

Dear Grady and Lee Ann:

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This package summarizes our findings of the zoning assessment study for the property located at 3775 Elmwood St in Burnaby, BC.

For the assessment, we reviewed the previous architect’s study, the current R5 zoning and City of Burnaby (CoB) Zoning Bylaw generally, as well as the BC Building Code (2018 edition). The study was primarily undertaken during October/November 2021 and February 2022.

Context

Since the previous study prepared in 2008 by Halkier+Associates, the City of Burnaby implemented revisions to the R5 zoning requirements in March 2019 primarily intended to permit the creation of larger secondary suites in single-family homes. (The staff report is included as an Appendix.)

Prior to the zoning amendment, the Gross Floor Area for a single family dwelling in the R5 District was limited to the lesser of 0.60 FAR or 370 m² (398.8 SF) — which is reflected the Halkier study. The 2019 changes removed the Gross Floor Area limit for single-family homes in a number of residential zones including R5, but either retained existing, or implemented new, requirements to limit the mass or bulk of new homes taking advantage of the change. The main effect was to permit cellars that can extend to the full area of the floor above (i.e. the main floor) but also place limits on the main floor area extents to limit the overall house size, and implement development requirements to ensure that any cellars over 323 SF could be easily converted into secondary suites.

The original parameters for secondary suites reflected related clauses in the Building Code at the time. Following the City’s zoning bylaw changes, sections in the Building Code pertaining to secondary suites were also revised in December 2019. The changes afforded more flexibility for integrating secondary suites into developments in terms of both location and size. Bulletins from the change are also included as an Appendix. It should be noted, however, that while the Building Code no longer includes restrictions on the secondary suite’s size, or limits on its proportion of the total development floor area, these limits are effectively present in the City of Burnaby’s zoning bylaw: secondary suite area in a cellar is limited by the area of the main floor above, and secondary suites in Burnaby are still limited to 40% of the total development floor area.

Study Options

For this study, we reviewed six potential development options:

1. R5 1-family dwelling with cellar
2. R5 1-family dwelling with secondary suite
3. R5a large 1-family dwelling with cellar
4. R5 2-family duplex
5. R5 2-family semi-detached with cellar
6. R5 2-family semi-detached without cellar

Note: The options use language consistent with the CoB Zoning Bylaw:

- *cellar: “the portion of a building between two floor levels that is partly or wholly underground and has more than one-half its height, from its finished floor to the underside of the joists of the floor next above it, below average natural grade as determined by the Building Inspector; and a cellar shall not be considered to be a storey.”*
 - *(Note: “cellar” in the CoB’s usage would more commonly be interpreted as a “basement.” However, note how “cellar” is contrasted against the bylaw’s official definition of “basement,” as follows)*
- *basement: “the portion of a building between two floor levels that is partly underground but has at least one-half its height, from its finished floor to the underside of the joists of the floor next above it, above average natural grade as determined by the Building Inspector; and a basement shall be considered to be a storey.”*



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- duplex: “a two-family dwelling wherein the two dwelling units are placed one above the other”
- semi-detached: “a two-family dwelling wherein the two dwelling units are placed side by side”

In all cases, our study found that it appears possible to maximize the permitted buildable area in each scenario without removal or alteration of the existing subgrade stormwater line on site. Your previous consultation with Kimberly Wong in the City’s Engineering Department appears to confirm that no additional restrictions related to the stormwater line seem to apply as long as the new house does not encroach on the existing right of way. Relocation/removal of the stormwater line or modifications to the right-of-way would be expected to be quite costly and would have limited benefit except perhaps to improve flexibility of planning the house and garage locations on the site.

Assessment Summary

In terms of maximum gross built square footage (i.e. notwithstanding whether or not all of the development’s storeys/area is counted with respect to the zoning bylaw), the typical R5 single-family scenario permits the largest Gross Floor Area: 6240 SF (includes cellar area). It is noted that this scenario permits a larger total area than the R5a “large single-family” zoning on this site (calculated GFA = 0.60 FAR = 5762 SF). Consultation with planning staff during our study implied that the 2019 zoning changes effectively reduced the need for the R5a zoning designation. However, the 2019 zoning changes also introduced the “suite ready” requirements that apply to single-family houses in order to make all cellars larger than 323 SF easily convertible into secondary suites. Due to the City’s “suite ready” provisions, the single-family scenarios in our study — with either cellar or secondary suite — are generally comparable from a development perspective.

As in the previous study, it remains the case that R5a proposals are not permitted outright and require rezoning of the property. From our conversation with a CoB planning clerk, rezoning would be expected to take 8–12 months, requires a public hearing, and requires consultation with an area planner to first determine if the planning department would support the rezoning.

Finally, the combination of large site area and 2019 zoning changes appears to inadvertently discourage two-family dwellings on this lot when considered from the perspective of aiming to maximize gross buildable area. While single-family area limits are generally presented in the zoning as proportional to the lot size (usually up to some maximum), the two-family clauses for Gross Floor Area and Above Grade Floor Area in R5 instead place hard limits on dwelling sizes irrespective of lot size — the effect being that the larger site provides little area benefit in the two-family scenarios.

Laneway Homes

A brief note on the status of laneway homes in Burnaby: Laneway homes were not a subject of this study as they are currently not permitted in Burnaby’s zoning bylaw. Information available on the City’s website notes that the City is working toward permitting laneway homes, but the timeline is uncertain. (Reference: <https://www.burnaby.ca/our-city/programs-and-policies/housing/laneway-homes>) We did notice in January 2022 that the City issued an RFP for external consultants to study infill housing (including “laneway homes and suites in duplexes”) which would seem to indicate that laneway homes are still uncertain and a ways off in terms of timeline.

Closure

While we have attempted to make a thorough assessment of the types and sizes of developments permitted by the current zoning, please note that municipal regulations (zoning, land-use policies, etc) and building code requirements are subject to change over time, which may affect the types and sizes of development that may be permitted in the future. Experience in other municipalities — namely the City of Vancouver — has also shown that planning departments may have undocumented requirements applicable to your site, or other

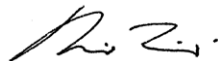
city departments may have internal policies that may affect the viability of certain developments. Often these requirements may only be discovered during the process of proposing a specific new development. The findings of this report should not be construed as a guarantee that the City will permit the development scenarios exactly as described.

Should you wish to pursue any of the noted scenarios, the recommended next steps should include:

- Retain a registered BCLS land surveyor to perform a legal survey to verify the overall site area and legal location of the existing right-of-way (this was recommended by the CoB Planning Department).
- Retain an architect or house designer to prepare schematic massing plans for the desired development scenario. (The requirement for an architect may depend on the size and nature of the development, but is likely not required for the size of developments contemplated in the study. Please refer to <https://aibc.ca/protecting-the-public/does-your-project-need-an-architect/> for more information.)
- Consult with the City's Planning and Building Departments as required to verify zoning interpretation and verify general compliance of the proposed development. Arrange a pre-application meeting with City staff (if possible) prior to permit application to discuss the proposed development and any constraints that may apply.
- Assuming the proposed development is acceptable to the City, have the architect or house designer prepare detailed construction documentation
- Apply for a building permit. It is our understanding from documentation on the City's website that Preliminary Planning Approval (PPA) (i.e. a "development permit") is currently not required for single- and two-family dwellings.

We trust the contents of this study meets your present needs. Should you have any questions, please don't hesitate to get in touch.

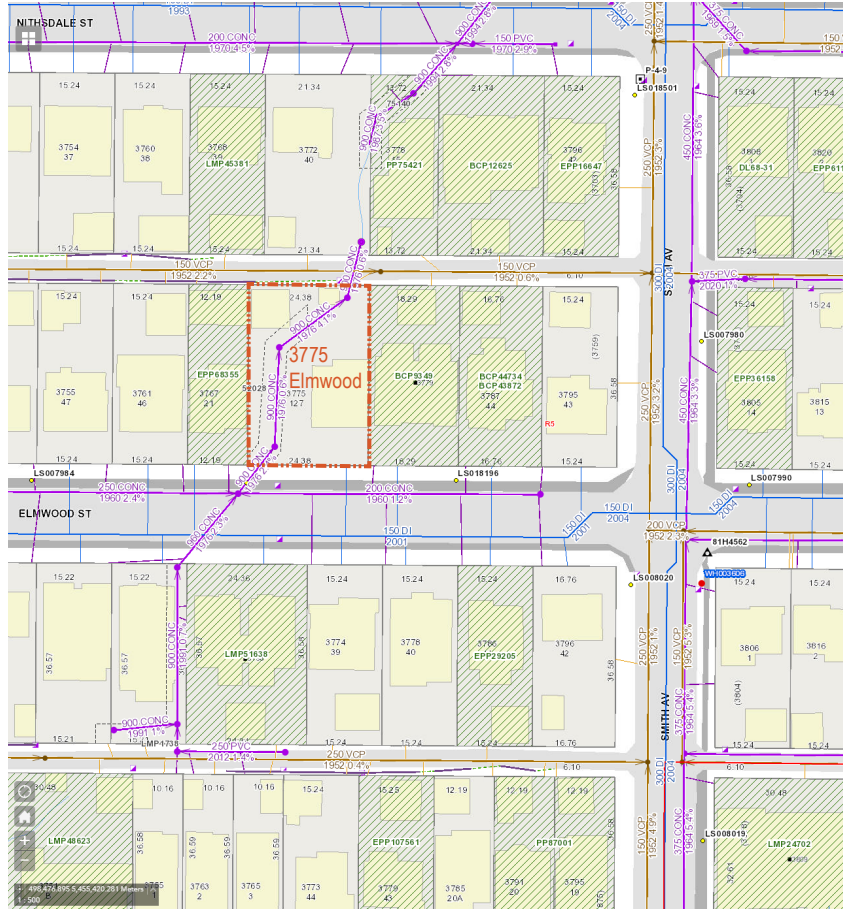
Sincerely,



David Zeibin

Principal, Architect AIBC MRAIC LEED AP^{BD+C}

1 Site

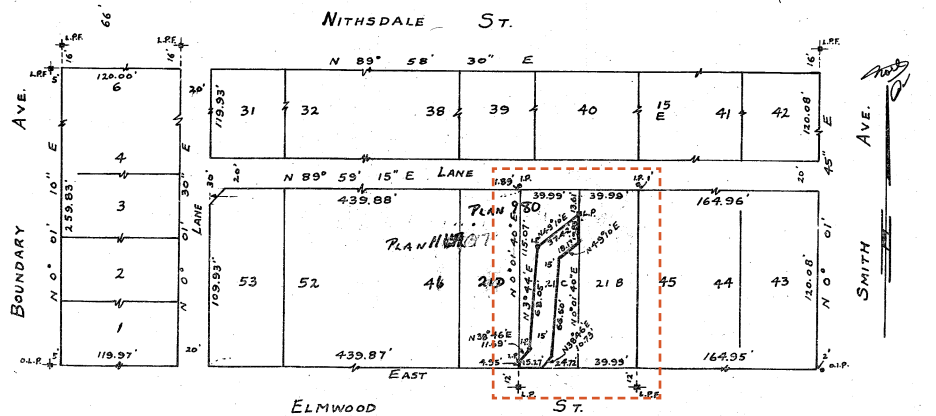


Burnaby GIS Map (Not to Scale)

2 Excerpt of Right-of-Way Survey

RIGHT OF WAY PLAN THROUGH LOT 21C OF BLOCK 9, OF LOT 68, GR. I, PLAN 980, N. W. D.
 SCALE: 1 INCH = 50 FEET.
 (FOR MUNICIPAL DRAINAGE PURPOSES)

BOOK OF REFERENCE
 Lot 21C, Blk. 9, Lot 68, Gr. I, N.W.D., Plan 980/432 sq.ft.

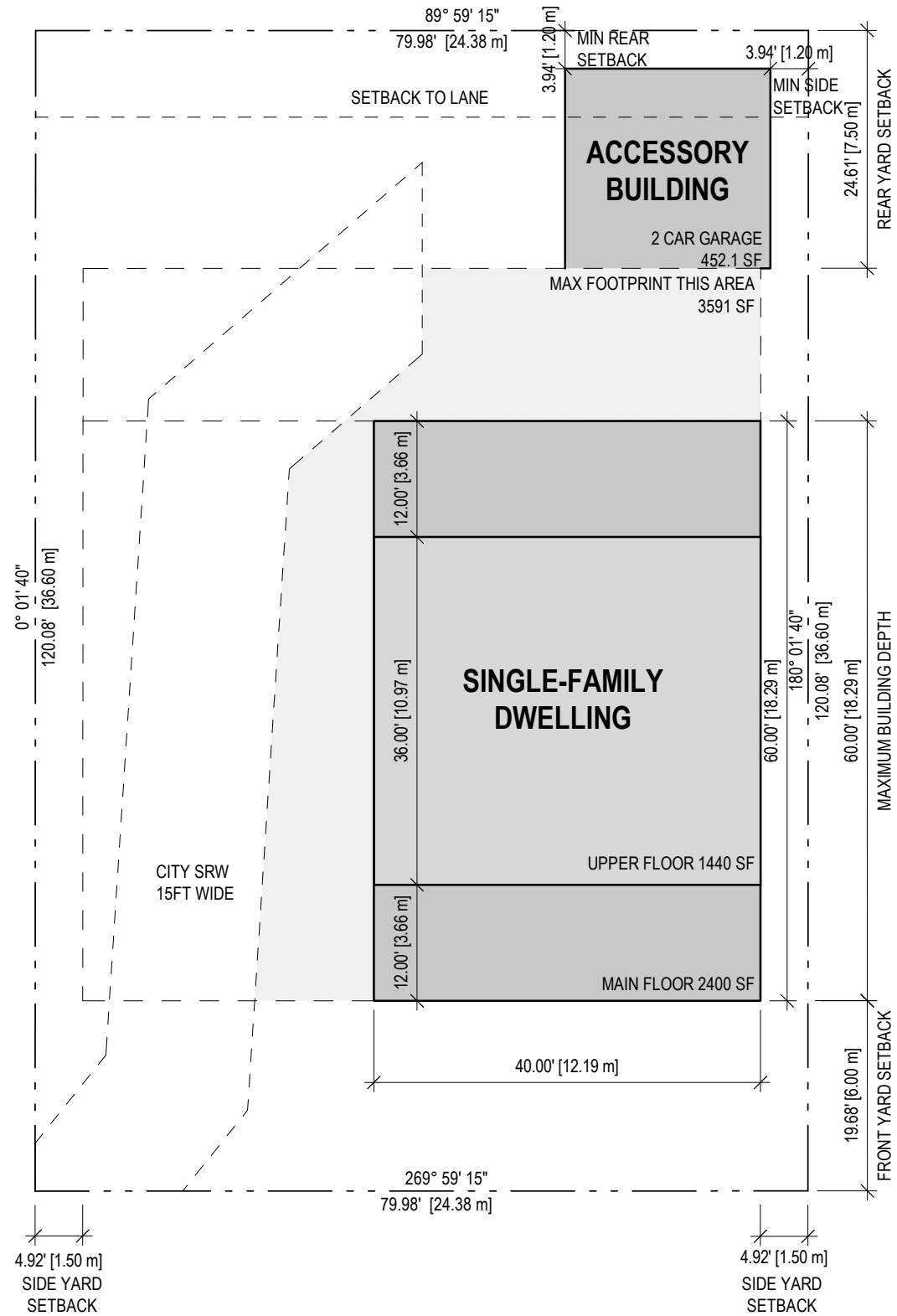


3 Burnaby R5 Zoning Summary

| | EXISTING | R5 — SINGLE FAMILY | | | R5 — 2 FAMILY | | | | |
|---|--------------------------------|---|--|---|--|---|---|--|--|
| | | 1-FAMILY with cellar | 1-FAMILY with secondary suite* | R5a Large 1-FAMILY | Duplex (one on top of other) | Semi-detached (1-storey above grade w/ cellar) | Semi-detached (2-storey above grade w/o cellar) | | |
| LOT AREA AND WIDTH [105.2] | | | | | | | | | |
| SITE WIDTH | 24.38m [80'] | MIN 15.0m [49.2'] | | | MIN 21.0m [68.9'] | | | | |
| SITE DEPTH | 36.60m [120'] | no requirement | | | | | | | |
| SITE AREA | 892.2 m ² [9600 SF] | MIN 557.40 m ² [6000 SF] | | | MIN 840 m ² [9042 SF] | | | | |
| LOT COVERAGE [105.3] | | | | | | | | | |
| | | Max 40% of Site Area = 356.8m ² [3840 sf] <i>Lots with garage detached from the principal building: Max 45% Site Area</i> | | | Max 40% of Site Area = 356.8m ² [3840 SF] <i>Lots having a garage detached from the principal building: Max 45% Site Area</i> | | | | |
| HEIGHT | | | | | | | | | |
| — SINGLE-FAMILY [105.6] — TWO-FAMILY [105.7] <i>Subject to exceptions in Section 6.4</i> | | MAX 9.0m [29.5'] (SLOPED ROOF) MAX 7.4m [24.3'] (FLAT ROOF) MAX 2.5 STOREYS | | | MAX 9.0m [29.5'] (SLOPED ROOF) MAX 7.4m [24.3'] (FLAT ROOF) | | MAX 5.5m [18.0'] MAX 7.62m [25.0'] (SLOPED ROOF) MAX 6.1m [20'] (FLAT ROOF) | | |
| FRONT YARD [105.9] | | | | | | | | | |
| | | MIN 6.0m [19.7'] <i>EXCEPTION: If the average front yards on adjacent lots is more than 6+1.5m, then the required setback is to be not less than the average of those front yards</i> | | | | | | | |
| SIDE YARDS [105.10] | | | | | | | | | |
| | | MIN 1.5m [4.9'] | | | | | | | |
| REAR YARD [105.11] | | | | | | | | | |
| | | MIN 7.5m [24.6'] | | | | | | | |
| BUILDING DEPTH [105.8] | | | | | | | | | |
| | | Principal Building, other than 2-maily with attached garage: Lesser of: 50% of Lot Depth = 36.60m x 50% = 18.30m [60.0'] OR 18.3m [60'] | | | 2-family dwelling w/ attached garage: Lesser of: 50% of Lot Depth = 36.60m x 50% = 18.30m [60.0'] OR 19.8m [65'] | | | | |
| DEVELOPMENT DENSITY (GROSS FLOOR AREA) [105.4] <i>EXCLUDES UP TO 42m² OF GARAGE/CARPORT</i> | | | | | | | | | |
| | | <i>No GFA limit is stated, but it is effectively limited by other clauses. (i.e. max AGFA & cellar cannot extend beyond floor above) [Note: We believe the GFA limit was removed in the 2019 bylaw amendment and was previously 0.6 FAR, consistent with the previous Halkier+Associates study.]</i> | | | 0.60 FAR for lots w/ width of 22.5 m [73.8'] or more: 0.60 x lot area = 0.6 x 892.2m ² = 535.3m ² [5762 SF] | | Lesser of: 0.60 FAR = 535.3m ² [5762 SF] OR 370 m ² [3983 SF] <i>(i.e. 1991.5 SF per unit if split equally)</i> | | |
| ABOVE GRADE FLOOR AREA [105.5] <i>If garage/carport is attached, area >42m² is counted in the above-grade floor area. [105.5(4)]</i> | | | | | | | | | |
| | | 105.5(2): New One-Family Dwelling: Gross area of all floors (excluding floor of cellar) not to exceed greater of: 0.2 OF SITE AREA + 130m ² [1399.4 SF] = (0.2 x 892.2m ²) + 130m ² = 308.4m ² [3320 SF] OR 0.4 OF SITE AREA = 356.9m ² [3840 SF] Main floor area limit Max area of the main floor (when located above a cellar) is limited to the max AGFA minus 0.15 x lot area. (i.e. 0.15 x lot area must be located on the upper level) [105.5(6)] 0.15 x lot area = 0.15 x 892.2 m ² = 133.8 m ² [1440 SF] Max main floor area = 2400 SF | | | Assumed to be the same AGFA limit as for typical R5 1-family. [105.5(2)] = 356.9m ² [3840 SF] <i>Planning confirmed secondary suite req'ts do not apply in R5a (email Anja van Spaendonk, 2022-02-08)</i> Main floor area limit Main floor area limit does not apply in R5a zones [105.5(6)] so the full 3840 SF available could be located on the main floor. However, building depth and the RoW limit the max main floor footprint to 3010 SF | | 105.5(3): Duplexes and One-Storey Semi-Detached Dwellings: Gross Floor Area of all floors located above a cellar, basement, crawl space or ground surface: Max 116m ² [1249 SF] per dwelling unit Max total AGFA = 232m ² [2497 SF] | | 105.5(5): Two-storey Semi-Detached Dwelling (a) Cellar not permitted (b) For each unit: max total GFA = 185.8m ² [2000 SF] and max GFA 65.03 m ² [700 SF] on 2nd floor (c) Max combined above-grade floor area of the two dwelling units = 0.3 OF SITE AREA + 139.5m ² [1502] = 0.3 x 892.2 + 139.5m ² = 407.16m ² [4382] However, this not achievable as each unit is limited to 2000SF (i.e. 4000SF total) and GFA is limited to 3983 SF Max AGFA = 3983 SF |
| EFFECTIVE MAXIMUM USABLE AREA | | | | | | | | | |
| Note: <i>For reference, on a standard 15.24m x 36.6m (50'x120') lot: Lot Area: 50x120' = 6000 SF</i> Max 1-family AGFA would normally be: greater of 2600 SF or 2400 SF Applying the 0.15 lot area rule for main floor: Upper: 900SF Main: 1700 SF Cellar: 1700 SF (Sec Suite ready) Total GFA: 4300 SF Max GFA for a 2-family dwelling would be lesser of 3600 SF or 3983 SF | | Max area for 1-family dwelling: - Upper: 1440 SF - Main: 2400 SF - Cellar: 2400 SF (excluded from AGFA) Total: 6240 SF <i>Requires cellar to be designed to support future secondary suite. Refer to CoB Informational Guide "Secondary Suites" (Rev. 2021-08-31)</i> Largest 1-family dwelling without suite-ready requirements: - Upper: 1440 SF - Main: 2400 SF - Cellar: 323 SF (excluded from AGFA, max cellar size before SS req'ts take effect) Total: 4163 SF | Secondary Suite Area Requirements: Min: 30 m ² [322.93 SF] Max: 40% of the GFA of the principle building Assuming max GFA of 6240 SF, max secondary suite area = 2496 SF, so option is similar to 1-family with cellar: - Upper: 1440 SF - Main: 2400 SF - Cellar: 2400 SF (excluded from AGFA) Total: 6240 SF | Total: 5762 SF per GFA limit above May be split as desired onto 3 levels: - Upper: 1920 SF - Main: 1920 SF - Cellar: 1920 SF or - Upper: 1440 SF - Main: 2400 SF - Cellar: 1922 SF or - Upper: 962 SF - Main: 2400 SF - Cellar: 2400 SF | Max area for Duplex with cellar: - Upper: 1249 SF (unit 2) - Main: 1249 SF (unit 1) - Cellar: 1249 SF Total: 3747 SF | Max area for One-Storey Semi-Detached, each unit with a cellar - Upper: n/a - Main: 2497 (1249 each) - Cellar: 1486 (743 each) Total: 3983 SF | Max area for Two-Storey Semi-Detached (no cellars) - Upper: 1400 (700 each) - Main: 2582 (1291 each) - Cellar: n/a (not permitted) Total: 3982 SF | | |
| OFF-STREET PARKING | | | | | | | | | |
| | | In accordance with Schedule VIII | | | | | | | |
| ACCESSORY BUILDING REQUIREMENTS (I.E. FOR GARAGE) | | | | | | | | | |
| MAX PEAK HEIGHT [2.2A.(a)] | | 4.6m [15.1'] | | | | | | | |
| MAX MEAN HEIGHT [2.2A.(a)] | | 3.7m [12.13'] | | | | | | | |
| MIN REAR SETBACK [2.2A.(b)] | | 1.2m [3.94'] FROM LANE | | | | | | | |
| MIN SIDE SETBACK [6.6 (2)(d)] | | 1.2m [3.94'] FROM SIDE PROPERTY LINES | | | | | | | |
| MAX FLOOR AREA [6.6 (2)(b)] | | SINGLE FAMILY DWELLING: 56 m ² [602.8 SF] | | | SEMI-DETACHED DWELLING: MAX 74.4 m ² [800 SF] | | | | |
| MAX WIDTH | | MAX: TWO-THIRDS OF REAR YARD WIDTH 21.40 x 2/3 = 13.6 m [44.62'] | | | | | | | |

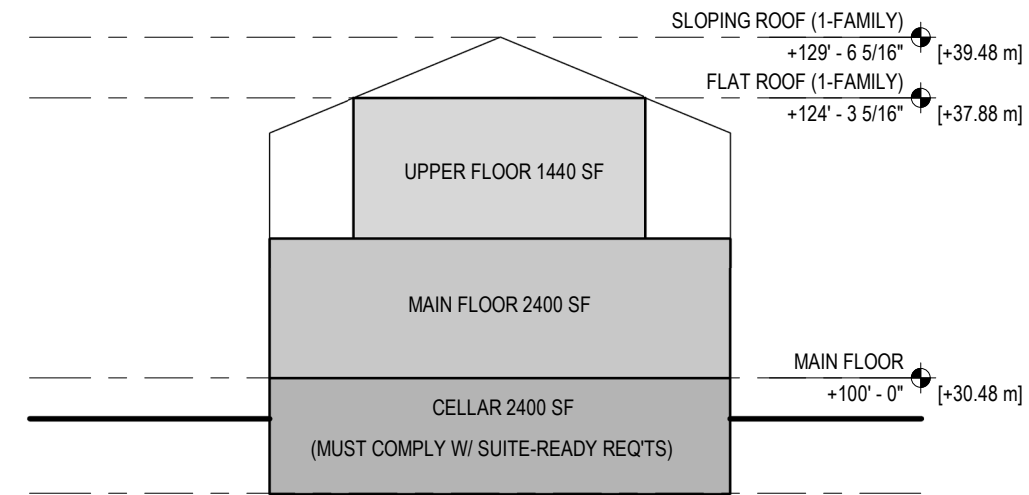
* 6.9(6) on a lot developed with a single family dwelling a cellar exceeding a floor area of 32 m² (345 sq. ft.) shall meet the requirements of the British Columbia Building Code and all other requirements of this Bylaw for a secondary suite

Appendix A — Zoning Scenario Plans



DEVELOPMENT AREA SUMMARY

| | |
|------------------------------|----------------|
| UPPER FLOOR | 1440 SF |
| MAIN FLOOR | 2400 SF |
| CELLAR | 2400 SF |
| TOTAL GFA | 6240 SF |
| TOTAL ABOVE-GRADE GFA | |
| | 3840 SF |

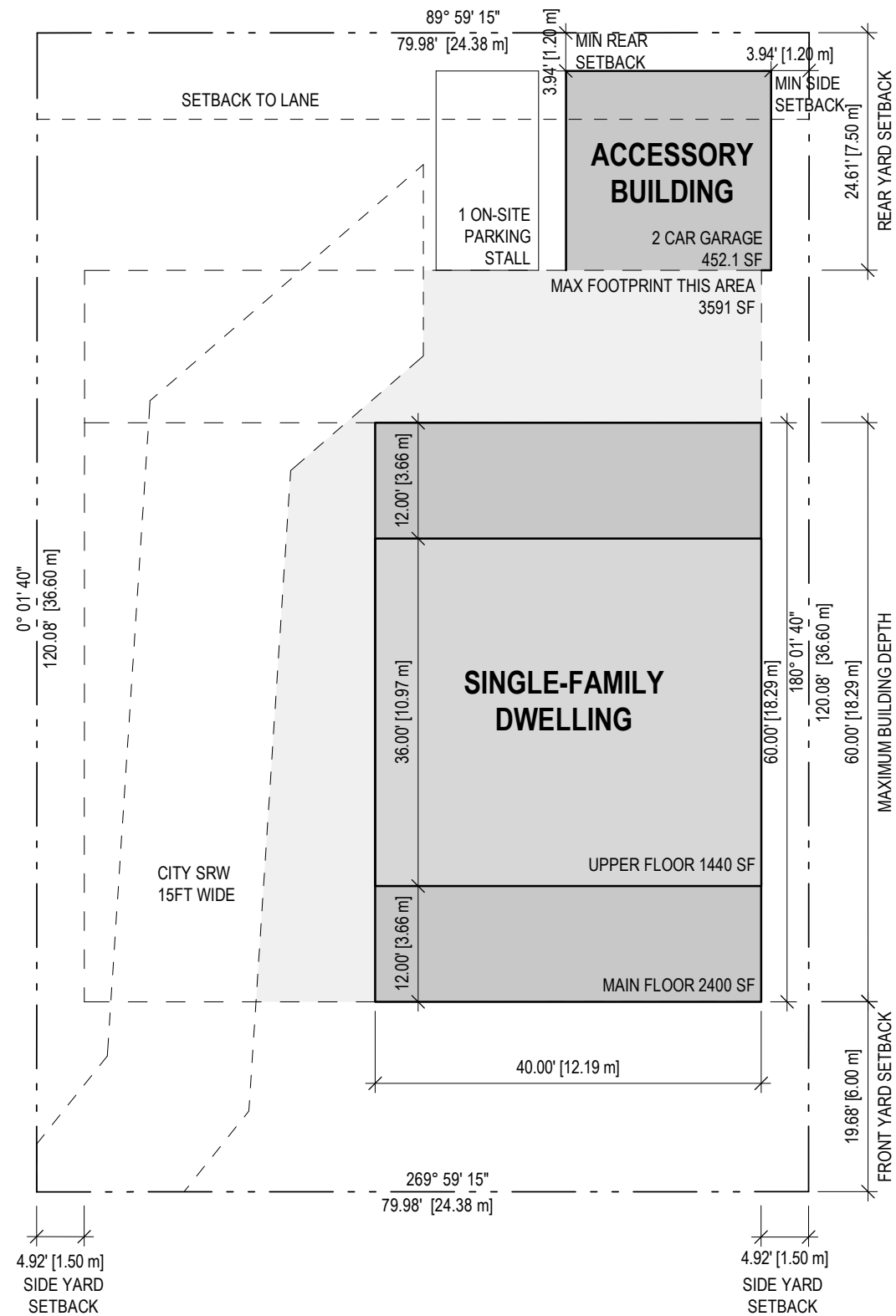


HEIGHT OF PRINCIPLE BUILDING

- Single Family Dwelling:
- Sloping roof: <= 2 1/2 storeys & 29.5' (9.0 m)
 - Flat roof: <= 2 1/2 storeys & 24.3' (7.4 m) (99-12-13)
- Two Family Dwelling:
- One storey: <= 18' (5.0 m)
 - Two storey:
 - Sloping roof: <= 25' (7.62 m)
 - Flat roof: <= 20' (6.1 m) (96-04-15)

1 SITE PLAN (R5 1-FAMILY W/ CELLAR)
1 : 200

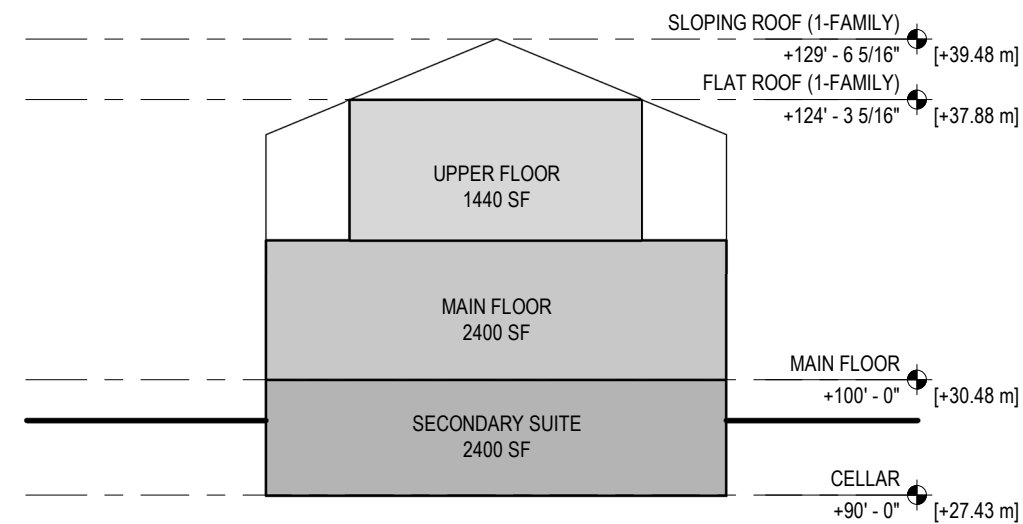
2 SECTION DIAGRAM (R5 1-FAMILY W/ CELLAR)
1 : 200



DEVELOPMENT AREA SUMMARY

| | |
|--------------------------|----------------|
| UPPER FLOOR | 1440 SF |
| MAIN FLOOR | 2400 SF |
| SEC.SUITE | 2400 SF |
| TOTAL GFA | 6240 SF |
| TOTAL ABOVE-GRADE | |
| GFA | 3840 SF |

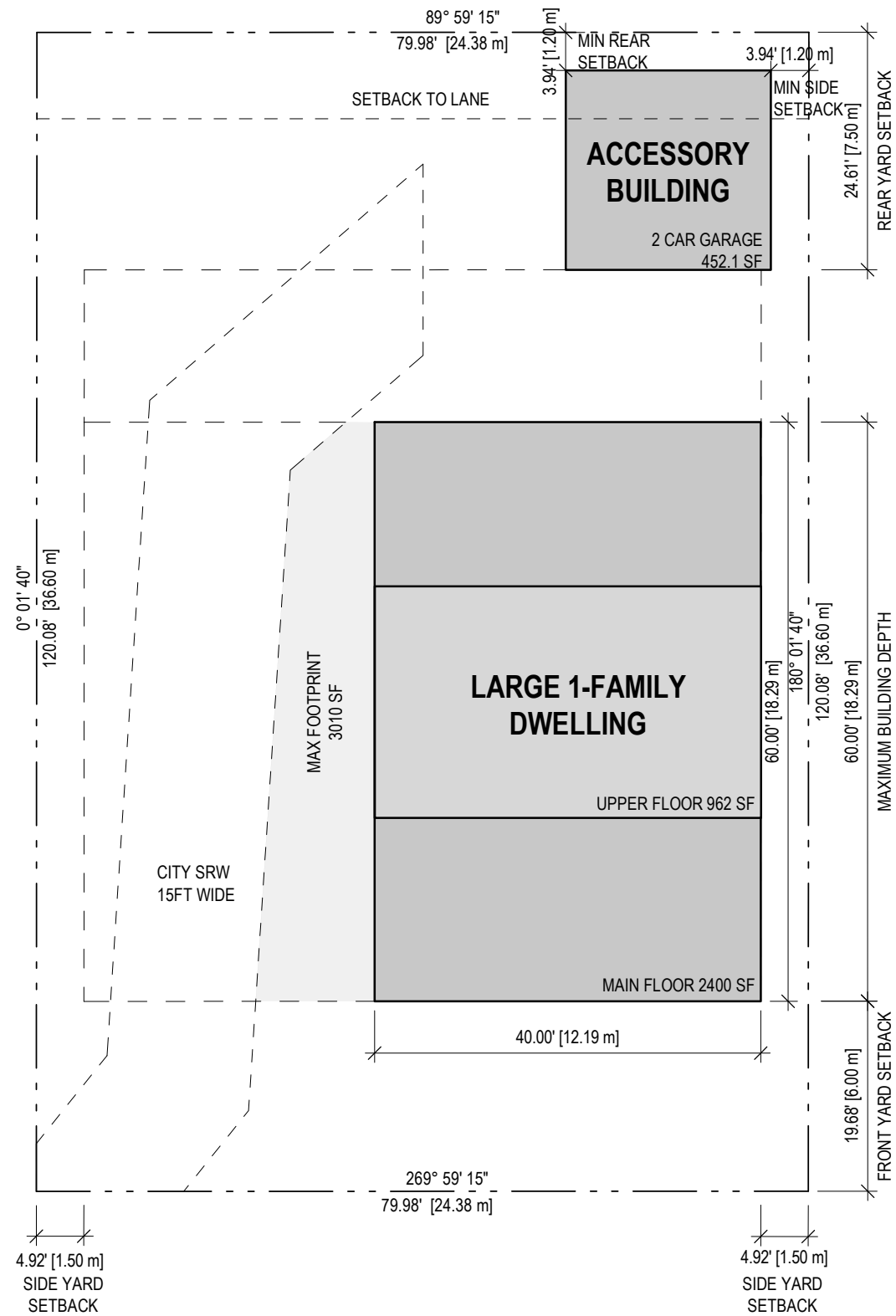
1 SITE PLAN (R5 1-FAMILY W/ SECONDARY SUITE)
1 : 200



HEIGHT OF PRINCIPLE BUILDING

- Single Family Dwelling:
- Sloping roof: <= 2 1/2 storeys & 29.5' (9.0 m)
 - Flat roof: <= 2 1/2 storeys & 24.3' (7.4 m) (99-12-13)
- Two Family Dwelling:
- One storey: <= 18' (5.0 m)
 - Two storey:
 - Sloping roof: <= 25' (7.62 m)
 - Flat roof: <= 20' (6.1 m) (96-04-15)

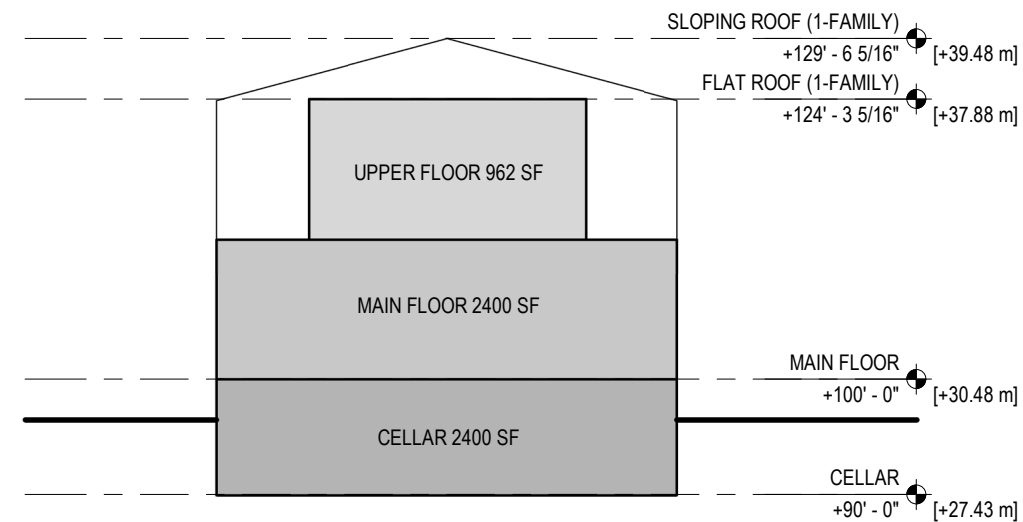
2 SECTION DIAGRAM (R5 1-FAMILY W/ SECONDARY SUITE)
1 : 200



DEVELOPMENT AREA SUMMARY

| | |
|------------------|----------------|
| UPPER FLOOR | 962 SF |
| MAIN FLOOR | 2400 SF |
| CELLAR | 2400 SF |
| TOTAL GFA | 5762 SF |

TOTAL ABOVE-GRADE
GFA 3362 SF



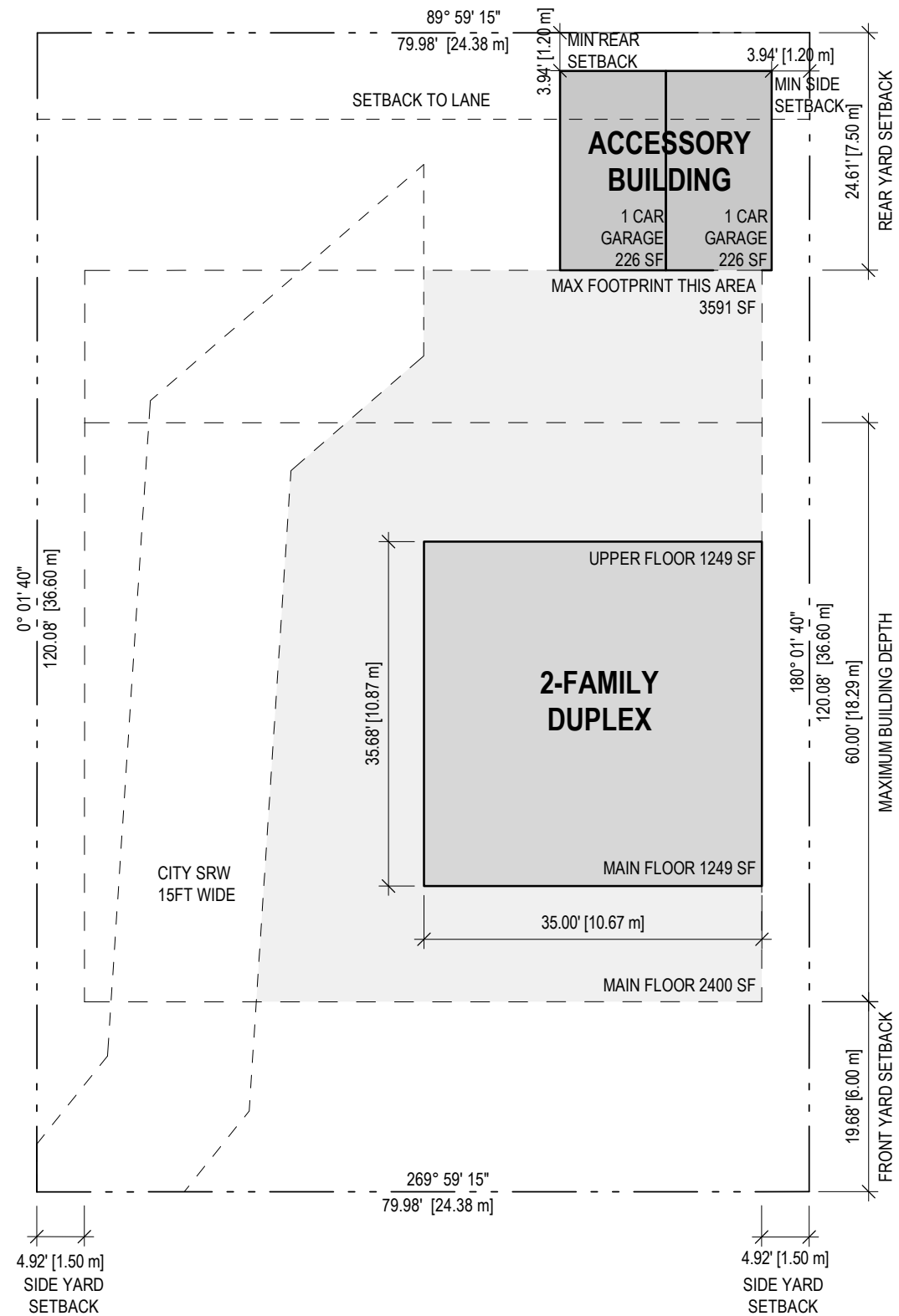
HEIGHT OF PRINCIPLE BUILDING

Single Family Dwelling:
1) Sloping roof: <= 2 1/2 storeys & 29.5' (9.0 m)
2) Flat roof: <= 2 1/2 storeys & 24.3' (7.4 m) (99-12-13)

Two Family Dwelling:
a. One storey: <= 18' (5.0 m)
b. Two storey:
1) Sloping roof: <= 25' (7.62 m)
2) Flat roof: <= 20' (6.1 m) (96-04-15)

1 SITE PLAN (R5a LARGE 1-FAMILY W/ CELLAR)
1 : 200

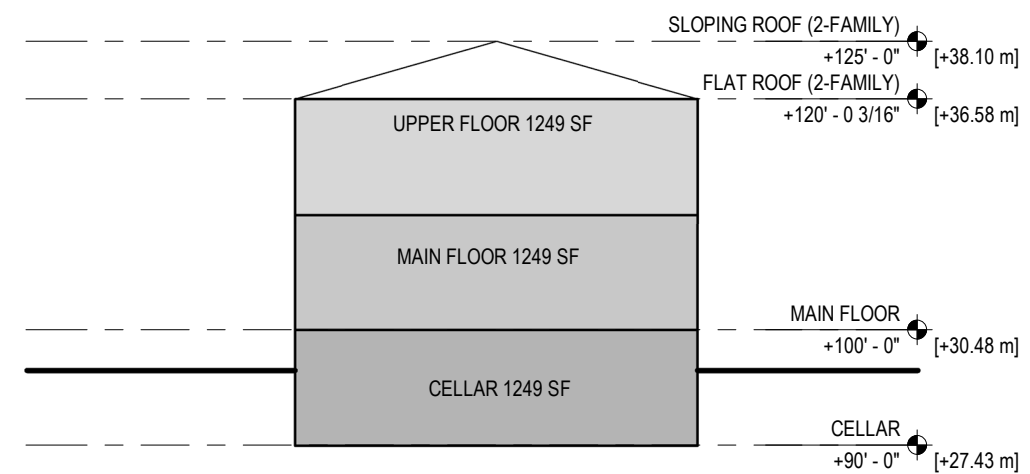
2 SECTION DIAGRAM (R5a LARGE 1-FAMILY W/ CELLAR)
1 : 200



1 SITE PLAN (R5 2-FAMILY DUPLEX)
1 : 200

DEVELOPMENT AREA SUMMARY

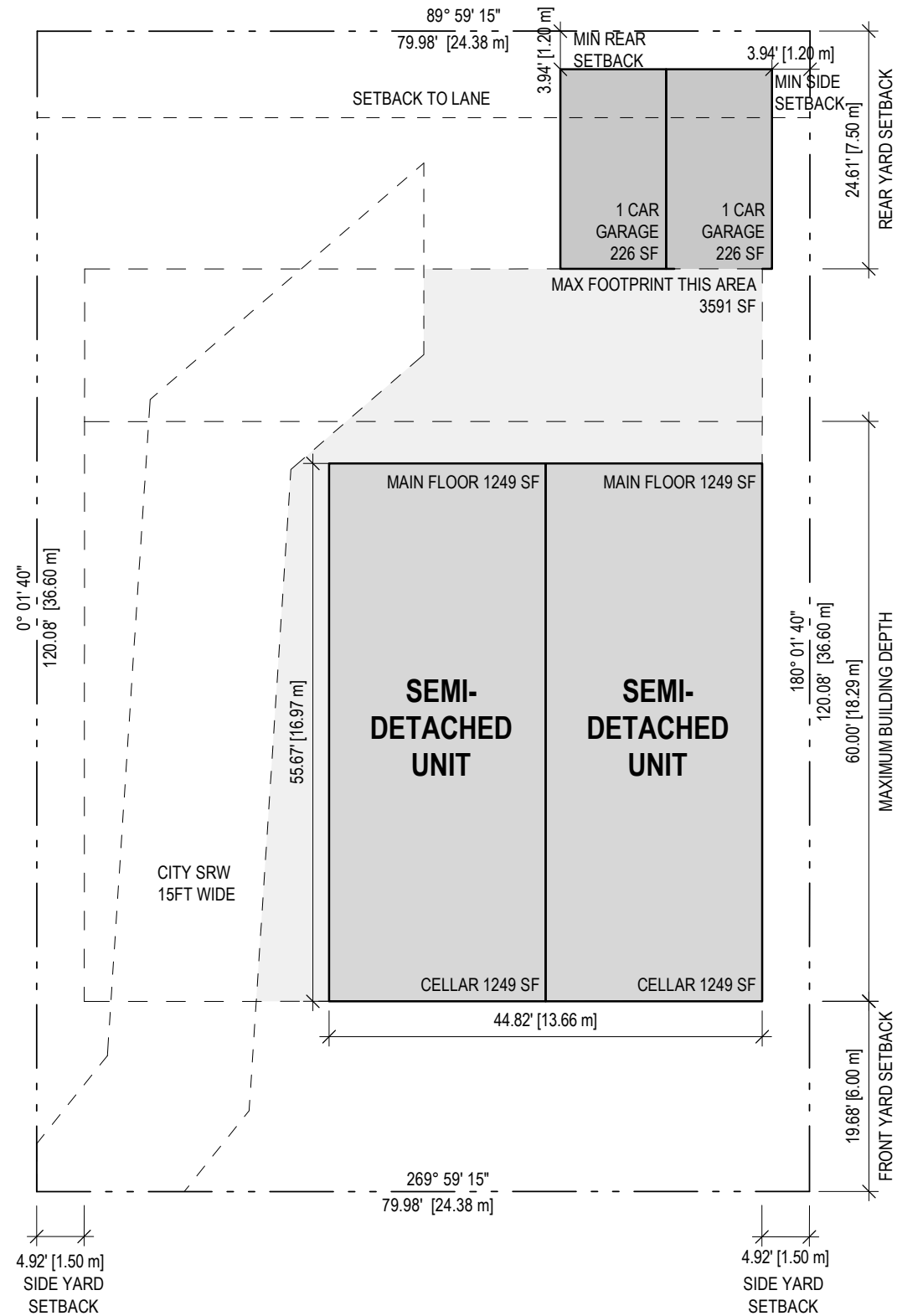
| | |
|------------------------------|----------------|
| UPPER FLOOR | 1249 SF |
| MAIN FLOOR | 1249 SF |
| CELLAR | 1249 SF |
| TOTAL GFA | 3747 SF |
| TOTAL ABOVE-GRADE GFA | |
| | 2498 SF |



2 SECTION DIAGRAM (R5 2-FAMILY DUPLEX)
1 : 200

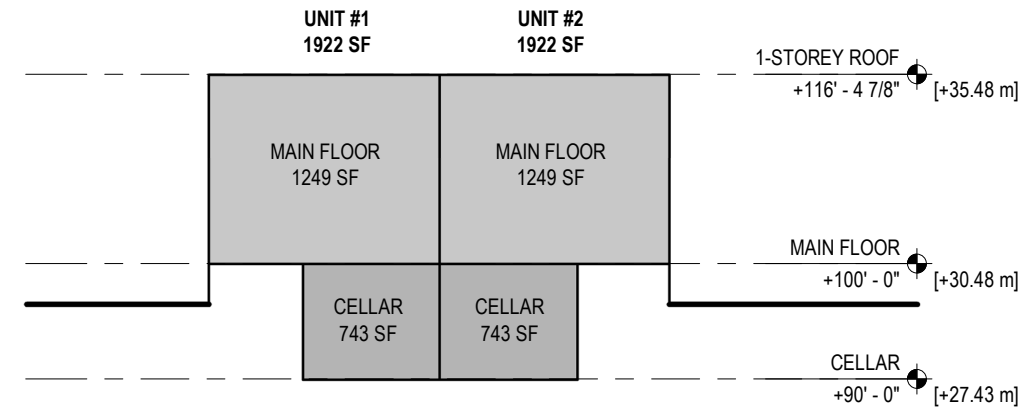
HEIGHT OF PRINCIPLE BUILDING

- Single Family Dwelling:
 1) Sloping roof: <= 2 1/2 storeys & 29.5' (9.0 m)
 2) Flat roof: <= 2 1/2 storeys & 24.3' (7.4 m) (99-12-13)
- Two Family Dwelling:
 a. One storey: <= 18' (5.0 m)
 b. Two storey:
 1) Sloping roof: <= 25' (7.62 m)
 2) Flat roof: <= 20' (6.1 m) (96-04-15)



DEVELOPMENT AREA SUMMARY

| | |
|------------------------------|----------------|
| MAIN FLOOR | 2497 SF |
| CELLAR | 1486 SF |
| TOTAL GFA | 3983 SF |
| TOTAL ABOVE-GRADE GFA | |
| | 2497 SF |

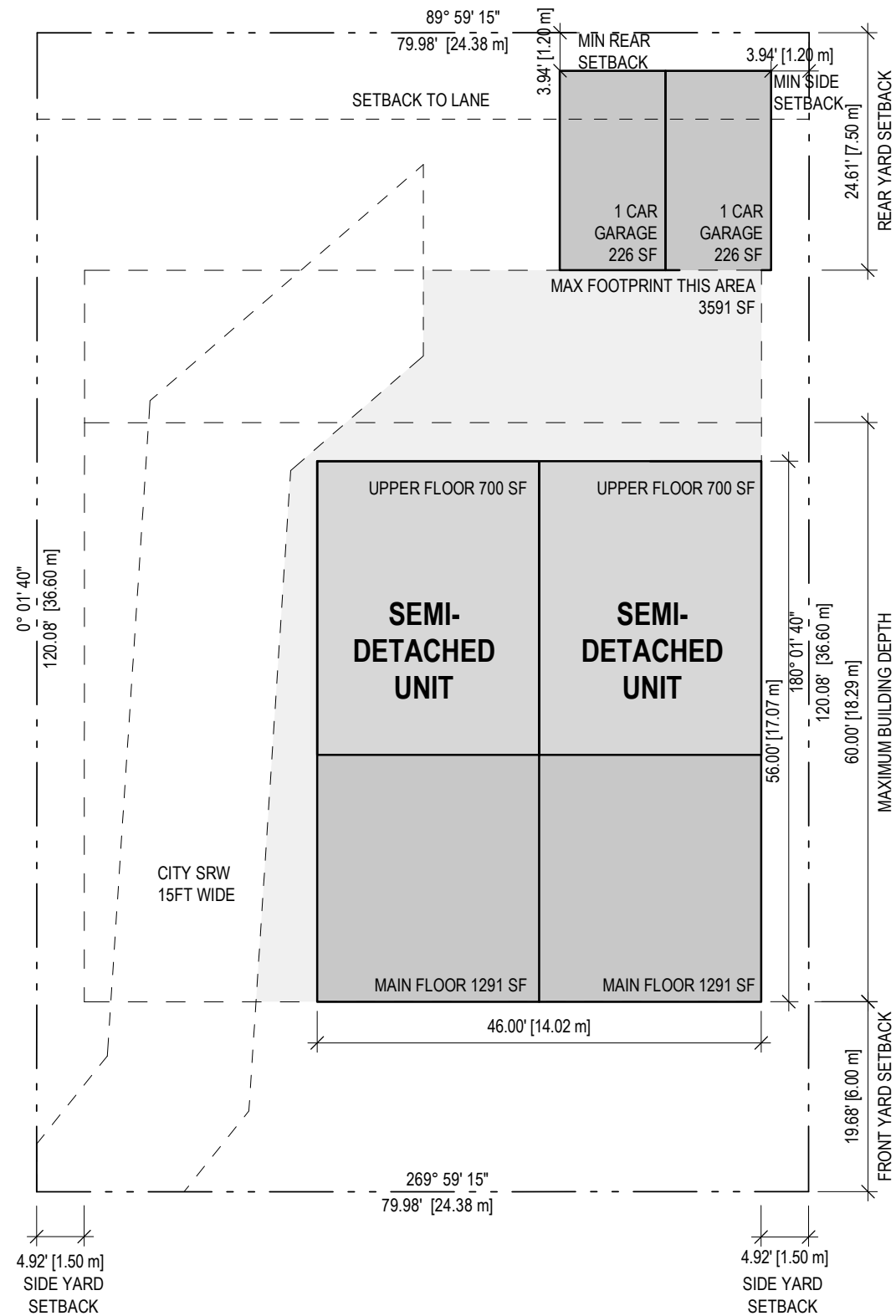


HEIGHT OF PRINCIPLE BUILDING

- Single Family Dwelling:
- Sloping roof: $\leq 2 \frac{1}{2}$ storeys & 29.5' (9.0 m)
 - Flat roof: $\leq 2 \frac{1}{2}$ storeys & 24.3' (7.4 m) (99-12-13)
- Two Family Dwelling:
- One storey: $\leq 18'$ (5.0 m)
 - Two storey:
 - Sloping roof: $\leq 25'$ (7.62 m)
 - Flat roof: $\leq 20'$ (6.1 m) (96-04-15)

1 SITE PLAN (R5 2-FAMILY SEMI-DETACHED W/ CELLAR)
1 : 200

2 SECTION DIAGRAM (R5 2-FAMILY SEMI-DETACHED W/ CELLAR)
1 : 200

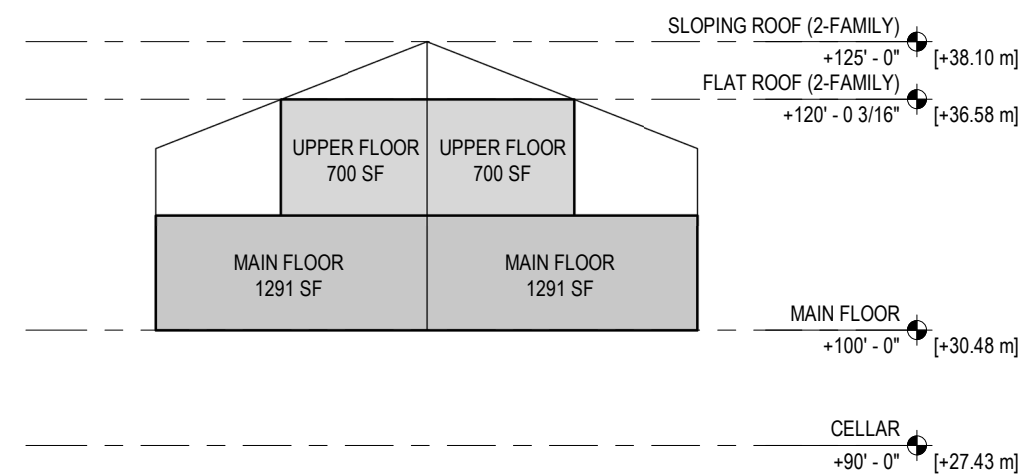


1 SITE PLAN (R5 2-FAMILY SEMI-DETACHED W/O CELLAR)
1 : 200

DEVELOPMENT AREA SUMMARY

| | |
|------------------|----------------|
| UPPER FLOOR | 1400 SF |
| MAIN FLOOR | 2582 SF |
| TOTAL GFA | 3982 SF |

TOTAL ABOVE-GRADE
GFA 3982 SF



2 SECTION DIAGRAM (R5 2-FAMILY SEMI-DETACHED W/O CELLAR)
1 : 200

HEIGHT OF PRINCIPLE BUILDING

Single Family Dwelling:
1) Sloping roof: <= 2 1/2 storeys & 29.5' (9.0 m)
2) Flat roof: <= 2 1/2 storeys & 24.3' (7.4 m) (99-12-13)

Two Family Dwelling:
a. One storey: <= 18' (5.0 m)
b. Two storey:
1) Sloping roof: <= 25' (7.62 m)
2) Flat roof: <= 20' (6.1 m) (96-04-15)

Appendix B — City of Burnaby R5 Zoning Bylaw (Annotated)

105. RESIDENTIAL DISTRICT (R5)

This District provides for the use and development of two-family dwellings on larger lots in medium density residential areas.

105.1 Uses Permitted:

- (1) Single family dwellings
- (2) Two family dwellings (B/L No. 10351-96-04-15)
- (3) Group homes (B/L No. 10123-94-12-05)
- (4) Boarding, lodging or rooming houses for not more than 5 persons, when situated in a single family dwelling on a lot with an area of not less than 668.88 m² (7,200 sq.ft.), subject to the condition that such use is included as part of a comprehensive development plan to which the provisions of the Comprehensive Development District apply. (B/L No. 13652-16-11-21)
- (5) Home occupations
- (6) Accessory buildings and uses
- (7) Repealed. (B/L No. 13063-12-05-14)
- (8) Category A supportive housing facilities, subject to the following conditions:
 - (a) the use shall be included as part of a comprehensive development plan subject to the CD (Comprehensive Development) District; and
 - (b) each living unit shall have a minimum floor area of 27 m² (290.6 sq.ft.). (B/L No. 11153-00-11-06)

105.2 Lot Area and Width:

- (1) R5 Single Family Dwelling. Each lot shall have an area of not less than 557.40 m² (6,000 sq.ft.) and a width of not less than 15.0 m (49.2 ft.).
- (2) R5 Single Family Dwelling - Small. Notwithstanding section 105.2(1), where 30 percent or more of the existing lots with (B/L No. 11154-00-11-06)
 - (a) the zoning designations R4, R5, or R9, or
 - (b) the zoning designation RM3 that are developed with a single family dwelling and are designated on the Official Community Plan for single and two family residential usein the block front have a width of 13.72 m (45.0 ft.) or less, each lot shall have an area of not less than 334.40 m² (3,600.0 sq.ft.) and a width of not less than 9.15 m (30.0 ft.). (B/L No. 11273-01-09-17)
- (3) R5a Single Family Dwelling. Each lot shall have an area of not less than 840 m² (9,041.9 sq.ft.) and a width of not less than 21 m (68.9 ft.). (B/L No. 11726-04-05-10)
- (4) R5 Two-family Dwelling. Each lot shall have an area of not less than 668.88 m² (7,200 sq.ft.) and a width of not less than 18.28 m (60 ft.).

105.3 Lot Coverage:

- (1) Lot coverage shall not exceed 40 percent, except that lots having a garage or carport detached from the principal building shall have a maximum lot coverage of 45 percent.
- (2) Notwithstanding subsection (1), lot coverage shall not exceed 40 percent for lots in an R5a zoning district.
(B/L No. 13838-18-03-12)

105.4 Development Density. Gross Floor Area:

- (1) The density of development shall not exceed:
 - (a) in an R5 District on a lot developed with a two-family dwelling, the lesser of a floor area ratio of 0.60 or 370 m² (3,982.6 sq. ft.).
 - (b) in an R5a District, a floor area ratio of:
 - (i) 0.60 for lots having a width of 22.5 m (73.8 ft) or more;
 - (ii) 0.55 for lots having a width of less than 22.5 m (73.8 ft.) but equal to or more than 21.8 m (71.5 ft.);
 - (iii) 0.50 for lots having a width of less than 21.8 m (71.5 ft.) but equal to or more than 21 m (68.9 ft.).(B/L No. 13983-19-03-25)
- (2) The gross floor area of all accessory buildings on a lot shall not exceed 56 m² (602.8 sq.ft.) except on a lot developed with a semi-detached dwelling, where the gross floor area shall not exceed 74.4 m² (800 sq.ft.). (B/L No. 12865-10-11-15)
- (3) A maximum of 42 m² (452.1 sq.ft.) of a garage or carport shall not be included as gross floor area under subsection (1).
- (4) A cellar constructed in the R5 District shall not have a floor area, including a garage or carport that exceeds the floor area of the storey next above it. (B/L No. 13983-19-03-25)

105.5 Development Density. Above Grade Floor Area:

- (1) For a principal building that exists on December 16, 1991, the gross floor area for all floors located above a cellar, basement, crawl space or ground surface shall not exceed the greater of (B/L No. 11032-99-12-13)
 - (a) 0.20 of the lot area + 130 m² (1,399.4 sq.ft.), or
 - (b) 0.40 of the lot area.
- (2) For a single family dwelling other than one that exists on December 16, 1991, the gross floor area for all floors, excluding the floor of a cellar, shall not exceed the greater of (B/L No. 11032-99-12-13)
 - (a) 0.20 of the lot area + 130 m² (1,399.4 sq.ft.), or
 - (b) 0.40 of the lot area.(B/L No. 10351-96-04-15)
- (3) For duplex dwellings and one storey semi-detached dwellings, the gross floor area for all floors located above a cellar, basement, crawl space or ground surface shall not exceed 116 m² (1,247.3 sq.ft.) per dwelling unit. (B/L No. 10351-96-04-15)
- (4) Where a garage or carport is attached to the principal building, the floor area in excess of 42 m² (452.1 sq.ft.) shall be included as above grade floor area under subsections (1), (2) and (3).
- (5) A two storey semi-detached dwelling shall not
 - (a) be developed with a cellar,
 - (b) have a dwelling unit with a gross floor area greater than 185.8 m² (2,000 sq.ft.) nor a second floor with a gross floor area greater than 65.03 m² (700 sq.ft.),
 - (c) have a combined above grade floor area of the two dwelling units that exceeds 0.30 of the lot area plus 139.5 m² (1,500 sq.ft.).(B/L No. 10351-96-04-15)
- (6) For a single family dwelling other than one located in an R5a District, the floor area of a first storey located above a cellar shall not exceed the maximum floor area permitted under subsections (1) and (2) less 0.15 of the lot area. (B/L No. 13983-19-03-25)

105.6 Height of Principal Building. Single Family Dwelling:

- (1) The height of a principal building shall not exceed
- (a) 2 1/2 storeys and 9.0 m (29.5 ft.) for a building with a sloping roof, or
 - (b) 2 1/2 storeys and 7.4 m (24.3 ft.) for a building with a flat roof
- as measured from the lower of the front average elevation or the rear average elevation to the highest point of the structure, subject to the applicable exceptions in section 6.4.
- (2) Notwithstanding subsection (1), for a principal building that exists on December 16, 1991, the height of any addition, measured from the lower of the front average elevation or the rear average elevation to the highest point of the addition, shall not exceed 9.0 m (29.5 ft.) if the building has a sloping roof or 7.4 m (24.3 ft.) if the building has a flat roof, subject to the applicable exceptions in section 6.4. (B/L No. 11032-99-12-13)

105.7 Height of Principal Building. Two Family Dwellings:

- (1) Duplex Dwelling:
A duplex dwelling shall not exceed 2 storeys and, subject to the applicable exceptions in section 6.4, the height shall not exceed 9.0 m (29.5 ft.) if the building has a sloping roof or 7.4 m (24.3 ft.) if the building has a flat roof measured from the lower of the front average elevation or rear average elevation
- (a) to the highest point of the structure, or
 - (b) if the duplex dwelling existed on December 16, 1991, to the highest point of the addition. (B/L No. 11032-99-12-13)
- (2) Semi-detached Dwelling:
Subject to the applicable exceptions in section 6.4, the height of a semi-detached dwelling shall not exceed the following:
- (a) for a one storey dwelling, 5.5 m (18.0 ft.) measured from the front average elevation to the highest point of the structure,
 - (b) for a two storey dwelling with a sloping roof, 7.62 m (25 ft.) measured from the lower of the front average elevation or the rear average elevation to the highest point of the structure, and,
 - (c) for a two storey dwelling with a flat roof, 6.1 m (20 ft.) measured from the lower of the front average elevation or the rear average elevation to the highest point of the structure.
- (B/L No. 10351-96-04-15)

105.8 Depth of Principal Building:

- (1) The depth of a principal building, other than a two-family dwelling with an attached garage, shall not exceed the lesser of 50 percent of the lot depth or 18.3 m (60 ft.).
- (2) The depth of a two-family dwelling with an attached garage shall not exceed the lesser of 50 percent of the lot depth or 19.8 m (65 ft.).
- (B/L No. 10397-96-07-22)

105.9 Front Yard:

A front yard shall be provided of not less than 6.0 m (19.7 ft.) in depth, except that on a lot where the average front yard depth of the two adjacent lots on each side is more than the required front yard by at least 1.5 m (4.9 ft.), then the front yard shall be not less than that average, subject to section 6.12 (2.1).

105.10 Side Yards:

- (1) Side yards shall be provided with a minimum width of 1.5 m (4.9 ft.).
- (2) In the case of a corner lot, the side yard adjoining the flanking street shall be not less than 3.0 m (9.84 ft.) in width.
- (3) Any lot with a width of less than 12.1 m (40 ft.) shall be provided with a side yard on each side of the building that is not less than 1.22 m (4.0 ft.) in width, and in the case of a corner lot, the side yard adjoining the flanking street shall be not less than 1.83 m (6.0 ft.) in width. (B/L No. 11154-00-11-06)

105.11 Rear Yard:

A rear yard shall be provided of not less than 7.5 m (24.6 ft.) in depth.

105.12 Off-Street Parking:

- (1) Off-street parking shall be provided and maintained in accordance with Schedule VIII of this Bylaw.
- (2) Parking for a two storey semi-detached dwelling shall be provided in a detached garage or carport at the rear of the lot except where there is no abutting lane or the Director Engineering is satisfied that access from a lane is not feasible because of an extreme grade, in which case a garage or carport having a maximum area of 42 m² (452.1 sq.ft.) may be attached to the dwelling. (B/L No. 10397-96-07-22)

Appendix C — City of Burnaby 2019 Zoning Changes Staff Report

PLANNING AND DEVELOPMENT COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

**SUBJECT: PROPOSED ZONING BYLAW TEXT AMENDMENT
CELLAR FLOOR AREA IN R DISTRICTS**

RECOMMENDATION:

1. THAT Council authorize the preparation of a bylaw amending the Burnaby Zoning Bylaw, as outlined in Section 4.0 of this report, for advancement to First Reading on 2019 February 11 and Public Hearing on 2019 February 26.

REPORT

The Planning and Development Committee, at its meeting held on 2019 January 14, received and adopted the *attached* report proposing a number of text amendments to the Burnaby Zoning Bylaw to enable construction of full cellars in single family dwellings in the R1, R2, R3, R4, R5, and R9 Residential Districts.

Respectfully submitted,

Councillor P. Calendino
Chair

Councillor S. Dhaliwal
Vice Chair

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|--|
| Copied to: City Manager Director Planning & Building Director Engineering Chief Building Inspector Chief Licence Inspector City Solicitor |
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TO: CHAIR AND MEMBERS
PLANNING AND DEVELOPMENT
COMMITTEE

DATE: 2019 January 10

FROM: DIRECTOR PLANNING AND BUILDING

FILE: 42000 20
Reference: Bylaw Text Amendment

**SUBJECT: PROPOSED ZONING BYLAW TEXT AMENDMENT
CELLAR FLOOR AREA IN R DISTRICTS**

PURPOSE: To propose text amendments to enable construction of cellars in R Residential Districts.

RECOMMENDATION:

1. **THAT** Council be requested to authorize the preparation of a bylaw amending the Burnaby Zoning Bylaw, as outlined in Section 4.0 of this report, for advancement to First Reading on 2019 February 11 and Public Hearing on 2019 February 26.

REPORT**1.0 INTRODUCTION**

On 2018 November 26, Council directed staff to pursue amendments to the Burnaby Zoning Bylaw to enable construction of full cellars in single and two family dwellings. This report responds to this direction by proposing text amendments to the floor area regulations for single family homes in the R1, R2, R3, R4, R5, and R9 Residential Districts, as well as to pertinent supplementary regulations found in Section 6 of the bylaw. Cellar construction in two family dwellings is being considered in the current review of secondary suites in two family homes, which will be the subject of a future report. The proposed bylaw amendments are *attached* as Appendix A.

2.0 CITY POLICY FRAMEWORK

The proposed bylaw amendments are supported by the following City-wide policies:

The Social Sustainability Strategy

- Strategic Priority 1 - Meeting Basic Needs
- Strategic Priority 5 - Enhancing Neighbourhoods

The Economic Development Strategy

- G1 Building a Strong, Livable, Healthy Community

The Official Community Plan

- Goal 3: To maintain and improve neighbourhood livability and stability
- Goal: Social Planning - To facilitate the development and ongoing sustainability of a community which enhances the physical, social, psychological and cultural well-being of Burnaby residents

Further to the above, the proposed approach also aligns with the following goals and sub-goals of the Corporate Strategic Plan:

- **A Dynamic Community**
 - Community Development – Manage change by balancing economic development with environmental protection and maintaining a sense of belonging
- **An Inclusive Community**
 - Create a sense of community – Provide opportunities that encourage and welcome all community members and create a sense of belonging

3.0 BACKGROUND

The Burnaby Zoning Bylaw regulates residential floor area through restrictions on density, lot coverage, setbacks, and height, as well as through specific provisions for cellars, basements, and crawl spaces. These regulations vary among R Residential Districts and may differ according to lot size and configuration. The interplay of these regulations, particularly those concerning density, introduces potential trade-offs for property owners with regard to construction of a full cellar. An outline of regulations (from the Burnaby Zoning Bylaw) affecting below grade floor area and definitions for “cellar,” “basement” and “crawl space” are provided in Appendix B, *attached*.

3.1 Density Regulations

The Burnaby Zoning Bylaw regulates density in R Residential Districts by setting a maximum amount of gross floor area (GFA) for each lot. GFA includes all floors above and below ground, as well as any accessory buildings. Crawl spaces, under height areas (such as attic dormers), and garages (up to 452.1 sf in area) are excluded from GFA calculations. Maximum GFA is provided at a ratio of 0.60 FAR, or 60% of the lot area, up to a fixed maximum. On larger lots, the fixed maximum limits floor area to less than 0.60 FAR.

In order to limit the visible bulk of houses, the Burnaby Zoning Bylaw also regulates how much of the permitted GFA can be built as above grade floor area (AGFA). For new construction, AGFA includes the floor area of any storey that is at least halfway above ground, including basements. It excludes cellars, which by definition are at least halfway below ground, and accessory buildings. For single family homes, maximum AGFA is always at least 0.40 FAR, and can be greater than that on smaller lots when an optional semi-fixed maximum of 0.20 FAR + 130 m² (1,399.4 sf) is utilized.

To: *Planning and Development Committee*
From: *Director Planning and Building*
Re: *Proposed Zoning Bylaw Text Amendment*
Cellar Floor Area in R Districts

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Because AGFA is a subset of GFA, a property owner can build less than the maximum permitted AGFA without reducing the overall floor area. For instance, if the maximum permitted AGFA is 2,400 sf and the maximum permitted GFA is 3,000 sf, a property owner could choose to build 2,000 sf above grade (as AGFA) and 1,000 sf below grade (as GFA). In this case, 400 sf that could have been built as AGFA is allocated to the cellar level.

However, most homeowners choose to maximize AGFA given its greater value and livability. In the above example, if the property owner builds 2,400 sf above grade, the footprint of development will be approximately 960 sf to accommodate that amount of floor area on the permitted 2 ½ storeys. The remaining 600 sf of GFA will then be insufficient for a full cellar. Because crawl spaces do not count as floor area, the property owner could build a 600 sf cellar and 360 sf of crawl space.

As such, the ratio between GFA and AGFA affects the choices made by homebuilders. This ratio varies depending on the zoning district and the size of the lot. On lots with a greater proportion of AGFA to GFA, homebuilders can choose whether to maximize AGFA and reserve only enough GFA for a partial cellar and crawl space, or forgo a percentage of AGFA and have enough GFA left to build a full cellar. On other lots, where the proportion of AGFA is smaller, the remaining GFA is generally sufficient for a full cellar. However, construction of an accessory building can also consume GFA that could otherwise be used to construct a full cellar.

In summary, while the construction of a full cellar is permitted on all residential lots, floor area regulations discourage construction of full cellars on some properties. Specifically, on lots with a high proportion of AGFA to GFA, a homebuilder may prefer to maximize AGFA rather than build out a cellar. Alternatively, a property owner may use GFA to build an accessory building instead of a full cellar. The proposed amendments address this issue by revising floor area regulations to facilitate construction of full cellars.

4.0 PROPOSED BYLAW TEXT AMENDMENTS

4.1 Floor Area on Single Family Residential Properties

Issue

R District regulations, particularly those concerning density, introduce potential trade-offs for single family homeowners seeking to build a full cellar. As a result, many property owners build partial cellars and crawl spaces in order to preserve floor area for the main and upper storeys. This practice produces inefficiencies in construction and in some cases prevents establishment of a secondary suite.

Recommended Approach

It is recommended that floor area regulations for single family homes in the R1, R2, R3, R4, R5, and R9 Districts be amended to replace limits on overall GFA with specific limits for cellar and accessory building floor area. Specifically, it is recommended that the maximum permitted floor area of a cellar be equivalent to the floor area of the main storey of a dwelling. In order to limit the amount of additional cellar floor area, and discourage oversized footprints, it is recommended that

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 Cellar Floor Area in R Districts

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the main storey of a home with a cellar have a floor area no greater than the maximum permitted AGFA less 0.15 FAR.

Discussion

The proposed approach specifically allocates floor area to the cellar, in order to facilitate construction of a full cellar. The allocated floor area, which is in addition to the permitted AGFA, is equivalent to the floor area of the main storey. This eliminates the need for below grade crawl spaces.

The proposed approach limits the floor area of the main storey to no greater than the maximum permitted AGFA less 0.15 FAR. Permitted AGFA not utilized on the main storey can be applied to a second storey and, where 2 ½ storeys is permitted, to the half storey above. The intent in limiting the footprint is to control the amount of additional floor area provided by a cellar, particularly on large lots where the overall increase could be substantial. It is noted that on smaller lots, where the AGFA is larger than 0.40 FAR, and footprints often extend to the required setbacks, the proposed amendment would not significantly affect development potential. Homes that are built slab-on grade, with no cellar, would be exempt from the proposed footprint limit.

The proposed approach removes the general allocation of GFA from which cellar and accessory building floor area is currently drawn. In doing so, it eliminates both the maximum 0.60 FAR per lot and the fixed maximums that limit GFA to less than 0.60 FAR on larger lots. Under the proposed approach, the following formula would determine maximum GFA:

$$\text{Cellar} + \text{existing AGFA} + \text{existing accessory building floor area}$$

The amount of floor area available on each level is summarized in Table 1 below:

Table 1: Proposed Floor Area for Single Family Homes

| Cellar | Main Storey | Upper Storey(s) | Accessory Buildings (includes garages) |
|--------------------------------------|----------------------------|-----------------------------------|--|
| Equivalent to main storey floor area | AGFA minus ≥ 0.15 FAR | Remaining AGFA (≥ 0.15 FAR) | Existing regulations: 56 m ² (602.8 sf) |

As such, the proposed approach ensures that maximum AGFA, at current levels, and a full cellar can be constructed. In order to achieve these objectives, the proposed approach increases overall GFA from a maximum of 0.60 FAR to a variable number tied to existing AGFA. While these provisions increase below grade floor area, they do not affect the visible density of single family dwellings. Moreover, the increase in overall floor area will be moderate on most properties. On those smaller lots where the percentage increase is greater, the increase in actual square footage would remain modest.

Under the proposed approach, existing single family homeowners that wish to construct a full cellar could do so subject to compliance with all associated zoning regulations and the issuance of a

building permit. Property owners that wish to construct a new home without a cellar would not be subject to the limit on main storey floor area.

It is recommended that the above amendments apply only to the R1, R2, R3, R4, R5, and R9 Residential Districts. The proposed amendments exclude the R10, R11, and R12 Residential Districts, which have been established by neighbourhood-initiated area rezoning processes, and contain provisions specifically designed to regulate density and built form. Application of any floor area changes to these districts would require additional review and extensive consultation with the affected neighbourhoods. The proposed approach also excludes A Agricultural Districts. These districts have simpler density regulations for single family homes, consisting only of GFA limits, which are appropriate to the semi-rural context.

Lastly, given the complexity of floor area regulations, particularly in their application to lots with a variety of constraints (i.e., geometry, size and topography), staff will monitor implementation of the proposed amendments, if adopted, and may advance further text amendments as necessary.

In view of the above, it is proposed that the Zoning Bylaw be amended as follows.

Recommended Bylaw Amendments

THAT Sections 101.4, 102.4, 103.4, 104.4, 105.4, and 109.4 be amended to eliminate the floor area standards found in subsection (1)(a), which limit floor area ratio to 0.60 or a fixed maximum that varies by district.

1. **THAT** Sections 101.4, 102.4, 103.4, 104.4, 105.4, and 109.4 be amended to Permit construction of a cellar with a floor area equivalent to the gross floor area of the storey next above it.
2. **THAT** Sections 101.5, 102.5, 103.5, 104.5, 105.5, and 109.5 be amended to require, where a single family home has a cellar, that the floor area of the main storey be no greater than AGFA less 0.15 FAR.
3. **THAT** Section 6.20(7) be added to clarify that attached garages in cellars are included as gross floor area.

4.2 Secondary Suites in Cellars

Issue

By facilitating construction of full cellars, the proposed amendments offer an opportunity to expand the City's inventory of secondary suites.

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Cellar Floor Area in R Districts
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Recommended Approach

It is recommended that cellars be required to be constructed to “suite ready” standards provided in the BC Building Code, and comply with other requirements for secondary suites in the Burnaby Zoning Bylaw.

Discussion

By facilitating construction of full cellars in single family homes, the proposed amendments are intended to encourage construction of secondary suites, which are an important source of rental housing. Secondary suites also accommodate family members ageing in place and other multigenerational living arrangements. As such, the proposed amendments require that all cellars meeting the minimum floor area for a secondary suite (32 m², or 345 sf) be constructed according to BC Building Code requirements for secondary suites, and meet all standards for secondary suites elsewhere in the Bylaw, including the required one parking space.

Recommended Bylaw Amendments

- 4. THAT Section 6.9 of the Burnaby Zoning Bylaw be amended to require all cellars in the R1, R2, R3, R4, R5, and R9 Districts that exceed 32 m² (345 sf) to be constructed in accordance with BC Building Code requirements for secondary suites and all other bylaw standards for secondary suites.

5.0 CONCLUSION

The above Zoning Bylaw text amendments are proposed in order to enable construction of full cellars in single family residences while encouraging the provision of secondary suites as a housing option. Should Council adopt the proposed amendments, staff would monitor their implementation and advance further text amendments as necessary, given the complexity of the proposed amendments and the variety of single family development contexts. It is recommended that Council approve the proposed text amendments, as outlined in Section 4.0 of this report, for advancement to First Reading on 2019 February 11 and Public Hearing on 2019 February 26.


Lou Pelletier, Director
PLANNING AND BUILDING

LF:sla
Attachments

- cc: City Manager
Director Engineering
Chief Building Inspector
Chief Licence Inspector
City Solicitor
City Clerk

PROPOSED ZONING BYLAW AMENDMENTS

Supplementary Regulations

1. **THAT** Section 6.9(6) be added to the Zoning Bylaw with wording the same or similar to the following:

“In the R1, R2, R3, R4, R5, and R9 Districts, on a lot developed with a single family dwelling a cellar exceeding a floor area of 32 m² (345 sq. ft.) shall meet the requirements of the British Columbia Building Code and all other requirements of this Bylaw for a secondary suite”.

2. **THAT** Section 6.20(7) be added to the Zoning Bylaw with wording the same and similar to the following:

“Notwithstanding Section 6.20(6)(c), in the R1, R2, R3, R4, R5 and R9 Districts on a lot developed with a single family dwelling, a garage or carport located in a cellar shall be included as floor area of the cellar”.

R District Schedules

3. **THAT** Section 101.4(1) (R1 District) be repealed and replaced with wording the same or similar to the following:

“(1) In an R1a District the gross floor area of all floors shall not exceed the floor area ratio of:

- (a) 0.60 for lots having a width of 37 m (121.4 ft.) or more;
- (b) 0.55 for lots having a width of less than 37 m (121.4 ft.) but equal to or more than 35.35 m (116 ft.);
- (c) 0.50 for lots having a width of less than 35.35 m (116 ft.) but equal to or more than 34 m (111.6 ft.)”.

4. **THAT** Section 101.4(4) be added to the Zoning Bylaw with wording the same or similar to the following:

“A cellar constructed in the R1 District shall not have a floor area, including a garage or carport, that exceeds the floor area of the storey next above it.”

5. **THAT** Section 101.5(4) be added after the Section 101.5(3) with wording the same or similar to the following:

“For a single family dwelling, other than one located in an R1a District, the floor area of a first storey located above a cellar shall not exceed the maximum floor area permitted under subsections (1) and (2) less 0.15 of the lot area”.

6. **THAT** Section 102.4(1) (R2 District) be repealed and replaced with wording the same or similar to the following:

“(1) In an R2a District the gross floor area of all floors shall not exceed the floor area ratio of:

- (a) 0.60 for lots having a width of 27.5 m (90.2 ft.) or more;
- (b) 0.55 for lots having a width of less than 27.5 m (90.2 ft.) but equal to or more than 26.5 m (86.9 ft.);
- (c) 0.50 for lots having a width of less than 26.5 m (86.9 ft.) but equal to or more than 25.5 m (83.7 ft.)”.

7. **THAT** Section 102.4(4) be added to the Zoning Bylaw with wording the same or similar to the following:

“A cellar constructed in the R2 District shall not have a floor area, including a garage or carport, that exceeds the floor area of the storey next above it.”

8. **THAT** Section 102.5(4) be added after the Section 102.5(3) with wording the same or similar to the following:

“For a single family dwelling, other than one located in an R2a District, the floor area of a first storey located above a cellar shall not exceed the maximum floor area permitted under subsections (1) and (2) less 0.15 of the lot area”.

9. **THAT** Section 103.4(1) (R3 District) be repealed and replaced with wording the same or similar to the following:

“(1) In an R3a District the gross floor area of all floors shall not exceed the floor area ratio of:

- (a) 0.60 for lots having a width of 22.5 m (73.8 ft.) or more;
- (b) 0.55 for lots having a width of less than 22.5 m (73.8 ft.) but equal to or more than 21.8 m (71.5 ft.);
- (c) 0.50 for lots having a width of less than 21.8 m (71.5 ft.) but equal to or more than 21 m (68.9 ft.)”.

10. **THAT** Section 103.4(4) be added to the Zoning Bylaw with wording the same or similar to the following:

“A cellar constructed in the R3 District shall not have a floor area, including a garage or carport, that exceeds the floor area of the storey next above it.”

11. **THAT** Section 103.5(4) be added after the Section 103.5(3) with wording the same or similar to the following:

“For a single family dwelling, other than one located in an R3a District, the floor area of a first storey located above a cellar shall not exceed the maximum floor area permitted under subsections (1) and (2) less 0.15 of the lot area”.

- 12. THAT** Section 104.4(1) (R4 District) of the Zoning Bylaw be repealed and replaced with the wording the same or similar to the following:

“(1) the density of development shall not exceed:
(a) in an R4 District on a lot developed with a two-family dwelling, the lesser of a floor area ratio of 0.60 or 440 m² (4736.1 sq. ft.).
(b) in an R4a District, a floor area ratio of:
i. 0.60 for lots having a width of 27.5 m (90.2 ft.) or more;
ii. 0.55 for lots having a width of less than 27.5 m (90.2 ft.) but equal to or more than 26.3 m (86.3 ft.);
iii. 0.50 for lots having a width of less than 26.3 m (86.3 ft.) but equal to or more than 25.5 m (83.7 ft.)”.

- 13. THAT** Section 104.4(4) be added to the Zoning Bylaw with wording the same or similar to the following:

“A cellar constructed in the R4 District shall not have a floor area, including a garage or carport, that exceeds the floor area of the storey next above it.”

- 14. THAT** Section 104.5(6) be added after Section 104.5(5) with wording the same or similar to the following:

“For a single family dwelling, other than one located in an R4a District, the floor area of a first storey located above a cellar shall not exceed the maximum floor area permitted under subsections (1) and (2) less 0.15 of the lot area”.

- 15. THAT** Section 105.4(1) (R5 District) of the Zoning Bylaw be repealed and replaced with the wording the same or similar to the following:

“(1) the density of development shall not exceed:
(a) in an R5 District on a lot developed with a two-family dwelling, the lesser of a floor area ratio of 0.60 or 370 m² (3982.6 sq. ft.).
(b) in an R5a District, a floor area ratio of:
i. 0.60 for lots having a width of 22.5 m (73.8 ft.) or more;
ii. 0.55 for lots having a width of less than 22.5 m (73.8 ft.) but equal to or more than 21.8 m (71.5 ft.);
iii. 0.50 for lots having a width of less than 21.8 m (71.5 ft.) but equal to or more than 21 m (68.9 ft.)”.

- 16. THAT** Section 105.4(4) be added to the Zoning Bylaw with wording the same or similar to the following:

“A cellar constructed in the R5 District shall not have a floor area, including a garage or carport, that exceeds the floor area of the storey next above it.”

- 17. THAT** Section 105.5(6) be added after Section 105.5(5) with wording the same or similar to the following:

“For a single family dwelling, other than one located in an R5a District, the floor area of a first storey located above a cellar shall not exceed the maximum floor area permitted under subsections (1) and (2) less 0.15 of the lot area”.

- 18. THAT** Section 109.4(1) (R9 District) of the Zoning Bylaw be repealed and replaced with wording the same or similar to the following:

“(1) In an R9a District, the gross floor area of all floors shall not exceed the floor area ratio of 0.60”.

- 19. THAT** Section 109.4(4) be added to the Zoning Bylaw with wording the same or similar to the following:

“A cellar constructed in the R9 District shall not have a floor area, including a garage or carport, that exceeds the floor area of the storey next above it.”

- 20. THAT** Section 109.5(4) be added after the Section 109.5(3) with wording the same or similar to the following:

“For a single family dwelling, other than one located in an R9a District, the floor area of a first storey located above a cellar shall not exceed the maximum floor area permitted under subsections (1) and (2) less 0.15 of the lot area”.

**EXISTING BURNABY ZONING BYLAW REGULATIONS
FOR BELOW GRADE FLOOR AREA**

Existing regulations that affect below grade floor area are outlined below:

1. *Gross Floor Area (GFA)*

Gross floor area is the area of all floors, measured to the exterior limit of a building. In R Districts, the following are excluded from GFA measurement:

- Garages and carports, up to 42 m² (452 sf)
- Crawl spaces, attics, and other areas with a height of less than 1.2 m (3.9 ft)
- Porches, decks, and balconies that are unenclosed
- Other minor development features

Maximum gross floor area is provided at a ratio of 0.60 FAR, or 60% of the area of the lot, up to a fixed maximum that varies from 590 m² (6,350.9 sf) in the R1 District to only 265 m² (2,852.5 sf) in the R9 District.

The intent of limiting gross floor area is to control both density and bulk.

2. *Above Grade Floor Area (AGFA)*

Above grade floor area is the area of all floors located above grade level, including basements in buildings that were constructed after 1991 December 16. Exclusions from GFA also are excluded from AGFA.

In most R Districts, maximum AGFA for single family dwellings is provided at a ratio of 0.40 FAR or at a semi-fixed maximum of 0.20 FAR + 130 m² (1,399.4 sf), whichever is greater.

The intent of limiting above grade floor area is to control visible bulk.

3. *Lot Coverage and Setbacks*

Lot coverage is the area of the lot, expressed as a percentage, that can be covered by structures. In R Districts, the maximum lot coverage is 40%. In addition, principal buildings must be set back from the front, side, and rear lot lines a minimum distance, which varies between Districts from 6 m (19.7 ft) to 9 m (29.5 ft) for front and rear lot lines and is usually 1.5 m (4.9 ft) for side lot lines. These regulations limit the above grade footprint of the principal building, including the main floor area, and thus indirectly affect the construction of below grade floor area. In most cases, building footprints are well within the boundaries established by lot coverage and setbacks, particularly the front and/or rear setbacks.

4. Height

Height is expressed both as a numerical dimension and as number of storeys. In most R Districts, the maximum height is 9 m (29.5 ft.) for pitched roofs and 7.2 m (24.1 ft.) for flat roofs, and no more than 2 ½ storeys. Basements are considered a storey¹, but cellars and crawl spaces are not. As a result, new construction almost always features a cellar with 2 or more storeys above it, rather than a basement with 1 ½ storeys above. As noted, basements also contribute to AGFA, which further discourages their construction.

Basements and cellars must be a minimum of 2.3 m (7.5 ft.) high, and a cellar can have only half its height above grade. Typical building profiles include a 2.4m (8 ft) high cellar with two storeys above.

5. Basements, Cellars, and Crawl Spaces

Basements are defined as the portion of a building, between two floor levels, that is partly underground and has at least half its height *above* natural grade. As noted above, basements constructed after 1991 December 16 are included in AGFA and considered a storey.

Cellars are defined as the portion of a building, between two floor levels, that is partly or wholly underground and has at least half its height *below* natural grade. Unlike basements, cellars are excluded from AGFA and are not considered a storey. They are, however, included in calculation of GFA. Cellars are not permitted in two storey semi-detached dwellings.

Crawl spaces are defined as a space at or below natural grade with a maximum ceiling height of 1.2 m (3.9 ft.). They are excluded from AGFA and GFA and are not considered a storey. Crawl spaces are measured from the floor slab on the ground surface below, whereas basements and cellars are measured from finished floor level.

The table below summarizes the regulations for basements, cellars, and crawl spaces:

| | Basement | Cellar | Crawl Space |
|---|-------------------------|-------------------------|-------------------------|
| Height | Min. 2.3 m (7.5 ft.) | Min. 2.3 m (7.5 ft.) | Max. 1.2 m (3.9 ft.) |
| Considered a storey | Yes | No | No |
| Included in GFA | Yes | Yes | No |
| Included in AGFA | Yes ² | No | No |
| Permitted in two-storey semi-detached dwelling | Yes | No | Yes |
| Permitted in duplex or one storey semi-detached dwelling | Yes | Yes | Yes |

¹ In homes built after 1991 December 16.

² Except for: homes constructed prior to 1991 December 16; in duplex or one-storey semi-detached dwellings; and in R11 District single family dwellings that are less than 20 ft. in height

Appendix D — City of Burnaby Secondary Suites Information Guide

Secondary Suite

The purpose of this brochure is to explain the requirements for a Secondary Suite in a Single Family Dwelling

"This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal Codes or laws. You must satisfy yourself that any existing or proposed construction or other works complies with such Bylaws, Codes or other laws."

Other Brochures related to this topic

- [Parking Areas and Driveways](#)
- [Smoke Alarms](#)
- [In-law suites \(existing\)](#)

Overview

The City's secondary suite program provides affordable rental housing while providing for greater bylaw compliance and public safety.

It manages the inclusion of secondary suites in neighbourhoods by addressing complaints, suite size limits, the number of accessory uses, additional parking, payment of utility and other fees, and management of suites where the owner does not reside on the property.

Its objectives include:

- increased safety standards;
- protection of affordable housing options;
- to minimize the impact on neighbourhoods;
- fair and equitable fees;
- assisting property owners with legalization efforts; with
- a focus on citizen 'complaint-based' enforcement priorities

What is a Secondary Suite?

A secondary suite is defined as "an accessory dwelling unit fully contained within a single family dwelling." It is one or more habitable rooms constituting one self-contained unit with a separate entrance used, or intended to be used, for living and sleeping purposes for not more than one family and containing not more than one kitchen or one set of cooking facilities.

Zoning Bylaw Requirements

A secondary suite:

- is permitted within R1, R2, R3, R4, R5, R6, R9, R10, R11, R12, A1, A2, A3 and RM6 Zoning Districts
- must be fully contained within a single family dwelling containing only the other principal dwelling unit
- uses for living and sleeping purposes for not more than one family
- contains not more than one kitchen or one set of cooking facilities
- has a minimum area of 30 sq. m. (322.93 sq. ft.)
- has a maximum area of 40 % of the gross floor area of the principal building, whichever is less
- may be located anywhere within a single family dwelling
- will not be permitted in a single family dwelling with
 - an in-law or care-giver suite
 - boarders and lodgers
 - a personal care or child care
 - bed and breakfast
 - home occupations that include in-home client services
- cannot be subdivided from the principal into separate parcel by strata plan, air space parcel plan or otherwise.
- shall be provided with one additional on-site independently accessible parking space. Tandem parking is not acceptable.

Suite-Ready

A single family dwelling with a cellar that exceeds 30 sq.m. (322.93 sq.ft.) in floor area must incorporate the following minimum **suite-ready** requirements unless there is an existing or proposed secondary suite elsewhere within the single family dwelling.

- all requirements listed in the "Building Code Requirements" section on Page 3
- at least one bedroom window with size that meets the egress requirement
- rough-in 3 piece bathroom
- rough-in cooking facilities including rough-in wiring for future kitchen counter, fridge and range receptacles; exhaust hood fan and/or gas supply piping
- one outside access and one internal access to the floor above
- one additional on-site parking space

Suite-ready provisions should be shown on the drawings submitted for building permit with dotted lines to indicate the location of the future suite.

Suite-ready requirements apply to the construction of a new cellar, converting crawlspaces into liveable area or expansion of an existing cellar so that the cellar can be easily converted into a secondary suite in the future; however a building permit and any related electrical, plumbing and/or gas permits would be required at the time of conversion.

Building Code Requirements

All construction to accommodate a secondary suite shall comply fully with **Part 9 of the BC Building Code**.

The following information **highlights** some critical requirements for the construction of a new house with a secondary suite or alterations to an existing house to accommodate a secondary suite. It is **not the complete list** of construction requirements and owner/builder should consult Part 9 of the BC Building Code for complete secondary suite construction requirements.

- **Fire Separations between a Secondary Suite and Principal Dwelling Unit (including common spaces) shall have:**
 - a minimum 45 minutes fire-resistance rating is required for walls and ceilings between the principal dwelling unit and the secondary suite if there is no interconnected smoke alarms between the principal dwelling and the secondary suite; or
 - a minimum 30 minutes fire-resistance rating is permitted if an additional interconnected photo-electric smoke alarm is installed in each of the principal dwelling unit and the secondary suite and are interconnected; or
 - a minimum 15 minutes fire-resistance rating is permitted if ALL smoke alarms within the house are of photoelectric and interconnected.

- **Smoke Alarms** – The principal dwelling unit and the secondary suite shall have
 - interconnected smoke alarms; and
 - an additional interconnected photo-electric type smoke alarm in each of the principal dwelling unit and the secondary suite and are interconnected if the fire separation between the principal dwelling and the secondary suite has only 30 minutes fire-resistance rating; or
 - smoke alarms throughout the entire house and shall be photoelectric and interconnected if the fire separation between the principal dwelling unit and the secondary suite has only 15 minutes fire-resistance rating.

- **Sound insulation** - Walls and ceilings separating the principal dwelling unit and the secondary suite shall have:
 - sound insulation, resilient channel on ceiling, and 12.7 mm (1/2") drywall; or
 - STC rating of not less than 43; or
 - ASTC rating of not less than 40.

- **Combustible Drain, Waste and Vent (DWV) Piping** are permitted to penetrate a vertical fire separation, provided the pipe is sealed at the penetration by a fire stop that has an F rating not less than the fire-resistance rating required for the fire separation. Combustible DWV piping are not permitted to penetrate a horizontal fire separation.

- **Heating System** – It is preferable for the secondary suite to have its own heating or ventilation system independent of the principal dwelling unit. If forced-air heating and/or ventilation ducts are serving both the secondary suite and principal dwelling unit, duct-type smoke detectors must be installed to shut down the heating and the ventilation

system. In addition, they must be equipped with fire dampers where penetrating required fire separations.

- **Central Vacuum Systems** – are not permitted to serve more than one suite.
- **Electrical panel** – The secondary suite in a new house must be provided with a separate panel or access to a panel located in a common space. This requirement does not apply to existing conditions.
- **Service room** – Shared access by the principal dwelling unit and the secondary suite to a service room containing common HAVAC equipment is not required.
 - If there is fuel fired appliances located in such room it shall be separated from the remainder of the house by a fire separation having a fire-resistance rating not less than the fire-resistance rating required for the fire separation between the principal dwelling unit and the secondary suite.
 - If the service room is located in the secondary suite it shall be treated as part of the principal dwelling unit and shall be fire-separated from the secondary suite.

Permit Requirements

Property owner must obtain and finalize a building permit and any related plumbing, electrical, gas or heating permits for a secondary suite.

Building permit

For application requirements for a new house with a secondary suite please refer to the brochure "[Building Permit Application Requirements for New Single and Two Family dwellings](#)".

For application requirements for a secondary suite in an existing house please refer to brochure "[Building Permit Application Requirements for Interior Finishing for existing Single and Two Family Dwellings](#)".

Applications for permits for new single family dwelling with a secondary suite or to add a secondary suite to existing single family dwelling require a Land Title covenant search for the property. This search will be completed by City Staff and an additional search fee will apply at the time of application.

Suite-ready provisions should be shown on the drawings submitted for building permit with dotted lines to indicate the location of the future suite.

All Building Permit applications are subject to the existing Building Permit [Fee Schedule](#) based on construction value.

Sub-trade Permits

After the issuance of a building permit for the secondary suite the licensed electrical, plumbing and gas contractors can obtain their own sub-trade permits if required. Home owners cannot carry out sub-trade works in a house with a secondary suite.

Inspection Requirements

The electrical, plumbing and gas contractors have to call for inspections and obtain acceptance of their rough-in work from the inspectors before the general contractor can request a framing inspection.

The building inspector will not conduct a final inspection unless all the sub-trade final inspections have been accepted by the electrical and plumbing & gas inspectors.

Supplementary Utility Fees

All residential properties identified with a secondary suite may be charged with supplementary utility fees. For more information about utility fees, please contact the City's Tax office directly at (604) 294-7350 or visit their [website](#).

Decommission a Suite

If the owner wants to remove (decommission) a suite the owner must:

- engage a licensed electrical contractor and obtain permit to:
 - remove the 40 amp range receptacle and install a box cover
 - disconnect and remove the range breaker from the panel and install approved panel fillers
 - remove the hood fan and disconnect and safely terminate the range hood wiring in an electrical junction box
- engage a licensed gas contractor and obtain permit to remove the gas supply to gas stove under permit
- reinstate an access door between the decommissioned suite and the principal dwelling
- call for electrical and gas final inspections

Business License Requirements

A Business Licence is required for property owners who rent out both the principal dwelling unit and the secondary suite in the single family dwelling. The license is subject to the conditions of

the “House Rental Business Licence” Bylaw that includes community standards and practices to assist in enforcement of any issues that impact adjacent properties or neighbourhoods.

For more information about licence requirements please contact the City’s Business Licence Office directly at (604) 294-7320 or visit their [website](#).

Further information

For further questions regarding secondary suites please contact the Building Department at (604) 294-7130.

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Appendix E — BC Building Bulletins Regarding Changes to Secondary Suites (Dec 2019)

No. B19-04
December 12, 2019

Changes to the BC Building Code for Secondary Suites

The Province of British Columbia is working to remove barriers to the creation of more affordable housing including secondary suites. Previously, secondary suites could only be built in single detached homes and could not exceed a certain size. Effective December 12, 2019, the BC Building Code will allow the construction of new secondary suites in more types of houses, such as duplexes and row housing. Size restrictions for secondary suites have also been removed. This will provide local governments with more options for land use planning.

This bulletin provides further information about Revision 2 of the BC Building Code 2018 (BC Code) for the design and construction of new secondary suites in more building types. Local governments are encouraged to share this information with local builders and property owners.

Background

Allowing the construction of secondary suites in more building types helps to create more affordable housing units while still providing an acceptable level of health and fire safety to occupants. Secondary suites help provide more affordable housing options by expanding a community's rental stock. By making more efficient use of land and infrastructure, secondary suites facilitate low-impact densification that supports community vitality and sustainability. Secondary suites can be integrated within mature neighbourhoods with limited visual impact on the street, which helps communities retain neighbourhood character while providing more options for rental housing.

The BC Code historically limited the size of secondary suites and only permitted them in single detached houses. Land use bylaws were often based on these requirements. Mid-cycle revisions to the BC Code increase the options for the design and construction of new secondary suites in a wider range of building types and remove the restrictions on size.

The introduction of new requirements for the design and construction of secondary suites in the BC Code does not allow owners to contravene existing land use bylaws. The changes only provide acceptable design and construction solutions of a technical nature.

Local governments are encouraged to review their bylaws to determine if the BC Code changes will have any impacts. Local governments may wish to amend their bylaws to remove any previous code references or if they decide to permit secondary suites in more building types.

Changes to the BC Building Code 2018

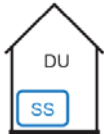
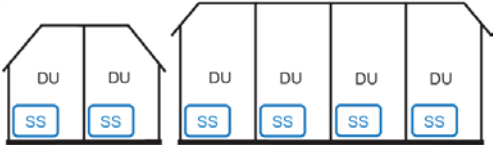
The BC Code **previously** defined a *secondary suite* as “a *dwelling unit*

- having a total floor space of not more than 90 m² in area,
- having a floor space less than 40% of the habitable space of the *building*,
- located within a *building* of *residential occupancy* containing only one other *dwelling unit*, and
- located in and part of a *building* which is a single real estate entity.”

The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. For further information, contact the Building and Safety Standards Branch.

The approved mid-cycle revision **discontinues the prescribed floor space amounts and percentage distribution**. The BC Code does not require the building owner to occupy either of the units, but the two units must be a single real estate entity.

Comparison of Changes

| Provision | Previous BC Code 2018 | BC Code 2018 Revision 2 Change |
|---|---|---|
| Total floor area of the secondary suite | A secondary suite shall have a total floor space of not more than 90 m ² in area. | No limit to floor space of a secondary suite. |
| Percentage distribution of the floor space of the secondary suite to the habitable space of the building | A secondary suite shall have a floor space less than 40% of the habitable space of the building. | No limit to the percentage distribution of the secondary suite to the habitable space of the building. |
| Building type where secondary suites are permitted | A secondary suite shall be located within a building of residential occupancy containing only one other dwelling unit.  | The building may contain other dwelling units or occupancies that are horizontally adjacent; they may not be located above or below each other.  |
| Real estate entity | A secondary suite shall be located in, and part of, a building which is a single real estate entity. | No change: the secondary suite and the other dwelling unit in the house constitute a single real estate entity; the secondary suite may not be separately strata-titled or otherwise subdivided from the other dwelling unit. |

The **new definition** states that a *secondary suite* means “a self-contained *dwelling unit* located within a *building* or portion of a *building*”:

- completely separated from other parts of the *building* by a *vertical fire separation* that has a *fire-resistance rating* of not less than **1 hour** and extends from the ground or lowermost assembly continuously through or adjacent to all *storeys* and spaces including *service spaces* of the separated portions,
- of only *residential occupancy* that contains only one other *dwelling unit* and common spaces, and
- where both *dwelling units* constitute a **single real estate entity**.”

The change adopts and adapts permissions in the National Building Code to **allow construction of secondary suites in a building that may contain more than one dwelling unit or other occupancy**. These permissions are limited and only apply where a dwelling unit and its secondary suite are completely separated from other parts of the building with continuous vertical fire-rated construction. These permissions do not allow

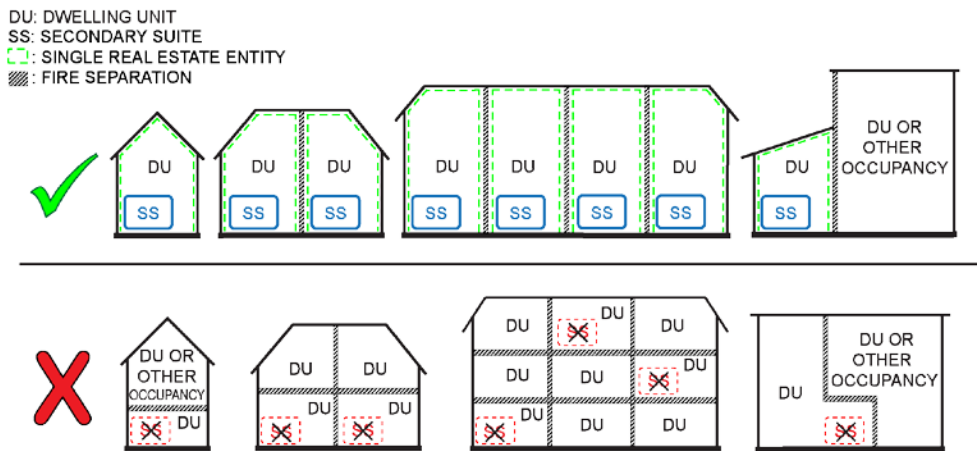
The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. For further information, contact the Building and Safety Standards Branch.

secondary suites to be constructed in dwelling units that are above or below multiple dwelling units or other occupancies.

Examples where secondary suites are now permitted include side-by-side duplexes and row houses where a vertical fire separation separates the secondary suite from the remainder of the building.

Examples where secondary suites are not permitted are up/down duplexes and apartment buildings where dwelling units are above or below other dwelling units.

Figure 1: Examples of permissible and non-permissible secondary suites



Resources

The new BC Code definition of “secondary suite” is included in the Appendix to this bulletin.

More Information

[Technical Bulletin B19-05](#) provides information about the Revision 2 changes to the BC Code for the design and construction of new secondary suites.

Please direct any questions about land use bylaws to:

Ministry of Municipal Affairs and Housing
Planning and Land Use Management Branch
Telephone: 250-387-3394
Email: PLUM@gov.bc.ca

Please direct any questions about technical code requirements to:

Ministry of Municipal Affairs and Housing
Building and Safety Standards Branch
Telephone: 250-387-3133
Email: Building.Safety@gov.bc.ca

The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. For further information, contact the Building and Safety Standards Branch.

Appendix: Definition of “Secondary Suite” (from BC Building Code 2018 Revision 2)

Secondary suite means a self-contained *dwelling unit* located within a *building* or portion of a *building*

- completely separated from other parts of the *building* by a vertical *fire separation* that has a *fire-resistance rating* of not less than 1 h and extends from the ground or lowermost assembly continuously through or adjacent to all *storeys* and spaces including *service spaces* of the separated portions,
- of only *residential occupancy* that contains only one other *dwelling unit* and common spaces, and
- where both *dwelling units* constitute a single real estate entity.

(See Note A-1.4.1.2.(1) of Division B.)

A-1.4.1.2.(1) Defined Terms.

Secondary Suite

A secondary suite is a self-contained dwelling unit that is part of a house containing not more than two dwelling units (including the secondary suite) and any common spaces such as common storage, common service rooms, common laundry facilities or common areas used for egress. Secondary suites are typically created within an existing single dwelling building (house) either constructed as an addition or an alteration to an existing house or incorporated during the construction of a new house. A secondary suite may have more than one storey and may be on the same level as the other dwelling unit of the house or be above or below it.

Examples of buildings where secondary suites are permitted include individual detached houses, or where the secondary suite is located in a portion of a building, semi-detached houses (half of a double and also known as a side-by-side) and row houses where a vertical fire separation separates the portion from the remainder of the building.

Where a building has multiple vertically separated occupancies, the secondary suite can only be created in a vertically separated portion of the building that is of residential occupancy. A vertical fire separation that extends continuously through all crawlspaces, storeys and attic spaces of the building is required to vertically separate portions of a building. Apartment buildings have dwelling units above and below others that share a horizontal assembly and are therefore not permitted to have secondary suites. Figure A-1.4.1.2.(1)-C shows building types where secondary suites are permitted as well as building types where other dwelling units or other occupancies are located above or below such that secondary suites are not permitted.

DU: DWELLING UNIT
SS: SECONDARY SUITE
□: SINGLE REAL ESTATE ENTITY
▨: FIRE SEPARATION

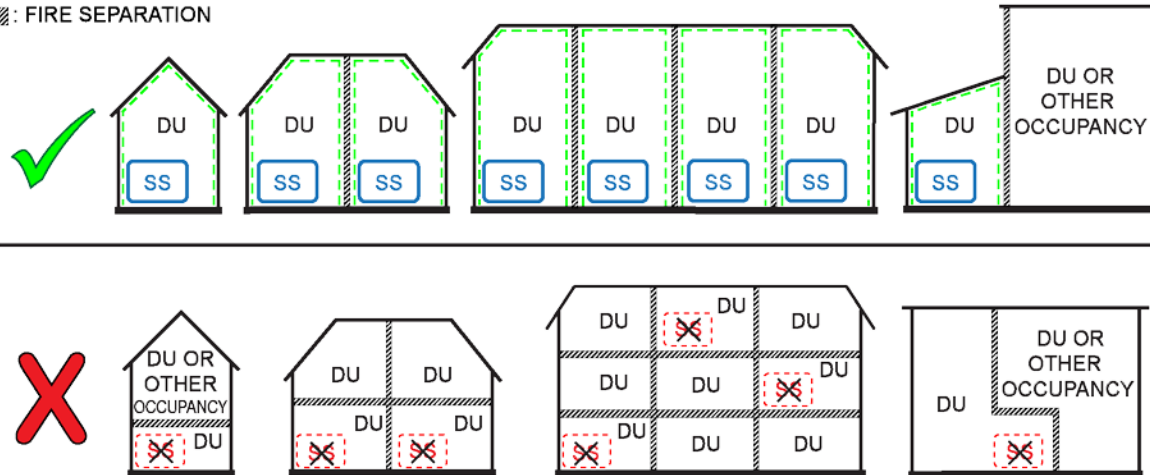


Figure A-1.4.1.2.(1)-C
Building Types where Secondary Suites are Permitted

Neither the secondary suite nor the other dwelling unit in a house can be strata-titled or otherwise subdivided from the remainder of the house under provincial or territorial legislation. This means that both dwelling units are **registered under the same title**.

No. B19-05
December 12, 2019

Secondary Suites, Changes to Design and Construction Requirements British Columbia Building Code 2018 Revision 2

The purpose of this bulletin is to provide information about Revision 2 changes to the British Columbia Building Code 2018 (BC Code) for the design and construction of new secondary suites. Changes are effective December 12, 2019 and apply to projects for which a permit is applied for on or after this date.

A separate bulletin B19-04 discusses how the BC Code changes to secondary suite requirements may impact land use planning.

Background

The BC Code introduced requirements for secondary suites in 1995. Therefore, the National Building Code (National Code) provisions were not adopted when they were first published in 2010. The BC Code requirements have not been substantially updated since 1995.

The adopted changes:

- harmonize with the form and approach of the National Code, and most of its technical requirements;
- incorporate historical requirements from the BC Code that provide a higher level of health and safety; and
- adapt some requirements based on application to existing buildings and to coordinate with other requirements.

The Province of British Columbia (B.C.) is working to remove barriers to secondary housing forms. These mid-cycle revisions to the BC Code aim to increase options for the design and construction of new secondary suites in buildings. Allowing the construction of more secondary suites in more building types helps create more housing units while providing an acceptable level of health and fire safety to occupants. These changes provide local authorities with more options for land use planning.

The definition of secondary suite in the BC Code is not to be equated with similar terms in land use bylaws. Land use bylaws may define or use the term secondary suite to describe housing types. The term might carry a different meaning in bylaw than the meaning assigned in the BC Code. It is often appropriate to set aside the BC Code terms when considering land use and zoning matters.

Including solutions for design and construction of secondary suites in the BC Code does not allow owners to contravene land use bylaws. Land use bylaws govern where secondary suites are permitted whereas the BC Code governs how they are to be built. **Before constructing a secondary suite, check with the local authority.**

The BC Code governs the design and construction of new secondary suites including alterations to existing buildings to add a secondary suite as well as new work or alterations within a secondary

suite. It is not intended that the BC Code be used as evaluation metrics or retroactive construction requirements for existing secondary suites.

Changes to the Definition of Secondary Suites

The BC Code **previously** defined a *secondary suite* as “a *dwelling unit*

- having a total floor space of not more than 90 m² in area,
- having a floor space less than 40% of the habitable space of the *building*,
- located within a *building* of *residential occupancy* containing only one other *dwelling unit*, and
- located in and part of a *building* which is a single real estate entity.”

The **new** definition states that a *secondary suite* means “a self-contained *dwelling unit* located within a *building* or portion of a *building*

- completely separated from other parts of the *building* by a vertical *fire separation* that has a *fire-resistance rating* of not less than 1 h and extends from the ground or lowermost assembly continuously through or adjacent to all *storeys* and spaces including *service spaces* of the separated portions,
- of only *residential occupancy* that contains only one other *dwelling unit* and common spaces, and
- where both *dwelling units* constitute a single real estate entity.”

The previous definition placed limits on floor space as a mechanism to moderate fire load and occupant load. This revision **discontinues the prescribed floor space amounts and percentage distribution**. New requirements as well as some existing and revised requirements, moderate risks attributed to fire load and occupant load as compensatory measures. **Check with the local authority on floor space allowances.**

It cannot be assumed that the owner occupies one of the dwelling units, nor that the occupant of the dwelling unit has direct control over the secondary suite or use by its occupants as a means of increasing the level of safety. A secondary suite is not a subordinate suite to a principle suite. However, there are health and safety opportunities and benefits that come with a house with a secondary suite having single ownership that may not be available for units with separate ownership. Typical requirements for separately-owned dwelling units have been adjusted to accommodate the interest, coordination, and maintenance that is available with single ownership.

In addition, this change adopts and adapts permissions in the National Code to **allow the construction of secondary suites in a building that may contain more than one dwelling unit or other occupancy**. These permissions are limited and only apply where a dwelling unit and its secondary suite are completely separated from other parts of the building with continuous vertical fire-rated construction. These permissions do not apply where any portion of the dwelling unit and its secondary suite are above or below another dwelling unit or other occupancy.

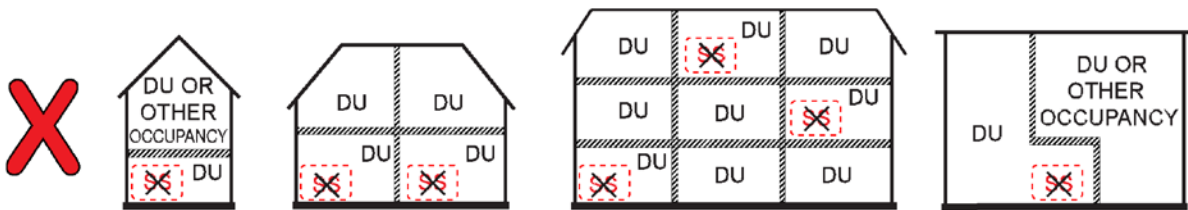
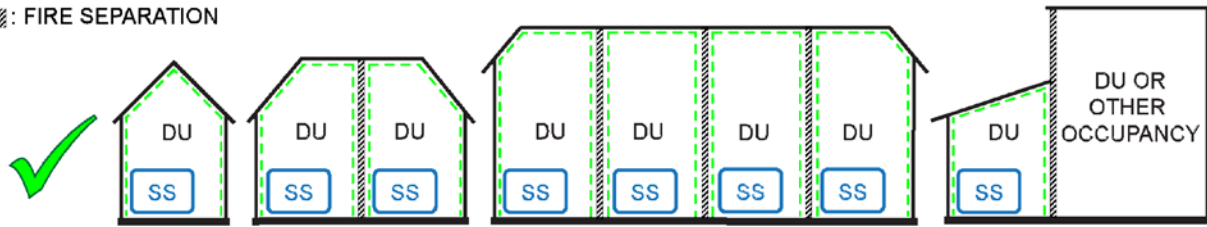
Examples of buildings where the BC Code allows the construction of secondary suites include side-by-side duplexes and also row houses where a vertical fire separation separates the portion with the dwelling unit with the secondary suite from the remainder of the building. Examples where secondary suites are not permitted are up/down duplexes and apartment buildings where dwelling units are above or below other dwelling units.

The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. For further information, contact the Building and Safety Standards Branch.

The following illustration provides examples of the types of buildings in which the BC Code allows the construction of secondary suites and where secondary suites are not permitted. **Before constructing a secondary suite, check with the local authority.**

Local government contact information is available here: <http://www.civicinfo.bc.ca/directories>.

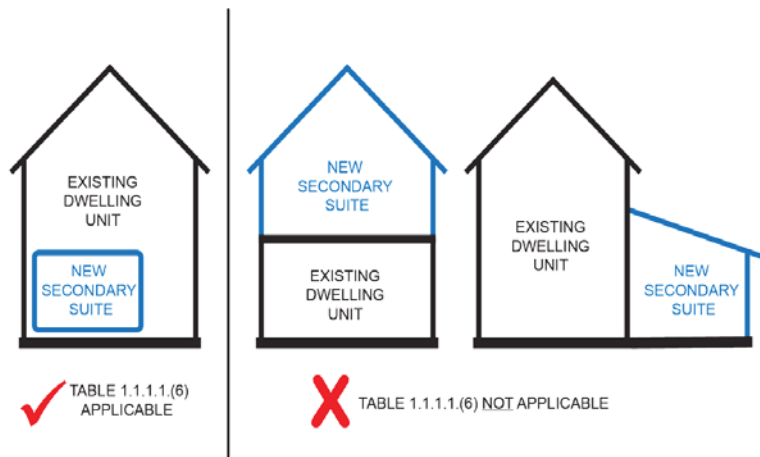
DU: DWELLING UNIT
SS: SECONDARY SUITE
□: SINGLE REAL ESTATE ENTITY
▨: FIRE SEPARATION



Changes to Alterations to Existing Buildings to Add a Secondary Suite

Some previous requirements were based on the premise of 'finishing' an unfinished basement and dealing with the hardships that may exist when working within the confines of an existing home. Some accommodation for when existing construction poses a practical or financial hardship is necessary to avoid abandoning projects or creating disincentives to permits and inspections.

This change distinguishes requirements for new construction - with no existing construction imposing hardship - from requirements for alterations to existing buildings where existing construction poses a hardship. Division A provides Table 1.1.1.1.(6) containing Alternative Compliance Methods that are considered adequate but may only be used where existing construction acts as a practical barrier to compliance with the acceptable solutions in Division B of the BC Code.



Similar to the alternative compliance methods available to heritage buildings, the alternative compliance methods in Table 1.1.1.1.(6) may be substituted for the requirements contained elsewhere in the BC Code. The owner may choose any or a combination of these options:

- apply acceptable solutions in Division B,
- apply alternative solutions under Division A, or
- apply alternative compliance methods in Table 1.1.1.1.(6) of Division A.

Changes to Design and Construction Requirements (Division B)

This change adopts the form and approach of the National Code with regards to secondary suites. Requirements specific to secondary suites are found along side those for dwelling units throughout Part 9 and B.C.'s unique Section 9.37. is deleted.

A table providing references to secondary suite-specific content as it appears throughout Part 9 of Division B is included in the Appendix to this bulletin.

Many provisions are carried over and/or adapted from B.C.'s previous Section 9.37., however there are some provisions that are new. Examples are as follows (references are to Division B):

| Examples of New Secondary Suite Provisions | |
|---|---------------|
| Means of Egress | Section 9.9. |
| <p>A second and separate means of egress may be required depending on the design and risk to the first means of egress. Sprinklered buildings and access to balconies provide some alternatives. Where an openable window is relied upon as a second means of egress, it must meet certain conditions; it must have a larger opening (at least 1 m high by 0.55 m wide) than a bedroom egress window, and the sill height is limited to 1 m above the floor and 7 m above adjacent ground level.</p> | |
| Fire Protection | Section 9.10. |
| <p>Within a house with a secondary suite, the dwelling units and the common spaces are required to be separated from each other by a fire separation that acts as a continuous barrier to the spread of smoke and fire. Fire separations in a house with a secondary suite must have a fire-resistance rating unless the house is fully sprinklered. As previous, a 45-minute fire-resistance rating is required if smoke alarms are not interconnected (smoke alarms are still required) and a 30-minute fire-resistance rating is permitted where additional photo-electric smoke alarms are installed in each unit and the additional smoke alarms are interconnected. A new 15-minute fire-resistance rating is now permitted where every smoke alarm in the house (secondary suite and the other dwelling unit including their common spaces) are interconnected. A 15-minute rating can be based on testing described in Part 3, calculated using the component additive method in Appendix D, or the designer can follow the construction specifications detailed in Clause 9.11.1.1.(2)(a). There are also construction specifications detailed in Sentence 9.10.3.1.(3) that the designer can use where a 30-minute fire-resistance rating is required. The construction specifications for both the 15-minute assembly and the 30-minute assembly permit the use of 12.7 mm regular gypsum board and satisfy the sound transmission requirements as well.</p> | |

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| Examples of New Secondary Suite Provisions (continued) | |
|--|--------------------------|
| Fire Protection (continued) | Section 9.10. |
| <p>Doors as closures in fire separations do not need to be labelled or tested, provided they are designed to specific criteria such as having a 45 mm thickness of solid wood and be provided with a self-closing device.</p> <p>Assemblies that separate houses with secondary suites need not be constructed as a firewall but shall be constructed as fire separations with not less than a 1-hour fire-resistance rating. The assembly must be continuous from the top of footings to the underside of the roof deck and may not at any point be horizontal. A house with a secondary suite may not be above or below any other unit or occupancy.</p> <p>Interconnected smoke alarms must be photo-electric type as they are less susceptible to nuisance alarms and may now rely on wireless technology for interconnection.</p> <p>Windows or access panels for firefighting are not required for houses with secondary suites, nor is firefighting access to basements required.</p> | |
| Sound Transmission | Section 9.11. |
| <p>Controlling sound transmission is important to occupant health and well-being. The separation between a secondary suite and the other dwelling unit within a house has a reduced apparent sound transmission class (ASTC 40 from 47) and reduced sound transmission class (STC 43 from 50). There is an additional option in lieu of a rating of a prescriptive assembly that is considered acceptable. Sound resistance can be further improved by selecting furnishings and finishing materials that absorb sound such a carpet.</p> | |
| Carbon Monoxide Alarms | Article 9.32.4.2. |
| <p>All carbon monoxide alarms installed in a house with a secondary suite including their common spaces must be interconnected and may rely on wireless technology for interconnection.</p> | |

A house with a secondary suite may contain common spaces such as common storage, common service rooms, common laundry facilities, and common areas used for egress. Common spaces that are part of a shared means of egress must be separated from the dwelling units with a fire separation and have available controls such as for lighting.

More Information

BC Codes are Now Available Free Online

Free online access to the [BC Building Code](#) and the [BC Fire Code](#) is available on the BC publications [website](#). In addition, Revision 2 content changes are summarized in the online [BC Building Code](#) and the [BC Fire Code 2018](#), for convenience.

Links

- Codes Canada: (volunteer & attend) https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes_centre_index.html
- Ministry website: <https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards>
- National Code Change Request: https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes_centre/code_change_request.html

Contact the Building and Safety Standards Branch

- **General** inquiries can be sent to building.safety@gov.bc.ca
- **Technical** code inquiries can be sent to codequestion@gov.bc.ca

Contact the Local Authority

- Local authority contact information is available online at <http://www.civicinfo.bc.ca/directories>.

The Building and Safety Standards Branch does not enforce compliance with the BC Code. Local authorities are authorized to enforce the BC Code through the Local Government Act and the Community Charter.

Appendix A

British Columbia Building Code 2018 Revision 2 References to Secondary Suite Provisions

The following table provides references to secondary suite-specific content as it appears throughout Part 9 of Division B.

| Secondary Suite Provisions in Part 9 | | |
|--------------------------------------|---|---|
| Reference | Application | Provision |
| Article 9.5.3.1. | Ceiling Heights of Rooms or Spaces | Ceiling and clear heights in secondary suites shall be the same as for all other dwelling units |
| Article 9.5.5.1. | Doorway Opening Sizes | Doorway opening sizes shall be the same as for all other dwelling units |
| Section 9.8. | Stairs, Ramps, Landings, Handrails and Guards | Stairs, ramps, landings, handrails and guards shall be the same as for those serving single dwelling units |
| Article 9.9.2.4. | Principal Entrances | Exemption from requirements for exits |
| Article 9.9.3.3. | Width of Corridors | Minimum width for public corridors and exit corridors serving a house with a secondary suite including its common spaces |
| Article 9.9.3.4. | Clear Height | Minimum clear height for public corridors and exit corridors serving a house with a secondary suite including its common spaces |
| Subsection 9.9.4. | Fire Separations for Exits | Exits shall be separated by a fire separation with a fire-resistance rating corresponding to the interconnection of smoke alarms and the presence of sprinklers |
| Subsection 9.9.6. | Doors in a Means of Egress | Limits on obstructions of doors and at doorways in a means of egress |
| Article 9.9.9.2. | Two Separate Exits | Permitted alternatives from providing a second and separate exit |
| Article 9.9.9.3. | Shared Egress Facilities | Permitted alternatives from providing a second and separate means of egress |
| Subsection 9.9.11. | Signs | Exemption from requirements for signage |
| Subsection 9.9.12. | Lighting | Exemption from requirements for lighting in a means of egress |
| Article 9.10.3.1. | Fire-Resistance and Fire-Protection Ratings | Permitted assemblies where a fire-resistance rating is required |
| Article 9.10.9.2. | Continuous Barrier | Sealing of joints in fire separations |
| Article 9.10.9.3. | Openings to be Protected with Closures | Permitted alternative for doors where a fire-protection rating is required |

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Secondary Suite Provisions in Part 9 (continued)

| Reference | Application | Provision |
|---------------------|------------------------------------|---|
| Article 9.10.9.6. | Penetrations of Fire Separations | Permitted alternative to providing fire dampers |
| Article 9.10.9.14. | Separation of Residential Suites | Dwelling units shall be separated by a fire separation with a fire-resistance rating corresponding to the interconnection of smoke alarms and the presence of sprinklers |
| Article 9.10.9.15. | Separation of Public Corridors | Public corridors shall be separated from the remainder of the building by a fire separation with a fire-resistance rating corresponding to the interconnection of smoke alarms and the presence of sprinklers |
| Article 9.10.10.4. | Location of Fuel-Fired Appliances | Permitted alternative for the separation of service rooms containing a fuel-fired appliance |
| Article 9.10.11.2. | Firewalls Not Required | Permitted alternative to the requirement for a firewall on a property line |
| Article 9.10.12.3. | Exterior Walls Meeting at an Angle | Required distance between unprotected openings |
| Subsection 9.10.15. | Spatial Separation Between Houses | Application of Subsection 9.10.15. to houses with a secondary suite |
| Article 9.10.19.1. | Required Smoke Alarms | Smoke alarms required in ancillary spaces and common spaces |
| Article 9.10.19.5. | Interconnection of Smoke Alarms | Options for interconnection of smoke alarms corresponding with the fire-resistance rating of fire separations and the presence of sprinklers |
| Subsection 9.10.20. | Firefighting | Exemption from providing access panels and basement access |
| Subsection 9.11.1. | Protection from Airborne Noise | Requirement for protection from airborne noise, and permitted assemblies where an apparent sound transmission class rating or a sound transmission class rating are required |
| Section 9.32. | Ventilation | Permitted alternative to a self-contained mechanical ventilation system serving only one dwelling unit |
| Article 9.32.4.2. | Carbon Monoxide Alarms | Carbon monoxide alarms shall be interconnected |
| Section 9.33. | Heating and Air-Conditioning | Permitted alternative to a heating system or air-conditioning system serving only one dwelling unit |
| Article 9.33.4.3. | Heating System Control | Individual temperature controls shall be provided in each dwelling unit |
| Subsection 9.34.2. | Lighting Outlets | Requirement for stairways to be lighted |

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