

EXPLANATION**2014 Building By-law**

The attached by-law will implement Council's resolution of September 25, 2013 to repeal the 2007 Building By-law and to adopt the 2012 British Columbia Building Code, amended to reflect "Unique to Vancouver Requirements", as the 2014 Building By-law, to come into force and take effect on July 1, 2014.

Director of Legal Services
April 1, 2014



BY-LAW NO. _____

A By-law to regulate the construction of buildings and related matters and to adopt the British Columbia Building Code

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

**SECTION 1
ADOPTION OF BUILDING CODE AND INTERPRETATION**

Adoption of Building Code

1.1 Council adopts the British Columbia Building Code (the "Building Code") established under Ministerial Order No. M188/2012 as the British Columbia Building Code Regulation, B.C. Reg 264/2012, including all subsequent amendments, and incorporates the Building Code into this By-law to the extent and subject to the changes set out in this By-law.

Name of By-law

1.2 The name of this By-law, for citation, is the "Building By-law".

Table of contents

1.3 The table of contents for this By-law is for convenient reference only, and is not for use in interpreting or enforcing this By-law.

Changes to Building Code

1.4 Council:

- (a) strikes out "Code" only where it appears in the Building Code in reference to the Building Code, and substitutes "By-law";
- (b) strikes out "British Columbia Building Code" wherever it appears in the Building Code, and substitutes "By-law";
- (c) strikes out "British Columbia Fire Code" wherever it appears in the Building Code, and substitutes "Fire By-law";
- (d) strikes out "*authority having jurisdiction*" wherever it appears in the Building Code, and substitutes "*Chief Building Official*";
- (e) strikes out "construction" wherever it appears and substitutes "*construction*";
- (f) strikes out "%" wherever it appears and substitutes "per cent";
- (g) strikes out the words "fire fighter", "fire fighters", "fire fighter's", "fire-fighters", "fire-fighter", and "fire-fighter's" wherever they occur and substitutes "firefighter", "firefighters" and "firefighter's" as the case may be;
- (h) strikes out "sprinkler system" wherever it appears and substitutes "*sprinkler system*"; and

- (i) removes, changes and adds to the indicated Divisions, Parts and provisions of the Building Code as indicated in Schedule 1 attached to this By-law.

Schedules

- 1.5 The changes and additions which are contained in Schedule 1 attached to this By-law, including the numbered items attached to Schedule 1, form part of this By-law.

Parts of By-law

- 1.6 The Building By-law shall consist of two parts: Book I (General) and Book II (Plumbing Systems).

Severability

- 1.7 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.

**SECTION 2
REPEAL AND ENACTMENT**

Repeal and transition

- 2.1 Council repeals By-law No. 9419 except that the provisions of By-law No. 9419, with respect to matters other than administration, continue to apply as if unrepealed in respect of a permit applied for under By-law No. 9419 before July 1, 2014, for work which complies with the provisions of Section 3.3 of Part 3 of Division C of Book I (General) and Book II (Plumbing Systems) of this By-law.

Force and effect

- 2.2 This By-law is to come into force and take effect on the 1st day of July, 2014.

ENACTED by Council this day of , 2014

Mayor

City Clerk

**SCHEDULE 1
SCHEDULE OF CHANGES AND ADDITIONS TO THE BUILDING CODE
Book I Building By-law**

Division	Reference	BCBC Insertion location	Book I Building By-law Unique to Vancouver Text
Preface	Preface	Preface	<p>Strike out Preface and substitute:</p> <p>“Preface The 2014 Building By-law (hereinafter the “Building By-law”) is an objective-based code which identifies the minimum standard in the City of Vancouver for buildings to which this By-law applies. This Building By-law replaces the 2007 Building By-law and also contains certain transition provisions which apply to permits issued under the 2007 Building By-law. The Building By-law is regularly updated and users should ensure that the By-law is current. The Building By-law is substantially based on the British Columbia Building Code and British Columbia Plumbing Code, which in turn is substantially based on the model National Building Code of Canada 2010 and the model National Plumbing Code of Canada 2010. The Building By-law establishes minimum standards to meet the following five objectives, which are fully described in Division A of the By-law:</p> <ul style="list-style-type: none"> • safety • health • accessibility for persons with disabilities • fire and structural protection of buildings • energy and water efficiency <p>The Building By-law establishes standards for building materials, products and assemblies. Some standards are explicitly provided in the Building By-law while others are incorporated by reference to existing standards for materials products and assemblies which are developed and published by specialist organizations.</p> <p>Organization of the Building By-law A consistent organization system has been used in the Building By-law. The By-law is divided into Divisions which are designated by alphabetical letters. Divisions are divided into numbered Parts; each Part is divided into Sections; Sections are divided into Subsections; and Subsections are divided into Articles. Articles are divided into Sentences, which are delineated by numbers in brackets. Sentences may be further broken down into Clauses and Subclauses, delineated respectively by letters and roman numerals in brackets. This organization system is illustrated as follows:</p>

		<p>Division B 3 Part 3.5. Section 3.5.2. Subsection 3.5.2.1. Article 3.5.2.1.(2) Sentence 3.5.2.1.(2)(a) Clause 3.5.2.1.(2)(a)(i) Subclause</p> <p>Divisions of the By-law are identified either:</p> <ul style="list-style-type: none"> • by the letters A, B or C preceding the Part (ex. B.3.5.2.1.(2)(a)(i)), <p>or</p> <ul style="list-style-type: none"> • by specifying the Division after the code reference (ex. 3.5.2.1.(2)(a)(i) of Division B) <p>Use of the term “Reserved” The term “reserved” is used in the Building By-law in place of provisions from the National Codes which have not been adopted in the By-law. Term “reserved” is used so that the numbering structure of the Building By-law aligns with the model National Code of Canada 2010 and the model National Plumbing Code of Canada 2010, for ease of comparison and possible future harmonization.</p> <p>Change Indication Every effort has been made to identify technical changes or additions relative to the 2006 edition of the British Columbia Building and Plumbing Codes. In the printed version, these changes or additions are enclosed by angle brackets wherever practical. The online version of the British Columbia Building and Plumbing Codes (www.bccodes.ca) contains additional functionality with regards to identifying changes from the previous edition. No change indication is provided for renumbered or deleted provisions.</p> <p>Every effort has been made to identify technical changes or additions relative to the 2006 edition of the British Columbia Building and Plumbing Codes. In the printed version, these changes or additions are enclosed by angle brackets wherever practical. The online version of the British Columbia Building and Plumbing Codes (www.bccodes.ca) contains additional functionality with regards to identifying changes from the previous edition. No change indication is provided for renumbered or deleted provisions.</p> <p>Unique to Vancouver Indication All text in the By-law that is unique to Vancouver is enclosed with { } brackets wherever practical. This identifier was utilized to provide the user of the By-law with a means by which to differentiate the Vancouver provisions of this By-law from those of the 2012 British Columbia</p>
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		<p>Building and Plumbing Codes. Where the provisions of Vancouver have required the deletion of the 2012 British Columbia Building and Plumbing Code text, and no Vancouver text has replaced the deleted text, the word “Deleted” has been used to alert the user that a deletion has been made and that there is a difference from the 2012 British Columbia Building and Plumbing Codes text.</p> <p>Intent and Application Statements The intent statements pertaining to the National Building and Plumbing Codes, which also pertain to the Building By-law, are available, free of charge, on the national codes website at www.nationalcodes.nrc.gc.ca. As those substantive parts of the Building By-law which are not unique to Vancouver are identical to the National model Codes, users may consult the national website to access intent statements.</p> <p>The application statements for the 2010 National Building, Fire and Plumbing Codes have not been updated as the Canadian Commission on Building and Fire Codes discontinued their publication. In view of these developments at the national level, the Building By-law does not include application statements.</p> <p>Metric Conversion All values in the Building By-law are given in metric units. A conversion table of imperial equivalents for the most common units used in building design and construction is located at the end of the By-law.</p> <p>Acknowledgements and Copyright Copyright 2012 Province of British Columbia (portions) Copyright 2012 National Research Council (portions) All rights reserved. This Publication contains material that is copyrighted by the National Research Council of Canada and reproduced herein under a license agreement. This Publication also contains material that is copyrighted by the Province of British Columbia. No part of that material may be reproduced without written permission from the Province of British Columbia and the National Research Council. For more information, please contact the Intellectual Property Program for British Columbia.</p> <p>Intellectual Property Program PO Box 9412 Stn Prov Govt Victoria, BC V8W 9V1 Website: www.cio.gov.bc.ca Email: ipp@mail.qp.gov.bc.ca Phone: (250) 356-1339 Requests for permission to reproduce the unique to Vancouver provisions of the By-law must be sent to:</p>
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			<p>Code Development Engineer Office of the Chief Building Official Community Service 453 West 12th Avenue Vancouver, BC V5Y 1V4</p> <p>The provincial government welcomes comments and suggestions for improvements to the Building Code and Plumbing Code. Comments and suggestions can be sent to:</p> <p>Building and Safety Standards Branch Office of Housing and Construction Standards 614 Humboldt Street PO Box 9844 Stn Prov Govt Victoria BC V8W 9T2 Email: building.safety@gov.bc.ca Persons interested in the development of the National Codes, the model document for the British Columbia Building Code and Plumbing Code and for the Building By-law, can contact:</p> <p>The Secretary Canadian Commission on Building and Fire Codes Institute for Research in Construction National Research Council of Canada Ottawa, Ontario K1A 0R6 Website: www.nationalcodes.nrc.gc.ca</p>
A	1.1.1.1.(1)	Clause (l)	Add "or removed" after "relocated" and "or removal" after "relocation"
A	1.1.1.1.(1)	In Sentence 1.1.1.1.(1)	Strike out "and" at the end of Clause (n). Strike out "." and substitute "," at the end of Clause (o). After Clause (o) add: "p) the design and construction of a <i>marina</i> , q) the <i>alteration</i> of a <i>marina</i> , and r) retaining structures greater than 1.2 m in height."
A	1.1.1.1.(2)	In Subclause (f)(iii)	Strike out Subclause (iii) and substitute "Deleted"
A	1.1.1.1.(2)	At the end of Clause (g)	Strike out "and"
A	1.1.1.1.(2)	At the end of Clause (h)	Strike out "." and substitute ","
A	1.1.1.1.(2)	After Clause	Add:

		(h)	<p>“i) an existing <i>one-family dwelling</i> located on a parcel which is the subject of an application to subdivide into strata lots, if</p> <ul style="list-style-type: none"> i) the minimum distance between the existing <i>one-family dwelling</i> and the proposed new strata lot boundaries complies with the applicable spatial separation requirements in Part 3 or 9 of Division B, and ii) there is no renovation or change in use of the existing <i>one-family dwelling</i>, <p>j) an existing <i>one-family dwelling</i> or <i>one-family dwelling with secondary suite</i> located on a parcel which is the subject of an application for a <i>building permit</i> to construct a <i>laneway house</i> if there is no renovation or change in use of the existing <i>one-family dwelling</i> or <i>one-family dwelling with secondary suite</i>,</p> <p>k) a <i>noncombustible container</i> used only for storage of emergency supplies and required by the City’s Emergency Social Services Program if</p> <ul style="list-style-type: none"> i) the <i>building area</i> of the <i>container</i> is no more than 15 m², ii) the <i>container</i> is located at least 3 m from any <i>building</i>, and iii) the location of the <i>container</i> does not obstruct the <i>exit</i> path of an <i>existing building</i> and the firefighter’s access path to an <i>existing building</i>, <p>l) structures necessary for the operation of a <i>public bike share station</i> if the public bike share station</p> <ul style="list-style-type: none"> i) does not interfere with any public works, public facilities or public amenities, ii) does not include any enclosed structures, iii) is located at least 3 m from any <i>building</i>, and iv) does not obstruct the <i>exit</i> path of an existing building and the firefighter’s access path to an existing building.”
A	1.1.1.1.(5)	In Sentence (5)	<p>Strike out Sentence (5) and substitute:</p> <p>“5) Where an existing heritage building is altered, the alternative compliance methods for heritage buildings in Section 11.5. of Division B and the alternative acceptable solutions in Sentence (6) may be substituted for the requirements contained elsewhere in this By-law.</p> <p>6) Alternative acceptable solutions to assist in the rehabilitation of existing buildings in Section 11.3. of Division B may be substituted for the requirements contained elsewhere in this By-law if the conditions for using the alternatives have been met.”</p>
A	1.1.1.2.(1)	In Sentence (1)	<p>In Sentence (1):</p> <p>Before “<i>occupancy</i>” insert “<i>major</i>”.</p> <p>Strike out “the level of life safety and <i>building</i> performance shall not be decreased below a level that already exists.” and substitute “the <i>building</i> shall be upgraded in accordance with Part 11 of Division B.”</p>

			Before "Appendix A" insert "A-1.1.1.1. (1) in".
A	1.1.3.1.(1)	In Clause(1)(a)	Strike out Clause (1)(a) and substitute: "Deleted".
A	1.1.3.1.(1)	In Clause(1)(b)	After Subclause (1)(b)(ii) strike out "and". After Subclause (1)(b)(iii) add: "iv) Appendix Note A-1.4.1.2. of Division A (<i>Designated flood plain</i>), v) Appendix Note A-1.4.1.2. of Division A (<i>Flood construction level requirements</i>), and vi) Appendix Note A-11.2.1.2. of Division B."
A	1.3.3.2.(1)	After Sentence (1)	Add: "2) Part 4 applies to all <i>buildings</i> except <i>one</i> and <i>two family dwellings</i> and <i>accessory buildings</i> . 3) Part 5 applies to all Group C <i>multi-family buildings</i> and <i>Artist Live/Work Studios</i> that are a) more than 2 <i>storeys</i> in <i>building height</i> , or b) more than 600 m ² in <i>building area</i> excluding <i>firewalls</i> . 4) Notwithstanding Sentence (1), Section 3.8 applies to all Part 9 buildings."
A	1.3.3.3.	In the title to Article 1.3.3.3.	Strike out the title "Application of Part 9" and substitute "Application of Parts 9, 11 and 12".
A	1.3.3.3.	In Sentence (1)	At the beginning, add: "Except as provided in Sentences 1.3.3.2. (2) and (3),"
A	1.3.3.3.	After Sentence (1)	Add: "2) Part 11 applies to the alteration, rehabilitation, renovation, repair, addition or change of <i>major occupancy</i> of an existing <i>building</i> and as defined in Appendix Note A-11.2.1.2. of Division B. 3) Part 12 applies to the design and <i>construction</i> of all new <i>marinas</i> and <i>float homes</i> ; and to existing <i>marinas</i> and existing <i>float homes</i> as defined in Article 11.2.1.11. of Division B."
A	1.3.3.4.	After Article 1.3.3.4.	Add: "1.3.3.5. Air Space Subdivision 1) Where a subdivision of land creates an <i>air space parcel</i> boundary in or through a <i>building</i> ,

		<p>which otherwise complies with this By-law, such <i>building</i> or a portion of the <i>building</i> may, at the discretion of the <i>Chief Building Official</i>, be considered as a single <i>building</i> not requiring internal <i>firewalls</i> or <i>party walls</i> along <i>air space parcel</i> boundaries if legal agreements are registered against title to all <i>air space parcels</i> and the remainder whereby</p> <p>a) all relevant <i>owners</i> grant easements necessary to ensure common access to the fire and life safety systems and <i>exits</i> required for the <i>building</i> to function as a single <i>building</i> and to allow the <i>owners</i> to operate and maintain the <i>building</i> and its common systems, and</p> <p>b) all <i>owners</i> grant a covenant to the <i>City</i> on terms acceptable to its Director of Legal Services and the <i>Chief Building Official</i> whereby the <i>owners</i></p> <ul style="list-style-type: none"> i) acknowledge and agree that they have requested the <i>Chief Building Official</i> to treat the <i>building</i> as a single <i>building</i>, ii) release and indemnify the <i>City</i> and the <i>Chief Building Official</i> for, without limitation, all liability arising from the <i>Chief Building Official</i> agreeing to treat the <i>building</i> or a portion of the <i>building</i> as a single <i>building</i> for the purposes of this By-law, and iii) agree to inspect, test and keep in good repair and good working order all common fire and life safety systems, common utilities and shared exits located on their parcel and, to the extent necessary, use the easements referred to in Clause (a) for that purpose. <p>1.3.3.6. Automatic Sprinkler Systems</p> <p>1) Except for <i>buildings</i> described in Sentence (2), all newly constructed <i>buildings</i> shall be provided with an automatic <i>sprinkler system</i> designed and installed in accordance with Article 3.2.5.12. of Division B.</p> <p>2) The following <i>buildings</i> are not required to be <i>sprinklered</i></p> <ul style="list-style-type: none"> a) temporary <i>buildings</i> conforming to Subsection 1A.7.7. of Division C, and tents and <i>air-supported structures</i> conforming to Subsection 3.1.6. of Division B, b) one <i>storey</i> non-residential storage <i>buildings</i> less than 100 m² in <i>building area</i>, and having a <i>limiting distance</i> on all sides of no less than 15 m, c) one <i>storey</i> detached residential garages and carports, d) one <i>storey</i> detached <i>buildings</i> which are accessory to <i>one- and two-family dwellings</i>, and which are less than 50 m² in <i>building area</i>, e) <i>industrial</i> or hazardous <i>occupancies</i> where the <i>Chief Building Official</i> accepts that the installation of an automatic <i>sprinkler system</i> would represent a hazard to the occupants or would be incompatible with the use of the <i>building</i>, f) public concession stands and changing room <i>buildings</i> less than 100 m² in <i>building area</i> and having a <i>limiting distance</i> on all sides of no less than 15 m, g) ticket kiosks, h) bleachers which do not contain roofed <i>occupancies</i>,
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			<p>i) farm buildings, except farm buildings with caretaker residential suites, j) greenhouses used solely for the growing of plants where no public admittance is permitted, and k) one <i>storey</i> portable classroom <i>buildings</i> of less than 100 m² in <i>building area</i> with an <i>occupancy</i> classification of Group A Division 2 or Group D. [See Appendix A.]”</p>
A	1.3.4.1.	The title to Article 1.3.4.1.	Strike out “1 and 2” and substitute “1, 2 and 3”.
A	1.3.4.1.	In Sentence (1)	Strike out “1 and 2” and substitute “1, 2 and 3”.
A	1.4.1.2.	In Sentence (1)	<p>Strike out the definitions of “<i>Building</i>” and “<i>Unprotected opening</i>” and add the following definitions in alphabetical order:</p> <p>“<i>Acceptable</i> means acceptable to the <i>Chief Building Official</i>.</p> <p><i>Accepted</i> means accepted by the <i>Chief Building Official</i>.</p> <p><i>Addition</i> means an <i>alteration</i> to any <i>building</i> which will increase the total aggregate <i>floor area</i> or the <i>building height</i> (in <i>storeys</i>).</p> <p><i>Air space parcel</i> has the meaning assigned to it by the Land Title Act of British Columbia.</p> <p><i>Apprentice</i> means a regularly indentured apprentice under the provisions of the Industry Training Authority Act of British Columbia.</p> <p><i>Approved</i> (as used in Book II) means <i>accepted</i>.</p> <p><i>Area of refuge</i> means a space that facilitates a safe delay in egress, is sufficiently protected from fire conditions developing in the <i>floor area</i>, and provides direct access to an <i>exit</i> or fire fighters' elevator.</p> <p><i>Artist Live/Work Studio</i> means an Artist Studio and a Residential Unit associated with and forming an integral part of an Artist Studio, as defined in the Zoning and Development By-law.</p> <p><i>Artist studio – Class A</i> means Artist studio-Class A as defined in the Zoning and Development By-law.</p> <p><i>Artist studio – Class B</i> means Artist studio-Class B as defined in the Zoning and Development By-law.</p> <p><i>Arts and culture indoor event</i> means an event of an artistic or cultural nature, including but</p>

		<p>not limited to visual, performing, media, literary, craft or interdisciplinary arts, for a maximum of 250 persons, with or without liquor service, which occurs no more than two days per month in a <i>building</i> or portion of a <i>building</i> not approved for <i>assembly occupancy</i>.</p> <p>Bathroom group means one lavatory basin, one water closet and one bathtub or maximum 2 head shower drain.</p> <p>Building means any structure used or intended for supporting or sheltering any use or <i>occupancy</i>, including any float home or marina and any retaining structures greater than 1.2m in height).</p> <p>Building energy use means non site-renewable energy used for space heating, cooking and/or operation of <i>buildings</i> intended for human <i>occupancy</i>.</p> <p>Building Envelope Professional means a member of the Architectural Institute of British Columbia or the Association of Professional Engineers and Geoscientists of British Columbia.</p> <p>Catch basin means a receptacle installed to intercept the flow of deleterious matter into the <i>building sewer</i> or public <i>sewer</i> and to prevent the outflow of <i>sewer</i> gas, but does not include a <i>sump</i>.</p> <p>Certified Professional means a Certified Professional as defined in the Certification of Professionals By-law.</p> <p>Chief Building Official means the <i>City Building Inspector</i>, and any person authorized to act on behalf of the <i>City Building Inspector</i>.</p> <p>Child Care Facility means a care facility within the meaning of the Child Care Licensing Regulation of the Community Care and Assisted Living Act.</p> <p>Children mean persons under the age of 13 years.</p> <p>City means the City of Vancouver.</p> <p>City Building Inspector means the person appointed as such by City Council pursuant to the provisions of the Vancouver Charter.</p> <p>City Engineer means the person appointed as such by City Council pursuant to the provisions of the Vancouver Charter.</p> <p>Community Care Facility means Community Care Facility as defined in the Zoning &</p>
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		<p>Development By-law.</p> <p>Construction means, with respect to a <i>building</i>: erection, repair, <i>alteration</i>, enlargement, <i>addition</i>, demolition, <i>deconstruction</i>, removal and excavation.</p> <p>Construction Safety Officer means a person who has been trained specifically to understand and apply safe <i>construction</i> practice as it relates to the worksite and as it affects the public, neighbouring properties and utilities, and who has been retained by the <i>owner</i>, or the <i>owner's</i> principal <i>contractor</i> or <i>project</i> manager, to coordinate all sub trade supervisors relating to <i>construction</i> safety at the <i>project</i> site.</p> <p>Construction Safety Program means a policy of construction procedures designed to protect workers on a <i>project</i>, neighbouring private property, public property and members of the general public, and includes measures of fire safety.</p> <p>Container means a metal transportable structure designed for the storage and transport of goods, the typical dimensions of which are 2.44m in width, 2.59 m in height, and 6.1 m in length.</p> <p>Contractor means a person who contracts with an <i>owner</i> or an authorized agent of an <i>owner</i> to undertake a <i>project</i>, and includes an <i>owner</i> who contracts with more than one person for the work on a <i>project</i> or undertakes the work on a <i>project</i> or any part thereof.</p> <p>Deconstruction means demolition by systematic disassembly of a building resulting in the reuse, recycling or recovery of not less than 75% of all building materials, excluding materials which are hazardous or banned from landfill.</p> <p>Demolition means the action or process of demolishing a building, and includes deconstruction.</p> <p>Designated flood means a flood which may occur in any given year, of such magnitude as to equal a flood having a 200 year return period.</p> <p>Designated flood plain means those lands in the City which are hereby designated, for the purposes of section 306(cc) of the Vancouver Charter, as flood plains susceptible to flooding and subject to <i>flood construction level requirements</i>, and those lands so designated include:</p> <ul style="list-style-type: none"> a) lands located in proximity to the <i>natural boundary</i> of Burrard Inlet, English Bay, False Creek and the Fraser River, which are lower than the <i>flood construction level requirements</i> applicable to the flood plain in which the lands are located; and b) lands located in the areas shown crosshatched on the map attached to this By-law. (See Appendix A for Diagram B - Still Creek flood plain and <i>flood construction levels</i>.)
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		<p>Designated Structural Engineer (Struct. Eng.) means a person who is registered or licensed to practice as a professional engineer under the Engineers and Geoscientists Act of British Columbia, and a person who is designated by the Association of Professional Engineers and Geoscientists of British Columbia as a Designated Structural Engineer.</p> <p>Existing building means a <i>building</i> lawfully constructed and completed under a <i>permit</i> before submission of the current <i>permit</i> application.</p> <p>Float home means any structure incorporating a floatation system, intended for use or occupancy or being used or occupied for residential purposes, containing one dwelling unit only, and not primarily intended for, or useable in, navigation, but does not include any <i>water craft</i> designed or intended for navigation.</p> <p>Flood construction level means the minimum elevation of the underside of a floor system, or of the top of a concrete slab, of a building which is used or may be used for habitation, business, or for the storage of goods which may be damaged by flood water.</p> <p>Flood construction level requirements means</p> <ul style="list-style-type: none"> a) on the Burrard Inlet and English Bay flood plains: <ul style="list-style-type: none"> (i) for buildings located within 15 m of the natural boundary, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods, shall not be lower than 3.5 m Greater Vancouver Regional District datum, plus an additional elevation allowance for wave run-up of 1.5 m, or as determined by a Professional Engineer; and (ii) for buildings located more than 15 m from the <i>natural boundary</i>, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods, shall not be lower than 3.5 m Greater Vancouver Regional District datum; b) on the False Creek and Fraser River flood plains: <ul style="list-style-type: none"> (i) for buildings located within 300 m of the <i>natural boundary</i>, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods, shall not be lower than 3.5 m Greater Vancouver Regional District datum; and (ii) for buildings located more than 300 m from the <i>natural boundary</i>, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods shall not be lower than 3.0 m Greater Vancouver Regional District (GVRD) datum; c) on the Still Creek flood plain: <ul style="list-style-type: none"> (i) the underside of a floor system or the top of a concrete slab of any building used for habitation, business or storage of goods shall not be lower than the applicable elevation shown on the map attached to this By-law. (See Appendix A for Diagram B - Still Creek
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		<p>flood plain and <i>flood construction levels</i>.)</p> <p>Floor drain means a fixture used to receive water from the floor of a <i>building</i>.</p> <p>General Manager, Park Board means the person appointed as such by the Park Board.</p> <p>General Manager, Real Estate and Facilities Management means the person appointed as such by City Council.</p> <p>Green house gases means any gas that contributes to a gradual warming of the Earth's climate as a result of increased heat retention.</p> <p>Green roof means a structure constructed on top of a roof, which is designed to support the growth of vegetation and to capture rainwater.</p> <p>Green roof assembly means the components of a green roof and includes a waterproof barrier which is impervious to root migration, a filtering layer, roof drainage, soil or other growing medium and plants, installed on top of a roof assembly.</p> <p>Grooming station means facilities for grooming which are separated from washrooms and which contain a mirror, an electrical outlet and a countertop.</p> <p>Group Residence means Group Residence as defined in the Zoning & Development By-law.</p> <p>Heritage building is a <i>building</i> which is legally protected or officially recognized as a heritage property by the Province of British Columbia or the <i>City</i>. (See Appendix A.)</p> <p>Industrial flex space means an industrial use which is located in a new building containing Group C major occupancies.</p> <p>Journeyman plumber means a person, other than an <i>apprentice</i>, who holds a certificate issued pursuant to the provisions of the Industry Training Authority Act of British Columbia authorizing the person to engage in the plumbing trade.</p> <p>Lane means a public thoroughfare or way no more than 10.1 m in width which affords only a secondary means of access to a site, at the side or rear.</p> <p>Laneway house means a detached <i>dwelling unit</i> constructed in the rear yard of a parcel on which is situate a <i>one-family dwelling</i> or <i>one-family dwelling with secondary suite</i>.</p> <p>Licensed Beverage Establishment means an <i>assembly occupancy</i> or part thereof, where people</p>
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		<p>may consume alcohol in a Class 2-restaurant as defined in the Zoning and Development By-law, lounge, recreational centre, community hall, cabaret, pub, neighbourhood public house, marine public house and similar facility.</p> <p>Liveaboard vessel means any <i>water craft</i> intended primarily for use in navigation and used for residential purposes.</p> <p>Natural boundary means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself.</p> <p>Marina means any structure or installation, including marina walkways, which provides moorage space for <i>water craft</i>.</p> <p>Marina walkway means any surface extending over navigable water used to accommodate pedestrian traffic, and used so that <i>water craft</i> and <i>float homes</i> may lie alongside to receive and discharge cargo and passengers.</p> <p>Marine toilet means any toilet on or within a <i>water craft</i>.</p> <p>Multi-family means a <i>residential occupancy</i> with more than two <i>dwelling units</i>.</p> <p>One-family dwelling means a <i>building</i> containing only one <i>dwelling unit</i>.</p> <p>One-family dwelling with secondary suite means a <i>building</i> containing only two <i>dwelling units</i> of which the <i>secondary suite</i> is smaller than the principal residence.</p> <p>Owner means a registered owner, a lessee, a sublessee, a holder of an agreement for sale and purchase and, in the case of Crown-owned lands, <i>owner</i> means the occupier.</p> <p>Permit means permission or authorization in writing by the <i>Chief Building Official</i> to perform work regulated by this By-law and, in the case of an <i>occupancy permit</i>, to occupy any <i>building</i> or part thereof.</p> <p>Plumbing contractor means a person licensed as a <i>contractor</i> pursuant to the License By-law and who is either a plumber or a person who employs a plumber on a full time basis.</p> <p>Plumbing fixtures means installed receptacles, devices or appliances, including <i>floor drains</i> and <i>roof drains</i> and swimming pools, which are supplied with water or which receive liquid or liquid-borne wastes and discharge such wastes into the <i>drainage system</i> to which they may be directly</p>
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		<p>or indirectly connected, except that industrial or commercial tanks, vats and similar processing equipment are not <i>plumbing fixtures</i>, but may be connected to or discharge into <i>traps</i> or <i>plumbing fixtures</i> which are in compliance with or otherwise provided for in this By-law.</p> <p>Plumbing Inspector means any person appointed as such by the <i>Chief Building Official</i>.</p> <p>Project means any <i>construction, alteration</i> or demolition operation.</p> <p>Public bike share means a service that provides the general public with an opportunity to rent bicycles through an automated system, on a short term basis for use within the City as part of a network comprised of no fewer than 50 <i>public bike share stations</i> located on separate sites.</p> <p>Public bike share station means a bicycle sharing facility where bicycles are stored and from which the general public may rent and return bicycles and other objects or equipment necessary for or appurtenant to the operation of a <i>public bike share</i>.</p> <p>Public sewer connection means that part of the public sewer which connects or is intended to connect a <i>building sewer</i> with any public sewer.</p> <p>Pump-out facility means a device or method for the removal of sewage from a holding tank connected to a <i>marine toilet</i> or from a self-contained <i>marine toilet</i>.</p> <p>Re-occupancy permit means permission or authorization in writing by the <i>Chief Building Official</i> to re-occupy any <i>building</i> or part thereof in respect of which the <i>Chief Building Official</i> has issued an order to cease <i>occupancy</i> because of an <i>unsafe condition</i>.</p> <p>Row housing means a <i>building of residential occupancy</i> where no <i>dwelling unit</i> is located above another <i>dwelling unit</i> and there is no common interior or exterior <i>means of egress</i>.</p> <p>Secondary suite means that area of a <i>building</i> that is intended to be a <i>dwelling unit</i> that is smaller than the principal residence in the same <i>building</i>.</p> <p>Separate system area means an area in which the <i>City Engineer</i> has required the separate disposal of <i>storm water</i> and <i>sewage</i>.</p> <p>Sewage sump means an <i>approved</i> airtight tank or pit which receives <i>sewage</i> or liquid waste and which is located below the normal grade of the gravity system and must be emptied by mechanical means.</p> <p>Sewer means an underground drain or conduit to remove waste water and organic refuse.</p>
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			<p>Trades safety coordinator means an agent, employee or officer of a company supplying, installing or using materials at a <i>construction</i> site who has been trained to understand and apply safe <i>construction</i>, installation or demolition techniques, as applicable, respecting those materials and their relationship to the worksite, neighbouring property, public utilities and the general public.</p> <p>Training school means a School-Arts or Self-Improvement, School - Business, or School - Vocational or Trade, as defined in the Zoning & Development By-law.</p> <p>Two-family dwelling means a) as applying to plumbing, a <i>building</i> containing only 2 self-contained <i>dwelling units</i> each served with a separate water connection, and b) in all other cases, a <i>building</i> containing only two self-contained <i>dwelling units</i>.</p> <p>Two-family dwelling with secondary suites means a building containing two self-contained dwelling units where each self-contained dwelling unit contains one secondary suite.</p> <p>Unprotected opening (as applying to <i>exposing building face</i>) means a door, doorway, window or opening other than one equipped with a <i>closure</i> having the required <i>fire-protection rating</i>, or any part of a wall forming part of the <i>exposing building face</i> that has a <i>fire-resistance rating</i> less than that required for the <i>exposing building face</i>.</p> <p>Unsafe condition means any condition that could cause undue hazard or risk to life, limb or health of any person authorized, expected, or anticipated to be on or about premises or a <i>building</i> or <i>construction</i>.</p> <p>Water craft means any boat, hull, barge, or houseboat which is afloat, whether self-propelled or not, and includes pleasure and commercial craft.</p>
A	Appendix A Note A- 1.4.1.2.	At the end of Appendix A	Add Diagram B- Still Creek Flood Plain and Flood Construction Levels (attached as Item 1)
A	2.1.1.1.(1)	In Sentence (1)	At the end, strike out “.” and add “except for existing <i>buildings</i> .”
A	2.1.1.2.(2)	In Sentences (2) and (4)	Strike out Sentences (2) and (4) and substitute: “2) Deleted.” and “4) Deleted.”
A	2.2.1.1.	In OS3 Safety in Use	To OS3.1, after “contact,” add “assault”.
A	3.1.1.2.(2)	In Sentence (2)	Strike out Sentence (2) and substitute:

			"2) Deleted."
A	3.2.1.1(1)	In Sentence (1)	In F30 after "contact," add "assault,".
B	1.1.1.1.(1)	After Sentence (1)	Add: "2) When an existing building is altered and the alteration triggers upgrading as determined by this By-law, alternative provisions in Part 11 of Division B may be used instead of the requirements of this Part. (See Article 1.1.1.2. of Division A.)"
B	1.1.3.1.(1)	In Sentence (1)	Strike out: "with the values established by the authority having jurisdiction or, in the absence of such data, with Sentence (2) and the climatic and seismic values in Appendix C. (See Appendix A)" and substitute: "with Table 1.1.3.1.A and Table 1.1.3.1.B."
B	1.1.3.1.(2)	In Sentence (2)	Strike out: "determined from Appendix C shall be those listed for the January 2.5% values for the January 2.5% values." and substitute: "shall be those listed in Table 1.1.3.1.A and Table 1.1.3.1.B for the January 2.5% values."
B	1.1.3.2.(2)	After Sentence (2)	Add: Table 1.1.3.1.A (Attached as Item 2) Table 1.1.3.1.B (Attached as Item 3)
B	1.1.3.2.(1)	In Sentence (1)	Strike out: "established on the basis of local experience." And substitute: "no less than 450 mm."

B	1.1.4.1.(1)	In Sentence (1)	Strike out: “to Section 2.8 of Division B of the British Columbia Fire Code.” and substitute: “to the relevant provisions of the Fire By-law.”
B	Table 1.3.1.2.	In the title of Table 1.3.1.2.	Strike out “British Columbia Building Code 2012” and substitute: “Building By-law”
B	Table 1.3.1.2.	In Table 1.3.1.2.	In the row for ANSI/ASHRAE strike out “62-2001” and substitute “62.1-2001(except Addendum n)”. In the row for ANSI/ASHRAE/IESNA strike out “90.1-04” and substitute “90.1-2010” and strike out “10.2.1.1. (1) Table 10.2.1.1.B” and substitute “10.2.1.1. (1)(a)”. In the first row for BC, strike out “BC” and substitute “City”. In the second row for BC, strike out “BC” and substitute “City”. In the row for CGSB which deals with Sealing and Bedding Compound, Acoustical, strike out “9.11.1.1. (2)” and substitute “9.11.3.1(1)”.
B	3.1.2.5.	In the title of Article 3.1.2.5.	Strike out the title of Article 3.1.2.5. and substitute “Care Facilities”.
B	3.1.2.5.(2)	In Sentence (2)	After “provincial legislation” add “, a <i>community care facility</i> or a <i>group residence</i> ,”
B	3.1.2.5.(2)	After Sentence (2)	Add: “3) A <i>child care facility</i> shall be classified as either a Group C or Group A Division 2 <i>major occupancy</i> as determined by Table 3.1.2.5. provided a) the fire safety requirements for the <i>major occupancy</i> of Table 3.1.2.5. have been met, b) all additional requirements in this By-law for new <i>construction</i> and the determined <i>major occupancy</i> have been met, and c) for <i>existing buildings</i> , the upgrade requirements under Clause 11.4.2.1.(1)(g) have been met.”

B	3.1.2.5.(3)	After Sentence (3)	Add Table 3.1.2.5.(Attached as Item 4)
B	3.1.2.6.(1)	In Sentence (1)	At the end of Clause (a) strike out “and”. At the end of Clause (b) strike out “.” and substitute “, and”. After Clause (b), add: “c) the <i>suite</i> does not contain a <i>child care facility</i> pursuant to Article 3.1.2.5.”
B	3.1.2.7.	After Article 3.1.2.7.	Add: “3.1.2.8. Retail Food Facility 1) A retail food facility is permitted to be classified as a Group E <i>major occupancy</i> provided it is designed to accommodate no more than 16 persons consuming food or drink.”
B	Table 3.1.3.1.	In the column entitled “Major Occupancy”	Strike out “C” and substitute “C ⁽⁵⁾ ”
B	Table 3.1.3.1	In the column entitled “Adjoining Major Occupancy”	Strike out “C” and substitute “C ⁽⁵⁾ ”
B	Table 3.1.3.1.	At the end of the notes at the end of Table 3.1.3.1.	Add: “(5) See Article 3.2.1.7.”
B	3.1.3.2.(2)	In Sentence (2)	Strike out “Not” and substitute “Except as provided in Article 3.1.3.4. and Subsection 11.4.7., not”
B	3.1.3.2.	After Article 3.1.3.2.	Add: “3.1.3.3. Artist Live/Work - Class A Artist Studio 1) A <i>building</i> containing <i>artist studio – class A</i> and residential quarters integrated with the studio for the use of artists occupying the studio may be designed as a Group C <i>major occupancy</i> provided a) the building is <i>sprinklered</i> in conformance with NFPA 13, and b) structural floor loads are based on a light <i>industrial occupancy</i> , with a minimum <i>live load</i> of

		<p>3.6 kPa and, where the <i>floor areas</i> are designated for residential use only, such as sleeping lofts, dinettes and bathrooms, with a minimum <i>live load</i> of 1.9 kPa.</p> <p>3.1.3.4. Artist Live/Work - Class B Artist Studio</p> <p>1) A <i>building</i> containing <i>artist studio – class B</i> and residential quarters integrated with the studio for the use of artists occupying the studio may be permitted provided</p> <p>a) the construction requirements of Subsection 3.2.2. are based on the most restrictive requirements arising from the evaluation of the building as both a Group F Division 2 <i>occupancy</i> and a Group C <i>occupancy</i>,</p> <p>b) the spatial separation requirements of the <i>building</i> are based on Table 3.2.3.1.D. for a Group F, Division 2 <i>occupancy</i>,</p> <p>c) the fire alarm is based on Group C <i>occupancy</i> requirements and where a fire alarm is required, <i>smoke detectors</i> are installed in corridors and stair shafts as required in Article 3.2.4.11.,</p> <p>d) <i>smoke alarms</i> are provided in individual suites as required in Article 3.2.4.20.,</p> <p>e) the <i>building</i> is sprinklered in conformance with NFPA 13 to a minimum Ordinary Hazard Group 1 classification,</p> <p>f) standpipes are based on residential Group C <i>occupancy</i> requirements,</p> <p>g) <i>accessible</i> design is based on Group C <i>occupancy</i> requirements, and</p> <p>h) structural floor loads are based on a light <i>industrial occupancy</i>, with a minimum <i>live load</i> of 3.6 kPa and, where <i>floor areas</i> are designated for residential use only, such as sleeping lofts, dinettes and bathrooms, with a minimum <i>live load</i> of 1.9 kPa.</p> <p>2) Light and ventilation requirements can be borrowed from the working studio area.</p> <p>3) Where a portion of the studio such as a dinette or sleeping loft is used solely as living space, exit travel distances from these spaces may be based on a Group C <i>residential occupancy</i>.</p> <p>3.1.3.5. Training School</p> <p>1) A <i>building</i> or portion of a <i>building</i> containing a <i>training school</i> is permitted to be considered as a Group D <i>major occupancy</i> provided</p> <p>a) the <i>suite</i> area is no more than 46 m², and</p> <p>b) the total <i>occupant load</i> of the <i>suite</i> is no more than 10.</p> <p>3.1.3.6. Industrial Flex Space</p> <p>1) An <i>industrial flex space</i> use is permitted in a new <i>building</i> containing a Group C <i>major occupancy</i> provided</p>
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			<p>a) the total <i>floor area</i> of each <i>industrial flex space</i> unit or a single tenant <i>industrial flex space</i> is no more than 500 m²,</p> <p>b) the <i>industrial flex space</i> shall be located on the <i>first storey</i> and completely independent of the Group C portion of the <i>building</i>, including the <i>exit</i> system,</p> <p>c) the ventilation systems for individual <i>industrial flex spaces</i> shall be completely separate and independent from each other and from the <i>residential</i> portion of the <i>building</i>,</p> <p>d) a horizontal <i>fire separation</i> of concrete <i>construction</i> having a <i>fire resistance rating</i> of no less than 2 hours shall be provided between the <i>industrial flex space</i> and the <i>Group C occupancy</i>,</p> <p>e) vertical <i>fire separations</i> between <i>industrial flex space</i> units and any Group C portion of the <i>building</i> shall be of concrete or masonry <i>construction</i> having a <i>fire-resistance</i> rating of no less than 2 hours,</p> <p>f) the Group C portion of the <i>building</i> shall be separated from the <i>industrial flex space</i> portion of the <i>building</i> by <i>construction</i> having a <i>STC</i> rating of no less than 55,</p> <p>g) the penetrations between the horizontal <i>fire separation</i> in Clause (c) shall be FT rated,</p> <p>h) the <i>industrial flex space</i> units shall be sprinklered in conformance with NFPA 13 to a minimum Ordinary Hazard Group 2 classification using only quick response heads and no reduction in design area,</p> <p>i) the automatic <i>sprinkler system</i> noted in Clause (h) shall be a single system supplying the entire <i>building</i>, and shall be designed so that the <i>industrial flex spaces</i> as a whole and the Group C <i>occupancy</i> floors as a whole are supplied by separate water supply lines,</p> <p>j) each individual <i>industrial flex space</i> unit shall have a minimum of two <i>egress</i> doors regardless of the unit size,</p> <p>k) the principal <i>egress</i> door serving each <i>industrial flex space</i> unit shall <i>exit</i> directly to the <i>street</i>,</p> <p>l) except for the principal <i>exit</i> door in Clause (k), all other <i>exit</i> or <i>egress</i> doors shall lead to a lane or to an independent corridor leading to a public thoroughfare serving only the <i>industrial flex space</i> portion of the <i>building</i> and shall be separated from the remainder of the <i>building</i> by a concrete or masonry <i>fire separation</i> having a <i>fire-resistance rating</i> of no less than 2 hours,</p> <p>m) the <i>industrial flex spaces</i> shall be provided with two unisex water closets, notwithstanding the requirement of Section 3.7 of Division B, and</p> <p>n) one of the washrooms serving the <i>industrial flex space</i> shall comply with the requirements of Section 3.8 of Division B.</p> <p>2) An <i>industrial flex space</i> use is not permitted in an <i>existing building</i>.”</p>
B	3.1.4.3.(1)(a)	In Clause 3.1.4.3.(1)(a)	After the words “(FT1 rating)” add “except as required by Subclause 3.6.4.3.(1)(a)(ii),”
B	3.1.11.2.	In the title to Article 3.1.11.2	At the end, add “and Vertical Concealed Spaces”.

B	3.1.11.2.(1)	In Sentence (1)	After the words “wall assembly” add “and concealed vertical spaces forming part of wood frame <i>buildings</i> up to 6 storeys in <i>building</i> height:”
B	3.1.11.2.(2)	In Sentence (2)	In Clause (a) after “wall space” add “or concealed vertical space”. In Clause (b) after “wall space” add “or concealed vertical space”. In Clause (c) before “space” add “wall” and after “wall space” add “or concealed vertical space”.
B	3.1.14.2.	After Article 3.1.14.2.	<p>Add:</p> <p>“3.1.14.3. Overhead Skylight Glazing</p> <p>1) All skylights shall be glazed with wired glass, laminated safety glass or <i>combustible</i> glazing, which is anchored to the skylight frame and to the <i>building</i> structure. (See Appendix A.)”</p> <p>3.1.14.4. Green Roof Assemblies</p> <p>1) A <i>green roof assembly</i> is permitted in <i>combustible</i> and <i>noncombustible construction</i> if</p> <p>a) the <i>green roof assembly</i> is designed and constructed in conformance with ANSI/SPRI VF-1 “External Fire Design Standard for Vegetative Roofs”,</p> <p>b) gravity loads on the <i>building</i> structure are determined by ASTM E2397-11 “Standard Practice for Determination of Dead Loads and Live Loads Associated with Vegetative (Green) Roof Systems”,</p> <p>c) the <i>green roof assembly</i> is designed and constructed with a root barrier,</p> <p>d) the <i>green roof assembly</i> is designed and constructed with water retention materials to support vegetative growth, and</p> <p>e) the drainage layer of the <i>green roof assembly</i> is designed to accommodate rainwater harvesting and conforms to ASTM E2398-11 “Standard Test Method for Water Capture and Media Retention of Geocomposite Drain Layers for Vegetative (Green) Roof Systems”.</p> <p>2) In addition to the requirements in Sentence (1), the roof assembly which supports a <i>green roof assembly</i> shall conform with Subsection 3.1.15., except for Part 9 <i>buildings</i>.</p> <p>3) In addition to the requirements in Sentence (1), the roof assembly which supports a <i>green roof assembly</i> shall conform with Part 5.”</p>
B	Table 3.1.17.1.	In Table 3.1.17.1.	<p>Add, at the end of Assembly uses:</p> <p>“Exercise rooms without equipment - 1.40⁽⁴⁾ Exercise rooms with equipment - 4.60⁽⁴⁾”</p>

B	Table 3.1.17.1.	In the notes at the end of Table 3.1.17.1.	After note (3) add: “ ⁽⁴⁾ See A-3.1.17.1 in Appendix A.”
B	3.2.1.5.(1)	In Sentence (1)	Strike out “Except as permitted by Sentences (2) and 3.2.2.15.(3), in” and substitute “In”.
B	3.2.1.5.(2)	In Sentence (2)	Strike out Sentence (2) and substitute: “2) Deleted.”
B	3.2.1.6.	After Article 3.2.1.6.	Add: “3.2.1.7. Fire Containment in Group C Combustible Buildings Greater than 2 Storeys 1) All Group C <i>major occupancies</i> shall be separated from all other <i>major occupancies</i> , except as prohibited in Article 3.1.3.2. and except as permitted in Sentence (2), by a concrete or masonry <i>fire separation</i> with a 2 h <i>fire resistance rating</i> . 2) The <i>fire-resistance rating</i> required in Sentence (1) is permitted to be 1 1/2 h for a <i>storage garage</i> . 3) The <i>fire separation</i> of every <i>exit</i> , elevator and vertical service shaft that penetrates a concrete or masonry floor assembly as required in Sentence (1) shall be separated from the remainder of the <i>building</i> by a <i>fire separation</i> having a <i>fire resistance rating</i> determined by Sentences (1) or (2) for a) the floor assembly above the <i>storey</i> , or b) the floor assembly below the <i>storey</i> , if there is no floor assembly above.”
B	3.2.2.7.(2)	In Sentence (2)	At the end, add “(See Appendix A.)”
B	3.2.2.15.(2)	In Clause (a)	In Clause (a) strike out “except as permitted by Sentence (3),”.
B	3.2.2.15.(3)	In Sentence (3)	Strike out Sentence (3) and substitute: “3) Deleted.”
B	3.2.2.18.(1)	In Sentence (1)	Strike out “Except as permitted by Sentence (2)” and substitute “Except as required by Sentences (2) and (3)”.
B	3.2.2.18.(2)	After Sentence 3.2.2.18.(2)	Add: “3) Except for <i>buildings</i> described in Sentence 1.3.3.6.(2) of Division A, all newly constructed <i>buildings</i> shall be provided with an automatic <i>sprinkler system</i> designed and installed in accordance with Article 3.2.5.12.

			4) Where an <i>assembly occupancy</i> is located in a <i>basement</i> , the <i>basement</i> shall be sprinklered throughout.”
B	3.2.3.10.1.(1)	In Sentence(1)	Strike out “with all storeys constructed as open air storeys”
B	3.2.3.13.(2)	In Sentence (2)	Strike out “”If an unenclosed exterior <i>exit</i> stair or ramp” and substitute “If there is a single <i>means of egress</i> ”.
B	3.2.3.13.(4)	In Sentence 3.2.3.13.(4)	In Clause (b), at the end, strike out “or”. In Clause (c), at the end, strike out “.” and substitute “, or”. After Clause (c), add “d) if the <i>exit</i> facility serves no more than 10 persons, a sprinkler water curtain in accordance with Sentence (5).”
B	3.2.3.13.	After Sentence 3.2.3.13.(4)	Add: “5) A sprinkler water curtain for opening protection as permitted in Clause 2.3.13.(4)(d) shall a) have fast response upright or pendant type sprinklers, b) if the opening is 1.8 m or less in width, have one sprinkler head installed at the center of the opening at a maximum distance of no more than 0.9m from the vertical edge of the opening, c) if the opening is more than 1.8 m in width, have multiple sprinkler heads installed at a maximum distance of 1.8 m on center and at a maximum distance of no more than 0.9m from the sprinklers to the vertical edge of the opening, d) have sprinklers located 50mm vertically and between 150 mm and 300 mm horizontally from the interior face of the glazing at ceiling level, e) discharge water at a minimum flow rate of 68L/min (18 usgpm), f) have sprinkler heads with an orifice size of 12.7 mm and a k factor of 5.7, g) be designed independently from the floor area coverage and be included in the most hydraulically demanding area for the design of the adjacent floor area sprinklers, h) have sprinkler heads protected from spray and from cold solder effects from adjacent sprinklers (floor area or water curtain sprinkler heads) by means of baffles in accordance with NFPA 13, and i) be provided with tempered or laminated safety glass glazed openings where windows are permitted to be openable.”
B	3.2.4.1.(4)(g)	In Clause 3.2.4.1.(4)(g)	Strike out “licensed beverage establishment” and substitute “ <i>licensed beverage establishment</i> ”
B	3.2.4.1.(5)	In Sentence (5)	Strike out “that is not sprinklered”.
B	3.2.4.1.(6)	In Sentence (6)	Strike out “that is contained in a building that is not sprinklered”.
B	3.2.4.7.	After Sentence 3.2.4.7.(2)	Add: “3) A manual silencing switch, accessible only to authorized personnel, shall be installed inside

			of the annunciator described in Sentence 3.2.4.9. (1). (See Appendix A.)”
B	3.2.4.9.(2)	In Sentence 3.2.4.9.(2)	Strike out “Sentence (6) “and substitute “Sentences (6), (8), (9) and (10)”. Strike out “and” at the end of Clause (g). Strike out “.” at the end of Clause (h) and substitute “, and”. After Clause (h) add: “i) <i>floor area</i> required to be equipped with <i>smoke detector</i> or <i>detectors</i> as required by Clause 3.2.4.12.(1)(h) to i) initiate an <i>alert signal</i> in a 2 stage system or an <i>alarm signal</i> in a single stage system, and ii) indicate the actuation of each device separately on the fire alarm system annunciator.”
B	3.2.4.9.(7)	After Sentence 3.2.4.9.(7)	Add: “8) If a fire alarm system is required in <i>row housing</i> or in residential <i>buildings</i> where egress from the <i>dwelling units</i> conforms to Sentence 3.3.4.4.(3) and the <i>building</i> is no more than 4 <i>storeys</i> in <i>building</i> height, the <i>building</i> shall be provided with a) a single electrically supervised fire alarm system for the entire <i>building</i> , b) at least one sprinkler zone for each block of <i>row housing</i> or each residential block, c) a <i>sprinkler system</i> which is monitored by the fire alarm system and an off-site monitoring service, d) a strobe light located outside the principal entrance of each <i>dwelling unit</i> and connected to an internal smoke alarm within the <i>dwelling unit</i> , and e) an exterior audible signal activated by the fire alarm system. 9) In a multi-level residential <i>suite</i> , where a single egress door is provided and the egress door opens directly into a <i>public corridor</i> , an exterior <i>exit</i> passageway or a street, a separate zone for sprinkler water flow detecting devices on each <i>storey</i> is not required provided a) the actuation of a sprinkler waterflow detecting device in the <i>suite</i> shall be zoned at the <i>public corridor</i> or exterior <i>exit</i> passageway floor level, and b) a strobe light is installed and maintained outside the <i>suite</i> entrance of the <i>dwelling unit</i> , and connected to an internal smoke alarm within the <i>dwelling unit</i> . 10) A separate zone for waterflow detecting devices is not required for a shaft described in Clause 3.2.4.9.(2)(c).”
B	3.2.4.10.(3)	In Sentence 3.2.4.10.(3)	Strike out “supervisory” and substitute “trouble”.

B	3.2.4.10.(5)	In Sentence 3.2.4.10.(5)	Strike out Sentence (5) and substitute: “5) A trouble signal indicating the nature of the trouble in accordance with Sentence (3) shall be transmitted to a Fire Signal Receiving Centre conforming to CAN/ULC-S561, “Installation and Services for Fire Signal Receiving Centres and Systems” as provided for in Sentence 3.2.4.8.(4).”
B	3.2.4.12.(1)	In Sentence (1)	Strike out “and” in Clause (f). Strike out “.” and substitute “, and” in Clause (g). After Clause (g) add: “h) each <i>floor area</i> in front of the elevator or elevators where required by Sentence 3.2.6.4.(5).”
B	3.2.4.15.	In Article 3.2.4.15.	Strike out Sentences (1), (2), and (3) and substitute: “1) Deleted. [See Article 3.2.6.4. for high buildings] 2) Deleted. 3) Deleted.”
B	3.2.4.19.(8)	In Sentence (8)	In Clause (a) after “open circuit” add “or short circuit”.
B	3.2.4.19.(9)	In Sentence (9)	Strike out Sentence (9) and substitute: “ 9) Deleted.”
B	3.2.4.20.	In Article 3.2.4.20.	Strike out Clauses 3.2.4.20. (4)(a),(b),(c), and substitute: “4) The visual warning system required by Sentence (2) shall consist of strobe lights conforming to ULC-S526 “Standard for Visible Signal Devices for Fire Alarm Systems” that are designed to operate as part of the <i>building</i> fire alarm system a) Deleted. b) Deleted. c) Deleted.” Strike out Sentence (5) and substitute: “5) Deleted.” Strike out Clauses 3.2.4.20. (6)(a),(b),(c), and (d) and substitute: “6) When a fire alarm system is not provided in <i>occupancies</i> required by Subsection 3.8.2. to have a warning system, strobe lights that conform to ULC - S526 “Standard for Visible Signal Devices for Fire Alarm Systems” shall be connected to and activated by <i>smoke alarms</i> required

			<p>by Sentence 3.2.4.20.(1) and Article 9.10.19.1., in locations described in Articles 3.8.2.27 to 3.8.2.31.</p> <p>a) Deleted. b) Deleted. c) Deleted. d) Deleted.”</p> <p>In Clause 3.2.4.20. (6)(e) strike out “are” and substitute “be”.</p> <p>Strike out Clause 3.2.4.20.(7)(a) and substitutes:</p> <p>“7) The special outlet boxes and cover plates required by Sentence 3.8.2.27.(3) shall be a) designed and wired specifically to allow strobe lights to operate as required by i) Sentence (3) where a fire alarm system is provided, or ii) Sentence (6) where a fire alarm system is not provided,”</p>
B	3.2.4.22.(5)	In Sentence (5)	Strike out “ <i>alarm signal</i> ” and substitute “ <i>alert or alarm signal</i> ” and strike out “2- stage”.
B	3.2.5.1.(3)	After Sentence 3.2.5.1.(3)	<p>Add:</p> <p>“4) Where locking devices to prevent access to <i>floor areas</i> are installed on <i>exit doors</i> a) a master key shall be provided in an <i>acceptable</i> location accessible to fire fighters, or b) the <i>exit doors</i> shall be provided with a wired glass panel measuring no less than 0.0645 m² in area and located no more than 300 mm from the door opening hardware.”</p>
B	3.2.5.4.(1)	In Sentence 3.2.5.4.(1)	<p>Strike out Sentence (1) and substitute:</p> <p>“1) Every <i>building</i> shall be provided with fire department access routes a) to the <i>building</i> face having a principal entrance, and b) to each <i>building</i> face having access openings for firefighting as required by Articles 3.2.5.1. and 3.2.5.2. (See Appendix A.)”</p>
B	3.2.5.5.	Title to Article 3.2.5.5.	In the title at the end, add “and Paths of Travel” and immediately below the title add “(See Appendix A.)”

B	3.2.5.5.	In Article 3.2.5.5.	<p>Strike out Sentences (1),(2),(3)and (4) and substitute:</p> <p>“1) Except as provided by Sentences (2) and (3), access routes required by Article 3.2.5.4. shall be located so that every access opening required by Articles 3.2.5.1. and 3.2.5.2. is no less than 3 m and no more than 15 m from the closest portion of the access route, measured horizontally to the face of the <i>building</i>. (See Appendix A.)</p> <p>2) Access routes required by Article 3.2.5.4. shall be located so that the principal entrance is no less than 3 m and no more than 15 m from the closest portion of the access route, measured horizontally along the path of travel from the access route to the principal entrance. (See Appendix A.)</p> <p>3) Paths of travel for fire fighters shall be no more than</p> <p>a) 45 m from the access route to the entrance door of each <i>dwelling unit</i> for sprinklered <i>buildings of residential occupancy</i> if there is no <i>dwelling unit</i> located above another <i>dwelling unit</i>,</p> <p>b) 55 m from the access route to the entrance door of each <i>dwelling unit</i>, where the <i>dwelling unit</i> may contain a <i>secondary suite</i> or the <i>dwelling unit</i> has no more than one <i>dwelling unit</i> on top, if</p> <ul style="list-style-type: none"> i) the <i>building</i> is sprinklered to NFPA 13R, ii) a minimum 2 m wide unobstructed access path is available for fire fighters, iii) a strobe light is installed outside the principal entrance of the <i>dwelling unit</i>, and is connected to an internal <i>smoke alarm</i> within the <i>dwelling unit</i>, iv) <i>sprinkler systems</i> are monitored by the fire alarm system and by an off-site monitoring service, v) an exterior audible signal activated by the fire alarm system provides a minimum sound level of 75 db in the sleeping area of the <i>dwelling unit</i>, vi) emergency lighting is provided along the path of travel for fire fighters, and vii) the fire alarm system has a graphic annunciator, <p>c) 65 m from the access route to the entrance door of each <i>dwelling unit</i>, where the <i>dwelling unit</i> may contain a <i>secondary suite</i> or the <i>dwelling unit</i> has no more than one <i>dwelling unit</i> on top, if</p> <ul style="list-style-type: none"> i) the requirements of Subclauses (i) to (vii) of Clause (b) are met, ii) a 64 mm diameter fire department hose connection is located adjacent to the path of travel for firefighters and no more than 45 m from the principal entrance of the <i>dwelling units</i>, and iii) the location of the fire department hose connections required by Subclause (ii) is indicated on the fire alarm system graphic annunciator, and <p>d) 45 m from the access route to the entrance door, for non-residential portions of a <i>building</i>, which are cut off from and have no internal access to the remainder of the <i>building</i>.</p>
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			<p>(See Appendix A.)</p> <p>4) The access route from the hydrant location to the <i>building</i> location or from the hydrant location to the principal entrance of the <i>building</i> as described in Sentences (5) and (6), shall be no more than 90 m. (See Appendix A.)</p> <p>5) Where the access route runs continuously across the face of a <i>building</i>, the length of the access route shall be measured by measuring the shortest distance between a line drawn perpendicular to the access route and through the hydrant and a line drawn perpendicular to the access route and through the principal entrance of the <i>building</i>. (See Appendix A.)</p> <p>6) Where the access route terminates before the principal entrance of a <i>building</i>, the length of the access route shall be measured by measuring from a line drawn perpendicular to the access route and through the hydrant straight along the access route to its terminus and thereafter along the actual path of travel to the principal entrance. (See Appendix A.)”</p>
B	3.2.5.6.	Title to Article 3.2.5.6.	Strike out the title and substitute “Design of Access Routes and Paths of Travel”.
B	3.2.5.6.	In Article 3.2.5.6.	<p>After Sentence (1) add:</p> <p>“2) The unobstructed path of travel for fire fighters from the curb to the main entrance or suite entrance door as required in Sentences 3.2.5.5.(1) to (3) and every access opening as required in Articles 3.2.5.1 and 3.2.5.2 shall be</p> <p>a) no less than</p> <p style="padding-left: 40px;">i) 2 m in width, or</p> <p style="padding-left: 40px;">ii) 1.2 m in width where serving no more than two <i>dwelling units</i>; or</p> <p style="padding-left: 40px;">iii) 900 mm in width where serving one <i>dwelling unit</i>, <i>one-family dwelling</i>, or <i>one-family dwelling with secondary suite</i>, and</p> <p>b) surfaced with concrete, asphalt or similar material.”</p>
B	3.2.5.9.(1)	In Sentence (1)	Strike out “(6)” and substitute “(7)”.
B	3.2.5.9.(6)	After Sentence(6)	<p>Add:</p> <p>“7) If a standpipe system is required by Sentence 3.2.5.8.(1) and an <i>exit</i> stair shaft is not provided in the <i>building</i>, a standpipe system may be omitted if</p> <p>a) a 64 mm diameter fire department hose connection is located adjacent to the path of travel for fire fighters, and</p> <p>b) the hose connection is located no more than 39 m from any point on a floor area within the</p>

			building with a hose length of no more than 30 m.”
B	3.2.5.12.(3)	In Sentence (3)	<p>In Sentence (3) strike out “construction and installation” and substitute “<i>construction, installation and testing</i>”.</p> <p>Strike out Clause (a) and substitute:</p> <p>“a) in a <i>building of residential occupancy</i> throughout containing no more than 1 or 2 <i>dwelling units</i> where</p> <ul style="list-style-type: none"> i) each <i>dwelling unit</i> has its own sprinkler water supply, 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; or” <p>After Clause (b) add:</p> <p>“c) in a <i>building of residential occupancy</i> throughout that contains only <i>row housing</i> where</p> <ul style="list-style-type: none"> i) there is no <i>dwelling unit</i> located above another <i>dwelling unit</i>, ii) all vertical <i>suite</i> separations are constructed as a <i>fire separation</i> having no less than a 1 h <i>fire-resistance rating</i>, iii) the <i>fire separation</i> described in Sub clause (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 <i>noncombustible</i> material, iv) each <i>dwelling unit</i> has its own sprinkler water supply, and v) one tank-type water closet is supplied with water from the sprinkler head which is located farthest from the main water supply; or <p>d) in a <i>laneway house</i> where</p> <ul style="list-style-type: none"> i) each bathroom, clothes closet, linen closet, and pantry must have sprinkler coverage, 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.”
B	3.2.5.12.(8)	After Sentence (8)	<p>Add:</p> <p>“9) Notwithstanding Sentences (1) and (2) and except as permitted by Sentence (10), automatic sprinkler protection shall be provided for all unenclosed balconies, exterior decks, porches and patios of residential <i>buildings</i> sprinklered to NFPA 13R or NFPA 13 if</p> <ul style="list-style-type: none"> a) the framing or cladding is of <i>combustible construction</i>, b) the depth of balcony, deck, porch, or patio is more than 1200 mm, and c) the balcony, roof overhang or structure above is more than 300 mm overlapping the balcony, deck or patio below and is located less than 3 m above the finished floor of the balcony, deck or patio below.

			<p>10) Automatic sprinkler protection for an unenclosed exterior balcony of a residential <i>building</i> may be omitted if</p> <p>a) the <i>building</i> is of <i>noncombustible construction</i>, and</p> <p>b) the exterior wall assembly adjoining the balcony and the exterior ceiling assembly covering the balcony are constructed with <i>noncombustible</i> materials.”</p>
B	3.2.5.15.(1)	In Sentence (1)	Strike out “so that the distance from the fire department connection to a hydrant is no more than 45 m and is unobstructed” and substitute “horizontally within 5 m of the principal entrance of a <i>building</i> and shall be unobstructed. (See Appendix A.)”
B	3.2.5.15.(2)	In Sentence (2)	Strike out “so that the distance from the fire department connection to a hydrant is no more than 45 m and is unobstructed” and substitute “horizontally within 5 m of the principal entrance of a <i>building</i> and shall be unobstructed.”.
B	3.2.5.18.	After Article 3.2.5.18.	<p>Add:</p> <p>“3.2.5.19. Location of Building Safety Facilities for Firefighters</p> <p>1) Firefighting installations and <i>building</i> safety facilities including central control facility, firefighters' elevator and stairwells equipped with standpipes shall be centrally located in close proximity to the firefighters' entrance.”</p>
B	3.2.6.1.(1)	In Sentence (1)	<p>Strike out Sentence (1) and substitute:</p> <p>“1) This Subsection applies to a <i>building</i></p> <p>a) more than 18 m in height, measured between <i>grade</i> and the floor level of the top <i>storey</i>, or</p> <p>b) with a <i>floor area</i> or part of a <i>floor area</i> located above the third <i>storey</i> designed or intended as a Group B, Division 2 or Group B, Division 3 <i>major occupancy</i>.”</p>
B	3.2.6.4.	In Article 3.2.6.4.	<p>In Sentence (1) strike out “Manual” and substitute “Automatic and manual”.</p> <p>After Sentence (4) add:</p> <p>“5) The automatic emergency recall provided in accordance with Sentence (1) shall be activated by</p> <p>a) <i>smoke detectors</i> installed in each <i>floor area</i> in front of the elevator or elevators, or</p> <p>b) the <i>building</i> fire alarm system.</p> <p>6) Where <i>smoke detectors</i> as provided in accordance with Sentence (5), are activated on the recall level, the automatic emergency recall signal shall automatically direct the elevator to an alternate floor level.</p>

			7) <i>Smoke detectors</i> provided in accordance with Sentence (5) shall be designed as part of the <i>building</i> fire alarm system.”
B	3.2.6.5.(6)	In Sentence (6)	Strike out Sentence (6) and substitute: “6) Deleted.”
B	3.2.6.8.(1)	In Sentence (1)	Strike out Sentence (1) and substitute: “1) A voice communication system or systems conforming to Article 3.2.4.21. shall be provided in all <i>buildings</i> conforming to Article 3.2.6.1.”
B	3.2.7.9.	In Clause(1)(a)	Strike out “36” and substitute “18”.
B	3.2.7.10.	In Sentence (1)	Strike out Sentence (1) and substitute: “1) Electrical conductors shall be protected against exposure to fire, for a period of no less than 1 h, from the source of the emergency power supply to the branch circuits serving equipment, if the electrical conductors serve a) fire alarm systems, b) voice communication systems, c) the operation of an elevator referred to in Sentences 3.2.6.5.(1), d) emergency lighting referred to in Articles 3.2.7.3. and 3.2.7.4., except where self-contained emergency lighting units described in Sentence 3.2.7.4.(2) are utilized and remote lamps are located within the same <i>floor area</i> , and e) electrical equipment required by Clauses 3.2.7.9.(1)(b) to (e). (See Appendix A.)”
B	3.3.1.1.(4)	After Sentence (4)	Add: “5) Each <i>suite</i> other than a residential <i>suite</i> , located at ground level and having direct access to the <i>street</i> shall be separated from adjoining <i>suites</i> and from the remainder of the <i>building</i> by a <i>fire separation</i> having a <i>fire resistance rating</i> no less than 2h.”
B	3.3.1.18.	After Sentence (4)	Add: “5) Swimming pools greater than 450 mm deep shall be protected in conformance with Article 9.8.8.1.”
B	3.3.1.19.	After Sentence (6)	Add: “7) An openable window which has a width of 380 mm or less, is located less than 1070 mm above interior floor level, and which opens to a space more than 600 mm below the level of the interior floor, shall be protected by a <i>guard</i> , in conformance with Article 3.3.1.18.

			<p>8) An openable window which has a width greater than 380 mm, is located less than 1070 mm above interior floor level, and which opens to a space more than 600 mm below the level of the interior floor, shall be protected by</p> <p>(a) an opening mechanism that limits the unobstructed opening to no more than 100 mm measured either vertically or horizontally, and</p> <p>(b) a guard in conformance with Article 3.3.1.18.”</p>
B	3.3.3.5.	After Sentence (17)	<p>Add:</p> <p>“18) Fire dampers in fire separations between fire compartments described in Sentence (2) shall be designed to close upon a signal from a <i>smoke detector</i> in either fire compartment. (See Appendix A.)”</p>
B	3.3.4.4.(3)	In Sentence (3)	<p>Strike out Clause (b) and substitute:</p> <p>“b) in a <i>sprinklered building</i>, it is not necessary to travel up or down more than two storeys to reach the <i>exit</i> door, provided the travel distance to a single <i>exit</i> door does not exceed 25 m, or</p> <p>c) the uppermost floor level opens to a balcony no more than 6 m above adjacent ground level.”</p>
B	3.3.5.2.	In Sentence (1)	<p>Strike out Sentence (1) and substitute:</p> <p>“1) In addition to other requirements in this By-law regarding automatic fire extinguishing systems, an appropriate fire extinguishing system shall be installed in every <i>industrial occupancy floor area</i> if required by the Fire By-law.”</p>
B	3.3.6.	After Subsection 3.3.6.	<p>Add:</p> <p>3.3.7. Building Security</p> <p>3.3.7.1. Scope</p> <p>1) This Subsection is intended to address issues of life safety through the security of <i>buildings</i>.</p> <p>3.3.7.2. Skylights</p> <p>1) All openable skylights shall be designed to prevent opening from the outside when in the closed and locked position.</p> <p>2) All exterior skylight fasteners shall be tamperproof.</p> <p>3.3.7.3. Doors</p>

		<p>1) All entrance and exterior doors to <i>dwelling units</i>, doors between <i>dwelling units</i> and attached garages, and doors which provide direct or indirect access from <i>storage garages</i> to <i>dwelling units</i> shall conform to Subsections 9.6.5., 9.6.6. and 9.6.8.</p> <p>3.3.7.4. Sidelights to Doors</p> <p>1) All sidelights to doors and all windows adjacent to doors located within 915 mm of the door locks shall conform to Article 9.6.6.2.</p> <p>3.3.7.5. Exterior Sliding Windows</p> <p>1) In <i>buildings of residential occupancy</i>, all exterior windows with a sliding sash located within 5 m of finished grade, shall be provided with a positive, automatically locking mechanism and installed so that the sliding sash cannot be removed from its frame when in the locked position.</p> <p>3.3.7.6. Security Gates for Storage Garages</p> <p>1) Security gates installed at vehicle entrances or at secured areas in <i>storage garages</i> shall comply with the following provisions</p> <p>a) except as required in Clause (b), security gates shall be designed and installed with a clearance between the moving parts and adjacent surfaces which is sufficient to prevent injury or entrapment and is no greater than 100 mm.</p> <p>b) if horizontally sliding security gates open by sliding into a pocket guard enclosure constructed against a wall</p> <p style="padding-left: 40px;">(i) the clearance between the pocket guard enclosure and the wall surface shall be no greater than 25 mm; and</p> <p style="padding-left: 40px;">(ii) the clearance between the pocket guard enclosure and the gate frame shall be no greater than 25 mm on each side of the gate frame.</p> <p>c) security gates shall be designed and installed with</p> <p style="padding-left: 40px;">i) a load sensitive device designed to reverse the gates on contact with an obstruction,</p> <p style="padding-left: 40px;">ii) a five second audible or visual warning device indicating the opening or closing of the gate, and</p> <p style="padding-left: 40px;">iii) a maximum clearance between the gate frame and wall surface of no more than 25 mm.</p> <p>3.3.7.7. Security for Storage Garage</p> <p>1) The provisions of Sentences (2) to (7) shall apply to a <i>storage garage</i> with more than 19 parking spaces.</p>
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		<p>2) If access is provided from a <i>storage garage</i> to a stair tower or to an elevator through a vestibule, the vestibule shall be constructed</p> <p>a) with closures glazed with clear wired glass in steel frames, which provide the greatest possible unobstructed view from the <i>storage garage</i> into the stair tower or vestibule, b) as a <i>fire separation</i> with a <i>fire-resistance rating</i> of no less than 1 hr, c) with full or half glazed closures with a <i>fire-protection rating</i> of no less than 45 min between the <i>storage garage</i> and the vestibule and between the vestibule and the stair tower, and d) with a row of sprinkler heads running the full width of the glazing, installed on the garage side of the vestibule at a spacing of 1800 mm on center parallel to the glass, located between 150 mm to 300 mm perpendicular to the glazing and vertically installed on the garage ceiling in conformance with NFPA requirements.</p> <p>3) A stair shaft serving a <i>storage garage</i> and which is connected to a <i>storey</i> containing an <i>occupancy</i> other than a <i>storage garage</i>, shall terminate at that <i>storey</i>.</p> <p>4) Except for open-air <i>storage garages</i> and a <i>sprinklered building of residential occupancy</i>, a <i>storage garage</i> shall be provided with <i>exits</i> which only serve the <i>storage garage</i> and which <i>exit</i> directly outside the <i>building</i>.</p> <p>5) Except as provided in Sentence (6), an exterior stair shaft or elevator vestibule which serves as access to a <i>storage garage</i> shall be unenclosed.</p> <p>6) An enclosed exterior stair shaft or elevator vestibule which serves as access to a <i>storage garage</i> shall conform to Clauses (2) (a) and (c) but need not conform to the <i>fire separation</i> and <i>fire-resistance rating</i> requirements.</p> <p>7) Where the stair shaft or vestibule in Sentence (5) or (6) is required to have a <i>fire-resistance rating</i> due to spatial separation requirements, the provisions of Clauses (2) (a), (b) and (c) shall apply.</p> <p>8) Despite the provisions of Sentence 3.2.7.1.(2) and Table 9.34.2.7., storage garages shall meet the following average lighting levels measured at floor level</p> <p>a) 550 lx in the first 15 m of entrance roadway, b) 110 lx in traffic aisles, and c) 220 lx in pedestrian access vestibules, stairwells and elevator lobbies.</p> <p>3.3.7.8. Washrooms in Public Buildings</p>
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			<p>1) Public access to washrooms in a public <i>building</i> shall be located in areas which are open to the public and shall not be located in enclosed stairwells.</p> <p>3.3.8. Public Storage Facilities</p> <p>3.3.8.1. Egress From Storage Lockers</p> <p>1) Despite the provisions of this By-law, an egress door from a storage locker in a public storage facility is not required to swing on a vertical axis if</p> <p>a) the storage locker is equipped with its own sprinkler head, b) the <i>building</i> is fully sprinklered in conformance with NFPA 13, c) the <i>building</i> is equipped with a fire alarm system in conformance with Subsection 3.2.4., d) each storage locker is separated from the remainder of the <i>floor area</i> by a solid wall assembly without openings, e) the storage locker door is equipped with a failsafe locking mechanism, f) the size of the storage locker does not exceed 50 m² and the travel distance to the egress door does not exceed 10 m, and g) the overhead door only serves a single storage locker.”</p>
B	3.4.1.2.	After Sentence (2)	<p>Add:</p> <p>“3) Contiguous exit stairs (scissors stairs) are not permitted in a 5 or 6 storey wood frame building.”</p>
B	3.4.6.12.	In Sentence (1)	<p>Before the words “Article 3.4.6.14.”, add “Sentence (2) or”.</p> <p>After Sentence (1) add:</p> <p>“2) Despite the provisions of Sentence (1), principal entrance doors opening to an <i>acceptable</i> open space at ground level are not required to swing in the direction of <i>exit</i> travel if</p> <p>a) the <i>suite</i> is located at ground level, b) the <i>suite</i> does not serve a Group F, Division 1 <i>occupancy</i>, and c) the <i>occupant load</i> is no more than 60 persons.”</p>
B	3.4.6.16.(4)	In Sentence (4)	<p>After Clause (d) add:</p> <p>“e) there is a push button together with a motion sensor or a pressure sensitive pad to release the electro-magnetic lock, f) the push button referred to in Clause (e) is i) directly connected to the electrical circuit that provides power to the electro-</p>

			<p>magnetic lock, without any intervening mechanism,</p> <p>ii) embossed with the word "EXIT" on the activation surface in text with dimensions of no less than 25 mm,</p> <p>iii) internally illuminated by a permanent LED type light source, and</p> <p>iv) labeled "DOOR RELEASE" in plain and legible characters.</p> <p>g) the door release hardware is located so that a person can reach an exit within 15 seconds,</p> <p>h) the electromagnetic lock will reset automatically, except as provided in Clause (j),</p> <p>i) the automatic reset feature in Clause (h) is not activated for at least 15 seconds, and</p> <p>j) after activation of the fire alarm system, the electromagnetic lock can only be reset by manual means."</p>
B	3.6.4.3.(1)	In Clause (a)	<p>Strike out Subclauses (ii) and (iv) and substitute:</p> <p>"ii) optical fibre cables and electrical wires and cables with a flame spread of no more than 1.5 m, a smoke density of no more than 0.5 at peak optical density and a smoke density of no more than 0.15 at average optical density when tested in conformance with the Horizontal Flame and Smoke Test referenced in Clause 4.11.6. of CAN/CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT6 Rating)</p> <p>iv) Deleted."</p>
B	3.6.4.3.	After Sentence (2)	<p>Add:</p> <p>"3) Notwithstanding Sentence (1), all optical fibre cables and electrical wires and cables installed in a concealed space used as a plenum shall:</p> <p>a) have a flame spread of no more than 1.5 m, a smoke density of no more than 0.5 at peak optical density and a smoke density of no more than 0.15 at average optical density when tested in conformance with the Horizontal Flame and Smoke Test referenced in Clause 4.11.6. of CAN/CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT6 Rating), or</p> <p>b) be located in totally enclosed noncombustible raceways. (See A-3.1.4.3.(1)(b)(i) in Appendix A.).</p> <p>4) Notwithstanding Clause (3)(a), minor components of wiring systems such as communication conductors no more than 9 m in length, including the drop down to floor level, that exhibit a vertical char of no more than 1.5 m when tested in conformance with the Vertical Flame Test - Cables in Cable trough in Clause 4.11.4. of the CSA C22.2 No. 0.3, "Test Method for Electrical Wires and Cables" (FT4 Rating), may be installed in a concealed space used as a plenum.</p> <p>5) Notwithstanding Clause (3)(b), a totally enclosed nonmetallic raceway may be installed in a concealed space used as a plenum if the nonmetallic raceway</p>

			<p>a) conforms to Article 3.1.5.20., and b) is no more than 9 m in length.”</p>
B	3.6.5.8.	After Article 3.6.5.8.	<p>Add:</p> <p>“3.6.5.9. Location of Exhaust Vents in One and Two Family Dwellings</p> <p>1) In <i>one</i> and <i>two-family dwellings</i>, exhaust vents serving heating and air conditioning equipment and similar appliances, other than direct vented fireplaces, shall be directed</p> <p>a) vertically through the roof of a <i>building</i>, with the discharge located at least 1.5 m away from any property line, or b) horizontally through an exterior wall which faces a <i>street</i>, with the discharge located at least 3 m away from any property line.”</p>
B	3.7.2.2.	In Article 3.7.2.2.	<p>Strike out Sentence (2) and substitute “2) Deleted.”</p> <p>Strike out Sentence (3) and substitute “3) Deleted.”</p> <p>In Sentence (4) strike out “10” and substitute “25”.</p> <p>In Sentence (6) strike out “and (8),” and substitute “(8), (17) and (18),”.</p> <p>In Sentence (12) strike out “Sentence (4)” and substitute “Sentences (4) and (17)”.</p> <p>In Sentence (13) strike out “and (16)” and substitute “(16) and (17),”.</p> <p>In Sentence (14) strike out “Sentence (4)” and substitute “Sentences (4) and (17)”.</p> <p>After Sentence (16) add:</p> <p>“17) Two unisex toilet rooms may serve an <i>assembly occupancy</i>, a <i>business and personal services occupancy</i>, a <i>mercantile occupancy</i>, or an <i>industrial occupancy</i> provided</p> <p>a) the <i>suite</i> area of the <i>occupancy</i> is no more than 200 m², b) the total <i>occupant load</i> of the <i>occupancy</i> is no more than 60 persons, c) each toilet room is fitted out with one water closet and one lavatory, and d) at least one of the toilet rooms complies with the requirements of Sentence 3.7.2.10.(9)</p> <p>18) Three unisex toilet rooms are permitted to serve 61 to 100 persons in an <i>assembly occupancy</i> provided</p> <p>a) each toilet room is fitted out with one water closet and one lavatory, and</p>

			b) at least one of the unisex toilet rooms complies with the requirements of Sentence 3.7.2.10.(9).”
B	3.7.2.10.	After Article 3.7.2.10.	<p>Add:</p> <p>“3.7.2.11. Gender Neutral Washroom Requirements</p> <p>1) Individual toilet stalls in <i>gender neutral washroom</i> facilities shall</p> <p>a) have partition walls and doors that are full height with a clear opening height of no less than 150 mm and no more than 300 mm, measured from the finished floor to the underside of the partition wall or door, and</p> <p>b) have locking devices equipped with display mechanisms to indicate on the outside of the stall doors if the stall is occupied.</p> <p>2) The main entrance door serving the <i>gender neutral washroom</i> facility shall</p> <p>a) have no door, or</p> <p>b) have a door with an open transom or louvered grill.”</p>
B	3.7.2.11.	After Article 3.7.2.11.	<p>Add:</p> <p>“3.7.2.12. Bicycle Parking Facilities</p> <p>1) Water closets, wash basins, showers and <i>grooming stations</i> shall be provided to accommodate Class A bicycle spaces in conformance with Sentences (3) and (4), except that these requirements do not apply to residential <i>buildings</i>.</p> <p>2) Despite the provisions of Sentence (1), additional shower and change facilities are not required if on-site facilities are provided as part of an employee fitness centre provided these facilities meet or exceed the requirements of Sentences (3) and (4), and are accessible to employees before and after their work shifts.</p> <p>3) The number of water closets, wash basins and showers required by Sentence (1) shall conform to Table 3.7.2.12.</p> <p>4) There shall be no less than 1 <i>grooming station</i> for each shower provided, and each station shall be</p> <p>a) separate from the wash basin area,</p> <p>b) equipped with a mirror and an electrical outlet, and</p>

			c) equipped with a counter top with a minimum width of 600 mm and a minimum depth of 250 mm.”
B	3.7.2.12.	At the end of Sentence (4)	Add Table 3.7.2.12.(Attached as Item 5)
B	3.8.1.1.	In Sentence (3)	Strike out Sentence (3) and substitute: “3) Access to existing <i>buildings</i> shall be provided to the extent required in Division B, Part 11.”
B	3.8.2.1.	In Sentence (2)	Strike out “This” and substitute “Except as described in Subsection 3.8.5., this”
B	3.8.2.3.	At the end of Sentence (2)	Add “(See Sentence 3.7.2.10. (12) of Division B.)”.
B	3.8.2.27.	In Sentence (1)	At the end of Clause 3.8.2.27. (1) (a), add “without the use of a mechanical lift,”. At the end of Clause 3.8.2.27. (1) (b) strike out “and” and substitute “without the use of a mechanical lift, and”.
B	3.8.2.27.	After Sentence (3)	Add: “4) Despite the provisions of Sentence (1), a <i>building</i> which contains three or more <i>dwelling units</i> served by an elevator and a public corridor shall be equipped with the following (See Appendix A) a) interior and exterior stairs and ramps that are <i>accessible</i> to the public, with a colour contrast or distinctive pattern, visible from both directions of travel, demarcating the leading edge of treads and landings, and the beginning and end of ramps, b) door opening hardware within <i>dwelling units</i> and common amenity areas which may be operated i) without tight grasping or twisting of the wrist, and ii) by application of a force of no more than 38 N for exterior doors or 22 N for interior doors at the handle, push plate or latch-releasing device, except where the <i>Chief Building Official</i> determines that a greater force is necessary to ensure proper <i>building</i> function, c) kitchen sinks and washbasins within <i>dwelling units</i> and common amenity spaces with faucets activated by levers or by devices that do not require tight grasping or twisting of the wrist, d) wall assemblies reinforced adjacent to the toilet and bathtub to accommodate the future installation of grab bars, e) an accessible path of travel from the main entrance and from any parking area serving the <i>building</i> to the entry doors of <i>dwelling units</i> and to common amenity areas, f) a clearance of no less than 450 mm beside the latching jamb of dwelling unit entry doors,

			<p>notwithstanding Subclause 3.3.1.13.(10)(b)(i),</p> <p>g) <i>accessible</i> gender neutral washrooms in public or common amenity areas of the <i>building</i>,</p> <p>h) entry doors with level thresholds leading into each <i>dwelling unit</i>, except for ramps or other devices conforming to Article 3.8.3.10.,</p> <p>i) a washroom at the main entry level of each dwelling unit, containing a washbasin and toilet, with a minimum clear doorway opening of 800 mm and a minimum floor space, clear of the door swing, of 750 mm by 1 200 mm in front of the washbasin and toilet,</p> <p>j) all doors in the accessible path of travel equipped with a self-closer with a closing period of no less than 3 seconds, measured from a door open position of 70 degrees to a point 75 mm from the door closed position,</p> <p>k) power-operated doors at the main building entrance and the entrance from the parking area, and</p> <p>l) signage in public areas, amenity spaces and exits in multi-unit residential buildings in conformance with Sentence 3.8.3.12.(3) of Division B.</p> <p>5) Despite the provisions of Clause 3.8.2.27.(4) (f), if the <i>dwelling unit</i> contains pre-wired outlet boxes for a residential style automatic door opener and related controls, and the <i>Chief Building Official</i> determines that provision of the required clearance is impractical, the <i>Chief Building Official</i> may waive the clearance requirement.”</p>
B	3.8.3.4.	In Article 3.8.3.4	<p>Strike out Article 3.8.3.4. and substitute:</p> <p>“3.8.3.4. Parking Requirements for Persons with Disabilities</p> <p>1) Parking stalls for <i>persons with disabilities</i> shall comply with the Parking By-law (see Appendix A), and shall</p> <p>a) have a firm, slip-resistant and level surface,</p> <p>b) be located adjacent to an accessible entrance conforming to Article 3.8.3.5., and</p> <p>c) be marked with signage or symbols identifying such stalls as exclusively for the use of <i>persons with disabilities</i>.</p> <p>2) Where parking stalls are provided for <i>persons with disabilities</i>, entry and exit controls, security controls, ticketing equipment, and pay stations serving such parking stalls shall be designed and installed so that all user functions are located no more than 1 200 mm above the finished paved area, and are <i>accessible</i>.”</p>
B	3.8.4.1.	In Subsection 3.8.4.	<p>In Article 3.8.4.1. Strike out Sentences (1) and (2) and substitute:</p> <p>“1) All <i>existing buildings</i> shall be upgraded in accordance with Division B, Part 11.</p>

			<p>2) Deleted.”</p> <p>Delete Articles 3.8.4.2. to 3.8.4.8 inclusive.</p>
B	3.8.5.	In Subsection 3.8.5.	<p>Strike out Subsection 3.8.5. and substitute:</p> <p>“3.8.5. ADAPTABLE HOUSING REQUIREMENTS</p> <p>3.8.5.1. Application</p> <p>1) This Subsection applies to the design and <i>construction</i> of</p> <p>a) <i>one and two family dwellings,</i></p> <p>b) <i>laneway houses,</i></p> <p>c) <i>secondary suites,</i></p> <p>d) <i>row housing,</i> and</p> <p>e) <i>multi-family residential buildings.</i></p> <p>2) This Subsection does not apply to <i>single room accommodation.</i></p> <p>3.8.5.2. Entrance Doors to Dwelling Units</p> <p>1) All <i>dwelling units</i> shall have at least one entrance door no less than 865 mm wide, equipped with</p> <p>a) two peepholes, one located at 1067 mm above the floor and the other located at 1524 mm above the floor, or a glass sidelight or intercom security type system (see Appendix A),</p> <p>b) a beveled threshold no more than 13 mm above the floor level, except for entrance doors serving balconies and basements, and</p> <p>c) door opening hardware that does not require a tight grasp or twisting action of the wrist, and can be opened with a force of no more than 38 N.</p> <p>3.8.5.3. Interior Doors, Corridors, and Stairs in Dwelling Units</p> <p>1) Doorways within <i>dwelling units</i> shall have a width of least 800 mm.</p> <p>2) Doors within <i>dwelling units</i> shall have door opening hardware that does not require a tight grasp or twisting action of the wrist and can be opened with a force of no more than 22 N.</p> <p>3) Doors within <i>dwelling units</i> shall have beveled thresholds no more than 13mm above the floor.</p>

		<p>4) Corridors within <i>dwelling units</i> shall have a clear width of at least 900 mm.</p> <p>5) Except for interior stairs within <i>laneway houses</i>, at least one staircase within a <i>dwelling unit</i> shall have a minimum width of 915 mm.</p> <p>3.8.5.4. Kitchens in Dwelling Units</p> <p>1) Kitchen sinks in <i>dwelling units</i> shall be equipped with lever-type faucets or hardware that does not require a tight grasp or twisting action of the wrist.</p> <p>2) All waste pipes running from under-sink “P” traps to drain stacks shall be installed no higher than 305 mm above the finished floor.</p> <p>3.8.5.5. Bathrooms in Dwelling Units</p> <p>1) All bath and shower controls in <i>dwelling units</i> shall be easily accessible from an open floor space or offset.</p> <p>2) All washbasins in <i>dwelling units</i> shall be equipped with lever-type faucets or hardware that does not require a tight grasp or twisting action of the wrist.</p> <p>3) One bathroom within a <i>dwelling unit</i> shall be configured to accommodate the future installation of a low barrier shower and shall be constructed with</p> <ul style="list-style-type: none"> a) double floor joists under a bathtub on timber construction, or b) a second shower drain under a bathtub on timber construction with concrete topping, or c) a second shower drain under a bathtub on concrete slab. <p>4) One bathroom in a <i>dwelling unit</i> shall have a minimum clear floor space of 750 mm by 1200 mm in front of the washbasin, toilet, bathtub or shower.</p> <p>5) Wall assemblies shall include reinforcement adjacent to the toilet, bathtub and shower to accommodate the future installation of grab bars.</p> <p>3.8.5.6. Minimum Fixture Requirements for Bathrooms in Multi-Level Dwelling Units</p> <p>1) One bathroom located on the lower level of a multi-level <i>dwelling unit</i> shall be equipped with fixtures in accordance with Table 3.8.5.6.</p> <p>3.8.5.7. Outlets, Switches and Controls</p>
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			<p>1) Electrical, telephone, cable and data outlets in a <i>dwelling unit</i> shall be located between 450 mm and 1 200 mm above the finished floor, except where , in the opinion of the <i>Chief Building Official</i>, a different height is necessary to accommodate appliances or equipment.</p> <p>2) Controls for the operation of building services or safety devices, electrical switches, thermostats and intercoms in a <i>dwelling unit</i> shall be located no more than 1 200 mm above the finished floor, except where, in the opinion of the <i>Chief Building Official</i>, a different height is necessary for safety reasons.</p> <p>3.8.5.8. Living Room Window Requirements</p> <p>1) One window in a living room shall have a window sill no higher than 800 mm above the finished floor.”</p>
B	3.8.5.6.	After Article 3.8.5.6.	Add Table 3.8.5.6. (Attached as Item 6)
B	3.9.1.1.	In Table 3.9.1.1.	<p>Add in chronological order:</p> <p>“3.1.3.3. Artist Live/Work - Class A Artist Studio (1) [F03, F20-OS1.2, OS2.2, OP1.2]</p> <p>3.1.3.4. Artist Live/Work - Class B Artist Studio (1) [F02, F03, F11, F12, F20, F73, F81-OS1.2, OS2.2, OA1, OP1.2, OP2.2]</p> <p>3.1.3.5. Training School (1) [F02-OS3.7]</p> <p>3.1.3.6. Industrial Flex Space (1) [F02, F03, F11-OS1.2, OS3.7]</p> <p>3.1.14.3. Overhead Skylight Glazing (1) [F20, F21, F23, F30-OS2.1, OS2.2, OS2.4, OS3.1]</p> <p>3.1.14.4. Green Roof Assembly (1) [F02, F03, F61-OS1.1, OP1.1, OP2.3]</p> <p>3.2.1.7. Containment in Group C Combustible Buildings Greater than 2 Storeys (1) [F02, F03, F10-OS1.2, OS1.5] (3) [F05, F10-OS1.2, OS1.5]</p> <p>3.2.5.19. Location of Building Safety Facilities for Firefighters (1) [F12-OS1.2, OP1.2]</p>

			<p>3.3.7.2. Skylights (1) [F34-OS4.1] (2) [F34-OS4.1]</p> <p>3.3.7.5. Exterior Sliding Windows (1) [F34-OS4.1]</p> <p>3.3.7.6. Security Gates for Storage Garages (1) [F36-OS3.6]</p> <p>3.3.7.7. Security for Storage Garages (1) [F34, F35-OS4.1] (2) [F34, F35-OS4.1] [F30-OS4.2] (3) [F34, F35-OS4.1] [F30-OS4.2] (4) [F34, F35-OS4.1] [F30-OS4.2] (5) [F34, F35-OS4.1] [F30-OS4.2] (6) [F34, F35-OS4.1] [F30-OS4.2] (7) [F34, F35-OS4.1] (8) [F30-OS4.2][F35-OS4.2]</p> <p>3.3.8.1. Public Storage Facilities (1) [F10-OS3.7]</p> <p>3.6.5.9. Location of Exhaust Vents Serving One and Two-Family Dwellings (1) [F50-OH5] [F56-OH3.1]</p> <p>3.7.2.11. Bicycle Parking Facilities (3) [F71, F72-OH2.1, OH2.3] (4) [F71-OH2.3]</p> <p>3.8.5.2. Entrance Doors to Dwelling Units (1) [F73-OA1]</p> <p>3.8.5.3. Interior Doors, Cooridors and Stairs in Dwelling Units (1) [F73-OA1] (2) [F73-OA1] (3) [F73-OA1]</p> <p>3.8.5.4. Kitchens in Dwelling Units (1) [F74-OA2] (2) [F74-OA2]</p>
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			<p>3.8.5.5. Bathrooms in Dwelling Units</p> <p>(1) [F74-OA2] (2) [F74-OA2] (3) [F73-OA1] (4) [F73-OA1] (5) [F73-OA1]</p> <p>3.8.5.6. Minimum Fixture Requirements for Bathrooms in Multi-level Dwelling Units</p> <p>(1) [F74-OA2]</p> <p>3.8.5.7. Outlet Switches and Controls</p> <p>(1) [F74-OA2] (2) [F74-OA2]”</p> <p>In Article 3.2.2.18. add Sentences:</p> <p>“(3) [F02-OS1.2, OP1.2] (4) [F02-OS1.2, OP1.2]”</p> <p>In Article 3.2.3.13. add Sentence:</p> <p>“(5) [F10-OS1.5, OS3.7]”</p> <p>In Article 3.2.4.9. add Sentences:</p> <p>“(8) [F12-OS1.5, OS3.7] (9) [F12-OS1.5, OS3.7]”</p> <p>In Article 3.2.4.15. delete Sentences (1), (2) and (3) and substitute:</p> <p>“(1) Deleted (2) Deleted (3) Deleted”</p> <p>In Article 3.2.4.19. delete Sentence (9) and substitute:</p> <p>“(9) Deleted”</p> <p>In Article 3.2.5.1. add Sentence:</p> <p>“(4) [F12-OS1.2, OS1.5, OS3.7]”</p>
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			<p>In Article 3.2.5.9. add Sentence: “(7) [F12-OS1.2, OP1.2]”</p> <p>In Article 3.2.5.12. add Sentences: “(9) [F03-OS1.2] (10) [F03-OS1.2]”</p> <p>In Article 3.2.6.4. add Sentences: “(5) [F12-OS3.4] (6) [F12-OS3.4] (7) [F12-OS3.4]”</p> <p>In Article 3.2.4.20. delete Sentence (5) and substitute: “(5) Deleted”</p> <p>In Article 3.3.1.1. add Sentence: “(5) [F03-OS1.2, OP1.2]”</p> <p>In Article 3.3.1.18. add Sentence: “(5) [F30-OS3.1]”</p> <p>In Article 3.3.1.19. add Sentences: “(7) [F30-OS3.1] (8) [F30-OS3.1]”</p> <p>In Article 3.3.3.5. add Sentence: “(18) [F03-OS1.2]”</p> <p>In Article 3.4.1.2. add Sentence: “(3) [F10, F12, F05, F06-OS3.7]”</p>
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			<p>[F12, F06-OP1.2] [F12, F06-OS1.5, OS1.2]”</p> <p>In Article 3.6.4.3. add Sentence:</p> <p>“(3) [F02, F03-OS1.2, OS3.4]”</p> <p>In Article 3.7.2.2. add Sentences:</p> <p>“(17) [F72-OH2.1] (18) [F72-OH2.1]”</p> <p>In Article 3.2.5.5. at the end of the title add “and Paths of Travel” and add Sentences</p> <p>“(5) [F12-OP1.2] [F12-OS1.2] (6) [F12-OP1.2] [F12-OS1.2]”</p> <p>In Article 3.2.5.6. strike out “Access Route Design” and substitute “Design of Access Routes and Paths of Travel” and add Sentence:</p> <p>“(2) [F12-OS1.5, OS3.1, OS3.7]”</p> <p>In Article 3.8.2.27. strike out the title “Apartment and Condominium Buildings” and substitute “Apartment Building and Condominiums” and add Sentence:</p> <p>“(4) [F73, F74-OA1]”</p> <p>In Article 3.8.3.4. strike out “Stalls” in the title and substitute “Requirements” and add Sentences:</p> <p>(1) “[F73, F74-OA1, OA2] (2) [F73, F74-OA1, OA2]”</p> <p>In Article 3.8.4.2. strike out the title and substitute “Deleted” and delete Sentence (1) and Substitute</p> <p>(1) Deleted</p> <p>In Article 3.8.4.3. strike out the title and substitute “Deleted” and delete Sentence (1) and Substitute</p>
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			<p>(1) Deleted</p> <p>In Article 3.8.4.4. strike out the title and substitute “Deleted” and delete Sentence (1) and Substitute</p> <p>(1) Deleted</p> <p>In Article 3.8.4.5. strike out the title and substitute “Deleted” and delete Sentence (1) and Substitute</p> <p>(1) Deleted</p> <p>In Article 3.8.4.6. strike out the title and substitute “Deleted” and delete Sentence (1) and Substitute</p> <p>(1) Deleted</p> <p>In Article 3.8.4.7. strike out the title and substitute “Deleted” and delete Sentence (1) and Substitute</p> <p>(1) Deleted</p> <p>In Article 3.8.4.8. strike out the title and substitute “Deleted” and delete Sentence (1) and Substitute</p> <p>(1) Deleted</p>
B	4.1.5.17.	After Article 4.1.5.17.	<p>Add:</p> <p>“4.1.5.18. Loads For Building Maintenance</p> <p>1) <i>Buildings</i> shall be designed to support the loads and forces required to support <i>building</i> maintenance equipment.”</p>
B	4.1.7.4.	After Article 4.1.7.4.	<p>Add:</p> <p>“4.1.7.5. Exterior Wall Air Barrier</p> <p>1) An exterior wall assembly incorporating an air barrier required by Subsection 5.4.1. shall be designed to accommodate loading due to air pressure differences on opposite sides of the air barrier.”</p>

B	4.3.1.	After Subsection 4.3.1.	Add "(See Appendix A.)"
B	4.5.1.1.	In Table 4.5.1.1.	Add in chronological order: 4.1.5.18 Loads for Building Maintenance (1) [F30-OS3.1] 4.1.7.5. Exterior Wall Air Barrier (1) [F22-OP2.3, OP2.4, OS2.3]"
B	5.1.1.1.	After Article 5.1.1.1.	Add: "5.1.1.2. Maritime Climate 1) This Part includes special provisions to deal with the potentially damaging effects of Vancouver's maritime climate, including the possibility of rapid decay in structural members. (See Appendix A.)"
B	5.1.2.1.	In Article 5.1.2.1.	In Sentence (1), at the beginning, strike out "This" and substitute "Except as provided in Sentence (2), this " After Sentence (1) add: " 2) Buildings or portions of buildings not required to provide environmental separation, not exposed to exterior environmental loads or intended only for summer seasonal use need not conform to this Part where it can be shown, to the satisfaction of the <i>Chief Building Official</i> , that the health or safety of <i>building</i> users, the intended use of the <i>building</i> and the operation of <i>building</i> services will not be adversely affected. (See Appendix A.)"
B	5.1.2.1.	After Article 5.1.2.1.	Add: "5.1.2.2. Building Envelope Professional Requirements 1) The <i>Building Envelope Professional</i> shall conduct reviews, and provide letters as required in Sentences (2) and (3), on <i>buildings</i> or portions of <i>buildings</i> with a cladding system over wood framing or light steel framing and on residential <i>buildings</i> within the scope of Part 5. (See Appendix A.) 2) The <i>Building Envelope Professional</i> shall, prior to issuance of a <i>building permit</i> , provide the

			<p><i>Chief Building Official</i> with a completed, signed and sealed commitment letter in the form attached as Schedule D-1 at the end of this Part.</p> <p>3) The <i>Building Envelope Professional</i> shall, prior to issuance of an <i>occupancy permit</i>, provide the <i>Chief Building Official</i> with a completed, signed and sealed completion letter in the form attached as Schedule D-2 at the end of this Part.”</p>
B	5.1.4.2.	After Sentence (2)	<p>Add:</p> <p>“3) Design and <i>construction of building</i> components and assemblies described in Article 5.1.2.1. shall be in accordance with good practice as described in CSA S478, “Guideline on Durability in Buildings”.”</p>
B	5.1.5.1.	In Sentence (1)	Strike out “Structural” and substitute “Energy utilization, structural”.
B	5.3.1.1.	In Article 5.3.1.1.	<p>Strike out Sentences (1) and (2) and substitute:</p> <p>“1) Where a <i>building</i> component or assembly will be subjected to an intended temperature differential, the component or assembly shall include materials to resist heat transfer in accordance with this Subsection and Part 10 of Division B.</p> <p>2) Deleted.”</p>
B	5.4.1.1.	In Sentence (3)	Strike out Sentence (3) and substitute “3) Deleted.”
B	5.4.1.2.	In Sentence (2)	Strike out Sentence (2) and substitute “2) Deleted.”
B	5.5.1.1.	In Sentence (3)	Strike out Sentence (3) and substitute “3) Deleted.”
B	5.6.1.1.	In Sentence (2)	Strike out Sentence (2) and substitute “2) Deleted.”
B	5.6.1.2.	In Sentence (3)	<p>Strike out Sentence (3) and substitute:</p> <p>“3) Where protective materials applied to assemblies are installed to provide the required protection from precipitation, the materials shall be installed to shed precipitation, minimize its entry into the assembly, prevent its penetration through the assembly and drain any accumulated water to the exterior. (See Appendix A.)</p> <p>4) Flashings, drips, or overhangs shall be incorporated to deflect accumulated water from the <i>building</i> face where there are changes in planes of walls and roofs, changes in cladding material, or window or door heads or sills. (See Appendix A.)”</p>

B	5.6.2.	In the title to Subsection 5.6.2.	Strike out the title and substitute “DRAINAGE, ACCUMULATION AND DISPOSAL”
B	5.6.2.1.	In the title to Article 5.6.2.1.	Strike out “Sealing and”.
B	5.6.2.1.(1)	In Sentence (1)	Strike out “Except as provided in Sentence (2), materials” and substitute “Materials”. Strike out Clause (a) and substitute “a) designed to shed precipitation, and”.
B	5.6.2.1.(2)	In Sentence (2)	Strike out Sentence (2) and substitute “2) Deleted.”
B	5.6.2.2.	After Sentence (4)	Add: “5) Where a roof or balcony is entirely enclosed by parapet walls, there shall be a sufficient number of overflow outlets installed in the parapet walls in order to properly drain the roof or balcony in the event that rainwater conductors become obstructed. (See Appendix A.)”
B	5.8.2.1.	In Sentence (2)	Strike out Sentence (2) and substitute “2) Deleted.”
B	5.11.1.1.	In Table 5.11.1.1.	In Article 5.6.2.2. add Sentence: “(5) [F20-OS2.1,OS2.2,OS2.3]” In Article 5.6.1.2. add Sentence: “(4) [F61-OH1.1,OH1.2,OH1.3] [F62-OS2.3]” In Article 5.6.2.1. delete “Sealing and” in the title.
B	Part 5	At the end of Part 5	Add Schedule D-1 (Attached as Item 7)
B	Part 5	At the end of Part 5	Add Schedule D-2 (attached as Item 8)
B	6.2.2.6.	In Sentence (1)	Strike out “or territorial regulations” and substitute “enactments” and strike out “such regulations” and substitute “such enactments”.
B	6.2.2.7.	In Sentence (1)	Strike out “Sentence 3.6.3.1.(1) and Article 3.6.4.2.” and substitute “Sentences (3) and (4), Sentence 3.6.3.1.(1) and Article 3.6.4.2.”.
B	6.2.2.7.	After	Add:

		Sentence (2)	<p>“3) The exhaust from a commercial cooking unit shall discharge through an <i>ecology unit</i> where the exterior wall termination of the exhaust is within 3 m of a lane, property line or <i>street</i> property line. (See Appendix A.)</p> <p>4) The exhaust from a commercial cooking unit which is discharged from an exterior wall termination shall not</p> <p>a) be discharged in a location or manner which causes a concentrated stream of air to fall directly onto pedestrians,</p> <p>b) be discharged in a location or manner which causes exhaust to accumulate in an area with outdoor seating, and</p> <p>c) generate a sound pressure level which exceeds noise levels permitted by the Noise Control By-law. (See Appendix A.)”</p>
B	6.4.1.1.	In Table 6.4.1.1.	<p>In Article 6.2.2.7. add Sentences:</p> <p>“(3) [F40, F50-OH5]</p> <p>(4) [F40, F50-OH5]”</p>
B	8.1.1.1.	In Sentence (3)	Strike out “Section 5.6 of Division B of the British Columbia Fire Code’ and substitute “the Fire By-law and Subsection 8.2.6.”.
B	8.1.1.3.	In Article 8.1.1.3.	<p>In the beginning of the title add “Deconstruction and”.</p> <p>In Sentence (1) before “demolition” add “deconstruction and”.</p>
B	8.1.2.1.	In Sentence (1)	Strike out “ <i>alteration</i> or demolition,” and substitute “ <i>construction</i> and fire safety”.
B	8.1.2.	After Subsection 8.1.2.	<p>Add:</p> <p>“8.1.3. Construction Safety Program</p> <p>8.1.3.1. Requirements for Construction Safety Program</p> <p>1) Unless otherwise provided in Article 8.1.3.2., before the commencement of any <i>construction</i> a <i>Construction Safety Program</i> shall be submitted to the <i>Chief Building Official</i>.</p> <p>2) a <i>Construction Safety Program</i> shall include</p> <p>a) the names and emergency phone numbers of the <i>constructor</i>, the <i>coordinating registered</i></p>

		<p><i>professional and the Construction Safety Officer,</i></p> <p>b) details of the <i>construction</i> procedures relating to site access, traffic control, scaffolding and swing stages, protection at excavations, hoisting equipment (including its location and scheduling), fire protection facilities, material storage, waste material disposal, control of dust and debris, protection at the perimeters of all floor levels, barricades, covered walkways and any other details required by the <i>City Engineer, the Chief Building Official</i> or any other city official having jurisdiction, and</p> <p>c) a <i>construction</i> site plan showing the location on the site of the equipment, facilities and safety measures detailed in the <i>Construction Safety Program</i> in accordance with Clause (b).</p> <p>3) The <i>Construction Safety Program</i> shall be amended from time to time to reflect the current stage of <i>construction</i>.</p> <p>8.1.3.2. Exemptions</p> <p>1) A <i>Construction Safety Program</i> is not required for minor interior <i>alterations</i> contained within a <i>suite</i> or for minor <i>alterations</i> or <i>additions</i> to a <i>one-family dwelling</i>, except that the <i>Chief Building Official</i> may require a <i>Construction Safety Program</i> if, in the opinion of the <i>Chief Building Official</i>, the work may cause a hazard for persons occupying the <i>building, construction</i> workers or the public.</p> <p>8.1.3.3. Posting Requirements</p> <p>1) No <i>construction</i> shall commence until a copy of the <i>Construction Safety Program</i> which complies with this subsection is posted on the <i>construction</i> site in accordance with Sentence (2).</p> <p>2) The copy of the <i>Construction Safety Program</i> required by Sentence (1) shall be</p> <p>a) posted on a plywood board measuring no less than 600 mm by 600 mm, which is staked into the ground, protected from the weather and visible from the street, or</p> <p>b) posted on the exterior of the principal <i>construction</i> site shelter.</p> <p>3) A copy of the <i>Construction Safety Program</i> shall be posted on the <i>construction</i> site at all times during <i>construction</i>.</p> <p>8.1.4. Construction Safety Officer</p> <p>8.1.4.1. Requirement for Construction Safety Officer</p> <p>1) Where construction of a <i>building</i> includes the services of a <i>Coordinating Registered Professional</i>, a full-time <i>Construction Safety Officer</i> shall be present on the <i>construction</i> site at</p>
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			<p>all times during <i>construction</i>.</p> <p>8.1.4.2. Requirement for Site Reviews</p> <p>1) During <i>construction</i>, the <i>Construction Safety Officer</i> shall carry out site reviews at least twice daily to ensure that work is proceeding safely and in conformance with the <i>Construction Safety Program</i>.</p> <p>2) After each site review, the <i>Construction Safety Officer</i> shall post a copy of the site review in a location adjacent to the posted copy of the <i>Construction Safety Program</i>.</p> <p>8.1.4.3. Site Safety Meetings Required</p> <p>1) The <i>Construction Safety Officer</i> shall hold regular <i>construction</i> site safety meetings at least monthly with the <i>constructor</i> and a representative of each trade.</p> <p>8.1.4.4. Safety Meeting Minutes</p> <p>1) The <i>Construction Safety Officer</i> shall keep minutes of the <i>construction</i> site safety meetings held in accordance with Article 8.1.4.3. and copies of those minutes shall be provided to the <i>coordinating registered professional</i> and shall be available at the <i>construction</i> site for inspection by the <i>Chief Building Official</i>.</p> <p>8.1.4.5. Violation of Construction Safety Program</p> <p>1) If the <i>Construction Safety Officer</i> observes that a procedure set out in the <i>Construction Safety Program</i> is not being followed, the <i>Construction Safety Officer</i> shall immediately inform the appropriate <i>trades safety coordinator</i> or, if that person is unavailable at the site, the supervisor of the appropriate sub-contractor.</p> <p>2) If corrective measures are not taken immediately by the person informed in accordance with Sentence (1), the <i>Construction Safety Officer</i> shall promptly inform the <i>constructor</i> or an agent of the <i>constructor</i>.”</p>
B	8.2.1.	In the title	Strike out the title to Subsection 8.2.1. and substitute “Walkways, Fencing, Boarding and Barricades”
B	8.2.1.1.	In the title	Strike out the title to Article 8.2.1.1. and substitute “Covered Walkways”.
B	8.2.1.1.	In Sentence (1)	Strike out Sentence (1) and substitute: <p>”1) If <i>construction</i> of a <i>building</i> may cause a hazard for persons using the adjacent sidewalk, work shall not commence until a covered walkway has been provided on the sidewalk in</p>

			<p>accordance with Article 8.2.1.2.</p> <p>2) Despite the provisions of Sentence (1) a covered walkway is not required on a sidewalk if</p> <p>a) the work is carried out entirely behind fencing, boarding or barricades which separate the <i>construction</i> site from the sidewalk, or</p> <p>b) the <i>building</i> is located no less than 2 m from a sidewalk used by pedestrians, except that the <i>Chief Building Official</i> may require a covered walkway for a site which contains a <i>building</i> located more than 2 m from a sidewalk if, in the opinion of the <i>Chief Building Official</i>, site conditions so warrant. “</p>
B	8.2.1.2.	In the title	Strike out the title to Article 8.2.1.2. and substitute “Covered Walkway Construction”.
B	8.2.1.2.	In Article 8.2.1.2.	<p>Strike out Sentence (1) and substitute:</p> <p>“1) A covered walkway shall be</p> <p>a) no less than 2.5 m in height,</p> <p>b) no less than 1.5 m in width, or the width of the sidewalk, whichever is the lesser,</p> <p>c) designed and constructed to support loads no less than 2.4 kPa on the roof,</p> <p>d) designed and constructed to support all loads that may be applied to it,</p> <p>e) equipped with a weather tight roof sloped towards the site or a flat roof with a splash board no less than 300 mm high on the <i>street</i> side,</p> <p>f) totally enclosed on the <i>construction</i> site side of the sidewalk,</p> <p>g) constructed with a wall with a smooth surface facing the sidewalk,</p> <p>h) equipped with a railing 1070 mm high measured from the walking surface and located on the <i>street</i> side of the sidewalk if the covered walkway is supported by posts on the <i>street</i> side of the sidewalk, and</p> <p>i) constructed with sufficient lighting to enable the public to walk safely through any walkway which is constructed on a sidewalk which is illuminated by overhead <i>street</i> lighting at night.”</p>
B	8.2.1.3.	In Article 8.2.1.3.	<p>Strike out Sentences (1), (2) and (3) substitute:</p> <p>“1) If <i>construction</i> which may cause a hazard to the public is located 2 m or less from a <i>street</i>, fencing, boarding or barricades no less than 1.8 m high shall be erected between the <i>construction</i> site and the <i>street</i>.</p> <p>2) Fencing, boarding or barricades erected in accordance with Sentence (1) shall have a smooth surface facing the <i>street</i> and shall have no openings, except openings required for access to the <i>construction</i> site.</p> <p>3) Deleted.</p>

			<p>4) Access openings through fencing, boarding or barricades erected in accordance with Sentence (1) shall be equipped with gates that shall be</p> <p>a) closed and locked when the <i>construction</i> site is unattended, and</p> <p>b) maintained in place until <i>construction</i> is completed.”</p>
B	8.2.1.4.	In Article 8.2.1.4.	<p>Strike out Sentence (1) and substitute:</p> <p>“1) If an unusual hazard exists on a <i>construction</i> site, security guards shall be posted 24 hours a day and 7 days a week, to prevent public access to the area where the unusual hazard is located.”</p>
B	8.2.1.5.	In Article 8.2.1.5.	<p>Strike out Sentence (1) and substitute:</p> <p>“1) All hazardous areas on a <i>construction</i> site shall be secured against unauthorized entry at all times when workers are not present on the site.</p> <p>2) If workers are not present on a construction site during normal working hours,</p> <p>a) all windows, doors and other openings located within 3 m of the ground shall be secured with barricades, or</p> <p>b) fencing, boarding or barricades shall be constructed around the entire site in accordance with Article 8.2.1.3.”</p>
B	8.2.3.1.	In Article 8.2.3.1.	<p>In Sentence (1) before “site” add “<i>construction</i>”.</p> <p>In Sentence (2) strike out “<i>street</i> or other public property” and substitute “<i>public way</i>” and, at the end, strike out “.” and substitute “ by the <i>City Engineer, the General Manager, Real Estate and Facilities Management, or the General Manager, Park Board, as the case may be.</i>”</p> <p>In Sentence (3) before “site” add “<i>construction</i>”.</p> <p>After Sentence (4) add:</p> <p>“5) If <i>construction</i> necessitates the movement of material or equipment on or across a <i>public way</i> a person shall be posted to supervise the movement of the material or equipment and shall take all steps necessary to ensure the safety of pedestrians and vehicular traffic on the <i>public way.</i>”</p>
B	8.2.3.2.	In the Title	Before “ Activities ” add “ Construction ”
B	8.2.3.2.	In Sentence (1)	Strike out Sentence (1) and substitute:

			<p>“1) Overhead operations which may create a hazard to pedestrian or vehicular traffic shall only be carried out if the <i>public way</i> is closed to pedestrian and vehicular traffic.</p> <p>2) For the purposes of Sentence (1), closure of a <i>street</i>, other than momentary interruptions in public use, shall only be permitted by the <i>City Engineer</i> if the <i>City Engineer</i> is satisfied that no other reasonable alternative exists to minimize the hazard to pedestrians and vehicular traffic.</p> <p>3) For the purposes of Sentence (1), closure of a <i>public way</i> other than a <i>street</i> or park shall only be permitted by the <i>General Manager, Real Estate and Facilities Management</i> if the <i>General Manager, Real Estate and Facilities Management</i> is satisfied that no other reasonable alternative exists to minimize the hazard to pedestrians and vehicular traffic.</p> <p>4) For the purposes of Sentence (1), closure of a park shall only be permitted by the <i>General Manager, Park Board</i> if the <i>General Manager, Park Board</i> is satisfied that no other reasonable alternative exists to minimize the hazard to pedestrians and vehicular traffic.</p> <p>5) Permission to close a <i>street</i> , park or other <i>public way</i> as required in Sentences (2),(3), and (4) shall be applied for and obtained before the <i>street</i>, park or other <i>public way</i> is closed.”</p>
B	8.2.3.3.	In the title	Strike out “ Barricades ” and substitute “ Barriers ’.
B	8.2.3.3.	In Article 8.2.3.3.	<p>Strike out Sentence (1) and substitute:</p> <p>“1) An excavation in a <i>street</i> or other <i>public way</i> or adjacent to a traffic lane where there is no sidewalk or curb, shall be protected by barriers.</p> <p>2) Barriers provided for in Sentence (1) shall be constructed of concrete interlocking barriers or plastic water filled interlocking barriers sufficient to prevent pedestrian or vehicular traffic from entering the excavation.</p> <p>3) Barriers provided for in Sentence (1) shall be marked with retro reflective tape, paint or delineators sufficient to make the barriers visible from dusk until dawn.”</p>
B	8.2.3.4.	In the title	At the end add “ of Streets or City Property ”
B	8.2.3.4.	In Sentences (1) and (2)	<p>In Sentence (1) strike out “sidewalks” and, after “<i>streets</i>” add “parks,” and, at the end, strike out “to a safe condition.” and substitute “ to the satisfaction of the <i>City Engineer</i>, the <i>General Manager, Real Estate and Facilities Management</i>, or the <i>General Manager, Park Board</i>, as the case may be.</p> <p>In Sentence (2) strike out “sidewalks” and, after “<i>streets</i>” add “parks,” and strike out “when” and substitute “as soon as”.</p>

B	8.2.3.5.	In Sentence (1)	Strike out “during the hours of darkness” and substitute “from dusk until dawn”.
B	8.2.3.5.	After Article 8.2.3.5.	<p>Add:</p> <p>“8.2.3.6. Maintenance of Public Ways</p> <p>1) <i>Public ways</i> adjacent to <i>projects</i> shall be cleaned and maintained to the satisfaction of the <i>City Engineer.</i>, the <i>General Manager</i>, <i>Real Estate and Facilities Management</i>, or the <i>General Manager</i>, <i>Park Board</i>, as the case may be.</p> <p>2) No person shall place, park or leave <i>construction</i> vehicles on <i>public ways</i> or <i>City</i> property.</p> <p>3) No person shall place or leave <i>construction</i> materials, overspills, debris, excavated materials or mud on <i>public ways</i> or <i>City</i> property</p> <p>4) No person shall dump or discharge waste water from <i>construction</i> activities or vehicle wash water from concrete trucks or dump trucks on <i>public ways</i> or <i>City</i> property.”</p>
B	8.2.4.	In Subsection 8.2.4.	<p>Strike out Subsection 8.2.4. and substitute:</p> <p>“8.2.4. Traffic Control</p> <p>8.2.4.1. Protection of the Public on Public Ways</p> <p>1) If work on a <i>construction</i> site creates a traffic hazard on or adjacent to a <i>public way</i>, traffic control measures for the duration of the hazard shall include</p> <p>a) persons to direct <i>construction</i> workers,</p> <p>b) persons to direct traffic,</p> <p>c) appropriate warning signs indicating the presence of <i>construction</i> work and flagpersons.</p> <p>d) warning signs indicating any lane closures,</p> <p>e) if there is a lane closure of a vehicle travel lane, retro reflective lane control devices set up in a gradual taper to close the vehicle travel lane,</p> <p>f) if there is a lane closure of a vehicle travel lane at night, yellow flashing lights mounted on retro reflective barricades at the closure point of the vehicle travel lane,</p> <p>g) retro reflective lane control devices surrounding the closed portion of any <i>public way</i>, and</p> <p>h) at night, retro reflective barricades with yellow flashing lights in front of any construction material or equipment which is not marked with retro reflective sheeting.</p> <p>2) If work on a <i>construction</i> site creates a hazard to bicycle traffic on a bikeway for more than 15 minutes, traffic control measures for the duration of the hazard must include</p>

		<p>a) a safe delineated continuous path for bicycle traffic or a safe alternative delineated path for pedestrian traffic, b) persons to supervise and direct bicycle traffic past the hazard, and c) if a safe alternative pedestrian path is provided, a bicycle dismount sign at either end of the path.</p> <p>8.2.4.2. Traffic Control and Hazard Signs</p> <p>1) Traffic control and traffic hazard signs shall be</p> <p>a) at least 75 cm by 75 cm, b) backed with retro reflective sheeting, c) marked with black text or symbols on an fluorescent orange background for hazard signs, and d) marked with black text or symbols on a white background for traffic control signs.</p> <p>8.2.4.3. Lane Control Devices</p> <p>1) A lane control device shall be</p> <p>a) a fluorescent red or orange plastic tubular marker 100 cm in diameter marked with two 8 cm retro reflective bands, b) a fluorescent red or orange plastic cone 45 cm or 70 cm in diameter at the base with a 15 cm retro reflective band, or c) a fluorescent red or orange plastic flexible drum with two 10 inch retro reflective bands.</p> <p>8.2.4.4. Traffic Control Person</p> <p>1) A person directing traffic on a <i>public way</i> shall</p> <p>a) carry written proof of completion of a traffic control course approved under the authority of the Workers' Compensation Act of British Columbia or the British Columbia Safety Council, b) wear personal protective equipment approved under the authority of the Workers' Compensation Act of British Columbia including a safety vest, hard hat, reflective wrist straps, and safety footwear approved under the authority of the Canadian Standards Association, c) use a traffic control paddle consisting of a "STOP" sign marked with white letters on a retro reflective red background and a "SLOW" sign marked with black letters on a retro reflective yellow background, and d) use a flashlight that includes a red signalling hood for night traffic conditions.</p> <p>8.2.4.5. Construction Vehicle Traffic Hazard</p>
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			<p>1) If the location or use of a vehicle related to a <i>construction</i> site creates a traffic hazard on a <i>public way</i> adjacent to a <i>construction</i> site, the vehicle shall display</p> <p>a) a 360 degree yellow flashing light, b) four way flashers, and c) a flashing arrow board.”</p>
B	8.2.5.3.	In Article 8.2.5.3.	<p>Strike out Sentence (1) and substitute:</p> <p>“1) Waste material removed in accordance with Sentence 8.2.5.2.(1) shall be deposited in a container which is</p> <p>a) designed to ensure that waste material cannot escape from the container, and b) secure and inaccessible to the public.”</p>
B	8.2.5.4.	After Article 8.2.5.4.	<p>Add:</p> <p>“8.2.5.5. Disposal of Waste Material</p> <p>1) Except as provided in Sentence (2), all waste material on a <i>construction</i> site shall be sorted, diverted and disposed of in a manner satisfactory to the <i>Chief Building Official</i> (see Appendix A.)</p> <p>2) Sentence (1) does not apply to</p> <p>a) proposed work of a value of \$50,000 or less, and b) corrective measures or immediate measures carried out by the <i>Chief Building Official</i> in accordance with Articles 1.5.3.4. and 1.5.3.5.”</p>
B	8.2.5.	After Subsection 8.2.5.	<p>Add:</p> <p>“8.2.6. Fire Safety Measures</p> <p>8.2.6.1. Application (See Appendix A.)</p> <p>1) This Subsection applies to fire safety for <i>buildings</i> undergoing <i>construction</i> and adjacent <i>buildings</i>.</p> <p>8.2.6.2. Protection of Adjacent Buildings</p> <p>1) Protection shall be provided for adjacent <i>buildings</i> that could be exposed to fire originating from <i>buildings</i> undergoing <i>construction</i>. (See Appendix A.)</p>

		<p>8.2.6.3. Fire Safety Plan</p> <p>1) Before the commencement of <i>construction</i>, a fire safety plan for the <i>construction</i> site shall be submitted to and accepted by the <i>Chief Building Official</i>.</p> <p>2) Unless otherwise required by Sentence (3), a fire safety plan shall conform with the requirements of the Fire By-law and shall include</p> <p>a) measures to reduce fire hazards in and around the <i>building</i> (see Appendix A), and</p> <p>b) a maintenance program for firefighting measures required by the Fire By-law.</p> <p>3) Where <i>construction</i> occurs in an <i>existing building</i> that is required to have a fire safety plan conforming to the Fire By-law, the existing fire safety plan shall be modified to incorporate the alterations to the <i>existing building</i>.</p> <p>8.2.6.4. Access for Firefighting</p> <p>1) Unobstructed access to fire hydrants, portable extinguishers and fire department connections for standpipe and <i>sprinkler systems</i> shall be maintained on all <i>construction</i> sites.</p> <p>2) Firefighters shall be provided with unobstructed access to all levels of the <i>building</i>.</p> <p>3) Firefighters shall be provided with unobstructed access to to all elevators, hoists or lifts in the <i>building</i>.</p> <p>4) Firefighters shall be provided with unobstructed access to access routes for fire department vehicles.</p> <p>5) Where a <i>construction</i> site is enclosed by fencing, boarding or barricades, firefighters shall be provided with 24 hour emergency access for fire department equipment and personnel.</p> <p>8.2.6.5. Portable Extinguishers</p> <p>1) Portable extinguishers shall be provided in unobstructed locations in all areas where</p> <p>a) hot work operations are carried out,</p> <p>b) <i>combustibles</i> are stored,</p> <p>c) internal combustion engines are located,</p> <p>d) flammable liquids and <i>combustible</i> liquids or gases are stored or handled, and</p> <p>e) temporary fuel-fired equipment is used.</p>
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			<p>2) Portable extinguishers required by Sentence (1) shall have a minimum rating of</p> <ul style="list-style-type: none"> a) 2-A:10-B:C on moveable equipment, and b) 4-A:40-B:C in all other locations. <p>8.2.6.6. Standpipe Systems (See Appendix A.)</p> <p>1) Where a standpipe system is installed in a <i>building</i> under <i>construction</i>, the standpipe system shall be installed progressively, in conformance with Subsection 3.2.5. of Division B of this By-law, in occupied portions of a <i>building</i>.</p> <p>2) Where a standpipe system is to be installed progressively in unoccupied portions of a <i>building</i> under <i>construction</i>, a permanent or temporary standpipe system is permitted, and the standpipe system shall have</p> <ul style="list-style-type: none"> a) conspicuously marked and readily accessible fire department connections on the outside of the <i>building</i> at street level b) at least one hose outlet at each floor, c) pipe size, hose valves and water supply conforming to Subsection 3.2.5. of Division B of this By-law, d) as a minimum, secure supports and restraints on alternate floors, e) at least one hose valve for attaching fire department hose at each intermediate landing or floor level in the exit stairway, and f) valves which are kept closed and protected from mechanical damage at all times. <p>3) A standpipe system installed in accordance with Sentence (2) shall be progressively installed so that it is no more than one floor below the highest forms, staging, and similar <i>combustible construction</i> materials at all times.</p> <p>4) A temporary standpipe system shall remain in service until the installation of the permanent standpipe system is complete.</p> <p>5) If a <i>building</i> equipped with a standpipe system is being deconstructed or demolished floor by floor, the standpipe system, together with all fire department connections and valves, shall be maintained in operable condition at all times on all <i>storeys</i>, except for the <i>storey</i> located immediately below the <i>storey</i> being deconstructed or demolished.</p> <p>8.2.6.7. Hot Surface Applications</p>
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		<p>1) Roofing operations and other surface applications that involve heat sources and hot processes shall be considered hot works and shall conform to the requirements in the Fire By-law.</p> <p>2) Bitumen kettles shall not be located on roofs, and shall be</p> <p>a) provided with a close-fitting cover constructed of steel with a minimum thickness of No. 14 sheet metal gauge, b) under constant supervision when in operation, and c) maintained free of excessive residue.</p> <p>3) Mops used to spread bitumen shall be stored in a safe location at a safe distance away from <i>buildings</i>, when not in use.</p> <p>8.2.6.8. Ignition Sources (See Appendix A.)</p> <p>1) Internal combustion engines, temporary heating equipment and other equipment capable of causing ignition shall be kept at a safe distance away from <i>combustible</i> materials.</p> <p>2) The clearance between <i>combustible</i> materials and temporary heating equipment, including flues, shall be in conformance with Part 6 or in conformance with the minimum clearances shown on certified heating equipment.</p> <p>8.2.6.9. Utility Services to Buildings under Construction</p> <p>1) Except as required in Sentence (3) and except for water supplies for firefighting, utility services shall be terminated at a point located outside the <i>building</i> undergoing <i>deconstruction</i> or <i>demolition</i>.</p> <p>2) A utility service provider whose service connections will be affected by <i>construction</i>, shall be notified before any service connections are terminated in accordance with Sentence (1).</p> <p>3) If it is necessary to maintain any utility service, during <i>deconstruction</i> or <i>demolition</i>, the utility service shall be</p> <p>a) relocated as necessary, and b) protected from damage.</p> <p>4) Temporary electrical installations shall be installed in conformance with the British Columbia Electrical Safety Regulation.</p>
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		<p><i>demolition</i>, a fire watch shall be maintained at all times, unless the <i>building</i> is provided with an active fire alarm system.</p> <p>2) A fire watch as required by Sentence (1) shall include:</p> <ul style="list-style-type: none"> a) a complete tour of inspection of the site at least once every hour, b) facilities to provide a fire warning to occupants, to the satisfaction of the <i>Chief Building Official</i>, and c) facilities to communicate with the fire department in the event of fire, to the satisfaction of the <i>Chief Building Official</i>. <p>8.2.6.15. Smoking Restrictions on Construction Sites</p> <p>1) Smoking shall only be permitted on <i>construction</i> sites in accordance with the Fire By-law.</p> <p>8.2.6.16. Egress from Buildings under Construction</p> <p>1) In <i>buildings</i> under <i>construction</i>, there shall be at least one <i>exit</i> which is accessible and usable at all times.</p> <p>2) In <i>buildings</i> under <i>construction</i> there shall be least one stairway maintained in usable condition at all times.</p> <p>8.2.6.17. Fire Warning in Buildings under Construction</p> <p>1) Facilities shall be provided to alert persons on a <i>construction</i> site to the presence of a fire and such facilities shall be audible throughout the <i>building</i>.</p> <p>8.2.6.18. Storage and Use of Dangerous Goods on Construction Sites</p> <ul style="list-style-type: none"> 1) <i>Combustible</i> liquids and <i>flammable liquids</i> shall be stored and used in conformance with the Fire By-law. 2) Dangerous goods and materials shall be stored in conformance with the Fire By-law. 3) Dangerous goods and materials shall be used in conformance with the Fire By-law. <p>8.2.6.19. Temporary Enclosures on Construction Sites</p> <p>1) Fabrics and films used to temporarily enclose <i>buildings</i> shall be securely fastened to prevent contact with heaters or other ignition sources.</p>
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			<p>8.2.6.20. Storage of Combustible Refuse</p> <p>1) <i>Combustible</i> refuse shall be stored a safe distance away from <i>buildings</i>, and at a safe location. (See also Subsection 8.2.5.)</p> <p>8.2.6.21. Shut-off of Utility Services at Excavation Sites</p> <p>1) Except as provided in Article 8.2.6.22., before excavation begins, utility services shall be shut off, and terminated outside the limits of the excavation and the terminations shall be labeled so as to be easily identifiable. (See also Sentence 8.2.6.9. (1).)</p> <p>2) A utility service provider whose service connections will be affected by <i>construction</i>, shall be notified before any service connections are terminated in accordance with Sentence (1).</p> <p>3) If it is necessary to maintain any utility service, during excavation, the utility service shall be</p> <p>a) relocated as necessary, and b) protected from damage.</p> <p>8.2.6.22. Maintaining Existing Utility Services</p> <p>1) Existing utility services may be left within the area of the excavation if</p> <p>a) the service company consents to the location of the services before the excavation begins, b) a method of excavation is adopted which ensures that the services are not damaged, and c) the services are provided with temporary support.”</p>
B	8.3.1.1.	In Table 8.3.1.1.	<p>Add in chronological order:</p> <p>“8.1.3.1. Requirements for Construction Safety Program</p> <p>(1) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p> <p>(2) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p> <p>8.1.3.3. Posting Requirements</p> <p>(1) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p> <p>(2) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p> <p>8.1.4.1. Requirements for Construction Safety Officer</p> <p>(1) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p>

			<p>8.1.4.2. Requirements for Site Reviews (1) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p> <p>8.1.4.3. Site Safety Meeting Required (1) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p> <p>8.1.4.4. Safety Meeting Minutes (1) [F12, F30-OS5.1, OS5.2, OS5.3, OD5.4, OS5.5, OS5.6, OS5.7]</p> <p>8.2.6.2. Protection of Adjacent Buildings (1) [F03-OS1.2, OP3.1]</p> <p>8.2.6.4. Access to Firefighting (1) [F12-OS1.2, OP3.1]</p> <p>8.2.6.5. Portable Extinguishers (1) [F12-OS1.2, OP3.1]</p> <p>8.2.6.6. Standpipe Systems (1) [F12-OS1.2, OP3.1]</p> <p>8.2.6.7. Hot Surface Application (1) [F03-OS1.1] [F31-OS5.6]</p> <p>8.2.6.8. Ignition Source (1) [F03-OS1.2]</p> <p>8.2.6.12. Fire Separation in Partly Occupied Buildings (1) [F03-OS1.2]</p> <p>8.2.6.14. Requirements for Fire Watch (1) [F11-OS5.9]</p> <p>8.2.6.15. Smoke Restrictions on Construction Sites (1) [F02-OS1.1]</p> <p>8.2.6.16. Egress from Buildings under Construction (1) [F10-OS1.5]</p> <p>8.2.6.20. Storage of Combustible Refuse (1) [F01-OS1.2]</p>
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			<p>In Article 8.1.1.3. add “Deconstruction and” at the beginning of the title.</p> <p>In Article 8.2.1.1. strike out “Covered Way Exceptions” in the title and substitute “Covered Walkways”.</p> <p>In Article 8.2.1.2. strike out “Covered Way Construction” in the title and substitute “Covered Walkway Construction”.</p> <p>In Article 8.2.1.3. delete Sentence 3 and substitute:</p> <p>“(3) Deleted (4) [F34-OS5.5]”</p> <p>In Article 8.2.1.5. add Sentence:</p> <p>“(2) [F34-OS5.5]”</p> <p>In Article 8.2.3.1. add Sentence:</p> <p>“(5) [F30-OS5.3]”</p> <p>In Article 8.2.3.2. add “Construction” in the title after “Overhead”.</p> <p>In Article 8.2.3.3. strike out “Barricades” in the title and substitute “Barriers”.</p> <p>In Article 8.2.3.4. add “of Streets or City Property” in the title after “Restoration and Repair”.</p> <p>In Article 8.2.4.1. delete the title and substitute “Protection of the Public on Public Ways”.</p> <p>In Article 8.2.4.2. delete the title and substitute “Traffic Control and Hazard Signs”.</p> <p>In Article 8.2.4.3. delete the title and substitute “Lane Control Devices”.</p> <p>In Article 8.2.4.4. delete the title and substitute “Traffic Control Devices”.</p> <p>In Article 8.2.4.5. delete the title and substitute “Construction Vehicle Traffic Hazard”</p>
B	9.1.1.1.	In the Title	Change the title to “ General Application ”.
B	9.1.1.1.	After Sentence (1)	<p>Add:</p> <p>“(2) When an <i>existing building</i> is altered and the <i>alteration</i> triggers upgrading as determined in Division B Section 11.2, the alternative <i>acceptable</i> solutions provided in Division B, Sections</p>

			11.3., 11.4., 11.5. and 11.6. may apply in lieu of the requirements of this Part. (See Article 1.1.1.2. of Division A.)”
B	9.4.1.1.	After Sentence (3)	Add: <p>“4) A <i>registered professional</i> who undertakes design work and <i>field review</i> for the structural design of <i>one and two family dwellings</i> or <i>laneway housing</i> shall provide a note on the structural drawings which provides assurance that the design of the structure has been reviewed for resistance to the structural requirements of Section 9.4., Division B.”</p>
B	9.5.5.	After Subsection 9.5.5.	Add: <p>“9.5.6. Automatic Overhead Garage Doors</p> <p>9.5.6.1. Automatic Overhead Garage Doors</p> <p>1) Automatic overhead garage doors equipped with openers shall be designed in accordance with Articles 3.3.7.6. and 3.3.7.7.”</p>
B	9.6.1.1.(1)(a)	In Clause (a)	In Subclause (a) (v) at the end strike out “and”. After Subclause (a) (v) add “vi) glass guards, and”.
B	9.6.1.4.	In Article 9.6.1.4.	In Sentence (1) strike out “Glass sidelights greater than 500 mm wide that could be mistaken for doors,” and substitute “Sidelights and windows located within 915 mm of doors,”. In Sentence (2) strike out “where the glass area exceeds 0.5 m ² and extends to no less than 900 mm from the bottom of the door”. After Sentence (6) add: <p>“7) All skylights shall be glazed with wired glass, laminated safety glass or <i>combustible</i> glazing, which is anchored to the skylight frame and to the <i>building</i> structure (See A-3.1.14.3. in Appendix A.)”</p>
B	9.7.5.3.	After Article 9.7.5.3.	Add: <p>“ 9.7.5.4. Resistance to Forced Entry for Skylights</p> <p>1) All openable skylights shall be designed to prevent opening from the outside when in the closed and locked position.</p>

			2) All exterior skylight fasteners shall be tamperproof.”
B	9.8.6.2.	In Sentences (3) and(4)	Strike out “may be omitted” and substitute “is not required”.
B	9.8.8.1.	In Article 9.8.8.1.	<p>In Sentence (5) strike out “”Except as provided in Sentence (6), operable” and substitute “Openable”.</p> <p>Strike out Sentence (6) and substitute “6) Deleted.”</p> <p>After Sentence (9) add:</p> <p>“10) Swimming pools greater than 450 mm deep shall be enclosed within a sturdy fence no less than 1.22 m in height, with no openings greater than 100 mm, and with no member, attachment, or opening located between 100 mm and 900 mm above ground level which could facilitate climbing, except that heavy gauge chain link fencing with a maximum opening size of 35 mm may be considered <i>acceptable</i> fencing for this purpose. (See Appendix A.)</p> <p>11) The fence described in Sentence (10)</p> <p>a) shall enclose the pool and the principal <i>building</i> on the premises, except that the fence may enclose the pool separately, if the pool is entirely visible from the principal <i>building</i> or through the fence, and</p> <p>b) shall be continuous, except for points of access which shall be equipped with a self-closing gate, secured by a spring lock located no less than 1 070 mm above grade, and only operable from the pool side of the fence.”</p>
B	9.8.8.7.	After Article 9.8.8.7.	<p>Add:</p> <p>“9.8.8.8. Glass Guards</p> <p>1) All glass guards shall have a top rail capable of transferring the guard loads to adjacent glass panels or, in the event of the failure of a glass panel, to the structural component of the <i>building</i>.”</p>
B	9.9.6.5.	After Sentence (4)	<p>Add:</p> <p>“5) Principal entrance doors opening to an <i>acceptable</i> open space at ground level are not required to swing in the direction of <i>exit</i> travel provided</p> <p>a) the room or <i>suite</i> is located at ground level, and</p> <p>b) the <i>occupant load</i> is no more than 60 persons.”</p>

B	9.9.7.4.	After Sentence (2)	Add: <p>“3) The travel distance required in Sentence (1) may be increased to 25 m for <i>sprinklered buildings</i>.”</p>
B	9.9.9.1.	In Sentence (1)	Strike out “to travel up or down more than one storey” and substitute “to ascend or descend more than 1 <i>storey</i> in a <i>building</i> , or more than 2 <i>storeys</i> in a <i>sprinklered building</i> ,” <p>In Clause (b) strike out “no more than 1.5 m above adjacent ground level” and substitute “an <i>exit doorway</i> located within 1 storey of ground level.”</p>
B	9.10.14.4.	In Sentence (6), in Sentence (8) and after Sentence (11)	At the beginning of Sentence (6) strike out “The” and substitute “If a building is not <i>sprinklered</i> , the”. <p>Strike out Sentence (8) and substitute: <p>“8) If a <i>storage garage</i> has a <i>limiting distance</i> of no less than 3 m, the <i>exposing building face</i> of such <i>storage garage</i> may have unlimited <i>unprotected openings</i>.”</p> <p>After Sentence (11) add: <p>“12) Where a building of <i>residential occupancy</i> is <i>sprinklered</i> and the <i>limiting distance</i> is less than 1.2 m but no less than 1 m, the maximum percentage of <i>unprotected openings</i> may be 10 per cent if windows are glazed with tempered, wired or laminated glass, or glass block.”</p> </p></p>
B	9.10.14.5.	In Sentence (4) and after Sentence (13)	In Sentence (4), strike out “where a garage or accessory <i>building</i> serves one <i>dwelling unit</i> only and is detached from any <i>building</i> ” and substitute “if a detached garage or accessory <i>building</i> serves one <i>dwelling unit</i> or if a detached garage serves both <i>units</i> in a <i>two-family dwelling</i> and has a continuous internal <i>fire separation</i> with a 45 min <i>fire resistance rating</i> , from the floor slab to the roof sheathing separating the parking spaces for each <i>unit</i> ,”. <p>After Sentence (13) add: <p>“14) Where a residential <i>building</i> is <i>sprinklered</i>, and Table 9.10.14.5.A requires <i>noncombustible construction</i>, the <i>exposing building faces</i> may use a wood stud wall assembly having a 1 h <i>fire-resistance rating</i> provided the <i>limiting distance</i> is at least 1.0 m, the studs are filled with <i>noncombustible insulation</i>, and the wall assembly is clad with <i>noncombustible cladding</i>.”</p> </p>
B	9.10.15.	In the Title	Strike out “Houses” and substitute “Residential Buildings”.

B	9.10.15.1	Sentence (1)	<p>Strike out Sentence (1) and substitute:</p> <p>“1) This Subsection applies to</p> <p>a) <i>buildings</i> containing only <i>dwelling units</i> with no <i>dwelling unit</i> above another <i>dwelling unit</i>,</p> <p>b) <i>one-family dwellings</i> with <i>secondary suite</i>,</p> <p>c) <i>two-family dwellings</i> having no <i>dwelling unit</i> above another <i>dwelling unit</i> except <i>secondary suite</i> within the principal <i>dwelling unit</i>, and</p> <p>d) <i>laneway houses</i>.”</p>
B	9.10.15.2	Subclause (1)(b)(iii)	Strike out “glazed” and substitute “unprotected”
B	9.10.15.2	Sentence (3)	Strike out “glazed” and substitute “unprotected”
B	9.10.15.3.	Sentence (2)	Delete Sentence (2)
B	9.10.15.4.	In the Title	Strike out “Glazed” and substitute “Unprotected”.
B	9.10.15.4.	Article 9.10.15.4.	<p>In Sentence (1) strike out “Sentence (6),” and substitute “Sentences (6), (7) and (8),” ;</p> <p>In Clause (1)(b) strike out “conform to“ and substitute “in a building which conforms to Sentence (8), comply with”</p> <p>In Sentences (1), (2), (3), (4) and (6) strike out “glazed” and substitute “<i>unprotected</i>”</p> <p>After Sentence (6) add:</p> <p>“7) If a <i>building</i> is <i>sprinklered</i> and the <i>limiting distance</i> is less than 1.2 m but no less than 1 m, the maximum percentage of <i>unprotected openings</i> shall be 10 per cent provided</p> <p>a) all windows are glazed with tempered, wired, or laminated glass or glass block, and</p>

			<p>b) the <i>exposing building face</i> is constructed according to Sentence 9.10.15.5.(13).</p> <p>8) If a <i>building</i> is <i>sprinklered</i>, the maximum aggregate area of <i>unprotected openings</i> may be no more than twice the area as determined in Table 9.10.15.4. provided all rooms, including closets and bathrooms, that are adjacent to the <i>exposing building face</i> and that have <i>unprotected openings</i> shall be <i>sprinklered</i>, notwithstanding any exemptions in the sprinkler standards referenced in Article 3.2.5.12.</p> <p>9) If a <i>storage garage</i> has a <i>limiting distance</i> of no less than 3 m, the <i>exposing building face</i> of such <i>storage garage</i> may have unlimited <i>unprotected openings</i>.”</p>
B	9.10.15.4.	Table 9.10.15.4.	Strike out “Glazed” and substitute “Unprotected”.
B	9.10.15.5.	Sentence (1)	Strike out “Sentences (4) and (12)” and substitute “Sentences (4), (12) and (13)”.
B	9.10.15.5.	Article 9.10.15.5.	<p>Strike out “Sentence (10)” and substitute:</p> <p>“10) Roof soffits located within 1.2 m of a property line or the centre line of a <i>public way</i>, or located within 1.2 m of an imaginary line between two <i>buildings</i> or two <i>fire compartments</i> on the same property, shall</p> <p>a) have no openings, and</p> <p>b) be protected by</p> <p>i) no less than 0.38 mm thick sheet steel,</p> <p>ii) unvented aluminum conforming to CAN/CGSB-93.2-M, “Prefinished Aluminum Siding, Soffits, and Fascia, for Residential Use,”</p> <p>iii) no less than 12.7 mm thick gypsum soffit board or gypsum ceiling board installed according to CSA A82.31-M, “Gypsum Board Application,”</p> <p>iv) no less than 11 mm thick plywood,</p> <p>v) no less than 12.5 mm thick OSB or waferboard, or</p>

			vi) no less than 11 mm thick lumber. (See A-3.2.3.6.(2) in Appendix A.)”
B	9.10.15.5.	After Sentence (12)	Add: “13) If a <i>building</i> is <i>sprinklered</i> , and the maximum percentage of <i>unprotected openings</i> complies with Sentence 9.10.15.4.(7), the <i>exposing building faces</i> may be constructed with a wood stud wall assembly provided a) the <i>exposing building faces</i> have a one hour fire-resistance rating, b) the void spaces between studs are filled with <i>non-combustible</i> insulation, and c) the wall assembly is clad with <i>non-combustible</i> cladding.”
B	9.10.18.4.	In Sentence (3) and after Sentence (3)	At the beginning of Sentence (3), strike out “ <i>Heat</i> ” and substitute “Except as required in Sentence (4), <i>heat</i> ”. After Sentence (3) add: “4) <i>Heat detectors</i> or <i>smoke detectors</i> shall be installed in any elevator hoistway or dumbwaiter shaft which is not equipped with a <i>sprinkler system</i> .”
B	9.10.19.1.	After Sentence (1)	Add: “2) All <i>smoke alarms</i> installed in <i>dwelling units</i> in unsprinklered <i>buildings</i> shall be equipped with a battery powered back up system and a wired in manually operated device which is capable of silencing a <i>smoke alarm</i> signal for a period of no more than 10 minutes and re-sounding the signal if smoke levels in the vicinity trigger the <i>smoke alarm</i> .”
B	9.10.20.3.	In Sentence (1) and after Sentence (2)	In Sentence (1) strike out “equipment” and substitute “vehicles” and strike out “ <i>building</i> by means of a <i>street</i> , private roadway or yard. (See Appendix A and A-3.2.5.6. (1) in Appendix A)” and substitute “principal entrance of a <i>building</i> in accordance with Articles 3.2.5.4., 3.2.5.5. and 3.2.5.6.”. After Sentence (2) add: “3) Despite the provisions of Sentence (1), an unobstructed path of travel for firefighters shall be provided to a <i>laneway house</i> and the path of travel shall:

			<p>a) lead continuously from the <i>street</i> to the <i>lane</i>,</p> <p>b) have a travel distance of no more than 45 m from the <i>street</i> to the principal entrance of the <i>laneway house</i>,</p> <p>c) be at least 900 mm wide,</p> <p>d) have an overhead clearance of at least 2 m, and</p> <p>e) consist of concrete, asphalt, or similar material.</p> <p>4) A <i>laneway house</i> shall have a strobe light installed and maintained outside the principal entrance, connected to an internal smoke alarm within the <i>laneway house</i>.</p> <p>5) Despite Clause 9.10.20.3. (3)(b) the path of travel for firefighters may be greater than 45 m but no more than 70 m provided the principal entrance to the <i>laneway house</i> is visible from the <i>street</i>.</p> <p>6) If the principal <i>building</i> and the <i>laneway house</i> are adjacent to a <i>lane</i>, the path of foot travel for firefighters to the <i>laneway house</i> may be through the <i>lane</i> if</p> <p>a) the travel distance from the <i>street</i> to the principal entrance of the <i>laneway house</i> is no more than 70 m,</p> <p>b) the path has an overhead clearance of at least 3 m,</p> <p>c) the path consists of concrete, asphalt, or similar material, and</p> <p>d) the principal entrance of the <i>laneway house</i> is visible from the <i>street</i>.</p> <p>7) If two adjacent parcels, each containing a <i>laneway house</i>, are both subject to a covenant registered on title which prohibits <i>construction</i> upon or obstruction of the common property line and of a specified area adjacent to the property line, a single path of travel for firefighters over the common property line and the adjacent specified area to access both <i>laneway houses</i> is acceptable, provided the path of travel meets the requirements of Sentences 9.10.20.3. (3), (4) and (5).”</p>
B	9.11.2.1.	After Article 9.11.2.1.	<p>Add:</p> <p>“9.11.3.1. Acoustical Sealant</p> <p>1) If acoustical sealant is provided for walls, ceilings and floors, it shall conform to CAN/CSGB-19.21-M87, “Sealing and Bedding Compound, Acoustical”.”</p>
B	9.25.1.1.	In Sentence (1) and after Sentence (3)	<p>At the end of Sentence (1) add “(See Sentence 1.3.3.2.(3) of Division A for Part 5 application to <i>Group C multi-family residential occupancies and artist live/work studios.</i>)”</p> <p>After Sentence (3) add:</p>

			<p>“4) Except for <i>buildings</i> containing only <i>dwelling units</i> or for portions of <i>buildings</i> containing <i>dwelling units</i>, the design and installation of thermal insulation and measures to control heat transfer and condensation shall conform to Part 10.”</p>
B	9.26.18.2.	After Article 9.26.18.2.	<p>Add:</p> <p>“9.26.18.3. Roof or Balcony Parapet Walls</p> <p>1) Where a roof or balcony is entirely enclosed by parapet walls, a secondary means of drainage such as scuppers or overflow outlets shall be installed in the parapet walls, in addition to drains. (See Appendix A.)”</p>
B	9.27.2.2.(1)	In Clause (1)(c)	<p>In Clause (c), strike out “cladding’s components are hollow-backed metal or vinyl and are “and substitute “cladding is composed of non-insulating type, hollow backed aluminum or vinyl which is“.</p>
B	9.33.4.9.	After Article 9.33.4.9.	<p>Add:</p> <p>“9.33.4.10. Noise Control</p> <p>1) Heating and air-conditioning equipment shall be installed and located so that the noise generated by this equipment conforms with the Vancouver Noise Control By-law.”</p>
B	9.33.10.3.	After Article 9.33.10.3.	<p>Add:</p> <p>“9.33.10.4. Location of Exhaust Vents Serving One and Two Family Dwellings</p> <p>1) Exhaust vents from heating and air conditioning equipment and similar appliances, other than direct vented fireplaces, shall be directed</p> <p>a) vertically through the roof of a <i>building</i>, with the discharge located at least 1.5 m away from any property line, or</p> <p>b) horizontally through an exterior wall which faces a <i>street</i>, with the discharge located at least 3 m away from any <i>property line</i>.”</p>
B	9.34.1.1.	After Sentence (1)	<p>Add:</p> <p>“2) In addition to the requirements of Sentence (1), electrical installations in a <i>one-family dwelling</i> required to conform to Article 9.36.3.1. shall also comply with the following:</p> <p>a) the electrical service size shall be based on the demand load calculated on the total area of</p>

			<p>the <i>dwelling unit</i>, provided that:</p> <ul style="list-style-type: none"> i) for each electrical range additional to the first range, 6kw demand shall be added for a rating of 12 kw or less, plus 40 per cent of the amount by which the rating of the range exceeds 12 kw, and ii) except for the first electrical range referred to in paragraph (i), for each electrical appliance exceeding 1500 watts additional to those provided for one-family use, 100 per cent of the rating of such appliance shall be added, <p>b) general circuit branch wiring may be interconnected between outlets located in the principal dwelling and the <i>secondary suite</i>, and</p> <p>c) a single panel board may supply electrical loads of the principal dwelling and the <i>secondary suite</i>, provided that it is located within the <i>building</i> in a common area accessible to all occupants of the <i>building</i>.”</p>
B	9.36.2.	In Subsection 9.36.2.	Strike out Subsection 9.36.2. and substitute “Deleted.”.
B	9.36.2.	After Subsection 9.36.2.	<p>Add:</p> <p>“9.36.3. One Family Dwelling with Secondary Suite</p> <p>9.36.3.1. Specific Requirements</p> <p>1) In addition to the requirements of this Part, a <i>one-family dwelling with secondary suite</i> shall be constructed in conformance with</p> <ul style="list-style-type: none"> a) the fire compartmentation requirements in Table 11.4.3.1., b) the installation of <i>smoke alarms</i> in Subsection 9.10.19., and c) the installation of electrical facilities in Subsection 9.34.1. <p>2) The location of gas shut off valves controlling the flow of gas to appliances in a <i>one-family dwelling with secondary suite</i> shall be readily accessible to all occupants having access to the appliances served by such valves.</p> <p>3) A <i>one-family dwelling with secondary suite</i> may be classified, for the purposes of this By-law, as a <i>one family dwelling</i> if the <i>building</i> is constructed in conformance with the requirements of Sentences (1) and (2) or converted in conformance with the requirements of Subsection 11.4.3.</p> <p>9.36.4. Two Family Dwelling with Secondary Suite</p> <p>9.36.4.1. Specific Requirements</p> <p>1) In addition to the requirements of this Part, a <i>two family dwelling with a secondary suite</i> in</p>

			<p>each <i>dwelling unit</i> or a <i>secondary suite</i> in one of the <i>dwelling units</i> shall be</p> <p>a) <i>sprinklered</i> to NFPA 13D if no part of a <i>dwelling unit</i> or its <i>secondary suite</i> is constructed over another <i>dwelling unit</i> or its <i>secondary suite</i>, or</p> <p>b) <i>sprinklered</i> to NFPA 13R if any part of a <i>dwelling unit</i> or its <i>secondary suite</i> is constructed over another <i>dwelling unit</i> or its <i>secondary suite</i>,</p> <p>2) Each <i>dwelling unit</i> and its <i>secondary suite</i> shall be separated from an adjoining <i>dwelling unit</i> and its <i>secondary suite</i> by</p> <p>a) a <i>fire separation</i> with a 1 h fire resistance rating, and</p> <p>b) a sound transmission classification (STC) of 50.</p> <p>3) Each <i>dwelling unit</i> and its <i>secondary suite</i> shall be separated from each other by</p> <p>a) a <i>fire separation</i> with a minimum 13mm thick gypsum wallboard on wood studs at maximum 450 mm on centre, and</p> <p>b) tightly fitted <i>building service penetrations</i>.”</p>
B	9.37.1.1.	In Table 9.37.1.1.	<p>Add in chronological order:</p> <p>9.7.5.4. Resistance to Forced Entry</p> <p>(1) [F34-OS4.1]</p> <p>9.8.8.8. Glass Guards</p> <p>(1) [F30-OS3.1]</p> <p>9.26.18.3. Roof or Balcony Parapet Walls</p> <p>(1) [F81-OS2.1, OS2.2, OS2.3]</p> <p>9.33.4.10. Noise Control</p> <p>(1) [F56-OH3.1]</p> <p>9.33.10.4. Location of Exhaust Vents Serving One and Two-Family Dwellings</p> <p>(1) [F50-OH5] [F56-OH3.1]</p>

			<p>9.36.3.1. Specific Requirements</p> <p>(1) [F03-OS1.2] [F11-OS1.2, OS3.7]</p> <p>9.36.4.1. Specific Requirements</p> <p>(1) [F03-OS1.2] (2) [F03-OS1.2] (3) [F03-OS1.2]”</p> <p>In Article 9.6.1.4. add Sentence:</p> <p>“(7) [F20, F21, F23, F30-OS2.1, OS2.2, OS2.4, OS3.1]”</p> <p>In Article 9.8.8.1. add Sentences:</p> <p>“(10) [F30-OS3.1] (11) [F30-OS3.1]”</p> <p>In Article 9.9.6.5. add Sentence:</p> <p>“(5) [F10-OS3.7]”</p> <p>In Article 9.10.14.4. add Sentence:</p> <p>“(12) [F03-OP3.1]”</p> <p>In Article 9.10.14.5. add Sentence:</p> <p>“(14) [F03-OP3.1]”</p> <p>In Article 9.10.15.3. strike out Sentence (2) and substitute:</p> <p>“(2) Deleted”</p>
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		<p>In Article 9.10.15.4. strike out “Glazing” in the title and substitute “Unprotected” and add Sentence:</p> <p>“(8) [F03-OP3.1]”</p> <p>In Article 9.10.15.5. add Sentence:</p> <p>“(13) [F02, F03-OP3.1]”</p> <p>In Article 9.10.18.4. add Sentence:</p> <p>“(4) [F11-OS1.5]”</p> <p>In Article 9.10.19.1. add Sentence:</p> <p>“(2) [F11-OS1.5]”</p> <p>In Article 9.10.20.3. add Sentence:</p> <p>“(5) [F12-OP1.2] [F12-OS1.2, OS1.3]</p> <p>“(6) [F12-OP1.2] [F12-OS1.2, OS1.3]</p> <p>In Article 9.34.1.1. add Sentence:</p> <p>“(2) [F01-OP1.1] [F01-OS1.1] [F32-OS3.3]”</p> <p>Strike out Article 9.10.15.3. and substitute “9.10.15.3. Deleted”</p> <p>Strike out Article 9.10.15.4. and substitute “9.10.15.4. Deleted”</p> <p>Strike out Article 9.36.2.1. and substitute “9.36.2.1. Deleted”</p>
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B	10.2.	In Section 10.2.	<p>Strike out Section 10.2 and substitute:</p> <p>“10.2 Energy Efficiency</p> <p>10.2.1 Design and Installation</p> <p>10.2.1.1. Design</p> <p>1) Except as provided in Sentence (2) and Subsection 10.2.2., all <i>buildings</i> shall be designed and constructed to conform to</p> <p>a) ANSI/ASHRAE/IESNA 90.1-2010, “Energy Standard for Buildings, except Low Rise Residential Buildings”, and</p> <ul style="list-style-type: none"> i) designed with a climate zone of 5, ii) designed with ventilation in conformance with ASHRAE 62.1-2001 (except addendum n), iii) designed with vestibules located at all doors used to access a <i>building</i> with a gross <i>floor area</i> of more than 278.7 m² (see Sentence (6)), and iv) if designed in accordance with ASHRAE 90.1-2010, Section 11, the 5 per cent in Table 11.3.1.5. Building Envelope, Exception a., shall be replaced by 1 per cent; <p>or</p> <p>b) the National Energy Code of Canada for Buildings 2011 (NECB), except that where NECB refers to the National Building Code of Canada (NBC), the provisions of this By-law shall apply, and designed</p> <ul style="list-style-type: none"> i) with a climate zone of 4, ii) with ventilation in conformance with ASHRAE 62.1-2001 (except addendum n) iii) with vestibules located at all doors used to access a <i>building</i> with a gross <i>floor area</i> of more than 278.7 m² (see Sentence (6)), iv) with window-to - wall and skylight-to - roof area ratios of the reference <i>building</i> identical to area ratios of the proposed <i>building</i>, v) with a vertical glazing Solar Heat Gain Coefficient which does not exceed an assembly maximum of 0.40, vi) with a Skylight Solar Heat Gain Coefficient without curb or with curb and glass which does not exceed an assembly maximum of 0.49, where the ratio of the aggregate skylight area to roof area is less than 2.0 per cent, vii) with a Skylight Solar Heat Gain Coefficient without curb or with curb and glass which

			<p>does not exceed an assembly maximum of 0.39, where the ratio of the aggregate skylight area to roof area is greater than 2.0 per cent and less than or equal to 5.0 per cent,</p> <p>viii) with a Skylight Solar Heat Gain Coefficient with curb and plastic which does not exceed an assembly maximum of 0.77, where the ratio of the aggregate skylight area to roof area is less than 2.0 per cent, and</p> <p>ix) with a Skylight Solar Heat Gain Coefficient with curb and plastic which does not exceed an assembly maximum of 0.62, where the ratio of the aggregate skylight area to roof area is greater than 2.0 per cent and less than or equal to 5.0 per cent.</p> <p>2) A <i>building</i> which is less than 4 storeys in <i>building height</i>, and which is entirely classified as Group C major occupancy, excluding Group F Division 3 (Storage Garage) occupancy subsidiary to the Group C major occupancy, shall be designed with thermal insulation conforming to Table 10.2.1.1.A</p> <p>a) between heated space and unheated space, b) between heated space and exterior air, c) between heated space and exterior soil, d) between heating floor assemblies and heated space, e) between heating floor assemblies and unheated space, f) between heating floor assemblies and exterior air, and g) between heating floor assemblies and exterior soil.</p> <p>3) Deleted.</p> <p>4) Deleted.</p> <p>5) Insulation and the installation of insulation shall conform to Subsection 9.25.2. or Part 5.</p> <p>6) Except as permitted in Sentence (7), there shall be an enclosed vestibule in a <i>building</i> entrance separating a conditioned space from the exterior, and</p> <p>a) all doors opening into and out of the vestibule shall be equipped with self-closing devices, b) the interior and exterior doors of the vestibule shall be separated by no less than 2.1m when closed, c) the exterior envelope of a conditioned vestibule shall comply with the design requirements for a conditioned space, and d) the interior and exterior envelope of an unconditioned vestibule shall comply with the design requirements for a semi heated space.</p> <p>7) An enclosed vestibule is not required for</p>
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		<p>a) a <i>building</i> entrance with revolving doors, b) a door not intended to be used as the <i>building entrance</i>, c) a door opening directly to the exterior from a <i>dwelling unit</i>, d) a <i>building</i> entrance, in a <i>building</i> less than 278.7 m² in gross floor area, and e) a door which is separate from the <i>building</i> entrance and opens directly to the exterior from a space that is less than 278.7 m² in gross floor area.</p> <p>8) Every <i>building</i> shall be equipped with metering equipment capable of collecting <i>building</i> energy performance data for the <i>building</i> and for every portion of the <i>building</i> which supports a separate use or <i>occupancy</i>.</p> <p>9) The effective total “R” value of the opaque envelope area, the non- opaque envelope area, and the overall envelope area, calculated by a <i>design professional</i>, shall be submitted as part of an application for a <i>building</i> permit.</p> <p>10.2.1.2. Lighting Controls in Residential Buildings</p> <p>1) Where a residential <i>building</i> or a portion of a multi-use <i>building</i> contains more than 20 residential suites, the <i>building</i> shall be designed with</p> <p>a) <i>occupancy</i> based lighting sensor controls, located in all exit stair shafts and parking garages, compatible with the requirements of Sentence 3.2.7.3.(1) of Division B, and b) a switch near the principal entrance of each residential suite that controls all overhead lighting fixtures within the suite, except overhead lights serving corridors and stairs within the suite.</p> <p>10.2.1.3. Sub-metering in Buildings</p> <p>1) <i>Buildings</i> shall be designed with sub-metering for</p> <p>a) hot water generated by a central hot water generation system, b) natural gas used for air handling systems in common areas, and c) natural gas used for domestic hot water in amenity spaces, pools and spas.</p> <p>10.2.2. Energy Efficiency for One and Two-Family Dwellings, One and Two-Family Dwellings with Secondary Suites and Laneway Houses</p> <p>10.2.2.1. Application</p>
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		<p>1) Unless otherwise stipulated in this Subsection, this Subsection applies to <i>one and two-family dwellings, one and two-family dwellings with secondary suites and laneway houses</i>.</p> <p>2) In case of discrepancy between the provisions of this Subsection and other provisions of this By-law, this Subsection shall apply.</p> <p>10.2.2.2. Windows, Glass Doors and Skylights</p> <p>1) Windows and glass doors shall have a maximum thermal conductance (U value) of 1.4 W/(K·m²) and shall be labeled accordingly. (See Appendix A.)</p> <p>2) Skylights shall have a maximum thermal conductance (U value) of 2.4 W/(K·m²).</p> <p>10.2.2.3. Electrically Heated Hot Water Tanks</p> <p>1) Electrically heated hot water tanks shall have insulation with a minimum RSI value of 1.76.</p> <p>10.2.2.4. Hot Water Tank Piping</p> <p>1) The first 3 m of non-recirculating hot water piping leading from both electrically heated and gas heated hot water tanks, and the last 1 m of piping leading to the hot water tank connection, shall have insulation with a minimum RSI value of 0.35.</p> <p>2) Notwithstanding Sentence (1), a hot water piping system designed to constantly recirculate shall have insulation with a minimum RSI value of 0.35.</p> <p>10.2.2.5. Domestic Gas-Heated Hot Water Heaters</p> <p>1) Gas-heated appliances providing only domestic hot water service shall have an energy factor of no less than 78 per cent, as determined by the following</p> <p>a) CSA P.3-04, "Testing Method for Measuring Energy Consumption and Determining Efficiencies of Gas-Fired Storage Water Heaters",</p> <p>b) CSA P.7-10, "Testing Method for Measuring Energy Loss of Gas-Fired Instantaneous Water Heaters",</p> <p>c) CSA C191-04, "Performance of electric storage tank water heaters for domestic hot water service", or</p> <p>d) CSA 4.3/ANSI Z21.10.3, "Gas Water Heaters Volume III, Storage Water Heaters, with Input Ratings above 75,000 Btu per hour, Circulating and Instantaneous.</p> <p>10.2.2.6. Domestic Gas-Heated Boilers</p>
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		<p>1) Gas-heated boilers providing domestic heat or domestic heat and hot water shall have an Annual Fuel Utilization Efficiency (AFUE) rating of no less than 92 per cent, as tested using CSA P.2-07, Testing Method for Measuring the Annual Fuel Utilization Efficiency of Residential Gas-fired Furnaces and boilers.</p> <p>10.2.2.7. Domestic Gas-Heated Furnaces</p> <p>1) Domestic gas-heated furnaces shall have an Annual Fuel Utilization Efficiency (AFUE) rating of no less than 92 per cent, as tested using CSA P.2-07: "Testing Method for Measuring the Annual Fuel Utilization Efficiency of Residential Gas-Fired Furnaces and Boilers".</p> <p>10.2.2.8. Domestic Gas-Fired Fireplaces</p> <p>1) Domestic gas-fired domestic fireplaces in conditioned spaces shall use</p> <ul style="list-style-type: none"> a) intermittent pilot ignition (IPI) systems, or b) on-demand ignition systems that automatically shut off within 7 days of appliance non-use. <p>2) Domestic gas-fired fireplaces shall be direct vented.</p> <p>10.2.2.9. Domestic Wood Burning Heating Appliances</p> <p>1) Except for cooking stoves and ranges, a wood burning heating appliance installed in a residential <i>dwelling unit</i> shall be tested in accordance with CAN/CSA B415.1-10 "Performance Testing of Solid-Fuel-Burning Heating Appliances" or EPA Title 40, Part 60, Subpart AAA - "Standards of Performance for New Residential Wood Heaters", and shall</p> <ul style="list-style-type: none"> a) produce no more than 2.5 grams per hour of particulate air contaminant emissions for catalytic appliances, or b) produce no more than 4.5 grams per hour of particulate air contaminant emissions for non-catalytic appliances. <p>2) Open masonry fireplaces and factory-built fireplaces are not permitted.</p> <p>10.2.2.10. Domestic Heat Recovery Ventilators</p> <p>1) This Article does not apply to <i>laneway houses</i>.</p> <p>2) There shall be one heat recovery ventilator in</p>
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		<p>a) each <i>one-family dwelling</i> , b) each <i>one-family dwelling with secondary suite</i>, c) each <i>dwelling unit</i> in a <i>two-family dwelling</i> and d) each <i>dwelling unit</i> in a <i>two-family dwelling with secondary suit</i>.</p> <p>3) Components of mechanical ventilation systems not specifically described in this Subsection shall be designed, constructed and installed in accordance with good engineering practice and as described in the ASHRAE Handbooks and Standards, HRAI Digest, TECA Ventilation Guideline, Hydronics Institute Manuals or the SMACNA manuals.</p> <p>4) A heat recovery ventilator (HRV) shall</p> <p>a) have 65 per cent sensible heat recovery efficiency (65% Minimum SRE at 0°C) and be designed and tested in conformance with CSA 22.2 No. 113M-1984, b) be designed and tested to meet the CSA International Standard CAN/CSA-F326 M91 (“Residential Mechanical Ventilation Systems”), c) be installed by persons trained by the Thermal Environmental Comfort Association (TECA) or the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) or equivalent, d) supply outdoor air directly to the principal living area, to each bedroom, and to any floor without a bedroom, directly or indirectly, through a central recirculation system with a continuously operating fan, e) be designed to run continuously to meet or exceed Table 9.32.3.3.A of Division B, f) not be connected to kitchen and bathroom exhaust fans, g) have exterior connected supply-air ducts and exhaust ducts insulated to no less than RSI 0.75 (R 4.25) and an effective vapour barrier, h) have balanced HRV supply and exhaust air flows within plus or minus 10 per cent of the actual normal operating exhaust capacity, i) be labelled with tested supply and exhaust air flows for high and low settings, measured in CFM, and j) be located within conditioned space in the <i>dwelling unit</i> for access.</p> <p>5) The HRV system contractor or installer shall provide a completed Mechanical Ventilation Checklist to the <i>Chief Building Official</i>.</p> <p>6) A <i>contractor</i> trained in the installation of Energy Recovery Ventilators (ERV) may install an ERV in lieu of a Heat Recovery Ventilator.</p> <p>10.2.2.11. Solar Ready Pipe Run</p> <p>1) This Article does not apply to <i>laneway houses</i>.</p>
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		<p>2) A solar ready pipe chase, consisting of at least two 50 mm PVC pipes, capped at both ends and having at least a 20° angle measured above the horizontal level, shall extend from a location near the service water heater, to the attic space.</p> <p>10.2.2.12. EnerGuide Rating System Audit</p> <p>1) At the time of final inspection, the <i>owner</i> shall provide the <i>Chief Building Official</i> with an EnerGuide Rating System Audit, as defined by the EnerGuide™ Rating Service of Natural Resources Canada, and shall comply with the requirements of Sentence(2).</p> <p>2) A <i>dwelling unit</i> shall have a maximum of 3.5 air changes per hour or be sealed in accordance with good engineering practice. (See Appendix A.)</p> <p>10.2.3. Electric Vehicle Charging</p> <p>10.2.3.1. - Electric Vehicle Charging for Buildings</p> <p>1) Except as provided by Sentence (2), each storage garage or carport in <i>one-family dwellings, two-family dwellings, one- or two- family dwellings with secondary suites, and laneway houses</i> shall be provided with an electrical outlet box wired with a separate branch circuit capable of supplying 40A at 240 V and labelled to identify its intended use.</p> <p>2) Where the requirements of Sentence (1) would cause demand load to exceed 200 A, the installation of a 40 A branch circuit may be omitted if a raceway no less than 21 mm, leading from the <i>dwelling unit</i> panel board to an electrical outlet box, is installed in the storage garage or carport and is labelled to identify its intended use.</p> <p>3) A <i>multi-family building</i> or the <i>multi-family</i> component of a mixed use <i>building</i> with three or more <i>dwelling units</i>, shall be designed with a receptacle for charging electric vehicles in 20 per cent of all parking stalls used by <i>owners</i> or occupiers of <i>dwelling units</i>.</p> <p>4) A commercial building, or the commercial component of a mixed use building, shall be designed with a receptacle for charging electric vehicles in 10 per cent of all parking stalls.</p> <p>5) The receptacle required by Sentences (3) and (4) shall be supplied by a separate branch circuit rated no less than 40 A at the nominal alternating current of 208 V or 240 V as applicable.</p> <p>10.2.3.2. Electrical Rooms</p> <p>1) In a <i>multi-family building</i> or the <i>multi-family</i> component of a mixed use <i>building</i> with three or more <i>dwelling units</i>, an electrical room shall be designed with sufficient space for the future</p>
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			installation of electrical equipment to support the installation of receptacles, supplied by the branch circuits for charging electric vehicles, in all residential parking stalls.”
B	Article 10.2.1.1.	After Article 10.2.1.1.	Add Table 10.2.1.1A (Attached as Item 9)
B	10.4.1.1.	In Table 10.4.1.1.	<p>Add in chronological order:</p> <p>“10.2.1.2. Lighting Controls in Residential Buildings (1) [F86, OE1]</p> <p>10.2.1.3. Submetering in Buildings (1) [F86, OE1]</p> <p>10.2.2.2. Windows, Glass Doors and Skylights (1) [F85, OE1] (2) [F85, OE1]</p> <p>10.2.2.3. Electrically Heated Hot Water Tanks (1) [F85, OE1]</p> <p>10.2.2.4. Hot Water Tank Piping (1) [F85, OE1]</p> <p>10.2.2.5. Domestic Gas-Heated Hot Water Heaters (1) [F86, OE1]</p> <p>10.2.2.6. Domestic Gas-Heated Boilers (1) [F86, OE1]</p> <p>10.2.2.7. Domestic Gas-Heated Furnaces (1) [F86, OE1]</p> <p>10.2.2.8. Domestic Gas-Fired Fireplaces (1) [F86, OE1]</p> <p>10.2.2.9. Domestic Wood Burning Heating Appliances (1) [F86, OE1]</p>

			<p>10.2.2.10. Domestic Heat Recovery Ventilators (2) [F85, OE1] (3) [F85, OE1] (4) [F85, OE1]</p> <p>10.2.2.12. EnerGuide Rating System Audit (2) [F85, OE1]</p> <p>In Article 10.2.1.1. strike out Sentences (3) and (4) and substitute:</p> <p>“(3) Deleted (4) Deleted</p> <p>and add Sentences:</p> <p>(6) [F85-OE1] (8) [F86-OE1]</p>
B	Part 11	After Part 10	Add Part 11 (Attached as Item 10)
B	Appendix A	After Appendix Note A- 10.2.2.12.	Add Appendix Note A-11.2.1.2 Existing Building Upgrade Mechanism Model (Attached as Item 11.)
B	Part 12	After Part 11	Add: “ Part 12 - Float Homes and Marinas Section 12.1 General 12.1.1. Application 12.1.1.1. Application 1) The application of this Part shall be as described in Subsection 1.3.3. of Division A. 12.1.2. Definitions

		<p>12.1.2.1. Defined Terms</p> <p>1) Words that appear in italics are defined in Article 1.4.1.2. of Division A.</p> <p>Section 12.2. Design and Construction</p> <p>12.2.1. EXISTING FLOAT HOMES AND MARINAS</p> <p>12.2.1.1. See Article 11.2.1.11. for alterations to existing <i>float homes</i> and <i>marinas</i>.</p> <p>12.2.2. NEW FLOAT HOMES AND MARINAS</p> <p>12.2.2.1. Construction Requirements</p> <p>1) A <i>marina walkway</i> shall be protected against fire spread and collapse in accordance with NFPA 303, “Fire Protection Standard for Marinas and Boatyards”.</p> <p>2) A <i>float home</i> shall be designed and constructed in accordance with the British Columbia Float Home Standard.</p> <p>4) In addition to this Part, the requirements of Parts 3 to 9 shall apply to the design and <i>construction</i> of any structure or installation forming part of a <i>marina</i>.</p> <p>5) Except as required by Sentence (6), a <i>marina</i> shall have an <i>occupancy</i> classification of <i>Group F Division 3</i>.</p> <p>6) Despite the provisions of Sentence (5), a <i>marina</i> equipped with a fueling station shall have an <i>occupancy</i> classification of <i>Group F Division 2</i>.</p> <p>12.2.2.2. Potable Water Supply for Marinas</p> <p>1) The potable water connection at a <i>marina</i> shall be located no more than 300 m from any <i>water craft</i>.</p> <p>2) Each moorage space for a <i>liveaboard vessel</i> or <i>float home</i> shall be provided with a potable water connection.</p> <p>3) Where potable water is supplied to a dockside, watering point, or <i>water craft</i> connection, the potable water supply and each berth connection shall be protected with a <i>backflow preventer</i>.</p> <p>4) A <i>marina</i> shall meet the requirements of Book II Plumbing Systems regarding potable water</p>
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		<p>supply.</p> <p>12.2.2.3. Sewer Discharge for Float Homes and Marinas</p> <p>1) Each moorage space for a <i>liveaboard vessel</i> or <i>float home</i> shall be provided with a <i>sanitary sewer</i> connection.</p> <p>2) <i>Sewage</i> shall be discharged into an <i>acceptable sanitary sewer</i>.</p> <p>3) Every owner or operator of a <i>marina</i> with more than 10 moorage spaces shall provide an easily accessible <i>pump-out connection</i> for visiting vessels and non <i>liveaboard vessels</i>.</p> <p>4) <i>Pump-out facilities</i> shall be discharged into the <i>sanitary sewer</i>, and shall be designed, operated, and maintained to prevent any discharge of <i>sewage</i> onto docks or into the adjacent water.</p> <p>5) A <i>sewer pipe</i> shall be located beside or underneath the surface of any <i>marina walkway</i> and shall not be submerged below water.</p> <p>6) A <i>marina</i> shall meet the requirements of Book II Plumbing Systems, regarding <i>sewage</i> discharge.</p> <p>12.2.2.4. Lighting for Marinas</p> <p>1) All areas throughout a <i>marina</i> shall be illuminated to a minimum average level of 50 lux at the level of all <i>marina walkways</i>.</p> <p>12.2.2.5. Marina Walkways and Ramps Serving Float Homes and Marinas</p> <p>1) A floating <i>marina walkway</i> which provides access to the shore shall be at least 2 m wide.</p> <p>2) A floating <i>marina walkway</i> which provides access to <i>water craft</i> shall be at least 750 mm wide.</p> <p>3) An inclined <i>marina walkway</i> shall have a non skid surface and handrails on both sides conforming to Article 9.8.7.4.</p> <p>4) Life rings, assist poles and ladders from docks into the water shall be provided at intervals not exceeding 30 m along the length of all <i>marina walkways</i>.</p> <p>12.2.2.6. Washroom Facilities for Marinas</p>
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		<p>1) Separate washroom facilities shall be</p> <p>a) provided for each sex, and b) located within a 300 m walking distance from any <i>watercraft</i> moored at the <i>marina</i>.</p> <p>2) The washroom facilities in Sentence (1) shall consist of a minimum of one water closet and one hand basin for males and one water closet and one hand basin for females for each 100 moorage spaces or part thereof, except that</p> <p>a) up to one half of the total number of water closets required for males may be substituted with urinals, and b) a <i>marina</i> with less than 10 moorage spaces shall be provided with one universal washroom having one water closet and one wash basin.</p> <p>12.2.2.7. Shower Facilities for Marinas</p> <p>1) A <i>marina</i> providing moorage space to <i>water craft</i> which are not <i>liveaboard vessels</i> or <i>float homes</i> shall provide separate shower facilities for each sex in accordance with Sentence (2).</p> <p>2) A minimum of one shower for males and one shower for females shall be provided for each 100 moorage spaces or part thereof.</p> <p>12.2.2.8. Laundry Facilities for Marinas</p> <p>1) Every owner or operator of a <i>marina</i> providing moorage space to <i>water craft</i> which are not <i>liveaboard vessels</i> or <i>float homes</i> shall provide a laundry room in accordance with Sentences (2) and (3).</p> <p>2) Laundry facilities in a <i>marina</i> shall include a washing and drying machine.</p> <p>3) Laundry facilities in a <i>marina</i> shall not be located in a washroom.”</p>
C	Part 1- General - Section 1.2	<p>1.3. - 1.10. Interpretation, Intent and Prohibitions (Vancouver Administration Provisions)</p> <p>In Part 1- General, after Section 1.2 add:</p> <p>“Section 1.3. Interpretation, Intent and Prohibitions</p> <p>1.3.1. GENERAL INTERPRETATION</p> <p>1.3.1.1. Interpretation</p> <p>1) This By-law shall, despite any other provision herein, be interpreted in accordance with this</p>

		<p>Section.</p> <p>2) The Schedules attached to this Part 1 form part of this By-law.</p> <p>1.3.2. GENERAL INTENT</p> <p>1.3.2.1. Intent</p> <p>1) This By-Law sets standards in the general public interest. It is enacted and retained on the understanding and specifically expressed condition that it creates no duty whatsoever on the <i>City</i>, the <i>Chief Building Official</i> or any employee of the <i>City</i> to enforce its provisions, and on the further condition that a failure to administer or enforce its provisions, or the incomplete or inadequate administration or enforcement of its provisions, shall not give rise to a cause of action in favour of any person whatsoever. The issuance of any <i>permit</i>, including an <i>occupancy permit</i>, is not a representation, warranty or statement that this By-Law or any other enactment has been complied with, and the issuance thereof in error shall not give rise to a cause of action. Accordingly, words in this By-law defining the responsibilities and authority of the <i>Chief Building Official</i> shall be construed as internal administrative directions which do not create a duty.</p> <p>1.3.2.2. Reliance on Registered and Certified Professionals</p> <p>1) The <i>City</i> and the <i>Chief Building Official</i> do not have the resources to deal with matters which fall within the expertise of <i>registered professionals</i> and the <i>City</i> and the <i>Chief Building Official</i> rely on letters of assurance, documents sealed with professional seals, and related documents received from <i>registered professionals</i>, and on <i>field reviews</i> carried out by or under the supervision of <i>registered professionals</i>, as evidence that the design and <i>construction of buildings</i> complies with the provisions of this By-law, including alternate solutions, and substantially complies with any other applicable enactments.</p> <p>2) The <i>City</i> and the <i>Chief Building Official</i> do not have the resources to deal with matters which fall within the expertise of <i>certified professionals</i> and the <i>City</i> and the <i>Chief Building Official</i> rely on letters of assurance, documents stamped with professional stamps, and related documents received from <i>certified professionals</i>, on site reviews carried out by <i>certified professionals</i>, and on <i>field reviews</i> monitored by <i>certified professionals</i> as evidence that the design and <i>construction of buildings</i> complies with the provisions of this By-law, including alternate solutions and substantially complies with any other applicable enactments.</p> <p>1.3.2.3. No Representation or Warranty</p> <p>1) No person shall rely on a <i>permit</i> issued by the <i>Chief Building Official</i> or an inspection carried out by the <i>Chief Building Official</i> as establishing compliance with this By-Law or any other enactment or assume or conclude that this By-Law has been administered or enforced according</p>
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		<p>to its terms.</p> <p>2) All persons shall make such independent investigations as they deem necessary to determine whether a <i>building</i> complies with this By-law or any other enactment.</p> <p>1.3.3. GENERAL PROHIBITIONS</p> <p>1.3.3.1. Contravention</p> <p>1) No person shall fail to comply with an order or notice issued by the <i>Chief Building Official</i>.</p> <p>1.3.3.2. No Work Without Permit</p> <p>1) No person shall work or authorize or allow work to proceed on a <i>project</i> for which a <i>permit</i> is required unless a valid <i>permit</i> exists for the work to be done.</p> <p>1.3.3.3. Deviation Needs Prior Approval</p> <p>1) No person shall deviate from the plans and supporting documents forming part of the <i>permit</i>, without having first paid all necessary fees and obtained all necessary <i>permits</i> and approvals from the <i>Chief Building Official</i>.</p> <p>1.3.3.4. No Occupancy Without Permission</p> <p>1) No person shall occupy a <i>building</i> or authorize or allow the <i>occupancy</i> of a <i>building</i> without having first obtained the permission of the <i>Chief Building Official</i>.</p> <p>1.3.3.5. Unsafe Conditions</p> <p>1) No person who is an <i>owner</i> or who is involved in the <i>construction</i>, relocation or <i>occupancy</i> of a <i>building</i> shall cause, allow or maintain any <i>unsafe condition</i>. (See Appendix A.)</p> <p>1.3.3.6. Work on Public Property</p> <p>1) No person shall excavate or undertake work on public property, or erect or place any <i>construction</i> or work or store any materials thereon without approval having first been obtained in writing from the appropriate government authority having jurisdiction over such public property. (See Appendix A.)</p> <p>1.3.3.7. Changes in Ground Elevation and Limiting Distance</p> <p>1) No person shall change or alter the ground elevations or grading of a <i>building</i> site without</p>
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		<p>first obtaining the necessary <i>permits</i>.</p> <p>2) No person shall change or alter the <i>limiting distance</i> of an exposing <i>building</i> face without first obtaining the necessary <i>permits</i> (See Appendix A.)</p> <p>1.3.3.8. Compliance with By-law and Other Enactments</p> <p>1) No person shall work, or authorize or allow work to proceed, or undertake any <i>building, construction, work or occupancy</i> which is in contravention of this By-law or any other enactment.</p> <p>1.3.3.9. False Information</p> <p>1) No person shall submit false or incorrect information to the <i>Chief Building Official</i>.</p> <p>1.3.3.10. Tampering with a Posted Notice or Order</p> <p>1) No person, except for the <i>Chief Building Official</i>, shall reverse, alter, deface, cover, remove or in any way tamper with any notice or order which has been posted on or affixed to a <i>building</i> pursuant to this By-law.</p> <p>Section 1.4. Obligations of the Owner and Contractor</p> <p>1.4.1. OBLIGATIONS OF THE OWNER</p> <p>1.4.1.1. Right of Entry of Chief Building Official</p> <p>1) The <i>owner</i> shall allow the <i>Chief Building Official</i> to enter any <i>building</i> or premises at any reasonable time for the purpose of administering and enforcing this By-law.</p> <p>1.4.1.2. Permit Required</p> <p>1) The <i>owner</i> shall obtain all <i>permits</i> or approvals prior to commencing the work to which they relate.</p> <p>1.4.1.3. Compliance with Permit</p> <p>1) The <i>owner</i> shall comply with all conditions of a <i>permit</i> or a staged <i>permit</i>.</p> <p>1.4.1.4. Posting a Permit</p> <p>1) The <i>owner</i> shall ensure that the <i>permit</i> authorizing the work, or a true copy of the <i>permit</i>, is</p>
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		<p>posted conspicuously on the site or is affixed to the exterior of the <i>building</i> during the entire <i>project</i>.</p> <p>1.4.1.5. Compliance with By-law and other enactments</p> <p>1) The <i>owner</i> shall comply with this By-law and all other applicable enactments.</p> <p>2) The <i>owner</i> shall ensure that all work, <i>construction</i>, or <i>occupancy</i> is carried out in accordance with this By-law and all other applicable enactments.</p> <p>3) The <i>owner</i> shall ensure that the <i>occupancy</i> of a <i>building</i> or part of a <i>building</i> complies with the <i>occupancy permit</i>.</p> <p>4) The issuance of a <i>permit</i>, the acceptance of plans and supporting documents submitted for a <i>permit</i>, or the making of inspections by the <i>Chief Building Official</i> shall not relieve the <i>owner</i> of a <i>building</i> from the full responsibility for carrying out the work or having the work carried out in accordance with this By-law and all other applicable enactments.</p> <p>1.4.1.6. Compliance with Stop Work Order</p> <p>1) The <i>owner</i> shall not carry out work or <i>construction</i> or suffer, permit or allow work or <i>construction</i> to be carried out in contravention of a stop work order issued by the <i>Chief Building Official</i>.</p> <p>1.4.1.7. Compliance with Development Permit Plans</p> <p>1) The <i>owner</i> shall ensure that the plans and supporting documents submitted for a <i>permit</i> conform substantially with the approved Development Permit plans and supporting documents, except that where differences exist, the <i>owner</i> shall make application for a "Development Permit Amendment" as required by the Zoning and Development By-law.</p> <p>1.4.1.8. Owner's Undertaking</p> <p>1) The <i>owner</i> shall submit a completed Owner's Undertaking letter to the <i>Chief Building Official</i> in support of and prior to the issuance of a <i>permit</i>, in the applicable form set out in Schedules E-1, E-2 and E-3 at the end of this Part.</p> <p>1.4.1.9. Letters of Assurance</p> <p>1) When required by this By-law, the <i>owner</i> shall provide to the <i>Chief Building Official</i> any applicable letters of assurance in the forms set out in Schedules A, B, C-A and C-B the end of Part 2, Division C, Books I and II or in the forms set out in Schedules D-1 and D-2 at the end of</p>
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		<p>Part 5, Division B, Book I.</p> <p>1.4.1.10. Project Directory</p> <p>1) The <i>owner</i> shall, prior to commencing work, give notice in writing to the <i>Chief Building Official</i>, of the name, address, electronic mail address and telephone number of the <i>owner</i>, the <i>constructor</i> or other person in charge of the work, the <i>designer</i> reviewing the work, and any inspection or testing agency engaged to monitor the work.</p> <p>2) During the course of the <i>construction</i>, the <i>owner</i> shall give immediate notice in writing to the <i>Chief Building Official</i>, of any change in employment of persons listed in the notice given pursuant to Sentence (1). (See Appendix A.)</p> <p>1.4.1.11. Other Notices</p> <p>1) The <i>owner</i> shall give such other notices to the <i>Chief Building Official</i> as may be required by the <i>Chief Building Official</i>, by this By-law, or by another enactment.</p> <p>1.4.1.12. Construction Safety</p> <p>1) Where a <i>Construction Safety Program</i> is required by Section 8.2, Division B, Book I, the <i>owner</i> shall:</p> <p>a) prior to commencing work, ensure that the <i>Construction Safety Program</i> has been submitted to the <i>Chief Building Official</i>, and</p> <p>b) during <i>construction</i>, ensure that the <i>Construction Safety Program</i> is posted at all times and is amended from time to time in accordance with the requirements of this By-law.</p> <p>2) Where a <i>building</i> is required by Subsection 2.2.7., Division C, Book I to be professionally designed and reviewed, the <i>owner</i> shall, prior to commencing work, ensure that the <i>contractor</i> provides a full-time <i>construction safety officer</i> at the worksite.</p> <p>1.4.1.13. Plans Required on Site</p> <p>1) The <i>owner</i> shall ensure that the plans and specifications on which the issuance of the <i>permit</i> was based are available at the worksite for inspection during working hours by the <i>Chief Building Official</i>.</p> <p>1.4.1.14. Site Cleared of Debris</p> <p>1) The <i>owner</i> shall ensure that upon completion of demolition procedures, all debris and fill is cleared and the site levelled or graded, to the satisfaction of the <i>Chief Building Official</i>.</p>
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1) If the *Chief Building Official* discovers faulty or incomplete work or faulty materials during an inspection, the *owner* shall apply for a reinspection.

2) Every applicant for a reinspection of a *project* shall pay the applicable reinspection fees set out in the Fee Schedule, prior to the reinspection.

1.4.1.21. Report of Building, Demolition or Excavation Failure

1) When a *building*, demolition or excavation failure occurs which causes or has the potential to cause injury or loss of life, the *owner* shall

- a) immediately report the failure to the *Chief Building Official*,
- b) submit a report, if required to do so by the *Chief Building Official*, in accordance with Article 1.5.3.1., and
- c) carry out any repairs or remedial work required by the *Chief Building Official*.

1.4.1.22. Removing Unsafe Conditions

1) When a *building* or part thereof is in an *unsafe condition*, the *owner* shall forthwith take all necessary action to put the *building* in a safe condition.

1.4.1.23. Damage to City Property

1) The *owner* is responsible for the cost of repair of any damage to *City* property or works located thereon that occurs as a result of undertaking work for which a *permit* or a *street use permit* was required.

1.4.1.24. Requirements Regarding Street Addresses

1) An *owner* shall not post any number or letter on a *building* or *suite* entry except for a street address or *suite* number that has been designated by the *Chief Building Official*.

2) Every *owner* shall place and maintain the designated street address on the *building* in a place that is easily visible from the *street*, and the address shall be mounted on a contrasting background and shall conform with the minimum character size requirements in Table 1.4.1.24.

Table 1.4.1.24. Requirements Regarding Street Addresses Forming Part of Sentence 1.4.1.24.(2)		
<i>Building Setback from Street</i>	Minimum Non-illuminated Character Size	Minimum Illuminated Character Size

0 - 15 m	100 mm	80 mm
15 - 20 m	150 mm	100 mm
Greater than 20 m	200 mm	150 mm

3) Where landscaping or other structures obscure the visibility of a *building* from the *street*, the *owner* shall erect a sign no larger than 0.4 m² displaying the *street* address, on the *building* property within sight of the *street*.

4) Every *owner* shall place and maintain a designated *suite* number on a contrasting background and of a character size of no less than 25 mm at the *suite* entry. (See also Article 3.8.3.13., Division B, Book I for design requirements for persons with a visual impairment.)

5) If a *suite* number is assigned to an exterior principal *suite* entry, every *owner* shall place and maintain the designated *suite* number in conformance with this section.

6) Every *owner* shall ensure that designated street addresses and *suite* numbers are made of durable materials and are affixed securely to the *building*.

1.4.1.26 Requirements regarding Professional Design and Review

1) In addition to the obligations listed in this section, the *owner* of a *building* to which the provisions of Part 2, Division C , Book I apply, shall also comply with the owner's obligations in that Part.

1.4.2. OBLIGATIONS OF THE CONTRACTOR

1.4.2.1. Construction Safety

1) The *contractor* shall ensure that all requirements of this By-law relating to *construction* safety are complied with, and shall ensure that every sub-*contractor* of the *project* has retained a *trades safety coordinator* as required by Sentence (2).

2) Every sub-*contractor* shall retain a qualified *trades safety coordinator* whose responsibilities shall include appropriate training of all persons working for the sub-*contractor* at the worksite in safe *construction* and installation practice.

		<p>3) The <i>trades safety coordinator</i> shall provide certification respecting training to the <i>City Building Official</i> upon request.</p> <p>1.4.2.2. Work on Public Property</p> <p>1) The <i>contractor</i> shall ensure that no excavation or other work is undertaken on public property, and that no <i>building</i> is erected or materials stored thereon, without first having obtained approval in writing from the appropriate government authority.</p> <p>1.4.2.3. Compliance with By-law and Other Enactments</p> <p>1) The <i>contractor</i> shall ensure that all work, <i>building, construction, or occupancy</i> is carried out in accordance with this By-law and with all other applicable enactments.</p> <p>1.4.2.4 Right of Entry of Chief Building Official</p> <p>1) The <i>contractor</i> shall allow the <i>Chief Building Official</i> to enter any <i>building</i> or premises at any reasonable time for the purpose of administering and enforcing this By-law.</p> <p>1.4.2.5 Compliance with Stop Work Order</p> <p>1) The <i>contractor</i> shall not carry out work or <i>construction</i>, or suffer, permit or allow work or <i>construction</i> to be carried out, in contravention of a stop work order issued by the <i>Chief Building Official</i>.</p> <p>Section 1.5. Authority of the Chief Building Official</p> <p>1.5.1. ADMINISTRATION</p> <p>1.5.1.1. Administrator</p> <p>1) The <i>Chief Building Official</i> is authorized to administer this By-law.</p> <p>1.5.1.2. Filing Documents</p> <p>1) The <i>Chief Building Official</i> is authorized to keep copies of applications received, <i>permits</i> and orders issued, inspections and tests made and papers and documents connected with the administration of this By-law, for such time as is required by law.</p> <p>2) Despite the provisions of Sentence (1), the <i>Chief Building Official</i> is authorized to keep copies of applications received, <i>permits</i> and orders issued, inspections and tests made and papers and</p>
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		<p>documents connected with the administration of this By-law, for such time as is necessary, in the opinion of the <i>Chief Building Official</i>, to support the administration of this By-law.</p> <p>1.5.1.3. Inspection of Records</p> <p>1) The <i>Chief Building Inspector</i> is authorized to provide plans and documents filed pursuant to the provisions of this By-law for inspection, subject to the provisions of the Freedom of Information and Protection of Privacy Act.</p> <p>1.5.1.4. Fees for Inspection of Records</p> <p>1) The <i>Chief Building Official</i> shall charge a fee as set out in the Fee Schedule, payable in advance, for the inspection of records referred to in Article 1.5.1.3.</p> <p>1.5.2. AUTHORITIES</p> <p>1.5.2.1. Power of Entry</p> <p>1) The <i>Chief Building Official</i>, and any person authorized to act on behalf of the <i>Chief Building Official</i>, may enter any <i>building</i> or premises at any reasonable time for the purpose of administering or enforcing this By-law, or if there is reason to believe an <i>unsafe condition</i> exists. (See Appendix A.)</p> <p>1.5.2.2. Review of Value of Work</p> <p>1) The <i>Chief Building Official</i> may review the value of the proposed work in an application for a <i>permit</i> and may substitute a different value, in accordance with Articles 1.6.2.3. and 1.6.2.4., for the purpose of determining applicable <i>permit</i> fees.</p> <p>1.5.2.3. Construction Safety</p> <p>1) The <i>Chief Building Official</i> may review a <i>Construction Safety Plan</i> and may require that the <i>Construction Safety Plan</i> be changed or amended.</p> <p>1.5.2.4. Permit Issuance</p> <p>1) The <i>Chief Building Official</i> shall issue a <i>permit</i> when the applicable requirements of this By-law have been met.</p> <p>1.5.2.5. Permit Refusal</p> <p>1) The <i>Chief Building Official</i> may refuse to issue a <i>permit</i></p>
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		<p>a) if plans or supporting documents are incomplete or do not comply with the provisions of this By-law, b) if plans or supporting documents contain false or incorrect information, or c) for any <i>building, construction, work or occupancy</i> that would not be permitted by this By-law or by another enactment.</p> <p>2) The <i>Chief Building Official</i> shall provide reasons for the refusal to issue a <i>permit</i>, on the request of an applicant or <i>owner</i>.</p> <p>1.5.2.6. Permit with Incomplete Application</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> for a <i>building</i> based on an incomplete application if the incomplete information is of a secondary nature and is unavailable at the time of <i>permit</i> issuance.</p> <p>2) If the <i>Chief Building Official</i> issues a <i>permit</i> pursuant to Sentence (1) the <i>Chief Building Official</i> may impose conditions requiring submission of further information by a specified date.</p> <p>3) The <i>Chief Building Official</i> may suspend or revoke a <i>permit</i> issued pursuant to Sentence (1), if the holder of the <i>permit</i> fails to comply with the conditions imposed by the <i>Chief Building Official</i>. (See Appendix A.)</p> <p>1.5.2.7. Conditions on Permits</p> <p>1) The <i>Chief Building Official</i> may impose conditions on <i>permits</i> including, but not limited to, conditions regarding</p> <p>a) notifications and notices, b) safety, c) health, d) design requirements, e) <i>construction</i> requirements, f) timing of <i>construction</i>, g) deadlines for completion of <i>construction</i>, h) reviews and inspections, i) responsibilities of the <i>owner, constructor, registered professional and certified professional</i>, j) compliance with this By-law and other enactments, k) use and <i>occupancy</i>, and l) temporary <i>buildings</i> and <i>occupancies</i>.</p> <p>1.5.2.8. Permits for Existing Buildings</p>
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		<p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> for an existing <i>building</i> in accordance with the provisions of Part 11, Division B, Book I and may impose conditions on the <i>permit</i>.</p> <p>2) The <i>Chief Building Official</i> may permit an alternative solution to the alternative acceptable solutions provided in this By-law for the conversion of an existing <i>building</i> if</p> <p>a) the owner demonstrates, to the satisfaction of the <i>Chief Building Official</i>, that the level of upgrade required presents an extraordinary hardship for the owner, and</p> <p>b) the owner proposes an alternative solution which achieves the objectives of the alternative acceptable solutions prescribed by this By-law, to the satisfaction of the <i>Chief Building Official</i>.</p> <p>1.5.2.9. Combustible Construction for Minor Repairs in Existing Buildings</p> <p>1) If <i>additions</i> and new work are required to be <i>noncombustible construction</i> pursuant to Subsection 3.2.2., the <i>Chief Building Official</i> may permit minor repairs to existing floor or wall assemblies to be <i>combustible construction</i> provided</p> <p>a) the minor repair of the floor assembly does not exceed 5 per cent of the <i>floor area</i> of the room in which it is located, and</p> <p>b) the minor repair of the wall assembly does not exceed 5 per cent of the wall area of the wall plane on which it is located.</p> <p>1.5.2.10. Permits for Plumbing and Sprinkler Systems</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> for a <i>plumbing system</i> or <i>sprinkler system</i> in accordance with the provisions of Section 1.6.3.</p> <p>1.5.2.11. Permits in Designated Flood Plain</p> <p>1) If a building is located on a <i>designated flood plain</i> the <i>Chief Building Official</i> may</p> <p>a) require plans and supporting documents to demonstrate that the elevation or design of the <i>building</i> incorporates <i>flood construction level requirements</i> intended to reduce the risk of flood damage,</p> <p>b) require that a covenant acknowledging the risk of flood damage be registered against the land, and</p> <p>c) withhold issuance of a <i>permit</i> until the requirements of the <i>Chief Building Official</i> have been satisfied.</p> <p>1.5.2.12. Permit for Staged Construction</p>
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		<p>1) Where a permit for staged <i>construction</i> is applied for pursuant to Subsection 1.6.5., the <i>Chief Building Official</i> may authorize the excavation or <i>construction</i> of a portion of a <i>building</i>, and may impose conditions to ensure compliance with this By-law, before all the plans and supporting documents for the <i>building</i> have been <i>accepted</i>, at the risk of the <i>owner</i>.</p> <p>2) The <i>Chief Building Official</i> may suspend or revoke a <i>permit</i> issued pursuant to Subsection 1.6.5. if the holder of the <i>permit</i> fails to comply with the conditions imposed by the <i>Chief Building Official</i>. (See Appendix A.)</p> <p>1.5.2.13. Minor Revisions to Permit</p> <p>1) The <i>Chief Building Official</i> may accept an application for minor revisions to an existing <i>permit</i> if the proposed revisions do not add or delete additional <i>storeys</i> or <i>major occupancy</i> classifications to or from the <i>project</i>.</p> <p>1.5.2.14. Requirement for New Permit</p> <p>1) The <i>Chief Building Official</i> may require that an applicant for revisions to an existing <i>permit</i> apply for a new <i>permit</i>, if the proposed revisions would add or delete <i>floor area</i>, <i>storeys</i>, <i>dwelling units</i> or <i>major occupancy</i> classifications to or from the <i>project</i>.</p> <p>1.5.2.15. Permit Suspension</p> <p>1) The <i>Chief Building Official</i> may suspend a <i>permit</i> by issuing an order to stop work.</p> <p>1.5.2.16. Permit Revocation</p> <p>1) The <i>Chief Building Official</i> may revoke a <i>permit</i> if</p> <ul style="list-style-type: none"> a) there is a contravention of any condition under which the <i>permit</i> was issued, b) the <i>permit</i> was issued in error, or c) the <i>permit</i> was issued on the basis of false or incorrect information. <p>1.5.2.17. Permit Extension.</p> <p>1) The <i>Chief Building Official</i> may extend a <i>permit</i> in accordance with Subsection 1.6.7 of this Part.</p> <p>1.5.2.18. Designation of Street Addresses</p> <p>1) The <i>Chief Building Official</i> may, at any time, number, renumber or assign a series of numbers or <i>suite</i> numbers to any <i>building</i>, or part thereof.</p>
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		<p>2) Upon the issuance of a <i>building permit</i>, the <i>Chief Building Official</i> shall designate the street address or series of <i>suite</i> numbers required for the <i>building</i>, or any portion of the <i>building</i>.</p> <p>3) Upon registration of a parcel of land in the Land Title Office, the <i>Chief Building Official</i> shall designate the street address or series of numbers required for the parcel.</p> <p>1.5.2.19. Renumbering of Street Addresses</p> <p>1) Where an <i>owner</i> has requested a renumbering and has paid the applicable fees set out in the Fee Schedule, the <i>Chief Building Official</i> may renumber any <i>building</i> or <i>suite</i> within a <i>building</i>, or parcel of land.</p> <p>1.5.2.20. Proof of Compliance</p> <p>1) The <i>Chief Building Official</i> may direct that tests of materials, equipment, devices, <i>construction</i> methods, structural assemblies or <i>foundations</i> be made, or sufficient evidence or proof be submitted, at the expense of the <i>owner</i>, where such evidence or proof is necessary, in the opinion of the <i>Chief Building Official</i>, to determine whether the material, equipment, device, <i>construction</i>, structural assembly or <i>foundation</i> condition complies with this By-law.</p> <p>1.5.2.21. Occupancy Permit for Building at Variance with By-law</p> <p>1) The <i>Chief Building Official</i> may issue an <i>occupancy permit</i> for a <i>building</i> which varies in a minor respect from the requirements of this By-law if, in the opinion of the <i>Chief Building Official</i>, such variation will not substantially interfere with the objectives of this By-law.</p> <p>1.5.2.22. Occupancy Permit Prior to Completion</p> <p>1) The <i>Chief Building Official</i> may issue an <i>occupancy permit</i> to allow the <i>occupancy</i> of a <i>building</i> or a part thereof for the <i>approved</i> use, prior to commencement or completion of the <i>construction</i> or demolition work.</p> <p>2) The <i>Chief Building Official</i> may impose conditions on an <i>occupancy permit</i> issued in accordance with Sentence (1).</p> <p>1.5.3. AUTHORITIES REGARDING UNSAFE CONDITIONS</p> <p>1.5.3.1. Report of Failure</p> <p>1) Where any <i>building</i>, <i>construction</i> or excavation failure occurs which causes or has the potential to cause injury or loss of life, the <i>Chief Building Official</i> may require the <i>owner</i> to</p>
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		<p>submit a report which includes</p> <ul style="list-style-type: none"> a) the name and address of the <i>owner</i>, b) the address or location of the <i>building</i>, demolition or excavation, c) the name and address of the <i>constructor</i>, d) the nature of the failure, e) the cause of the failure, f) a remedial plan to correct the failure, and g) a plan to prevent future failure. <p>1.5.3.2. Hazardous Material</p> <p>1) The <i>Chief Building Official</i> may require that any person supervising or doing work to install or remove <i>building</i> materials provide evidence of their training, certification or qualifications, if the installation or removal of <i>building</i> materials may create an <i>unsafe condition</i> or affect the structural safety or fire protection of a <i>building</i>.</p> <p>1.5.3.3. Order to Remove Unsafe Condition</p> <p>1) When any <i>building</i>, <i>construction</i> or excavation or part thereof is in an <i>unsafe condition</i>, the <i>Chief Building Official</i> may issue a written order to the <i>owner</i>, certifying the existence of an <i>unsafe condition</i> and requiring correction of any <i>unsafe condition</i> found on a <i>building</i> site, within a specified time.</p> <p>1.5.3.4. Corrective Measures</p> <p>1) If the <i>Chief Building Official</i> has issued an order in accordance with Article 1.5.3.3. and an <i>owner</i> has failed to comply with that order, the <i>Chief Building Official</i> may</p> <ul style="list-style-type: none"> a) authorize demolition, removal, posting of security guards or fire wardens, or enclosure of a <i>building</i>, <i>construction</i>, excavation or part thereof, at the expense of the <i>owner</i>, b) recover such expense in the manner set out in Article 1.5.3.6., and c) take such other measures as may be necessary to protect the public. <p>1.5.3.5. Immediate Measures</p> <p>1) When immediate measures must be taken to avoid an imminent danger or risk of accident, the <i>Chief Building Official</i> may take such action as is appropriate, without prior notice and at the expense of the <i>owner</i>.</p> <p>1.5.3.6. Recovery of City Costs</p>
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		<p>1) The cost of the measures described in Articles 1.5.3.4. and 1.5.3.5. shall be recoverable from the <i>owner</i></p> <p>a) in any Court of competent jurisdiction, or b) by entry of such cost in the real property roll with respect to the property and by collection in the same manner as the taxes shown in the real property roll.</p> <p>1.5.4. Notices and Orders</p> <p>1.5.4.1. Notices or Orders</p> <p>1) The <i>Chief Building Official</i> may issue in writing such notices or orders as may be necessary to inform the <i>owner</i> of a contravention of this By-law, in the manner set out in this By-law.</p> <p>1.5.4.2. Scope of Orders</p> <p>1) The <i>Chief Building Official</i> may order</p> <p>a) a person who contravenes any provision of this By-law, to comply with the provision within a specified time, b) a person who contravenes any provision of this By-law, to allow the <i>Chief Building Official</i> to enter any <i>building</i> or premises at any reasonable time for the purpose of administering and enforcing this By-law, c) work to stop on a <i>building</i> or any part thereof, if such work is proceeding in contravention of a provision of this By-law or another enactment, or if there is deemed to be an <i>unsafe condition</i>, d) the removal of an unauthorized encroachment on public property, e) the removal of any <i>building</i> or part thereof constructed in contravention of a provision of this By-law, f) the cessation of any <i>occupancy</i> in contravention of a provision of this By-law, g) the cessation of any <i>occupancy</i> if an <i>unsafe condition</i> exists, and h) the correction of an <i>unsafe condition</i>.</p> <p>1.5.4.3. Contents of Notice</p> <p>1) A notice shall state the nature of any contravention and specify the date or the phase of <i>construction</i> by which remedial measures must be completed.</p> <p>1.5.4.4. Delivery of Notice</p> <p>1) A notice may be posted on a <i>building</i>, and may be delivered by regular mail or by hand to the person listed as the <i>owner</i> in the records of the Assessment Authority of British Columbia or to a representative of the <i>owner</i>.</p>
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		<p>a) provide proof that the <i>construction</i> complies with this By-law and any other applicable enactments,</p> <p>b) carry out tests and investigations by independent agencies, at the cost of the <i>owner</i>, to determine whether or not the <i>construction</i> complies with this By-law,</p> <p>c) carry out tests and investigations by independent agencies, at the cost of the <i>owner</i>, to determine appropriate remedial measures to ensure that the <i>construction</i> complies with this By-law,</p> <p>d) provide to the Chief Building Official, at the cost of the owner, the results of any tests and investigations ordered by the Chief Building Official, and</p> <p>e) provide documentation to the satisfaction of the Chief Building Official to establish that all remedial measures to ensure the construction complies with this By-law have been completed.</p> <p>1.6.1.3. Additional Permits</p> <p>1) In addition to a <i>permit</i> required by Article 1.6.1.1., other <i>permits</i> and supporting documents necessary for specific <i>building</i> components, services and uses, may be required by the <i>Chief Building Official</i>.</p> <p>1.6.2. APPLICATION FOR PERMIT</p> <p>1.6.2.1. Owner Requirement</p> <p>1) To obtain a <i>permit</i>, the <i>owner</i> shall file an application in writing in the form prescribed by the <i>Chief Building Official</i>.</p> <p>1.6.2.2. Application Requirements</p> <p>1) Except as otherwise provided in this By-law, every application shall</p> <p>a) describe the work, <i>building</i>, <i>construction</i> or and <i>occupancies</i> for which the <i>permit</i> is required,</p> <p>b) provide a legal description and address for the land on which the work is to be done,</p> <p>c) include plans and other supporting documents which conform with Section 2.2. of Division C,</p> <p>d) state the value of the proposed work calculated in accordance with Article 1.6.2.3.,</p> <p>e) include the requisite <i>permit</i> fee, in accordance with the Fee Schedule at the end of this Part,</p> <p>f) include the appropriate owner's undertaking letter in the applicable form set out in Schedules E-1, E-2 and E-3 at the end of this Part,</p> <p>g) include any other plans or supporting documents required by the Chief Building Official to establish that the work, <i>building</i>, <i>construction</i> and <i>occupancy</i> complies with this By-law or any other enactment, and</p> <p>h) list the names, addresses, electronic mail addresses and telephone numbers of all <i>owners</i>, designers and <i>constructors</i>. (See Appendix A.)</p>
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		<p>1) If <i>construction</i> authorized by <i>permit</i> has not commenced and the <i>Chief Building Official</i> approves, the Director of Finance may refund a portion of the fees related to the <i>permit</i>, after deduction of any outstanding costs incurred by the <i>City</i> in processing the application for the <i>permit</i> and in carrying out any work pursuant to Article 1.5.3.4. or Article 1.5.3.5.</p> <p>1.6.2.8. Lapse of Application</p> <p>1) Subject to the provisions of Article 1.6.2.9., an <i>owner</i> shall comply with all the necessary requirements to complete an application for a <i>permit</i> within 6 months after the date of receipt of the application by the <i>Chief Building Official</i>.</p> <p>2) If an <i>owner</i> fails to comply with the requirements of Sentence (1), the application for a <i>permit</i> shall lapse.</p> <p>3) An application for a <i>permit</i> which has lapsed is expired and shall not be renewed except in accordance with Article 1.6.2.9.</p> <p>1.6.2.9. Renewal of Lapsed Application</p> <p>1) The <i>Chief Building Official</i> may renew a lapsed application for a <i>permit</i> if the <i>Chief Building Official</i> determines that</p> <p>a) no more than 3 months have passed since the date the application lapsed, and b) the failure to complete the requirements of the original application for a <i>permit</i> was reasonable in the circumstances.</p> <p>2) Despite the provisions of Sentence (1), the <i>Chief Building Official</i> shall not renew a lapsed application for a <i>permit</i> more than once.</p> <p>3) An application for a <i>permit</i> which has been renewed pursuant to Sentence (1) must comply with any amendments to this By-law made since the date of receipt of the original application by the <i>Chief Building Official</i>.</p> <p>1.6.3. ADDITIONAL REQUIREMENTS FOR PLUMBING AND SPRINKLER PERMITS</p> <p>1.6.3.1. Application Requirements</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> for a <i>plumbing system</i> or <i>sprinkler system</i> if the applicant is authorized to obtain such a permit in accordance with the provisions of this Section.</p> <p>1.6.3.2. Permit for Plumbing System</p>
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		<p>1) A <i>Certified Professional</i> who applies for a <i>permit</i> on behalf of an <i>owner</i> must comply with the requirements of Section 1.6 of this By-law.</p> <p>1.6.4.3. Application Review For Permit</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> based upon a modified review of the drawings and other supporting documents submitted with the application for a <i>permit</i> by a <i>Certified Professional</i>.</p> <p>1.6.4.4. Site Review For Permit</p> <p>1) A <i>Certified Professional</i> shall carry out detailed site reviews and shall be responsible for monitoring and follow-up necessary to support the <i>construction</i> authorized by the <i>permit</i> and to support the <i>construction</i> of the entire <i>building</i>.</p> <p>1.6.4.5. Reduced Fees</p> <p>1) The <i>Chief Building Official</i> may reduce the fees for a <i>permit</i> issued to a <i>Certified Professional</i>, after a final <i>occupancy permit</i> has been issued, if the <i>Chief Building Official</i> first determines that, as a result of the involvement of the <i>Certified Professional</i> in the project, the administrative costs of the <i>City</i> in relation to the <i>permit</i> have been substantially reduced.</p> <p>1.6.5. APPLICATIONS FOR STAGED CONSTRUCTION BY CERTIFIED PROFESSIONALS</p> <p>1.6.5.1. Requirements for Staged Construction</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> to construct a <i>building</i> in stages if</p> <ul style="list-style-type: none"> a) the applicant for the staged <i>construction</i> is a <i>Certified Professional</i>, b) the <i>Certified Professional</i> also applies for permission to construct the entire <i>building</i>, c) the <i>Certified Professional</i> submits complete plans and all supporting documents for each portion of the work for which a <i>permit</i> for staged <i>construction</i> is sought, and d) the <i>Certified Professional</i> submits all documents required pursuant to the Certification of Professionals By-law. <p>1.6.5.2. Owner's Risk</p> <p>1) The issuance of a staged <i>permit</i> creates no obligation on the <i>Chief Building Official</i> to issue any other staged <i>permits</i> or to issue a <i>permit</i> to construct the entire <i>building</i>.</p> <p>2) An <i>owner</i> who commences <i>construction</i> of a <i>building</i> in accordance with a staged <i>permit</i> does so at the <i>owner's</i> risk.</p>
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		<p>1.6.5.3. Owner's Responsibility</p> <p>1) An <i>owner</i> who fails to complete the work authorized by a <i>permit</i> for staged construction or who fails to comply with the conditions of a <i>permit</i> for staged construction shall restore the site to a safe condition, to the satisfaction of the <i>Chief Building Official</i>.</p> <p>1.6.5.4. Application Review for Permit for Staged Construction</p> <p>1) Where a <i>Certified Professional</i> complies with all application requirements for a <i>permit</i> for staged construction, the <i>Chief Building Official</i> may issue a <i>permit</i> for staged construction based upon a modified review of the drawings and other supporting documents submitted for the <i>permit</i> for staged construction.</p> <p>1.6.5.5. Site Review of Staged Construction</p> <p>1) Where a <i>permit</i> for staged construction is issued, the <i>Certified Professional</i> shall carry out detailed site reviews and shall be responsible for monitoring and follow-up necessary to support the construction authorized by the <i>permit</i> for staged construction and to support the construction of the entire <i>building</i>.</p> <p>1.6.6. REVISIONS</p> <p>1.6.6.1. Revisions to Applications</p> <p>1) All applications for revisions to the original application shall comply with Article 1.6.2.2.</p> <p>2) When revisions to the original application result in an increase in the value of the proposed work, the <i>Chief Building Official</i> shall review the valuation and recalculate the <i>permit</i> fee in accordance with this By-law.</p> <p>3) When application documents are either incomplete or changed to the extent that an additional plan review is necessary, an additional revision fee shall be charged in accordance with the Fee Schedule at the end of this Part.</p> <p>1.6.6.2. Minor Revisions to Permits</p> <p>1) All applications for minor revisions to the original <i>permit</i> shall comply with Article 1.6.2.2. to the extent required by the <i>Chief Building Official</i>.</p> <p>2) When applications for minor revisions to the original <i>permit</i> result in an increase in the value of the proposed work, the <i>Chief Building Official</i> shall review the valuation and recalculate the</p>
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		<p><i>permit</i> fee in accordance with this By-law.</p> <p>3) An additional revision fee shall be charged for applications for minor revisions to the original <i>permit</i> in accordance with the Fee Schedule at the end of this Part.</p> <p>1.6.7. PERMIT EXPIRY AND EXTENSION</p> <p>1.6.7.1. Permit Expiry</p> <p>1) Except as provided in this Subsection, a <i>permit</i> shall expire and the rights of the <i>owner</i> under the <i>permit</i> shall terminate if in the opinion of the <i>Chief Building Official</i></p> <p>a) the work authorized by the <i>permit</i> is not commenced within 6 months from the date of issue of the <i>permit</i>,</p> <p>b) the work although commenced is not continuously and actively carried out thereafter, or</p> <p>c) the work has been substantially discontinued for a period of 6 months. (See Appendix A.)</p> <p>2) Except as provided in this Subsection 1.6.7., a <i>permit</i> for a temporary <i>building</i> or <i>occupancy</i> shall expire and the rights of the <i>owner</i> under the <i>permit</i> shall terminate on the expiry date noted on the <i>permit</i>.</p> <p>1.6.7.2. Application to Chief Building Official for Extension</p> <p>1) An <i>owner</i> who wishes to seek an extension of a <i>permit</i> shall make application to the <i>Chief Building Official</i> prior to the expiry of the <i>permit</i>.</p> <p>2) An <i>owner</i> who wishes to seek an extension of a <i>permit</i> shall submit the application in writing accompanied by the requisite extension fee.</p> <p>1.6.7.3. Extension of Permit by Chief Building Official</p> <p>1) If the <i>Chief Building Official</i> is of the opinion that substantial completion of the work has been prevented because of exceptional circumstances, the <i>Chief Building Official</i> may extend the <i>permit</i> twice only, provided that, in the meantime, no applicable amendments have been made to this By-law. 2) If the <i>Chief Building Official</i> is of the opinion that a <i>building</i> or <i>occupancy</i> is temporary, the <i>Chief Building Official</i> may extend the <i>permit</i> for a temporary <i>building</i> or <i>occupancy</i> twice only, provided that, in the meantime, no applicable amendments have been made to this By-law.</p> <p>1.6.7.4. Application to Council for Extension</p>
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		<p>1) An <i>owner</i> who has been granted an extension of a <i>permit</i> by the <i>Chief Building Official</i> may make application to Council for a further extension prior to the expiry of the <i>permit</i>.</p> <p>2) An <i>owner</i> who wishes to seek an extension of a <i>permit</i> from Council shall submit an application in writing to the <i>Chief Building Official</i> accompanied by the requisite extension fee.</p> <p>3) The <i>Chief Building Official</i> shall forward to Council any application submitted in accordance with this section, together with information and advice to assist Council in considering the application.</p> <p>1.6.7.5. Extension of Permit by Council</p> <p>1) Council may extend a <i>permit</i> for such further period or periods it deems appropriate.</p> <p>2) If Council grants an extension of a <i>permit</i>, the <i>Chief Building Official</i> shall endorse the further extension or extensions on the <i>permit</i>.</p> <p>1.6.8. PERMITS FOR TEMPORARY BUILDINGS, INCLUDING TENTS AND AIR-SUPPORTED STRUCTURES</p> <p>1.6.8.1. Definition of “Temporary”</p> <p>1) In this Subsection, “temporary” means for a time period not exceeding twelve consecutive months.</p> <p>1.6.8.2. Compliance with By-law</p> <p>1) Except as otherwise provided in this Subsection or in Section 11.6, Division B, Book 1, no person shall erect a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, which does not comply with this By-law.</p> <p>1.6.8.3. Permit Required</p> <p>1) No person shall erect, or use or occupy a temporary <i>building</i>, including a tent or <i>air-supported structure</i> without a <i>permit</i>.</p> <p>1.6.8.4. Compliance with Permit Conditions</p> <p>1) No person shall erect, or use or occupy a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, in contravention of the conditions of a <i>permit</i>.</p> <p>1.6.8.5. Application Requirements</p>
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		<p>1) The application for a <i>permit</i> for a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, shall be accompanied by</p> <p>a) plans showing the location of the temporary <i>building</i>, tent or <i>air-supported structure</i> on the site, all other existing <i>buildings</i> on the same property and all other <i>buildings</i> on adjacent property located within at least 10 feet of the property line of the site,</p> <p>b) <i>construction</i> details of the <i>building</i>, tent or <i>air-supported structure</i>, and</p> <p>c) a statement by the <i>owner</i> indicating the intended use and intended duration of such use.</p> <p>2) The application for a temporary <i>occupancy permit</i> for a tent or <i>air-supported structure</i> shall be accompanied by documentation sufficient to establish that the tent or <i>air-supported structure</i> complies with Subsection 3.1.6., Division B, Book I.</p> <p>1.6.8.6. Time Limited Permits for Temporary Buildings</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> authorizing the <i>construction</i>, use or <i>occupancy</i> of a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, and may attach conditions to such <i>permit</i>, including conditions allowing for selective compliance with the provisions of this By-law, if the <i>Chief Building Official</i> determines that the <i>construction</i>, use or <i>occupancy</i> will exist for a short time, and the circumstances do not warrant complete compliance with this By-law.</p> <p>1.6.8.7. Permit End Date</p> <p>1) A <i>permit</i> for a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, shall state the date after which the <i>permit</i> is no longer valid.</p> <p>1.6.8.8. Permit Extension</p> <p>1) A <i>permit</i> for a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, may only be extended if an extension is granted by the <i>Chief Building Official</i> prior to the expiry of the <i>permit</i>.</p> <p>2) An <i>owner</i> who wishes to seek an extension of a <i>permit</i> for a temporary <i>building</i> from the <i>Chief Building Official</i> shall submit an application in writing to the <i>Chief Building Official</i> accompanied by the requisite extension fee.</p> <p>3) If the <i>Chief Building Official</i> is of the opinion that the temporary <i>building</i> complies with the life safety requirements of this By-law, the <i>Chief Building Official</i> may extend the <i>permit</i> once</p>
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only, and the *Chief Building Official* may require documentation from *registered professionals* to verify that the requirements of this By-law are being met.

Section 1.7. Permission to Occupy Buildings

1.7.1. GENERAL

1.7.1.1. Occupancy Permit Required

1) Except as otherwise provided in this By-law, no person shall occupy or allow the *occupancy* of any *building* or part thereof unless the *owner* has obtained an *occupancy permit* from the *Chief Building Official*.

2) No person shall occupy any *building* for a purpose other than the *occupancy* stipulated in an *occupancy permit* issued by the *Chief Building Official*.

1.7.1.2. Occupancy Permit

1) Every *owner* shall obtain an *occupancy permit* from the *Chief Building Official* prior to any

- a) *occupancy* of a *building* or part thereof after *construction* or *alteration* of that *building*,
- b) change in the *major occupancy* of any *building* or part thereof, or
- c) change in the permitted *occupancy* within the same Division of the *major occupancy* Group, where the *occupant load* or the *fire load* has increased. (See Appendix A.)

1.7.1.3. Exemptions from Occupancy Permit

1) Despite the requirements of Articles 1.7.1.1. and 1.7.1.2., an *occupancy permit* is not required for

- a) *one* or *two-family dwellings*, or
- b) a change in the permitted *occupancy* within the same *major occupancy* classification provided the *occupant load* is not increased and no *construction* has taken place.

1.7.1.4. Posting of Lawful Use

1) In any *building* not requiring an *occupancy permit*, the *Chief Building Official* may post a notice which describes the uses to which the *building* may be lawfully put.

1.7.2. OCCUPANCY PERMIT PROCESS

1.7.2.1. Owner's Obligation

		<p>1) An <i>owner</i> who wishes to obtain an <i>occupancy permit</i> shall file an application in the form required by the <i>Chief Building Official</i>.</p> <p>1.7.2.2. Requirements for Occupancy Permit Application</p> <p>1) The permit application requirements described in Article 1.6.2.2. do not apply to an application for an <i>occupancy permit</i> if the application includes</p> <ul style="list-style-type: none"> a) a letter from the <i>owner</i> declaring that the work complies with the By-law, the necessary <i>permits</i> have been obtained and the <i>building</i> conforms with the <i>accepted</i> plans, in any case where a professional is not required by Subsection 2.2.7., Division C, Book I, b) the appropriate letters of assurance in any case where a professional <i>field review</i> is required by Subsection 2.2.7., Division C, Book I, c) the anticipated date of completion, d) the classification of the <i>building</i>, e) the number of <i>storeys</i> in the <i>building</i>, f) the gross <i>floor area</i> of each <i>storey</i>, and g) the allowable <i>live loads</i> for each <i>floor area</i>. <p>1.7.2.3. Scheduling of Construction, Fire & Life Safety Systems Inspection</p> <p>1) Prior to the issuance of an <i>occupancy permit</i>, the <i>owner</i> of a <i>building</i> shall call for and coordinate a final inspection of <i>construction</i>, fire and life safety systems in the <i>building</i>.</p> <p>1.7.2.4. Requirements prior to Construction, Fire and Life Safety Systems Inspection</p> <p>1) At least 24 hours prior to the final inspection for an <i>occupancy permit</i>, every <i>owner</i> shall submit to the <i>Chief Building Official</i></p> <ul style="list-style-type: none"> a) proof of compliance with the By-law for all materials, equipment and methods of <i>construction</i>, b) letters of assurance in the forms attached as Schedules C-A and C-B, at the end of Part 2, Division C, c) a <i>contractor's</i> material and test certificate, certifying that the <i>sprinkler systems</i> have been flushed, inspected and tested, d) a certificate of verification and a manufacturer's inspection report for the fire alarm system, e) a fire safety plan and record of installed fire safety systems, conforming to the Fire By-law, and f) a letter from a fire protection consultant verifying that the special devices or methods forming part of the alternative solution achieves the alternative solution.
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		<p>a) public utility poles or equipment, b) fire fighting equipment or fire rescue operations, c) <i>street</i> trees or lamp standards, or d) <i>street</i> furniture.</p> <p>1.8.1.6. Compliance with Encroachment By-law</p> <p>1) The <i>Chief Building Official</i> shall not issue a <i>permit</i> to construct an encroachment unless the encroachment complies with this By-law and with the Encroachment By-law.</p> <p>1.8.2. Existing Encroachments</p> <p>1.8.2.1. Existing Encroachments</p> <p>1) An existing encroachment which complies with the Encroachment By-law and does not conform with this By-law may be continued if the encroachment is not altered.</p> <p>1.8.2.2 Damage to Existing Encroachment</p> <p>1) Subject to the provisions in Sentence (2), an existing encroachment which is damaged may be repaired.</p> <p>2) Despite the provisions of Sentence(1) if the cost of the repair to an existing encroachment is more than 50 per cent of the current replacement cost of the damaged encroachment, the repair shall constitute a new encroachment and shall comply with the provisions of this By-law and the Encroachment By-law.</p> <p>1.8.2.3. Alteration to Existing Encroachment</p> <p>1) Except for signs permitted by the Sign By-law, any enlargement or <i>alteration</i> of an existing encroachment shall constitute a new encroachment and shall comply with the provisions of this By-law and the Encroachment By-law.</p> <p>1.8.2.4. Signs</p> <p>1) Signs permitted by the Sign By-law which encroach in a <i>street</i> shall comply with this By-law.</p> <p>1.8.2.5. Door Swings</p> <p>1) Except as provided in Subsection 1.8.10, doors, security gates and other moveable barriers, whether open or closed, shall not encroach in a <i>street</i>.</p>
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		<p>1.8.3. New Encroachments</p> <p>1.8.3.1. Application</p> <p>1) This Section applies to</p> <p>(a) new encroachments, and (b) <i>alterations</i> to existing encroachments which do not comply with the provisions of Section 1.8.2..</p> <p>1.8.3.2. Dimensions and Clearances</p> <p>1) Unless otherwise provided in this By-law, all new encroachments shall comply with the applicable <i>construction</i>, clearance and dimension requirements in Subsections 1.8.5. to 1.8.10.</p> <p>1.8.3.3. Design and Construction of New Encroachments</p> <p>1) A new encroachment shall be designed and constructed so that, in the event of its removal from the <i>building</i>, the <i>building</i> will comply with the provisions of this By-law.</p> <p>1.8.3.4. Compliance with By-laws</p> <p>1) A new encroachment shall comply with the provisions of this By-law and the Encroachment By-law.</p> <p>1.8.3.5. Encroachments in Narrow Streets</p> <p>1) Unless otherwise permitted by this Section, new encroachments or encroachments which do not comply with the provisions of Section 1.8.2. are not permitted in a <i>street</i> which is 10 m or less in width.</p> <p>1.8.4. Repair or Removal of Encroachment</p> <p>1.8.4.1. Removal or Repair by Owner</p> <p>1) The <i>owner</i> of a <i>building</i> which encroaches in a <i>street</i> shall repair, alter or remove the encroachment if so ordered</p> <p>a) by the Chief Building Official, in accordance with this By-law, or b) by the City Engineer, in accordance with the Encroachment By-law.</p> <p>1.8.4.2. Repair of Building after Removal of Encroachment</p>
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		<p>1) Upon removal of an encroachment from a <i>building</i>, the <i>owner</i> shall promptly repair the <i>building</i> and shall ensure that the <i>building</i> complies with this By-law.</p> <p>1.8.4.3. Repair of Building at Owner’s Expense</p> <p>1) If the <i>Chief Building Official</i> has issued an order in accordance with Article 1.8.4.1. and an <i>owner</i> has failed to comply with that order, the <i>Chief Building Official</i> may</p> <p>a) authorize demolition or removal of an encroachment, posting of security guards or fire wardens, or enclosure of such encroachment, <i>building</i>, <i>construction</i>, excavation or part thereof, at the expense of the <i>owner</i>,</p> <p>b) recover such expense in the manner set out in this By-law, and</p> <p>c) take other measures as may be necessary to protect the public.</p> <p>1.8.5. Areaways</p> <p>1.8.5.1. Areaway Defined</p> <p>1) In this Subsection an areaway means an existing underground <i>building</i> or <i>building</i> appurtenance, which encroaches in a <i>street</i> and forms part of or serves an adjacent <i>building</i>.</p> <p>1.8.5.2. Design and Structural Requirements</p> <p>1) The <i>Chief Building Official</i> shall refuse to issue a <i>permit</i> for <i>alteration</i> of an areaway unless the design has been first approved by the <i>City Engineer</i>.</p> <p>2) Areaways shall be constructed with reinforced concrete walls and roofs which are capable of supporting the <i>street</i> surface, any superimposed live loads, surcharge loads and seismic loads, to the satisfaction of the <i>City Engineer</i>.</p> <p>3) Notwithstanding Sentences (1) and (2), the provisions of Part 4, Division B, Book I of this By-law apply to the <i>construction</i> of an areaway.</p> <p>1.8.5.3. Surface Construction Requirements</p> <p>1) If any part of an areaway interfaces with the <i>street</i> surface, the areaway shall be</p> <p>a) <i>noncombustible construction</i>,</p> <p>b) constructed with solid non slip surfaces at the <i>street</i> surface interface, and</p> <p>c) level with the <i>street</i> surface at the <i>street</i> surface interface.</p>
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		<p>1.8.5.4. Removal of Areaway</p> <p>1) A person who wishes to remove an areaway shall</p> <p>a) apply for and obtain all necessary <i>permits</i>, b) install a cut-off wall integral to the <i>building</i>, to the satisfaction of the <i>City Building Official</i>, c) waterproof the cut-off wall, to the satisfaction of the <i>City Building Official</i>, and d) backfill and restore the <i>street</i> surface in accordance with the Encroachment By-law, to the satisfaction of the <i>City Engineer</i>.</p> <p>1.8.6. Ornamental Projections and Existing Windows</p> <p>1.8.6.1. Ornamental Projections Defined</p> <p>1) In this Subsection, ornamental projections mean new and existing <i>building</i> appurtenances and fixtures which encroach in a <i>street</i>, and include</p> <p>a) cornices, b) copings, c) belt courses and other minor architectural trim such as water tables, column capitals and bases, and d) sun screens and other projections designed to increase energy efficiency.</p> <p>1.8.6.2. Construction</p> <p>1) Except as permitted in Sentence (2), all ornamental projections, including their connections and supports, which encroach in a <i>street</i>, shall be <i>noncombustible construction</i>, and if constructed of metal, shall be no less than 0.56 mm in thickness.</p> <p>2) Where roof <i>construction</i> is permitted to be of wood, the <i>Chief Building Official</i> may also permit a cornice to be of <i>combustible</i> materials, if</p> <p>a) the cornice only consists of roof members cantilevered over the <i>street</i> and covered by a roof deck, and b) the underside of the cornice is exposed, without a boxed-in soffit.</p> <p>1.8.6.3. Ornamental Projections in Streets</p> <p>1) An ornamental projection may encroach in a <i>street</i> which is at least 10 m wide</p> <p>a) no more than 75 mm where the distance from the lowest point of the encroachment to the <i>street</i> level immediately below is less than 2.75 m, and</p>
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		<p>b) no more than 915 mm where the distance from the lowest point of the encroachment to the <i>street</i> level immediately below is 5.2 m or more.</p> <p>2) An ornamental projection may encroach in a <i>street</i> which is less than 10 m wide, if</p> <p>a) it is located no less than 5.2 m above the <i>street</i>, b) it does not encroach more than 915 mm beyond the property line, and c) it does not interfere with overhead public utilities.</p> <p>1.8.6.4. Existing Encroaching Windows</p> <p>1) An oriel or bay window shall not encroach in a <i>street</i> except that <i>alterations</i> may be made to an existing oriel or bay window if</p> <p>a) it encroaches no more than 600 mm beyond the property line, b) it is located no less than 5.2 m above the <i>street</i>, and c) the <i>street</i> is no less than 10 m in width.</p> <p>2) The provisions of Sentence (1) do not apply to an existing encroaching oriel or bay window which is designated in accordance with a heritage designation by-law or is the subject of a heritage revitalization agreement with the <i>City</i>.</p> <p>1.8.7. Awnings</p> <p>1.8.7.1. Awning Defined</p> <p>1) In this Subsection, an awning means a light detachable structure which encroaches in a <i>street</i> and which consists of a covering of fabric, sheet metal or other relatively flexible material on a fixed or retractable structural frame attached to and entirely supported by a <i>building</i>.</p> <p>1.8.7.2. Attachments</p> <p>1) No electrical wiring, illuminated device, electrical equipment or apparatus shall be attached to or incorporated in an awning, except that drive mechanisms and attachments to the structural frame required for the operation of collapsible awnings may be permitted by the <i>Chief Building Official</i>.</p> <p>1.8.7.3. Structural Design</p> <p>1) Except as permitted in Sentence (3), the structural frame of an awning and its connections to the supporting <i>building</i> shall be designed in conformance with Part 4, Division B, Book I.</p>
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		<p>2) The structural frame of an awning and its connections to the supporting <i>building</i> shall be <i>noncombustible</i>.</p> <p>3) A fabric covered retractable awning shall be designed to withstand wind, rain, snow, and seismic design loads applied to the closed awning.</p> <p>1.8.7.4. Clearances</p> <p>1) The horizontal distance from the outer edge of an awning measured to the outer face of the <i>street</i> curb shall be no less than 600 mm.</p> <p>2) No portion of an awning shall be less than 2.75 m above the level of the <i>street</i> surface or established <i>building grade</i>, except that if the <i>street</i> surface or established <i>building grade</i> below the awning slopes more than 0.1 m over the length of the awning, the vertical clearance may be no less than 2.6 m, except that a soft fringe attached to the awning and made of canvas or cloth may have a clearance of no less than 2.3 m.</p> <p>1.8.7.5. Combustible Material Requirements</p> <p>1) Combustible materials used in awnings shall conform to the appropriate requirements for resistance to fire as set out in CAN/ULC-S109, “Flame Tests of Flame-Resistant Fabrics and Films”, or NFPA 701, “Standard Method of Fire Tests for Flame Propagation of Textiles and Films”, 2010 edition.</p> <p>2) Combustible materials shall not be used in an awning which is above the second <i>storey</i> of a <i>building</i>.</p> <p>3) Combustible materials shall not be used in an awning which is attached to an exterior wall required to be of <i>noncombustible construction</i>.</p> <p>1.8.7.6. Vertical Height</p> <p>1) The vertical dimensions of the front and sides of an awning shall not exceed 3.65 m at any point, unless otherwise permitted by the <i>Chief Building Official</i>.</p> <p>1.8.7.7. Awning Not To Span Unprotected Openings</p> <p>1) An awning shall not span <i>unprotected openings</i> in separate <i>fire compartments</i>.</p> <p>1.8.8. Canopies</p> <p>1.8.8.1. Canopy Defined</p>
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			<p>1) In this Subsection, a canopy means a rigid, roofed structure which encroaches in a <i>street</i> and is attached to and supported by a <i>building</i>.</p> <p>1.8.8.2. Requirements for Materials</p> <p>1) A canopy shall be</p> <p>a) constructed of <i>noncombustible</i> materials, except as provided in Sentence (2) and Clause (3)(c),</p> <p>b) supported entirely by the <i>building</i> to which the canopy is attached, and</p> <p>c) constructed so that its removal conforms to Sentence 1.8.3.3.(1).</p> <p>2) Despite Clause (1) (a), if the <i>building</i> or the exterior wall to which the canopy is attached is of <i>combustible construction</i>, a canopy may be constructed of <i>combustible</i> materials.</p> <p>3) The deck and roof of a canopy shall be constructed of</p> <p>a) wired or laminated safety glass,</p> <p>b) metal no less than 0.56 mm in thickness, or</p> <p>c) wood plank no less than 60 mm in thickness, sheathed on the top and the soffit with metal or other <i>noncombustible</i> material, and constructed and fire stopped to the satisfaction of the <i>Chief Building Official</i>.</p> <p>1.8.8.3. Clearances</p> <p>1) The vertical distance from the lowest point of a canopy to the <i>street</i> surface shall be no less than 2.75 m.</p> <p>2) The horizontal distance from the outer edge of a canopy to the outer face of the <i>street</i> curb shall be no less than 60 mm, except that where the distance from the lowest point of a canopy to the sidewalk surface is more than 5.2 m, the outer edge of the canopy may extend to the outer face of the <i>street</i> curb.</p> <p>3) A canopy shall be no less than 600 mm from an adjoining property line or from the production of the property line into the <i>street</i>, unless the canopy is constructed entirely of <i>noncombustible</i> materials.</p> <p>4) Despite the provisions of Sentence (3), if a property line is adjacent to a lane, a canopy shall be located no less than 600 mm from the production of the property line into the <i>street</i>.</p> <p>1.8.8.4. Vertical Dimensions of Canopy</p>
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			<p>1) Unless otherwise accepted by the <i>Chief Building Official</i>, the vertical dimensions of the front and sides of a canopy shall not exceed 3.65 m at any point.</p> <p>1.8.8.5. Canopy Not to Span Unprotected Openings</p> <p>1) A canopy shall not span <i>unprotected openings</i> in separate <i>fire compartments</i>.</p> <p>1.8.8.6. Canopy Drainage System</p> <p>1) Unless otherwise permitted by the <i>Chief Building Official</i>, a canopy roof shall be provided with a drainage system conforming to Part 2, Division B, Book II and connected to the <i>building storm water</i> system.</p> <p>2) Downpipes for canopies shall not encroach more than 75 mm in the <i>street</i>.</p> <p>1.8.9. Mechanical Apparatus</p> <p>1.8.9.1. Clearances</p> <p>1) Exterior hose connections for fire-fighting equipment, ventilation intakes and outlets, chimneys and air conditioning units shall not encroach in a <i>street</i> unless permitted by the <i>City Engineer</i>.</p> <p>2) Fire alarm bells and fire gongs may encroach up to 300 mm in a <i>street</i>, except that such encroachments shall be located no less than 2.6 mm above the <i>street</i> surface or established <i>building grade</i>.</p> <p>1.8.10 Emergency Exits</p> <p>1.8.10.1. Stairways and Fire Escapes</p> <p>1) The <i>Chief Building Official</i> may permit stairways and balconies for fire escapes to encroach in a <i>street</i>, except that the lowest part of such stairways and balconies shall be no less than 5.2 m above the <i>street</i> surface.</p> <p>1.8.10.2. Emergency Exit Doors</p> <p>1) Emergency <i>exit</i> doors may encroach no more than 300 mm in a <i>street</i> which is no less than 10 m in width.</p> <p>2) Despite Sentence (1), the <i>City Engineer</i> may permit an emergency <i>exit</i> door to encroach in a</p>
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		<p><i>street</i> which is less than 10 m in width, provided that such door does not encroach more than 300 mm in the <i>street</i>.</p> <p>Section 1.9. Temporary Occupancy Of A Street For Construction Purposes</p> <p>1.9.1. GENERAL REQUIREMENTS</p> <p>1.9.1.1. Permit Required Prior to Occupancy of Street</p> <p>1) No person shall occupy a <i>street</i> or the air space above a <i>street</i> in connection with, or incidental to the <i>construction</i> or maintenance of any <i>building</i>, without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>1.9.1.2. Permit Required Prior to Excavation in Street</p> <p>1) No person shall excavate or backfill any part of a <i>street</i> without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>1.9.1.3. Liability Disclaimer</p> <p>1) An application for a <i>street use permit</i> shall contain an undertaking by the <i>owner</i> to save harmless the <i>City</i> against all claims, liabilities, judgments, costs and expenses in consequence of, or in any way incidental to the granting of such <i>permit</i> in a form satisfactory to the Director of Legal Services.</p> <p>1.9.2. OVERHEAD CONSTRUCTION</p> <p>1.9.2.1. Permit Required for Overhead Construction</p> <p>1) No person shall cause a swing scaffold or <i>construction</i> hoisting device to occupy the air space above a street without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>1.9.2.2. Prevention of Public Entry</p> <p>1) The <i>street</i> under a swing scaffold or <i>construction</i> hoisting device shall be fenced, roped off or otherwise protected against public entry to the satisfaction of the <i>City Engineer</i>.</p> <p>1.9.3. PUBLIC SAFETY</p> <p>1.9.3.1. Construction Site Protection of the Public Required</p> <p>1) No person shall construct, alter or repair any <i>building</i> unless fencing, boarding, barricades or</p>
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		<p>covered walkways as required by Part 8, Division B, Book I have first been erected on or adjacent to the <i>street</i>, to the satisfaction of the <i>Chief Building Official</i>.</p> <p>2) The <i>Chief Building Official</i> may modify the requirements of Sentence (1) if satisfied that the location of the <i>construction</i> is sufficiently protected or remote from areas frequented by the public.</p> <p>1.9.3.2. Permit Required for Fencing, Boarding, Barricades or Covered Walkways</p> <p>1) No person shall erect fencing, boarding, barricades or covered walkways on a <i>street</i>, without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>Section 1.10. Addressing Buildings and Parcels of Land</p> <p>1.10.1. ADDRESS NUMBERING SYSTEM</p> <p>1.10.1.1. Numeric Addresses</p> <p>1) Addressing of <i>buildings, suites</i> within a <i>building</i> or parcels of land shall be numeric.</p> <p>1.10.1.2. East/West Addresses</p> <p>1) East/ West addresses shall run in series, commencing with the unit block and increasing in numeric value in a westerly direction from the west side of Ontario Street or the west side of Carrall Street and commencing with the unit block and increasing in numeric value in an easterly direction from the east side of Ontario Street or the east side of Carrall Street.</p> <p>2) <i>Buildings</i> on the north side of <i>streets</i> running in an east or west direction shall have odd numbers, and <i>buildings</i> on the south side of such <i>streets</i> shall have even numbers.</p> <p>1.10.1.3. North/South Addresses</p> <p>1) North/South addresses shall run in series, commencing with the unit block and increasing in numeric value in a northerly direction from the north side of Dundas Street and commencing with the unit block and increasing in numeric value in a southerly direction from the south side of Dundas Street.</p> <p>2) <i>Buildings</i> on the west side of <i>streets</i> running in a north or south direction shall have odd numbers, and <i>buildings</i> on the east side of such <i>streets</i> shall have even numbers.</p> <p>1.10.1.4. Multiple Suite Addresses</p>
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			<p>1) Where a <i>building</i> with a non-continuous public corridor contains multiple addressable <i>suites</i>, addresses of <i>suites</i> on <i>floor areas</i> shall be assigned in an increasing numeric order commencing from the point of entry as determined by the <i>Chief Building Official</i> and moving in a direction as determined by the <i>Chief Building Official</i>.</p> <p>2) Where a <i>building</i> with a continuous public corridor contains multiple addressable <i>suites</i>, addresses of <i>suites</i> on <i>floor areas</i> shall be assigned in an increasing numeric order commencing from the point of entry as determined by the <i>Chief Building Official</i> and moving in a direction as determined by the <i>Chief Building Official</i>.</p> <p>1.10.1.5. Principal Buildings</p> <p>1) Every principal <i>building</i>, <i>secondary suite</i> and <i>laneway house</i> on a site shall be assigned a separate numeric <i>street</i> address where sufficient numeric <i>street</i> addresses are available.</p> <p>2) In the case where three numeric <i>street</i> addresses are available for a site containing a principal <i>building</i>, <i>secondary suite</i> and a <i>laneway house</i>, the first available numeric <i>street</i> address shall be assigned to the principal <i>building</i>, the second available numeric <i>street</i> address shall be assigned to the <i>secondary suite</i>, and the third available numeric <i>street</i> address shall be assigned to the <i>laneway house</i>.</p> <p>3) In the case where only two numeric <i>street</i> addresses are available for a site containing a principal <i>building</i>, <i>secondary suite</i> and a <i>laneway house</i>, the first available numeric <i>street</i> address shall be assigned to the principal <i>building</i> and the <i>secondary suite</i> with <i>suite</i> number 1 assigned to the principal <i>building</i> and <i>suite</i> number 2 assigned to the <i>secondary suite</i>. The second available numeric <i>street</i> address shall be assigned to the <i>laneway house</i>.</p> <p>4) In the case where only one numeric <i>street</i> address is available for a site containing a principal <i>building</i>, <i>secondary suite</i> and a <i>laneway house</i>, the same numeric <i>street</i> address shall be assigned to the principal <i>building</i>, <i>secondary suite</i> and the <i>laneway house</i> with <i>suite</i> number 1 assigned to the principal <i>building</i>, <i>suite</i> number 2 assigned to the <i>secondary suite</i> and <i>suite</i> number 3 assigned to the <i>laneway house</i>.</p> <p>1.10.1.6. Exterior Principal Suite Entry</p> <p>1) Every <i>suite</i> with an exterior principal entry shall be assigned a separate numeric <i>street</i> address.</p> <p>2) Where sufficient numeric <i>street</i> addresses are not available for every <i>suite</i> with an exterior principal entry, an additional <i>suite</i> number shall be assigned to every <i>suite</i>."</p>
C	Part 1	At the end of	Add Schedule E-1 (Attached as Item 12)

		Part 1	
C	Part 1	At the end of Part 1	Add Schedule E-2 (Attached as Item 13)
C	Part 1	At the end of Part 1	Add Schedule E-3 (Attached as Item 14)
C	Part 1	At the end of Part 1	Add Fee Schedule (Attached as Item 15)
C	2.2.1.1.	In Sentence (1)	Strike out “692 of the Local Government Act” and substitute “306 of the Vancouver Charter”.
C	2.2.1.2.	In Sentence (1) and after Sentence (1)	<p>At the beginning of Sentence (1) strike out “For” and substitute “Except as required in Sentence (2), for a “.</p> <p>After Sentence (1) add:</p> <p>“2) For the design of a Part 3 Division B <i>building</i>, carried out in accordance with Part 4 of Division B, the <i>designer</i> shall be a <i>registered professional</i> designated by the Association of Professional Engineers and Geoscientists of British Columbia as a <i>Designated Structural Engineer (Struct. Eng.)</i> and shall</p> <p>a) assume overall responsibility for the design work and <i>field reviews</i> of the primary structural components of a <i>building</i> that falls within the scope of Article 1.3.3.2. of Division A,</p> <p>b) apply his or her professional (P.Eng.) seal and <i>Struct. Eng.</i> stamp, sign and date the plans and supporting documents prepared by, or under the supervision of the <i>Designated Structural Engineer</i>, and</p> <p>c) apply his or her professional (P.Eng.) seal and <i>Struct. Eng.</i> stamp and sign and date the Letters of Assurance described in Subsection 2.2.7.”</p>
C	2.2.2.2.(2)	In Sentence (2)	<p>At the end of Clause (d) strike out “and”.</p> <p>At the end of Clause (e) strike out “.” and substitute “, and” and add:</p> <p>“f) the exterior entrances and key plan for each <i>storey</i> indicating the location and number of <i>suites.</i>”</p>
C	2.2.2.3.	After Article 2.2.2.2.	<p>Add:</p> <p>“2.2.2.3. Information Required on Building Plans for Addressing Purposes</p> <p>1) Architectural floor plans provided for addressing purposes shall</p> <p>a) measure 280 mm by 430 mm ,</p> <p>b) identify the location and designated <i>street</i> number of the principal entrance of a <i>building</i> and</p>

			the location and designated <i>suite</i> number of all interior and exterior <i>suite</i> entrances.”
C	2.2.7.1.(1)	In Sentence (1)	At the end of Clause (b) strike out “and”. At the end of Clause (c) strike out “.” and substitute “,” and then add: “d) a <i>building</i> that is designed according to Subsection 1.3.3.5. of Division A, e) a <i>building</i> that is within the scope of Part 5 of Division B, f) <i>additions</i> which are subject to Part 11 of Division B, and g) a change of <i>major occupancy</i> which is subject to Part 11 of Division B.”
C	2.2.7.2.(1)	In Sentence (1)	At the end of Subclause (a) (ii), strike out “and”. At the end of Clause (b) strike out “.” and substitute “, and” and add: “c) provide reasonable and timely written notice of any work or excavation that would directly or indirectly affect private property adjacent to the <i>excavation</i> site, to the <i>owner</i> of the affected property, and deliver a copy of the notice to the <i>Chief Building Official</i> . (See Appendix A.)”
C	2.2.7.3.	In Sentence (2)	Strike out “make the record available to the <i>authority having jurisdiction</i> on the request of that authority” and substitute “submit monthly summary reports to the <i>Chief Building Official</i> .”
C	2.2.8.	After Subsection 2.2.7.	Add: “2.2.8. Buildings on Designated Flood Plains 2.2.8.1. Design Considerations on Designated Flood Plains 1) For buildings constructed on <i>designated flood plains</i> , the <i>building designer</i> shall comply with City of Vancouver Flood Proofing Policies regarding <i>construction</i> materials and service equipment installations below <i>flood construction level requirements</i> .(See Article 1.5.2.11. of Division C.)”
C	2.3.2.	After Subsection 2.3.1.	Add: “2.3.2. Additional Requirements for Fire Safety Alternative Solutions 2.3.2.1. Design Criteria 1) Alternative solutions, as described in Article 2.3.1.2., shall be based upon an <i>acceptable</i> report sealed by an <i>acceptable registered professional</i> , which shall include a) a thorough description of the <i>building</i> , b) an analysis of the <i>building</i> that identifies all deviations from the requirements of this By-law, c) the life safety principles considered in developing the proposed alternative solutions and their rationale, based upon NRC fire research reports and other approved agencies where applicable,

			<p>d) a proposal for alternative solutions, e) an evaluation of the proposed alternative solutions based upon generally recognized studies, f) evidence of reliable performance of the proposed alternative solutions, g) a method of monitoring the design of the proposed alternative solutions, and h) a commitment to perform field review of the proposed alternative solutions.</p> <p>2) The report described in Sentence (1) shall be sufficiently detailed to permit evaluation of the proposed alternative solutions.</p> <p>3) Upon acceptable of a proposed alternative solution by the <i>Chief Building Official</i>, the registered professional who has placed their seal on the report shall</p> <p>a) submit a letter assuring that the alternative solution, as installed, will perform as represented in the report, and b) at the request of the <i>Chief Building Official</i>, submit an acceptable field commissioning and testing report.</p> <p>2.3.3. Alternative Solution Review Panel</p> <p>2.3.3.1. Request for Review by Alternative Solution Review Panel</p> <p>1) An applicant may apply to the <i>Chief Building Official</i> to request the appointment of an alternative review panel to review an alternative solution application.</p> <p>2) An applicant who requests the appointment of an alternative review panel must pay the fees set out in the Fee Schedule.</p> <p>3) At the request of the applicant, the <i>Chief Building Official</i> may appoint an alternative solution review panel of up to three experts to review the alternative solution application, to hear from the applicant and <i>City</i> staff and to advise the applicant and the <i>Chief Building Official</i> regarding the proposed solution.</p> <p>4) A decision of an alternative solution review panel is not binding on the <i>Chief Building Official</i>.”</p>
C	Part 2	At the end of Part 2	Add Schedule A (Attached as Item 16)
C	Part 2	At the end of Part 2	Add Schedule B (Attached as Item 17)
C	Part 2	At the end of Part 2	Add Schedule C-A (Attached as Item 18)
C	Part 2	At the end of	Add Schedule C-B (Attached as Item 19)

		Part 2	
C	Part 3	After Part 2	<p>“Part 3 Appeals, Offences and Penalties and Transition Provisions</p> <p>Section 3.1. Appeals</p> <p>3.1.1. Building Board of Appeal</p> <p>3.1.1.1. Appeal Within 30 Days</p> <p>1) Any person dissatisfied with a decision of the <i>Chief Building Official</i> relating to matters described in Article 3.1.1.2, may appeal the decision to the Building Board of Appeal who shall have such powers relating to this By-law as are set out in this By-law and in the Building Board of Appeal By-law.</p> <p>3.1.1.2. Limits of Appeal</p> <p>1) An appeal lies to the Building Board of Appeal from any decision or order of the <i>Chief Building Official</i> regarding</p> <p>a) the interpretation of this By-law, b) the use of new <i>construction</i> methods or materials, c) upgrading <i>existing buildings</i>, or d) permitting alternative proposals.</p> <p>3.1.1.3. Filing of Appeal</p> <p>1) An application for an appeal shall be filed with the Secretary of the Board, in writing, within 30 days of the decision which gives rise to the appeal.</p> <p>2) An application for an appeal shall include</p> <p>a) the address of the <i>building</i> to which the decision relates, b) the applicable provisions of the By-law, and c) sufficient detail to describe the factual and technical basis for the appeal.</p> <p>Section 3.2. Offences and Penalties</p> <p>3.2.1. Violation of By-law</p> <p>3.2.1.1. Offences</p>

		<p>1) Every person who</p> <p>a) violates any of the provisions of this By-law, b) suffers or permits any act or thing to be done in contravention or in violation of any of the provisions of this By-law, c) neglects to do or refrains from doing anything required to be done by any of the provisions of this By-law, d) does any act which violates any of the provisions of this By-law, or e) fails to comply with an order or notice given under this By-law, is guilty of an offence against this By-law and liable to the penalties hereby imposed.</p> <p>3.2.2. Fines and Penalties</p> <p>3.2.2.1. Minimum Fine</p> <p>1) Every person who commits an offence against this By-law is liable to a fine of no less than \$250 and no more than \$10,000 for each offence.</p> <p>3.2.2.2. Continuing Offence</p> <p>1) Every person who commits an offence of a continuing nature against this By-law is liable to a fine of no less than \$250 and no more than \$10,000 for each day such offence is continued.</p> <p>3.2.2.3. Unsafe Condition</p> <p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who permits <i>occupancy</i> to occur while an <i>unsafe condition</i> exists in or about a <i>building</i> or premises is guilty of an offence and liable to a fine of no less than \$500 and no more than \$10,000 for each offence.</p> <p>3.2.2.4. Failure to Comply with an Order</p> <p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who fails to comply with an order or notice issued by the <i>Chief Building Official</i> is liable to a fine of no less than \$500 and no more than \$10,000 for each offence.</p> <p>3.2.2.5. Work Without a Permit</p> <p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who works without <i>permit</i> is liable to a fine of no less than \$500 and no more than \$10,000 for each offence.</p> <p>3.2.2.6. Failure to Permit Entry</p>
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			<p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who fails to allow the <i>Chief Building Official</i> entry to a <i>building</i> or premises is liable to a fine of no less than \$500 and no more than \$10,000 for each offence.</p> <p>Section 3.3. Transition Provisions</p> <p>3.3.1. General</p> <p>3.3.1.1. Validity of Permits Issued Under Previous By-law</p> <p>1) Subject to the provisions of Article 3.3.1.2., <i>buildings</i> for which <i>permits</i> were obtained under By-law No. 9419 may be constructed in accordance with the provisions of that By-law.</p> <p>3.3.1.2. Grace Period</p> <p>1) Where an <i>owner</i> has applied for a <i>permit</i> prior to July 1, 2014, a <i>building</i> may be constructed in accordance with By-law No. 9419 if, in the opinion of the <i>Chief Building Official</i>, the <i>owner</i> has commenced the work authorized by the <i>permit</i> within 6 months of the date of issuance of the <i>permit</i> and the <i>owner</i> has continued work to completion without interruption other than work stoppages which are standard in the building industry.”</p>
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**SCHEDULE 1
SCHEDULE OF CHANGES AND ADDITIONS TO THE BUILDING CODE
Book II Building By-law (Plumbing Systems)**

Division	Reference	BCBC Insertion Location	Book II Building By-law (Plumbing Systems) Unique to Vancouver Text
Preface	Preface	Preface	<p>Strike out Preface and substitute:</p> <p>“Preface The 2014 Building By-law (hereinafter the “Building By-law”) is an objective-based code which identifies the minimum standard in the City of Vancouver for buildings to which this By-law applies. This Building By-law replaces the 2007 Building By-law and also contains certain transition provisions which apply to permits issued under the 2007 Building By-law. The Building By-law is regularly updated and users should ensure that the By-law is current. The Building By-law is substantially based on the British Columbia Building Code and British Columbia Plumbing Code, which in turn is substantially based on the model National Building Code of Canada 2010 and the model National Plumbing Code of Canada 2010. The Building By-law establishes minimum standards to meet the following five objectives, which are fully described in Division A of the By-law:</p> <ul style="list-style-type: none"> • safety • health • accessibility for persons with disabilities • fire and structural protection of buildings • energy and water efficiency <p>The Building By-law establishes standards for building materials, products and assemblies. Some standards are explicitly provided in the Building By-law while others are incorporated by reference to existing standards for materials products and assemblies which are developed and published by specialist organizations.</p> <p>Organization of the Building By-law A consistent organization system has been used in the Building By-law. The By-law is divided into Divisions which are designated by alphabetical letters. Divisions are divided into numbered Parts; each Part is divided into Sections; Sections are divided into Subsections; and Subsections are divided into Articles. Articles are divided into Sentences, which are delineated by numbers in brackets. Sentences may be further broken down into Clauses and Subclauses, delineated respectively by letters and roman numerals in brackets. This organization system is illustrated as follows:</p>

Division B	
3	Part
3.5.	Section
3.5.2.	Subsection
3.5.2.1.	Article
3.5.2.1.(2)	Sentence
3.5.2.1.(2)(a)	Clause
3.5.2.1.(2)(a)(i)	Subclause

Divisions of the By-law are identified either:

- by the letters A, B or C preceding the Part (ex. B.3.5.2.1.(2)(a)(i)),
- or
- by specifying the Division after the code reference (ex. 3.5.2.1.(2)(a)(i) of Division B)

Use of the term “Reserved”

The term “reserved” is used in the Building By-law in place of provisions from the National Codes which have not been adopted in the By-law. Term “reserved” is used so that the numbering structure of the Building By-law aligns with the model National Code of Canada 2010 and the model National Plumbing Code of Canada 2010, for ease of comparison and possible future harmonization.

Change Indication

Every effort has been made to identify technical changes or additions relative to the 2006 edition of the British Columbia Building and Plumbing Codes. In the printed version, these changes or additions are enclosed by angle brackets wherever practical. The online version of the British Columbia Building and Plumbing Codes (www.bccodes.ca) contains additional functionality with regards to identifying changes from the previous edition. No change indication is provided for renumbered or deleted provisions.

Every effort has been made to identify technical changes or additions relative to the 2006 edition of the British Columbia Building and Plumbing Codes. In the printed version, these changes or additions are enclosed by angle brackets wherever practical. The online version of the British Columbia Building and Plumbing Codes (www.bccodes.ca) contains additional functionality with regards to identifying changes from the previous edition. No change indication is provided for renumbered or deleted provisions.

Unique to Vancouver Indication

All text in the By-law that is unique to Vancouver is enclosed with { } brackets wherever practical. This identifier was utilized to provide the user of the By-law with a means by which to differentiate the Vancouver provisions of this By-law from those of the 2012 British Columbia

Building and Plumbing Codes. Where the provisions of Vancouver have required the deletion of the 2012 British Columbia Building and Plumbing Code text, and no Vancouver text has replaced the deleted text, the word “Deleted” has been used to alert the user that a deletion has been made and that there is a difference from the 2012 British Columbia Building and Plumbing Codes text.

Intent and Application Statements

The intent statements pertaining to the National Building and Plumbing Codes, which also pertain to the Building By-law, are available, free of charge, on the national codes website at www.nationalcodes.nrc.gc.ca. As those substantive parts of the Building By-law which are not unique to Vancouver are identical to the National model Codes, users may consult the national website to access intent statements.

The application statements for the 2010 National Building, Fire and Plumbing Codes have not been updated as the Canadian Commission on Building and Fire Codes discontinued their publication. In view of these developments at the national level, the Building By-law does not include application statements.

Metric Conversion

All values in the Building By-law are given in metric units. A conversion table of imperial equivalents for the most common units used in building design and construction is located at the end of the By-law.

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			<p>Code Development Engineer Office of the Chief Building Official Community Service 453 West 12th Avenue Vancouver, BC V5Y 1V4</p> <p>The provincial government welcomes comments and suggestions for improvements to the Building Code and Plumbing Code. Comments and suggestions can be sent to:</p> <p>Building and Safety Standards Branch Office of Housing and Construction Standards 614 Humboldt Street PO Box 9844 Stn Prov Govt Victoria BC V8W 9T2 Email: building.safety@gov.bc.ca Persons interested in the development of the National Codes, the model document for the British Columbia Building Code and Plumbing Code and for the Building By-law, can contact:</p> <p>The Secretary Canadian Commission on Building and Fire Codes Institute for Research in Construction National Research Council of Canada Ottawa, Ontario K1A 0R6 Website: www.nationalcodes.nrc.gc.ca</p>
A	1.1.1.1.(1)	At the end of Sentence (1)	Add "(See Appendix A)".
A	1.1.3.1.	At the end of Sentence (1)	Strike out "." and add "except for Appendix Note A-1.4.1.2. Diagram B - Still Creek flood plain and <i>flood construction levels.</i> "
A	1.3.4.1.	In the title of Article 1.3.4.1.	Strike out "and 2" and substitute ", 2 and 3".
A	1.3.4.1.(1)	In Sentence (1)	Strike out "and 2" and substitute ", 2 and 3".
A	1.4.1.2.	In Sentence (1)	<p>Strike out the definitions of "<i>Building</i>" and "<i>Unprotected opening</i>" and add the following definitions in alphabetical order:</p> <p><i>Acceptable</i> means acceptable to the <i>Chief Building Official</i>.</p> <p><i>Accepted</i> means accepted by the <i>Chief Building Official</i>.</p>

			<p>Addition means an <i>alteration</i> to any <i>building</i> which will increase the total aggregate <i>floor area</i> or the <i>building height</i> (in <i>storeys</i>).</p> <p>Air space parcel has the meaning assigned to it by the Land Title Act of British Columbia.</p> <p>Apprentice means a regularly indentured apprentice under the provisions of the Industry Training Authority Act of British Columbia.</p> <p>Approved (as used in Book II) means <i>accepted</i>.</p> <p>Area of refuge means a space that facilitates a safe delay in egress, is sufficiently protected from fire conditions developing in the <i>floor area</i>, and provides direct access to an <i>exit</i> or fire fighters' elevator.</p> <p>Artist Live/Work Studio means an Artist Studio and a Residential Unit associated with and forming an integral part of an Artist Studio, as defined in the Zoning and Development By-law.</p> <p>Artist studio – Class A means Artist studio-Class A as defined in the Zoning and Development By-law.</p> <p>Artist studio – Class B means Artist studio-Class B as defined in the Zoning and Development By-law.</p> <p>Arts and culture indoor event means an event of an artistic or cultural nature, including but not limited to visual, performing, media, literary, craft or interdisciplinary arts, for a maximum of 250 persons, with or without liquor service, which occurs not more than two days per month in a <i>building</i> or portion of a <i>building</i> not approved for <i>assembly occupancy</i>.</p> <p>Bathroom group means one lavatory basin, one water closet and one bathtub or maximum 2 head shower drain.</p> <p>Building means any structure used or intended for supporting or sheltering any use or <i>occupancy</i>, including any float home or marina and any retaining structures greater than 1.2m in height).</p> <p>Building energy use means non site-renewable energy used for space heating, cooking and/or operation of <i>buildings</i> intended for human <i>occupancy</i>.</p> <p>Building Envelope Professional means a member of the Architectural Institute of British Columbia or the Association of Professional Engineers and Geoscientists of British Columbia.</p>
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			<p>Catch basin means a receptacle installed to intercept the flow of deleterious matter into the <i>building sewer</i> or <i>public sewer</i> and to prevent the outflow of <i>sewer gas</i>, but does not include a <i>sump</i>.</p> <p>Certified Professional means a Certified Professional as defined in the Certification of Professionals By-law.</p> <p>Chief Building Official means the <i>City Building Inspector</i>, and any person authorized to act on behalf of the <i>City Building Inspector</i>.</p> <p>Child Care Facility means a care facility within the meaning of the Child Care Licensing Regulation of the Community Care and Assisted Living Act.</p> <p>Children mean persons under the age of 13 years.</p> <p>City means the City of Vancouver.</p> <p>City Building Inspector means the person appointed as such by City Council pursuant to the provisions of the Vancouver Charter.</p> <p>City Engineer means the person appointed as such by City Council pursuant to the provisions of the Vancouver Charter.</p> <p>Community Care Facility means Community Care Facility as defined in the Zoning & Development By-law.</p> <p>Construction means, with respect to a <i>building</i>: erection, repair, <i>alteration</i>, enlargement, <i>addition</i>, demolition, <i>deconstruction</i>, removal and excavation.</p> <p>Construction Safety Officer means a person who has been trained specifically to understand and apply safe <i>construction</i> practice as it relates to the worksite and as it affects the public, neighbouring properties and utilities, and who has been retained by the <i>owner</i>, or the <i>owner's</i> principal <i>contractor</i> or <i>project</i> manager, to coordinate all sub trade supervisors relating to <i>construction safety</i> at the <i>project</i> site.</p> <p>Construction Safety Program means a policy of construction procedures designed to protect workers on a <i>project</i>, neighbouring private property, public property and members of the general public, and includes measures of fire safety.</p> <p>Container means a metal transportable structure designed for the storage and transport of</p>
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		<p>goods, the typical dimensions of which are 2.44m in width, 2.59 m in height, and 6.1 m in length.</p> <p>Contractor means a person who contracts with an <i>owner</i> or an authorized agent of an <i>owner</i> to undertake a <i>project</i>, and includes an <i>owner</i> who contracts with more than one person for the work on a <i>project</i> or undertakes the work on a <i>project</i> or any part thereof.</p> <p>Deconstruction means demolition by systematic disassembly of a building resulting in the reuse, recycling or recovery of no less than 75% of all building materials, excluding materials which are hazardous or banned from landfill.</p> <p>Demolition means the action or process of demolishing a building, and includes deconstruction.</p> <p>Designated flood means a flood which may occur in any given year, of such magnitude as to equal a flood having a 200 year return period.</p> <p>Designated flood plain means those lands in the City which are hereby designated, for the purposes of section 306(cc) of the Vancouver Charter, as flood plains susceptible to flooding and subject to <i>flood construction level requirements</i>, and those lands so designated include:</p> <ul style="list-style-type: none"> a) lands located in proximity to the <i>natural boundary</i> of Burrard Inlet, English Bay, False Creek and the Fraser River, which are lower than the <i>flood construction level requirements</i> applicable to the flood plain in which the lands are located; and b) lands located in the areas shown crosshatched on the map attached to this By-law. (See Appendix A for Diagram B - Still Creek flood plain and <i>flood construction levels</i>.) <p>Designated Structural Engineer (Struct. Eng.) means a person who is registered or licensed to practice as a professional engineer under the Engineers and Geoscientists Act of British Columbia, and a person who is designated by the Association of Professional Engineers and Geoscientists of British Columbia as a Designated Structural Engineer.</p> <p>Existing building means a <i>building</i> lawfully constructed and completed under a <i>permit</i> before submission of the current <i>permit</i> application.</p> <p>Float home means any structure incorporating a floatation system, intended for use or occupancy or being used or occupied for residential purposes, containing one dwelling unit only, and not primarily intended for, or useable in, navigation, but does not include any <i>water craft</i> designed or intended for navigation.</p> <p>Flood construction level means the minimum elevation of the underside of a floor system, or of the top of a concrete slab, of a building which is used or may be used for habitation,</p>
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			<p>business, or for the storage of goods which may be damaged by flood water.</p> <p>Flood construction level requirements means</p> <p>a) on the Burrard Inlet and English Bay flood plains:</p> <ul style="list-style-type: none"> (i) for buildings located within 15 m of the natural boundary, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods, shall not be lower than 3.5 m Greater Vancouver Regional District datum, plus an additional elevation allowance for wave run-up of 1.5 m, or as determined by a Professional Engineer; and (ii) for buildings located more than 15 m from the <i>natural boundary</i>, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods, shall not be lower than 3.5 m Greater Vancouver Regional District datum; <p>b) on the False Creek and Fraser River flood plains:</p> <ul style="list-style-type: none"> (i) for buildings located within 300 m of the <i>natural boundary</i>, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods, shall not be lower than 3.5 m Greater Vancouver Regional District datum; and (ii) for buildings located more than 300 m from the <i>natural boundary</i>, the underside of a floor system or the top of a concrete slab of a building used for habitation, business or storage of goods shall not be lower than 3.0 m Greater Vancouver Regional District (GVRD) datum; <p>c) on the Still Creek flood plain:</p> <ul style="list-style-type: none"> (i) the underside of a floor system or the top of a concrete slab of any building used for habitation, business or storage of goods shall not be lower than the applicable elevation shown on the map attached to this By-law. (See Appendix A for Diagram B - Still Creek flood plain and <i>flood construction levels</i>.) <p>Floor drain means a fixture used to receive water from the floor of a <i>building</i>.</p> <p>General Manager, Park Board means the person appointed as such by the Park Board.</p> <p>General Manager, Real Estate and Facilities Management means the person appointed as such by City Council.</p> <p>Green house gases means any gas that contributes to a gradual warming of the Earth's climate as a result of increased heat retention.</p> <p>Green roof means a structure constructed on top of a roof, which is designed to support the growth of vegetation and to capture rainwater.</p>
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		<p>which the general public may rent and return bicycles and other objects or equipment necessary for or appurtenant to the operation of a <i>public bike share</i>.</p> <p>Public sewer connection means that part of the public sewer which connects or is intended to connect a <i>building sewer</i> with any public sewer.</p> <p>Pump-out facility means a device or method for the removal of sewage from a holding tank connected to a <i>marine toilet</i> or from a self-contained <i>marine toilet</i>.</p> <p>Re-occupancy permit means permission or authorization in writing by the <i>Chief Building Official</i> to re-occupy any <i>building</i> or part thereof in respect of which the <i>Chief Building Official</i> has issued an order to cease <i>occupancy</i> because of an <i>unsafe condition</i>.</p> <p>Row housing means a <i>building of residential occupancy</i> where no <i>dwelling unit</i> is located above another <i>dwelling unit</i> and there is no common interior or exterior <i>means of egress</i>.</p> <p>Secondary suite means that area of a <i>building</i> that is intended to be a <i>dwelling unit</i> that is smaller than the principal residence in the same <i>building</i>.</p> <p>Separate system area means an area in which the <i>City Engineer</i> has required the separate disposal of <i>storm water</i> and <i>sewage</i>.</p> <p>Sewage sump means an <i>approved</i> airtight tank or pit which receives <i>sewage</i> or liquid waste and which is located below the normal grade of the gravity system and must be emptied by mechanical means.</p> <p>Sewer means an underground drain or conduit to remove waste water and organic refuse.</p> <p>Single room accommodation means a room designated as accommodation pursuant to the Single Room Accommodation By-law.</p> <p>Small suite means a <i>suite</i> classified as a Group A Division 2, Group D, Group E, Group F Division 2 (wholesale showroom) or Group F, Division 3 occupancy where the <i>occupant load</i> for the entire <i>suite</i> does not exceed 60 persons.</p> <p>Sprinkler contractor means a person licensed as a <i>contractor</i> pursuant to the License By-law and who is either a <i>sprinkler system installer</i> or a person who employs a <i>sprinkler system installer</i> on a full-time basis.</p> <p>Sprinkler system means an automatic fire extinguishing system designed to the National Fire Protection Association 13, 13D or 13R standard and all applicable associated sprinkler</p>
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		<p>standards, and which consists of a system of devices and equipment designed to automatically detect a fire and discharge water or another approved fire extinguishing agent in the area of or onto a fire.</p> <p>Sprinkler system installer means a person who has successfully completed an accredited program as a <i>Sprinkler System Installer</i> under the Industry Training Authority Act and Industry Training Regulation of British Columbia.</p> <p>Street means a public road, highway, bridge, viaduct, lane, sidewalk, and any other way normally open to the use of the public, but does not include a private right-of-way on private property and, for the purposes only of Part 3 and Part 9 of this By-law, does not include a <i>street</i> less than 9 m in width, a lane or a sidewalk.</p> <p>Sump means a receptacle installed between the storm or <i>combined sewer</i> and the <i>building</i> storm system to intercept the flow of deleterious matter into the <i>building</i> or public sewer and to prevent the outflow of sewer gas.</p> <p>Supervisory staff means those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan.</p> <p>Temporary special event means a presentation of an artistic or cultural nature, including but not limited to visual, performing, media, literary, craft or interdisciplinary arts, for a maximum of 250 people, with or without liquor service, which occurs not more than two days per month in a building not approved for assembly occupancy.</p> <p>Trade waste system means a system of drainage pipes from floor drains and hub drains located in food display areas that are intercepted by a trade waste <i>sump</i> and <i>backwater valve</i> before entering the sanitary <i>building</i> drain.</p> <p>Trades safety coordinator means an agent, employee or officer of a company supplying, installing or using materials at a <i>construction</i> site who has been trained to understand and apply safe <i>construction</i>, installation or demolition techniques, as applicable, respecting those materials and their relationship to the worksite, neighbouring property, public utilities and the general public.</p> <p>Training school means a School-Arts or Self-Improvement, School - Business, or School - Vocational or Trade, as defined in the Zoning & Development By-law.</p> <p>Two-family dwelling means</p> <p>a) as applying to plumbing, a <i>building</i> containing only 2 self-contained <i>dwelling units</i> each served with a separate water connection, and</p>
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			<p>b) in all other cases, a <i>building</i> containing only two self-contained <i>dwelling units</i>.</p> <p>Two-family dwelling with secondary suites means a building containing two self-contained dwelling units where each self-contained dwelling unit contains one secondary suite.</p> <p>Unprotected opening (as applying to <i>exposing building face</i>) means a door, doorway, window or opening other than one equipped with a <i>closure</i> having the required <i>fire-protection rating</i>, or any part of a wall forming part of the <i>exposing building face</i> that has a <i>fire-resistance rating</i> less than that required for the <i>exposing building face</i>.</p> <p>Unsafe condition means any condition that could cause undue hazard or risk to life, limb or health of any person authorized, expected, or anticipated to be on or about premises or a <i>building</i> or <i>construction</i>.</p> <p>Water craft means any boat, hull, barge, or houseboat which is afloat, whether self-propelled or not, and includes pleasure and commercial craft.</p>
A	3.2.1.1.	In Sentence (1)	<p>In F30 after “contact,” add “assault,”.</p> <p>After F82 add:</p> <p>“F83 To control the amount of water a plumbing fixture will use. F84 To control the flow of water to a plumbing fixture or outlet. F85 To minimize thermal loss or gain. F86 To minimize the use of energy for <i>building</i> systems.”</p>
A	Appendix A Note A- 1.4.1.2.	At the end of Appendix A	Add Diagram B- Still Creek Flood Plain and Flood Construction Levels (attached as Item 1)
B	Table 1.3.1.2.	In Table 1.3.1.2.	<p>After the last row for AWWA, in the first row for BC, strike out “BC” and substitute “City” and strike out “British Columbia Building Code 2012” and substitute “Building By-law”.</p> <p>In the second row for BC strike out “BC” and substitute “City”, strike out “British Columbia Fire Code 2012” and substitute “Fire By-law”.</p> <p>In the row for CSA which deals with Plumbing Fittings add “2.2.10.6. (3)” in chronological order.</p>
B	2.2.1.1.(2)	In Sentence (2)	After “corrosive wastes” add “or storm water”.
B	2.2.2.5.	After Article 2.2.2.5.	<p>Add:</p> <p>“2.2.2.6 Low Consumption Water Closets</p> <p>1) Every water closet installed in a <i>building</i> shall have a maximum flush cycle in compliance with Article 10.3.1.2., Division B, Book I.</p>

			<p>2.2.2.7. Low Consumption Urinals</p> <p>1) Every urinal installed in a <i>building</i> shall have a maximum flush cycle in compliance with Article 10.3.1.2., Division B, Book I.”</p>
B	2.2.10.6.(2)	After Sentence(2)	<p>Add:</p> <p>“3) Every lavatory faucet, kitchen sink faucet and shower head shall conform with CSA-B125 “Plumbing Fittings”, and have a maximum flow rate in compliance with Article 10.3.1.1. Division B, Book I”</p>
B	2.4.2.1.(5)	After Sentence(5)	<p>Add:</p> <p>“6) All floor and hub drains located in food display areas shall be connected to a <i>trade waste system</i> and shall be protected from <i>backflow</i> from the <i>sanitary drainage system</i>. (See Appendix A.)</p> <p>7) Garbage grinders, water closets and urinals shall not discharge into a <i>trade waste system</i>. “</p>
B	2.4.2.3.	After Article 2.4.2.3.	<p>Add:</p> <p>“2.4.2.4. Connection to Storm Drainage Systems</p> <p>1) Except as provided in Sentence (2), all roof and paved areas shall drain to a <i>storm drainage system</i>.</p> <p>2) <i>Building</i> and site drainage need not connect to a <i>storm drainage system</i> if <i>storm water</i> conservation measures are employed and storm water does not discharge upon or impact other lands or sites.”</p>
B	2.4.3.6.	After Article 2.4.3.6.	<p>Add:</p> <p>“2.4.3.7. Fixtures in Electrical Pull Pits</p> <p>1) Drains located within an electrical pull pit shall discharge to a <i>sump</i> well that is located outside of the electrical pull pit and shall be equipped with a soft seated check valve installed in the drain between the pull pit and the <i>sump</i> well.”</p>
B	2.4.4.2.	In Article 2.4.4.2.	<p>In Sentence (1) strike out “above 75°C, provision shall be made for cooling of the waste to 75°C or less before it is discharged to the <i>drainage system</i>.” and substitute “above 65°C, the temperature of the waste shall be reduced to 65°C or less before it is discharged to the <i>sanitary drainage system</i>.”</p> <p>After Sentence (1) add:</p> <p>“2) Where a <i>fixture</i> discharges <i>clear-water waste</i> that is at a temperature above 40°C,</p>

			provision shall be made for cooling of the waste to 40° C or less before it is discharged to the storm <i>drainage system</i> .”
B	2.4.5.2.	In the title to Article 2.4.5.2.	Strike out the title and substitute “Sumps and Traps for Storm Drainage Systems”.
B	2.4.5.2.(1)	In Sentence(1)	Strike out “ <i>combined building sewer</i> or a public <i>combined sewer</i> ” and substitute “public <i>sewer</i> ”. Strike out “trap” wherever it appears and substitute “ <i>sump</i> ”. Strike out “drain or” and substitute “ <i>sewer</i> ”.
B	2.4.5.3.	In the title to Article 2.4.5.3.	Strike out “Sanitary” and substitute “Storm”.
B	2.4.5.3.	In Article 2.4.5.3.	Strike out Sentence (1) and substitute: “1) A subsoil drainage pipe shall be connected to a <i>sump</i> . (See Appendix A.) 2) The <i>sump</i> referred to in Sentence (1) shall be connected to a <i>storm sewer</i> or to a <i>combined sewer</i> . 3) The <i>sump</i> referred to in Sentence (1) shall not be connected to a <i>sanitary sewer</i> .”
B	2.4.6.4.	In Article 2.4.6.4.	In Sentence (3) strike out “(4),(5) and (6)” and substitute “(4) and (5)”. Strike out Sentence (6) and substitute: “6) Except as provided in Sentence (7), where a <i>storm sump</i> is provided there shall be a backwater valve within the <i>sump</i> attached to the outlet pipe. 7) Notwithstanding Sentence (6), a backwater valve is not required if the <i>storm sump</i> and the <i>storm sump</i> piping are both located above the level of the next upstream manhole of the public <i>storm sewer</i> .”
B	2.6.1.3.	In Article 2.6.1.3.	Strike out Sentence (4) and substitute: “4) Every fixture shall be fitted with a shut-off valve, located on each water supply serving the fixture.” Strike out Sentence (6) and substitute” “6) Deleted”
B	2.6.2.1.	In Article 2.6.2.1.	Strike out Sentence (3) and substitute:

			<p>“3) <i>Backflow preventers</i> shall be selected and installed in conformance with CSA B64.10, “Selection and Installation of Backflow Preventers.”</p> <p>4) <i>Backflow preventers</i> shall be maintained and field tested in conformance with the Water Works By-law.”</p>
B	2.6.2.4.	In Article 2.6.2.4.	<p>Strike out Sentences (1) (2) (3) and (4) and substitute:</p> <p>“1) <i>Backflow</i> caused by <i>back-siphonage</i> or <i>back pressure</i> from fire <i>sprinkler</i> systems where water treatment is not added shall be prevented by the installation of a double <i>check valve</i> assembly or an <i>approved</i> dual <i>check valve</i> when the <i>building</i> is <i>sprinklered</i> to NFPA 13D and a flow through system is installed.</p> <p>2) <i>Backflow</i> caused by <i>back-siphonage</i> or <i>back pressure</i> from fire sprinkler or standpipe systems where water treatment is added shall be prevented by the installation of a reduced pressure principal <i>backflow preventer</i>. (See Appendix A.)</p> <p>3) Deleted.</p> <p>4) Deleted.”</p>
B	2.6.2.10.(3)	In Sentence (3)	Strike out “25” and substitute “150”.
B	Table 2.8.1.1.	In Table 2.8.1.1.	<p>Add in chronological order:</p> <p>“2.2.2.6. Low Consumption Water Closets (1) [F83, OE2.1]</p> <p>2.2.2.7. Low Consumption Urinals (1) [F83, OE2.1]</p> <p>2.4.2.4. Connection to Storm Drainage System (1) [F60, F61-OP2.3, OP4.3]</p> <p>2.4.3.7. Fixtures in Electrical Pull Pits (1) [F62-OP5] “</p> <p>In Article 2.2.10.6. add Sentence:</p> <p>“(3) [F83-OE2.1]</p> <p>”In Article 2.4.2.1. add Sentences:</p> <p>“(6) [F81-OH2.1, OH2.4]”</p>

			<p>(7) [F40-OH2.1, OH2.4]”</p> <p>In Article 2.4.4.2. add Sentence:</p> <p>“(2) [F30-OS3.1]”</p> <p>In Article 2.4.5.2. strike out the title and substitute “Sumps and Traps for Storm and Drainage Systems”</p> <p>In Article 2.4.5.3. strike out ‘Sanitary’ in the title and substitute “Storm”</p> <p>In Article 2.6.1.3. strike out Sentence (6) and substitute “(6) Deleted”</p> <p>In Article 2.6.2.4. strike out Sentences (3) and (4) and substitute:</p> <p>“(3) Deleted (4) Deleted”</p>
C	Part 1- General - Section 1.2	1.3. - 1.10. Interpretation, Intent and Prohibitions (Vancouver Administration Provisions	<p>In Part 1- General, after Section 1.2 add:</p> <p>“Section 1.3. Interpretation, Intent and Prohibitions</p> <p>1.3.1. GENERAL INTERPRETATION</p> <p>1.3.1.1. Interpretation</p> <p>1) This By-law shall, despite any other provision herein, be interpreted in accordance with this Section.</p> <p>2) The Schedules attached to this Part 1 form part of this By-law.</p> <p>1.3.2. GENERAL INTENT</p> <p>1.3.2.1. Intent</p> <p>1) This By-Law sets standards in the general public interest. It is enacted and retained on the understanding and specifically expressed condition that it creates no duty whatsoever on the <i>City</i>, the <i>Chief Building Official</i> or any employee of the <i>City</i> to enforce its provisions, and on the further condition that a failure to administer or enforce its provisions, or the incomplete or inadequate administration or enforcement of its provisions, shall not give rise to a cause of action in favour of any person whatsoever. The issuance of any <i>permit</i>, including an <i>occupancy permit</i>, is not a representation, warranty or statement that this By-Law or any other enactment has been complied with, and the issuance thereof in error shall not give rise to a cause of</p>

		<p>action. Accordingly, words in this By-law defining the responsibilities and authority of the <i>Chief Building Official</i> shall be construed as internal administrative directions which do not create a duty.</p> <p>1.3.2.2. Reliance on Registered and Certified Professionals</p> <p>1) The <i>City</i> and the <i>Chief Building Official</i> do not have the resources to deal with matters which fall within the expertise of <i>registered professionals</i> and the <i>City</i> and the <i>Chief Building Official</i> rely on letters of assurance, documents sealed with professional seals, and related documents received from <i>registered professionals</i>, and on <i>field reviews</i> carried out by or under the supervision of <i>registered professionals</i>, as evidence that the design and <i>construction of buildings</i> complies with the provisions of this By-law, including alternate solutions, and substantially complies with any other applicable enactments.</p> <p>2) The <i>City</i> and the <i>Chief Building Official</i> do not have the resources to deal with matters which fall within the expertise of <i>certified professionals</i> and the <i>City</i> and the <i>Chief Building Official</i> rely on letters of assurance, documents stamped with professional stamps, and related documents received from <i>certified professionals</i>, on site reviews carried out by <i>certified professionals</i>, and on <i>field reviews</i> monitored by <i>certified professionals</i> as evidence that the design and <i>construction of buildings</i> complies with the provisions of this By-law, including alternate solutions and substantially complies with any other applicable enactments.</p> <p>1.3.2.3. No Representation or Warranty</p> <p>1) No person shall rely on a <i>permit</i> issued by the <i>Chief Building Official</i> or an inspection carried out by the <i>Chief Building Official</i> as establishing compliance with this By-Law or any other enactment or assume or conclude that this By-Law has been administered or enforced according to its terms.</p> <p>2) All persons shall make such independent investigations as they deem necessary to determine whether a <i>building</i> complies with this By-law or any other enactment.</p> <p>1.3.3. GENERAL PROHIBITIONS</p> <p>1.3.3.1. Contravention</p> <p>1) No person shall fail to comply with an order or notice issued by the <i>Chief Building Official</i>.</p> <p>1.3.3.2. No Work Without Permit</p> <p>1) No person shall work or authorize or allow work to proceed on a <i>project</i> for which a <i>permit</i> is required unless a valid <i>permit</i> exists for the work to be done.</p>
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		<p>1.3.3.3. Deviation Needs Prior Approval</p> <p>1) No person shall deviate from the plans and supporting documents forming part of the <i>permit</i>, without having first paid all necessary fees and obtained all necessary <i>permits</i> and approvals from the <i>Chief Building Official</i>.</p> <p>1.3.3.4. No Occupancy Without Permission</p> <p>1) No person shall occupy a <i>building</i> or authorize or allow the <i>occupancy</i> of a <i>building</i> without having first obtained the permission of the <i>Chief Building Official</i>.</p> <p>1.3.3.5. Unsafe Conditions</p> <p>1) No person who is an <i>owner</i> or who is involved in the <i>construction</i>, relocation or <i>occupancy</i> of a <i>building</i> shall cause, allow or maintain any <i>unsafe condition</i>. (See Appendix A).</p> <p>1.3.3.6. Work on Public Property</p> <p>1) No person shall excavate or undertake work on public property, or erect or place any <i>construction</i> or work or store any materials thereon without approval having first been obtained in writing from the appropriate government authority having jurisdiction over such public property. (See Appendix A).</p> <p>1.3.3.7. Changes in Ground Elevation and Limiting Distance</p> <p>1) No person shall change or alter the ground elevations or grading of a <i>building</i> site without first obtaining the necessary <i>permits</i>.</p> <p>2) No person shall change or alter the <i>limiting distance</i> of an exposing <i>building</i> face without first obtaining the necessary <i>permits</i> (See Appendix A).</p> <p>1.3.3.8. Compliance with By-law and Other Enactments</p> <p>1) No person shall work, or authorize or allow work to proceed, or undertake any <i>building</i>, <i>construction</i>, work or <i>occupancy</i> which is in contravention of this By-law or any other enactment.</p> <p>1.3.3.9. False Information</p> <p>1) No person shall submit false or incorrect information to the <i>Chief Building Official</i>.</p>
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		<p>of a <i>building</i> from the full responsibility for carrying out the work or having the work carried out in accordance with this By-law and all other applicable enactments.</p> <p>1.4.1.6. Compliance with Stop Work Order</p> <p>1) The <i>owner</i> shall not carry out work or <i>construction</i> or suffer, permit or allow work or <i>construction</i> to be carried out in contravention of a stop work order issued by the <i>Chief Building Official</i>.</p> <p>1.4.1.7. Compliance with Development Permit Plans</p> <p>1) The <i>owner</i> shall ensure that the plans and supporting documents submitted for a <i>permit</i> conform substantially with the approved Development Permit plans and supporting documents, except that where differences exist, the <i>owner</i> shall make application for a "Development Permit Amendment" as required by the Zoning and Development By-law.</p> <p>1.4.1.8. Owner's Undertaking</p> <p>1) The <i>owner</i> shall submit a completed Owner's Undertaking letter to the <i>Chief Building Official</i> in support of and prior to the issuance of a <i>permit</i>, in the applicable form set out in Schedules E-1, E-2 and E-3 at the end of this Part.</p> <p>1.4.1.9. Letters of Assurance</p> <p>1) When required by this By-law, the <i>owner</i> shall provide to the <i>Chief Building Official</i> any applicable letters of assurance in the forms set out in Schedules A, B, C-A and C-B the end of Part 2, Division C, Books I and II or in the forms set out in Schedules D-1 and D-2 at the end of Part 5, Division B, Book I.</p> <p>1.4.1.10. Project Directory</p> <p>1) The <i>owner</i> shall, prior to commencing work, give notice in writing to the <i>Chief Building Official</i>, of the name, address, electronic mail address and telephone number of the <i>owner</i>, the <i>constructor</i> or other person in charge of the work, the <i>designer</i> reviewing the work, and any inspection or testing agency engaged to monitor the work.</p> <p>2) During the course of the <i>construction</i>, the <i>owner</i> shall give immediate notice in writing to the <i>Chief Building Official</i>, of any change in employment of persons listed in the notice given pursuant to Sentence (1). (See Appendix A.)</p> <p>1.4.1.11. Other Notices</p>
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		<p>1) The <i>owner</i> shall give such other notices to the <i>Chief Building Official</i> as may be required by the <i>Chief Building Official</i>, by this By-law, or by another enactment.</p> <p>1.4.1.12. Construction Safety</p> <p>1) Where a <i>Construction Safety Program</i> is required by Section 8.2, Division B, Book I, the <i>owner</i> shall:</p> <p>a) prior to commencing work, ensure that the <i>Construction Safety Program</i> has been submitted to the <i>Chief Building Official</i>, and</p> <p>b) during <i>construction</i>, ensure that the <i>Construction Safety Program</i> is posted at all times and is amended from time to time in accordance with the requirements of this By-law.</p> <p>2) Where a <i>building</i> is required by Subsection 2.2.7., Division C, Book I to be professionally designed and reviewed, the <i>owner</i> shall, prior to commencing work, ensure that the <i>contractor</i> provides a full-time <i>construction safety officer</i> at the worksite.</p> <p>1.4.1.13. Plans Required on Site</p> <p>1) The <i>owner</i> shall ensure that the plans and specifications on which the issuance of the <i>permit</i> was based are available at the worksite for inspection during working hours by the <i>Chief Building Official</i>.</p> <p>1.4.1.14. Site Cleared of Debris</p> <p>1) The <i>owner</i> shall ensure that upon completion of demolition procedures, all debris and fill is cleared and the site levelled or graded, to the satisfaction of the <i>Chief Building Official</i>.</p> <p>1.4.1.15. Tests to Establish Compliance</p> <p>1) Where required by the <i>Chief Building Official</i> the <i>owner</i> shall make or have made, at the <i>owner's</i> expense, tests or inspections, as necessary to establish compliance with this By-law and shall promptly provide a copy of all such tests or inspection reports to the <i>Chief Building Official</i>. (See Appendix A).</p> <p>1.4.1.16. Up-to-Date Survey</p> <p>1) The <i>owner</i> shall provide to the <i>Chief Building Official</i> a survey, which has been certified by a registered land surveyor not more than 30 days before the date of delivery of the survey to the <i>Chief Building Official</i></p> <p>a) in the case of an <i>existing building</i> and site, if required by the <i>Chief Building Official</i> to</p>
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		<p>substantiate the <i>building</i> location and size, above, at and below ground level, relative to the site,</p> <p>b) in the case of an <i>existing building</i> and site, if required by the <i>Chief Building Official</i> to establish the relationship of the <i>building</i> to neighbouring grades, and</p> <p>c) in the case of all new <i>buildings</i>, upon completion of foundations and footings and before any further <i>construction</i>, and the survey must include the elevation of a bench mark on the front of the foundation wall, to substantiate its size, location, and elevation relative to the site and to neighbouring grades.</p> <p>1.4.1.17. Covering Work Prior to Inspection, Site Review or Field Review</p> <p>1) The <i>owner</i> shall not cover work prior to inspection, site review or <i>field review</i>.</p> <p>1.4.1.18. Request for Inspection</p> <p>1) The <i>owner</i> shall give at least 24 hours notice to the <i>Chief Building Official</i> when requesting an inspection of work that is required or ordered to be inspected.</p> <p>1.4.1.19. Uncovering Work</p> <p>1) The <i>owner</i> shall uncover any work that has been covered without inspection, when required to do so by the <i>Chief Building Official</i>. (See Appendix A).</p> <p>2) An <i>owner</i> who is required to uncover work by the <i>Chief Building Official</i> shall uncover and replace such work at the <i>owner's</i> expense.</p> <p>1.4.1.20. Reinspection</p> <p>1) If the <i>Chief Building Official</i> discovers faulty or incomplete work or faulty materials during an inspection, the <i>owner</i> shall apply for a reinspection.</p> <p>2) Every applicant for a reinspection of a <i>project</i> shall pay the applicable reinspection fees set out in the Fee Schedule, prior to the reinspection.</p> <p>1.4.1.21. Report of Building, Demolition or Excavation Failure</p> <p>1) When a <i>building</i>, demolition or excavation failure occurs which causes or has the potential to cause injury or loss of life, the <i>owner</i> shall</p> <p>a) immediately report the failure to the <i>Chief Building Official</i>,</p> <p>b) submit a report, if required to do so by the <i>Chief Building Official</i>, in accordance with Article 1.5.3.1., and</p>
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c) carry out any repairs or remedial work required by the *Chief Building Official*.

1.4.1.22. Removing Unsafe Conditions

1) When a *building* or part thereof is in an *unsafe condition*, the *owner* shall forthwith take all necessary action to put the *building* in a safe condition.

1.4.1.23. Damage to City Property

1) The *owner* is responsible for the cost of repair of any damage to *City* property or works located thereon that occurs as a result of undertaking work for which a *permit* or a *street use permit* was required.

1.4.1.24. Requirements Regarding Street Addresses

1) An *owner* shall not post any number or letter on a *building* or *suite* entry except for a street address or *suite* number that has been designated by the *Chief Building Official*.

2) Every *owner* shall place and maintain the designated street address on the *building* in a place that is easily visible from the *street*, and the address shall be mounted on a contrasting background and shall conform with the minimum character size requirements in Table 1.4.1.24.

Building Setback from Street	Minimum Non-illuminated Character Size	Minimum Illuminated Character Size
0 - 15 m	100 mm	80 mm
15 - 20 m	150 mm	100 mm
Greater than 20 m	200 mm	150 mm

3) Where landscaping or other structures obscure the visibility of a *building* from the *street*, the *owner* shall erect a sign no larger than 0.4 m² displaying the *street* address, on the *building* property within sight of the *street*.

4) Every *owner* shall place and maintain a designated *suite* number on a contrasting background and of a character size of no less than 25 mm at the *suite* entry. (See also Article 3.8.3.13., Division B, Book I for design requirements for persons with a visual impairment.)

5) If a *suite* number is assigned to an exterior principal *suite* entry, every *owner* shall place and

		<p>maintain the designated <i>suite</i> number in conformance with this section.</p> <p>6) Every <i>owner</i> shall ensure that designated street addresses and <i>suite</i> numbers are made of durable materials and are affixed securely to the <i>building</i>.</p> <p>1.4.1.26 Requirements regarding Professional Design and Review</p> <p>1) In addition to the obligations listed in this section, the <i>owner</i> of a <i>building</i> to which the provisions of Part 2, Division C , Book I apply, shall also comply with the owner’s obligations in that Part.</p> <p>1.4.2. OBLIGATIONS OF THE CONTRACTOR</p> <p>1.4.2.1. Construction Safety</p> <p>1) The <i>contractor</i> shall ensure that all requirements of this By-law relating to <i>construction</i> safety are complied with, and shall ensure that every sub-<i>contractor</i> of the <i>project</i> has retained a <i>trades safety coordinator</i> as required by Sentence (2).</p> <p>2) Every sub-<i>contractor</i> shall retain a qualified <i>trades safety coordinator</i> whose responsibilities shall include appropriate training of all persons working for the sub-<i>contractor</i> at the worksite in safe <i>construction</i> and installation practice.</p> <p>3) The <i>trades safety coordinator</i> shall provide certification respecting training to the <i>City Building Official</i> upon request.</p> <p>1.4.2.2. Work on Public Property</p> <p>1) The <i>contractor</i> shall ensure that no excavation or other work is undertaken on public property, and that no <i>building</i> is erected or materials stored thereon, without first having obtained approval in writing from the appropriate government authority.</p> <p>1.4.2.3. Compliance with By-law and Other Enactments</p> <p>1) The <i>contractor</i> shall ensure that all work, <i>building</i>, <i>construction</i>, or <i>occupancy</i> is carried out in accordance with this By-law and with all other applicable enactments.</p> <p>1.4.2.4 Right of Entry of Chief Building Official</p> <p>1) The <i>contractor</i> shall allow the <i>Chief Building Official</i> to enter any <i>building</i> or premises at any reasonable time for the purpose of administering and enforcing this By-law.</p>
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		<p>1.4.2.5 Compliance with Stop Work Order</p> <p>1) The <i>contractor</i> shall not carry out work or <i>construction</i>, or suffer, permit or allow work or <i>construction</i> to be carried out, in contravention of a stop work order issued by the <i>Chief Building Official</i>.</p> <p>Section 1.5. Authority of the Chief Building Official</p> <p>1.5.1. ADMINISTRATION</p> <p>1.5.1.1. Administrator</p> <p>1) The <i>Chief Building Official</i> is authorized to administer this By-law.</p> <p>1.5.1.2. Filing Documents</p> <p>1) The <i>Chief Building Official</i> is authorized to keep copies of applications received, <i>permits</i> and orders issued, inspections and tests made and papers and documents connected with the administration of this By-law, for such time as is required by law.</p> <p>2) Despite the provisions of Sentence (1), the <i>Chief Building Official</i> is authorized to keep copies of applications received, <i>permits</i> and orders issued, inspections and tests made and papers and documents connected with the administration of this By-law, for such time as is necessary, in the opinion of the <i>Chief Building Official</i>, to support the administration of this By-law.</p> <p>1.5.1.3. Inspection of Records</p> <p>1) The <i>Chief Building Inspector</i> is authorized to provide plans and documents filed pursuant to the provisions of this By-law for inspection, subject to the provisions of the Freedom of Information and Protection of Privacy Act.</p> <p>1.5.1.4. Fees for Inspection of Records</p> <p>1) The <i>Chief Building Official</i> shall charge a fee as set out in the Fee Schedule, payable in advance, for the inspection of records referred to in Article 1.5.1.3.</p> <p>1.5.2. AUTHORITIES</p> <p>1.5.2.1. Power of Entry</p> <p>1) The <i>Chief Building Official</i>, and any person authorized to act on behalf of the <i>Chief Building</i></p>
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			<p><i>Official</i>, may enter any <i>building</i> or premises at any reasonable time for the purpose of administering or enforcing this By-law, or if there is reason to believe an <i>unsafe condition</i> exists. (See Appendix A.)</p> <p>1.5.2.2. Review of Value of Work</p> <p>1) The <i>Chief Building Official</i> may review the value of the proposed work in an application for a <i>permit</i> and may substitute a different value, in accordance with Articles 1.6.2.3. and 1.6.2.4., for the purpose of determining applicable <i>permit</i> fees.</p> <p>1.5.2.3. Construction Safety</p> <p>1) The <i>Chief Building Official</i> may review a <i>Construction Safety Plan</i> and may require that the <i>Construction Safety Plan</i> be changed or amended.</p> <p>1.5.2.4. Permit Issuance</p> <p>1) The <i>Chief Building Official</i> shall issue a <i>permit</i> when the applicable requirements of this By-law have been met.</p> <p>1.5.2.5. Permit Refusal</p> <p>1) The <i>Chief Building Official</i> may refuse to issue a <i>permit</i></p> <ul style="list-style-type: none"> a) if plans or supporting documents are incomplete or do not comply with the provisions of this By-law, b) if plans or supporting documents contain false or incorrect information, or c) for any <i>building, construction, work or occupancy</i> that would not be permitted by this By-law or by another enactment. <p>2) The <i>Chief Building Official</i> shall provide reasons for the refusal to issue a <i>permit</i>, on the request of an applicant or <i>owner</i>.</p> <p>1.5.2.6. Permit with Incomplete Application</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> for a <i>building</i> based on an incomplete application if the incomplete information is of a secondary nature and is unavailable at the time of <i>permit</i> issuance.</p> <p>2) If the <i>Chief Building Official</i> issues a <i>permit</i> pursuant to Sentence (1) the <i>Chief Building Official</i> may impose conditions requiring submission of further information by a specified date.</p>
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			<p>3) The <i>Chief Building Official</i> may suspend or revoke a <i>permit</i> issued pursuant to Sentence (1), if the holder of the <i>permit</i> fails to comply with the conditions imposed by the <i>Chief Building Official</i>. (See Appendix A).</p> <p>1.5.2.7. Conditions on Permits</p> <p>1) The <i>Chief Building Official</i> may impose conditions on <i>permits</i> including, but not limited to, conditions regarding</p> <ul style="list-style-type: none"> a) notifications and notices, b) safety, c) health, d) design requirements, e) <i>construction</i> requirements, f) timing of <i>construction</i>, g) deadlines for completion of <i>construction</i>, h) reviews and inspections, i) responsibilities of the <i>owner, constructor, registered professional and certified professional,</i> j) compliance with this By-law and other enactments, k) use and <i>occupancy</i>, and l) temporary <i>buildings</i> and <i>occupancies</i>. <p>1.5.2.8. Permits for Existing Buildings</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> for an existing <i>building</i> in accordance with the provisions of Part 11, Division B, Book I and may impose conditions on the <i>permit</i>.</p> <p>2) The <i>Chief Building Official</i> may permit an alternative solution to the alternative acceptable solutions provided in this By-law for the conversion of an existing <i>building</i> if</p> <ul style="list-style-type: none"> a) the owner demonstrates, to the satisfaction of the <i>Chief Building Official</i>, that the level of upgrade required presents an extraordinary hardship for the owner, and b) the owner proposes an alternative solution which achieves the objectives of the alternative acceptable solutions prescribed by this By-law, to the satisfaction of the <i>Chief Building Official</i>. <p>1.5.2.9. Combustible Construction for Minor Repairs in Existing Buildings</p> <p>1) If <i>additions</i> and new work are required to be <i>noncombustible construction</i> pursuant to Subsection 3.2.2., the <i>Chief Building Official</i> may permit minor repairs to existing floor or wall assemblies to be <i>combustible construction</i> provided</p>
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		<p>a) the minor repair of the floor assembly does not exceed 5 per cent of the <i>floor area</i> of the room in which it is located, and b) the minor repair of the wall assembly does not exceed 5 per cent of the wall area of the wall plane on which it is located.</p> <p>1.5.2.10. Permits for Plumbing and Sprinkler Systems</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> for a <i>plumbing system</i> or <i>sprinkler system</i> in accordance with the provisions of Section 1.6.3.</p> <p>1.5.2.11. Permits in Designated Flood Plain</p> <p>1) If a building is located on a <i>designated flood plain</i> the <i>Chief Building Official</i> may</p> <p>a) require plans and supporting documents to demonstrate that the elevation or design of the <i>building</i> incorporates <i>flood construction level requirements</i> intended to reduce the risk of flood damage, b) require that a covenant acknowledging the risk of flood damage be registered against the land, and c) withhold issuance of a <i>permit</i> until the requirements of the <i>Chief Building Official</i> have been satisfied.</p> <p>1.5.2.12. Permit for Staged Construction</p> <p>1) Where a permit for staged <i>construction</i> is applied for pursuant to Subsection 1.6.5., the <i>Chief Building Official</i> may authorize the excavation or <i>construction</i> of a portion of a <i>building</i>, and may impose conditions to ensure compliance with this By-law, before all the plans and supporting documents for the <i>building</i> have been <i>accepted</i>, at the risk of the <i>owner</i>.</p> <p>2) The <i>Chief Building Official</i> may suspend or revoke a <i>permit</i> issued pursuant to Subsection 1.6.5. if the holder of the <i>permit</i> fails to comply with the conditions imposed by the <i>Chief Building Official</i>. (See Appendix A).</p> <p>1.5.2.13. Minor Revisions to Permit</p> <p>1) The <i>Chief Building Official</i> may accept an application for minor revisions to an existing <i>permit</i> if the proposed revisions do not add or delete additional <i>storeys</i> or <i>major occupancy</i> classifications to or from the <i>project</i>.</p> <p>1.5.2.14. Requirement for New Permit</p> <p>1) The <i>Chief Building Official</i> may require that an applicant for revisions to an existing <i>permit</i></p>
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		<p>apply for a new <i>permit</i>, if the proposed revisions would add or delete <i>floor area, storeys, dwelling units</i> or <i>major occupancy</i> classifications to or from the <i>project</i>.</p> <p>1.5.2.15. Permit Suspension</p> <p>1) The <i>Chief Building Official</i> may suspend a <i>permit</i> by issuing an order to stop work.</p> <p>1.5.2.16. Permit Revocation</p> <p>1) The <i>Chief Building Official</i> may revoke a <i>permit</i> if</p> <p>a) there is a contravention of any condition under which the <i>permit</i> was issued, b) the <i>permit</i> was issued in error, or c) the <i>permit</i> was issued on the basis of false or incorrect information.</p> <p>1.5.2.17. Permit Extension.</p> <p>1) The <i>Chief Building Official</i> may extend a <i>permit</i> in accordance with Subsection 1.6.7 of this Part.</p> <p>1.5.2.18. Designation of Street Addresses</p> <p>1) The <i>Chief Building Official</i> may, at any time, number, renumber or assign a series of numbers or <i>suite</i> numbers to any <i>building</i>, or part thereof.</p> <p>2) Upon the issuance of a <i>building permit</i>, the <i>Chief Building Official</i> shall designate the street address or series of <i>suite</i> numbers required for the <i>building</i>, or any portion of the <i>building</i>.</p> <p>3) Upon registration of a parcel of land in the Land Title Office, the <i>Chief Building Official</i> shall designate the street address or series of numbers required for the parcel.</p> <p>1.5.2.19. Renumbering of Street Addresses</p> <p>1) Where an <i>owner</i> has requested a renumbering and has paid the applicable fees set out in the Fee Schedule, the <i>Chief Building Official</i> may renumber any <i>building</i> or <i>suite</i> within a <i>building</i>, or parcel of land.</p> <p>1.5.2.20. Proof of Compliance</p> <p>1) The <i>Chief Building Official</i> may direct that tests of materials, equipment, devices, <i>construction</i> methods, structural assemblies or <i>foundations</i> be made, or sufficient evidence or proof be submitted, at the expense of the <i>owner</i>, where such evidence or proof is necessary, in</p>
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		<p>the opinion of the <i>Chief Building Official</i>, to determine whether the material, equipment, device, <i>construction</i>, structural assembly or <i>foundation</i> condition complies with this By-law.</p> <p>1.5.2.21. Occupancy Permit for Building at Variance with By-law</p> <p>1) The <i>Chief Building Official</i> may issue an <i>occupancy permit</i> for a <i>building</i> which varies in a minor respect from the requirements of this By-law if, in the opinion of the <i>Chief Building Official</i>, such variation will not substantially interfere with the objectives of this By-law.</p> <p>1.5.2.22. Occupancy Permit Prior to Completion</p> <p>1) The <i>Chief Building Official</i> may issue an <i>occupancy permit</i> to allow the <i>occupancy</i> of a <i>building</i> or a part thereof for the <i>approved</i> use, prior to commencement or completion of the <i>construction</i> or demolition work.</p> <p>2) The <i>Chief Building Official</i> may impose conditions on an <i>occupancy permit</i> issued in accordance with Sentence (1).</p> <p>1.5.3. AUTHORITIES REGARDING UNSAFE CONDITIONS</p> <p>1.5.3.1. Report of Failure</p> <p>1) Where any <i>building</i>, <i>construction</i> or excavation failure occurs which causes or has the potential to cause injury or loss of life, the <i>Chief Building Official</i> may require the <i>owner</i> to submit a report which includes</p> <ul style="list-style-type: none"> a) the name and address of the <i>owner</i>, b) the address or location of the <i>building</i>, demolition or excavation, c) the name and address of the <i>constructor</i>, d) the nature of the failure, e) the cause of the failure, f) a remedial plan to correct the failure, and g) a plan to prevent future failure. <p>1.5.3.2. Hazardous Material</p> <p>1) The <i>Chief Building Official</i> may require that any person supervising or doing work to install or remove <i>building</i> materials provide evidence of their training, certification or qualifications, if the installation or removal of <i>building</i> materials may create an <i>unsafe condition</i> or affect the structural safety or fire protection of a <i>building</i>.</p> <p>1.5.3.3. Order to Remove Unsafe Condition</p>
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			<p>1) When any <i>building, construction</i> or excavation or part thereof is in an <i>unsafe condition</i>, the <i>Chief Building Official</i> may issue a written order to the <i>owner</i>, certifying the existence of an <i>unsafe condition</i> and requiring correction of any <i>unsafe condition</i> found on a <i>building site</i>, within a specified time.</p> <p>1.5.3.4. Corrective Measures</p> <p>1) If the <i>Chief Building Official</i> has issued an order in accordance with Article 1.5.3.3. and an <i>owner</i> has failed to comply with that order, the <i>Chief Building Official</i> may</p> <p>a) authorize demolition, removal, posting of security guards or fire wardens, or enclosure of a <i>building, construction, excavation</i> or part thereof, at the expense of the <i>owner</i>, b) recover such expense in the manner set out in Article 1.5.3.6., and c) take such other measures as may be necessary to protect the public.</p> <p>1.5.3.5. Immediate Measures</p> <p>1) When immediate measures must be taken to avoid an imminent danger or risk of accident, the <i>Chief Building Official</i> may take such action as is appropriate, without prior notice and at the expense of the <i>owner</i>.</p> <p>1.5.3.6. Recovery of City Costs</p> <p>1) The cost of the measures described in Articles 1.5.3.4. and 1.5.3.5. shall be recoverable from the <i>owner</i></p> <p>a) in any Court of competent jurisdiction, or b) by entry of such cost in the real property roll with respect to the property and by collection in the same manner as the taxes shown in the real property roll.</p> <p>1.5.4. Notices and Orders</p> <p>1.5.4.1. Notices or Orders</p> <p>1) The <i>Chief Building Official</i> may issue in writing such notices or orders as may be necessary to inform the <i>owner</i> of a contravention of this By-law, in the manner set out in this By-law.</p> <p>1.5.4.2. Scope of Orders</p> <p>1) The <i>Chief Building Official</i> may order</p>
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		<p>a) a person who contravenes any provision of this By-law, to comply with the provision within a specified time,</p> <p>b) a person who contravenes any provision of this By-law, to allow the <i>Chief Building Official</i> to enter any <i>building</i> or premises at any reasonable time for the purpose of administering and enforcing this By-law,</p> <p>c) work to stop on a <i>building</i> or any part thereof, if such work is proceeding in contravention of a provision of this By-law or another enactment, or if there is deemed to be an <i>unsafe condition</i>,</p> <p>d) the removal of an unauthorized encroachment on public property,</p> <p>e) the removal of any <i>building</i> or part thereof constructed in contravention of a provision of this By-law,</p> <p>f) the cessation of any <i>occupancy</i> in contravention of a provision of this By-law,</p> <p>g) the cessation of any <i>occupancy</i> if an <i>unsafe condition</i> exists, and</p> <p>h) the correction of an <i>unsafe condition</i>.</p> <p>1.5.4.3. Contents of Notice</p> <p>1) A notice shall state the nature of any contravention and specify the date or the phase of <i>construction</i> by which remedial measures must be completed.</p> <p>1.5.4.4. Delivery of Notice</p> <p>1) A notice may be posted on a <i>building</i>, and may be delivered by regular mail or by hand to the person listed as the <i>owner</i> in the records of the Assessment Authority of British Columbia or to a representative of the <i>owner</i>.</p> <p>1.5.4.5. Contents of Order</p> <p>1) An order shall specify any contraventions of this By-law or any <i>unsafe condition</i> and may require demolition, removal, or compliance with this By-law, by a specified phase of <i>construction</i>, or within a specified time after the date of mailing or posting the order.</p> <p>2) Despite Sentence (1), an order to stop work, board up or cease <i>occupancy</i> shall state the nature of the contravention or <i>unsafe condition</i>, and may order the immediate suspension of <i>construction</i> or of <i>occupancy</i> and the rectification of the contravention or <i>unsafe condition</i>.</p> <p>1.5.4.6. Delivery of Order</p> <p>1) The <i>Chief Building Official</i> may deliver an order</p> <p>a) by mailing the order by registered mail to the <i>owner</i> at the <i>owner's</i> address as it appears on the records of the Assessment Authority of British Columbia, mailing the order by regular mail,</p>
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- and posting the order on the *building* which is the subject of the order,
- b) by sending the order by electronic mail to the electronic mail address of the *owner* or a representative of the *owner*, or
- c) by delivery of the order by hand to the *owner* or a representative of the *owner*.

Section 1.6. Permits, Applications and Fees

1.6.1. PERMITS

1.6.1.1. When a Permit is Required

- 1) A *permit* is required before any work regulated by this By-Law is undertaken.

1.6.1.2. Construction without a Permit

- 1) If *construction* for which a *permit* is required has been commenced before a *permit* has been issued, the *owner* shall

- a) make application for any necessary *permits*, and
- b) pay to the city, double the fee set out in the Fee Schedule or \$5000 plus the fee set out in the Fee Schedule, whichever is the lesser amount.

- 2) If *construction* for which a *permit* is required has been commenced before a *permit* has been issued, the *owner* shall, if ordered to do so by the *Chief Building Official*,

- a) provide proof that the *construction* complies with this By-law and any other applicable enactments,
- b) carry out tests and investigations by independent agencies, at the cost of the *owner*, to determine whether or not the *construction* complies with this By-law,
- c) carry out tests and investigations by independent agencies, at the cost of the *owner*, to determine appropriate remedial measures to ensure that the *construction* complies with this By-law,
- d) provide to the Chief Building Official, at the cost of the owner, the results of any tests and investigations ordered by the Chief Building Official, and
- e) provide documentation to the satisfaction of the Chief Building Official to establish that all remedial measures to ensure the construction complies with this By-law have been completed.

1.6.1.3. Additional Permits

- 1) In addition to a *permit* required by Article 1.6.1.1., other *permits* and supporting documents necessary for specific *building* components, services and uses, may be required by the *Chief Building Official*.

			<p>1.6.2. APPLICATION FOR PERMIT</p> <p>1.6.2.1. Owner Requirement</p> <p>1) To obtain a <i>permit</i>, the <i>owner</i> shall file an application in writing in the form prescribed by the <i>Chief Building Official</i>.</p> <p>1.6.2.2. Application Requirements</p> <p>1) Except as otherwise provided in this By-law, every application shall</p> <p>a) describe the work, <i>building, construction</i> or <i>occupancies</i> for which the <i>permit</i> is required,</p> <p>b) provide a legal description and address for the land on which the work is to be done,</p> <p>c) include plans and other supporting documents which conform with Section 2.2. of Division C,</p> <p>d) state the value of the proposed work calculated in accordance with Article 1.6.2.3.,</p> <p>e) include the requisite <i>permit</i> fee, in accordance with the Fee Schedule at the end of this Part,</p> <p>f) include the appropriate owner's undertaking letter in the applicable form set out in Schedules E-1, E-2 and E-3 at the end of this Part,</p> <p>g) include any other plans or supporting documents required by the Chief Building Official to establish that the work, <i>building, construction</i> and <i>occupancy</i> complies with this By-law or any other enactment, and</p> <p>h) list the names, addresses, electronic mail addresses and telephone numbers of all <i>owners, designers</i> and <i>constructors</i>. (See Appendix A).</p> <p>1.6.2.3. Valuation for Permit</p> <p>1) The value of the proposed work stated on the application for the <i>permit</i> shall reflect the total current monetary worth of all proposed materials, <i>construction</i> and work related to the <i>building</i>.</p> <p>2) In addition to Sentence (1), the value of the proposed work shall include the total current monetary worth of all labour and all fees and costs incurred for design, investigative testing, consulting services, <i>construction, construction</i> management, <i>contractor's</i> profit and overhead, sales taxes, and <i>construction</i> insurance related to the <i>building</i>.</p> <p>3) The total current monetary worth referred to in Sentences (1) and (2) shall include the market value of all labour, including unpaid labour provided by an <i>owner</i> or volunteer, and the market value of all materials, including donated, recycled or used materials.</p>
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		<p>4) The total current monetary worth referred to in Sentences (1) and (2) shall include all components of the <i>building</i>, notwithstanding the fact that some components of the <i>building</i> may be subject to other <i>permits</i> and fees.</p> <p>1.6.2.4. Review of Valuation by Chief Building Official</p> <p>1) The <i>Chief Building Official</i> may review the value of the proposed work stated in an application, using the <i>Marshall Valuation Method</i>, and may substitute a different value for the proposed work.</p> <p>1.6.2.5. Fee Schedule</p> <p>1) <i>Permit</i> fees shall be calculated in accordance with the Fee Schedule at the end of this Part and the fees for <i>construction</i> without a <i>permit</i> are as outlined in Article 1.6.1.2.</p> <p>1.6.2.6. No Refund</p> <p>1) Except as permitted in Article 1.6.2.7. or Article 1.6.4.5., no <i>permit</i> fees or part thereof shall be refunded if</p> <p>a) <i>construction</i> authorized by a <i>permit</i> has commenced, b) the <i>permit</i> has expired pursuant to Article 1.6.7.1., or c) the application has lapsed as outlined in Article 1.6.2.8.</p> <p>1.6.2.7. Partial Refund and Set-off</p> <p>1) If <i>construction</i> authorized by <i>permit</i> has not commenced and the <i>Chief Building Official</i> approves, the Director of Finance may refund a portion of the fees related to the <i>permit</i>, after deduction of any outstanding costs incurred by the <i>City</i> in processing the application for the <i>permit</i> and in carrying out any work pursuant to Article 1.5.3.4. or Article 1.5.3.5.</p> <p>1.6.2.8. Lapse of Application</p> <p>1) Subject to the provisions of Article 1.6.2.9., an <i>owner</i> shall comply with all the necessary requirements to complete an application for a <i>permit</i> within 6 months after the date of receipt of the application by the <i>Chief Building Official</i>.</p> <p>2) If an <i>owner</i> fails to comply with the requirements of Sentence (1), the application for a <i>permit</i> shall lapse.</p> <p>3) An application for a <i>permit</i> which has lapsed is expired and shall not be renewed except in accordance with Article 1.6.2.9.</p>
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			<p>1.6.3.5. Permit for Plumbing System to Owner</p> <p>1) Despite the provisions of Article 1.6.3.2, the <i>Chief Building Official</i> may issue a <i>permit</i> to the owner of a <i>one-family dwelling</i> to do plumbing work in that <i>one-family dwelling</i> if the owner is the occupier of the <i>one-family dwelling</i>.</p> <p>1.6.3.6. No Permit for Minor Repairs to Plumbing System</p> <p>1) Despite the provisions of Article 1.6.3.1, no <i>permit</i> is required to repair or replace a valve, faucet, <i>fixture</i>, <i>fixture outlet pipe</i> or <i>service water heater</i>, to clear a stoppage, or to repair a leak, if there is no change to any other piping.</p> <p>1.6.3.7. Requirement for Inspection</p> <p>1) No person shall use a <i>plumbing system</i> or <i>sprinkler system</i> until it has been inspected by the <i>Chief Building Official</i>.</p> <p>1.6.4. APPLICATIONS BY CERTIFIED PROFESSIONALS</p> <p>1.6.4.1. Applications for Permits by Certified Professionals</p> <p>1) A <i>Certified Professional</i> may apply for a <i>permit</i> on behalf of an owner.</p> <p>1.6.4.2. Requirements for Permit</p> <p>1) A <i>Certified Professional</i> who applies for a <i>permit</i> on behalf of an owner must comply with the requirements of Section 1.6 of this By-law.</p> <p>1.6.4.3. Application Review For Permit</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> based upon a modified review of the drawings and other supporting documents submitted with the application for a <i>permit</i> by a <i>Certified Professional</i>.</p> <p>1.6.4.4. Site Review For Permit</p> <p>1) A <i>Certified Professional</i> shall carry out detailed site reviews and shall be responsible for monitoring and follow-up necessary to support the <i>construction</i> authorized by the <i>permit</i> and to support the <i>construction</i> of the entire <i>building</i>.</p> <p>1.6.4.5. Reduced Fees</p>
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1) The *Chief Building Official* may reduce the fees for a *permit* issued to a *Certified Professional*, after a final *occupancy permit* has been issued, if the *Chief Building Official* first determines that, as a result of the involvement of the *Certified Professional* in the project, the administrative costs of the *City* in relation to the *permit* have been substantially reduced.

1.6.5. APPLICATIONS FOR STAGED CONSTRUCTION BY CERTIFIED PROFESSIONALS

1.6.5.1. Requirements for Staged Construction

1) The *Chief Building Official* may issue a *permit* to construct a *building* in stages if

- a) the applicant for the staged *construction* is a *Certified Professional*,
- b) the *Certified Professional* also applies for permission to construct the entire *building*,
- c) the *Certified Professional* submits complete plans and all supporting documents for each portion of the work for which a *permit* for staged *construction* is sought, and
- d) the *Certified Professional* submits all documents required pursuant to the Certification of Professionals By-law.

1.6.5.2. Owner's Risk

1) The issuance of a staged *permit* creates no obligation on the *Chief Building Official* to issue any other staged *permits* or to issue a *permit* to construct the entire *building*.

2) An *owner* who commences *construction* of a *building* in accordance with a staged *permit* does so at the *owner's* risk.

1.6.5.3. Owner's Responsibility

1) An *owner* who fails to complete the work authorized by a *permit* for staged *construction* or who fails to comply with the conditions of a *permit* for staged *construction* shall restore the site to a safe condition, to the satisfaction of the *Chief Building Official*.

1.6.5.4. Application Review for Permit for Staged Construction

1) Where a *Certified Professional* complies with all application requirements for a *permit* for staged *construction*, the *Chief Building Official* may issue a *permit* for staged *construction* based upon a modified review of the drawings and other supporting documents submitted for the *permit* for staged *construction*.

1.6.5.5. Site Review of Staged Construction

		<p>1) Where a <i>permit</i> for staged construction is issued, the <i>Certified Professional</i> shall carry out detailed site reviews and shall be responsible for monitoring and follow-up necessary to support the construction authorized by the <i>permit</i> for staged construction and to support the construction of the entire building.</p> <p>1.6.6. REVISIONS</p> <p>1.6.6.1. Revisions to Applications</p> <p>1) All applications for revisions to the original application shall comply with Article 1.6.2.2.</p> <p>2) When revisions to the original application result in an increase in the value of the proposed work, the <i>Chief Building Official</i> shall review the valuation and recalculate the <i>permit</i> fee in accordance with this By-law.</p> <p>3) When application documents are either incomplete or changed to the extent that an additional plan review is necessary, an additional revision fee shall be charged in accordance with the Fee Schedule at the end of this Part.</p> <p>1.6.6.2. Minor Revisions to Permits</p> <p>1) All applications for minor revisions to the original <i>permit</i> shall comply with Article 1.6.2.2. to the extent required by the <i>Chief Building Official</i>.</p> <p>2) When applications for minor revisions to the original <i>permit</i> result in an increase in the value of the proposed work, the <i>Chief Building Official</i> shall review the valuation and recalculate the <i>permit</i> fee in accordance with this By-law.</p> <p>3) An additional revision fee shall be charged for applications for minor revisions to the original <i>permit</i> in accordance with the Fee Schedule at the end of this Part.</p> <p>1.6.7. PERMIT EXPIRY AND EXTENSION</p> <p>1.6.7.1. Permit Expiry</p> <p>1) Except as provided in this Subsection, a <i>permit</i> shall expire and the rights of the <i>owner</i> under the <i>permit</i> shall terminate if in the opinion of the <i>Chief Building Official</i></p> <p>a) the work authorized by the <i>permit</i> is not commenced within 6 months from the date of issue of the <i>permit</i>,</p> <p>b) the work although commenced is not continuously and actively carried out thereafter, or</p> <p>c) the work has been substantially discontinued for a period of 6 months. (See Appendix A.)</p>
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2) Except as provided in this Subsection 1.6.7., a *permit* for a temporary *building* or *occupancy* shall expire and the rights of the *owner* under the *permit* shall terminate on the expiry date noted on the *permit*.

1.6.7.2. Application to Chief Building Official for Extension

1) An *owner* who wishes to seek an extension of a *permit* shall make application to the *Chief Building Official* prior to the expiry of the *permit*.

2) An *owner* who wishes to seek an extension of a *permit* shall submit the application in writing accompanied by the requisite extension fee.

1.6.7.3. Extension of Permit by Chief Building Official

1) If the *Chief Building Official* is of the opinion that substantial completion of the work has been prevented because of exceptional circumstances, the *Chief Building Official* may extend the *permit* twice only, provided that, in the meantime, no applicable amendments have been made to this By-law. **2)** If the *Chief Building Official* is of the opinion that a *building* or *occupancy* is temporary, the *Chief Building Official* may extend the *permit* for a temporary *building* or *occupancy* twice only, provided that, in the meantime, no applicable amendments have been made to this By-law.

1.6.7.4. Application to Council for Extension

1) An *owner* who has been granted an extension of a *permit* by the *Chief Building Official* may make application to Council for a further extension prior to the expiry of the *permit*.

2) An *owner* who wishes to seek an extension of a *permit* from Council shall submit an application in writing to the *Chief Building Official* accompanied by the requisite extension fee.

3) The *Chief Building Official* shall forward to Council any application submitted in accordance with this section, together with information and advice to assist Council in considering the application.

1.6.7.5. Extension of Permit by Council

1) Council may extend a *permit* for such further period or periods it deems appropriate.

2) If Council grants an extension of a *permit*, the *Chief Building Official* shall endorse the further extension or extensions on the *permit*.

		<p>1.6.8. PERMITS FOR TEMPORARY BUILDINGS, INCLUDING TENTS AND AIR-SUPPORTED STRUCTURES</p> <p>1.6.8.1. Definition of “Temporary”</p> <p>1) In this Subsection, “temporary” means for a time period not exceeding twelve consecutive months.</p> <p>1.6.8.2. Compliance with By-law</p> <p>1) Except as otherwise provided in this Subsection or in Section 11.6, Division B, Book I, no person shall erect a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, which does not comply with this By-law.</p> <p>1.6.8.3. Permit Required</p> <p>1) No person shall erect, or use or occupy a temporary <i>building</i>, including a tent or <i>air-supported structure</i> without a <i>permit</i>.</p> <p>1.6.8.4. Compliance with Permit Conditions</p> <p>1) No person shall erect, or use or occupy a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, in contravention of the conditions of a <i>permit</i>.</p> <p>1.6.8.5. Application Requirements</p> <p>1) The application for a <i>permit</i> for a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, shall be accompanied by</p> <p>a) plans showing the location of the temporary <i>building</i>, tent or <i>air-supported structure</i> on the site, all other existing <i>buildings</i> on the same property and all other <i>buildings</i> on adjacent property located within at least 10 feet of the property line of the site,</p> <p>b) <i>construction</i> details of the <i>building</i>, tent or <i>air-supported structure</i>, and</p> <p>c) a statement by the <i>owner</i> indicating the intended use and intended duration of such use.</p> <p>2) The application for a temporary <i>occupancy permit</i> for a tent or <i>air-supported structure</i> shall be accompanied by documentation sufficient to establish that the tent or <i>air-supported structure</i> complies with Subsection 3.1.6., Division B, Book I.</p>
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		<p>1.6.8.6. Time Limited Permits for Temporary Buildings</p> <p>1) The <i>Chief Building Official</i> may issue a <i>permit</i> authorizing the <i>construction</i>, use or <i>occupancy</i> of a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, and may attach conditions to such <i>permit</i>, including conditions allowing for selective compliance with the provisions of this By-law, if the <i>Chief Building Official</i> determines that the <i>construction</i>, use or <i>occupancy</i> will exist for a short time, and the circumstances do not warrant complete compliance with this By-law.</p> <p>1.6.8.7. Permit End Date</p> <p>1) A <i>permit</i> for a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, shall state the date after which the <i>permit</i> is no longer valid.</p> <p>1.6.8.8. Permit Extension</p> <p>1) A <i>permit</i> for a temporary <i>building</i>, including a tent or <i>air-supported structure</i>, may only be extended if an extension is granted by the <i>Chief Building Official</i> prior to the expiry of the <i>permit</i>.</p> <p>2) An <i>owner</i> who wishes to seek an extension of a <i>permit</i> for a temporary <i>building</i> from the <i>Chief Building Official</i> shall submit an application in writing to the <i>Chief Building Official</i> accompanied by the requisite extension fee.</p> <p>3) If the <i>Chief Building Official</i> is of the opinion that the temporary <i>building</i> complies with the life safety requirements of this By-law, the <i>Chief Building Official</i> may extend the <i>permit</i> once only, and the <i>Chief Building Official</i> may require documentation from <i>registered professionals</i> to verify that the requirements of this By-law are being met.</p> <p>Section 1.7. Permission to Occupy Buildings</p> <p>1.7.1. GENERAL</p> <p>1.7.1.1. Occupancy Permit Required</p> <p>1) Except as otherwise provided in this By-law, no person shall occupy or allow the <i>occupancy</i> of any <i>building</i> or part thereof unless the <i>owner</i> has obtained an <i>occupancy permit</i> from the <i>Chief Building Official</i>.</p> <p>2) No person shall occupy any <i>building</i> for a purpose other than the <i>occupancy</i> stipulated in an <i>occupancy permit</i> issued by the <i>Chief Building Official</i>.</p>
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		<p>1.7.1.2. Occupancy Permit</p> <p>1) Every <i>owner</i> shall obtain an <i>occupancy permit</i> from the <i>Chief Building Official</i> prior to any</p> <p>a) <i>occupancy</i> of a <i>building</i> or part thereof after <i>construction</i> or <i>alteration</i> of that <i>building</i>, b) change in the <i>major occupancy</i> of any <i>building</i> or part thereof, or c) change in the permitted <i>occupancy</i> within the same Division of the <i>major occupancy</i> Group, where the <i>occupant load</i> or the <i>fire load</i> has increased. (See Appendix A).</p> <p>1.7.1.3. Exemptions from Occupancy Permit</p> <p>1) Despite the requirements of Articles 1.7.1.1. and 1.7.1.2., an <i>occupancy permit</i> is not required for</p> <p>a) <i>one</i> or <i>two-family dwellings</i>, or b) a change in the permitted <i>occupancy</i> within the same <i>major occupancy</i> classification provided the <i>occupant load</i> is not increased and no <i>construction</i> has taken place.</p> <p>1.7.1.4. Posting of Lawful Use</p> <p>1) In any <i>building</i> not requiring an <i>occupancy permit</i>, the <i>Chief Building Official</i> may post a notice which describes the uses to which the <i>building</i> may be lawfully put.</p> <p>1.7.2. OCCUPANCY PERMIT PROCESS</p> <p>1.7.2.1. Owner's Obligation</p> <p>1) An <i>owner</i> who wishes to obtain an <i>occupancy permit</i> shall file an application in the form required by the <i>Chief Building Official</i>.</p> <p>1.7.2.2. Requirements for Occupancy Permit Application</p> <p>1) The permit application requirements described in Article 1.6.2.2. do not apply to an application for an <i>occupancy permit</i> if the application includes</p> <p>a) a letter from the <i>owner</i> declaring that the work complies with the By-law, the necessary <i>permits</i> have been obtained and the <i>building</i> conforms with the <i>accepted plans</i>, in any case where a professional is not required by Subsection 2.2.7., Division C, Book I b) the appropriate letters of assurance in any case where a professional <i>field review</i> is required by Subsection 2.2.7., Division C, Book I, c) the anticipated date of completion, d) the classification of the <i>building</i>,</p>
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		<p>e) the number of <i>storeys</i> in the <i>building</i>, f) the gross <i>floor area</i> of each <i>storey</i>, and g) the allowable <i>live loads</i> for each <i>floor area</i>.</p> <p>1.7.2.3. Scheduling of Construction, Fire & Life Safety Systems Inspection</p> <p>1) Prior to the issuance of an <i>occupancy permit</i>, the <i>owner</i> of a <i>building</i> shall call for and coordinate a final inspection of <i>construction</i>, fire and life safety systems in the <i>building</i>.</p> <p>1.7.2.4. Requirements prior to Construction, Fire and Life Safety Systems Inspection</p> <p>1) At least 24 hours prior to the final inspection for an <i>occupancy permit</i>, every <i>owner</i> shall submit to the <i>Chief Building Official</i></p> <p>a) proof of compliance with the By-law for all materials, equipment and methods of <i>construction</i>, b) letters of assurance in the forms attached as Schedules C-A and C-B, at the end of Part 2, Division C, c) a <i>contractor's</i> material and test certificate, certifying that the <i>sprinkler systems</i> have been flushed, inspected and tested, d) a certificate of verification and a manufacturer's inspection report for the fire alarm system, e) a fire safety plan and record of installed fire safety systems, conforming to the Fire By-law, and f) a letter from a fire protection consultant verifying that the special devices or methods forming part of the alternative solution achieves the alternative solution.</p> <p>1.7.2.5. Requirements during Construction, Fire and Life Safety Systems Inspection</p> <p>1) During the final inspection of <i>construction</i>, fire and life safety systems in the <i>building</i>, the <i>owner</i> of the <i>building</i> shall make available</p> <p>a) a copy of the fire safety plan, b) a copy of the record of installed fire safety systems, and c) a preventive maintenance and testing schedule and a maintenance log book for the life and fire safety systems.</p> <p>1.7.2.6. Notice of Change Prior to Occupancy</p> <p>1) Every <i>owner</i> shall give notice in writing to the <i>Chief Building Official</i> of any change to the <i>owner's</i> address or any change in the ownership of the building which occurs</p> <p>a) prior to the issuance of an <i>occupancy permit</i>, or</p>
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		<p>b) prior to the <i>occupancy of the building</i>.</p> <p>1.7.3. PARTIAL OCCUPANCY PERMIT FOR BUILDING UNDER CONSTRUCTION</p> <p>1.7.3.1. Partial Occupancy Permit</p> <p>1) The <i>Chief Building Official</i> may issue a <i>partial occupancy permit</i> for part of a <i>building</i> which is under <i>construction</i> if, in the opinion of <i>Chief Building Official</i>, such <i>partial occupancy</i> would not jeopardize life or property.</p> <p>2) The <i>Chief Building Official</i> may impose conditions on a <i>partial occupancy permit</i>.</p> <p>3) The <i>Chief Building Official</i> may revoke a <i>partial occupancy permit</i> if the <i>permit</i> holder fails to comply with the conditions imposed by the <i>Chief Building Official</i>.</p> <p>4) The <i>Chief Building Official</i> may revoke a <i>partial occupancy permit</i> if the <i>owner</i> fails to comply with any <i>permit</i> relating to the <i>building</i>.</p> <p>1.7.3.2. Owner's Obligation regarding Unsafe Conditions</p> <p>1) The <i>owner</i> of a <i>building</i> for which a <i>partial occupancy permit</i> has been issued shall ensure that there are no <i>unsafe conditions</i> in the building</p> <p>1.7.4. TEMPORARY OCCUPANCY PERMIT</p> <p>1.7.4.1. Temporary Occupancy Permit</p> <p>1) The <i>Chief Building Official</i> may issue a <i>temporary occupancy permit</i> for a temporary use within an existing <i>building</i>, or for the limited use of a <i>building</i> approved according to Subsection 1.6.8. or as otherwise provided in this By-law.</p> <p>1.7.5. RE-OCCUPANCY PERMIT</p> <p>1.7.5.1. Re-occupancy Permit</p> <p>1) Every <i>owner</i> shall obtain a <i>re-occupancy permit</i> from the <i>Chief Building Official</i> prior to any <i>occupancy of a building</i> or part thereof in respect of which the <i>Chief Building Official</i> has issued an order to cease <i>occupancy</i> due to an <i>unsafe condition</i>.</p> <p>Section 1.8. Street Regulations</p> <p>1.8.1. Encroachments</p>
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			<p>1.8.1.1. Encroachment Defined</p> <p>1) In this Section an encroachment means a <i>building</i>, or a <i>building</i> appurtenance or fixture, including an existing areaway, a new or existing ornamental projection, awning, canopy, mechanical apparatus, or emergency <i>exit</i> apparatus, projecting in a <i>street</i>, whether above, at or below ground level.</p> <p>1.8.1.2. Measurement of Encroachment</p> <p>1) An encroachment shall be measured at right angles from a theoretical vertical plane located at the property line, to the outermost point of the encroachment in the <i>street</i>.</p> <p>1.8.1.3. No Encroachment without Permission</p> <p>1) No encroachment shall project into a <i>street</i>, unless permission has first been granted by the city.</p> <p>1.8.1.4. Maintenance and Repair of Encroachment</p> <p>1) Encroachments shall be repaired and maintained to the satisfaction of the <i>City Engineer</i> and the <i>Chief Building Official</i>.</p> <p>1.8.1.5. Prohibited Encroachments</p> <p>1) An encroachment shall not obstruct or interfere with</p> <ul style="list-style-type: none"> a) public utility poles or equipment, b) fire fighting equipment or fire rescue operations, c) <i>street</i> trees or lamp standards, or d) <i>street</i> furniture. <p>1.8.1.6. Compliance with Encroachment By-law</p> <p>1) The <i>Chief Building Official</i> shall not issue a <i>permit</i> to construct an encroachment unless the encroachment complies with this By-law and with the Encroachment By-law.</p> <p>1.8.2. Existing Encroachments</p> <p>1.8.2.1. Existing Encroachments</p> <p>1) An existing encroachment which complies with the Encroachment By-law and does not</p>
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			<p>conform with this By-law may be continued if the encroachment is not altered.</p> <p>1.8.2.2 Damage to Existing Encroachment</p> <p>1) Subject to the provisions in Sentence (2), an existing encroachment which is damaged may be repaired.</p> <p>2) Despite the provisions of Sentence(1) if the cost of the repair to an existing encroachment is more than 50 per cent of the current replacement cost of the damaged encroachment, the repair shall constitute a new encroachment and shall comply with the provisions of this By-law and the Encroachment By-law.</p> <p>1.8.2.3. Alteration to Existing Encroachment</p> <p>1) Except for signs permitted by the Sign By-law, any enlargement or <i>alteration</i> of an existing encroachment shall constitute a new encroachment and shall comply with the provisions of this By-law and the Encroachment By-law.</p> <p>1.8.2.4. Signs</p> <p>1) Signs permitted by the Sign By-law which encroach in a <i>street</i> shall comply with this By-law.</p> <p>1.8.2.5. Door Swings</p> <p>1) Except as provided in Subsection 1.8.10, doors, security gates and other moveable barriers, whether open or closed, shall not encroach in a <i>street</i>.</p> <p>1.8.3. New Encroachments</p> <p>1.8.3.1. Application</p> <p>1) This Section applies to</p> <p>(a) new encroachments, and</p> <p>(b) <i>alterations</i> to existing encroachments which do not comply with the provisions of Section 1.8.2..</p> <p>1.8.3.2. Dimensions and Clearances</p> <p>1) Unless otherwise provided in this By-law, all new encroachments shall comply with the applicable <i>construction</i>, clearance and dimension requirements in Subsections 1.8.5. to 1.8.10.</p>
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		<p>1.8.3.3. Design and Construction of New Encroachments</p> <p>1) A new encroachment shall be designed and constructed so that, in the event of its removal from the <i>building</i>, the <i>building</i> will comply with the provisions of this By-law.</p> <p>1.8.3.4. Compliance with By-laws</p> <p>1) A new encroachment shall comply with the provisions of this By-law and the Encroachment By-law.</p> <p>1.8.3.5. Encroachments in Narrow Streets</p> <p>1) Unless otherwise permitted by this Section, new encroachments or encroachments which do not comply with the provisions of Section 1.8.2. are not permitted in a <i>street</i> which is 10 m or less in width.</p> <p>1.8.4. Repair or Removal of Encroachment</p> <p>1.8.4.1. Removal or Repair by Owner</p> <p>1) The <i>owner</i> of a <i>building</i> which encroaches in a <i>street</i> shall repair, alter or remove the encroachment if so ordered</p> <p>a) by the Chief Building Official, in accordance with this By-law, or b) by the City Engineer, in accordance with the Encroachment By-law.</p> <p>1.8.4.2. Repair of Building after Removal of Encroachment</p> <p>1) Upon removal of an encroachment from a <i>building</i>, the <i>owner</i> shall promptly repair the <i>building</i> and shall ensure that the <i>building</i> complies with this By-law.</p> <p>1.8.4.3. Repair of Building at Owner's Expense</p> <p>1) If the <i>Chief Building Official</i> has issued an order in accordance with Article 1.8.4.1. and an <i>owner</i> has failed to comply with that order, the <i>Chief Building Official</i> may</p> <p>a) authorize demolition or removal of an encroachment, posting of security guards or fire wardens, or enclosure of such encroachment, <i>building</i>, <i>construction</i>, excavation or part thereof, at the expense of the <i>owner</i>, b) recover such expense in the manner set out in this By-law, and c) take other measures as may be necessary to protect the public.</p>
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		<p>and fixtures which encroach in a <i>street</i>, and include</p> <ul style="list-style-type: none"> a) cornices, b) copings, c) belt courses and other minor architectural trim such as water tables, column capitals and bases, and d) sun screens and other projections designed to increase energy efficiency. <p>1.8.6.2. Construction</p> <ul style="list-style-type: none"> 1) Except as permitted in Sentence (2), all ornamental projections, including their connections and supports, which encroach in a <i>street</i>, shall be <i>noncombustible construction</i>, and if constructed of metal, shall be no less than 0.56 mm in thickness. 2) Where roof <i>construction</i> is permitted to be of wood, the <i>Chief Building Official</i> may also permit a cornice to be of <i>combustible</i> materials, if <ul style="list-style-type: none"> a) the cornice only consists of roof members cantilevered over the <i>street</i> and covered by a roof deck, and b) the underside of the cornice is exposed, without a boxed-in soffit. <p>1.8.6.3. Ornamental Projections in Streets</p> <ul style="list-style-type: none"> 1) An ornamental projection may encroach in a <i>street</i> which is at least 10 m wide <ul style="list-style-type: none"> a) no more than 75 mm where the distance from the lowest point of the encroachment to the <i>street</i> level immediately below is less than 2.75 m, and b) no more than 915 mm where the distance from the lowest point of the encroachment to the <i>street</i> level immediately below is 5.2 m or more. 2) An ornamental projection may encroach in a <i>street</i> which is less than 10 m wide, if <ul style="list-style-type: none"> a) it is located no less than 5.2 m above the <i>street</i>, b) it does not encroach more than 915 mm beyond the property line, and c) it does not interfere with overhead public utilities. <p>1.8.6.4. Existing Encroaching Windows</p> <ul style="list-style-type: none"> 1) An oriel or bay window shall not encroach in a <i>street</i> except that <i>alterations</i> may be made to an existing oriel or bay window if <ul style="list-style-type: none"> a) it encroaches no more than 600 mm beyond the property line,
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		<p>b) it is located no less than 5.2 m above the <i>street</i>, and c) the <i>street</i> is no less than 10 m in width.</p> <p>2) The provisions of Sentence (1) do not apply to an existing encroaching oriel or bay window which is designated in accordance with a heritage designation by-law or is the subject of a heritage revitalization agreement with the <i>City</i>.</p> <p>1.8.7. Awnings</p> <p>1.8.7.1. Awning Defined</p> <p>1) In this Subsection, an awning means a light detachable structure which encroaches in a <i>street</i> and which consists of a covering of fabric, sheet metal or other relatively flexible material on a fixed or retractable structural frame attached to and entirely supported by a <i>building</i>.</p> <p>1.8.7.2. Attachments</p> <p>1) No electrical wiring, illuminated device, electrical equipment or apparatus shall be attached to or incorporated in an awning, except that drive mechanisms and attachments to the structural frame required for the operation of collapsible awnings may be permitted by the <i>Chief Building Official</i>.</p> <p>1.8.7.3. Structural Design</p> <p>1) Except as permitted in Sentence (3), the structural frame of an awning and its connections to the supporting <i>building</i> shall be designed in conformance with Part 4, Division B, Book I.</p> <p>2) The structural frame of an awning and its connections to the supporting <i>building</i> shall be <i>noncombustible</i>.</p> <p>3) A fabric covered retractable awning shall be designed to withstand wind, rain, snow, and seismic design loads applied to the closed awning.</p> <p>1.8.7.4. Clearances</p> <p>1) The horizontal distance from the outer edge of an awning measured to the outer face of the <i>street</i> curb shall be no less than 600 mm.</p> <p>2) No portion of an awning shall be less than 2.75 m above the level of the <i>street</i> surface or established <i>building grade</i>, except that if the <i>street</i> surface or established <i>building grade</i> below the awning slopes more than 0.1 m over the length of the awning, the vertical clearance</p>
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		<p>may be no less than 2.6 m, except that a soft fringe attached to the awning and made of canvas or cloth may have a clearance of no less than 2.3 m.</p> <p>1.8.7.5. Combustible Material Requirements</p> <p>1) <i>Combustible</i> materials used in awnings shall conform to the appropriate requirements for resistance to fire as set out in CAN/ULC-S109, “Flame Tests of Flame-Resistant Fabrics and Films”, or NFPA 701, “Standard Method of Fire Tests for Flame Propagation of Textiles and Films”, 2010 edition.</p> <p>2) <i>Combustible</i> materials shall not be used in an awning which is above the second <i>storey</i> of a <i>building</i>.</p> <p>3) <i>Combustible</i> materials shall not be used in an awning which is attached to an exterior wall required to be of <i>noncombustible construction</i>.</p> <p>1.8.7.6. Vertical Height</p> <p>1) The vertical dimensions of the front and sides of an awning shall not exceed 3.65 m at any point, unless otherwise permitted by the <i>Chief Building Official</i>.</p> <p>1.8.7.7. Awning Not To Span Unprotected Openings</p> <p>1) An awning shall not span <i>unprotected openings</i> in separate <i>fire compartments</i>.</p> <p>1.8.8. Canopies</p> <p>1.8.8.1. Canopy Defined</p> <p>1) In this Subsection, a canopy means a rigid, roofed structure which encroaches in a <i>street</i> and is attached to and supported by a <i>building</i>.</p> <p>1.8.8.2. Requirements for Materials</p> <p>1) A canopy shall be</p> <p>a) constructed of <i>noncombustible</i> materials, except as provided in Sentence (2) and Clause (3)(c),</p> <p>b) supported entirely by the <i>building</i> to which the canopy is attached, and</p> <p>c) constructed so that its removal conforms to Sentence 1.8.3.3.(1).</p> <p>2) Despite Clause (1) (a), if the <i>building</i> or the exterior wall to which the canopy is attached is</p>
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		<p>of <i>combustible construction</i>, a canopy may be constructed of <i>combustible</i> materials.</p> <p>3) The deck and roof of a canopy shall be constructed of</p> <ul style="list-style-type: none"> a) wired or laminated safety glass, b) metal no less than 0.56 mm in thickness, or c) wood plank no less than 60 mm in thickness, sheathed on the top and the soffit with metal or other <i>noncombustible</i> material, and constructed and fire stopped to the satisfaction of the <i>Chief Building Official</i>. <p>1.8.8.3. Clearances</p> <p>1) The vertical distance from the lowest point of a canopy to the <i>street</i> surface shall be no less than 2.75 m.</p> <p>2) The horizontal distance from the outer edge of a canopy to the outer face of the <i>street</i> curb shall be no less than 60 mm, except that where the distance from the lowest point of a canopy to the sidewalk surface is more than 5.2 m, the outer edge of the canopy may extend to the outer face of the <i>street</i> curb.</p> <p>3) A canopy shall be no less than 600 mm from an adjoining property line or from the production of the property line into the <i>street</i>, unless the canopy is constructed entirely of <i>noncombustible</i> materials.</p> <p>4) Despite the provisions of Sentence (3), if a property line is adjacent to a lane, a canopy shall be located no less than 600 mm from the production of the property line into the <i>street</i>.</p> <p>1.8.8.4. Vertical Dimensions of Canopy</p> <p>1) Unless otherwise accepted by the <i>Chief Building Official</i>, the vertical dimensions of the front and sides of a canopy shall not exceed 3.65 m at any point.</p> <p>1.8.8.5. Canopy Not to Span Unprotected Openings</p> <p>1) A canopy shall not span <i>unprotected openings</i> in separate <i>fire compartments</i>.</p> <p>1.8.8.6. Canopy Drainage System</p> <p>1) Unless otherwise permitted by the <i>Chief Building Official</i>, a canopy roof shall be provided with a drainage system conforming to Part 2, Division B, Book II and connected to the <i>building storm water</i> system.</p>
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		<p>2) Downpipes for canopies shall not encroach more than 75 mm in the <i>street</i>.</p> <p>1.8.9. Mechanical Apparatus</p> <p>1.8.9.1. Clearances</p> <p>1) Exterior hose connections for fire-fighting equipment, ventilation intakes and outlets, chimneys and air conditioning units shall not encroach in a <i>street</i> unless permitted by the <i>City Engineer</i>.</p> <p>2) Fire alarm bells and fire gongs may encroach up to 300 mm in a <i>street</i>, except that such encroachments shall be located no less than 2.6 mm above the <i>street</i> surface or established <i>building grade</i>.</p> <p>1.8.10 Emergency Exits</p> <p>1.8.10.1. Stairways and Fire Escapes</p> <p>1) The <i>Chief Building Official</i> may permit stairways and balconies for fire escapes to encroach in a <i>street</i>, except that the lowest part of such stairways and balconies shall be no less than 5.2 m above the <i>street</i> surface.</p> <p>1.8.10.2. Emergency Exit Doors</p> <p>1) Emergency <i>exit</i> doors may encroach no more than 300 mm in a <i>street</i> which is no less than 10 m in width.</p> <p>2) Despite Sentence (1), the <i>City Engineer</i> may permit an emergency <i>exit</i> door to encroach in a <i>street</i> which is less than 10 m in width, provided that such door does not encroach more than 300 mm in the <i>street</i>.</p> <p>Section 1.9. Temporary Occupancy Of A Street For Construction Purposes</p> <p>1.9.1. GENERAL REQUIREMENTS</p> <p>1.9.1.1. Permit Required Prior to Occupancy of Street</p> <p>1) No person shall occupy a <i>street</i> or the air space above a <i>street</i> in connection with, or incidental to the <i>construction</i> or maintenance of any <i>building</i>, without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>1.9.1.2. Permit Required Prior to Excavation in Street</p>
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		<p>1) No person shall excavate or backfill any part of a <i>street</i> without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>1.9.1.3. Liability Disclaimer</p> <p>1) An application for a <i>street use permit</i> shall contain an undertaking by the <i>owner</i> to save harmless the <i>City</i> against all claims, liabilities, judgments, costs and expenses in consequence of, or in any way incidental to the granting of such <i>permit</i> in a form satisfactory to the Director of Legal Services.</p> <p>1.9.2. OVERHEAD CONSTRUCTION</p> <p>1.9.2.1. Permit Required for Overhead Construction</p> <p>1) No person shall cause a swing scaffold or <i>construction</i> hoisting device to occupy the air space above a <i>street</i> without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>1.9.2.2. Prevention of Public Entry</p> <p>1) The <i>street</i> under a swing scaffold or <i>construction</i> hoisting device shall be fenced, roped off or otherwise protected against public entry to the satisfaction of the <i>City Engineer</i>.</p> <p>1.9.3. PUBLIC SAFETY</p> <p>1.9.3.1. Construction Site Protection of the Public Required</p> <p>1) No person shall construct, alter or repair any <i>building</i> unless fencing, boarding, barricades or covered walkways as required by Part 8, Division B, Book I have first been erected on or adjacent to the <i>street</i>, to the satisfaction of the <i>Chief Building Official</i>.</p> <p>2) The <i>Chief Building Official</i> may modify the requirements of Sentence (1) if satisfied that the location of the <i>construction</i> is sufficiently protected or remote from areas frequented by the public.</p> <p>1.9.3.2. Permit Required for Fencing, Boarding, Barricades or Covered Walkways</p> <p>1) No person shall erect fencing, boarding, barricades or covered walkways on a <i>street</i>, without first obtaining a <i>street use permit</i> from the <i>City Engineer</i>.</p> <p>Section 1.10. Addressing Buildings and Parcels of Land</p>
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		<p>1.10.1. ADDRESS NUMBERING SYSTEM</p> <p>1.10.1.1. Numeric Addresses</p> <p>1) Addressing of <i>buildings, suites</i> within a <i>building</i> or parcels of land shall be numeric.</p> <p>1.10.1.2. East/West Addresses</p> <p>1) East/ West addresses shall run in series, commencing with the unit block and increasing in numeric value in a westerly direction from the west side of Ontario Street or the west side of Carrall Street and commencing with the unit block and increasing in numeric value in an easterly direction from the east side of Ontario Street or the east side of Carrall Street.</p> <p>2) <i>Buildings</i> on the north side of <i>streets</i> running in an east or west direction shall have odd numbers, and <i>buildings</i> on the south side of such <i>streets</i> shall have even numbers.</p> <p>1.10.1.3. North/South Addresses</p> <p>1) North/South addresses shall run in series, commencing with the unit block and increasing in numeric value in a northerly direction from the north side of Dundas Street and commencing with the unit block and increasing in numeric value in a southerly direction from the south side of Dundas Street.</p> <p>2) <i>Buildings</i> on the west side of <i>streets</i> running in a north or south direction shall have odd numbers, and <i>buildings</i> on the east side of such <i>streets</i> shall have even numbers.</p> <p>1.10.1.4. Multiple Suite Addresses</p> <p>1) Where a <i>building</i> with a non-continuous public corridor contains multiple addressable <i>suites</i>, addresses of <i>suites</i> on <i>floor areas</i> shall be assigned in an increasing numeric order commencing from the point of entry as determined by the <i>Chief Building Official</i> and moving in a direction as determined by the <i>Chief Building Official</i>.</p> <p>2) Where a <i>building</i> with a continuous public corridor contains multiple addressable <i>suites</i>, addresses of <i>suites</i> on <i>floor areas</i> shall be assigned in an increasing numeric order commencing from the point of entry as determined by the <i>Chief Building Official</i> and moving in a direction as determined by the <i>Chief Building Official</i>.</p> <p>1.10.1.5. Principal Buildings</p> <p>1) Every principal <i>building, secondary suite</i> and <i>laneway house</i> on a site shall be assigned a separate numeric <i>street</i> address where sufficient numeric <i>street</i> addresses are available.</p>
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			<p>2) In the case where three numeric <i>street</i> addresses are available for a site containing a principal <i>building</i>, <i>secondary suite</i> and a <i>laneway house</i>, the first available numeric <i>street</i> address shall be assigned to the principal <i>building</i>, the second available numeric <i>street</i> address shall be assigned to the <i>secondary suite</i>, and the third available numeric <i>street</i> address shall be assigned to the <i>laneway house</i>.</p> <p>3) In the case where only two numeric <i>street</i> addresses are available for a site containing a principal <i>building</i>, <i>secondary suite</i> and a <i>laneway house</i>, the first available numeric <i>street</i> address shall be assigned to the principal <i>building</i> and the <i>secondary suite</i> with <i>suite</i> number 1 assigned to the principal <i>building</i> and <i>suite</i> number 2 assigned to the <i>secondary suite</i>. The second available numeric <i>street</i> address shall be assigned to the <i>laneway house</i>.</p> <p>4) In the case where only one numeric <i>street</i> address is available for a site containing a principal <i>building</i>, <i>secondary suite</i> and a <i>laneway house</i>, the same numeric <i>street</i> address shall be assigned to the principal <i>building</i>, <i>secondary suite</i> and the <i>laneway house</i> with <i>suite</i> number 1 assigned to the principal <i>building</i>, <i>suite</i> number 2 assigned to the <i>secondary suite</i> and <i>suite</i> number 3 assigned to the <i>laneway house</i>.</p> <p>1.10.1.6. Exterior Principal Suite Entry</p> <p>1) Every <i>suite</i> with an exterior principal entry shall be assigned a separate numeric <i>street</i> address.</p> <p>2) Where sufficient numeric <i>street</i> addresses are not available for every <i>suite</i> with an exterior principal entry, an additional <i>suite</i> number shall be assigned to every <i>suite</i>."</p>
C	Part 1	At the end of Part 1	Add Schedule E-1 (attached as Item 12)
C	Part 1	At the end of Part 1	Add Schedule E-2 (attached as Item 13)
C	Part 1	At the end of Part 1	Add Schedule E-3 (attached as Item 14)
C	Part 1	At the end of Part 1	Add Fee Schedule (attached as Item 15)
C	2.1.1.1.	In Sentence (1)	Strike out "Section 692 Of the Local Government Act." And substitute "Section 306 of the Vancouver Charter."
C	2.2.1.1.	In Sentence (1)	Strike out "Section 692 Of the Local Government Act." And substitute "Section 306 of the Vancouver Charter."
C	2.2.1.2.	In Clauses (1)(a) and (b)	Strike out "tradesman's" and substitute "Canadian" wherever it occurs.
C	2.2.1.2.	After Article	Add:

		2.2.1.2.	<p>“2.2.1.3. Personnel Performing Sprinkler System Work</p> <p>1) Persons performing installation, alteration or repair on a <i>sprinkler system</i> shall</p> <p>a) possess a British Columbia industry training credential as a <i>sprinkler system installer</i>, or b) be a trainee supervised by a Sprinkler System Installer qualified under the Industry Training Authority Act.”</p>
C	2.3.1.2.(2)	In Clause (a)	Strike out “Code” and substitute “code”.
C	2.3.1.2.	In Sentences (3), (4), (5) and (6)	Strike out “Code” and substitute “code”.
C	2.3.1.	After Subsection 2.3.1.	<p>Add:</p> <p>“2.3.2. Additional Requirements for Fire Safety Alternative Solutions</p> <p>2.3.2.1. Design Criteria</p> <p>1) Alternative solutions, as described in Article 2.3.1.2., shall be based upon an <i>acceptable</i> report sealed by an <i>acceptable registered professional</i>, which shall include</p> <p>a) a thorough description of the <i>building</i>, b) an analysis of the <i>building</i> that identifies all deviations from the requirements of this By-law, c) the life safety principles considered in developing the proposed alternative solutions and their rationale, based upon NRC fire research reports and reports from other approved agencies where applicable, d) a proposal for alternative solutions, e) an evaluation of the proposed alternative solutions based upon generally recognized studies, f) evidence of reliable performance of the proposed alternative solutions, g) a method of monitoring the design of the proposed alternative solutions, and h) a commitment to perform <i>field review</i> of the proposed alternative solutions.</p> <p>2) The report described in Sentence (1) shall be sufficiently detailed to facilitate evaluation of the proposed alternative solutions.</p> <p>3) Upon acceptable of a proposed alternative solution by the <i>Chief Building Official</i>, the <i>registered professional</i> who has placed their seal on the report shall</p> <p>a) submit a letter assuring that the alternative solution, as installed, will perform as represented in the report, and</p>

			<p>b) submit an acceptable field commissioning and testing report, if requested to do so by the <i>Chief Building Official</i>.</p> <p>2.3.3. Alternative Solution Review Panel</p> <p>2.3.3.1. Request for Review by Alternative Solution Review Panel</p> <p>1) An applicant may apply to the <i>Chief Building Official</i> to request the appointment of an alternative review panel to review an alternative solution application.</p> <p>2) An applicant who requests the appointment of an alternative review panel must pay the fees set out in the Fee Schedule.</p> <p>3) At the request of the applicant, the <i>Chief Building Official</i> may appoint an alternative solution review panel of up to three experts to review the alternative solution application, to hear from the applicant and City staff and to advise the applicant and the <i>Chief Building Official</i> regarding the proposed solution.</p> <p>4) A decision of an alternative solution review panel is not binding on the <i>Chief Building Official</i>.”</p>
C	Part 2	At the end of Part 2	Add Schedule A (attached as Item 16)
C	Part 2	At the end of Part 2	Add Schedule B (attached as Item 17)
C	Part 2	At the end of Part 2	Add Schedule C-A (attached as Item 18)
C	Part 2	At the end of Part 2	Add Schedule C-B (attached as Item 19)
C	Part 2	After Part 2	<p>Add:</p> <p>“Part 3 Appeals, Offences and Penalties and Transition Provisions</p> <p>Section 3.1. Appeals</p> <p>3.1.1. Building Board of Appeal</p> <p>3.1.1.1. Appeal Within 30 Days</p> <p>1) Any person dissatisfied with a decision of the <i>Chief Building Official</i> relating to matters described in Article 3.1.1.2. may appeal the decision to the Building Board of Appeal who shall</p>

		<p>have such powers relating to this By-law as are set out in this By-law and in the Building Board of Appeal By-law.</p> <p>3.1.1.2. Limits of Appeal</p> <p>1) An appeal lies to the Building Board of Appeal from any decision or order of the <i>Chief Building Official</i> regarding</p> <ul style="list-style-type: none"> a) the interpretation of this By-law, b) the use of new <i>construction</i> methods or materials, c) upgrading <i>existing buildings</i> or d) permitting alternative proposals. <p>3.1.1.3. Filing of Appeal</p> <p>1) An application for an appeal shall be filed with the Secretary of the Board, in writing, within 30 days of the decision which gives rise to the appeal.</p> <p>2) An application for an appeal shall include</p> <ul style="list-style-type: none"> a) the address of the <i>building</i> to which the decision relates, b) the applicable provisions of the By-law, and c) sufficient detail to describe the factual and technical basis for the appeal. <p>Section 3.2. Offences and Penalties</p> <p>3.2.1. Violation of By-law</p> <p>3.2.1.1. Offences</p> <p>1) Every person who</p> <ul style="list-style-type: none"> a) violates any of the provisions of this By-law, b) suffers or permits any act or thing to be done in contravention or in violation of any of the provisions of this By-law, c) neglects to do or refrains from doing anything required to be done by any of the provisions of this By-law, d) does any act which violates any of the provisions of this By-law, or e) fails to comply with an order or notice given under this By-law, <p>is guilty of an offence against this By-law and liable to the penalties hereby imposed.</p>
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		<p>3.2.2. Fines and Penalties</p> <p>3.2.2.1. Minimum Fine</p> <p>1) Every person who commits an offence against this By-law is liable to a fine of no less than \$250 and not more than \$10,000 for each offence.</p> <p>3.2.2.2. Continuing Offence</p> <p>1) Every person who commits an offence of a continuing nature against this By-law is liable to a fine of no less than \$250 and not more than \$10,000 for each day such offence is continued.</p> <p>3.2.2.3. Unsafe Condition</p> <p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who permits <i>occupancy</i> to occur while an <i>unsafe condition</i> exists in or about a <i>building</i> or premises is liable to a fine of no less than \$500 and not more than \$10,000 for each offence.</p> <p>3.2.2.4. Failure to Comply with an Order</p> <p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who fails to comply with an order or notice issued by the <i>Chief Building Official</i> is liable to a fine of no less than \$500 and not more than \$10,000 for each offence.</p> <p>3.2.2.5. Work Without a Permit</p> <p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who works without <i>permit</i> is liable to a fine of no less than \$500 and not more than \$10,000 for each offence.</p> <p>3.2.2.6. Failure to Permit Entry</p> <p>1) Despite the minimum fine referred to in Article 3.2.2.1., every person who fails to allow the <i>Chief Building Official</i> entry to a <i>building</i> or premises is liable to a fine of no less than \$500 and not more than \$10,000 for each offence.</p> <p>Section 3.3. Transition Provisions</p> <p>3.3.1. General</p> <p>3.3.1.1. Validity of Permits Issued Under Previous By-law</p> <p>1) Subject to the provisions of Articles 1.5.2.4. and 3.3.1.2., <i>buildings</i> for which <i>permits</i> were</p>
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			<p>obtained under By-law No. 9419 may be constructed in accordance with the provisions of that By-law.</p> <p>3.3.1.2. Grace Period</p> <p>1) Where an <i>owner</i> has applied for a <i>permit</i> prior to July 1, 2014, a <i>building</i> may be constructed in accordance with By-law No. 9419 if, in the opinion of the <i>Chief Building Official</i>, the <i>owner</i> has commenced the work authorized by the <i>permit</i> within 6 months of the date of issuance of the <i>permit</i> and the <i>owner</i> has continued work to completion without interruption other than work stoppages which are standard in the building industry.”</p>
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Diagram B
Still Creek Flood Plain and Flood Construction Levels

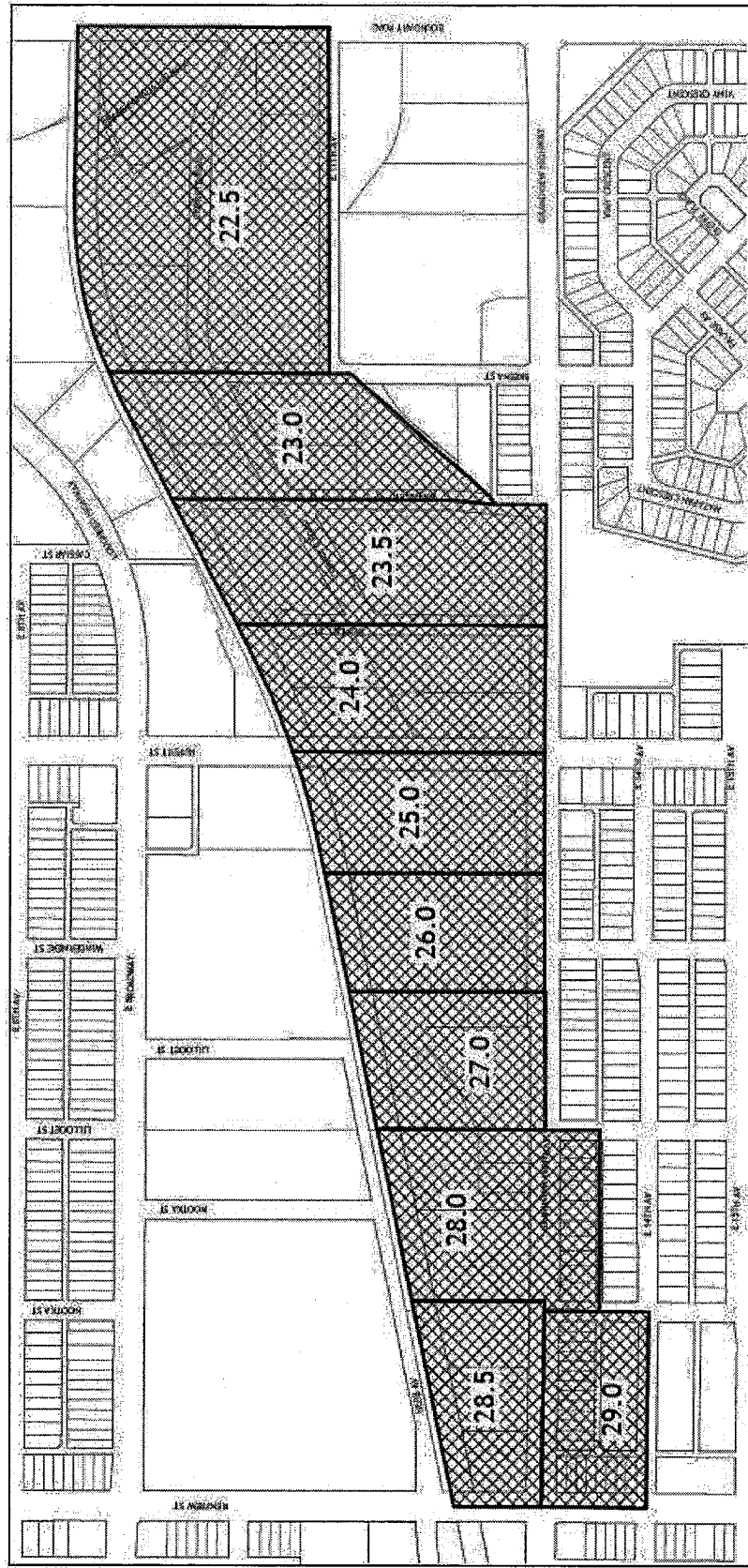


Diagram B Still Creek Flood Plain and Flood Construction Levels

Table 1.1.3.1.A
Climatic Data for the City of Vancouver except Granville Street
and 41st Avenue
Forming Part of Sentence 1.1.3.1.(1)

**Table 1.1.3.1.A
Climatic Data for the City of Vancouver
Except Granville Street & 41st Avenue
Forming Part of Sentence 1.1.3.1.(1)**

1.	January 2.5% Design Temperature	- 7°C
2.	January 1% Design Temperature	- 9°C
3.	July 2.5% Design Dry-bulb Temperature	28°C
4.	July 2.5% Design Wet-bulb Temperature	20°C
5.	Degree-days below 18°C	2825
6.	Ground Snow Load	
	Ground Snow Load, 1/50 (Ss)	1.8 kPa
	Associated Rain Load, 1/50 (Sr)	0.2 kPa
7.	Hourly Wind Pressures	
	Probability 1/10	0.35 kPa
	Probability 1/50	0.45 kPa
8.	Seismic Data:	
	5% Damped Spectral Response Acceleration Sa(T)	
	Sa(0.2)	0.94
	Sa(0.5)	0.64
	Sa(1.0)	0.33
	Sa(2.0)	0.17
	Peak Ground Acceleration, PGA	0.46
9.	15-minute Rainfall	10 mm
10.	One-day Rainfall, 1/50	112 mm
11.	Annual Rainfall	1325 mm
12.	Moisture Index	1.44
13.	Annual Total Precipitation	1400 mm
14.	Driving Rain Wind Pressures, 1/5	160 Pa

Table 1.1.3.1.B
Climatic Data for the City of Vancouver for Granville Street and
41st Avenue
Forming Part of Sentence 1.1.3.1.(1)

Table 1.1.3.1.B
Climatic Data for the City of Vancouver
For Granville Street & 41st Avenue
Forming Part of Sentence 1.1.3.1.(1)

1.	January 2.5% Design Temperature	- 6°C
2.	January 1% Design Temperature	- 8°C
3.	July 2.5% Design Dry-bulb Temperature	28°C
4.	July 2.5% Design Wet-bulb Temperature	20°C
5.	Degree-days below 18°C	2925
6.	Ground Snow Load	
	Ground Snow Load, 1/50 (Ss)	1.9 kPa
	Associated Rain Load, 1/50 (Sr)	0.3 kPa
7.	Hourly Wind Pressures	
	Probability 1/10	0.35 kPa
	Probability 1/50	0.45 kPa
8.	Seismic Data:	
	5% Damped Spectral Response Acceleration Sa(T)	
	Sa(0.2)	0.95
	Sa(0.5)	0.65
	Sa(1.0)	0.34
	Sa(2.0)	0.17
	Peak Ground Acceleration, PGA	0.47
9.	15-minute Rainfall	10 mm
10.	One-day Rainfall, 1/50	107 mm
11.	Annual Rainfall	1325 mm
12.	Moisture Index	1.44
13.	Annual Total Precipitation	1400 mm
14.	Driving Rain Wind Pressures, 1/5	160 Pa

Table 3.1.2.5.
Major Occupancy Classification and Fire Safety Requirements for
Child Care Facilities
Forming Part of Sentence 3.1.2.5.(3)

Table 3.1.2.5.
Major Occupancy Classification and Fire Safety Requirements for Child Care Facilities
 Forming Part of Sentence 3.1.2.5.(3)

Major Occupancy Determination			Fire Safety Requirements for Major Occupancy				
Age of Children (months)	Number of Children ⁶	Major Occupancy Permitted	Sprinkler (suite or entire building)	Fire Alarm	Smoke and CO ₂ Detectors Alarms	Fire Separation From Remainder of Building	Emergency Lighting
≥ 30	≤ 8 and more than 2	C ¹	No	No	Yes	No	Yes ²
< 30	≤ 8 and more than 2	C ¹	Yes ⁵	No	Yes ³	No	Yes ²
Any	≤ 8 and more than 2	C ⁴	Yes ⁵	Yes	Yes ³	2 h	Yes
Any	> 8 and more than 2	A2	Yes	Yes	Yes ³	2 h	Yes

- Notes**
- ¹ Applies to one and two family dwellings or row houses
 - ² Emergency lighting to conform to Subsections 3.2.7. and 9.9.12. where applicable
 - ³ Coverage to include all areas within the suite, except closets and kitchens
 - ⁴ Applies to buildings other than one or two family dwellings or row houses
 - ⁵ Suite only
 - ⁶ Children means persons under the age of 13 years.

Table 3.7.2.12
Bicycle Parking Facilities
Forming Part of Sentence 3.7.2.12.(3)

Table 3.7.2.12
Bicycle Parking Facilities
 Forming Part of Sentence 3.7.2.12.(3)

Required Number of Class A Bicycle Spaces	Minimum Number of Fixtures for Each Gender		
	Water Closets	Wash Basins	Showers
0-3	0	0	0
4-29	1	1	1
30-64	2	1	2
65-94	3	2	3
95-129	4	2	4
130-159	5	3	5
160-194	6	3	6
Over 194	6 plus 1 for each additional 30 bicycle spaces or part thereof	3 plus 1 for each additional 30 bicycle spaces or part thereof	6 plus 1 for each additional 30 bicycle spaces or part thereof

Table 3.8.5.6.
Minimum Fixture Requirements for Bathrooms in Multi-Level
Dwelling Units
Forming Part of Sentence 3.8.5.6.(1)

Table 3.8.5.6.
Minimum Fixture Requirements for Bathrooms in
Multi-Level Dwelling Units
 (Forming Part of Sentence 3.8.5.6.(1))

Total Floor Area of Dwelling Unit (m ²)	Bathroom Required on Lower Floor	Minimum Required Fixtures		
		Washbasin	Toilet	Bathtub or Shower
≤40	No			
>40 to 50	Yes	•	•	
>50	Yes	•	•	•

SCHEDULE D-1

Forming Part of Section 5.1, Division B of the Building By-law

SCHEDULE D-2

Forming Part of Section 5.1, Division B of the Building By-law

Table 10.2.1.1.A
Minimum Thermal Resistance of Insulation RSI, m²°C/W for
Buildings of Residential Occupancy less than 4 Storeys in
Building Height
Forming part of Sentence 10.2.1.1.(2)

Table 10.2.1.1.A Minimum Thermal Resistance of Insulation RSI, m²°C/W for Buildings of Residential Occupancy less than 4 Storeys in Building Height Forming part of Sentence 10.2.1.1.(2)	
Building Assembly	Value Required
Attic Space other than one and two family dwellings ⁽¹⁾	7.0
Attic Space for one and two family dwellings ⁽¹⁾	8.8
Roof Joist Assemblies (Cathedral Ceilings/Flat Roofs)	4.9
Frame Walls other than one and two family dwellings (including frame crawl space walls)	3.5
Frame Walls for one and two family dwellings (including frame crawl space walls) – Effective rating	3.85
Concrete or Masonry Walls (other than foundation walls)	2.1
Suspended Floors (framed)	4.9
Suspended Floors (concrete slab)	2.1
Foundation Walls other than one and two family dwellings	2.1
Foundation Walls for one and two family dwellings - Effective rating	3.85
Concrete Slabs on Ground at, above, or below grade (insulation under all slab area and around edge of slab)	2.1
Radiant Heating Suspended Floor Assembly Over Heated Area (insulation between heated floor and heated area below) ⁽⁴⁾	2.1

Notes to Table 10.2.1.1.A

⁽¹⁾ The thermal resistance rating of attic space insulation may be reduced to value required for frame walls for a distance of 1.0 m from the exterior wall.

⁽²⁾ Deleted.

⁽³⁾ Deleted.

⁽⁴⁾ Not applicable when heating elements or piping are located within a concrete topping on a suspended floor assembly or within an internally heated suspended slab.

Part 11 - Existing Buildings

Part 11 – Existing Buildings

Section 11.1. General

11.1.1. Application

11.1.1.1. Scope

1) The scope of this Part shall be as described in Subsection 1.3.3. of Division A.

11.1.1.2. Application

1) The application of this Part shall be as described in Subsection 1.3.3. of Division A.

11.1.2. Definitions

11.1.2.1. Defined Terms

1) Words that appear in italics are defined in Article 1.4.1.2. of Division A.

Section 11.2. Upgrade Application

11.2.1. Upgrade Requirements

11.2.1.1. Upgrade Objectives

1) An *alteration* to an *existing building* shall trigger upgrading of the *existing building* to meet the following objectives

a) all *unsafe conditions* shall be corrected to an *acceptable* level,

b) all new materials and *construction* work shall comply with this By-law,

c) the *building* shall be upgraded to an *acceptable* level of fire, life and health safety, structural safety, non-structural safety, accessibility for persons with disabilities, and energy efficiency,

(d) any significant extension of the design life of an *existing building* beyond its original design life shall require upgrading to an *acceptable* level,

e) an *alteration* to an individual *suite* within an *existing building* will not trigger upgrades within any other *suites* except where the *alteration* creates non-conformity with the By-law within such other *suites*, and

f) the level of life safety and *building* performance shall not be decreased below the existing level.

11.2.1.2. General Requirements

(See Appendix A)

1) Where *construction* of *existing buildings* occurred before the effective date of this By-law,

reconstruction or *alteration of existing buildings* is not a requirement of this By-law, except as required by Articles 11.2.1.3. to 11.2.1.11. inclusive.

2) Except as provided in Sentences (3) to (9) inclusive, and Articles 11.2.1.3. to 11.2.1.11. inclusive, where an *alteration* is made to an *existing building*, the *alteration* shall comply with this By-law and the *existing building* shall be

a) upgraded to an *acceptable* level as defined in the *existing building* upgrade mechanism model in Division B Appendix A (See Appendix Note A-11.2.1.2.), or

b) upgraded to the satisfaction of the *Chief Building Official* where the *owner* demonstrates that the design levels, as defined by the upgrade mechanism model in Division B Appendix A, present a hardship for the *owner*.

3) Where an alteration does not involve an addition or a change in major occupancy, except for a change of major occupancy to a small suite, further upgrading to an *existing building* is not a requirement of this By-law provided

a) construction or a full upgrade of the *building* occurred on or after July 1, 1994,

b) all *unsafe conditions* are corrected to the satisfaction of the *Chief Building Official*, and

c) all new work is in compliance with this By-law.

4) Where a voluntary upgrade for fire alarm systems, sprinkler systems, exits, accessibility, seismic work, washrooms or kitchens for single room accommodations, energy efficiency or *building* envelope repair is carried out, no further upgrade of the *building* is required except that, where other work is included in the application, the upgrade requirement will only be based on the non-voluntary work proposed.

5) Where voluntary *building* envelope repair involves more than 60 per cent of one vertical section of an exposed *building* face, the *building* envelope on the entire vertical section of that exposed *building* face shall be replaced, except that this Sentence does not apply to one and two-family dwellings.

6) Where there is a change of major occupancy to a Post Disaster occupancy as defined in Table 4.1.2.1., or where there is a major addition to a Post Disaster *building*, the entire *building* shall be upgraded to design upgrade levels F4, S4, N4, A4 and E5 as detailed in the upgrade mechanism model in Division B Appendix A.

7) Where there is a temporary change of major occupancy to an *assembly occupancy* for an *arts and culture indoor event* in a *building* which is classified as Group E retail, Group F Division 2 production or rehearsal studio, wholesale, warehouse, or factory, or Group F Division 2 artist studio without living accommodations, the upgrade requirements shall be based solely on Section 11.6.

8) Where there is a change of major occupancy in a *building*, and the aggregate area of the change in major occupancy within any 5 year period is greater than 50 per cent of the *building* area in a one storey *building* or greater than 100 per cent of the *building* area in a *building* of more than one storey, the entire *building* shall be upgraded to design upgrade levels F4, S4, N4, A4 and E5 as detailed in the upgrade mechanism model in Division B Appendix A.

9) The upgrade requirements for energy efficiency to *existing buildings* shall conform to the upgrade mechanism model in Division B Appendix A for energy efficiency except for

a) *buildings* designed and constructed in conformance with ASHRAE 90.1-2007,

b) *buildings* designed and constructed in conformance with Article 9.25.2.1. Division B of *Building* By-law No.9419, and

c) *buildings* where the alteration is limited to the upgrade of energy related specific equipment, as listed in Table 11.2.1.2, provided the replacement equipment complies with industry standards for "high efficiency".

Table 11.2.1.2 Energy Related Equipment	
Equipment Type	Specific Equipment

Basic Building Systems	Boilers
	Furnaces
	Hot Water Tanks
	Lighting Systems
	Energy Reduction Sensors (occupant, light, etc.)
Renewable Energy Systems	Photovoltaic system
	Solar Thermal system
	Biofuel-based Energy system
	Geothermal Heating system
	Geothermal Electric system
	Wave & Tidal Power system
High Performance Energy Systems	Ground Source Heat Pump system
	Air Source Heat Pump system
	Waste Heat Recovery system

11.2.1.3. Sprinkler Installation Requirements for the Addition of Dwelling Units in Multi-family Buildings (See Appendix A)

1) Except as provided in Sentence (2), where an alteration to an *existing building* creates or adds one or more dwelling units, the *building* shall be sprinklered in conformance with Table 11.2.1.3.

2) Where the alteration in Sentence (1) involves the addition of existing floor space to an existing dwelling unit, and that converted space is greater than 50 per cent of the floor area of the original dwelling unit, the altered dwelling unit shall be considered as a new dwelling unit and the *building* shall be sprinklered in conformance with Table 11.2.1.3.

3) If sprinklers are required by Table 11.2.1.3., they shall be installed throughout the storey on which the new dwelling unit is to be located and all storeys immediately below the new dwelling unit.

Existing Dwelling Units	New DUs ¹ Added Over Any 5 year Period ²				
	1	2-3	4-5	6	>6
1	Spr R ³	Spr R	Spr R	Spr R	Spr R
2-4	-	Spr R	Spr R	Spr R	Spr R
5-10	-	-	Spr R	Spr R	Spr R
11-20	-	-	-	Spr R	Spr R
>20	-	-	-	-	Spr R

Notes: ¹ Dwelling Units

² The creation of dwelling units over the previous 5 years from the date of the proposed *building* permit application

³ Sprinklers Required

11.2.1.4. Upgrade Requirements for One and Two Family Dwellings

1) Except as required in Sentences (3) and (4) and Subsection 11.4, where an alteration is made to a one family or two family dwelling, the level of upgrade shall conform to Sentence (2), provided

- a) the alteration is not a change of major occupancy,
- b) the alteration does not create more dwelling units,
- c) all new work is in compliance with this By-law, and
- d) the value of the alteration is less than or equal to 50 per cent of the replacement value of the *existing building*.

2) Where the provisions of Sentence (1) apply to an alteration to a one family or two family dwelling,

- a) all unsafe guards, handrails and stairs shall be upgraded to the satisfaction of the Chief *Building Official*,
- b) smoke alarms shall be installed in conformance with Subsections 3.2.4. and 9.10.19.,
- c) carbon monoxide alarms shall be installed in conformance to Subsections 6.2.4. and 9.32.4.,
- d) all existing exterior wood frame walls shall be anchored to existing concrete foundation walls for seismic resistance where the proposed scope of work will expose all foundation walls and interfacing exterior wood frame walls, and
- e) the energy efficiency of the *building* shall be upgraded in conformance with Table 11.2.1.4.

Table 11.2.1.4. Energy Efficiency Upgrade for One and Two Family Dwellings	
Const. Value (\$)	Upgrade Level
≤5K	Not Required
>5 ≤25K	A and B
>25 ≤50K	A, B, and C
>50K	A, B, C and D

Notes

- Level A – Submit an EnerGuide (EGH) report completed within the last 4 years
- Level B – Where work includes a new boiler or furnace, annual fuel utilization efficiency (AFUE) shall be ≥90 per cent
- Level C – Where EGH > 5 air changes per hour, *building* envelope air sealing is required
- Level D – Where attic insulation <R12 (2.11RSI), increase to R28 (4.93RSI); where attic insulation ≥R12 (2.11RSI), increase to R40 (7.04RSI); and all flat roof and cathedral ceiling insulation shall be upgraded to ≥R14 (2.47RSI). Note: attic insulation shall not exceed R43.7 (7.7RSI)

3) Where the value of the alteration to a one family or two family dwelling exceeds 50 per cent of the replacement value of the *existing building*, a sprinkler system shall be installed throughout the *building*.

4) Where an alteration to a one family or two family dwelling does not fall within the scope of Clauses (1)(a),(b) or (d) and Subsection 11.4., the *building* shall be upgraded to an *acceptable* level as determined by the upgrade mechanism model in Division B Appendix A.

11.2.1.5. Self-contained Separated Spaces

1) Where an alteration to a *building* is a self-contained volumetric space that is separated from the remainder of the *building* by a non-combustible vertical or horizontal fire separation with a 2 h fire resistance rating, the upgrade requirements of this Part do not apply to the remainder of the *building* provided

- a) the self-contained volumetric space is upgraded in conformance with this By-law,
- b) the self-contained volumetric space does not exit through the remainder of the *building*,
- c) a non-combustible vertical fire separation with a 2h fire resistance rating is constructed as a continuous vertical fire separation from the *building* foundation to the underside of the roof

sheathing,

d) a non-combustible horizontal fire separation with a 2h fire resistance rating is constructed as a continuous horizontal fire separation of the *building* and terminates at the exterior cladding of the exterior walls of the *building*, and

e) the self-contained volumetric space does not reduce the existing structural capacity of the *building*.

2) Where a horizontal addition to a *building* is a self-contained separate volumetric space that is separated from the remainder of the *building* by a non-combustible vertical fire separation with a 2h fire resistance rating, the upgrade requirements of this Part do not apply to the remainder of the *building*, provided

a) the self-contained separate volumetric space is upgraded in conformance with this By-law,

b) the self-contained separate volumetric space does not exit through the remainder of the *building*, and

c) the non-combustible vertical fire separation with a 2h fire resistance rating is constructed as a continuous vertical fire separation from the *building* foundation across the entire interface of the *existing building* and the addition, and

d) the self-contained separate volumetric space does not reduce the existing structural capacity of the *building*.

11.2.1.6. Relocated Buildings

1) Where a *building* is relocated from another municipality to the City, from another lot within the City or within its existing lot, the *building* shall be upgraded to Design Upgrade Levels F4, S4, N4, A4 and E5, as determined by the upgrade mechanism model in Division B Appendix A.

11.2.1.7. Relocated Property Lines

1) Where property lines are relocated closer to a *building*, the *building* shall be upgraded to conform to the spatial requirements, fire department access requirements and means of egress requirements of this By-law or the applicant shall demonstrate that the relocated property lines and the *existing building* configuration comply with this By-law.

11.2.1.8. Demolished Buildings

1) Where a *building* is being demolished in whole or in part, the demolition work shall conform to the requirements of Part 8 and any part of the *building* that remains after demolition shall be upgraded in conformance with Article 11.2.1.2.

11.2.1.9. Damaged Buildings

1) Where a *building* has been damaged, all work necessary to reconstruct the damaged portions of the *building* shall conform to this By-law and the Fire By-law and the remainder of the *building* shall be upgraded in conformance with Article 11.2.1.2.

11.2.1.10. Fire Department Order

1) Where an order issued under the Fire By-law requires upgrading of a *building*, the *Chief Building Official* may allow deviations from this By-law.

11.2.1.11. Specific Upgrade Requirements for Float Homes and Marinas

1) Except as permitted by Sentence (2), where a *marina* is *altered*, all new work shall comply with Subsection 12.2.2. and the *marina* shall be upgraded to an *acceptable* level as determined by the upgrade mechanism model in Division B Appendix A.

2) Except as required by Sentence (3), Sentences 12.2.2.2.(1), 12.2.2.3.(3), 12.2.2.6.(1), 12.2.2.6.(2), 12.2.2.7.(1), and 12.2.2.8.(1) need not apply to a *marina*.

3) Where the total value of the *alteration to a marina* exceeds 50 per cent of the value of the *marina* as determined at the application stage for the alteration, then the *marina* shall comply with this Subsection 12.2.2.

4) Where a *float home* is *altered*, all new work shall comply with Subsection 12.2.2 of Division B and this By-law, and the float home shall be upgraded to an *acceptable* level as determined by the upgrade mechanism model in Division B Appendix A.

5) A *marina* shall have an occupancy classification as specified in Sentences 12.2.2.1. (5) and (6) of Group F Division 3.

Section 11.3 Alternative Acceptable Solutions for Existing Conditions to Assist Rehabilitation

11.3.1. Application

11.3.1.1. Application of Alternative Acceptable Solutions for Existing Conditions

1) Except as permitted in Sentence (3), the alternative *acceptable* solutions provided in this Section are to be applied to existing conditions only and are not to be applied to new work which must comply with the requirements for new construction in other Parts of this By-law.

2) Where the *building* is a *heritage building*, the alternative *acceptable* solutions in Section 11.5 may be applied to existing conditions.

3) The alternative *acceptable* solutions provided in Subsection 11.3.2. do not apply to newly constructed *buildings*.

4) Alterations to newly constructed *buildings*, as determined by Sentence (3), shall comply to Parts 1 to 10 of Division B in Book I and Parts 1 to 2 of Division B in Book II.

11.3.1.2. Conditions for Using Alternative Acceptable Solutions

1) Where a *building* or a portion of a *building* is required to comply with this By-law under Subsection 11.2.1., the provisions contained in this Section may be applied as alternative *acceptable* solutions to those requirements contained elsewhere in this By-law, under the conditions specified in Sentences (2) to (7), provided the *building* was originally constructed pursuant to a *building* permit issued prior to July 01, 1994.

2) Except for *additions* and new *construction*, where Subsection 3.2.2. requires that the construction of a *building* be *noncombustible*, the applicable Article in Subsection 11.3.2. may be applied as an alternative provided all of the requirements of the Article have been met.

3) Except for *additions* and new *construction*, where the spatial separation and exposure protection requirements of Subsection 3.2.3. require that the exterior wall construction of a *building* to be *noncombustible*, Subsection 11.3.3. may be applied.

4) Where the fire containment measures of a *building* are deficient, Subsections 11.3.4. and 11.3.6. may be used as an alternative.

5) Where the *exits* in a *building* are deficient, Subsections 11.3.5. and 11.3.6. may be used as an alternative.

6) Where a *building* is *sprinklered* throughout, the applicable relaxations of Subsection 11.3.6. may be applied as an alternative.

7) Where a *building* is designated as a *heritage building*, alternate *acceptable* solutions as detailed in Section 11.5. may be applied.

11.3.2. Construction and Building Safety Alternatives

11.3.2.1. Group A1 up to 600 Auditorium Occupants

1) A Group A, Division 1 *occupancy* having an *occupant load* of no more than 600 may be permitted within the *first* and second *storey* of a *building* provided the *building* conforms to Sentence (2).

2) A *building* referred to in Sentence (1) shall

a) be upgraded to comply with Sentence 3.2.2.21.(2), except that all floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

b) be provided with a fire alarm and detection system conforming to Subsection 3.2.4., notwithstanding any exemptions permitted by Article 3.2.4.1.,

c) be provided with lighting and emergency power systems conforming to Subsection 3.2.7.,

d) be upgraded to provide all *exit* locations with a maximum travel distance of 22.5 m for *sprinklered buildings* and 15 m for *unsprinklered buildings*,

e) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

f) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

g) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

h) except as permitted in Subsections 11.3.5. and 11.3.6. and as required by Clause (d), be upgraded to provide *exit* systems conforming to Section 3.4.

11.3.2.2. Group A1 up to 300 Auditorium Occupants

1) A Group A, Division 1 *occupancy* having an auditorium *occupant load* of no more than 300, may be permitted within the *first* and second *storey* of a *building*, provided the *building* conforms to Sentence (2).

2) A *building* referred to in Sentence (1) shall

a) be upgraded to comply with Sentence 3.2.2.22.(2), except that all floor assemblies shall be *fire separations* with a fire resistance rating no less than 1 h,

b) be provided with a fire alarm and detection system conforming to Subsection 3.2.4., notwithstanding any exemptions permitted by Article 3.2.4.1.,

c) be provided with lighting and emergency power systems conforming to Subsection 3.2.7.,

d) be upgraded to provide all *exit* locations with a maximum travel distance of 22.5 m for *sprinklered buildings* and 15 m for *unsprinklered buildings*,

e) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

f) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

g) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

h) except as permitted in Subsections 11.3.5. and 11.3.6. and as required by Clause (d), be upgraded to provide *exit* systems conforming to Section 3.4.

11.3.2.3. Group A2 in Building More Than 3 Storeys

1) A Group A, Division 2 *occupancy* may be permitted within the first 3 *storeys* of a *building* which is more than three *storeys* in *building height*, provided the *building* conforms to Sentence (2), and provided

a) where the *occupancy* is located on the third *storey* or where the *building area* exceeds 400 m², the entire *building* shall be *sprinklered* or

b) where the *occupancy* is located on the *first* or second *storey*, the *building* shall be *sprinklered* up to and including the *storey* containing the Group A2 *occupancy*.

2) A *building* referred to in Sentence (1) shall conform to Sentence 11.3.2.4.(2).

11.3.2.4. Group A2 Up to 3 Storeys

1) A Group A, Division 2 *occupancy* may be permitted in a *building* no more than three *storeys* in *building height*, provided

a) the *building* conforms to Sentence (2), and

b) the entire *building* is *sprinklered*, where

i) the *building area* exceeds 400 m², or

ii) the *occupancy* is located on the third *storey*.

2) A *building* referred to in Sentence (1) shall

a) be upgraded to conform to Sentence 3.2.2.25.(2),

b) be provided with a fire alarm and detection system conforming to Subsection 3.2.4., notwithstanding any exemptions permitted by Article 3.2.4.1.,

c) be provided with lighting and emergency power systems conforming to Subsection 3.2.7.,

d) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

e) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

f) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

g) except as permitted in Subsections 11.3.5. and 11.3.6., be upgraded to provide *exit* systems conforming to Section 3.4.

11.3.2.5. Group B2 Ambulatory Occupants

1) A Group B, Division 2 *occupancy* containing only occupants that are capable of walking up or downstairs unaided may be permitted within the first 3 *storeys* of a *building*, provided the entire *building* is *sprinklered* and conforms to Sentence (2),.

2) A *building* referred to in Sentence (1) shall

a) be upgraded to conform to Sentence 3.2.2.40.(2),

b) be provided with a fire alarm and detection system conforming to Subsection 3.2.4. where the *building* contains more than 2 *storeys* including *storeys* below *grade* or where the *building area* exceeds 250 m² regardless of the *occupant load*,

c) be provided with lighting and emergency power systems conforming to Subsection 3.2.7.,

d) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

e) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism

model in Division B Appendix A,

f) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

g) except as permitted in Subsections 11.3.5. and 11.3.6., be upgraded to provide *exit* systems conforming to Section 3.4.

11.3.2.6. Group B2 Non-ambulatory Occupants

1) A Group B, Division 2, non-ambulatory *occupancy* may be permitted only within a *storey* of a *building* which has direct or ramped access to ground level, provided the entire *building* is *sprinklered* and conforms to Sentence (2).

2) A *building* referred to in Sentence (1) shall

a) be upgraded to conform to Sentence 3.2.2.40.(2),

b) be provided with a fire alarm and detection system conforming to Subsection 3.2.4. where the *building* contains more than 2 *storeys* including *storeys* below *grade* or where the *building area* exceeds 250 m² regardless of the *occupant load*,

c) be provided with lighting and emergency power systems conforming to Subsection 3.2.7.,

d) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

e) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

f) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

g) except as permitted in Subsections 11.3.5. and 11.3.6., be upgraded to provide *exit* systems conforming to Section 3.4.

11.3.2.7. Group C More Than 3 Storeys

1) A Group C *occupancy* may be permitted in a *building* more than 3 *storeys* in *building height* provided the entire *building* is *sprinklered* and conforms to Sentence (2).

2) A *building* referred to in Sentence (1) shall

a) be upgraded to conform to Sentence 3.2.2.50.(2), provided the *building* conforms to Clause 3.2.2.50.(1)(c),

b) be provided with a fire alarm and detection system conforming to Subsection 3.2.4.,

c) be provided with lighting and emergency power systems conforming to Subsection 3.2.7.,

d) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

e) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

f) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

g) except as permitted in Subsections 11.3.5. and 11.3.6., be upgraded to provide *exit* systems conforming to Section 3.4.

11.3.2.8. Group D Occupancies

1) A Group D *occupancy* may be permitted in a *building* that exceeds 3 *storeys* in *building height*

provided that the entire *building* is *sprinklered* and conforms to Sentence (2).

2) A *building* referred to in Sentence (1) shall

1) be upgraded to conform to Sentence 3.2.2.58.(2) provided the limitations of Table 3.2.2.55. are not exceeded,

b) where the limitations of Table 3.2.2.55. are exceeded, be upgraded to conform to Sentence 3.2.2.55.(2), except that existing *combustible construction* shall be permitted,

c) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

d) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

e) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

f) except as permitted in Subsections 11.3.5. and 11.3.6., be upgraded to provide *exit* systems conforming to Section 3.4.

11.3.2.9. Group E Occupancies

1) A Group E *occupancy* may be permitted in a *building* provided that the *building* conforms to Sentence (2). except that where the *building* exceeds 1000 m² in *building area*, or 3 *storeys* in *building height* the entire *building* shall be *sprinklered*

2) A *building* referred to in Sentence (1) shall

a) be upgraded to conform to Sentence 3.2.2.64.(2) provided the *building* is no more than 4 *storeys* in *building height* and the *building area* is no more than 1800 m²,

b) except as required in Clause (c), be upgraded to conform to Sentence 3.2.2.63.(2) provided the *building* is no more than 6 *storeys* in *building height* and the *building area* conforms to Table 11.3.2.9.

c) be upgraded to conform to Sentence 3.2.2.62.(2), except that existing *combustible construction* and floor assemblies with a 1 1/2 h *fire separation* shall be permitted, when the *building* is more than 6 *storeys* in *building height*,

d) except as permitted in Subsection 11.3.3., be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3.,

e) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

f) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

g) except as permitted in Subsections 11.3.5. and 11.3.6., be upgraded to provide *exit* systems conforming to Section 3.4.

Table 11.3.2.9.			
Forming Part of Sentence 11.3.2.9.(2)			
No. of Storeys	Sprinklered Maximum Area, m²		
	Facing 1 Street	Facing 2 Streets	Facing 3 Streets
1	Unlimited	Unlimited	Unlimited
2	7 500	Unlimited	Unlimited
3	5 000	6 250	7 500
4	3 750	4 688	5 625

5	3 000	3 750	4 500
6	2 500	3 125	3 750

11.3.2.10. Group F2 or F3 Occupancies

1) A Group F, Division 2 or 3 occupancy may be permitted in a *building*, provided that the *building* conforms to Sentence (2) except that where the *building* exceeds 1000 m² in *building area*, or 2 storeys in *building height*, the entire *building* shall be sprinklered.

2) A *building* referred to in Sentence (1) shall

a) be upgraded to conform to Sentence 3.2.2.74.(2), and Table 11.3.2.10, except that roofs of *combustible construction* shall only be permitted in *buildings* with a *building area* no greater than 4800 m²,

b) except as required in Clause (c), where the limitations of Table 11.3.2.10. are exceeded, be upgraded to conform to Sentence 3.2.2.73.(2), except that existing *combustible construction* shall be permitted,

c) be upgraded to conform to Article 3.2.2.72.(2), when the *building* is more than 6 storeys in *building height*, except that existing *combustible construction* and floor assemblies with a 1 1/2 h *fire separation* shall be permitted,

d) be upgraded to provide exterior wall and opening protection conforming to Subsection 3.2.3., except as permitted in Subsection 11.3.3.,

e) be structurally upgraded to the design upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,

f) except as permitted in Subsections 11.3.4. and 11.3.6., be upgraded to comply with the fire containment requirements within a *floor area* conforming to this By-law, and

g) except as permitted in Subsections 11.3.5. and 11.3.6., be upgraded to provide *exit* systems conforming to Section 3.4.

**Table 11.3.2.10.
Forming Part of Sentence 11.3.2.10.(2)**

No. of Storeys	Sprinklered Maximum Area, m ²		
	Facing 1 Street	Facing 2 Streets	Facing 3 Streets
1	9 000	11 250	13 500
2	4 500	5 625	6 750
3	3 000	3 750	4 500
4	2 250	2 812	3 375
5	1 800	2 250	2 700
6	1 500	1 875	2 250

11.3.2.11. Combustible Construction for Minor Repairs

1) See Article 1.5.2.9. of Division C.

11.3.3. Spatial Separation Alternatives

11.3.3.1. General

1) Except for *additions* and new *construction*, where the exterior wall of a *building* is required by Parts 3 and 9 to be of *noncombustible construction*, the provisions of this Subsection may be used as an alternative *acceptable* solution to the spatial separation requirements of Parts 3 and 9.

11.3.3.2. Exterior Wall Construction

1) In a *building* of Group B or C *occupancy*, existing *combustible construction* may be retained in an existing exterior wall provided

- a) the wall has at least a 1 h fire-resistance rating,
- b) the *building* is *sprinklered*, and
- c) all voids in the wall are completely filled with *noncombustible* insulation and fire stopped.

2) In a *building* of other than Group B or C *occupancy*, existing *combustible construction* may be retained in an existing exterior wall provided the wall has at least a 1 h *fire-resistance rating*, and

- a) the *building* is *sprinklered*, or
- b) all voids in the wall are completely filled with *noncombustible* insulation and fire stopped.

3) When an existing exterior wall requires a 2 h *fire-resistance rating*, existing *combustible construction* may be retained provided

- a) the wall has at least a 1 h *fire-resistance rating*,
- b) the *building* is *sprinklered*, and
- c) all voids in the wall are completely filled with *noncombustible* insulation and fire stopped.

11.3.3.3. Exterior Cladding

1) Existing *combustible* cladding may be retained provided

- a) the *building* is *sprinklered* using fast-response heads,
- b) the exterior cladding is treated with *acceptable* exterior quality fire retardant intumescent paint, and
- c) all exterior windows contain wired or safety glass in steel frames.

11.3.3.4. Existing Unprotected Openings

1) Where the *limiting distance* is less than 900 mm, existing *unprotected openings* may be retained, provided

- a) the openings are constructed of glass block, wired glass, tempered glass or laminated safety glass, and the *building* is *sprinklered* using fast-response heads, or
- b) *acceptable* self-closing fire protection shutters are installed at the existing opening locations.

2) Except as provided in Sentence (3), where a *limiting distance* is 900 mm or more, existing *unprotected openings*, which have a total area exceeding the values listed in or extrapolated from Tables 3.2.3.1.B, 3.2.3.1.C, 3.2.3.1.D or 3.2.3.1.E, may be retained, provided

- a) the openings are constructed of glass blocks or wired glass, or
- b) the *building* is *sprinklered* with fast-response heads.

3) Existing *unprotected openings* in *dwelling units* may be retained where the distance from the adjacent property line is 900 mm or more, except that

a) where the distance from a bedroom window to the adjacent property line is less than 900 mm, protection as required in Sentence (2) shall be provided.

11.3.4. Alternatives for Fire Containment and Separation

11.3.4.1. Public Corridors

1) Existing *public corridor* walls, serving Group A Division 2, D, E, F Division 2 and F Division 3 *occupancies*, required to have a *fire-resistance rating* exceeding 45 min may be terminated at the underside of a 30 min ceiling membrane, where the public corridors are equipped with *acceptable smoke detectors* connected to the *building* fire alarm system.

11.3.4.2. Occupancy and Suite Separations

1) Existing vertical *occupancy fire separations* and *suite fire separations* in Group A Division 2, D, E, F Division 2 and F Division 3 *occupancies*, need not exceed a 1 h *fire-resistance rating* provided *acceptable smoke detectors* are installed on each side of such separations and are connected to the *building* fire alarm system.

11.3.4.3. Alternative to 20 Minute Doors

1) An existing door assembly may be retained in place of a required door assembly with a 20 min *fire-protection rating* provided

a) a solid core wood door has a minimum thickness of no less than 45 mm, or

b) a hollow core or panel type *suite* door has a layer of gypsum wallboard on the *suite* side covered by a minimum 0.9 mm thick sheet steel which extends over the edges of the door.

11.3.5. Alternatives for Exits

11.3.5.1. General

1) Except as permitted in Articles 11.3.5.2. and 11.3.5.3. and in Subsection 11.3.6., every *floor area* or other space shall be served with *exits* in conformance with Section 3.4.

11.3.5.2. Openings in an Exit Enclosure

1) A maximum of 2 *suite* doors or 2 room doors per *storey* may be located within an *exit* enclosure provided

a) the *exit* enclosure is not required to have a *fire-resistance rating* of more than 1 h,

b) the *suites* or rooms have a second and separate *means of egress*, and

c) the *suite* or room doors have a *fire-protection rating* of 45 min, are self-closing and self-latching and do not lock automatically.

2) *Exit* stairs shall be enclosed as required in Subsection 3.4.4. except that existing *exit* enclosures may have

a) wired glass set in steel frames conforming to Article 3.1.8.14. only in the portion of the enclosure which faces a *public corridor*, and

b) in *sprinklered buildings*, *acceptable* hold-open devices actuated by *smoke detectors* and the *building* fire alarm system.

11.3.5.3. Group C Single Exit

1) A single *exit* is permitted from an existing non *sprinklered dwelling unit* provided

a) the *exit* is an exterior doorway located no more than 1.5 m above adjacent ground level,

b) the total area served by the *exit* door does not exceed 100 m²,

- c) the maximum travel distance within the *dwelling unit* does not exceed 15 m, and
- d) it is not necessary to travel up or down more than one *storey* to reach the *exit* door, or
- e) the uppermost floor level opens from a common area to an unenclosed balcony or deck no more than 6 m above adjacent ground level.

11.3.6. Alternatives For Sprinklered Buildings

11.3.6.1. General

1) The alternative *acceptable* solutions in Articles 11.3.6.2. to 11.3.6.9. may be used in a *building* where

- a) the *building* is *sprinklered* in conformance with Subsection 3.2.5., and
- b) the *building* has a fire alarm system in conformance with Subsection 3.2.4.

11.3.6.2. Group C and D Fire Containment

1) The *fire separation* between a Group C or D occupancy and the remainder of a *building* which is no more than 3 storeys in *building height* need not exceed a *fire-resistance rating* of 45 min.

2) Existing lath and plaster, properly restored to its original condition, may be accepted by the *Chief Building Official* as meeting the *fire separation* requirements in Sentence (1).

11.3.6.3. Occupancy Separations

1) The existing *fire-resistance rating* for an *occupancy* separation in a *building* need not exceed 1 h when the By-law requires 2 h for new construction and 45 min when the By-law requires 1 h for new construction.

11.3.6.4. Flame Spread Rating

1) The *flame-spread rating* for an existing wall or ceiling finish may be increased to 300 for no more than 25 per cent of the wall or ceiling area, provided the wall or ceiling has no exposed foamed plastic.

11.3.6.5. Fire Dampers

1) Where a *fire separation* is permitted to have a 45 min *fire-resistance rating*, a *fire damper* is not required for existing *noncombustible* ducts less than 0.065 m² in cross-sectional area.

11.3.6.6. Plastic Sprinkler Piping

1) Plastic sprinkler piping may penetrate a vertical *fire separation* provided

- a) the piping and its installation are listed by an *acceptable* testing agency, and
- b) the piping is tightly fitted or fire stopped to maintain the integrity of the separation.

11.3.6.7. Smoke-Venting in High Buildings

1) Existing means of venting which are capable of removing smoke to aid firefighting may penetrate exterior openings and existing shafts in adjacent fire compartments.

11.3.6.8. Alternatives for Dead-end Public Corridors

1) In a *building* provided with a *sprinkler system* with fast-response heads, existing public corridors which have *smoke detectors* installed and connected to the fire alarm system may contain existing dead-end public corridors of lengths not exceeding 10 m to the nearest *exit* in Group C *occupancies* and 15 m to the nearest *exit* in Group D, Group E, Group F Divisions 2 and Group F Division 3 *occupancies*.

2) In a *building* containing *exits* conforming to Article 11.3.6.9., one existing dead-end public

corridor per floor may be permitted provided

- a) the existing dead-end public corridor does not exceed the lengths specified in Sentence (1),
- b) each *exit* stair serving the existing dead-end *public corridor* contains a smoke barrier between each *storey*, which prevents smoke from entering stairways and allows access to other stairways, and which may have a door equipped with an *acceptable* hold-open device actuated by a local smoke detector circuit, and
- c) the entire *building* is sprinklered with fast-response heads.

11.3.6.9. Alternatives for Exits

1) Existing open *exit* stairways located at the ends of *public corridors* need not be enclosed provided

- a) the *building* does not exceed 3 *storeys* in *building height*,
- b) there is a smoke barrier located within each *public corridor* approximately midway between the *exit* stairways, which
 - i) has a door provided with an *acceptable* hold-open device actuated by the fire alarm system and *smoke detectors* on that floor,
 - ii) is constructed of tempered or wired glass, or has a *fire-protection rating* of no less than 20 min, and
 - iii) is designed to retard the passage of smoke,
- c) the *public corridor* contains no dead-ends,
- d) the *public corridor* on both sides of the smoke barrier is continuously pressurized, and
- e) the entire *building* is sprinklered with fast-response heads.

2) Wired glass in steel frame exposure protection for exterior fire escapes need not be provided in an *existing building* provided

- a) there is at least one *exit* enclosure which conforms to this By-law and which leads directly to the exterior of the *building*,
- b) access to the fire escape is by means of a full-size door at each floor level,
- c) the fire escape leads directly to *grade* level or leads to *grade* level by means of an interior stair enclosure no less than 750 mm in width,
- d) a sprinkler head is located on the ceiling adjacent to and within 1 500 mm of each opening requiring protection, and
- e) the entire *building* is sprinklered with fast-response heads.

3) Where a *building* is provided with a *sprinkler system* with fast-response heads, existing *exit* doors may be retained provided they do not swing over stairs or significantly impede safe egress and the *Chief Building Official* is satisfied that the existing *exit* door swing and existing *exit* and corridor widths substantially comply with the requirements of Section 3.4.

Section 11.4 Alternative Acceptable Solutions for the Conversion of Existing Buildings

11.4.1. Application

11.4.1.1. Alternative Acceptable Solutions for Existing Conditions

- 1)** The alternative *acceptable* solutions for conversions in this Section apply to existing conditions only and do not apply to new work, which must conform to the requirements for new construction in this By-law.
- 2)** Except as required by this Section, the alternative *acceptable* solutions in Section 11.3. may be applied to existing conditions for conversions.
- 3)** Except as required by this Section, where a *building* is a *heritage building*, the alternative *acceptable* solutions in Section 11.5 may be applied to existing conditions for conversions.

11.4.2. Conversion of an Existing One-Family or Two Family Dwelling into a Community Care Facility, Group Residence or Child Care Facility

11.4.2.1. General Requirements

- 1)** An existing *one-family* or *two-family dwelling* may be converted or partially converted into a *community care facility, group residence* or *child care facility* provided
 - a) the *occupant load* does not exceed
 - i) 10 residents in a *community care facility*,
 - ii) 6 residents in a *group residence*, or
 - iii) 8 children in a *child care facility*,
 - b) the *building* containing a *community care facility* or *group residence* is
 - i) separated from a *one family dwelling* by a *fire separation* with a *fire resistance rating* of 1 h,
 - ii) separated from a *two family dwelling* by a *fire separation* with a *fire resistance rating* of 2 h,
 - iii) completely *sprinklered*, and
 - iv) equipped with a fire alarm system, emergency lights and smoke and *heat detectors* installed throughout the *building*.
 - c) the *child care facility* conforms with Clauses 3.1.2.5.(3)(a) and (b),
 - d) firefighter access conforms with this By-law,
 - e) the *building area* is no more than 300 m²,
 - f) all *unsafe conditions* are corrected to the satisfaction of the *Chief Building Official*, and
 - g) the *building* shall be upgraded to conform to upgrade design levels F2, S2, N2, A2 as defined in the upgrade mechanism model in Division B Appendix A and the energy upgrade requirements of Article 11.2.1.4.

11.4.2.2. Alternative Acceptable Solutions

- 1)** The alternative *acceptable* solutions contained in Sentences (2) to (11) inclusive may be applied to the conversion or partial conversion of an existing *one-family* or *two-family dwelling* into a *community care facility, group residence* or *child care facility*.
- 2)** For the purposes of determining *building* height, a *one-family dwelling* constructed pursuant to a *building permit* issued prior to July 01, 1994 which is four storeys or less in height may be considered as 3 *storeys* in *building height*.
- 3)** Existing exterior wood-frame walls may be retained instead of required *noncombustible construction*, provided

a) a minimum 45 min *fire-resistance rating* is provided, and

b) all voids are filled with mineral wool or fibreglass batts.

4) Combustible exterior cladding materials may be used instead of required *noncombustible* cladding provided the cladding

a) has a *flame-spread rating* of no more than 25,

b) is underlaid with a minimum layer of 12.7 mm exterior gypsum board sheathing, and

c) is composed of

i) aluminum panels,

ii) *fire-retardant treated wood* panels,

iii) fire-retardant treated cedar shakes or shingles, or

iv) vinyl siding.

5) Where exterior walls and openings are required by Subsections 3.2.3. or 9.10.14. to have exposure protection, existing openings need only conform to Article 11.3.3.4.

6) If one interior *exit* stair is no less than 900 mm wide, a second interior *exit* stair which is no less than 750 mm wide may be permitted.

7) The *flame-spread rating* of the existing interior finish of a *means of egress* need not exceed 150.

8) Ducts passing through *fire separations* need not be equipped with *fire dampers* if

a) the duct opening is less than 150 cm² in cross-sectional area, or

b) the duct work is constructed entirely of sheet steel and the duct opening is no more than 1 000 cm² in cross-sectional area.

9) Pull stations are not required if the fire alarm system and the sprinkler water flow alarm are designed in accordance with Article 3.2.4.8.

10) An existing exterior wall opening adjacent to an exterior *exit* stair or fire escape need not conform to Article 3.2.3.13. if the opening is glazed with wired or tempered glass in an aluminum or wood frame.

11) A single *exit* from a *dwelling unit* need not conform to Sentence 3.3.4.4. (3) if

a) the *exit* serves only one *dwelling unit*, and

b) the vertical floor elevation from the uppermost floor level to the adjacent ground level does not exceed 6m.

11.4.3. Conversion of a Portion of an Existing One or Two Family Dwelling into a Secondary Suite

11.4.3.1. Alternative Acceptable Solutions

1) Except as required in Sentence (2), where part of an existing *one or two family dwelling* is altered to create a *secondary suite*, the *existing building* may conform to Table 11.4.3.1., provided the *building* was constructed under a *building* permit issued prior to July 1, 1994.

2) Where the *alteration* in Sentence (1) includes an addition, the addition shall conform to Part 9.

3) Where an *existing building* was constructed with a *building* permit issued on or after July 1, 1994, the *existing building* and the alteration shall conform to Part 9.

4) Notwithstanding the requirements of Sentence 9.34.1.1. (1), circuits and receptacles in the *secondary suite* shall have a minimum of

a) two kitchen counter duplex receptacles

(i) supplied by two appliance circuits, and

(ii) wired on single circuits or a split circuit,

b) two duplex receptacles located on different walls in each bedroom, and

c) three duplex receptacles located on different walls in the living area.

5) Notwithstanding Clause 9.34.1.1.(2)(c), a single existing panel board may supply electrical loads in the principal dwelling and the *secondary suite*, if the panel is located in a common area within the *building* accessible to all occupants of the *building*.

**Table 11.4.3.1.
Fire Safety Requirements
Forming Part of Article 11.4.3.1.**

Item	Item Details	Alternative Acceptable Solution
Windows	Existing and new	Original openings may remain and New openings to conform to Part 9
Fire Containment	Separation between <i>Secondary Suite</i> and Principal Dwelling	Fire resistant <i>combustible construction</i> ¹
	Heating ducts that penetrate <i>fire separations</i>	<i>fire dampers</i> not required
	Plumbing and sprinkler plastic piping	fire stopping not required
	<i>Suite</i> entry doors in separation between <i>secondary suite</i> and principal dwelling	Existing solid core doors and frames in good condition are <i>acceptable</i> if unglazed or if glazed with wired glass. Doors to be provided with closers
Exits	Egress from each <i>suite</i> Windows adjacent to <i>exits</i>	Minimum of a single conforming <i>exit</i> is required from both the principal dwelling and the <i>secondary suite</i> . No requirements
Flame Spread Rating	<i>Exits</i>	≤150
	Remainder of <i>building</i>	No requirement
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 installed 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. Provided with battery backup and manual silencing devices which will silence the alarm in conformance with Article 9.10.19.6.
Stairs and Handrails	Entire <i>building</i>	Stair treads, rise and run to conform to Section 9.8. where existing stairs are 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>	<i>Guards</i> to be provided around all stairways, balconies, landings, decks, and porches in conformance with Subsection 9.8.8. and Article 4.1.5.14. Existing <i>guards</i> may be retained provided they are structurally sound and ≥ 900 mm high.
Existing Headroom	Entire <i>building</i>	May be reduced to 1980 mm over 80 per cent of the <i>suite</i> area and all egress routes.
Unsafe Conditions	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> .

Notes

¹Fire resistant *combustible construction* means existing lath and plaster in good condition, or minimum 13mm gypsum wallboard on wood studs at maximum 450 mm on centre.

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

11.4.4. Enclosure of an Exterior Open Balcony in an Existing Residential Building

11.4.4.1. Alternative Acceptable Solutions

- 1) An existing open balcony may be converted to an enclosed balcony if
- a) required *suite fire separations* are provided,
 - b) spatial separations conform to this By-law,
 - c) travel distances conform to this By-law,
 - d) *guards* conform to this By-law,
 - e) exhaust ducts conform to this By-law,
 - f) light and natural ventilation are maintained and conform to this By-law,
 - g) all new structural work conforms to Part 4,
 - h) high *building* measures (smoke-free refuge areas) are maintained,
 - i) the existing door assembly separating the *suite* from the existing open balcony is maintained, and
 - j) the *suite* is upgraded to an *acceptable* level as defined in the upgrade mechanism model in Division B Appendix A.

11.4.5. Conversion of Space in an Existing Group F Division 2 Building into Artist Live/Work Studios

11.4.5.1. Alternative Acceptable Solutions

- 1) *Artist live/work studios* are permitted in an *existing building* classified as a Group F, Division 2 occupancy if
- a) the *building* is *sprinklered* with fast-response heads,
 - b) all *suites* are separated from the remainder of the *building* by a *fire separation* with a 1 h *fire resistance rating* and all floors are separated from each other by a *fire separation* with a 1 h *fire*

resistance rating, except that a 45 min *fire-resistance rating* or existing lath and plaster in good repair is *acceptable* in a *building* less than 4 *storeys* in *building height*,

- c) the *exit systems* conform to Section 3.4., except as permitted in Subsections 11.3.5. and 11.3.6.,
 - d) all *public corridors* conform to Article 3.3.1.4., except as permitted in Subsections 11.3.4. and 11.3.6.,
 - e) the emergency lighting conforms to Subsection 3.2.7.,
 - f) a *fire alarm* and detection system conforming to Subsection 3.2.4. is installed in the *building*,
 - g) if dust or fumes are produced in a studio
 - (i) the *building* complies with the Fire By-law, and
 - (ii) the *building* is heated by hot water, electrical equipment, or elevated gas-fired forced-air heaters,
 - h) if flammable or *combustible* liquids or gases are stored or used in a studio, the *building* complies with the Fire By-law and the British Columbia Gas Safety Act,
 - i) *service rooms* and storage rooms located outside of a studio conform to Section 3.6.,
 - j) the floor assembly is designed for a minimum live load of 3.6 kPa and the *building* conforms to the structural upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,
 - k) a studio complies with the sound transmission requirements of Section 5.9.,
 - l) light and ventilation for the studio sleeping area complies with Parts 5 and 6,
 - m) shared washroom *facilities* comply with the requirements of the Standards of Maintenance By-law for lodging houses, and
 - n) the *building* is upgraded to an *acceptable* level as defined in the upgrade mechanism model in Division B Appendix A.
- 2) For the purpose of determining *occupancy* classification, *artist live/work studios* shall be considered to have an *occupancy* classification as defined in Articles 3.1.3.3. and 3.1.3.4.

11.4.6. Conversion of an Existing Hotel to Single Room Accommodation

11.4.6.1. Alternative Acceptable Solutions

- 1) *Single room accommodation* is permitted in an *existing building* classified as a Group C *major occupancy* (hotel) if
 - b) all *suites* are separated from the remainder of the *building* by a *fire separation* with a 1 h *fire resistance rating* and all floors are separated from each other by a *fire separation* with a 1 h *fire resistance rating*, except that a 45 min *fire-resistance rating* or existing lath and plaster in good repair is *acceptable* if the *building* is less than 4 *storeys* in *building height*,
 - c) the *exit systems* conform to Section 3.4., except as permitted in Subsections 11.3.5. and 11.3.6.,
 - d) all *public corridors* conform to Article 3.3.1.4., except as permitted in Subsections 11.3.4. and 11.3.6.,
 - e) the emergency lighting conforms to Subsection 3.2.7.,
 - f) a *fire alarm* and detection system conforming to Subsection 3.2.4. is installed throughout the *building*,

- g) the floor assembly is designed for a minimum live load of 2.4 kPa,
- h) notwithstanding Clause (k), the *building* conforms to the structural upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,
- i) shared washroom facilities comply with the requirements of the Standards of Maintenance By-law for lodging houses,
- j) the *suites* comply with the sound transmission requirements of Section 5.9 of Division B, and
- k) the *building* is upgraded to an *acceptable* level as defined in the upgrade mechanism model in Division B Appendix A.

11.4.7. Conversion of an Existing Non-Strata Building to a Strata Property

11.4.7.1. Alternative Acceptable Solutions

- 1) An *existing building* may be converted into 2 or more strata lots, if the entire *building* is
 - a) upgraded to design upgrade levels F4, S4, N4, A4 and E5 as detailed in the upgrade mechanism model in Division B Appendix A, and
 - b) fully *sprinklered*.

Section 11.5 Alternative Acceptable Solutions for Heritage Buildings

11.5.1. Application

11.5.1.1. Alternative Acceptable Solutions

- 1) This Subsection provides alternative *acceptable* solutions for the restoration and rehabilitation of *heritage buildings*.
- 2) The alternative *acceptable* solutions provided in Table 11.5.1.1. apply to existing conditions only and do not apply to new work which must conform to the requirements for new construction in other Parts of this By-law.

Table 11.5.1.1. Alternate Acceptable Solutions for Heritage Buildings		
No.	By-law Requirement	Alternate Compliance Method
1	Fire Separations 3.1.3.1.(1) and Table 3.1.3.1.; 9.10.9. 2 h <i>fire separation</i> required between some major <i>occupancies</i> .	Except for F1 <i>occupancies</i> , 1 h <i>fire separation</i> is <i>acceptable</i> , if the <i>building</i> is <i>sprinklered</i> .
2	Fire Separations 3.1.3.1.(1) and Table 3.1.3.1.; 9.10.9. 1 h <i>fire separation</i> required between some major <i>occupancies</i> .	1/2 h <i>fire separation</i> is <i>acceptable</i> if the <i>building</i> is <i>sprinklered</i> .

3	<p>Noncombustible Construction 3.1.5. and 9.10.6.1. All materials used in <i>noncombustible construction</i> must be <i>noncombustible</i> unless otherwise permitted.</p>	<p>1. Roofs may be of <i>combustible construction</i> provided the <i>building</i> is <i>sprinklered</i>. 2. Up to 10 per cent gross <i>floor area</i> to a maximum of 10 per cent of any one <i>floor area</i> may be of <i>combustible construction</i> provided the <i>building</i> is <i>sprinklered</i>.</p>
4	<p>Fire-resistance Rating 3.1.7.1. (1); 9.10.3.1. Where a material, assembly of materials or structural member is required to have a <i>fire-resistance rating</i> it shall be tested in accordance with CAN/ULC-S101.</p>	<p>A <i>fire-resistance rating</i> may also be used based on: 1. HUD No. 8 Guideline on Fire Ratings of Archaic Materials and Assemblies. 2. Fire Endurance of Protected Steel Columns and Beams, DBR Technical Paper No. 194. 3. Fire Endurance of Unit Masonry Walls, DBR Technical Paper No. 207. 4. Fire Endurance of Light-Framed and Miscellaneous Assemblies, DBR Technical Paper No. 222.</p>
5	<p>Rating of Supporting Construction 3.1.7.5.; 9.10.8.3. Supporting assemblies to have fire resistance rating at least equivalent to that of the supported floor.</p>	<p><i>Heavy timber construction</i> is permitted to have a <i>fire-resistance rating</i> less than would be required by the By-law provided the <i>building</i>: (a) is <i>sprinklered</i>, and (b) does not exceed 6 <i>storeys</i> in <i>building height</i>.</p>
6	<p>Continuity of Fire Separations 3.1.8.3.(1) and (2); 9.10.9.2. <i>Fire separations</i> are required to be continuous above the ceiling space.</p>	<p><i>Fire separations</i> are not required to be continuous above the ceiling space where: (a) the ceiling space is <i>non-combustible construction</i>, (b) both fire compartments are <i>sprinklered</i>, or (c) the ceiling has a minimum rating of 30 minutes.</p>
7	<p>Wired Glass 3.1.8.5.(1) and 3.1.8.14.(2); 9.10.13.1. and 9.10.13.5. 6 mm wired glass in steel frame required in <i>fire separations</i>.</p>	<p>For fixed transoms or sidelights, 6 mm wired glass fixed to a wood frame of at least 50 mm thickness with steel stops is permitted in a required <i>fire separation</i>.</p>
8	<p>Mezzanines 3.2.1.1.(3) to (6); 9.10.4.1. <i>Mezzanines</i> enclosing more than 10 per cent above the horizontal plane are considered as <i>storey</i> in <i>building height</i>.</p>	<p>Enclosed <i>mezzanines</i> may be up to 40 per cent of the <i>storey</i> in which they occur and not be considered a <i>storey</i> in <i>building height</i> if the <i>building</i> is <i>sprinklered</i>.</p>
9	<p>Building Height 3.2.2.20. to 3.2.2.88. <i>Noncombustible construction</i> required for <i>buildings</i> over 3 <i>storeys</i> in <i>building height</i>.</p>	<p><i>Buildings</i> may be of <i>combustible construction</i> up to 6 <i>storeys</i> provided: (a) the <i>building</i> is <i>sprinklered</i> (b) the <i>building</i> contains Group C, D, E, F2 or F3 <i>occupancies</i>, and (c) floor assemblies not required to exceed 1 h <i>fire separation</i> requirements may be of <i>heavy timber construction</i>.</p>
10	<p>Spatial Separation 3.2.3.; 9.10.14. The area of <i>unprotected</i></p>	<p>The area of <i>unprotected opening</i> is not limited provided: (a) the <i>limiting distance</i> is a minimum 1 m,</p>

	<p><i>opening</i> shall not exceed the limits in Tables 3.2.3.1.A to 3.2.3.1.E.</p>	<p>(b) the <i>building</i> has a supervised <i>sprinkler system</i> in conformance with Sentence 3.2.4.10.(3), and</p> <p>(c) the <i>sprinkler system</i> is designed to notify the fire department in conformance with Sentence 3.2.4.8.(4).</p>
11	<p>Construction of Exposing Building Face 3.2.3.7.; 9.10.14.5. The <i>exposing building face</i> is required to have a <i>fire-resistance rating</i> and/or be of <i>noncombustible construction</i>.</p>	<p><i>Exposing building face</i> is not required to have a <i>fire resistance rating</i> if the <i>building</i> is <i>sprinklered</i>. Also, the <i>exposing building face</i> is not required to be of <i>noncombustible construction</i> if it is protected by an exterior <i>sprinkler system</i> conforming to NFPA 13.</p>
12	<p>Roof Covering Rating 3.1.15.2.(1) Class A, B or C roof covering in conformance with CAN/ULC-S107 required.</p>	<p>For existing roofs not covered by a Class A, B or C roofing a manually operated deluge system in accordance with NFPA 13 is permitted.</p>
13	<p>Smoke Alarms 3.2.4.21.(5) & (6); 9.10.18.3.(1) <i>Smoke alarms</i> are required to be connected to an electric circuit.</p>	<p><i>Smoke alarms</i> may be battery operated in <i>one-family dwellings</i> only.</p>
14	<p>Interconnected Floor Space 3.2.8.; 9.10.1.3.(6)</p>	<p>1. Open stairs in <i>buildings</i> of maximum 4 storeys in <i>building height</i> need not comply with Subsection 3.2.8. provided:</p> <ul style="list-style-type: none"> <input type="checkbox"/> (a) the <i>building</i> contains a Group C or D occupancy, <input type="checkbox"/> (b) the <i>building</i> is <i>sprinklered</i> with fast-response sprinklers, <input type="checkbox"/> (c) corridors opening into the <i>interconnected floor space</i> are separated from the <i>interconnected floor space</i> by a <i>fire separation</i> with the rating required for the corridor, and <input type="checkbox"/> (d) <i>smoke detectors</i> are installed in the rooms opening into the <i>interconnected floor space</i> and the <i>smoke detectors</i> are connected to the fire alarm system. <p>2. Open stairs in <i>buildings</i> of maximum 3 storeys in <i>building height</i>, or the first 2 storeys and basement, need not comply with Subsection 3.2.8. provided:</p> <ul style="list-style-type: none"> <input type="checkbox"/> (a) the <i>building</i> contains a Group C or D occupancy, <input type="checkbox"/> (b) the <i>building</i> is <i>sprinklered</i> with fast-response sprinklers, <input type="checkbox"/> (c) <i>smoke detectors</i> are installed in the rooms opening into the <i>interconnected floor space</i> and the <i>smoke detectors</i> are connected to the fire alarm system, and (d) at least one <i>means of egress</i> is not through the <i>interconnected floor space</i>.
15	<p>Separation of Suites 3.3.1.1.; 9.10.9.13., 9.10.9.14. <i>Suites</i> are required to be</p>	<p>Existing <i>fire separations</i> of 30 min, such as wood lath and plaster in good condition, are <i>acceptable</i> in <i>sprinklered buildings</i> not exceeding 6 storeys in</p>

	separated from adjoining <i>suites</i> by 3/4 h or 1 h rated <i>fire separations</i> .	<i>building height</i> .
16	Corridor Fire Separation 3.3.1.4.; 9.10.9.15. <i>Public corridors</i> are required to be separated from the remainder of the <i>building</i> by a <i>fire separation</i> having a fire resistance rating of at least 3/4 h.	Existing corridors with 30 min <i>fire-resistance ratings</i> , such as wood lath and plaster in good condition, are <i>acceptable</i> in <i>residential occupancies</i> provided the <i>building</i> : (a) does not exceed 6 <i>storeys</i> in <i>building height</i> , and (b) is fully <i>sprinklered</i> with fast-response sprinklers.
17	Corridor Width 3.3.1.9. and 3.4.3.; 9.9.3.3. <i>Public corridors</i> and <i>exit corridors</i> are permitted to have a minimum width of 1 100 mm.	<i>Public corridors</i> and <i>exit corridors</i> are permitted with a minimum width of 800 mm provided: (a) the <i>occupant load</i> of the <i>building</i> is maximum 20 people, and (b) the <i>building</i> does not exceed 3 <i>storeys</i> in <i>building height</i> .
18	Door Swing 3.3.1.10. and 3.4.6.12.; 9.9.6.5. Doors required to swing in the direction of <i>exit</i> travel.	Second egress door from a room is not required to swing in the direction of <i>exit</i> travel provided: (a) the <i>building</i> is <i>sprinklered</i> and the system is supervised in conformance with Sentence 3.2.4.9.(2), and (b) the <i>occupant load</i> of the <i>building</i> is a maximum of 100 people.
19	Stairs, Ramps, Handrails and Guards 3.3.1.14., 3.3.1.16., 3.3.1.18., 3.4.6.4., 3.4.6.6.; 9.8.	Existing conditions that do not comply fully with the requirements are permitted if they are <i>acceptable</i> to the <i>Chief Building Official</i> .
20	Transparent Doors and Panels 3.3.1.19.; 9.6.1.4. Glass in doors and sidelights are required to be protected by <i>guards</i> and to be safety glass.	Existing glass or transparent panels that do not comply fully with the requirements are permitted if sufficiently discernible or <i>guards</i> are provided in hazardous situations.
21	Dead-end Corridors 3.3.1.9.(7); 9.9.7.3. Dead-end corridors are permitted to a maximum length of 6 m.	1. Dead-end corridors are permitted to a maximum length of 10 m in Group C <i>occupancies</i> provided: (a) the <i>building</i> is <i>sprinklered</i> with fast-response sprinklers, and (b) <i>smoke detectors</i> are installed in the corridor system. 2. Dead-end corridors are permitted to a maximum of 15 m in length in Group D, E, F2 and F3 <i>occupancies</i> provided: (a) the <i>building</i> is <i>sprinklered</i> with fast-response sprinklers, and (b) <i>smoke detectors</i> are installed in the corridor system.
22	Exits 3.4.2.1.; 9.9.8.2. <i>Floor areas</i> shall be served by not fewer than 2 <i>exits</i> except as permitted by 3.4.2.1.(2)	<i>Floor areas</i> may be served by a single <i>exit</i> within the limits of 3.4.2.1.(2) provided: (a) the <i>building</i> does not exceed 3 <i>storeys</i> in <i>building height</i> , (b) the <i>building</i> is <i>sprinklered</i> with fast-

		response sprinklers, and (c) all <i>floor areas</i> are protected by a system of <i>smoke detectors</i> connected to a fire alarm system.
23	Reduction of Exit Width 3.4.3.3.(2); 9.9.6.1. Swinging doors in their swing shall not reduce the effective width of <i>exit</i> stairs and landings to less than 750 mm.	Existing swinging doors in their swing are permitted to reduce the effective width of <i>exit</i> stairs and landings to a minimum of 550 mm provided: (a) they serve Group C or D <i>occupancies</i> , (b) the <i>building</i> does not exceed 4 <i>storeys</i> in <i>building height</i> , and (c) the <i>building</i> is <i>sprinklered</i> .
24	Fire Separation of Exits 3.4.4.1; 9.9.4. 3.4.4.1.; 9.9.4. <i>Exits</i> are required to be separated from the remainder of the <i>floor area</i> by a <i>fire separation</i> having a <i>fire-resistance rating</i> of not less than 3/4 h.	1. <i>Buildings</i> of 3 <i>storeys</i> or less may have <i>exits</i> that are separated by a <i>fire separation</i> that does not have a <i>fire-resistance rating</i> provided: (a) the <i>building</i> is <i>sprinklered</i> with fast-response sprinklers, and (b) the <i>sprinkler system</i> is supervised in accordance with Sentence 3.2.4.9.(2). 2. <i>Buildings</i> not exceeding 6 <i>storeys</i> in <i>building height</i> may have <i>exits</i> that are separated by a 45 min <i>fire separation</i> provided the <i>building</i> is <i>sprinklered</i> .
25	Exits Through Lobbies 3.4.4.2.; 9.9.8.5. Rooms adjacent to the lobby are required to be separated by a <i>fire separation</i> .	Rooms adjacent to the lobby are not required to be separated by a <i>fire separation</i> provided: (a) the <i>floor area</i> is <i>sprinklered</i> with fast-response sprinklers, and (b) <i>smoke detectors</i> are installed in the adjacent rooms.
26	Rooms Opening into an Exit 3.4.4.4.(7); 9.9.5.9. <i>Service rooms</i> and ancillary rooms are not permitted to open directly into an <i>exit</i> .	<i>Service rooms</i> and ancillary rooms may open directly into an <i>exit</i> provided: (a) the rooms are <i>sprinklered</i> with fast-response sprinklers, and (b) weatherstripping is installed on the doors to prevent the passage of smoke.
27	Illumination of Exit Signs 3.4.5.1.(2)&(4); 9.9.11.3.(2)to(6) <i>Exit</i> signs are required to be illuminated continuously while the <i>building</i> is occupied.	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.
28	Clearance from Exit Doors 3.4.6.11.(1); 9.9.6.6. Stair risers shall not be closer than 300 mm from an <i>exit</i> door.	Except as permitted in Sentences 3.4.6.10.(2) or 9.9.6.6.(2), existing <i>exit</i> doors shall not extend beyond the first riser.
29	Fire Escapes 3.4.7.; 9.9.2.1.(2) Fire escapes are required to conform to Subsection 3.4.7.	Existing fire escapes that do not completely conform to Subsection 3.4.7. are <i>acceptable</i> provided: (a) the fire escapes are <i>acceptable</i> , and (b) the <i>building</i> is <i>sprinklered</i> .
30	Fire Escape Construction 3.4.7.2.; 9.9.2.1.(2)	Existing combustible fire escapes are permitted if the <i>building</i> is permitted to be of <i>combustible construction</i> by Part 3, Part 9 or by this table.

31	Protection of Fire Escapes 3.4.7.4.; 9.9.2.1.(2) Openings in the exterior wall adjacent to the fire escape are required to be protected by closures.	Existing openings in the exterior wall adjacent to the fire escape are not required to be protected by closures provided: (a) the <i>building is sprinklered</i> , and (b) a sprinkler head is located within 1.5 m of the opening required to be protected by Sentence 3.4.7.4.
32	Vertical Service Space 3.6.3.1. <i>Vertical service spaces</i> are required to be separated from the adjacent <i>floor area</i> by a rated <i>fire separation</i> .	Existing <i>vertical service spaces</i> that do not completely conform to the rated <i>fire separation</i> requirements are <i>acceptable</i> provided the <i>vertical service spaces</i> are <i>sprinklered</i> .
33	Height and Area of Rooms 3.7.1.; 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.
34	Washroom Requirements 3.7.2.; 9.31. <i>Buildings</i> are required to be provided with a minimum number of washroom fixtures.	Existing <i>facilities</i> are not required to completely comply to the requirements of Subsection 3.7.2. or Section 9.31. provided it is <i>acceptable</i> to the <i>Chief Building Official</i> .
35	Access for Persons with Disabilities 3.8.	Sentences 3.8.1.1.(3) and 3.8.4.1.(1) shall apply to <i>existing buildings</i> .
36	Seismic Anchorage of Exterior Decoration 4.1.8.	Existing exterior decorations are not required to fully comply to the anchorage requirements of Subsection 4.1.8. provided: (a) adequate means of protection is provided, or (b) there is no exposure to the public.
37	Mechanical Systems Part 6 and Part 7	Existing mechanical systems in <i>buildings</i> 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> .

Section 11.6. Temporary Buildings and Occupancies

11.6.1. Application

11.6.1.1. Application

1) The alternative *acceptable* solutions in this Section apply to

a) *arts and culture indoor events* in *existing buildings*,

- b) temporary *buildings*,
- c) special event facilities in *existing* or temporary *buildings*, and
- d) temporary emergency shelters in *existing buildings*.

2) Subject to the provisions of Article 1.6.7.3., "temporary" in this Section means

- a) in relation to special event facilities, no more than two months,
- b) in relation to temporary *buildings*, no more than one year, and
- c) in relation to emergency shelters, no more than one year.

11.6.2.1. Alternative Acceptable Solutions

1) Section 11.3. may be applied to existing conditions, except as defined in Sections 11.6.3. and 11.6.4.

2) The alternative *acceptable* solutions in Section 11.5 may be applied to existing conditions in a *heritage building*, except as defined in Sections 11.6.3. and 11.6.4.

3) The alternative *acceptable* solutions provided in Table 11.6.3.1 apply to *existing buildings* used for *arts and culture indoor events* and do not apply to new work, which must conform to the requirements for new construction in other Parts of this By-law.

4) The alternative *acceptable* solutions provided in Table 11.6.4.1 apply to *existing buildings* used as temporary special event facilities and temporary emergency shelters and to temporary *buildings* and do not apply to new work, which must conform to the requirements for new construction in other Parts of this By-law.

11.6.3. Arts and Culture Indoor Event

11.6.3.1. Alternative Acceptable Solutions

1) Where the *occupancy* of an *existing building* or portion of an *existing building* is classified as Group E retail, Group F Division 2 production or rehearsal studio, wholesale, warehouse, or factory, or Group F Division 2 *artist studio* without living accommodations, the *major occupancy* may be changed to a temporary Group A Division 2 *major occupancy* for an *arts and culture indoor event* if

- a) the maximum *occupant load* is no more than 250 persons, or no more than 60 persons in an *artist studio*,
- b) the *arts and culture indoor event* is located in the *first storey* or the *storey* below the first storey and has at least one *exit* that conforms to Clauses 3.8.3.19(1)(d) or (e),
- c) emergency lighting is provided in washrooms and in locations leading from the *arts and culture indoor event* to the *street* as described in Sentence 3.2.7.3.(1),
- d) portable fire extinguishers are installed in accordance with the Fire By-law, with at least one extinguisher at the main entrance and at each egress door leading from the *arts and culture indoor event floor area*,
- e) an approved fire emergency procedures and security plan with approved maximum *occupant load* is posted beside each portable extinguisher at the main entrance and at each egress door leading from the *arts and culture indoor event*,
- f) the *building* is equipped with a *fire alarm system*, or *supervisory staff* are designated to monitor egress and *exit* doors and to carry out an emergency evacuation in accordance with approved fire emergency procedure, and
- g) the *storey* below the *first storey* used for an *arts and culture indoor event* is equipped with a *sprinkler system*.

2) The floor of a *building* used for an *arts and culture indoor event* shall be

a) constructed of concrete supported by solid ground without suspended slab, or

b) certified by a *registered professional*, after a structural review, to be safe for *assembly occupancy* and designed to a minimum specified uniformly distributed live load of 4.8 kPa.

3) Cooking which generates grease-laden vapour is not permitted at an *arts and culture indoor event*, unless commercial cooking and ventilation equipment, installed under *permit* and conforming with Article 6.2.2.7., is used.

4) An approved maximum *occupant load* from the Vancouver Fire and Rescue Services, and a Vancouver Police Department security assessment shall be obtained for *arts and culture indoor events* in accordance with Table 11.6.3.1.

5) The number of *exits*, designated *supervisory staff*, and *exit signs* for *arts and culture indoor events* shall be provided in accordance with Table 11.6.3.1.

Table 11.6.3.1. Requirements for Arts and Culture Indoor Events Forming Part of Article 11.6.3.1.					
Occupant Load for Event	Occupant load Approval Required⁽¹⁾	Minimum number of Exits Required	Exit Signage Required	Number of Supervisory staff at Egress/Exit Door⁽²⁾ Required⁽²⁾	VPD Security Assessment Required⁽⁵⁾
≤ 60 people for private SOL ⁽³⁾ or dry event ⁽⁴⁾	Yes	1	No	1	No
≤ 60 people for public SOL ⁽³⁾	Yes	1	No	1	Yes
61-250 people for private SOL ⁽³⁾ dry event ⁽⁴⁾ or public SOL ⁽³⁾	Yes	2	Yes	2	Yes

Notes

¹⁾ Vancouver Fire and Rescue Services will assess and approve the maximum temporary *occupant load* for *arts and culture indoor events*.

²⁾ Supervisory staff is required to monitor all egress/*exit* doors. One *supervisory staff* must be provided at each required *exit* door at all times.

³⁾ SOL means Special Occasion License issued by the British Columbia Liquor Control and Licensing Branch.

⁴⁾ Dry event means an event at which there is no liquor service.

⁵⁾ VPD means Vancouver Police Department.

11.6.4. Special Event Facilities, Emergency Shelters and Temporary Buildings

11.6.4.1. Alternative Acceptable Solutions

1) Table 11.6.4.1. provides alternative *acceptable* solutions for

a) temporary use of *buildings* as special events facilities and emergency shelters, and

b) temporary *buildings*.

<p align="center">Table 11.6.4.1. Alternate Acceptable Solutions for Temporary Special Events Facilities, Emergency Shelters and Temporary Buildings</p>		
No.	By-law Requirement Division B	Alternate Acceptable Solution
1	Flame Resistance 3.1.6.5.	<p>Fabric tent material may conform to</p> <p>a) NFPA 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films", 2004 edition, or</p> <p>b) Certification of Registered Flame Resistant Product certified by the California Department of Forestry and Fire Protection, Office of the State Fire Marshall.</p>
2	Fire Separation under Tiers of Seats 3.3.2.2.	<p>A fire separation between the space and the seats is not required provided</p> <p>a) the only occupied space beneath the bleacher seating is used as a pedestrian walkway for access to the bleacher seating,</p> <p>b) the occupied space is not used for storage, signage must be posted in the space beneath the bleacher seating that reads "No Storage Permitted in This Area", and</p> <p>c) cleanup crews must clean up debris from the space beneath the bleacher seating at the end of each day.</p>
3	Handrails 3.4.6.5.	<p>Handrail extensions for temporary <i>buildings</i> may extend vertically downward not less than 300 mm beyond the top and bottom of the stairway.</p>
4	Guards 3.4.6.6.	<p>Openings greater than 100 mm may be permitted in guards where</p> <p>a) the guard serves stairs that are used only by staff or work force volunteers, and</p> <p>b) a triangular space created by the stair tread, stair rise, and the underside of the guard, provided the opening will not permit the</p>

		<p>passage of a sphere greater than 200 mm, in egress stairs that serve bleacher seating.</p> <p>Member, attachment or openings located between 140 mm and 900 mm above the level being protected by the guard may be permitted where</p> <p>a) the guard serves stairs that are used only by staff or work force volunteers, and</p> <p>b) rosettes in the vertical posts of scaffolding type bleachers have been installed.</p>
5	<p>Treads and Risers 3.4.6.8.</p>	<p>In locations where it is not practical for persons with disabilities to work, stairs with no public access, may have</p> <p>a) runs of not less than 250 mm between successive steps,</p> <p>b) risers between successive treads not less than 125 mm and not more than 190 mm, and</p> <p>c) open risers.</p>
6	<p>Direction of Door Swing 3.4.6.12.</p> <p>Door Release Hardware 3.4.6.16.</p>	<p>Tent exit doors may be equipped with fabric flaps, tie straps, zippers, or VELCRO brand or equivalent hook and loop fasteners in lieu of doors that swing on a vertical axis provided</p> <p>a) a minimum of two exit doors are be provided for each tent,</p> <p>b) the occupant load of the tent does not exceed 60, and</p> <p>c) security personnel are trained for emergency evacuation procedures, and remain in the vicinity of the exit at all times.</p> <p>Temporary sliding gates may be used as exit doors provided</p> <p>a) gates are left open during normal operating hours and always manned by security personnel,</p> <p>b) gates are closed during non-operating hours, and locked with chains and a padlock,</p> <p>c) operational procedures are in place to ensure that the chains and padlock are removed during operating hours, and</p> <p>d) security personnel are trained for emergency evacuation procedures.</p>
7	<p>Environment Separation Part 5</p>	<p>Part 5 does not apply.</p>
8	<p>Commercial Cooking Equipment</p>	<p>26 gauge galvanized sheet metal kitchen exhaust ducts with seams are permitted provided clean-out access panels are provided at all elbow locations and at 6 m spacing for straight runs.</p>

	6.2.2.7.	
9	Faucets and Shower Head Efficiency 10.3.1.1.	No restriction required.
9	Water Closet Efficiency 10.3.1.2.	No restriction required.
11	Urinal Efficiency 10.3.1.2.	All urinals shall conform to CSA B45 "Plumbing Fixtures" and shall have an average water consumption not exceeding 3.8 litres per flush cycle.
12	Sanitary Connection 2.4.2.1. Book II	Portable water closets that form part of a temporary facility need not be connected to the sanitary drainage system.
13	Storm Drainage Connection 2.4.2.4. Book II	Roofs and paved areas need not be connected to the storm drainage system

11.6.4.2. Additional Requirements for Emergency Shelters

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 900mm 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.

Item 11 - Appendix Note A-11.2.1.2.

Appendix Note A-11.2.1.2.

A-11.2.1.2 EXISTING BUILDING UPGRADE MECHANISM MODEL

BACKGROUND AND INTENT. When work is carried out to an existing building, the By-law requires that the building be upgraded to an "acceptable" level. On April 20, 2004 Council approved a new model for determining the "acceptable" level of Building By-law upgrade for existing buildings undergoing alterations under the City's building permit process.

Prior to April 20, 2004, the upgrade mechanism model was based primarily on construction values. The new upgrade trigger mechanism model determines the required "acceptable" level of upgrade for an existing building using the concept of "Project Types and Categories of Work".

The intent of the upgrade triggers is to provide a road map for building owners and designers to determine the required level of Building By-law upgrade for an existing building as a function of the project types and the related categories of work.

The upgrade mechanism model is not intended for existing one-and two-family dwelling buildings. Except as required in Section 11.4. for the conversion of existing buildings, the upgrade requirement for these types of buildings is defined in Article 11.2.1.4.

VOLUNTARY BUILDING BY-LAW UPGRADES. Where a voluntary upgrade for fire alarm systems, sprinkler systems, exits, accessibility, seismic work, building envelope repair, washrooms and kitchens for single room accommodation or energy efficiency is performed, it is not the intent of this By-law to require the owner to further upgrade the building provided no other work is included in the project. If other work is included in the project, the upgrade requirement will only be based on the non-voluntary work proposed.

PROJECT TYPES AND RELATED CATEGORIES OF WORK

The upgrade mechanism model is based on the following defined three Project Types and related Categories of Work as illustrated in Table A-11.2.1.2.A

Table A-11.2.1.2.A Project Types and Related Categories of Work			
Project Type	Rehabilitation <i>(See Flow Chart No. 1)</i>	Change of Major Occupancy <i>(See Flow Chart No. 2)</i>	Addition <i>(See Flow Chart No. 3)</i>
Categories of Work	Voluntary Upgrade Repair/Small Suite Minor Renovation Major Renovation Reconstruction	Change of Major Occupancy Classification Change of Major Occupancy Classification to a Small Suite	Major Horizontal Addition Minor Horizontal Addition Major Vertical Addition Minor Vertical Addition

REHABILITATION PROJECT TYPE (Flow Chart No. 1)

Voluntary Building By-law Upgrades – Voluntary Building By-law upgrades are limited to alterations for fire alarm, sprinkler, exit, accessibility, seismic, building envelope, washrooms and kitchens for single room accommodation and energy efficiency work to an existing building.

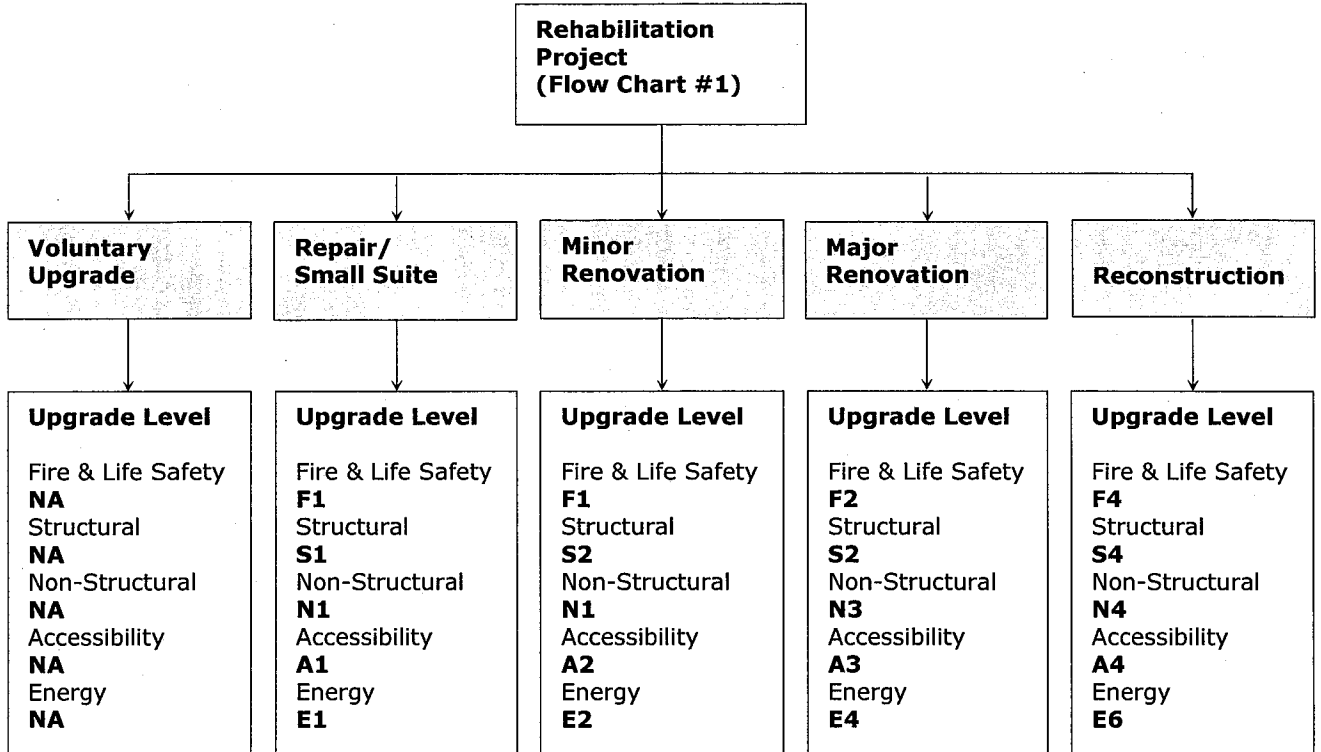
REPAIR – Repair is the replacement of any part of an existing building with like or similar materials for the repair or maintenance of the building. Repair work also includes repair to a building due to fire damage or the installation of a new kitchen exhaust system; however, a change of use or reconfiguration of the interior space is not considered to be a repair. If the repair includes other categories of work or project types such as a change of major occupancy or reconfiguration of the interior space; then, the most restrictive upgrade levels from all project types would be applied.

MINOR RENOVATION – Minor renovations mean work within a single tenant space which may occupy multiple levels in a building. Minor renovations may include reconfiguration of the interior space of the suite as well as exterior renovations or the consolidation of more than one existing suite into a single new tenant space; however, a change of major occupancy classification is not considered to be a minor renovation type project. Where the renovation includes a new interconnected floor space or a new mezzanine, this work would not be considered to be a minor renovation. New mezzanines are considered to be additions. If the renovation includes other categories of work or project types such as a change of major occupancy classification or an addition (mezzanine), then the most restrictive upgrade levels from all project types would be applied.

MAJOR RENOVATION – Major renovations means work within multiple tenant spaces which may include re-configuration of the entire interior space, which may include interconnected floor spaces, and exterior alterations that will create more than one new tenant space; however, where the renovation includes a change of major occupancy classification or a new mezzanine, this work would not be considered as a major renovation. New mezzanines are considered to be additions. If the renovation includes other categories of work or project types such as a change of major occupancy classification or an addition (mezzanine) then the most restrictive upgrade levels from all project types would be applied.

RECONSTRUCTION - Reconstruction means any project where: extensive renovations are being carried on throughout the entire building and the building is completely gutted; where all drywall and plaster has been removed from the interior walls; all drywall, plaster, insulation and exterior cladding has been removed from the exterior walls ; and all floor and roof membranes and coverings have been removed. Reconstruction also includes substantial reconfiguration of the interior floor space. Reconstruction means exposing the primary structure of the building on all interior and exterior walls, floors and roof with only the primary structural elements remaining in place (the building skeleton). Where work which might otherwise be considered as reconstruction, is undertaken solely to facilitate the repair of a building due to envelope damage, insect infestation, mould abatement or asbestos abatement, then the work would not be considered a reconstruction: it would be considered a repair, minor renovation or a major renovation as defined in this By-law.

FLOW CHART NO. 1



NOTE:

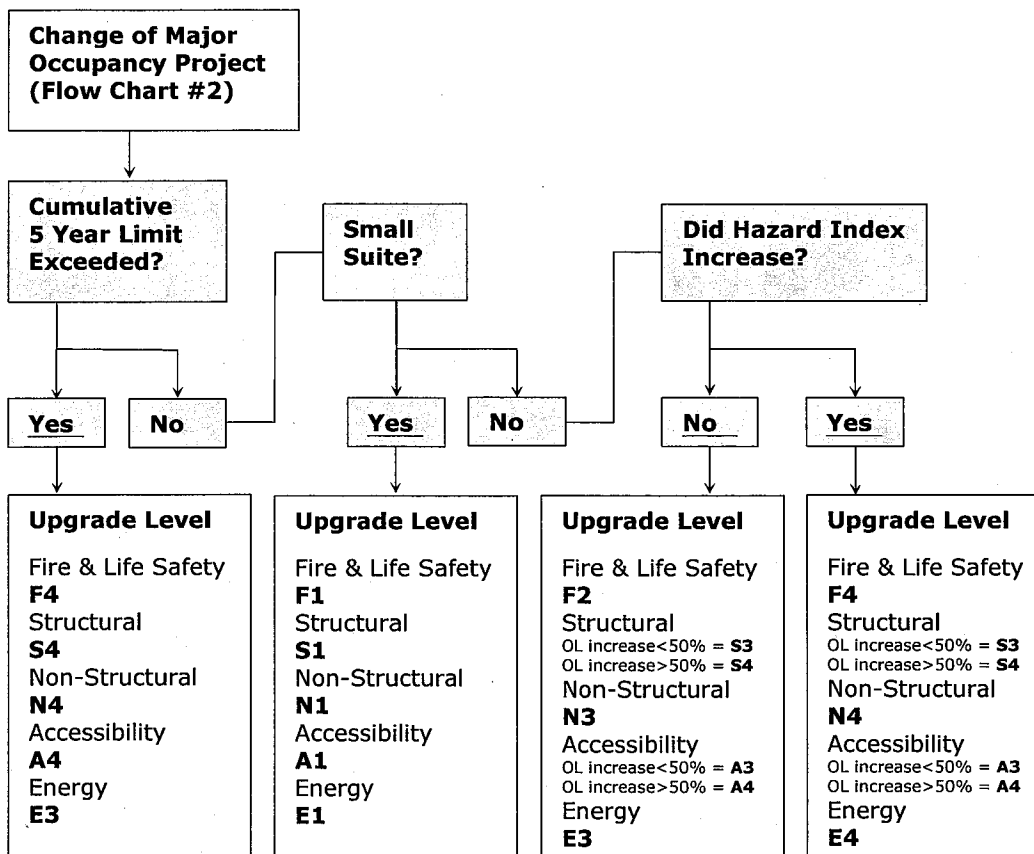
- (1) For small suites, the small suite must be separated on the suite side of the suite separation with at least two layers of gypsum wall board (GWB). Where only one layer exists, then an additional layer of GWB must be added to the suite side only. The additional layer of GWB may be any type of GWB with a minimum thickness of 13 mm.
- (2) Notwithstanding the upgrade levels in Flow Chart #1, where a minor renovation involves an entire building and the renovation includes the removal of all interior wall cladding (peripheral and interior) then the structural seismic upgrade level shall be S3.
- (3) Notwithstanding the upgrade levels in Flow Chart #1, where a major renovation involves an entire building and the renovation includes the removal of all interior wall cladding (peripheral and interior) then the structural seismic upgrade level shall be S3.

CHANGE OF MAJOR OCCUPANCY CLASSIFICATION PROJECTS (Flow Chart No. 2)

Change of Major Occupancy Classification – Change of major occupancy classification means a change of use within a building or a suite where the proposed use is outside of the defined uses of the existing major occupancy classification permitted for the building or the suite.

Small Suite Change of Major Occupancy Classification – Small suite change of major occupancy classification means a change of use within a building or a suite where the occupant load for the entire suite does not exceed 60 persons and the small suite is limited to a Group A, Division 2, Group D, Group E, Group F, Division 2 (wholesale showroom), or Group F, Division 3 major occupancy.

FLOW CHART NO. 2



NOTES:

1. Occupant load (OL) increase is based on the proposed occupant load for the entire building calculated as a percentage increase or decrease of the original occupant load for the entire building at the time of construction **or** calculated as a percentage increase or decrease of the current occupant load of the entire building. Occupant loads are to be determined by the acceptable solutions in Subsection 3.1.17. of Division B.

2. The Hazard Index may be determined by using Table 11.2.1.1.E. of Division B of the 2012 Building Code Compendium of the 2012 edition of the Ontario Building Code **or** the Hazard Index Table A-11.2.1.2.E.

3. For small suites, the small suite must be separated on the suite side of the suite separation with at least two layers of gypsum wall board (GWB). Where only one layer exists, then an additional layer of GWB must be added to the suite side only. The additional layer of GWB may be any type of GWB with a minimum thickness of 13 mm.

4. The cumulative 5 year limit is triggered when there is a change of major occupancy in an existing building and the aggregate area of the change in major occupancy within any 5 year period is greater than 50 per cent of the building area (as defined in Article 1.4.1.2. of Division A) in a building of not more than one storey, or the aggregate area of the change in major occupancy within any 5 year period is greater than 100 per cent of the building area (as defined in Article 1.4.1.2. of Division A) in a building of more than one storey.

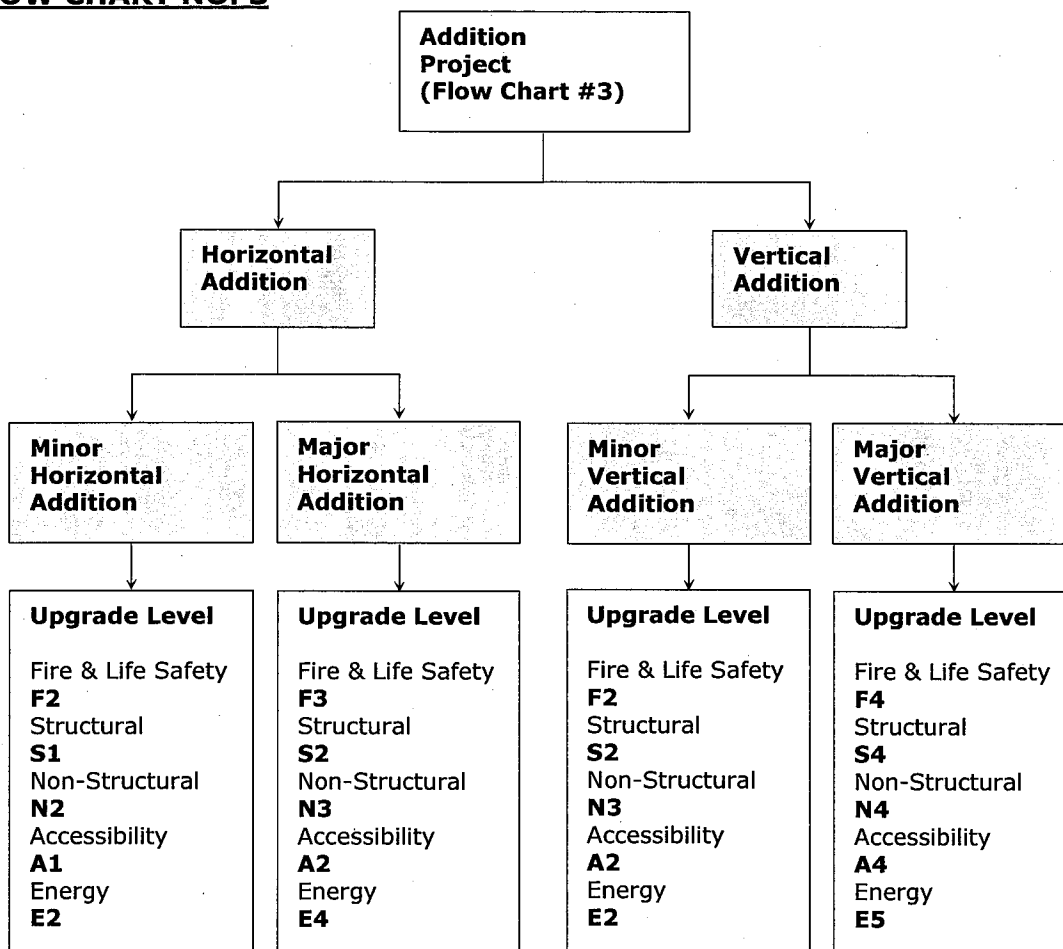
6. Where there is a change of major occupancy and the structural live loads for the new major occupancy are greater than the existing live loads required for the current major occupancy, then it shall be demonstrated that the existing building has the structural capacity to carry the increase in live load (including seismic resistance) or the building shall be structurally upgraded to carry the increase in live load.

ADDITION PROJECTS (Flow Chart No. 3)

Horizontal Addition – Horizontal additions include both “minor” and “major” horizontal additions. A minor horizontal addition is an addition that adds a total aggregate *floor area* of not more than 25 per cent of the existing *building area* or a total maximum aggregate *floor area* of less than or equal to 500 m². A major horizontal addition is an addition which adds a total aggregate *floor area* of more than 25 per cent of the existing *building area* to the building or a total aggregate *floor area* of more than 500 m².

Vertical Addition – Vertical additions include both “minor” and “major” vertical additions. A minor vertical addition is an addition that adds another floor level (mezzanine or storey) with a total maximum aggregate *floor area* of not more than 25 per cent of the *building area* or a total maximum aggregate *floor area* of less than or equal to 500 m². A major vertical addition is an addition that adds another floor level (mezzanine or storey) having a total aggregate *floor area* of more than 25 per cent of the existing *building area* or a total aggregate *floor area* of more than 500 m².

FLOW CHART NO. 3



PROCEDURE FOR USING THE UPGRADE MECHANISM MODEL

The following steps outline a recommended procedure for using the upgrade trigger mechanism model.

STEP 1 – Determine the appropriate Project Type(s) and Related Category or Categories of Work as a function of the scope of work for the alteration.

Table A-11.2.1.2.A Project Types and Related Categories of Work			
Project Type	Rehabilitation <i>(See Flow Chart No. 1)</i>	Change of Major Occupancy <i>(See Flow Chart No. 2)</i>	Addition <i>(See Flow Chart No. 3)</i>
Categories of Work	Voluntary Upgrade Repair/Small Suite Minor Renovation Major Renovation Reconstruction	Change of Major Occupancy Classification Change of Major Occupancy Classification to a Small Suite	Major Horizontal Addition Minor Horizontal Addition Major Vertical Addition Minor Vertical Addition

STEP 2 – Determine the Required Design Upgrade Level Based on the Category of Work for the Project

The required upgrade levels for fire, life & health safety; structural safety; non-structural safety; accessibility for persons with disabilities; and energy efficiency are to be determined using each of the applicable project type flow charts and the related category of work

For Rehabilitation Type Projects use Flow Chart No. 1.

For Change of Major Occupancy Type Projects use Flow Chart No. 2.

For Addition Type Projects use Flow Chart No. 3.

NOTE: Where a project involves more than one category of work, the most restrictive upgrade level, as determined from each category of work, shall determine the upgrade design level.

STEP 3 – Determine the objective and acceptable solution for the most restrictive upgrade level for fire, life and health safety; structural safety; non-structural safety; accessibility for persons with disabilities; and energy efficiency. The most restrictive upgrade levels are the design upgrade levels that are to be applied to the existing building.

The model is based on incremental upgrade levels for each of the fire, life and health safety (F), structural safety (S); non-structural safety (N); accessibility (A); and energy (E) objectives. For each of the upgrade levels, the model states the objective of the upgrade level as well as the corresponding acceptable solution that is deemed to meet the intended objective of the applicable upgrade level. The objective statement and acceptable solution for each F, S, N and A upgrade level is defined in Table A-11.2.1.2.B. The objective statement and acceptable solution for each E upgrade level is defined in Tables A-11.2.1.2.C and A-11.2.1.2.D.

The alternative acceptable solution for energy efficiency requires that the determined E design upgrade level is used to enter Table A-11.2.1.2.C to obtain a solution. The solution column in Table A-11.2.1.2.C provides the L level to enter Table A-11.2.1.2.D. Within the L Level row of Table A-11.2.1.2.D the user is provided with various Section rows under the Section column. Each Section row provides one or more alternative acceptable solutions under the Alternative

Acceptable Solution Options column. Each alternative acceptable solution is identified as a separate numeric solution. There are one or more alternative acceptable solutions for each Section row. The "Select 1-L1, 2-L2, ..." solution in Table A-11.2.1.2.C means that only one (1) of the alternative solutions in the Alternative Acceptable Solution Options column or only two (2) of the alternative acceptable solutions in the Alternative Acceptable Solution Options column and so on in Table A-11.2.1.2.D are required to meet the objective. It is up to the user to determine which Section(s) in the Section column and corresponding alternative acceptable solution in the Alternative Acceptable Solution Options column is (are) used to satisfy the objective. Within any 5 year period, when an alternative acceptable solution has been used previously within the project area, then that option is not permitted to be used as an alternative acceptable solution.

STEP 4 – Determine Any Other Requirements that may be Applicable. Other Building By-law requirements may be applicable to the existing building project. Review the Overall Conditions for the Upgrade Trigger Model to determine if other requirements are applicable.

DESIGN UPGRADE LEVEL TABLES

Table A-11.2.1.2.B DESIGN UPGRADE LEVELS FOR FIRE, LIFE AND HEALTH SAFETY (F), STRUCTURAL SAFETY(S), NON-STRUCTURAL SAFETY (N), and ACCESSIBILITY (A)		
DESIGN LEVEL	OBJECTIVE STATEMENT	ALTERNATIVE ACCEPTABLE SOLUTION
F1	Exiting to be reviewed to ensure that the exits do not present an unsafe condition.	Project Area - Exits to be upgraded with respect to number, capacity, and fire separations only.
S1	Proposed work must not have an adverse effect on the structural capacity of the existing structure.	Entire Building - Proposed work must not reduce the structural integrity of the existing building.
N1	Project area to be reviewed to ensure safety from overhead falling hazards.	Project Area - Restrain all ceiling supporting frames, T-bars assemblies, ceiling gypsum wall boards, all overhead mechanical ducts, and equipment, overhead electrical conduits and lights
A1	The proposed work must not adversely affect the existing accessibility level of the building.	Project Area - Existing level of accessibility must be maintained throughout the project area. No additional accessibility enhancements are required.
F2	Existing building to meet the fire & life safety requirements of the Building By-law within the project area and have conforming exits leading from the project area to an acceptable open space.	Project Area - Alarms and detectors (only where existing devices are provided), emergency lights, access to exit, exits, exit signs, and exit lights. Public Area (leading from project area to an acceptable open space) - emergency lights, exit signs, access to exit, exits, and flame spread ratings.
S2	Limited structural upgrade required in order to provide minimum protection to building occupants during a seismic event within the project area.	Project Area - Non-structural elements and falling hazards must be restrained to resist lateral loads due to earthquakes within the project area.
N2	Project area and means of egress to be reviewed to ensure safety from overhead falling hazards.	Project Area Means of Egress - Restrain interior partition walls. Restrain all ceiling supporting frames, T-bars assemblies, ceiling gypsum wall boards, all overhead mechanical ducts, and equipment, overhead electrical conduits and lights. Restrain cladding veneer, parapets, canopies and ornaments over exit and extended to 5 m on either side of exit
A2	A limited level of upgrade shall be provided within the project area to ensure access for persons with disabilities.	Project Area - door clearances, door hardware, and areas of refuge.

F3	Existing building to meet fire, life and health safety requirements within the project area. Existing building to meet fire, life & health safety requirements within the public areas.	<p>Project Area – Alarms & detectors (only where existing devices are provided), emergency lighting, access to exit, exits, exit signs, exit lights, flame spread ratings, floor assemblies & supports, occupancy separation, standpipes and sprinklers, washrooms.</p> <p>Public Area - Alarms & detectors (only where existing devices are provided), emergency lighting, access to exit, exits, exit signs, exit lights.</p> <p>Entire Building – Firefighting access.</p>
S3	The building structure shall be upgraded to an acceptable level in order to provide a minimum level of property and life safety to unreinforced masonry or other buildings having less than 30 per cent of the current required seismic resistance. Falling hazards over exits and sidewalks must be addressed.	<p>Entire Building — Bolting floor and roof structure to bearing walls and strengthening of floor and roof diaphragms as required to safely distribute lateral forces to bearing walls (i.e., Bolts Plus) All falling hazards such as cornices, parapets and awnings located above exits and sidewalks must be restrained to resist forces due to a seismic event.</p>
N3	Building exits and to acceptable open space to be reviewed to ensure safety from overhead falling hazards.	<p>Entire Building Exits - Restrain interior partition walls. Restrain all ceiling supporting frames, T-bars assemblies, ceiling gypsum wall boards, all overhead mechanical ducts, and equipment, overhead electrical conduits and lights. Restrain falling hazards from cladding, veneer, parapets, canopies and ornaments over exit and extended to 5 m on either side of exit.</p>
A3	The existing building shall be upgraded to an acceptable level in order to ensure complete access within the project area as well as access to the remainder of the building.	<p>Project Area — Door clearances, door hardware, accessible washrooms, and areas of refuge.</p> <p>Public Area — Door clearances, door hardware, areas of refuge, washrooms, ramps, and elevators.</p>
F4	Entire building to substantially meet the intent of health, fire and life safety requirements of the VBBL as well as provide protection to adjacent property.	<p>Entire Building — Alarms & detectors, emergency lighting, access to exit, exits, exit signs, exit lights, flame spread ratings, firefighting access & water supply, floor assemblies & support, spatial separation, occupancy separation, standpipes & sprinklers, washrooms, high building requirements, lighting levels, sound transmission classifications, ventilation, and building envelope review.</p>
S4	The entire building structure shall be brought up to an acceptable level in order to meet seismic requirements of the VBBL.	<p>Entire Building — Building to be upgraded to resist 75 per cent of the current By-law specified lateral force levels, where the building is evaluated as having less than 60 per cent of the current required seismic resistance. Post disaster buildings shall fully conform to Part 4</p>
N4	Entire Building and to acceptable open space to be reviewed to ensure safety from overhead falling hazards.	<p>Entire Building — Restrain all interior partition walls. Restrain all ceiling supporting frames, T-bars assemblies, ceiling gypsum wall boards, all overhead mechanical ducts, and equipment, overhead electrical conduits and lights. Restrain all falling hazards from cladding, veneer, parapets, canopies and ornaments attached to the exterior of the building.</p>
A4	The existing building shall be upgraded in order to provide the minimum accessibility requirements of the VBBL.	<p>Entire Building — Building to meet accessibility provisions of the current VBBL.</p>

Note

(1) Where there is one or more upgrade level(s) within the same category preceding the design upgrade level in Table A-11.2.1.2.B, then the design upgrade level shall also include all of the preceding upgrade levels. For example, where the design upgrade level is F3, then all of the upgrade requirements under F2 and F1 also apply.

TABLE A-11.2.1.2.C DESIGN UPGRADE LEVELS FOR ENERGY EFFICIENCY (E)			
Design Level	Objective Statement	Solution Location	Solution
E1	Review and maintain, or upgrade, basic energy efficiency equipment or components. Limit the probability of inefficient energy performance of <i>buildings</i> or <i>building</i> components	Project Area	Select 1-L1 in Table A-11.2.1.2.D (see notes)
E2	Review and maintain, or upgrade, a basic energy efficiency sub-systems. Limit the probability of inefficient energy performance of <i>buildings</i> or <i>building</i> components	Project Area	Select 1-L1 and 1-L2 in Table A-11.2.1.2.D (see notes)
E3	Review and improve energy performance of a basic energy efficiency system. Limit the probability of inefficient energy performance of <i>buildings</i> or <i>building</i> components	Project Area	Select 2-L3 and 2-L4 in Table A-11.2.1.2.D (see notes)
E4	Review and improve energy performance of an integrated energy efficiency system. Limit the probability that, as a result of the renovation of a <i>building</i> the use of energy will be inefficient	Project Area	Select 2-L3 and 2-L4 and 1-L5 in Table A-11.2.1.2.D (see notes)
E5	Review and bring to present VBBL energy requirements. Limit the probability that, as a result of the renovation of a <i>building</i> the use of energy will be inefficient	Project Area	Select 1-L6 in Table A-11.2.1.2.D (see notes)
E6	Reconstruct building to meet energy efficiency requirements of present Vancouver Building By-Law. Limit the probability that, as a result of the renovation of a <i>building</i> the use of energy will be inefficient	Entire Building	L7 in Table A-11.2.1.2.D

Notes:

The solution column in Table A-11.2.1.2.C provides the solution that will satisfy the objective. The solution column in Table A-11.2.1.2.C provides the L level to enter Table A-11.2.1.2.D. Within the L Level row of Table A-11.2.1.2.A, the user is provided with various Section rows under the Section column. Each Section row provides one or more alternative acceptable solutions under the Alternative Acceptable Solution Options column. Each alternative acceptable solution is identified as a separate numeric solution. There are one or more alternative

acceptable solutions for each Section row. The "Select 1-L1, 2-L2, ..." solution in Table A-11.2.1.2.C means that only one (1) of the alternative solutions in the Alternative Acceptable Solution Options column or only two (2) of the alternative acceptable solutions in the Alternative Acceptable Solution Options column and so on in Table A-11.2.1.2.D are required to meet the objective. It is up to the user to determine which Section(s) in the Section column and

corresponding alternative acceptable solution in the Alternative Acceptable Solution Options column is (are) used to satisfy the objective. Within any 5 year period, when an alternative acceptable solutions has been used previously within the project area, then that option is not permitted to be used as an alternative acceptable solution.

BOMA BEST (Path 1) may be substituted as the solution for Design Level E2 and BOMA BEST (Path 2) may be substituted as the solution for Design Levels E3, E4 or E5. BOMA BEST is a Canadian industry standard for commercial building sustainability certification. Official certification documentation produced by BOMA would be required for acceptance as an alternative acceptable solution option.

The intent of the inclusion of the BOMA BEST rating system is to recognise the efforts made towards improved building performance. BOMA BEST Path 1 or Path 2 will be accepted provided

- a) the BOMA BEST certification is administered by BOMA,
- b) BOMA BEST Path 1 - BOMA BEST (Level 1, 2, 3, 4) provides proof of a valid Certification and ongoing commissioning per BOMA's BEST Practice Q.3 (Preventative Maintenance Program), and
- c) BOMA BEST Path 2 - BOMA BEST (Level 1-AL2, 2, 3, 4) provides proof of a first-time Certification (to at least Level 1 with an ASHRAE Level 2 audit) within the previous 18 months, or a valid Certification and an increase in BOMA BEST's Energy Performance Benchmark Scale by at least one level within the previous 18 months, or advancing Certification (from one level to another) within the previous 24 months.

Proof means in the form of official certified documentation produced by BOMA, or a single Commissioning/Energy Report developed and provided by a qualified consultant, contractor, or other expert in this specialized field.

TABLE A-11.2.1.2.D
Alternative Acceptable Solutions for Energy Efficiency

L Level	Section	Alternative Acceptable Solution Options
L1	Envelope	<p>1) Reduce air leakage of all Vestibules (per 5.4.3.4 of ASHRAE 90.1 - 2010)</p> <p>2) Upgrade all Opaque Doors performance (per 5.5.3.6 of ASHRAE 90.1 - 2010)</p>
	HVAC	<p>1) Upgrade Dead Band settings (per 6.4.3.1.2 of ASHRAE 90.1 - 2010)</p> <p>2) Upgrade Set-point Overlap Restrictions (per 6.4.3.2 of ASHRAE 90.1 - 2010)</p> <p>3) Upgrade Off-Hour Controls (per 6.4.3.3 of ASHRAE 90.1 - 2010)</p> <p>4) Upgrade Ventilation System Controls (per 6.4.3.4 of ASHRAE 90.1 - 2010)</p> <p>5) Upgrade Heat Pump Auxiliary Heat Controls (per 6.4.3.5 of ASHRAE 90.1 - 2010)</p> <p>6) Upgrade Freeze Protection and Snow/Ice Melting Systems (per 6.4.3.8 of ASHRAE 90.1 - 2010)</p> <p>7) Upgrade Ventilation Controls For High-Occupancy Areas (per 6.4.3.9 of ASHRAE 90.1 - 2010)</p> <p>8) Upgrade Single Zone VAV Controls (per 6.4.3.10 of ASHRAE 90.1 - 2010)</p> <p>9) Upgrade Heat and Cool Limitation (per 6.5.2.1 of ASHRAE 90.1 - 2010)</p>

		<p>10) Inspect and remediate HVAC Insulation (per 6.4.4.1 of ASHRAE 90.1 - 2010)</p> <p>11) Inspect and remediate Duct and Plenum Leakage (per 6.4.4.2 of ASHRAE 90.1 - 2010)</p>
	SWH	1) Upgrade all SWH Piping Insulation (per 7.4.3 of ASHRAE 90.1 - 2010)
	Lighting	<p>1) Upgrade internal Exit Signs to not exceed 5W per face (per 9.4.2 of ASHRAE 90.1 - 2010)</p> <p>2) Functional Testing (per 9.4.4 of ASHRAE 90.1 - 2010)</p>
L2	Envelope	<p>1) Reduce air leakage of all Loading Dock Doors (per 5.4.3.3 of ASHRAE 90.1 - 2010)</p> <p>2) Upgrade all Floor Insulation (per 5.5.3.4 of ASHRAE 90.1 - 2010)</p>
	HVAC	<p>1) Clean and Balance all Air Systems (per 6.7.2.3.2 of ASHRAE 90.1 - 2010)</p> <p>2) Balance all Hydronic Systems (per 6.7.2.3.3 of ASHRAE 90.1 - 2010)</p>
	SWH	<p>1) Upgrade SWH system Temperature Controls (per 7.4.4.1 of ASHRAE 90.1 - 2010)</p> <p>2) Upgrade SWH system Temperature Maintenance Controls (per 7.4.4.2 of ASHRAE 90.1 - 2010)</p> <p>3) Upgrade SWH system Outlet Temperature Controls (per 7.4.4.3 of ASHRAE 90.1 - 2010)</p> <p>4) Upgrade SWH system Circulating Pump Controls (per 7.4.4.4 of ASHRAE 90.1 - 2010)</p> <p>5) Upgrade Pool systems (per 7.4.5 of ASHRAE 90.1 - 2010)</p> <p>6) Upgrade pipe risers to incorporate Heat Traps (per 7.4.6 of ASHRAE 90.1 - 2010)</p>
	Lighting	<p>1) Upgrade to incorporate Automatic Lighting Shutoff (per 9.4.1.1 of ASHRAE 90.1 - 2010)</p> <p>2) Upgrade to incorporate Space Control systems (per 9.4.1.2 of ASHRAE 90.1 - 2010)</p> <p>3) Upgrade to control Parking Garage Lighting (per 9.4.1.3 of ASHRAE 90.1 - 2010)</p> <p>4) Upgrade all Automatic Daylighting Controls for Primary Sidelighted Areas (per 9.4.1.4 of ASHRAE 90.1 - 2010)</p> <p>5) Upgrade all Automatic Daylighting Controls for Toplighting (per 9.4.1.5 of ASHRAE 90.1 - 2010)</p> <p>6) Upgrade to incorporate Additional Controls for specialized lighting (per 9.4.1.6 of ASHRAE 90.1 - 2010)</p> <p>7) Exterior Lighting Control (per 9.4.1.7 of ASHRAE 90.1 - 2010)</p>
L3	Envelope	<p>1) Provide a Building Envelope Assessment Report, to be signed and sealed by a design professional, report to include: effective R-value, blower test, list of upgrades to achieve a compliance rating using the latest COMcheck software version.</p> <p>2) Reduce air leakage of all Fenestration & Doors (per 5.4.3.2 of ASHRAE 90.1 - 2010)</p> <p>3) Upgrade all Below-Grade Wall Insulation (per 5.5.3.3 of ASHRAE 90.1 -</p>

	<p>2010)</p> <p>4) Reduce total Skylight Fenestration/Glazing Area to 5% of gross roof area (per 5.5.4.2.2 of ASHRAE 90.1 - 2010)</p> <p>5) Inspect and remediate all ceiling space and floor space equipment and services including ductwork, plumbing, insulation, penetrations, dampers, valves, coils, pans and drains.</p>
HVAC	<p>1) Provide an HVAC System Assessment Report, to be signed and sealed by a design professional. Report to include: systems reviews, upgrade and re-commissioning options, with estimates for energy savings and cost paybacks.</p> <p>2) Upgrade all ducts, plenums, and insulation (per 6.4.4 of ASHRAE 90.1 - 2010); inspect and remediate HVAC Insulation (per 6.4.4.1 of ASHRAE 90.1 - 2010); and inspect and remediate Duct and Plenum Leakage (per 6.4.4.2 of ASHRAE 90.1 - 2010)</p> <p>3) Incorporate Exhaust Air Recovery systems (per 6.5.6.1 of ASHRAE 90.1 - 2010)</p> <p>4) Incorporate a Service Water Heating Recovery system (per 6.5.6.2 of ASHRAE 90.1 - 2010)</p> <p>5) Upgrade all Kitchen Exhaust and Replacement Air systems (per 6.5.7.1 of ASHRAE 90.1 - 2010)</p> <p>6) Upgrade all Laboratory Exhaust and Replacement Air systems (per 6.5.7.2 of ASHRAE 90.1 - 2010)</p> <p>7) Balance all systems (per 6.7.2.3 of ASHRAE 90.1 - 2010); clean and balance all air systems (per 6.7.2.3.2 of ASHRAE 90.1 - 2010); balance all hydronic systems (per 6.7.2.3.3 of ASHRAE 90.1 - 2010)</p>
SWH	<p>1) Provide an SWH System Assessment Report, to be signed and sealed by a design professional</p> <ul style="list-style-type: none"> • Report to include: systems reviews, upgrade and re-commissioning options, with estimates for energy savings and cost paybacks. <p>2) Upgrade SWH system Controls (per 7.4.4 of ASHRAE 90.1 - 2010)</p> <ul style="list-style-type: none"> • Upgrade SWH system temperature controls (per 7.4.4.1 of ASHRAE 90.1 - 2010) • Upgrade SWH system Temperature Maintenance Controls (per 7.4.4.2 of ASHRAE 90.1 - 2010) • Upgrade SWH system Outlet Temperature Controls (per 7.4.4.3 of ASHRAE 90.1 - 2010) • Upgrade SWH system Circulating Pump Controls (per 7.4.4.4 of ASHRAE 90.1 - 2010)
Lighting	<p>1) Provide a comprehensive Lighting System Assessment Report to be signed and sealed by a design professional</p> <ul style="list-style-type: none"> • Report to include: systems reviews, upgrade options, with estimates for energy savings and cost paybacks. <p>2) Provide day lighting by skylight (per 5.5.4.2.3 of ASHRAE 90.1 - 2010)</p> <p>3) Upgrade total Exterior Lighting Power (per 9.4.3 of ASHRAE 90.1 - 2010)</p> <p>4) Meet the interior lighting power allowance by the Building Area Method (per 9.5 of ASHRAE 90.1 - 2010)</p> <p>5) Meet the interior lighting power allowance by the Space-by-Space Method (per 9.6 of ASHRAE 90.1 - 2010)</p>

	Envelope	<p>1) Reduce air leakage of entire Building Envelope (per 5.4.3 of ASHRAE 90.1 - 2010); reduce air leakage of all Fenestration & Doors (per 5.4.3.2 of ASHRAE 90.1 - 2010)</p> <ul style="list-style-type: none"> • Reduce air leakage of all Loading Dock Doors (per 5.4.3.3 of ASHRAE 90.1 - 2010) • Reduce air leakage of all Vestibules (per 5.4.3.4 of ASHRAE 90.1 - 2010) <p>2) For single retail/tenant spaces < 500 sq.m.) Perform an Air Leakage / Blower test and remediate</p> <p>3) Upgrade all Roof Insulation (per 5.5.3.1 of ASHRAE 90.1 - 2010)</p> <p>4) Upgrade all Above-Grade Wall Insulation (per 5.5.3.2 of ASHRAE 90.1 - 2010)</p> <p>5) For single retail/tenant spaces < 500 sq.m.) Replace storefront window(s) to meet the By-law.</p> <p>6) Reduce total vertical Fenestration/Glazing Area to 40% of gross wall area (per 5.5.4.2.1 of ASHRAE 90.1 - 2010)</p> <p>7) Upgrade all Fenestration/Glazing Performance (per 5.5.4.3 and 5.5.4.4 of ASHRAE 90.1 - 2010)</p> <p>8) Inspect and remediate roof systems including membrane, parapets, scuppers, drains, gutters, downspouts and drains.</p>
L4	HVAC	<p>1) Upgrade all Zone Thermostatic Controls (per 6.4.3 & 6.5.2.1 of ASHRAE 90.1 - 2010)</p> <ul style="list-style-type: none"> • Upgrade Dead Band settings (per 6.4.3.1.2 of ASHRAE 90.1 - 2010) • Upgrade Set-point Overlap Restrictions (per 6.4.3.2 of ASHRAE 90.1 - 2010) • Upgrade Off-Hour Controls (per 6.4.3.3 of ASHRAE 90.1 - 2010) • Upgrade Ventilation System Controls (per 6.4.3.4 of ASHRAE 90.1 - 2010) • Upgrade Heat Pump Auxiliary Heat Controls (per 6.4.3.5 of ASHRAE 90.1 - 2010) • Upgrade Freeze Protection and Snow/Ice Melting Systems (per 6.4.3.8 of ASHRAE 90.1 - 2010) • Upgrade Ventilation Controls For High-Occupancy Areas (per 6.4.3.9 of ASHRAE 90.1 - 2010) • Upgrade Single Zone VAV Controls (per 6.4.3.10 of ASHRAE 90.1 - 2010) • Upgrade Heat and Cool Limitation (per 6.5.2.1 of ASHRAE 90.1 - 2010) <p>2) Upgrade HVAC to incorporate Economizers (per 6.5.1 of ASHRAE 90.1 - 2010)</p> <p>3) Upgrade Heat Rejection Equipment (per 6.5.5 of ASHRAE 90.1 - 2010)</p> <p>4) Upgrade to Air and Service Water Heating Heat Recovery systems (per 6.5.6 of ASHRAE 90.1 - 2010)</p> <ul style="list-style-type: none"> • Incorporate Exhaust Air Recovery systems (per 6.5.6.1 of ASHRAE 90.1 - 2010) • Incorporate a Service Water Heating Recovery system (per 6.5.6.2 of ASHRAE 90.1 - 2010) <p>5) Upgrade entire Radiant Heating system (per 6.5.8 of ASHRAE 90.1 - 2010)</p> <p>6) (Re-)Commission all systems (per 6.7.2.4 of ASHRAE 90.1 - 2010)</p>

	SWH	1) Upgrade all Service Water Heating Equipment Efficiency (per 7.4.2 of ASHRAE 90.1 - 2010)
	Lighting	1) Lighting Control (per 9.4.1 of ASHRAE 90.1 - 2010) <ul style="list-style-type: none"> • Upgrade to incorporate Automatic Lighting Shutoff (per 9.4.1.1 of ASHRAE 90.1 - 2010) • Upgrade to incorporate Space Control systems (per 9.4.1.2 of ASHRAE 90.1 - 2010) • Upgrade to control Parking Garage Lighting (per 9.4.1.3 of ASHRAE 90.1 - 2010) • Upgrade all Automatic Daylighting Controls for Primary Sidelighted Areas (per 9.4.1.4 of ASHRAE 90.1 - 2010) • Upgrade all Automatic Daylighting Controls for Toplighting (per 9.4.1.5 of ASHRAE 90.1 - 2010) • Upgrade to incorporate Additional Controls for specialized lighting (per 9.4.1.6 of ASHRAE 90.1 - 2010) • Exterior Lighting Control (per 9.4.1.7 of ASHRAE 90.1 - 2010)
L5	Envelope	1) Upgrade insulation levels of entire Building Envelope (Opaque Areas) (per 5.5.3 of ASHRAE 90.1 - 2010) <ul style="list-style-type: none"> • Upgrade all Roof Insulation (per 5.5.3.1 of ASHRAE 90.1 - 2010) • Upgrade all Above-Grade Wall Insulation (per 5.5.3.2 of ASHRAE 90.1 - 2010) • Upgrade all Below-Grade Wall Insulation (per 5.5.3.3 of ASHRAE 90.1 - 2010) • Upgrade all Floor Insulation (per 5.5.3.4 of ASHRAE 90.1 - 2010) • Upgrade all Opaque Doors performance (per 5.5.3.6 of ASHRAE 90.1 - 2010) 2) Upgrade all Fenestration/Glazing (per 5.5.4 of ASHRAE 90.1 - 2010) <ul style="list-style-type: none"> • (For single retail/tenant spaces $\leq 500 \text{ m}^2$) Replace storefront window(s) to meet Table 5.5-5 of ASHRAE 90.1-2010. • Reduce total vertical Fenestration/Glazing Area to 40% of gross wall area (per 5.5.4.2.1 of ASHRAE 90.1 - 2010) • Reduce total Skylight Fenestration/Glazing Area to 5% of gross roof area (per 5.5.4.2.2 of ASHRAE 90.1 - 2010) • Increase total Skylight Fenestration/Glazing Area (per 5.5.4.2.3 of ASHRAE 90.1 - 2010) • Upgrade all Fenestration/Glazing Performance (per 5.5.4.3 and 5.5.4.4 of ASHRAE 90.1 - 2010)
	HVAC	1) Upgrade all HVAC Controls, Insulation and Leakage (per 6.4 of ASHRAE 90.1 - 2010)
	SWH	1) Upgrade Service Water Heating system to meet the Mandatory Provisions (per 7.4 of ASHRAE 90.1 - 2010); Upgrade all Service Water Heating Equipment Efficiency (per 7.4.2 of ASHRAE 90.1 - 2010)
	Lighting	1) Upgrade Lighting system to meet the Mandatory Provisions (per 9.4 of ASHRAE 90.1 - 2010)
	Envelope	1) Upgrade all aspects of Building Envelope (per Section 5 of ASHRAE 90.1 - 2010)
L6	HVAC	1) Upgrade all aspects of HVAC (per Section 6 of ASHRAE 90.1 - 2010)
	SWH	1) Upgrade all aspects of SWH (per Section 7 of ASHRAE 90.1 - 2010)
	Lighting	1) Upgrade all aspects of Lighting (per Section 9 of ASHRAE 90.1 - 2010)
	Energy	1) Upgrade existing building (per Part 10)
L7	Energy	1) Upgrade existing building (per Part 10)

Notes:

(1) COMcheck – software developed by the US Department of Energy for use with ASHRAE 90.1-2010 Building Envelope Trade-Off option

(2) SWH – Service Water Heating

(3) HVAC – Heating, Ventilating and Air Conditioning

HAZARD INDEX TABLE

The hazard indices for various building uses are indicated in Table A-11.2.1.2.E.

The required level of Building By-law upgrade for a Change of Major Occupancy Type projects is dependent on whether or not the Hazard Index has increased for the proposed alteration. Hazard Index ratings are intended to reflect the level of fire and life safety risk to occupants for various building uses. Hazard index ratings range from 1 to 6, with a hazard index of rating of 6 representing the highest risk to occupants.

Table A-11.2.1.2.E Hazard Index Table	
Group A Division 1	
Building Use	Hazard Index
Dinner Theatres	5
Live Theatres	5
Motion Picture Theatres	5
Opera Houses	5
Television Studios (With Audience)	5
Group A Division 1	
Building Use	Hazard Index
Art Galleries	4
Auditoria	4
Billiard Halls, Amusement Arcades	4
Bowling Alleys	4
Churches	4
Clubs, Lodges (Non-Residential)	4
Community Halls	4
Concert Halls	4
Court Rooms	4
Dance Halls	4
Daycare Centres	4
Exhibition Halls (Without Sales)	4
Exhibition Halls (With Sales)	See Group E
Gymnasia (Multi-Purpose)	4
Gymnasia (Athletic)	4
Lecture Halls	4
Libraries	4
Licensed Beverage Establishments	4
Licensed Clubs, Lodges	4
Museums	4
Passenger Stations/Depots	4
Recreational Piers	4
Restaurants (Seating Over 17)	4

Schools, Colleges	4
Undertaking Premises	4
Group A Division 3	
Building Use	Hazard Index
Arenas (No Occupancy On Activity Surface)	4
Armouries (No Occupancy On Activity Surface)	4
Enclosed Stadia or Grandstand	4
Ice Rinks (No Occupancy On Activity Surface)	4
Indoor Swimming Pools	4
Group A Division 4	
Building Use	Hazard Index
Amusement Park Structures	3
Bleachers	3
Grandstands (Open)	3
Reviewing Stands	3
Stadia (Open)	3
Group B, Division 1	
Building Use	Hazard Index
Detention Facilities (Minimum Security)	5
Detention Facilities (All other types of security)	6
Police Station with Detention (not meeting Article 3.1.2.4.)	4
Group B, Division 2	
Building Use	Hazard Index
Hospital, Nursing Home, Geriatric, Sanitarium (Immobile)	5
Hospital, Nursing Home, Geriatric, Sanitarium (Non-Ambulatory)	5
Psychiatric Hospitals (Maximum Confinement)	5
Psychiatric Hospitals (Minimum Confinement)	4
Police Station with Detention (Meeting Article 3.1.2.4.)	3
Group B, Division 3	
Building Use	Hazard Index
Residential Care Facilities (Ambulatory)	4
Residential Care Facilities (Non-Ambulatory)	5
Children Custodial Homes	4
Convalescent Homes (Ambulatory)	4
Convalescent Homes (Non-Ambulatory)	5
Adult Group Homes with Development Disabilities (Minimum Confinement)	4
Adult Group Homes with Development Disabilities (Maximum Confinement)	5

Group C	
Building Use	Hazard Index
Apartments	4
Clubs, Residential	4
Colleges Residential	4
Congregate Care Housing for Seniors	5
Convents	4
Dormitories/Hotels	4
Hotels	5
Single Family Dwellings	2
Live/work units	5
Monasteries	4
Retirement Homes	4
Schools, Residential	4
Group D	
Building Use	Hazard Index
Advertising and Sales Offices	3
Automatic Bank Deposit	4
Barber/Hairdresser Shops	4
Beauty Parlours	4
Branch Banks	4
Car Rental Premises	3
Chiropractic Offices	4
Communications Offices (Telephone Exchange)	4
Communications Offices (Telex)	4
Communications Offices (Courier)	3
Computes Centres	4
Construction Offices	3
Costume Rental Premises	4
Dental Offices (Denture Clinic)	4
Dental Offices (General)	4
Dental Offices (Surgical/Anaesthesia)	5
Dry Cleaning Depots	4
Dry Cleaning Premises (Self-Serve)	4
Health/Fitness Clubs	4
Laundries (Self-Serve)	4
Massage Parlours	4
Medical Offices (Examination)	4
Medical Offices (Surgical Anaesthesia)	5
Offices (Business)	3
Offices (Charitable)	3

Offices (Legal/Accounting)	3
Offices (Design)	4
Pharmacy Offices	4
Photographic Studios	4
Physiotherapy Offices	4
Police Stations (No Detention)	4
Printing and Duplicating	5
Public Saunas	4
Radio Stations (No Audience)	4
Small Tool Rental Premises	4
Suntan Parlours	4
Veterinary Offices	4
Group E	
Building Use	Hazard Index
Automotive/Hardware Department Store	5
China Shops	4
Department Stores	5
Electrical Stores (Fixtures)	3
Exhibition Halls (With Sales)	5
"Fast Food" Outlets	4
Feed and Seed Stores	5
Flea Markets	5
Flower Shops	4
"Food" and Vegetable Markets	4
Garden Shops	4
"Gas" Bars	5
Gift Shops	4
Home Improvement Stores	5
Kitchen/Bathroom Cupboards Stores	4
Plumbing Stores (Fixtures/Accessories)	3
"Pop" Shops	4
Restaurants (Not More Than 30 Persons)	4
Shopping Malls	5
Stationery/Office Supply Stores	4
Stores (Art)	4
Stores (Baked Goods)	4
Stores (Beer)	4
Stores (Book)	4
Stores (Camera)	4
Stores (Candy)	4
Stores (Clothing)	4
Stores (Drugs)	4

Stores (Electronic)	4
Stores (Floor Coverings)	5
Stores (Food)	3
Stores (Furniture/Appliances)	4
Stores (Hardware)	5
Stores (Health)	4
Stores (Hobby)	4
Stores (Jewellery)	3
Stores (Paint/Wallpaper)	5
Stores (Pet)	4
Stores (Records/Tapes)	4
Stores (Spirits)	5
Stores (Toys)	5
Stores (Variety)	4
Stores (Video Sales/Rental)	4
Supermarket	4
Group F, Division 1	
Building Use	Hazard Index
All Uses	6
Group F, Division 2	
Building Use	Hazard Index
Aircraft Hangars	5
Abattoirs	4
Bakeries	5
Body Shop	5
Candy Plants	4
Cold Storage Plants with Flammable Refrigerant	5
Cold Storage Plants with Non-flammable Refrigerant and	4
Dry Cleaning Establishments (non-flammable or non-explosive)	4
Electrical Substations	4
Factories (High Fire Load)	5
Freight Depots (High Fire Load)	5
Laboratories (High Fire Load)	5
Laundries (not self-serve)	4
Manufacturer Sales (High Fire Load)	5
Mattress Factories	4
Meat Packing Plants	4
Packaging Manufacturers (Cellulose)	4
Packaging Manufacturers (Noncombustible)	3
Packaging Manufacturers (Plastics)	5

Paper Processing Plants (Wet)	5
Planing Mills	5
Printing Plants	4
Public Heritage Buildings	3
Repair Garages	5
Sample Display Rooms (High Fire Load)	5
Self Service Storage Buildings	4
Service Stations (no spray painting)	5
Storage Rooms (High Fire Load)	5
Television Studios (no audience)	4
Tire Storage	5
Warehouse (High Fire Load)	5
Welding Shops	5
Wholesale Rooms (High Fire Load)	5
Wood Working Factories	5
Workshops (High Fire Load)	5
Group F, Division 3	
Building Use	Hazard Index
Creameries	2
Factories (Low Fire Load)	3
Freight Depots (Low Fire Load)	3
Laboratories (Low Fire Load)	3
Manufacturers Sales (Low Fire Load)	3
Power Plants	4
Public Heritage Buildings	3
Sample Display Rooms (Low Fire Load)	3
Storage Garages	3
Storage Rooms (Low Fire Load)	3
Warehouse (Low Fire Load)	3
Wholesale Rooms (Low Fire Load)	3
Workshops (Low Fire Load)	3

Schedule E-1
Building By-law "Owner's Undertaking"

SCHEDULE E-1



Note: To be submitted with the application for a Building Permit

BUILDING BY-LAW "OWNER'S UNDERTAKING"

The Chief Building Official
City of Vancouver
453 West 12th Avenue
Vancouver, B.C.
V5Y 1V4

Date (Month Day Year)

Dear Sir:

RE: Property Address
Building Permit Application No.

In consideration of the City accepting and processing the above application for a building permit, and as required by the Building By-law, the following representations, warranties and indemnities are given to the City

- 1. (a) If an individual is the owner:
(b) If a corporation is the owner of the property,
2. The owner will comply with, and cause those employed for this project to comply with all applicable by-laws of the City of Vancouver and other statutes and regulations in force in the City of Vancouver relating to the development, work, undertaking or permission in respect of which this application is made.
3. The owner fully understands the requirements herein, and acknowledges full responsibility for carrying out the work, or gives assurance that the work will be carried out, in accordance with all by-laws governing the construction of the building.
4. The owner hereby agrees to indemnify and save harmless the City of Vancouver and its employees from all claims, liability, judgments, costs and expenses of every kind including negligence which may result from the failure to comply fully with all by-laws, statutes and regulations relating to any work or undertaking in respect of which this application is made.
5. Where used herein the words "work" or "undertaking" in respect of which this application is made, the owner understands this to include all electrical, plumbing, mechanical, gas and other works necessary to complete the contemplated construction.

Owner's Undertaking (continued) Property Address. _____

Building Permit No _____

6. I am authorized to give these representations, warranties, assurances and indemnities to the City of Vancouver.

This Owners' Undertaking is executed by the owner this _____ day of _____, _____
(Day) (Month) (Year)

1. Where owner is an individual:

Signed and delivered in the presence of:

Owner's Signature _____

Owner's Name _____

(PRINT)

Witness's Signature _____

Witness's Name _____

(PRINT)

Witness's Address _____

2. Where owner is a corporation:

Signed, sealed and delivered in the presence of:

Name of Corporation _____

Per:

Authorized Signatory _____

Name _____

(PRINT)

Witness's Signature _____

Witness's Name _____

(PRINT)

Witness's Address _____

3. Where owner is a partnership:

Signed, sealed and delivered in the presence of:

Name of Partnership _____

Per:

Authorized Signatory _____

Name _____

(PRINT)

Witness's Signature _____

Witness's Name _____

(PRINT)

Witness's Address _____

Building By-law Article 1.3.2.1. Intent

- 1) This By-Law sets standards in the general public interest. It is enacted and retained on the understanding and specifically expressed condition that it creates no duty whatsoever on the city, the Chief Building Official or any employee of the city to enforce its provisions, and on the further condition that a failure to administer or enforce its provisions, or the incomplete or inadequate administration or enforcement of its provisions, shall not give rise to a cause of action in favour of any person whatsoever. The issuance of any permit, including an occupancy permit, is not a representation, warranty or statement that this By-Law or any other enactment has been complied with, and the issuance thereof in error shall not give rise to a cause of action. Accordingly, words in this By-law defining the responsibilities and authority of the Chief Building Official shall be construed as internal administrative directions which do not create a duty.

Building By-law Article 1.4.1.5. Compliance with By-law and Other Enactments

- 1) The owner shall comply with this By-law and all other applicable enactments.
- 2) The owner shall ensure that all work, construction, or occupancy is carried out in accordance with this By-law and all other applicable enactments.
- 3) The owner shall ensure that the occupancy of a building or part of a building complies with the occupancy permit.
- 4) The issuance of a permit, the acceptance of plans and supporting documents submitted for a permit, or the making of inspections by the Chief Building Official shall not relieve the owner of a building from the full responsibility for carrying out the work or having the work carried out in accordance with this By-law and all other applicable enactments.

Schedule E-2
Building By-law
“Owner’s Undertaking for Tenant Improvements”

SCHEDULE E-2



Note: To be submitted with the application for a Building Permit

BUILDING BY-LAW
"OWNER'S UNDERTAKING FOR TENANT IMPROVEMENTS"

The Chief Building Official
City of Vancouver
453 West 12th Avenue
Vancouver, B.C.
V5Y 1V4

Date (Month Day Year)

Dear Sir:

RE: Property Address
Building Permit Application No.

In consideration of the City accepting and processing the above application for a building permit from (the "Tenant"), a tenant of the above-mentioned property, and as required by the Building By-law, the following representations, warranties and indemnities are given to the City.

- 1. (a) If an individual is the owner:
(b) If a corporation is the owner of the property,
2. The owner will use its reasonable efforts to require the tenant to comply with, and cause those employed for this project to comply with all applicable by-laws of the City of Vancouver and other statutes and regulations in force in the City of Vancouver relating to the development, work, undertaking or permission in respect of which this application is made.
3. The owner understands and acknowledges that the issuance of any permit, including an Occupancy Permit, or the inspection or approval or passage of work by the City is not a representation or warranty that any by-law has been complied with the owner remains responsible at all times to use its reasonable efforts to require compliance by the tenant. The owner has read and understands Article 1.3.2.1. and Article 1.4.1.5. of Division C Book I and Book II of the Building By-law which are set out on the reverse side hereof.
4. The owner hereby agrees to use its reasonable efforts to require that the tenant does indemnity and save harmless the City of Vancouver and its employees from all claims, liability, judgments, costs and expenses of every kind including negligence which may result from the failure to comply fully with all by-laws, statutes and regulations relating to any work or undertaking in respect of which this application is made.
5. Where used herein the words "work" or "undertaking" in respect of which this application is made, the owner understands this to include all electrical, plumbing, mechanical, gas and other works necessary to complete the contemplated construction

Owner's Undertaking (continued)
(Tenant Improvements)

Property Address _____

Building Permit Application No. _____

6. I am authorized to give these representations, warranties, assurances and indemnities to the City of Vancouver.

This Owners' Undertaking is executed by the owner this _____ day of _____, _____.
(Day) (Month) (Year)

1. Where owner is an individual:

Signed and delivered in the presence of:

Owner's Signature _____

Witness's Signature _____

Owner's Name _____
(PRINT)

Witness's Name _____
(PRINT)

Witness's Address _____

2. Where owner is a corporation:

Signed, sealed and delivered in the presence of:

Name of Corporation _____

Per:

Authorized Signatory _____

Witness's Signature _____

Name _____
(PRINT)

Witness's Name _____
(PRINT)

Witness's Address _____

3. Where owner is a partnership:

Signed, sealed and delivered in the presence of:

Name of Partnership _____

Per

Authorized Signatory _____

Witness's Signature _____

Name _____
(PRINT)

Witness's Name _____
(PRINT)

Witness's Address _____

Building By-law Article 1.3.2.1. Intent

1) This By-Law sets standards in the general public interest. It is enacted and retained on the understanding and specifically expressed condition that it creates no duty whatsoever on the city, the Chief Building Official or any employee of the city to enforce its provisions, and on the further condition that a failure to administer or enforce its provisions, or the incomplete or inadequate administration or enforcement of its provisions, shall not give rise to a cause of action in favour of any person whatsoever. The issuance of any permit, including an occupancy permit, is not a representation, warranty or statement that this By-Law or any other enactment has been complied with, and the issuance thereof in error shall not give rise to a cause of action. Accordingly, words in this By-law defining the responsibilities and authority of the Chief Building Official shall be construed as internal administrative directions which do not create a duty.

Building By-law Article 1.4.1.5. Compliance with By-law and Other Enactments

- 1) The owner shall comply with this By-law and all other applicable enactments.
- 2) The owner shall ensure that all work, construction, or occupancy is carried out in accordance with this By-law and all other applicable enactments.
- 3) The owner shall ensure that the occupancy of a building or part of a building complies with the occupancy permit.
- 4) The issuance of a permit, the acceptance of plans and supporting documents submitted for a permit, or the making of inspections by the Chief Building Official shall not relieve the owner of a building from the full responsibility for carrying out the work or having the work carried out in accordance with this By-law and all other applicable enactments.

Schedule E-3
Building By-law
“Lessee’s Undertaking for Tenant Improvements”

SCHEDULE E-3



Note: To be submitted with the application for a Building Permit

BUILDING BY-LAW "LESSEE'S UNDERTAKING FOR TENANT IMPROVEMENTS"

The Chief Building Official
City of Vancouver
453 West 12th Avenue
Vancouver, B.C.
V5Y 1V4

Date (Month Day Year)

Dear Sir:

RE: Property Address _____

Building Permit C _____

In consideration of the City accepting and processing the above application for a building permit, and as required by the Building By-law, the following representations, warranties and indemnities are given to the City.

- 1. (a) If an individual is the lessee:
() That I am the lessee of the above property, or
(b) If a corporation is the lessee of the property,
() That _____ is the lessee of the above property.
(Name of Corporation)
2. The lessee will comply with, and cause those employed for this project to comply with all applicable by-laws of the City of Vancouver and other statutes and regulations in force in the City of Vancouver relating to the development, work, undertaking or permission in respect of which this application is made.
3. The lessee fully understands the requirements herein, and acknowledges full responsibility for carrying out the work, or gives assurance that the work be carried out, in accordance with all by-laws governing the construction of the building. The lessee understands and acknowledges that the issuance of any permit, including an Occupancy Permit, or the inspection or approval or passage of work by the City is not a representation or warranty that any by-law has been complied with and the Lessee remains responsible at all times to assure compliance. The lessee has read and understands Article 1.3.2.1. and Article 1.4.1.5. of Division C Book I and Book II of the Building By-law which are set out on the reverse side hereof.
4. The lessee hereby agrees to indemnify and save harmless the City of Vancouver and its employees from all claims, liability, judgments, costs and expenses of every kind including negligence which may result from the failure to comply fully with all by-laws, statutes and regulations relating to any work or undertaking in respect of which this application is made.
5. Where used herein the words "work" or "undertaking" in respect of which this application is made, the lessee understands this to include all electrical, plumbing, mechanical, gas and other works necessary to complete the contemplated construction.

Lessee's Undertaking (continued) Property Address _____

Building Permit Application _____

6. I am authorized to give these representations, warranties, assurances and indemnities to the City of Vancouver.

This Lessee's Undertaking is executed by the Lessee this _____ day of _____, _____.

(Day) (Month) Year

1. Where lessee is an individual:

Signed and delivered in the presence of:

Lessee's Signature _____

Witness's Signature _____

Lessee's Name _____
(PRINT)

Witness's Name _____
(PRINT)

Witness's Address _____

2. Where lessee is a corporation:

Signed, sealed and delivered in the presence of:

Name of Corporation _____

Per:

Authorized Signatory _____

Witness's Signature _____

Name _____
(PRINT)

Witness's Name _____
(PRINT)

Witness's Address _____

3. Where lessee is a partnership:

Signed, sealed and delivered in the presence of:

Name of Partnership _____

Per

Authorized Signatory _____

Witness's Signature _____

Name _____
(PRINT)

Witness's Name _____
(PRINT)

Witness's Address _____

Building By-law Article 1.3.2.1. Intent

- 1) This By-Law sets standards in the general public interest. It is enacted and retained on the understanding and specifically expressed condition that it creates no duty whatsoever on the city, the Chief Building Official or any employee of the city to enforce its provisions, and on the further condition that a failure to administer or enforce its provisions, or the incomplete or inadequate administration or enforcement of its provisions, shall not give rise to a cause of action in favour of any person whatsoever. The issuance of any permit, including an occupancy permit, is not a representation, warranty or statement that this By-Law or any other enactment has been complied with, and the issuance thereof in error shall not give rise to a cause of action. Accordingly, words in this By-law defining the responsibilities and authority of the Chief Building Official shall be construed as internal administrative directions which do not create a duty.

Building By-law Article 1.4.1.5. Compliance with By-law and Other Enactments

- 1) The owner shall comply with this By-law and all other applicable enactments.
- 2) The owner shall ensure that all work, construction, or occupancy is carried out in accordance with this By-law and all other applicable enactments.
- 3) The owner shall ensure that the occupancy of a building or part of a building complies with the occupancy permit.
- 4) The issuance of a permit, the acceptance of plans and supporting documents submitted for a permit, or the making of inspections by the Chief Building Official shall not relieve the owner of a building from the full responsibility for carrying out the work or having the work carried out in accordance with this By-law and all other applicable enactments.

**Schedule A
Fee Schedule**

SCHEDULE A

FEE SCHEDULE

Current Fees

PART A - BUILDING

1. The fees hereinafter specified shall be paid to the City with respect to and upon the application for the issue of a PERMIT as follows:

(a) Except as provided for in Clause (b) for the CONSTRUCTION of any BUILDING, or part thereof:

When the estimated cost of the work, being the valuation referred to in Article 1.6.2.3. of Book I, Division C and Book II, Division C of this By-law, does not exceed \$5,000 or for the first \$5,000 of the estimated cost of the work \$120.00

For each \$1,000, or part thereof, by which the estimated cost of the work exceeds \$5,000 but does not exceed \$50,000.....\$8.10

For each \$1,000, or part thereof, by which the estimated cost of the work exceeds \$50,000\$4.05

(b) For the installation, CONSTRUCTION, re- construction, ALTERATION or repair of, or ADDITION to, any CHIMNEY, FIREPLACE, INCINERATOR, VENTILATING SYSTEM, AIR- CONDITIONING SYSTEM, or HEATING SYSTEM, the fee shall be in accordance with Clause (a), except that a fee shall not be charged when the cost of such work is less than \$500

(c) For a permit for temporary OCCUPANCY of a part of a STREET, or of the AIR SPACE immediately ABOVE a part of a STREET, in accordance with Section 1.9. of Book I, Division C and Book II, Division C of this By-law, the daily fee shall be for each 10 m² or part thereof, of STREET or of AIR SPACE part thereof, of STREET or of AIR SPACE immediately above such STREET to be occupied\$2.49

Subject to a minimum fee of \$84.00

(d) For an OCCUPANCY PERMIT not required by this By-law but requested..... \$87.00

(e) For the demolition of a BUILDING, not including a ONE-FAMILY DWELLING, which has at any time since November 1, 1986 provided RESIDENTIAL OCCUPANCY, subject to Section 3:

For each DWELLING UNIT.....\$1,000.00

For each sleeping room in a multiple conversion dwelling, hotel or other BUILDING, which is or has been a principal dwelling or residence of a person, family or household.....\$1,000.00

(f) For the demolition of a ONE-FAMILY DWELLING, which has at any time since November 1, 1986 provided RESIDENTIAL OCCUPANCY, subject to Section 3\$1,000.00

(g) For the repair of building envelope pursuant to requirements of Book I, Division B, Part 5 for any residential building..... Nil

2. The fees hereinafter specified shall be paid to the City as follows:

- (a) For a required permit inspection for compliance with this By-Law which cannot be carried out during normal working hours and where there is a request to carry out the inspection after hours, the fee to be based on the time actually spent in making such inspection, at a minimum inspection time of four (4) hours, including traveling time:
 - For each hour or part thereof \$228.00
- (b) For a plan review where an applicant requests in writing that the review be carried out during overtime:
 - For each hour or part thereof \$240.00
- (c) For each special inspection of a BUILDING or structure to determine compliance with this By-law, and in respect of which no specific fee is otherwise prescribed, the fee to be based on the time actually spent in making the inspection:
 - For each hour or part thereof \$160.00
- (d) For each REINSPECTION made necessary due to faulty work or materials or incomplete work requested to be inspected \$160.00
- (e) For each inspection of a drainage tile system:
 - For a one- or two-family residence \$199.00
 - For all other drain tile inspections:
 - When the estimated cost of the CONSTRUCTION of the BUILDING, being the valuation referred to in Article 1.6.2.3. of Book I, Division C and Book II, Division C does not exceed \$500,000 \$370.00
 - When the estimated cost of the work exceeds \$500,000 but does not exceed \$1,000,000 \$621.00
 - When the estimated cost of the work exceeds \$1,000,000 \$711.00
- (f) For a review of records pertaining to a BUILDING to provide the status of outstanding orders and other matters concerning the BUILDING:
 - For a one- or two-family residence \$195.00
 - For all other BUILDINGS \$391.00
- (g) For enabling the viewing of a plan of a BUILDING or a copy of the plan \$32.00
- (h) For supplying a copy of a plan of a BUILDING, for each page \$9.60
- (i) For a request to renumber a BUILDING \$711.00

- (j) For the extension of a BUILDING PERMIT where requested in writing by an applicant pursuant to Article 1.6.7.1. of Book I, Division C and Book II, Division C 50 percent of the original BUILDING PERMIT fee to a maximum of \$298.00
- (k) For the extension of a building permit by Council where requested in writing by an applicant pursuant to Article 1.6.7.4. of Book I, Division C and Book II, Division C \$999.00
- (l) For review of plans, specifications, building materials, procedures or design methods for the purpose of revisions to an application or a permit in accordance with Article 1.5.2.13. and Section 1.6.6. of Book I, Division C and Book II, Division C
 - where the PERMIT relates to a ONE-FAMILY DWELLING or a SECONDARY SUITE \$160.00
 - plus for each hour, or part thereof, exceeding one hour \$160.00
 - where the PERMIT relates to any other BUILDING \$490.00
 - plus for each hour, or part thereof, exceeding one hour \$249.00
- (m) For each RE-OCCUPANCY PERMIT after rectification of an UNSAFE CONDITION and related By-law violations \$149.00
- (n) For review of plans, specifications, building materials, procedures or design methods for the purpose of acceptance of an alternative solution for new construction under Article 2.3.2.1. Book I, Division C
 - for a single application \$704.00
 - for two applications..... \$1,370.00
 - for three or more applications..... \$1,810.00
- (o) For review of plans, specifications, building materials, procedures or design methods for the purpose of acceptance of existing conditions with mitigating features
 - for a single application \$440.00
 - for two applications..... \$830.00
 - for three or more applications..... \$1,080.00
- (p) for review by the Alternative Solution Review Panel \$2,160.00
- (q) For review of a resubmission or revised submission made under Clauses (n) or (o) of this Section 2 \$243.00

3. Upon written application of the payor and on the advice of the General Manager of Community Services, the Director of Finance shall refund to the payor, or a designate of the payor, the fees paid pursuant to Clauses (e) and (f) of Section 1:

- (a) for all demolished dwelling units in a building that will be replaced by a social housing or co-operative development that has received a Project Commitment Letter from the British Columbia Housing Management Commission or the Canada Mortgage and Housing Corporation; and
- (b) for each demolished dwelling unit that has been replaced by a dwelling unit occupied by rental tenants and not created pursuant to the Strata Property Act.

PART B - PLUMBING

Every applicant for a Plumbing PERMIT shall, at the time of application, pay to the City the fees set out hereunder:

1. INSTALLATIONS

For the Installation of:

One, two or three FIXTURES	\$160.00
Each additional FIXTURE.....	\$50.00

Note: For the purpose of this schedule the following shall also be considered as FIXTURES:

- Every "Y" intended for future connection;
- Every ROOF DRAIN, swimming pool, dishwasher, and interceptor;
- Every vacuum breaker in a lawn sprinkler system; and
- Every back-flow preventer

Alteration of Plumbing (no FIXTURES involved):

For each 30 metres of piping or part thereof.....	\$226.00
For each 30 metres of piping or part thereof, exceeding the first 30 metres	\$64.00
Connection of the City water supply to any hydraulic equipment.....	\$86.00

2. INSPECTIONS OF FIRELINE SYSTEMS:

Hydrant & Sprinkler System:

First two inspections for each 30 m of water supply pipe or part thereof	\$226.00
Each additional inspection for each 30 m of water supply pipe or part thereof.....	\$94.00

Sprinklers:

First head, one- or two-family dwelling	\$258.00
First head, all other buildings	\$548.00
First head, renovations to existing sprinkler systems	\$160.00
Each additional head, all buildings (no limit on number)	\$2.70

Firelines:

Hose Cabinets	\$30.00
Hose Outlets	\$30.00
Wet & Dry Standpipes	\$30.00
Standpipes	\$30.00
Dual Check Valve In-flow Through Devices	\$30.00
Backflow Preventer	\$153.00

Wet & Dry Line Outlets:

Each connection	\$30.00
-----------------------	---------

NOTE: A Siamese connection shall be considered as two dry line outlets.

Each Fire Pump	\$241.00
Each Fire Hydrant	\$74.00

3. RE-INSPECTIONS

Each re-inspection due to faulty work or materials.....	\$160.00
---	----------

4. SPECIAL INSPECTIONS

Each inspection to establish fitness of any existing fixture for each hour or part thereof	\$160.00
--	----------

An inspection outside normal working hours and at a minimum inspection time of four (4) hours, including traveling time, for each hour or part thereof.....	\$228.00
---	----------

5. BUILDING SEWER INSPECTIONS

First two inspections for each 30 m of BUILDING SEWER or part thereof.....	\$199.00
--	----------

Each additional inspection for each 30 m of BUILDING SEWER or part thereof	\$102.00
--	----------

Item 16 - Schedule A

Schedule A
**Confirmation of Commitment by Owner and Coordinating
Registered Professional**

SCHEDULE A

Forming Part of Sentence 2.2.7.2.(1), Div. C of the Building By-law

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

**CONFIRMATION OF COMMITMENT BY OWNER
AND COORDINATING REGISTERED PROFESSIONAL**

- Notes: (i) This letter must be submitted before issuance of a *building* permit.
 (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.

Re: Design and *Field Review of Construction*
by a *Coordinating Registered Professional*

To: The *Chief Building Official*

Re: _____
Name of Project (Print)

Address of Project (Print)

Legal Description of Project (Print)

(Professional's Seal and Signature)

Date

The undersigned has retained _____ as a *coordinating registered professional* to coordinate the design work and *field reviews* of the *registered professionals of record* required¹ for this project. The *coordinating registered professional* shall coordinate the design work and *field reviews* of the *registered professionals of record* required for the project in order to ascertain that the design will substantially comply with the Building By-law and other applicable enactments respecting safety and that the construction of the project will substantially comply with the Building By-law and other applicable enactments respecting safety, not including the construction safety aspects.

"*field reviews*" are defined in the Building By-law to mean those reviews of the work

- (a) at a project site of a development to which a *building* permit relates, and
- (b) where applicable, at fabrication locations where *building* components are fabricated for use at the project site

that a *registered professional* in his or her professional discretion considers necessary to ascertain whether the work substantially complies in all material respects with the plans and supporting documents prepared by the *registered professional of record* for which the *building* permit is issued.

The *owner* and the *coordinating registered professional* have read Subsection 2.2.7, Division C of the Building By-law. The *owner* and the *coordinating registered professional* each acknowledge their responsibility to notify the *Chief Building Official* of the date the *coordinating registered professional* ceases to be retained by the *owner* before the date the *coordinating registered professional* ceases to be retained or, if that is not possible, then as soon as possible. The *coordinating registered professional* acknowledges the responsibility to notify the *Chief Building Official* of the date a *registered professional of record* ceases to be retained before the date the *registered professional of record* ceases to be retained or, if that is not possible, then as soon as possible.

¹ It is the responsibility of the *coordinating registered professional* to ascertain which *registered professionals* are required, and to initial each Schedule B prior to submission to the *Chief Building Official*.

Schedule A – Continued

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

Project Address

The owner and the coordinating registered professional understand that where the coordinating registered professional or a registered professional of record ceases to be retained at any time during construction, work on the above project will cease until such time as

- (a) a new coordinating registered professional or registered professional of record, as the case may be, is retained, and
- (b) a new letter in the form set out in Schedule A or in the forms set out in Schedules B, as the case may be, is filed with the Chief Building Official.

The undersigned coordinating registered professional certifies that he or she is a registered professional as defined in the Building By-law, and agrees to coordinate the design work and field reviews of the registered professionals of record required for the project as outlined in the attached Schedules B including coordination and integration of functional testing of fire protection and life safety systems. (See A-2.2.7.3 in Appendix A.)

Coordinating Registered Professional

Owner

Coordinating Registered Professional's Name (Print)

Owner's Name (Print)

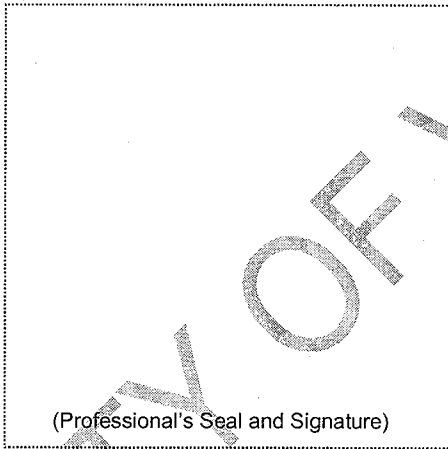
Address (Print)

Address (Print)

Phone No.

Name of Agent or Signing Officer if applicable (Print)

Date



(Professional's Seal and Signature)

Owner's or Owner's appointed agent's Signature. (If owner is a corporation the signature of a signing officer must be given here. If the signature is that of the agent, a copy of the document that appoints the agent must be attached.)

Date

(If the Coordinating 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)

This letter must be signed by the owner or the owner's appointed agent and by the coordinating registered professional. An agent's letter of appointment must be attached. If the owner is a corporation, the letter must be signed by a signing officer of the corporation and the signing officer must set forth his or her position in the corporation.

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.

Item 17 - Schedule B

Schedule B
**Assurance of Professional Design and Commitment for Field
Review**

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)

Legal Description 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

Schedule B - Continued

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

Project Address

Discipline

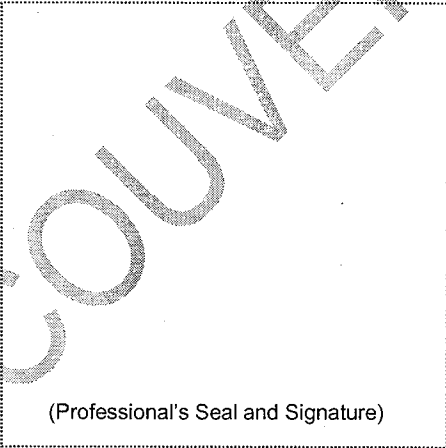
The undersigned also undertakes to notify the *Chief Building Official* in writing as soon as possible if the undersigned's contract for *field review* is terminated at any time during *construction*.

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

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

(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 requirements

CRP's Initials

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 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 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

Item 18 - Schedule C-A

Schedule C-A
Assurance of Coordination of Professional Field Review

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*

Name of Jurisdiction (Print)

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 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.

Schedule C-B
Assurance of Professional Field Review and Compliance

SCHEDULE C-B

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

Building Permit No. _____

ASSURANCE OF PROFESSIONAL FIELD REVIEW AND COMPLIANCE

- Notes:
- (i) This letter must be submitted after completion of the project but prior to final inspection by the *Chief Building Official*. 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.

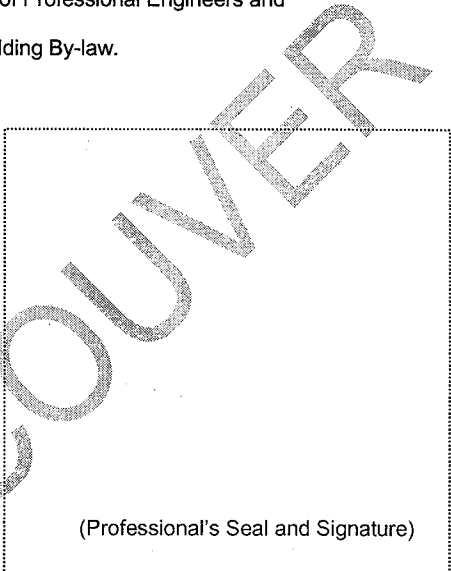
To: *The Chief Building Official*

Re: _____
 Discipline (e.g. Architectural, etc.) (Print)

 Name of Project (Print)

 Address of Project (Print)

 Legal Description of Project (Print)



(Each *registered professional of record* 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 *field review* as outlined in Subsection 2.2.7, Division C of the Building By-law and in the previously submitted Schedule B, "ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW, and
- (b) those components of the project opposite my initials in Schedule B 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 am a *registered professional of record* as defined in the Building By-law.

(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

EXPLANATION**Certification of Professionals By-law amending By-law**

The attached by-law will implement Council's resolution of September 25, 2013 to amend the Certification of Professionals By-law to strike out the Letters of Assurance attached to that by-law and to replace them with new forms of Letters of Assurance. Enactment of this By-law will accomplish Council's resolution.

Director of Legal Services
April 1, 2014

epb BY-LAW NO. _____

**A By-law to amend
Certification of Professionals By-law No. 6203
regarding letters of assurance and consequential amendments
related to the 2014 Building By-law**

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

1. This By-law amends the indicated sections of the Certification of Professionals By-law.
2. In section 6, Council strikes out “, CP-3 and CP-4” and substitutes “ and CP-3”.
3. Council strikes out Schedule A and substitutes the attached Schedule A, which shall form part of By-law 6203.
4. 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.
5. This By-law is to come into force and take effect on the date of enactment.

ENACTED by Council this _____ day of _____, 2014

Mayor

City Clerk

SCHEDULE A



Schedule CP-1
Confirmation of Commitment by Owner and Certified Professional

Certified Professional Program
An Alternate Building Permit Process

- Notes:
1. This letter is endorsed by the Architectural Institute of British Columbia and the Association of Professional Engineers and Geoscientists of British Columbia.
 2. The phrase Building By-law where used in this letter means the Vancouver Building By-law.
 3. Words in italics are given the same meaning as defined in the Vancouver Building By-law.
 4. Words in quotations are defined herein.

To: *Chief Building Official*

Date: _____

Project Address: _____

Building
Permit No.: _____

In signing and submitting this document to the *Chief Building Official* the *owner* confirms that the *owner* has authorized the Certified Professional, to undertake "code coordination" and the undersigned Certified Professional ("CP") confirms that the CP will undertake "code coordination" with respect to the above noted project for which a building permit is sought.

"Code coordination" includes the following tasks:

1. act on behalf of the *owner* as the *owner's* representative in matters involving the City of Vancouver in relation to the building permit, related project construction and related occupancy permit;
2. ascertain that the required "Registered Professionals of Record" for the project have been retained to provide *design* and *field review* in accordance with the Building By-law;
3. obtain the necessary letters of Assurance of Professional Design and Commitment for Field Review from the "Registered Professionals of Record" for the project and deliver the originals of same to the *Chief Building Official* when applying for the building permit for the project;
4. obtain the other necessary documents required to support the building permit application and deliver same to the *Chief Building Official* when applying for the building permit for the project;
5. apply for and obtain a building permit for the project in accordance with the process as described in the Building By-law;
6. provide "design review" of the plans and supporting documents prepared by each of the "Registered Professionals of Record" for the project;
7. ascertain that the "Registered Professionals of Record" have incorporated in their plans and supporting documents, the requirements of the "Building By-law" Division A; Division B Parts 1 and 3; and Division C;
8. ascertain that the Division A; Division B, Parts 1 and 3; and Division C Building By-law requirements governing the project are compatible between the plans and supporting documents prepared by each "Registered Professional of Record";
9. provide "site review" of the components of the plans and supporting documents prepared by each of the "Registered Professionals of Record" for the project;
10. keep records of all "site reviews" by the CP and of any corrective action required and taken as a result of these "site reviews". Discrepancies noted during "site reviews" must be tracked and the resolution of these discrepancies noted such that a list of significant unresolved discrepancies can be provided at any time;
11. "monitor field review activities" of the "Registered Professionals of Record";

12. monitor and report on significant events and changes in the project;
13. submit a monthly summary progress report to the *Chief Building Official* during construction of the project;
14. consult with the *Chief Building Official* if any unresolved variances in interpretation of the Building By-law arise between the CP, and the "Registered Professionals of Record";
15. consult with the *Chief Building Official* if any unresolved issues with respect to the Building By-law arise between the CP and the contractor;
16. review relevant shop drawings with respect to the requirements of Division A, Division B, Parts 1 and 3 and Division C of the Building By-law;

Date: _____

Project
Address: _____

Building
Permit
No.: _____

"Code coordination" (cont'd):

17. notify the *Chief Building Official* in a timely manner of any significant known, unresolved contraventions of the Building By-law or Building Permit requirements;
18. obtain the necessary letters of Assurance of Professional *Field Review* and Compliance from the "Registered Professionals of Record" for the project and deliver the originals of same to the *Chief Building Official* when applying for the occupancy permit for the project;
19. obtain the other necessary documents required to support the occupancy permit application and deliver same to the *Chief Building Official* when applying for the occupancy permit for the project;
20. apply for occupancy approval for the project in accordance with the process as described in the Building By-law; and
21. apply the CP stamp to all relevant documents that are submitted to the *Chief Building Official*. Affixing his or her CP stamp to a document confirms that the CP has provided the relevant portion of "code coordination" applicable to that document.

"Design review" means the activities necessary to ascertain that the design of the project will substantially comply, in all material respects, with the requirements of Division A; Division B, Parts 1 and 3; and Division C of the Building By-law.

"Monitoring field review activities" means ascertaining that the "Registered Professionals of Record" are providing *field reviews* as required by Div C, Part 2 of the Building By-law, and includes keeping records of all *field review* reports prepared by each Registered Professional of Record. The owner will instruct each "Registered Professional of Record" to highlight in his or her field review reports any significant variation from the documents accepted in support of the building permit and any corrective action as needed. The CP will review the variations highlighted in the *field review* reports and notify the *Chief Building Official*, in a timely manner, of significant unresolved variations from the documents accepted in support of the building permit.

"Registered Professional of Record" means a *registered professional* retained to undertake design work and *field review* pursuant to Schedules B and C-B of Subsection 2.7 in Division C of the Building By-law.

"Site review" means the activities necessary in the CP's professional judgment to ascertain that the construction of the project substantially complies, in all material respects, with the requirements of Division A; Division B, Parts 1 and 3; and Division C of the Building By-law and the requirements of the building permit and monitoring for compliance with the development permit issued for the project.

In addition to "code coordination" the undersigned *owner* and CP also acknowledge that:

1. If the project involves future tenant improvement works, and the base *building* occupancy is not achieved prior to commencement of the tenant improvement works, the involvement of the CP may be required; and,

Project Address: _____ Date: _____
Building Permit No.: _____

2. The *owner* and the CP are each required to notify the *Chief Building Official* on or before the date the CP ceases to be retained by the *owner*. It is understood that work on the above project will cease as of the effective date of such termination, until such time as a new appointment is made, and a *Stop Work Order* shall be posted upon the said project by the *Chief Building Official*.

NOTE: This letter must be signed by the *owner* or the *owner's* appointed agent and by the CP. An agent's letter of appointment must be attached. If the *owner* is a corporation, the letter must be signed by a signing officer of the corporation and the signing officer must set forth his or her position in the corporation.

Owner Information OR Agent for Owner Information

Signature: _____ Name: _____
Address: _____
City: _____ Postal Code: _____
Tel: _____ Fax: _____ Email: _____

NOTE: A **Certified Professional** means an Architect or Professional Engineer who has been recognized as qualified as a Certified Professional by the *Chief Building Official* pursuant to the Certification of Professionals By-law.

Certified Professional:

Signature: _____ Name: _____
Address: _____
City: _____ Postal Code: _____
Tel: _____ Fax: _____ Email: _____

(Affix Certified Professional's stamp here)

(Affix Certified Professional's professional seal here)



- Notes:
1. This letter is endorsed by the Architectural Institute of British Columbia and the Association of Professional Engineers and Geoscientists of British Columbia.
 2. Words in italics are given the same meaning as defined in the Vancouver Building By-law.
 3. Words in quotations are defined in Schedule CP-1.

To: *Chief Building Official*

Date: _____

Project Address: _____

Building Permit No.: _____

I confirm that I have fulfilled my obligations for "code coordination" as outlined in my previously submitted Schedule CP-1 entitled **Confirmation of Commitment by Owner and Certified Professional**.

I enclose the relevant occupancy permit documents as listed on the attached **Occupancy Permit Submission Documents Checklist**.

NOTE: A *Certified Professional* means an Architect or Professional Engineer who has been recognized as qualified as a *Certified Professional* by the *Chief Building Official* pursuant to the Certification of Professionals By-law.

Certified Professional:

Signature: _____

Name: _____

Name of Firm: _____

Address: _____

City: _____

Postal Code: _____

Tel: _____

Fax: _____

Email: _____

(Affix *Certified Professional's* stamp here)

(Affix *Certified Professional's* professional seal here)



- Notes:
1. This letter is endorsed by the Architectural Institute of British Columbia and the Association of Professional Engineers and Geoscientists of British Columbia.
 2. Words in italics are given the same meaning as defined in the Vancouver Building By-law.
 3. Words in quotations are defined in Schedule CP-1.
 4. The phrase "Building By-law" where used in this letter means the Vancouver Building By-law.

To: Chief Building Official

Date: _____

Base Building
 Project Address: _____

Base Building
 Permit No.: _____

Specific Location of Tenant Improvement: _____

I confirm that I have reviewed the drawings on the attached list to ascertain that the tenant improvement design is substantially compatible with the original building by-law concepts for the base *building*.

I confirm that the construction of the base building shell space for this tenant improvement is essentially complete with the exception of the items indicated on the attached list.

NOTE: A *Certified Professional* means an Architect or Professional Engineer who has been recognized as qualified as a *Certified Professional* by the *Chief Building Official* pursuant to the Certification of Professionals By-law.

Certified Professional:

Signature: _____

Name: _____

Name of Firm: _____

Address: _____

City: _____

Postal
 Code: _____

Tel: _____

Fax: _____

Email: _____

(Affix *Certified Professional's* stamp here)

(Affix *Certified Professional's* professional seal here)