4.0 RECOMMENDATIONS FOR C-2 CHANGES

As noted above, the C-2 owners' first preference is Scenario A, which has the least change to current zoning; while adjacent owners preferred Scenario D, which has the most change, reducing development to 3 storeys. However, the second-ranked options are B and C, respectively. Scenarios B and C are the same, except for the maximum height of the building on the front 2/3 of the site.

As a consultant team, it is our opinion that Scenarios B and C offer a significant improvement to neighbourliness, without unduly reducing the C-2 owners' land values and development potential. In addition, the ultimate housing capacity is not reduced significantly. The recommendations in this section are therefore based on Scenarios B and C, with the choice of overall maximum height presented as an option for Council's decision. The diagram below illustrates the recommended setbacks and height limits, which combine to determine the new C-2 envelope.

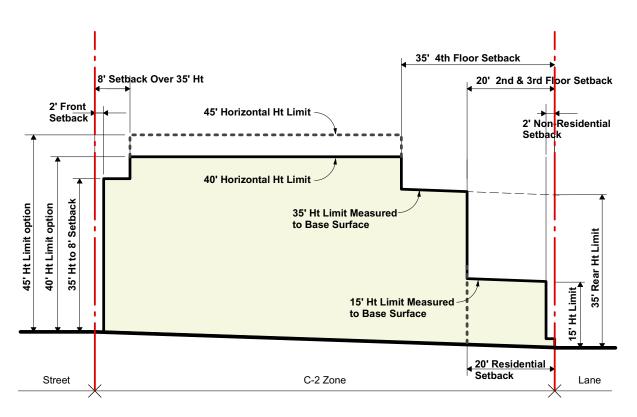


Fig. 4.0-1 Recommended setback and height limit diagram

This envelope was extensively tested through prototype designs to determine that various building configurations would fit and to confirm the range of achievable densities. Diagrammatic building sections of Scenario B and C prototypes are shown in Appendix A. The complete schematic prototype drawings are available in a separate document from the City Plans Division of the Vancouver Planning Department.

Each recommendation is shown in italics, followed by a rationale or commentary on its effects. The recommendations are written in simple terms, rather than in the formal legal language of District Schedules and Guidelines. If Council approves these recommendations, staff will use them to revise the C-2 District Schedule and Guidelines appropriately.

4.1 FRONT SETBACK

Introduce a 2 ft. front setback with allowable projections such as cornices, balconies and bays. This setback should also be provided on the exterior side of corner sites.

- Encourages greater articulation to the building façade, through the use of elements such as cornices, eaves, bay windows and balconies.
- Allows for greater use of eaves and cornices, which should result in better weather protection of the exterior wall and in less water related damage and unsightly staining.
- By widening the space at grade, creates opportunities for outdoor seating, display of merchandise, bicycle parking, signage and other street activity generators.

Consideration should be given to the relaxation of this requirement where setbacks for Building Lines are required, provided it is not anticipated that additional sidewalk width would be desirable.

4.2 LANDSCAPE STRIP AT THE LANE

At the rear of commercial and parking space at grade, provide a 2 ft. planting strip at grade and a 5 ft. continuous planter on the slab above. At the rear of residential at grade, provide a 5 ft. wide continuous planting strip. All planting at grade should be contained in a planter extending min. 1.5 ft. above lane grade.

- Low planting between rear wall of commercial space or parking enclosure and lane edge reduces
 visual severity of the wall. Raising lane planting above grade protects it from damage as well as
 reduces the apparent scale of the rear wall.
- The purpose of the larger 5 ft. planter is to facilitate larger shrubs and trees to provide screening between C-2 buildings and rear yards across the lane and to screen ground level units from lane activity.

4.3 REAR SETBACK TO NON-RESIDENTIAL AT GRADE

Require 2 ft. setback for planting strip

This setback is required to accommodate recommendation 4.2 above.

4.4 REAR SETBACK TO RESIDENTIAL AT GRADE

Increase setback to 20 ft. from current 15 ft.

- Increasing the distance between the lane and residential units in C-2 projects reduces their exposure to lane activity and improves privacy of residential yards across the lane.
- Allows space for the required 5 ft. wide planter without reduction of private open space of C-2 units at grade.

4.5 HEIGHT OF STRUCTURE AT LANE

Limit the height of the building at the lane to 15 ft., measured from "base surface".

- Improves scale relationship of new development with accessory buildings in residential district across the lane and prevents oversize structures on sloping sites.
- Reduces potential overlook of adjacent rear yards from patios located on top of ground level structures.

4.6 REAR SETBACK TO 2ND AND 3RD STOREYS

Increase setback to 20 ft. from current 15 ft.

- In combination with planting recommended in section 4.2 reduces overlook of neighbours across the lane
- Allows sufficient space for planting required in subsection 4.2.

4.7 REAR SETBACK TO 4TH STOREY

Increase setback to 35 ft. Current requirement is 15 ft. plus an unspecified additional setback in guidelines

• Significantly reduces overlook of neighbours across the lane.

4.8 INTERIOR SIDE YARDS

• Continue to require no side yards at interior side property lines, except on C-2 sites abutting R districts without a lane between. In those cases, refer to section 4.19 below.

4.9 EXTERIOR SIDE YARDS

For exterior side yards on corner sites, recommended front yard setback should be required, as noted in section 4.1.

• Ensures continuity of building treatment around the corner.

4.10 OVERALL HEIGHT

- Measure the height on the rear 35 ft. of the site from the "base surface", as now, but reduce the permitted height from 40 ft. to 35 ft.
- Measure the height on the front portion of the site from a plane, set from the grades along the street and extending horizontally from the front towards the rear of the site (rather than to a sloped plane following the "base surface" as now). For this part of the envelope adopt either:
 - a. a height limit of 40 ft.; or
 - b. a height limit of 45 ft.

• Eliminate the height relaxation for sloped sites or non-combustible construction currently allowed if the 45 ft. height limit is chosen. Continue to allow minor relaxations to accommodate slope along the street if the 40 ft. height limit is chosen.

In order to solve the complex issues around height, (refer to section 2.4.2) a two-part height envelope is proposed. The rear of the site should have a reduced height of 35 ft., measured from the "base surface", i.e. a sloped height envelope approximately following the slope of the land. The front of the site should have a height envelope following the street slope in one direction, but then extending horizontally toward the rear. This would allow for reasonably consistent building floor levels.

There are two options for council's consideration regarding the horizontal height limit on the front portion of the site: 40 ft or 45 ft. The current limit

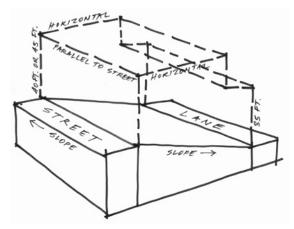


Fig. 4.10-1 Diagram of the proposed height envelope

is 40 ft., relaxable to 45 ft. to deal with sloping sites. It is common for projects to have to request the relaxation, because the 40 ft. envelope is often sloping with the site in both directions.

While the current 40 ft. height limit in the District Schedule was always inadequate for mixed-use four storey buildings, there was little ability to consider changing it as long as the VBBL maintained its height limitation for wood frame construction. The relaxation of the height limitation in the 1999 version of VBBL has opened up the possibility of the review of the 40 ft. C-2 height restriction. There are pros and cons to the 40 ft and the 45 ft. options.

- The 40 ft. option is close to the current limit, but because of the revised envelope, floor plates would not need to be stepped at the commercially important front portion of the project. However, with this limit, some height relaxations would still be needed to allow for street slope. As well, 40 ft. would continue to limit ceiling heights in the ground floor commercial spaces, affecting their viability.
- The 45 ft. horizontal envelope would permit higher commercial ceiling heights, as well as
 possibly higher ceilings on the residential floors, enhancing economic viability. It is expected
 that street slope could be accommodated within this height limit and no further relaxations would
 be required. The increase of the height limit to 45 ft. would, in some measure, compensate C-2
 property owners for the loss of density and building volume at the rear.
- In terms of streetscape, the front setback at the upper level (see section 4.11) will reduce the apparent height along the street.
- As shown in the diagrams below, on level sites the difference in neighbourliness between the
 two options is not significant, because the rear setback at the top floor will be increased to 35 ft.
 and the height at the rear reduced to 35 ft. However on severely sloped sites, the 45 ft. option
 will result in the topmost edge of the building appearing slightly higher than now (but also being
 approximately 16 ft. further away) from the viewpoint of the neighbout's back yard.

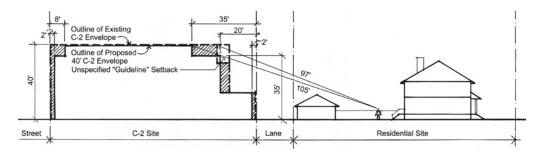


Fig. 4.10-2 Comparison of current and recommended C-2 envelopes with a 40' height limit on a level site

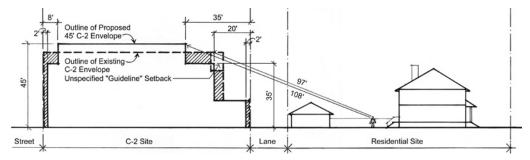


Fig. 4.10-3 Comparison of current and recommended C-2 envelopes with a 45' height limit on a level site

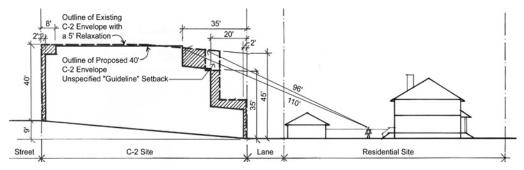


Fig. 4.10-4 Comparison of current and recommended C-2 envelopes with a 40' height limit on a sloping site

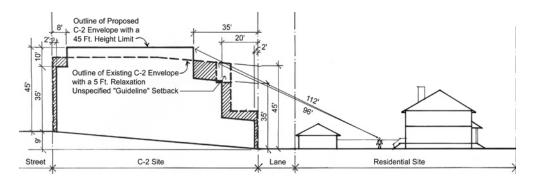


Fig. 4.10-5 Comparison of current and recommended C-2 envelopes with a 45' height limit on a sloping site

This difference in maximum height was the only difference between Scenarios B and C -- the setbacks, density achievable etc. were the same in both. As noted in Section 3 above, most C-2 owners chose Scenario B, with the 45 ft. limit as their second ranked option. For most neighbouring owners it was Scenario C, with the 40 ft. height limit.

4.11 FRONT SETBACK AT UPPER LEVEL

Introduce an 8 ft. front setback above the 35 ft. height level of the street wall. This setback should also be provided on the exterior side elevation of corner sites.

• Reduces apparent scale of C-2 developments viewed from the street, by decreasing the height at the street edge to 35 ft.

4.12 DENSITY

Permit up to 1.75 residential FSR in 3 levels above ground floor, up to 0.4 for additional residential FSR at the rear of the ground floor, and up to 2.50 total all uses.

- Based on extensive testing of both corridor and courtyard schemes, this floor space can comfortably fit within the envelope created by the recommended setbacks and heights.
- Modestly reduces current residential and overall density.
- Modestly reduces C-2 housing capacity from current 14,600 units to a range of 12,000 to 14,300 units (based on City of Vancouver estimate).
- Reduces C-2 land values from current average of \$84 / sq. ft. to \$77 / sq. ft. on the East Side and from \$109 / sq. ft. to \$99 / sq. ft. on the West Side (based on analysis by Coriolis Consulting).

4.13 ARTICULATION

Leave as is – articulation at the discretion of the designer and the planners.

Options for requiring greater articulation of building facades did not receive sufficient level of public support in the first round of open houses to suggest that changes to current practices are necessary. Note, however, that façade articulation will be made easier by the introduction of the front yard setback (in section 4.1).

4.14 BALCONIES

Leave as is – enclosed balconies allowed, but required to be expressed in a manner differentiating them from other glazing.

- Provision of semi-outdoor space that is protected from street impacts such as noise, dirt, etc.
- Provision of noise barrier to interiors of dwellings.

The option to disallow enclosed balconies was not supported at the first round of open houses. Some of the bulkiness of C-2 buildings caused by balcony enclosures will be reduced by anticipated projection of balconies into the recommended front yard and by the requirement to differentiate balcony enclosures from other glazing and the introduction of railing like elements.

4.15 PARKING / SERVICE

Continue to encourage covered parking and loading on all mixed residential / commercial. On sites over 50 ft. wide discourage direct parking off the lane and require parking at grade to be screened.

• Improves the visual environment of the lane and reduces exposure of neighbours and C-2 residents above to parking and service activity.

4.16 SMALL SITES

The maximum densities recommended in Section 4.12 should also apply to small sites (50 ft. wide or less), but with the advice to applicants that they may not be achievable, particularly due to parking requirements.

See section 2.8 of this report for comments on small site development.

4.17 COURTYARD SIZES

Revise section 2.6 of the current guidelines concerning courtyards to allow secondary living spaces (bedrooms, dens and dining rooms) of double fronting dwelling units on all floors to face into courtyards with the minimum 20 ft. clear dimension, providing the courtyard height-to-width ratio does not exceed 1.5.

As noted in section 2.2.2, courtyard projects provide needed housing variety and should be as feasible under C-2 zoning as corridor projects. Courtyard projects are often at a disadvantage due to their greater complexity, higher construction cost and a generally lower achievable FSR. As they are typically built out to C-2 setback limits, they will now be additionally affected by larger setbacks recommended in this report.

As a reasonable compensating trade-off, section 2.6 of the current Guidelines should be modified. Current Guidelines do not permit bedrooms, dens or dining rooms to face courtyards measuring less than 30 ft. However, in terms of the amount of light received, rooms facing into a 20 ft. courtyard may be preferable to bedroom configurations observed in some corridor schemes. These often have an effective distance of 18 ft. from the bedroom to the exterior building face, across a narrow throat and an enclosed balcony. Additionally, rooms facing into courtyards have the benefit of natural ventilation, away from street noise.

4.18 COMMERCIAL USE ALONG SIDE STREETS

Continue to allow both commercial and residential uses at grade along side streets, but require limited commercial expression (i.e., limit bright signage, illuminated awnings, etc).

- Maintains flexibility of design response to specific local conditions.
- Reduces visual impact on nearby residential area.

4.19 SITES ADJOINING SITES IN R DISTRICTS, WITHOUT INTERVENING LANES

Section 2.3.7 described the situations where C-2 sites adjoin R zoned sites, with no intervening lane to provide separation. There are a total of 126 C-2 lots in this situation, some already fully developed and some not.

The following recommendations aim at a reduction of the impacts of C-2 developments on the adjoining R sites.

4.19.1 Rear Setbacks

Where possible, deem the property line shared with the R-zoned property to be the rear, effectively rotating the zoning envelope to the advantage of the neighbouring R site. This means the same rear setbacks and height limitations recommended above would face R neighbours.

The Director of Planning has the ability to determine which side of the site shall be considered the front. When a C-2 site is on a corner, and beside an R-zoned site with no intervening lane, it is often possible to use this power to ensure that the large rear setbacks abut the R-zoned property.

4.19.2 Interior Side Setbacks

In cases where rotating the zoning envelope would negatively impact more residential units than it would benefit, introduce significantly increased side setbacks above the first level of the building:

- For the first (approximately) 15 feet of building height, keep the side yard requirement as it currently is, between 3 and 5 feet.
- Above the first 15 feet, up to and including the 3rd storey, increase the side setback to 12 feet. However, allow the building to project into this setback in the front 50% of the site depth.
- For the 4th storey, increase the side setback to 35 ft.

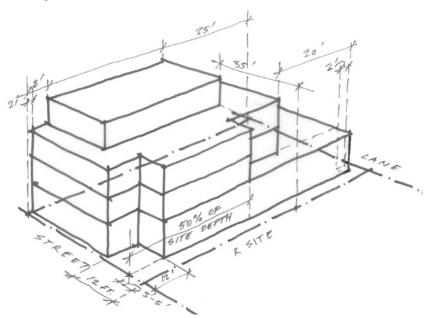


Fig. 4.19.2-1 Diagram of proposed interior side setbacks

In many cases the C-2 site adjoining an R-zoned site also has to its rear (with or without a lane) other R sites, or C sites which have been developed with residential/mixed use. In these cases, the strategy in 4.19.1 would negatively impact more residential units than it would help.

To reduce the impacts on the R-zoned properties' yards, the C-2 building would step back above the first level, other than where it would be beside the sidewall of the house on the R lot.

4.19.3 Front and Exterior Side Setbacks

- For any C-2 site directly adjoining the front yard of an R-zoned site, continue to require a 12 ft. by 12 ft. front setback, in order to provide a transition to the R site's front yard.
- Where the C-2 site adjoining the R site is on a corner, provide the 2 ft. front setback and the 8 ft. upper setback on both the front and the exterior side as required in Sections 4.1 and 4.11, to provide continuity around the corner.
- Regardless of which side of the site is deemed to be the front and which the exterior side, retail or service use should be continuous at grade along the arterial street(s), but is not necessary along a side street.

For C-2 sites adjoining R-zoned sites, whether the front is on the side street, or "deemed" to be facing the arterial, certain setbacks should apply to the front and exterior side.

4.19.4 Density for Sites Adjoining Sites in R Districts

Where the rear setback can be located adjacent to the R-zoned site, on sites 100 ft. wide or larger the achievable density should be the same as other C-2 sites, as per Section 4.12. On sites less than 100 ft, a lower density may be achievable, and applicants should be so advised.

Where the site must provide the larger interior sideyard, densities achievable are more sensitive to site size, for example:

- sites 100 ft. or more in width would likely be able to achieve the same densities as other C-2 sites, as per Section 4.12.
- a 66 ft. wide site would be able to achieve approximately 2.10 FSR total (all uses)
- a 33 ft. wide site would be able to achieve approximately 1.75 FSR total (all uses)

The density that is achievable on C-2 sites adjoining R-zoned sites will vary, depending on whether the rear yard can be located to face the R site (S 4.19.1 above) or whether the site must provide the increased interior side yard (S. 4.19.2). In addition, site size plays a significant role in determining feasible density.

4.20 MATERIALS, DETAILING AND LANDSCAPE

Revise C-2 Guidelines so that Section 5 Architectural Components and Section 8 Landscaping provide clearer guidance to staff and applicants. Use the C-7 and C-8 Guidelines as a precedent, adjusting as needed to be consistent to the recommendations in this report, and to recognize the broader range of sites and locations in C-2.

4.21 ALL-COMMERCIAL USES

All massing and density related recommendations contained in this report should also apply to developments containing all-commercial uses.