Perkins&Will

Memo

Date: 6.9.2020

To: Chris Mah

From: Alysia Baldwin, Perkins and Will

Re: Design Analysis of Draft C2 Amendments.

Design Analysis of Draft C2 Zoning Amendments .

Below is a summary of the design analysis testing the proposed amendments to the C2 Zoning District Schedules.

Background

In 2019, prior to testing the currently proposed C2 zoning amendments, Perkins and Will was hired to perform a building massing analysis looking at possible ways to increase density and height to 6 storeys while maintaining the current C2 massing form. Studies included looking at building forms that would require additional stepping on the lane. Studies concluded the prescriptive stepping resulted in many complications. Prescriptive stepping dictated the building form and therefore the unit depths per level. The majority of units on lower levels needed to be studios in order to maximize unit count and affectively use the deep depth on the base levels created by the stepping.

In these scenarios, in order to hit the required family unit count, all units on the upper levels where building depth was reduced needed to be 2-3 bedroom units. The change of unit layouts on each level created by the building stepping made it harder to stack structural walls with the units below. Furthermore, units on upper levels tend to be more expensive. Ideally, family units would be placed throughout to offer a range in unit price.

The conclusion of the study was that prescriptive building forms with multiple stepbacks results in complicated building forms that are difficult and expensive to build in wood-frame construction, creates unit depths that offer poor daylight and ventilation, and creates units that are hard to stack structurally.

In January 2020, Perkins and Will was hired to perform a design analysis on the current proposed amendments to the C2 zoning guidelines.

Testing guidelines included:

- 3.5 to 3.7 FSR depending on site conditions.
- A 6 storey building massing.
- A 2.5m front setback, a 1.5m rear yard setback for commercial uses with a 4.6m rear yard setback for residential use. For corner lots, the side setback shall be the same as the front setback without the chamfer requirement.
- A chamfered front setback of 45 deg above 15.3m for sites with an ROW less than 24.38m (80') for a north south arterial and 27.4m (90') for arterials in all other directions.
- 0.35 FSR commercial space
- 35% of all units to be family units (2 bedrooms or more) with a target of 10% 3 bedroom units
- A 19.8m overall building height which may be increased to 21.95m if a 5.2m floor to floor height is provided on the ground floor.
- Additional side and rear yard setbacks requirements if the site backs on to, without the intervention of a lane, or is adjacent to an R zoned property.

Guidance provided by the City for testing and assumptions included:

- Strive to achieve the maximum rental density possible on each site.
- Strive for simplified building forms that are achievable in wood-frame construction. Building stepping should only be used if it is required to hit the desired FSR.
- Design functional commercial spaces that are not overly deep and have reasonable ceiling heights.
- Design livable residential units. Units should not be overly deep to allow access to daylight and ventilation. Ceiling heights should follow industry standard and be achievable in wood-frame construction.
- Design for compatibility with building code and green building standards.

Design Analysis

FSR Exemptions

Since projects will be able to pursue optional FSR exemptions, a gross up factor was added to give a better indication of the typical gross floor area that could be fit on the site. FSR exemptions were considered for amenity space, mechanical rooms, and in-suite storage. The gross up factor was estimated to add approximately 9% additional GFA. The total GFA was then compared to the GFA of the maximum envelope to indicate how much of the envelope would need to be filled in order to hit the desired FSR.

Building Layout

The intent of the study was to determine if simplified building forms would be achievable under the proposed amendments. The desire to pursue simplified building forms stems from the added conditions that will require C2 projects to employ zero emissions heating and hot water systems, achieve a greenhouse gas intensity (GHGI) of 3 Kg/m2 or less and meet the energy efficiency and emissions requirements of the Green Policy for Rezonings by meeting the requirements of either: the Passive House standard, or meeting the greenhouse gas, thermal energy demands, and total energy use intensity limits (GHGI, TEDI, and TEUI) as set out by the policy.

Simplified building forms help improve the performance of the building envelope, thereby making compliance with green energy targets easier to achieve. Simplifying the building form to remove deep stepbacks allows the building to be constructed cost effectively with wood-frame construction. Multiple building stepbacks, as has previously been required in C2 zoning massings, complicates wood-frame construction as stepbacks may require deeper structural members or dropped beams that add cost and complexity to a project. Deeper construction and dropped beams also affect the ceiling heights of residential units. Removing multiple building stepbacks allows projects to create one residential floor plans that stacks on all levels, simplifying both the building envelope and the structural system.

When testing each site, a baseline massing (no inset balconies or articulation) was established to determine the minimum building depth required to achieve the desired FSR. If the baseline massing resulted in building depths that went beyond acceptable unit depths, or if the baseline massing must fill most or all of the maximum envelope, it can be determined that it would be very difficult to achieve the desired FSR on that site. If the baseline massing resulting in an acceptable building depth that left room within the maximum envelope, it indicates that there would be multiple design solutions possible for that site.

Having flexibility within the maximum envelope is a key factor in a sites ability to achieve the desired 35% family units. 2 and 3 bedroom units have frontage requirements for both bedrooms and living room spaces. The desire is to keep the overall size of the family units within a reasonable range to ensure that families will be able to afford the rent. In double loaded corridor configurations this is complicated, as adding an additional bedroom means adding the additional square footage for the entire length of the unit. Corner sites are able to more readily accommodate 2 and 3 bedroom units as the corner provides opportunities to shape units and provide additional frontage without adding too much additional living area. Therefore, having flexibility within the max envelope allows 2 and 3 bedroom units to be more easily accommodated in mid block site as the building form can inset balconies or add articulation to the form to provide more bedrooms while keeping the overall size of the units within the target range.

Unit Layout

Each test scenario prepared sample unit layouts to test unit depths, configuration, and the sites ability to accommodate the required 35% family units. To create a scenario that allowed comparison over multiple sites with different configurations, a singular approach was taken for unit layouts to ensure comparable outcomes.

Since building in wood-frame construction is one of the considerations of the study, unit layouts followed a module. While a simplified building form that would not require stepping was desired, the module was chosen such that if a building form did require stepping to hit the FSR target, two smaller modular suites below could be combined into one larger suite above while maintaining the alignment of demising walls.

Test Sites

6 sites of different lot depths and street ROW's were tested to determine how the draft amendments would affect different scenarios. Studies were conducted in 2 phases to test additional situations and ongoing revisions to the draft amendments.

Site configurations included:

- Corner sites
- Mid block sites
- Sloped sites
- Sites with R zoning adjacency
- Sites with irregular geometry
- A range of site depths from 31m (101') to 37m (122')
- A range of ROW arterial depths from 24.38m (80') to 30.17m (99')

Summary of Findings

Maximum Density

On all test sites, the maximum allowable density, including gross up for FSR exemptions could be achieved. The testing recognized that fitting the FSR on shallower sites will be more difficult, as there is less flexibility within the maximum envelope to achieve multiple building forms. Conflicts may arise on a shallow site if it must turn the parkade ramp parallel to the lane. A conflict with structure may occur if the building mass needs to come close to the 4.6m (15') setback in order to achieve maximum density. Sites with irregular geometry will also have more difficulty fitting the desired density if portions of the site are not suited to accommodate residential layouts (for example an acute angle on a portion of the site).

35% Family Units

All test sites were able to achieve 35% family units, however hitting a 10% 3 bedroom target was not achievable on most sites without having to resort to changing the floorplan layout on some levels. In the interest of simplifying the building massing, the goal of the study was to create one repetitive floorplan, with stepping only required on the upper level on sites where the ROW width requires the 45 degree chamfer. As mentioned, it is easier to achieve more 3 bedroom units on larger sites, or corner sites that have more flexibility in unit placement. On smaller sites and in mid-block sites, hitting a specific 3 bedroom target is difficult and requires a change in floorplan. This creates conflicts with the desire to stack units, simplify the massing, and keep the family units within a reasonable size for affordability.

Commercial FSR

All test sites were able to achieve the 0.35 commercial FSR requirement. Shallower sites, or sloped sites were harder to achieve the maximum as the parking ramp had a greater impact on the available ground floor space. On most sites there was room on the ground floor for additional commercial space or for a residential amenity/muti-purpose room to be accommodated next to the lobby.

General Overall Comments

Design Flexibility

In most test scenarios, fitting the desired density within the maximum envelope left flexibility for multiple design so lutions to be pursued. As previously mentioned, shallow sites and sites with irregular geometry will have the least design flexibility.

Simplified building form

The move away from requiring multiple building stepbacks and simplifying building for m provides opportunity for different unit mixes and layouts to be considered while making the new required green energy targets easier to achieve.

Design Challenges

Height – The study recogni zes that with in an overall building height of 19.8m (65') it will be difficult to accommodate desired residential ceiling heights in wood -frame construction while allowing provision for proper roofing build up and parapet s. The problem will be exasperated on sites with a slope along the arterial. The study found that the increase in overall height provided when increasing the commercial floor to floor to 5.2m (17') provided sufficient buffer . However i f sites with a slope along an arterial are required to provide a minimum 5.2m floor to floor height in order to qu alify for the increase , issues of overall height may arise as the project will need to keep a consistent height for level 2.

Choice of use - The proposed amendments include a provision for choice of use on the second storey. A commercial use on level 2 wo uld require a higher floor to floor height . Without an additional height relaxation, the project may be required to lower the level 01 floor to floor height below 5.2m to accommodate, which would then make it ineligible for the height increase to 21.95 m (72').

Chamfer – Where required, the 45 degree chamfer will affect each project differently. If a project decides to pursue the additional height relaxation by providing a 5.2m floor to floor on the ground level, and provides 9' clear ceiling heights on the residential levels, the 45 degree angle will result in an increased setback on the upper level compared to a project that pursues shorter floor to floor and ceiling heights. The test scenarios showed a range of setbacks from approximately 2.1m (6.8') to 3.4m (11.2') would be required depending on different floor to floor heights and use combinations. On shallower or irregular sites that may have a harder time fitting density , it may have the un intended outcome of the project deciding to pursue shorter floor to floor heights to maximize FSR An increased setback will trigger a change in floorplan and potentially require a dropped beam in wood -frame construction .

October 2021 - Note: The "A-6" draft zoning regulations align with those in the proposed RR-2C district.

STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA

Stuart Howard Architect AIBC FRAIC AIA Principal
W. Neil Robertson Architect AIBC MRAIC AIA Principal
Sarah Brar Architect AIBC MRAIC Associate

March 15, 2020

Dear Marie, Sander & Haizea,

RE: A-6 Draft Zoning Analysis.

Thank you for your interest in our firm to help you with this interesting zoning analysis.

Our analysis will follow the proposed A-6 district schedule section by section for clarity and sections not applicable to my analysis will be omitted. Our analysis will take the form of comments or suggestions on each item relative to the design exercise that we undertook as well as our experience on other developments in the city of Vancouver.

4 Regulations

4.1 Site Area and other criteria

4.1.1 The minimum site area is 919 sq.m (9900 sq.ft)

We believe that this would seem reasonable if staff are targeting the minimum lot width of 99' with standard lot depths. We see that 4.1.4 gives the DOP authority to relax this regulation. I will note that a large number of lots in designated areas fall well below this threshold inclusive of our study lots. By utilizing the relaxed 25' Rear Yard setback discussed with staff our study demonstrates that a viable project can be delivered on lots as shallow as 90'. We recommend amending minimum site area to 825 sq.m (8880 sq.ft) to avoid unnecessarily introducing process to viable development lots as well as allowing for a 4.1.4 Director of planning relaxation below this threshold to account for non-rectilinear but still viable development lots.

4.1.2 Sites must have access to a lane with a minimum right-of-way width of 6.1m (20')

We agree that direct access to a lane for parking access is critical to the success of these projects. As well we found that in order to eliminate the need for below grade parking, complete access for the entire property width is essential to the elimination of below grade parking.

4.1.3 Sites Must front on streets with a minimum right of way width of 20.1m (66ft.)

This would appear to be consistent with staff's desire to densify along arterials as well as the intent of the schedule. We would only recommend the option of Director of planning authority to relax this requirement to avoid situations such as where a lot technically fronts a narrower street but flanks a major street. DOP has authority to determine front yard, however in our experience, this is occasionally can cause other issues. For instance if a corner lot was 99' x 95', the flanking dimension was 95' and the 99' fronted on a street less than 66', a very viable lot would be eliminated from development potential on a technicality.

4.1.4 The Director of planning may vary the minimum site area provided the Director of planning considers the intent of the schedule and all applicable policies and guidelines.

We agree that this provision is essential to being flexible to non-standard lots. However as noted in 4.1.1 we recommend reducing the outright lot area threshold to 825 sq.m (8800 sq.ft)

4.2 Site Frontage and Depth

4.2.1 The minimum site frontage is 30.1m (99')

We believe that this is in line with staff's desire to have reasonably wide development lots and that the DOP has authority to relax.

4.2.2 The minimum site depth for a single principal building is 30.5m (100ft)

We see that 4.2.4 gives the DOP authority to relax this regulation. I will note that a large number of lots in designated areas fall well below this threshold inclusive of our study lots. By utilizing the relaxed 25' Rear Yard setback discussed with staff, our study demonstrates that a viable project can be delivered on lots as shallow as 90'. We recommend amending minimum site depth to 27.43m (90ft) to avoid unnecessarily introducing process to viable development lots <u>as well as</u> allowing for a 4.2.4 Director of planning relaxation below this threshold to account for non-rectilinear but still viable development lots.

4.2.3 The minimum site depth to include townhouses at the lane is 41.1m (135ft)

We did not test this scenario as part of our study but on the surface is appears to be in line with other multi-family zones with laneway townhouses on deeper lots. However our experience with the Laneway 2.0 program in the West End has revealed several fire fighter access issues associated with mid-block townhouse schemes addressing off the lane as well as travel distance issues associated with

addressing off the street. We recommend discussing this issue with Building department staff as well as fire department staff.

4.2.4 The Director of Planning may vary the minimum and maximum site frontage and the minimum site depth provided that the Director of Planning considers the intent of the schedule and all applicable policies and guidelines.

We agree that this provision is essential to being flexible to non-standard lots. However as noted in 4.2.2 we recommend reducing the outright lot depth threshold to 27.43m (90ft). Additionally 4.2.4 gives DOP discretion to realx the maximum site frontage, however we did not see a maximum site frontage under section 4.2.

4.3 Height

4.3.1 The maximum height for an apartment building is five storeys and 20m (55ft.)

The intent of this schedule as we understand it is to support 6-storey buildings. We recommend amending this section to allow for six storeys and 20m (66ft.) Additionally, a large number of the lots in the designated area are located on sloped lots. As height in the COV is measured relative to base surface, this can be problematic for building heights. We recommend introducing a clause similar to 4.2.4, which grants the DOP authority to relax height.

4.3.2 The maximum height for townhouses located at the rear of the site adjacent the lane is 10.7m (35ft.) and a partial 3rd storey, meaning the uppermost level of a building where the floor area, existing, proposed or as may be extended over open-to-below space and having a minimum ceiling height of 1.2m, does not exceed 60% of the storey immediately below.

Our study did not include a scenario involving deeper lots with laneway potential, however this regulation appears to be in keeping with laneway house regulations in similar multifamily zones.

4.3.3 The maximum floor-to-floor height is 3.1 m (10ft).

We believe that a maximum 10' floor-to-floor is appropriate for residential occupancies.

4.3.4 The apartment height may be increased to 22.9m (75ft) and an additional partial storey to enable the provision of a common roof top amenity room and require elevator or stair access provided the amenity room:

i) does not exceed 20% of the roof area,

ii) is stepped back from all building edges

iii) is continuous with common outdoor amenity space at the roof deck, and,

iv) 25% of the roof area is intensive green roof or 50% of the roof area is extensive green roof.

We agree that relaxation of the building height to engender roof top amenity area is a laudable and appropriate goal. We would like to point out however that in our discussions with the building group have indicated that the area permitted under the VBBL 2019 for combustible construction would be limited to 10% of the floor area below, which does not align with the 20% indicated in 4.3.4(i) and will limit the interior area on smaller lots such as our study lots. If non-combustible contraction were employed, this restriction would be eliminated, however the cost of construction would like increase as a result. Furthermore, there appears to be some disagreement within the Building group as the to acceptability of this approach, which might eliminate this possibility for combustible construction. We recommend coordinating with the Building group so that clear direction can be given to applicants and that the policy is aligned with VBBL interpretation by the building group. Finally, in our opinion proposing an intensive green roof system per 4.3.4(iv) would not be financial viable in a wood frame application. We do not recommend removal of this option as there my be viable non-wood framed options proposed.

4.3.5 Roof decks are not permitted at the townhouses.

We agree that restricting roof top amenity areas to the primary building is an appropriate way to address overlook concerns to the neighbours rear yard and the lane.

4.4 Front Yard

4.4.1 A front yard must have a minimum depth of 3.7m (12ft)

We have no concerns with a 12' front yard as we feel that it provides adequate space for decompression of the pedestrian realm relative to the scale of building.

4.4.2 Balconies may project up to 1.8m (6ft) into the required front yard.

We have no concerns with allowing balconies a 1.8m projection into required front yards as this provision is consistent with other extant multifamily zones.

4.4.3 Underground parking structures are not permitted to project into the required front yard.

Limiting the ability of the below grade parking the extend beyond the face of the building will impact parking layout efficiency which in turn affects building costs particularly on smaller lots such as our study lots. We were able to bring forward a scheme that did not require underground parking and we understand staff's desire to provide as much permeable surfaces as possible, however the majority of the 12' front yard will likely be populated with hard surfaces for patios and building entry. We recommend adding a provision for a DOP relaxation on this regulation especially for shallower lots.

4.5 Side Yard

4.5.1 Side yards must have a minimum width of 2.4m (8ft.)

We have no concerns with the proposed side yard setback requirements. We believe that 8ft will provide adequate spatial separation to allow for sufficient unprotected openings, providing access to light and air for the residents as well as a break in massing from the pedestrian experience along the street.

4.5.2 Underground Parking structures are not permitted to project into the required side yard.

Similarly to 4.4.3 we have conerns with not permitting the parking to extend beyond the building face on side yards as it will seriously impact parking efficiency and therefor construction costs on lots narrower than 116'. We recommend allowing for DOP relaxation of this regulation.

4.6 Rear Yard

For sites with a single principle building the rear yard must have a minimum depth as follows:

i) 10.7m (35ft) if surface parking is provided, or
ii) 7.6m (25ft) if underground parking is provided.

Further to our discussions with staff, we believe that restricting the 25ft rear yard to lots providing underground parking is unnecessarily punitive especially on shallower lots such as our study lots. Our understanding is that staff had concerns arising to the relationship between at-grade rear-facing units and surface parking spots. Our study revealed that in order to eliminate underground parking through TDM (excluding the employment of a car-share space) the rear ½ of the ground floor must be employed exclusively for bicycle parking. As such the concern of resident exposure to vehicular noise and exhaust as grade is eliminated. We would recommend an amendment that stipulates "or no rear facing residential units at grade" or similar. Additionally we would suggest that perhaps a percentage based

approach to rear yard setbacks such as employed on many RS zones with minimums and maximums might likewise function better as opposed to a bracket based setback system.

4.6.2 For site including townhomes at the lane, the minimum rear yard to the townhouses is 3.1m (10ft)

Although our study did not include sites that are sufficiently deep to support rear yard townhouses we believe that a 10ft rear yard setback for townhouses is appropriate as it allows sufficient space for at grade pedestrian access off the lane, sufficient space for semi-private outdoor space at grade and is consistent with staff's approach on similar multifamily zones.

4.6.3 Balconies may project up to 1.8m (6ft) into the required rear yard.

We have no objections to this relaxation and find it consistent with other multifamily zones.

4.6.4 Underground parking structures are not permitted to project into the required rear yard

We understand staff's desire to maximize permeable areas onsite and to encourage at grade parking, however we have concerns for irregular lots where at grade parking is not practical or possible. We recommend allowing for DOP relaxation of this regulation based on guidelines.

4.7 Floor Area and Density

4.7.1 The maximum permitted floor area is 2.4 FSR

Based on our study, this appears to be an appropriate density for a 6-storey typology and our study demonstrates that it is achievable even on lots as shallow as 90ft.

4.7.2 Computation of floor area must include:

(a) all floors, including earthen floor, to be measured to the extreme outer limits of the building;

(b) stairways, fire escapes, elevator shafts, and other features which the Director of Planning considers similar, measured by their gross cross-sectional areas and included in the measurements for each floor at which they are located; and

(c) the floor area of bay windows, regardless of seat height, location in building or relationship to yard setbacks, which is greater than the product of the total floor area permitted above the basement multiplied by 0.01.

We have no objection to this section as it is consistent with most multifamily zones.

4.7.3 Computation of floor area must exclude:

(a) open residential balconies, if the total area of these exclusions does not exceed 12% of the permitted floor area;

(b) Where floors are used for:

(i) off-street parking and loading, those floors or portions thereof which are located underground, except that the maximum exclusion for a parking space must not exceed 7.3 m in length

We have no objection to this section as it is consistent with most multifamily zones.

(ii) common bicycle storage rooms located underground, on the ground floor of the apartment building, or within accessory bicycle storage garage in the rear yard, provided the floor area does not exceed the required floor area for bicycle parking spaces and manoeuvring aisles in accordance with the Parking By-law, and

We have no objection to this section as it is consistent with most multifamily zones.

(iii) heating and mechanical equipment, or uses which in the opinion of the Director of Planning, are similar to the foregoing, which are located underground or on the ground floor of the apartment building.

We have no objection to this section as it is consistent with most multifamily zones. We would however recommend not limiting this exclusion to the main floor or underground. As technologies evolve and more integrated or decentralized high efficiency heat pump systems become available we believe that encouraging the use of such systems would help increase the energy efficiency of the built environment. Perhaps making exclusions for mechanical above the ground level a DOP decision with guidelines to explain the intent would be appropriate.

(c) Common amenity rooms to a maximum of 10% of the total permitted floor area located at an additional partial storey as described in section 4.3.4; and

Or study did include roof top amenity area, however based on our experience on other projects, we believe that in order to be consistent with other multifamily zones, all common amenity should be excluded regardless of the location. Staff typically request 400sq.ft of indoor amenity area with attached exterior space be provided.

(d) common storage rooms located underground or the ground floor of the apartment building provided that floor area does not exceed 3.7sq.m per dwelling unit.

Our understanding based on conversations with staff is that this section is likely being amended to include in-suite storage conforming to the bulk storage bulletin. We have designed or study based on this assumption and believe that providing applicants with this flexibility is both advisable and consistent with other zones.

4.8 Horizontal Angle of Daylight (access to daylight)

4.8.1 Each habitable room must have at least one window on an exterior wall of a building.

4.8.2 Each exterior window must be located so that a plane or planes extending from the window and formed by an angle of 50 degrees, or two angles with a sum of 70 degrees, will encounter no obstruction over a distance of 24.0 m.

4.8.3 The plane or planes referred to in section 4.10.2 **(rev 4.8.1)** must be measured horizontally from the centre of the bottom of each window.

4.8.4 An obstruction referred to in section 4.10.2 **(rev 4.8.2)** means:

1. (a) any part of the same building including permitted projections; or
2. (b) the largest building permitted under the zoning on any adjoining site.

4.8.6 A habitable room referred to in section 4.10.1 **(rev 4.8.2)** does not mean:

1. (a) a bathroom; or
2. (b) a kitchen whose floor area is the lesser of:

(i) 10% or less of the total floor area of the dwelling unit, or

(ii) 9.3m2.

We have no objection to this section as it is consistent with most multifamily zones. We did however notice that the DOP authority to relax the HAD requirements that is present in most other zones was removed. We recommend including this authority being afforded to the DOP. Although not essential for new buildings, or experience has shown us that this authority is quite important in renovation situations or in situations where large trees are being preserved. The exclusion of this authority results in the only path for relaxation being through the Board of Variance, which we believe to be unnecessary.

4.16 Building Depth and Width

4.16.1 The maximum *average* building depth is 21.3m (70ft)

We strongly support this approach to building depth, as we believe that it will allow for more variety in building envelope and provide architects with flexibility in building expression while simultaneously achieving staff's goal of limiting overall impact of building bulk and massing.

4.16.2 The maximum building width is 27.4m (90ft.)

Although we have no objections to this regulation on an assumed 99ft lot width, in the study area we observed a large number of lots that were not standard 33ft width. As a result, reaching maximum densities and thus financial viability would be difficult on lots between 216ft and 130ft. If staff wish to allow for midsized developments, we recommend inserting a clause similar to 4.2.4.

4.16.3 Balconies projections up to 1.8m (6ft) are not included in the calculation of *average* building depth.

We have no objections to this clause, however with the exclusion being limited to depth and not width, we believe that this will result in balconies primarily being located on front and rear façades.

4.18 Number of Buildings on site and building spacing

4.18.2 The Director of Planning may permit more than one building on a site to include townhouses at the rear of the site adjacent to the lane on sites with minimum depth of 41.1m (135ft)

We have no objection to this section as it is consistent with most multifamily zones.

4.18.2 For sites which include townhouses at the rear of the site adjacent to the lane, a central courtyard separating the apartment building and townhouses with a minimum depth of 7.3m (24ft) is required.

We have no objection to this section as it is consistent with most multifamily zones.

4.18.3 For sites with apartment buildings located side by side, the width of the spacing between the buildings must not be less than 4.9m (16ft) [*note – this is twice the side yard of 8ft.]*

Although this provision will allow for greater density being buildable onsite, we recommend increasing the building separation on site to 6.1m (20ft) to allow for increased breathing space between buildings of this scale. Alternatively, staff could consider utilizing 135d containing angles such as are employed in the RM-4 and similar zones to ensure adequate light penetration into the site. This in concert with our suggestions on 4.16.2 we believe would make for a more inviting pedestrian realm between buildings.

Summary

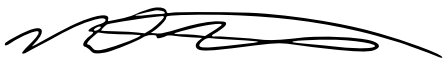
We are excited with staff's commitment to addressing the housing crisis as well as heeding professionals such as ourselves' comments regarding rezoning processing times on applications. We agree with staff's approach to pre-zoning areas to engender rental development. We believe that with some minor adjustments, this could be a quite successful initiative.

Please feel free to contact me if you have any questions concerning this report. We look forward to hearing from you.

Thank you again for utilizing our firm for this work.

Sincerely,

STUART HOWARD ARCHITECTS INC.



W. Neil Robertson Architect AIBC, MRAIC, AIA
PRINCIPAL