

## MOTION

### 1. **Consequential Amendments to Adding Missing Middle Housing and Simplifying Regulations - Update to Various Land Use Documents to Simplify and Update Policies and Guidelines**

THAT in accordance with Council's resolution adopted after the Public Hearing on September 14, 2023, Council make the changes to the documents as identified in Table 1 below and generally as set out in Appendix H of the Referral Report dated July 7, 2023, entitled "Adding Missing Middle Housing and Simplifying Regulations – Amendments to the Zoning and Development By-law.";

FURTHER THAT the following documents be repealed: Boundary and Tanner RS-1 Guidelines, RS-1 Caretaker Dwelling Unit Guidelines, Charles/Adanac RS-1 Guidelines, Riverside RS-1B Guidelines, RS-2 and RS-7 Infill and Multiple Dwelling Guidelines, RS-3, RS-3A and RS-5 Design Guidelines, RS-6 Design Guidelines, RS-7 Guidelines, Deering Island RS-1 Guidelines, and RS Zones Impermeable Materials Site Coverage Guidelines for RS-1, RS-1A, RS-1B, RS-2, RS-3, RS-3A, RS-4, RS-5, RS-6, and RS-7 Zones.

**Table 1**

Document	Section	Amendment
<b>Guidelines</b>		
<b>Guidelines for Additions, Infill and Multiple Conversion Dwelling in Association with the Retention of a Character House in an RS Zone</b>	Various	See attached Appendix A which shows in red line all wording and graphics to be removed or added
<b>Guidelines for the Administration of Variances for Zero Emission Buildings in RS, RT and RA Districts</b>	Various	See attached Appendix B which shows in red line all wording and graphics to be removed or added
<b>Multiple Conversion Dwelling Guidelines (RS-1A, RS-2, RS-7, RT-1 and RT-2 districts)</b>	Title	Remove "RS-1A, RS-2, RS-7" from the title of this Guideline
	1	Remove "RS-1A, RS-2, RS-7"
	2	Remove "In the RS-7 zone, consult the RS-7 District Schedule for External Design regulations, and the RS-7 Guidelines, Section 7 landscaping."

	3.2	Remove "This section is not applicable in RS-1A Districts."
<b>C-2 Guidelines</b>	2.1	Delete "RS" and replace with "R1-1"
<b>C-2, C-2B, C-2C, and C-2C1 Guidelines for Residential Rental Tenure Buildings</b>	2.1	Delete "RS" and replace with "R1-1"
<b>RM-1 and RM-1N Guidelines</b>	1(c)	Delete "RS" and replace with "R1-1"
	2.1.1(c)	Delete "RS" and replace with "R1-1"
	4.7(d)	Delete "RS zones" and replace with "R1-1"
<b>RM-7 and RM-7N Guidelines</b>	1.1(c)	Delete "RS" and replace with "R1-1"
	1.2	Delete "RS-1" and replace with "R1-1"
	Table 1, row (A)	Delete instances of "RS-1" and replace with "R1-1"
	Table 1, row (A)	Remove "-0.70"
<b>RM-7AN Guidelines</b>	1.1(c)	Delete "RS" and replace with "R1-1"
	1.2	Delete "RS-1" and replace with "R1-1"
	Table 1, row (A)	Delete instances of "RS-1" and replace with "R1-1"
	Table 1, row (A)	Remove "-0.70"
	2.2.2(b)(iii)	Delete "RS" and replace with "R1-1"
<b>RM-8, RM-8N, RM-8A and RM-8AN Guidelines</b>	1.1(d)	Delete "RS" and replace with "R1-1"
	1.2	Delete "RS-1" and replace with "R1-1"
	Table 1, first row	Delete instances of "RS-1" and replace with "R1-1"

	Table 1, first row	Remove "-0.70"
<b>RM-9, RM-9A, RM-9N, RM-9AN and RM-9BN Guidelines</b>	1.1(c)	Delete "RS" and replace with "R1-1"
	1.2	Delete "RS1" and replace with "R1-1"
<b>RM-10 and RM-10N Guidelines</b>	4.4(a)	Delete "RS" and replace with "R1-1"
	4.5	Delete "RS" and replace with "R1-1"
<b>Residential Rental Districts Schedules Design Guidelines</b>	1.1(a)(ii)	Delete "RS" and replace with "R1-1"
	1.1(a)(iii)	Delete "RS" and replace with "R1-1"
	Figure 2	Delete instances of "RS" and replace with "R1-1"
	Figure 19	Delete instances of "RS" and replace with "R1-1"
<b>RT-11 and RT-11N Guidelines</b>	1(c)	Delete "RS" and replace with "R1-1"
	4.4.1	Delete "RS" and replace with "R1-1"
	4.6(e)	Delete "RS zones" and replace with "R1-1"
	Appendix A page 23	Delete instances of "RS-1" and replace with "R1-1"
	Appendix A page 24	Delete instances of "RS-1" and replace with "R1-1"
<b>Community Care Facility - Class B and Group Residence Guidelines</b>	2.3	Delete "RS" and replace with "R1-1"
<b>Guidelines for the Administration of Variance in Larger Zero Emission Buildings</b>	Title	Change the title of this guideline to "Guidelines for Larger Zero Emission Buildings"
	Intent	Delete instances of "RS" and replace with "R1-1"
<b>Policies</b>		
	Table 1	Delete instances of "RS" and replace with "R1-1"

<b>Community Amenity Contributions Policy for Rezoning</b>	Appendix Table 1	Delete "RS" and replace with "R1-1"
<b>Development Contribution Expectations Policy in Areas Undergoing Community Planning</b>	Table 1a	Delete "RS" and replace with "R1-1"
	Table 1b	Delete "RS" and replace with "R1-1"
	Table 2	Delete "RS" and replace with "R1-1"
	Map A labels	Delete instances of "RS-1", "RS-2", and "RS-7" and replace with "R1-1"
	Map A legend	Delete "RS Zoning Districts" and replace with "R1-1"
<b>Moderate Income Rental Housing Pilot Program (MIRHPP) Rezoning Policy</b>	Background and context	Delete "RS" and replace with "R1-1"
	Table 3	Delete "RS" and replace with "R1-1"
<b>Secured Rental Policy</b>	Table 1	Delete "RS" and replace with "R1-1"
	2.4	Delete "RS" and replace with "R1-1"
	2.4.1	Delete "RS" and replace with "R1-1"
	2.4.3	Delete "RS" and replace with "R1-1"
	Table 2	Delete "RS" and replace with "R1-1"
	Appendix	Delete "RS" and replace with "R1-1"
<b>Strata Title Policies for RS, RT and RM Zones</b>	Title	Delete "RS" and replace with "R1-1"
	1	Delete "RS" and replace with "R1-1"
	5	Delete "RS" and replace with "R1-1"
<b>Zero Emissions Building Catalyst Policy</b>	7	Delete "Guidelines for the Administration of Variance in Larger Zero Emission Buildings" and replace with "Guidelines for Larger Zero Emission Buildings"
	7	Delete "Guidelines for the Administration of Variances for Zero Emission Buildings in RS, RT and RA Districts" and replace with "Guidelines for Zero Emission Buildings in R1-1, RT and RA Districts"



**Appendix A:** Red Line Version: Amendments to Guidelines for Additions, Infill and Multiple Conversion Dwelling in Association with the Retention of a Character House in an RS Zone



## City of Vancouver *Land Use and Development Policies and Guidelines*

Planning, Urban Design and Sustainability Department

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**\*Proposed amendments are shown in red**

# **GUIDELINES FOR ADDITIONS, INFILL AND MULTIPLE CONVERSION DWELLING IN ASSOCIATION WITH THE RETENTION OF A CHARACTER HOUSE IN THE R1-1 ZONE AN RS-1 ZONE**

*Adopted by City Council on October 3, 2017*

*Amended January 16, 2018, December 18, 2018, and July 20, 2022, Month, Day, Year*



**July 2022Month Year**

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## 1 Application and Intent

These guidelines are to be used in conjunction with the ~~R1-1RS-1~~ district schedules of the Zoning and Development By-law and pertain to the approval of conditional floor area for additions to a character house, the approval of the conditional uses of infill and multiple conversion dwelling, and the approval of certain development relaxations, when associated with the retention of a qualifying character house.

The intent of the guidelines is to ensure that:

- (a) renovations, alterations and additions to existing character houses maintain a form and character sensitive to the design of the original house;
- (b) additions, infill, and conversion developments are respectful of the design scale of adjacent properties and provide a good fit with the overall neighbourhood; and,
- (c) site design considers and respects existing amenities, including trees and mature landscape.

The guidelines will be used to:

- (a) assist owners and applicants in designing developments; and,
- (b) provide a basis on which City staff evaluates projects for approval of conditional floor area, the conditional approval uses of infill and multiple conversion dwelling, and discretionary variations in regulations.

## 2 General Design Consideration

### 2.1 Character House Criteria

~~A character house is defined as ‘an existing building that, in the opinion of the Director of Planning, has sufficient heritage character to justify its conservation’.~~

A character house is typically a single detached house constructed prior to January 1, 1940 that meets the following character merit criteria as established by the Director of Planning. Refer to Section 2 of the Zoning and Development By-law for its definition. An assessment is required to determine if a house is considered to have character merit and a candidate for discretionary incentives in zoning, including conditional floor area, infill or multiple conversion dwelling, and development relaxations.

The following are the minimum criteria:

- (a) Must have:
  - (i) Original massing and primary roof form - Alterations/additions that are subsidiary to the original massing and primary roof form, such as dormers, are not considered to have altered the character of the house.
- (b) Plus any four of the following:
  - (i) Entry - Original open front porch or verandah, or only partially filled in, or other original entry feature.
  - (ii) Cladding - Original cladding or replacement cladding consistent with the era when the house was built.
  - (iii) Window Openings - Original location, size and shape (50% or more). The windows themselves may not be original.
  - (iv) Period Details - Two or more period details, such as fascia, window casing or trim, eave brackets, soffits, exposed beam or joist ends, half-timbering, decorative shingling, porch columns, original wood doors, entry transom/sidelights, decorative or feature windows (special shapes, bay windows, crafted/leaded glass), brick or stone chimneys, piers or foundations, secondary porch, turrets, etc.
  - (v) Streetscape Context - The house is part of a context of 2 or more character houses on the same block face (including the subject house). In assessing the streetscape, at least 2 houses on either side of the subject house should be included.



Pre-1940s buildings that have been severely altered and do not qualify as character houses may be considered for incentives, including infill and/or conversion, if character elements are restored and reinstated as part of a development proposal. In special cases, a house built in 1940 or after that has particular architectural merit, and retains original and distinctive character features, may be considered a character house. In these cases, retention incentives may be supported on a case by case basis at the discretion of the Director of Planning.

A character house is not required to be listed on the Vancouver Heritage Register. Houses listed on the Vancouver Heritage Register are eligible for the zoning incentives available to character houses, including conditional floor area, infill or conversion, if meeting the above criteria.

## 2.2 Character House Retention Requirements

To be eligible for incentives, including conditional floor area, infill or conversion, the existing character house must be retained and restored to its original character as viewed from the street. At the pre-application stage, an assessment of the existing condition of the house will be undertaken by Planning staff to inform the amount of restoration required. This may include restoration of character elements, such as traditional window styles or opening up of entry porches that have been enclosed. The extent of restoration required will be determined by the scope of the proposal. Minimum expectations regarding the level of structural retention required in a character house undergoing major renovations and seeking conditional benefits in zoning are outlined in the ~~Zoning and Development By-law Administrative Bulletin~~ *Retention and Renovation of Character Merit Buildings – Scope and Documentation bulletin*.

## 2.3 Additions

Additions should appear subordinate in visual prominence to the retained character house, as seen from the street. In general, additions should be located at the rear. Additions may extend to the side, noting that side additions should be set back from the front façade in order to create a clear distinction between old and new. Additions to the existing front façade are not supportable.

Figure 1 – Addition is set back from the front. This retains the original façade and minimizes disruption to the streetscape



Rear additions are not required to replicate the period or style of the original house; however, a high degree of design sensitivity should be brought to additions seeking an architectural expression that is distinct from the original house.

Additions should be subordinate to the form and massing of the original house. Large additions may be seen to overwhelm the original house form and compromise its character value. Therefore, the maximum floor space ratio may not be fully achievable through an addition when the existing character house is modest in size. In those cases, infill may be a more supportable approach for the site.

Flexibility is provided with regards to building depth for additions. See Section 5.6 of these guidelines.

## 3 Site Design and Tree Retention

Existing trees and mature landscape are an important aspect of many character house sites, contributing to the character and amenity of the site and neighbourhood. Tree retention strategies should be explored at an early stage in the site design. Character house projects and associated infill, laneway houses or garages should be located and designed to preserve existing trees, where possible. Existing landscape features, such as stone walls, should also be retained, where possible.

To retain significant trees, the Director of Planning may relax the regulations regarding the siting of buildings, and the required number of parking stalls. Alternately, some sites may not be considered suitable for infill if significant tree removal is required. Utility connections and new landscape work such as driveways, walkways, patios, privacy fences and intensive plantings should be located to avoid disturbance of tree protection zones. Generally, site grading should respect the existing topography and provide compatibility with adjacent sites.

In some cases, electrical services such as a Pad-mounted Transformer (PMT) equipment may be required on the site, particularly for sites with more than 3 units. An area must be designated within the rear yard to accommodate such equipment unless confirmation is provided from BC Hydro that a PMT is not required. Engaging BC Hydro early in the planning process is recommended.

## **4 Uses**

### **4.1 Multiple Conversion Dwelling**

Multiple conversion dwelling is the conversion of an existing character house to contain more than one dwelling unit, but does not include a single detached house with secondary suite. In considering development permit applications for multiple conversion dwellings, the following factors will be taken into account:

- (a) quality and liveability of the resulting units;
- (b) suitability of the building for conversion in terms of age and size;
- (c) effect of the conversion on adjacent properties; and
- (d) effect of the conversion on the form and character of the existing house.

Additions may be permitted in accordance with these guidelines.

### **4.2 Infill**

Infill may be permitted as an incentive to retain an existing character house by allowing the construction of a second residential building, typically in the rear yard on sites with a developed lane.

In general, infill buildings should be subordinate to the existing character house, and respectful of adjacent properties. The following guidelines are intended to ensure a modest, neighbourly scale for infill buildings. Numerical values are not intended to be prescriptive, but to provide appropriate benchmarks to assist with the evaluation of proposed designs.

#### **4.2.1 Infill Location**

Infill will typically be located in the rear yard of sites with a developed lane.

On large sites where there is no lane access, a rear yard infill may be considered, provided there is a consistent pattern on the block of vehicular access from the street and new driveways can be located to avoid existing trees.

Front or side yard infill buildings may be considered ~~on large sites~~ where doing so would not unduly detract from the character and pattern of development of the neighbourhood. Infill located at the front of the site should be generally consistent with the regulations for size, building form and location of new principal buildings, including height.

Relocation of a character house may be considered to provide an access path to the infill building, or required separation between the buildings, with due regard to the zoning regulations for yards, and provided significant features such as stone foundations and pillars can be retained and existing trees preserved, where possible.

#### 4.2.2 Floor Space Ratio (FSR)

The infill should not exceed 0.25 FSR, or 186 square metres (2000 square feet).

Where the size of an addition would compromise the form or the character of the retained house, infill building may exceed 0.25 FSR, or 186 square metres (2000 square feet).

On large sites, consideration may be given to allow more than one infill to assist in breaking up the massing of buildings at the lane.— In such cases the maximum floor area of each infill building should not exceed 186 square metres (2000 square feet).

#### 4.2.3 Yards, Separation and Building Width

The minimum side yard setback should be ~~4.0-1.2~~ metre (~~3.3-4.0~~ feet).

The minimum rear yard setback should be 0.9 metres (3 feet).

The minimum separation between the existing character house and the infill building should be 4.9 metres (16 feet) to provide sufficient open space on site and in relation to neighbouring sites.

~~The maximum width of rear yard infill and accessory buildings should not exceed 80 percent of site width.~~

#### 4.2.4 Infill Building Height

Infill building height is limited to ~~one and a ‘partial’ second storey. Designs that approach the appearance or impact of a full two-storey expression should be avoided.~~ two storeys up to 8.5 metres (28 feet).

While there is no particular architectural style prescribed for infill buildings, careful attention to the design of the infill is necessary to ensure an appropriate scale at the lane. The height provision allows for flexibility to respond to a site’s topography, and to assist in the provision of required assemblies for a green roof, or to accommodate discrete clerestory elements above the primary roof line, noting such elements should improve liveability, daylighting and ventilation, and add architectural interest through variation in the roof profile. It is not intended for buildings to maximize the allowable height where not necessary, such as excessive ceiling height.

~~The permitted building height will be related to the proposed roof form as follows:~~

##### ~~(a) — Pitched Roofs~~

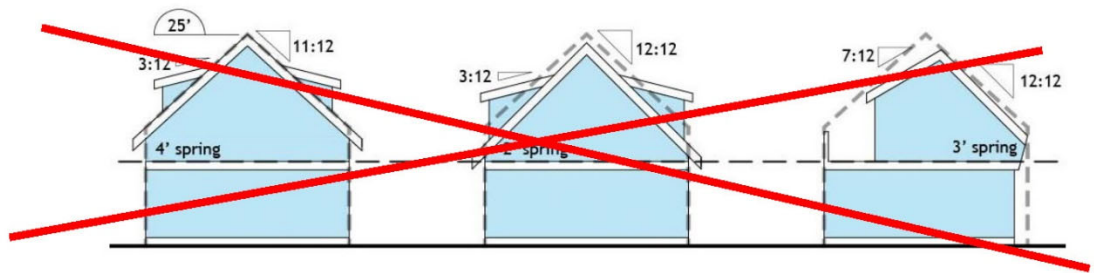
~~The second storey is not limited in floor area, but should be contained within a simple, steeply pitched primary roof form of a minimum pitch of 7:12. Secondary roof forms may be provided as outlined below (dormers).~~

~~The maximum overall building height should not exceed 7.7 metres (25 feet) to the ridge of a roof with a minimum pitch of 7:12.~~

~~The spring height for the primary roof should not exceed 1.2 metres (4 feet). Depending on the extent of dormers, a lower spring height may be suitable for some roof designs, to ensure an appropriate scale for the second storey and to facilitate the provision of windows at a standard sill height.~~

~~Figure 2— Height for minimum 7:12 pitch roofs~~





~~(b) Dormers~~

~~Dormer roof slopes should generally not be less than 3:12.~~

~~Dormer walls should be set in a minimum of 0.6 metres (2 feet) from the wall below and from adjacent walls (end gables) where possible.~~

~~The eave height of dormer roofs should be as low as practical to reduce the perceived scale of the partial upper storey.~~

- ~~(i) On a roof where the ridge runs across the property:~~
  - ~~▲ the largest dormer(s) should face the lane, and should not exceed 75 percent of the width of the partial upper storey; and;~~
  - ~~▲ dormers facing the character house should not exceed 50 percent of the width of the partial upper storey.~~
- ~~(ii) On a roof with gable ends facing the lane:~~
  - ~~▲ dormers facing a required side yard should not exceed 60 percent of the building length.~~

~~(c) Flat roofs, shed roofs and roof pitches less than 7:12~~

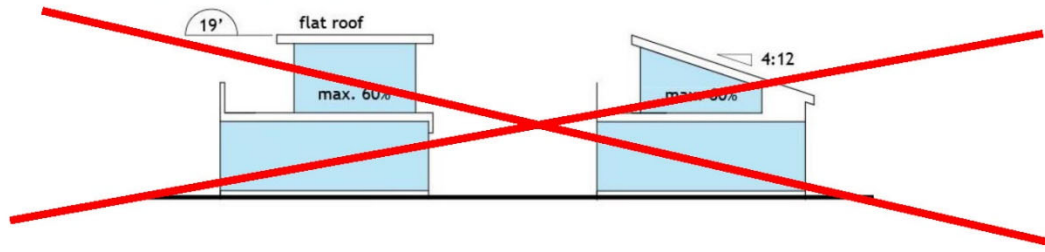
~~For flat, shed, or shallow pitched roofs, more design care is necessary to minimize the appearance of a two-storey building.~~

~~The floor area of the partial second storey should be approximately 60 percent of the floor area of the first storey, with setbacks to reduce its prominence.~~

~~The maximum overall building height should not exceed 5.8 metres (19 feet).~~

~~Increases in building height may be considered due to topography, to assist in the provision of required assemblies for a green roof, or to accommodate discrete clerestory elements above the primary roof line, noting such elements should improve liveability, daylighting and ventilation, and add architectural interest through variation in the roof profile.~~

~~Figure 3—Height and partial second storey for roofs with pitch < 7:12~~



4.2.5 Solar Panels

Solar Panels are excluded from building height in accordance with the ~~Administration Bulletin: Solar Hot Water and Photovoltaic Panels – Installation Guidelines for Residential Zones~~ bulletin.

#### 4.2.6 Green Roofs

Green roofs on infill buildings are encouraged to improve environmental performance, and to provide an amenable outlook from upper levels of neighbouring houses.

#### 4.2.7 Balconies and Decks

Balconies and decks should be in-keeping with the roof design. Balconies may be located at the ~~partial~~ second storey of the infill building and should face the lane, or a flanking street at corner sites. Balconies or decks facing the interior of the site, or roof decks above the ~~partial~~ second storey, are not permitted for infill buildings.

## 5 Relaxations of Regulations of the Zoning and Development By-law

The Director of Planning may relax the regulations of the Zoning and Development By-law when a character house is retained as per Section 10.11 of the Zoning and Development By-law. In cases where relaxation of a regulation is proposed to support retention of a character house, the Director of Planning will also consider impact on adjacent properties. Further direction is given below.

### 5.1 Site Area

~~Some RS zones limit infill development to large lots and/or in association with a caretaker dwelling unit. Those limitations are not applicable to infill in combination with retention of a character house.~~

### 5.12 Building Height

Additions may be permitted to match the building height of a character house to better relate to and integrate with its roof form.

### 5.23 Yards

Additions may be permitted to match the yard setbacks of a character house to better relate to its massing, or floor plans, with due regard to the requirements of the Vancouver Building By-law.

### 5.4 ~~Above-grade basement floor area exclusion in RS-3 and RS-3A~~

~~In accordance with Section 4.1.2 (f) of the RS-3 and RS-3A Districts Schedule, basements are excluded from floor area if the main floor is located less than 2.0 metres (6.56 feet) above finished grade. Historically, character houses may have a higher main floor resulting in the existing basement being included in floor area. For a character house, the Director of Planning may exclude floor space below an existing main floor level which is located 2.0 metres (6.56 feet) or more above finished grade; however, if the renovation project includes a new basement and foundation, the Director of Planning may require the main floor level of the house to be lowered to comply with the regulation.~~

### 5.35 Site Coverage

The site coverage of buildings should be responsive to building massing and open space at neighbouring sites. ~~The site coverage of buildings should not exceed 45 percent of the site area. The area of impermeable materials, which includes the site coverage of buildings and~~

~~impermeable surfaces (such as paths, driveways, and patios), should not exceed 60 percent of the total site area. The area of site coverage and impermeable materials may be increased a modest amount due to site constraints if rainwater management best practices are proposed. Refer to the City of Vancouver Integrated Rainwater Management Plan, Best Management Practice Toolkit, Volume 2.~~

#### **5.6 Building Depth**

~~Increases in the permitted building depth relative to the lot depth may be considered, as follows:~~

- ~~(a) For the cellar or basement and first storey, a building depth of 45 percent may be allowed; and,~~
- ~~(b) For the second floor and above, a building depth of 40 percent may be allowed.~~

~~Greater percentage building depth may be considered for sites with depth less than 30.5 metres (100 feet) or to support retention of existing trees or mature landscape.~~

~~In general, the building depth should not exceed 50 percent.~~

~~Additions seeking an increase in building depth should be responsive to the configuration of neighbouring buildings. The best massing solution may vary, depending on the particulars of the existing character house and neighbouring buildings.~~

~~Additions that project into rear yards beyond neighbouring buildings should be designed to minimize massing and overlook impacts. New windows and balconies or decks should be carefully positioned to ensure privacy, and portions of the addition that project beyond the permitted building depth may be required to step down in height.~~

#### **5.7 External Design**

~~External Design regulations are primarily intended for new house construction. Renovation, addition and conversion of existing character houses are therefore exempt.~~

### **6 Basements**

It is ~~encouraged~~ **acceptable** to utilize existing basement space in order to manage above grade building massing and maintain an appropriate visual scale for additions. The conversion of existing basement floor space into crawl space or parking is strongly discouraged.

Some existing character houses have basements with low headroom. To improve headroom, the existing basement slab may be lowered, or the house may be raised a modest amount, or a combination of both. Raising the house should not be considered where it will compromise existing character features, such as stone or brick foundations or pillars.

When raising the existing character house, the main floor should not be located disproportionately high above grade, entry porches or features should be kept in their original location at the main floor and the lowest level should continue to read as a 'base'. To that end, the main floor should not be raised more than 0.45 metres (18 inches), and should not be located more than 2 metres (6.56 feet) above grade, so that the basement will continue to conform to the requirements of the basement definition in the Zoning and Development By-law. If the renovation project includes a new basement and foundation, digging deeper to obtain increased headroom is preferred.

## **7 Quality, Durability and Expression**

Additions, infill and conversion projects should be designed to be lasting, quality additions to neighbourhoods. Material selection and detailing should ensure performance over time.

A variety of architectural styles may be considered for infill development, so that neighbourhoods may continue to evolve in a way that respects the character of existing streetscapes.

## **8 Lane Frontage**

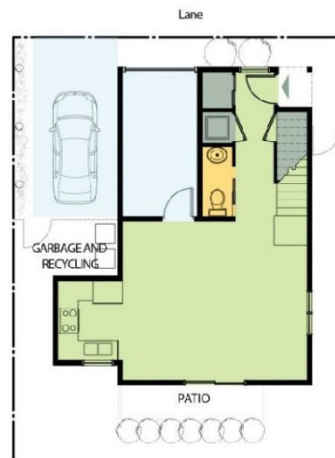
Infill should be designed to enhance the lane. In effect, the lane becomes the public space or 'street' on which infill buildings and laneway houses are located. The lane frontage should provide a residential character with a pleasant outlook for residents and a visually interesting experience for passersby.

Dwelling units should have living space with an outlook to the lane on the lower level, where possible, and primary windows and decks facing the lane on the upper level.

Consideration should be given to locating the infill entrance facing the lane. An inset entry porch should be provided to ensure the entrance is a safe and welcoming place for people to stand to avoid vehicular traffic in the lane.



Figure 4 – Plan of infill with lane entry



## 9 Entrances and Access to Dwelling Units

### 9.1 Multiple Conversion Dwelling

The original front entrance to a character house should be retained. Entries to additional dwelling units should be identifiable while maintaining the visual prominence of the original entry.

### 9.2 Infill

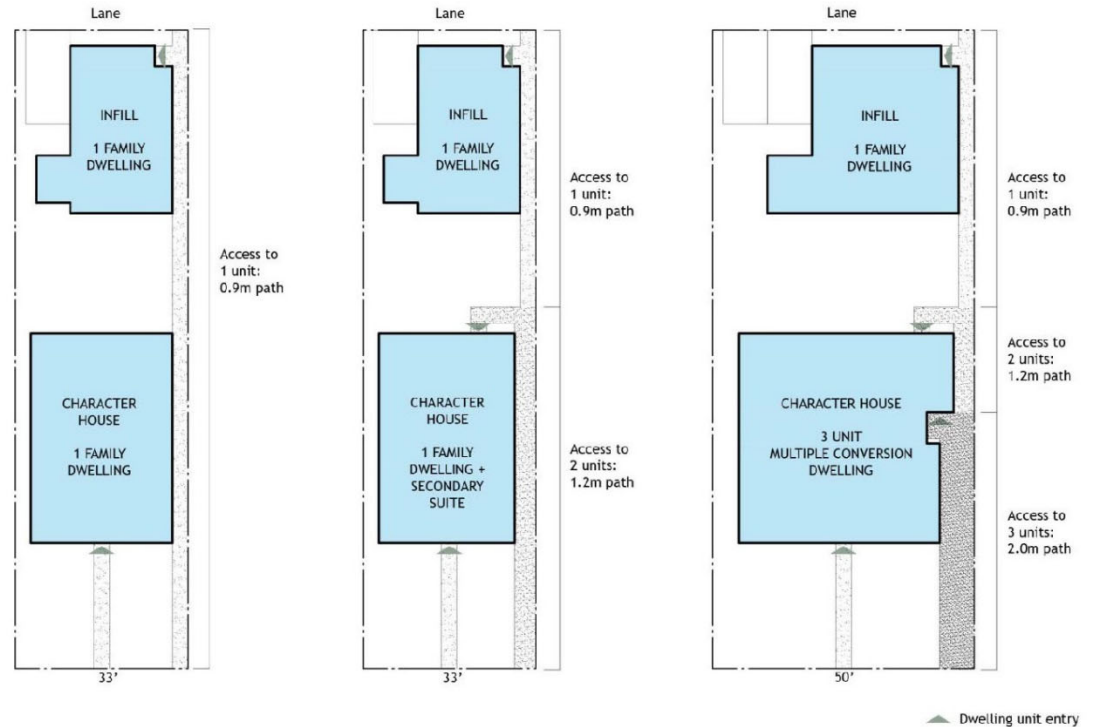
Pedestrian access to ~~the~~ infill buildings will be from the street and along a path at the side of the existing character house. The path may also provide access to dwelling units located within the existing character house. The width of the path is related to the number of units served by the path and must meet Vancouver Building By-law fire fighter access requirements. ~~with current requirements noted as follows:~~ Refer to the current Vancouver Building Bylaw for more information.

~~Access to one dwelling unit: 0.90 metres (3 feet)~~

~~Access to two dwelling units: 1.2 metres (4 feet)~~

~~Access to more than two dwelling units: 2 metres (6.56 feet)~~

Figure 5 – Examples of access path width requirements



For both infill and conversion projects, where entries to units are not visible from a street (e.g. units at the rear of the site), their presence and location may be announced through architectural or landscape features.

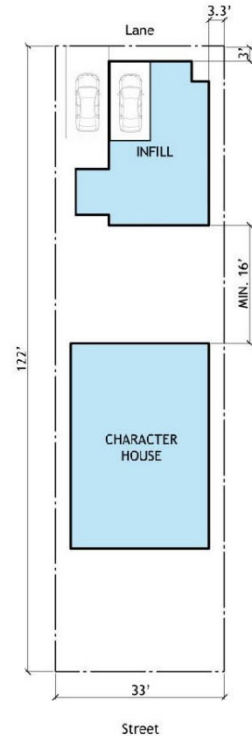
## 10 Dwelling Unit Density

For Multiple Conversion Dwelling and Infill, the dwelling unit density should not exceed 74 units per hectare, except where the calculation of dwelling units per hectare results in a fractional number, the nearest whole number shall be taken and one-half shall be rounded up to the nearest whole number. The total number of dwelling units on a site varies with lot width but should not exceed 6 units. For sites with a width of 10.05 metres (33 feet), the total number of units should not exceed 3-4 units. For sites with a width of 15.213.4 metres (50-44 feet), the total number of units should not exceed 4-5 units. For sites with a width of 15.1 metres (50 feet) or more, the total number of units should not exceed 6 units. ~~Generally, a minimum lot width of 20.1 metres (66 feet) or more can achieve the maximum of 6 dwelling units.~~

## 11 Parking

~~One parking space per dwelling unit should be provided. Refer to the Parking By-Law for minimum parking requirements.~~ The Director of Planning may consider a lesser number of parking spaces if warranted due to site constraints. On 33 foot wide lots, two parking spaces may be considered: one internal and one external space, to enhance infill designs by providing living space at the ground floor facing the lane.

Figure 6 – Parking configuration for infill on 33 ft. lot



On wider lots, a maximum of two parking spaces may be contained within an infill building and excluded from floor area. Surface parking must be permeable, including permeable pavers or wheel strips. Standard unit pavers are not considered as permeable. Surface parking should be screened by a 1.0 metre (3.3 feet) landscape planting bed adjacent to a side property line. This dimension may be reduced to 0.3 metres (1 foot) for 33 foot lots to accommodate a fence and climbing vine planting.

## 12 Landscape Design

The landscape design should enhance presentation to the street and the experience of the lane, improve the environmental performance of the property, provide sufficient outdoor amenity space for dwelling units on the site, and assist with the creation of privacy for the dwelling units on site and for neighbours.

### 12.1 Street Frontage

Front yards should create friendly and visually open semi-public spaces.

### 12.2 Tree Protection, Retention and Replacement

The Protection of Trees By-law applies to all trees on private property, and includes requirements for the retention and replacement of trees on the development site, protection of trees nearby on neighbouring sites and on City property. In accordance with the provisions of this by-law, applicants will be required to submit an arborist's report.

For sites which could accommodate additional trees, the Director of Planning may require trees to be planted on the development site in coordination with a landscape plan/tree plan.

### **12.3 Useable Open Space and Circulation**

Private, semi-private or shared outdoor areas should be provided at grade, adjacent to and convenient for each dwelling unit. Walkways should be sensitive to overlook onto private patios. Planting beds should screen common walkways using planting, rather than fencing, where possible. The amount of open space provided should be functional and should relate to the size of the dwelling unit. Where the rear yard is limited in size, a usable upper level deck with a minimum clear depth of 1.5 metres (5.0 feet) may meet the intent of the guidelines for private outdoor space.

### **12.4 Lane Frontage**

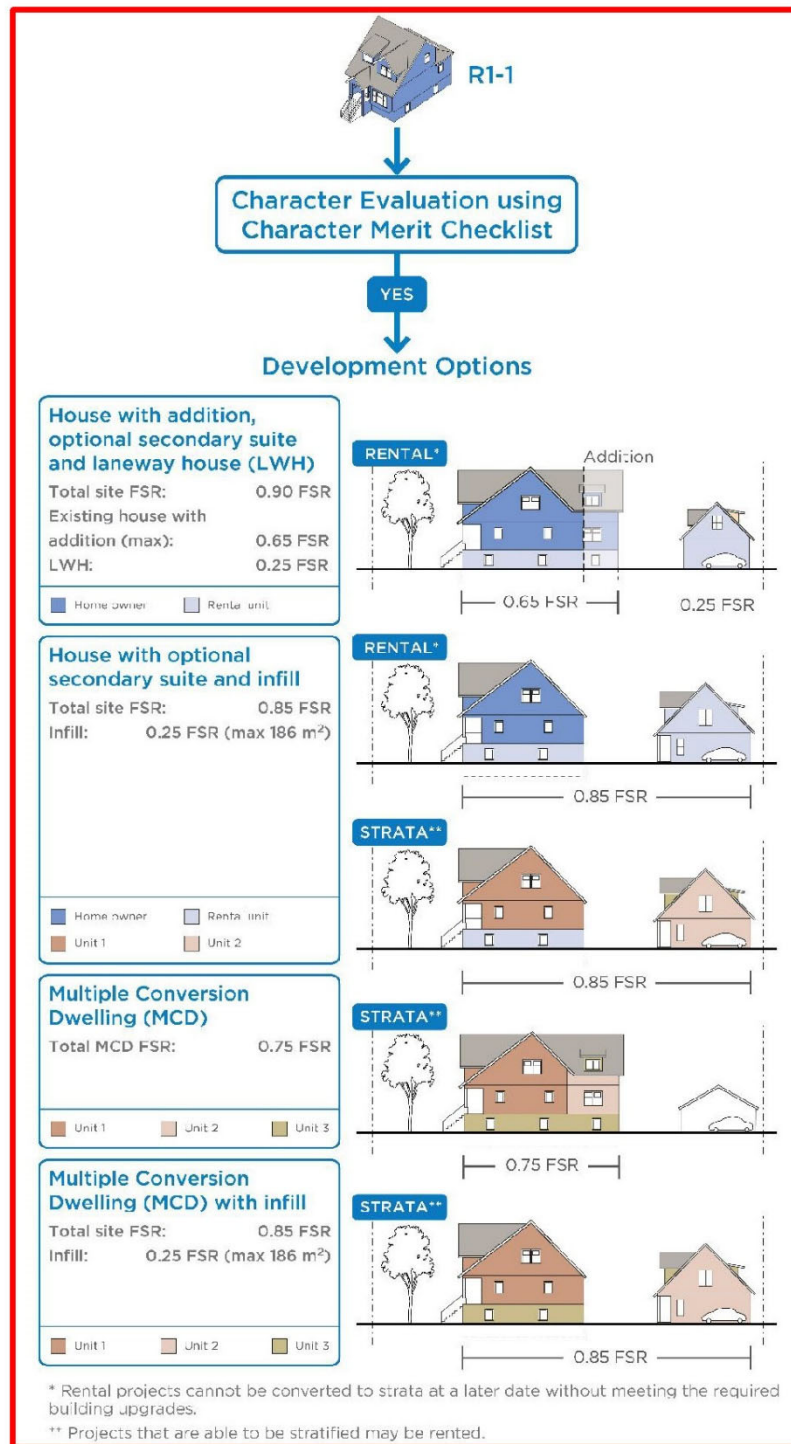
The 0.9 metres (3.0 feet) minimum setback between an infill building and the lane should be permeable and landscaped where not required for vehicle or pedestrian access. Planted areas that face the lane are intended to expand the public realm and should not be blocked from view by private fencing. Fencing, where desired, should be set back from the property line to enhance the prominence of the planting. Where possible, plants should be located at grade in contiguous soil, i.e. avoiding planter boxes. Planting should consist of woody, evergreen and hardy plant material for year-round presence and structure. Hose bibs should be located near lane edge planting. A 6 inch curb should be provided to protect planting beds at lane edge. Vehicular gates, including sliding types, are discouraged.

### **12.5 Garbage and Recycling**

Garbage and recycling should be provided onsite in a designated storage area that is accessible to all units on the lot and screened from outdoor amenity space and the lane frontage.



Figure 7 – Development Options for Character Houses in R1-1, RS-1 zones 1, 1A/B, 2, 4, 5, 6, and 7



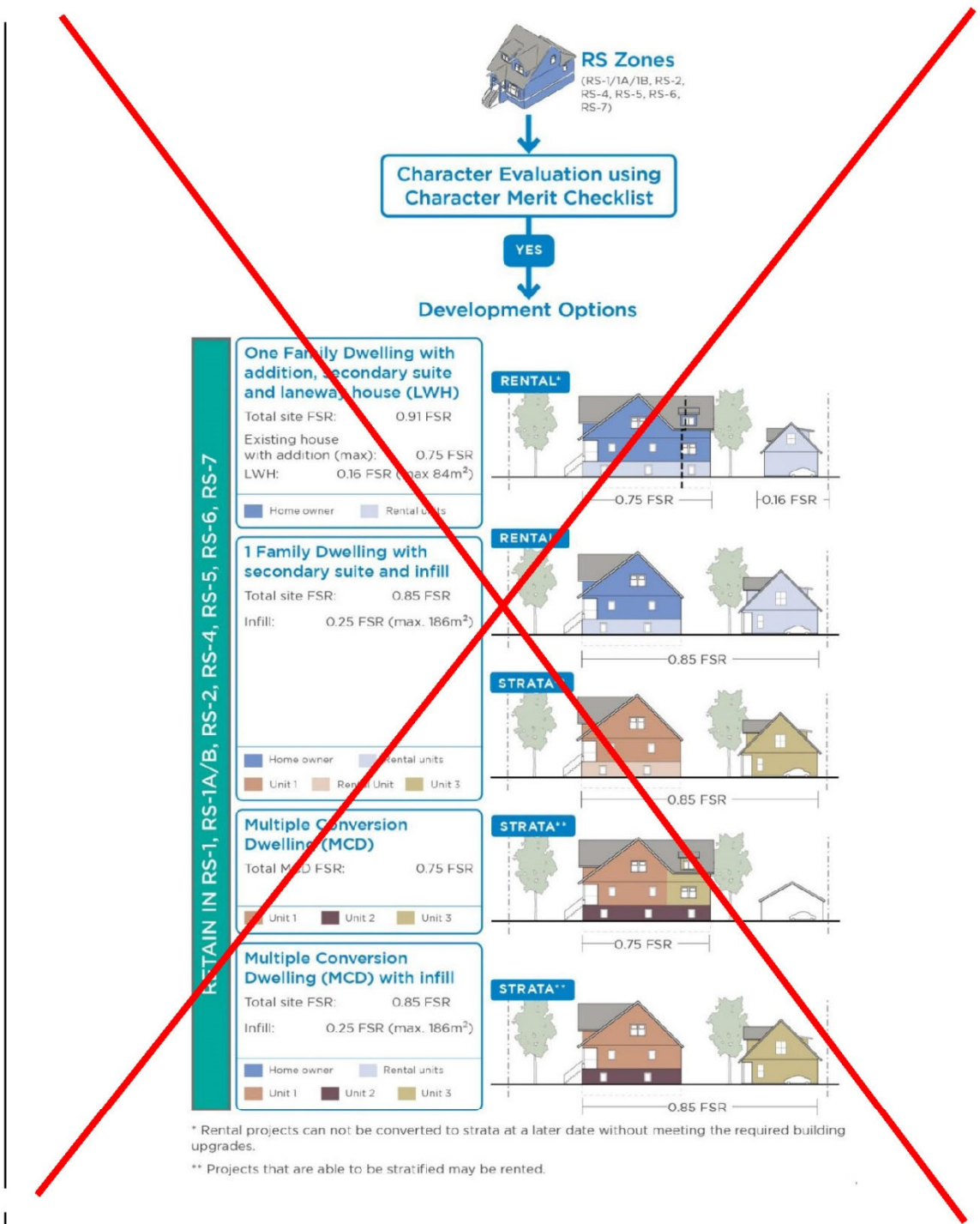
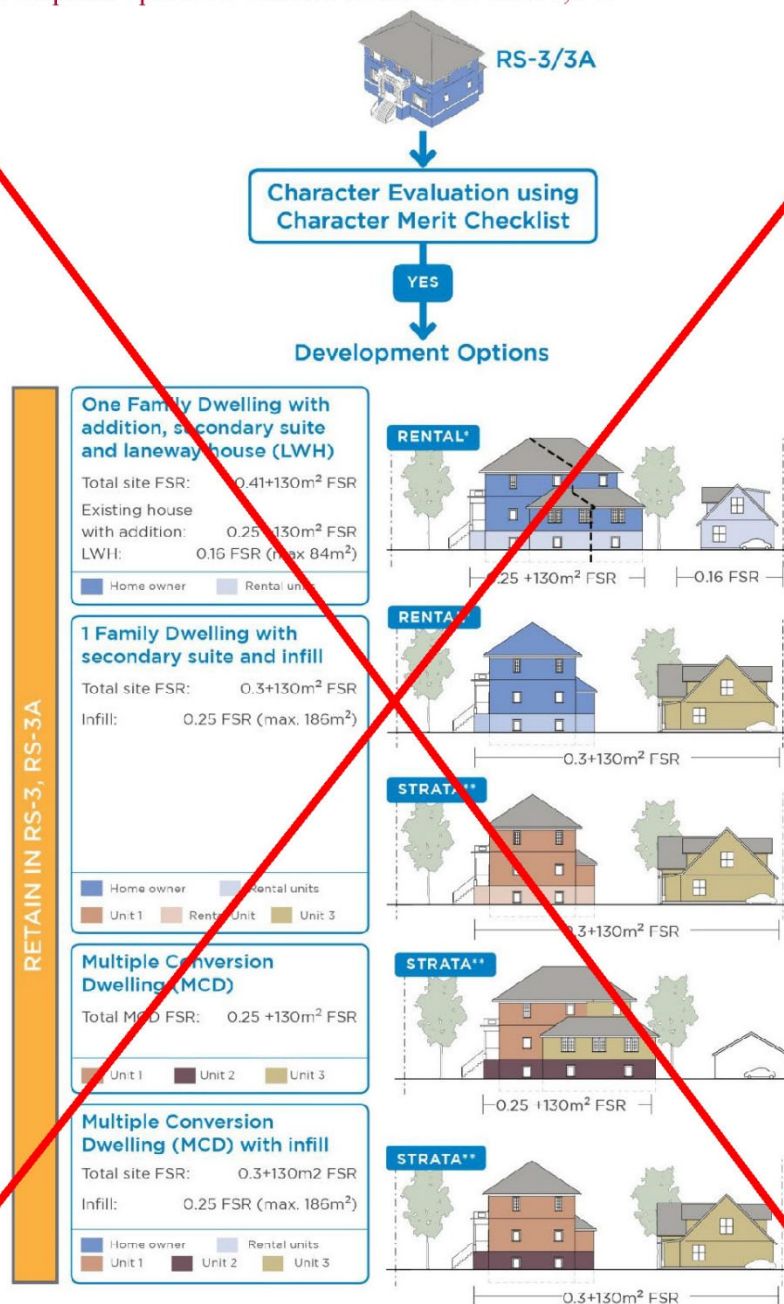


Figure 8 – Development Options for Character Houses in RS zones 3, 3/A



\* Rental projects can not be converted to strata at a later date without meeting the required building upgrades.

\*\* Projects that are able to be stratified may be rented.

**Appendix B:** Red Line Version: Amendments to Guidelines for the Administration of Variances for Zero Emission Buildings in RS, RT and RA District

\*Proposed Amendments are shown in red

# Guidelines

Guidelines for ~~the Administration of Variances for~~  
Zero Emission Buildings in ~~RSR1-1~~, RT and RA  
Districts

*Approved by Council January 16, 2018*

*Last amended ~~April 26, 2023~~ Month, Day, Year*

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## Background and Context

Removing barriers to zero emissions building is part of the City's emerging policy context. The Zero Emissions Building Plan, Vancouver's Renewable City Strategy, and the Climate Emergency Response all prioritize removing regulatory barriers to the development of zero emission buildings.

## Intent

These guidelines explain the administration of variances to Zoning and Development By-law regulations and related processes for residential projects designed to zero emission standards. ~~The guidelines apply to dwelling uses in the RSRI-1, RT and RA district schedules, except laneway houses districts.~~ For other zones and uses, see the "Guidelines for ~~the Administration of Variances for~~ Larger Zero Emission Buildings in Larger Projects".

Applicants must show how the building envelope and mechanical system have been designed to achieve the relevant standard before seeking related variances, and follow the process and requirements in this document.

These guidelines are to be used in conjunction with the relevant district schedule of the Zoning and Development By-law, as well as other applicable guidelines and bulletins. ~~In particular, please consult section 10.33: Passive House in the Zoning and Development By-law. Because this guideline document primarily addresses~~ Because these guidelines primarily address zoning considerations, applicants are encouraged to obtain early advice on meeting the requirements of Vancouver's Building By-law from a ~~Registered Professional~~ registered professional.

## Definitions

The following definitions apply in these guidelines:

- ~~Canadian Home Builders' Association (CHBA) Qualified Net Zero Builder: A builder who has met the requirements of the qualification as outlined in the CHBA Net Zero Administrative Requirements which include: being a CHBA builder member, being a registered EnerGuide builder with NRCan, having successfully completed the CHBA NZ-Builder Training, and having completed one Net Zero or Net Zero Ready labelled home.~~
- ~~CHBA Qualified Net Zero Energy Advisor (NZE): A professional who has met the requirements of the qualification as outlined in the CHBA Net Zero Administrative Requirements and registered with the CHBA. The NZE is eligible to perform home energy evaluations for homes pursuing the CHBA's Net Zero Home Label using energy modeling methods in accordance with EnerGuide Rating System (ERS) Technical Procedures.~~
- ~~CHBA Qualified Net Zero Service Organization (NZSO): An organization that has met the requirements of the qualification as outlined in the CHBA Net Zero Administrative Requirements and registered with the CHBA. The NZSO performs the administrative process for NZE's and builders pursuing the qualification of homes under the program.~~
- Certified Passive House Consultant (CPHC) or Certified Passive House Designer (CPHD):** These qualifications are equivalent in these guidelines. A CPHC is a person certified by the Passive House Institute as a Passive House Consultant. A ~~CPHD~~ CPHC is a person with professional and educational experience in architecture or building who is certified by the Passive House Institute as



a Passive House Designer. The ~~CPHD or~~ CPHC is responsible for designing the building to meet the PH standard. ~~The terms are used interchangeably in this guide.~~

- **Energy Advisor (EA):** An EA is a licensed professional who conducts home energy evaluations. An EA can evaluate a home, and provide the modeling and testing required for the final certification of a home under EnerGuide. They are trained to use NRCAN's energy simulation software, HOT2000, and to perform blower door air leakage testing.
- **Heat Recovery Ventilator (HRV) or Energy Recovery Ventilator (ERV):** These terms are equivalent in these guidelines. An HRV is a mechanical device that exchanges stale indoor air with fresh outdoor air while recovering heat at the same time using a heat exchanger. An ERV performs the same function and also provides humidification or dehumidification.
- **Passive House (PH):** In these guidelines, a Passive House building is one that meets the ~~definition in the Vancouver Zoning and Development By-law standards established by Passive House International.~~ For a general description, see section 3 of this document.
- **Passive House Building Certifier (Certifier):** In these guidelines, a Passive House Building Certifier is one that meets the definition in the ~~Vancouver~~ Zoning and Development By-law. A general description is a person accredited by the Passive House Institute in Darmstadt, Germany for the purpose of certifying buildings as being designed in accordance with its Passive House standards.
- **Passive House Planning Package (PHPP):** PHPP is software used to determine whether a building meets Passive House standards. The package, available through the Passive House Institute, assists with ~~housebuilding~~ design and window planning to test how different designs will affect energy use.
- **Qualified Green Building Consultant:** A professional with knowledge and practical experience in high-performance building design who ideally has worked on ILFI Zero Energy projects in the past. Training and experience in high-performing building design, energy modeling, efficient building systems, renewable energy assemblies, or comparable is likely necessary for ensuring ILFI Zero Energy targets are achieved.
- **Qualified Net Zero Builder:** A builder who has met the requirements of the qualification as outlined in the Net Zero Administrative Requirements established by the Canadian Home Builders' Association (CHBA), which include: being a CHBA builder member, being a registered EnerGuide builder with NRCAN, having successfully completed the CHBA NZ Builder Training, and having completed a Net Zero or Net Zero Ready labelled home.
- **Qualified Net Zero Energy Advisor (NZEa):** A professional who has met the requirements of the qualification as outlined in the CHBA Net Zero Administrative Requirements and registered with the CHBA. ~~Variance~~ The NZEA is eligible to perform energy evaluations for homes pursuing the CHBA's Net Zero Home Label using energy modeling methods in accordance with EnerGuide Rating System (ERS) Technical Procedures.
- **Variances:** For readability, ~~this guideline refers to the different~~ these guidelines refer to various allowances for zero emissions buildings in the Zoning and Development By-law ~~that require the approval of the Director of Planning as~~ variances.

## Guidelines

### 1 Zero Emissions Standards

In ~~this guide~~ these guidelines, acceptable zero emission standards include Passive House, the CHBA Net Zero Home Labelling Program with electric equipment, ILFI Zero Energy, and PHI EnerPHit. Projects must achieve the standard using on-site, installed equipment. ~~Consideration may be given to equivalent~~ The Director of Planning can consider alternative rating systems. Applicants and certification standards, but enquirers should confirm ~~the suitability of other standards~~ their acceptability with staff before making an application.

### 2 Regulation Variances

Achieving a ~~low-energy, high-efficiency home through high-quality thermal envelope design and better zero emission building usually requires more~~ insulation will result in thicker wall and roof insulation than a, advanced air tightness, renewable energy equipment, or other features that require changes to typical building, ~~which may affect floor area and height~~ designs.

~~Applicants~~ Buildings in RSR1-1, RT or RA districts may apply for an access variances to floor area, of building height, yard, and building depth regulations, and the exclusion of floor area, if they demonstrate that they will achieve Passive House Certification or certification in or another accepted zero emission standard. These variances may Variances of design regulations can also be granted at the discretion of considered by the Director of Planning upon consideration of all applicable guidelines and policies. Please see section 10.33. In these cases, the design of the project should also show how impacts on the privacy, daylight, or sunlight of neighbouring properties will be avoided. Please see the regulations in Section 10.33 of the Zoning and Development By-law for the requirements of these variances.

~~Because these conditional variances may allow extra height or floor space, the design of the project should consider impacts on neighbouring properties such as privacy, daylight, or shadowing in the application.~~

Other regulations that control building size, such as site coverage or side yards, may still apply.

Proponents applying for variances to a multiplex project (multiple dwelling up to 8 units in R1-1 district), must certify all units on the site to an acceptable standard.

#### 2.1 Floor Area – Fixed Rate Exclusion

Section 10.33.41 of the Zoning and Development By-law ~~includes a~~ provides an exclusion equal to 19% of the permitted floor area ~~exclusion for a zero emissions building~~ emission building in the RSR1-1, RT and RA districts that is 16% of the gross (or built) floor area in a single detached house, or 18% in a duplex. This fixed exclusion ~~replaces previous~~ can be used instead of multiple and more complex exclusions calculations for insulation, and mechanical equipment and skylights. Built. Floor area that is excluded from overall FSR may be located where it fits within the overall permitted development envelope. Where there is more than one FSR limit, such as above-grade FSR in RS-5, calculate and locate each exclusion separately. The amount of gross floor area that can be built under potential buildable area based on this clause regulation may be estimated with the following formula:

$$\frac{\text{Net Area}}{(1 - \text{Exclusion Percentage})} = \text{Gross Area}$$

$$\text{Permitted floor area} * 1.19 = \text{Potential buildable floor area}$$

For example, a ~~single-family~~ house that is permitted to have a net floor area of 3,600,960 sq. ft. by the FSR limit in zoning would use the figures:

$$3,600,960 \text{ sq. ft.} / (1 - 0.16) = 4,286,712 \text{ sq. ft.}$$

Note that the potential area may not be achievable on all sites and for all designs. Applications under ~~section 10.33.4~~ this exclusion cannot use ~~any~~ other floor area exclusions in sections 10.15 or 10.33, ~~or bay window exclusions.~~ Laneway houses must use the permitted area of the laneway house to calculate this exclusion, not the permitted area of the site.

## 2.2 Floor Area – Calculated Exclusions

Section 10.15 of the Zoning and Development By-law allows for the exclusion of floor area for insulation using two different calculations. For applications to exclude increased insulation under clause 10.15.2 in a conventional building, a Building Envelope Professional must be retained to calculate and verify the exclusion. In an application designed to the Passive House standard that provides a PHPP energy model, the Certified Passive House Designer or Certified Passive House Consultant may verify the exclusion instead. For more details on this exclusion, see the ~~separate bulletin~~ Floor Area Exclusions for Improved Building Performance bulletin.

~~Applications under section 10.15 cannot use the floor area exclusions in section 10.33.4.~~

~~Section 10.33.3 permits a floor area~~ The exclusion for ~~the area occupied by~~ heat recovery ventilators and connected shafts ~~to in section 10.33.3 allows~~ a maximum exclusion of 2% of floor area being provided. ~~The~~ This exclusion recognizes the ~~larger space additional floor area~~ that may be required for high efficiency units or for additional units, within a Passive House project. An HRV that is a Passive House “Certified Component” should be specified. The exclusion does not apply to mechanical equipment that uses the same floor area as a conventional system.

Applications under section 10.15 or 10.33.3 cannot use the floor area exclusion in section 10.33.1.

## 2.3 Building Height, Yards, Building Depth, and Balconies

The permitted building height and building depth are increased by 0.6 m, and the required rear yard and building separation are decreased by 0.6 m for qualifying buildings in the section 10.33.1 of the Zoning and Development By-law. Zero emission buildings can also access a variance for balconies in section 10.8.1.

## ~~2.3 Other Variances~~

~~Regulations that allow duplexes in certain R districts include external design regulations that could constrain green building solutions. These regulations can be varied for zero emissions buildings. In RS-1 and other district schedules, the clause that allows a variance of design regulations may be found at the end of section 4.17.~~



Regulations in certain R districts that require interior spaces greater than 3.7 m in height to be counted into FSR twice may be varied using section 10.23A1 (f).

## 2.4 Summary Table

The following table provides a reference for zoning variances that are available for green building features. For example, the dimensions of window wells and below-grade entrances to basements can also be varied if they are designed to increase solar gain under clause 10.33.1(h) buildings.

Before making an application, please read the current and relevant regulation in the Zoning and Development By-law, and the along with related administration bulletins, along with other guidelines and policies. These documents can be found on the City of Vancouver Zoning and Land Use Document Library web page. For example, more information on shading devices located in yards can be found in the "Shading Devices and Yard Projections" bulletin.

Table 1: Summary of Conditional Variance Related to Zoning and Development By-law Variances

Conditional Variance for Green Building Features	Zoning and Development By-law Section
Balcony projections into required yards	10.8.1(c)
Building depth	10.33.1(eb)
Building height	10.33.1(a)
External design regulations	10.33.1(ef)
Green roof access and infrastructure - height	10.1.1(d)
HRVs and connected shafts	10.33.3
Insulation	10.15.1 and 10.15.2
Mechanical rooms with zero emission equipment	10.18.1
Rear yard depth	10.33.1(d) or (ec)
Roof-mounted energy equipment - height	10.1.1(d)
Shading devices, eaves, and overhangs - yards	10.8.1(f)
Venting skylights and clerestory window - internal height	10.33.1(f)
Venting skylights and clerestory window - external height	10.1.1(e)
Window wells and basement entry dimensions	10.33.1(h)

## 3 Submission Requirements

This section describes the submission requirements at each project phase. These requirements are in addition to those of the development and building permit process for a conventional building.

For zero emission ~~projects~~buildings pursuing ~~building~~ standards other than ~~PHI's~~ Passive House, such as the ILFI's Zero Energy Certification or the CHBA's Net Zero Home Labelling Program, applicants are expected to provide a comparable level of material. For example, where a PHPP model is required for PHI sites, applications using an alternate standard should submit an energy or carbon balance, and an energy modelling report. For projects pursuing ILFI's Zero Energy Certification, twelve months of energy performance data is required. For questions about submittals for alternate standards, please contact ~~green.buildings@vancouver.ca~~green.buildings@vancouver.ca.

Please see ~~definitions of terms on page 4 of~~the Definitions in these guidelines, and note the different roles and responsibilities. For Passive House projects, a CPHC who is also an EA can serve both roles. ~~The CPHC and CPHD roles are equivalent in this guide.~~

#### Scheduling a Pre-Application Appointment

When requesting an appointment, applicants should note that the application will be for a ~~house~~building that meets a zero emission standard, and that the project team will be requesting related relaxations.

*~~Development Building (DB) Permit Application to Housing Review Branch: Before requesting an appointment, applicants should consult this document and all typical application documents (such as the "Intake Checklist"). After reviewing the material, applicants should contact the Supervisor of the Housing Review Branch to request an appointment.~~*

### 3.1 Pre-Application Meeting

At an enquiry or pre-submittal meeting, applicants must provide:

- A design strategy that identifies the zoning variances sought, describes the primary design elements intended to achieve the standard, and shows the elements on conceptual drawings.
- A letter from a consultant who is qualified to administer the proposed zero emission standard, confirming they have been engaged to advise on the project.

*~~Passive House applications:~~* Provide a letter from the CPHC confirming that they have been engaged to do energy modelling and advise on the project. A member of the project team may serve in this role if they are a CPHC.

*~~CHBA Net Zero applications:~~* Provide a letter from the CHBA of British Columbia to confirm that the project has been enrolled to obtain a Net Zero label, ~~and with a Qualified Net Zero Builder. Provide~~ a letter from an NZEA confirming that they have been engaged to advise on the project.

*~~ILFI Zero Energy applications:~~* Provide confirmation of registration with ILFI's Zero Energy Certification, and a letter from a Qualified Green Building Consultant confirming they have been engaged to advise on the project.

Proposals ~~should~~to vary external design regulations must show how potential effects on neighbouring houses such as privacy, massing, and shadowing have been considered in the design. ~~City staff~~Staff may provide feedback at the pre-application meeting to inform the application.

### 3.2 Following the Pre-Application Meeting

Prepare a preliminary energy model or other material as specified in the chosen zero emission standard, and revise the design as necessary to meet or exceed the standard.

*Passive House applications:* Applicants are advised to model the project using the current version of the Passive House Planning Package (PHPP) software, and to revise the design as necessary to meet or exceed the Passive House requirements.

If specific challenges to meeting Passive House targets are identified, these must be resolved before applying for a Development Permit.

*Development Building (DB) Permit Application to Housing Review Branch:* The applicant must engage an EA. The EA must review the proposed assemblies, submit a detailed copy of the City of Vancouver's "Pre-Permit Checklist", and otherwise comply with pre-permit requirements ~~for single detached houses and duplexes.~~

In addition to the PHPP file, applicants must provide the Housing Review Branch with a letter from a Certifier stating that the project design and specifications have been reviewed and, in the opinion of the Certifier, the project is capable of achieving Passive House certification if built to the design and specifications noted in the Certifier's letter.

Once the design, assemblies and components have been identified, and all of the above satisfied, applicants may submit their Development Building (DB) permit application to the Housing Review Branch.

*CHBA Net Zero applications:* Applicants should have the project modelled by an NZEA to confirm it can achieve a 0 (zero) GJ rating using modelling methods and calculation in conformance with the EnerGuide Rating System v15, using HOT2000.

### 3.3 Development Permit Application

Applicants must submit:

- An updated design strategy that:
  - identifies the proposed zero emission standard,
  - specifies the ~~related~~ zoning ~~relaxations~~ variances being sought,
  - provides a rationale for ~~the relaxation~~ any conditional variance, and
  - identifies the design elements proposed to meet the zero emission standard, including where these elements can found on the application drawings

*ILFI Zero Energy applications:* Applicants ~~should~~ must provide proof of an established energy target and a narrative as to how this target will be achieved, including strategies around energy efficiency, electrification of building systems, and on-site renewable energy generation, from a Qualified Green Building Consultant.

*CHBA Net Zero applications:* Applicants must provide a Homeowner Information Sheet prepared by the NZEA showing a 0 (zero) GJ rating using modelling methods and calculation in conformance with the EnerGuide Rating System v15, using HOT2000. The design must meet all requirements as outlined in the most current version of the CHBA Net Zero Home Labelling Program Technical Requirements, show that the design is fully Net Zero and uses all electric equipment. The applicant must submit signed letter from the NZEA that confirms the project is enrolled in the CHBA Net Zero program.

*Passive House applications:* Applicants are not required to prepare a HOT2000 model or to submit a "P-file" number. Instead, the CPHC must submit:

- a compliant pre-construction PHPP model (electronic copy of the Excel file),
- a printout of the completed "verification" page with relevant notes, signed by a CPHC, and



- a memo providing modelling input values for the PHPP.

If applying for the exclusion of floor area occupied by heat recovery ventilators and connected shafts under section 10.33.3, additional material is required:

- a signed letter from a CPHC that recommends the proposed mechanical system and notes the dimensions required,
  - dimensioned drawings in the application set showing the additional floor area required for the Passive House system as compared to a conventional system, and
  - a summary table of the proposed exclusion for each building level.
- ~~Identification of Application drawings that prominently state the proposed zero emission standard and identify~~ the design elements proposed to meet the ~~zero emission standard on the application drawings.~~
  - ~~Confirmation letters required at the Pre-Application stages, if not already provided~~
  - A signed letter of commitment from the owner to complete the steps set out in the selected zero emissions standard, including registration, certification, or labeling.

*Passive House applications:* Provide a letter of commitment to certify the building through the Passive House Institute.

### 3.4 Mid-Construction

Before drywall has been installed, the consultant must conduct a site visit ~~in accordance with requirements for all single detached house and duplex permit applications.~~ In addition to typical mid-construction checks such as a blower door test, the consultant must verify that all assemblies, materials, and components are installed as required to meet the zero emission standard.

*ILFI Zero Energy applications:* Provide a letter from a Qualified Green Building Consultant that contains:

- a statement that the construction of the ~~housebuilding~~ and ~~that~~ the installed assemblies and components match those specified in the consultant's narrative; and
- a statement that there are no known barriers to the project achieving Zero Energy certification.

*Passive House applications:* The EA will verify that all assemblies, insulation materials, and components (including windows, doors and ventilation equipment) are installed as per the specifications provided in the Certifier's letter. The EA will conduct a mid-construction blower door test to the EN 13829 protocol, with modifications as prescribed by the Passive House Institute, in lieu of the HOT2000 protocol. The EA will provide the applicant with documentation verifying the construction details and the EN 13829 blower door test results as attachments to the typical "Pre-Drywall Checklist", and this must be submitted to the City.

In addition to the typical EA review, the applicant must also provide the City with a letter from the retained CPHC that contains:

- a statement that the CPHC attended and inspected the construction of the ~~housebuilding~~ and that the installed assemblies and the doors and windows match those specified in the Certifier's letter;
- confirming there is no kitchen or dryer vent, unless modelled in the PHPP provided;
- bathroom and kitchen exhaust roughed in to the mechanical room;

- the results of the EA's mid-construction blower door test at 0.6 ACH; and
- a statement that there are no known barriers to the project achieving Passive House certification.

*CHBA Net Zero Applications:* The NZEA will provide a preliminary report with a predicted EnerGuide Rating based on the results of the mid-construction fan test to the City for review.

### 3.5 Prior to Final Inspection

In addition to typical requirements such as conducting a review and final door blower test, the EA should provide the applicant with a report on the mechanical and other construction details required to achieve the zero emission standard. The applicant must submit a copy of the report to the City.

*Passive House applications:*

- The EA must conduct a review and final door blower test. This test must be conducted to the EN 13829 protocol, with modifications as prescribed by the Passive House Institute (e.g. both pressurization and depressurization).
- The EA will provide the applicant with documentation of mechanical and other construction details, as well as a report on the results of the EN 13829/PHI blower door test, which must be submitted to the City.
- In addition to the EA review, applicants must provide the City with a letter from a Certifier stating that the final PHPP and relevant documentation have been received and are being reviewed for final certification. The Certifier's letter must include a suggested date by which the City may expect to be notified of final certification to the Passive House Institute standard.

Once the project is certified by the Passive House Institute, a copy of the certificate must be provided to the City of Vancouver

### 3.6 Building Certification

The project must complete the requirements of the zero emission standard, and provide a copy of the confirmation to the City of Vancouver.

*Passive House applications:* The project must meet the Passive House standard and achieve Certification to support the relaxations noted. The Certifier will review the project documentation, including the PHPP model, building envelope drawings, mechanical systems and other information. Once the project is certified by the Passive House Institute, a copy of the certificate must be provided to the City of Vancouver.

*CHBA Net Zero applications:* Once the project is labelled under the CHBA Net Zero Labelling Program, a copy of the Net Zero Label must be provided to the City of Vancouver.

*ILFI Zero Energy applications:* The project must meet the Zero Energy requirements and achieve Certification to support the relaxations noted. The ILFI Auditor will review the project documentation, including energy demand and production over 12 consecutive months, lack of combustion within the project, project drawings, site photographs, and other documentation. Once the project is certified by ILFI, a copy of the certification must be provided to the City of Vancouver.