



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

Planning, Urban Design and Sustainability Department

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RM-10 AND RM-10N GUIDELINES

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Contents

	Page
1	Application and Intent 1
1.1	Intent 1
1.2	Application 1
2	General Design Considerations 1
2.1	Neighbourhood/Streetscape Character 1
2.2	Development Scenarios and Building Typologies 1
2.3	Orientation 4
2.5	Topography 5
2.6	Light and Ventilation 5
2.8	Noise 6
2.9	Privacy 7
2.11	Access and Circulation 7
2.12	Internal Storage 8
3	Uses 8
3.1	Multiple Dwelling 8
3.2	Lock-off Units 8
3.3	Commercial Uses 9
4	Guidelines Pertaining to Regulations of the Zoning and Development or Parking By-laws 9
4.2	Frontage 9
4.3	Height 9
4.4	Front Yard 10
4.5	Side Yard 10
4.6	Rear Yard 11
4.7	Floor Space Ratio (FSR) 12
4.8	Site Coverage and Impermeability 12
4.9	Off-Street Parking, Loading and Bicycle Storage 12
4.10	Horizontal Angle of Daylight 12
4.16	Building Depth 13
4.19	Number of Buildings on Site 13
5	Architectural Components 14
5.1	Roof and Massing 14
5.3	Entrances, Stairs and Porches 15
5.4	Windows and Skylights 16
5.5	Balconies and Decks 16
5.6	Exterior Walls and Finishing 16
7	Open Space 17
7.1	Public Open Space 17
7.2	Semi-Private Open Space 18
7.3	Private Open Space 19

8	Landscaping	20
9	Garbage and Recycling	21

These guidelines are organized under standard headings. As a consequence, there are gaps in the numbering sequence where no guidelines apply.

1 Application and Intent

These guidelines are to be used in conjunction with the RM-10 and RM-10N Districts Schedule of the **Zoning and Development By-law**.

In this zone, a multiple dwelling will generally take the form of a 6-storey apartment building. On deeper sites a second, smaller building may be proposed at the rear of the site.

1.1 Intent

The intent of these guidelines is to:

- (a) Encourage the development of medium-density multiple dwellings, that include a range of unit sizes, many of which are suitably sized for families (i.e. include two- and three-bedroom units);
- (b) Ensure the design of common outdoor space that accommodates children's play;
- (c) Ensure a high standard of livability for all new dwelling units, including lock-off units. Emphasis is placed on natural light and ventilation, as well as usable private outdoor space for each unit. Ground-oriented access is encouraged where practical;
- (d) Encourage activation of residential street life;
- (e) Encourage an active lane interface, with lane-facing residential units on suitable sites or visual connections to landscaped open space.
- (f) Ensure durable and sustainable design, while allowing architectural diversity.

1.2 Application

These guidelines apply to conditional multiple dwellings with 4 or more units.

For developments proposing a multiple dwelling with 3 units ("triplex") under the outright provision, these guidelines do not apply. New one-family dwellings, one-family dwellings with secondary suite, laneway houses and two-family dwellings are not permitted in this zone. For renovations to these existing buildings, refer to the appropriate zones noted in the RM-10 and RM-10N Districts Schedule.

2 General Design Considerations

2.1 Neighbourhood/Streetscape Character

New multiple dwellings will be significantly larger than most existing buildings, but should reflect desirable characteristics of ground-oriented housing that are practical for a multiple dwelling. The intent is to create buildings that foster neighbourliness and social connection. New buildings should incorporate:

- (a) A clear entry identity from the street including, for ground level units, individual front doors, porches and patios;
- (b) Rich landscape character by providing varied plants of substantial size throughout the site;
- (c) Vehicular access at the rear of the site, and parking below grade;
- (d) Visually open semi-private spaces adjacent to the lane or street at the rear of the site.

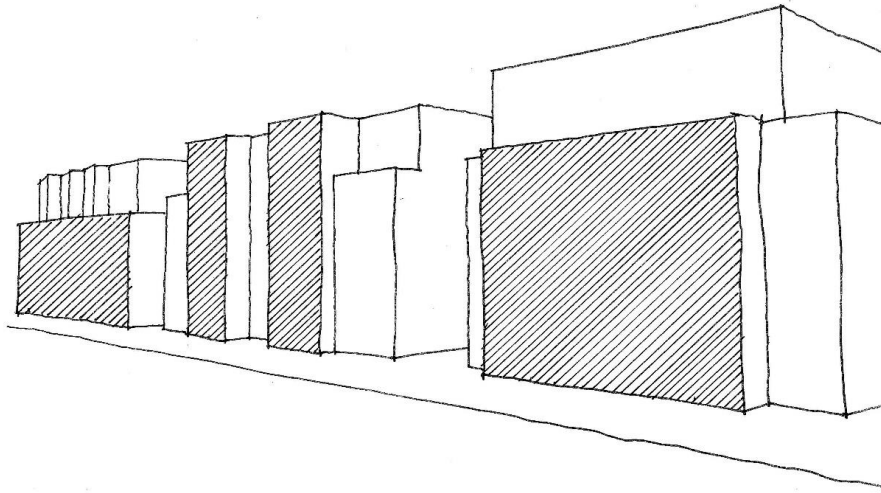
As new development occurs, there will be a change in the character of the street. New buildings are encouraged to have varied architectural character, however they should, over time, maintain a consistent primary building face, to create a consistency to the streetscape.

2.2 Development Scenarios and Building Typologies

2.2.1 Development Scenarios

The Districts Schedule provide some flexibility in multiple dwelling form and siting depending on lot depth. Most developments will require lot consolidation to meet a minimum site width. The option for individual lots, is a triplex (multiple dwelling consisting of 3 dwelling units, not including lock-off units).

Figure 1: Street wall



New multiple dwelling development consisting of 4 or more units, not including lock-off units, can be considered on sites less than 30 m in width only where they are Locked-in and there is no opportunity to assemble lots (i.e. all private properties directly adjacent have already been developed as multiple dwellings).

Shallow and standard depth lots (less than 130ft) can accommodate one principle building. Standard depth lots are suitable for alphabet building forms that best utilize the site. A second, smaller principle building is possible at the rear of deep lots (130ft and deeper). Development scenarios are described in more detail below, in Building Typologies.

All buildings may incorporate a limited amount of commercial use, on the ground floor. See section 3.0 Uses.

2.2.2 Building Typologies

(a) Objectives

All multiple dwellings should provide:

- (i) ground-oriented units with doors at the street;
- (ii) a range of unit types, including a minimum number of 2- and 3-bedroom units;
- (iii) private outdoor space for all units (exception may be made for studio units where generous common outdoor space is provided);
- (iv) unit layouts that maximize natural lighting and provide cross-ventilation to units, to the greatest extent possible;
- (v) a minimum width of major living spaces (e.g. living room) of any dwelling unit with 2 or more bedrooms, not less than 4.2 m (14 ft.);
- (v) common outdoor space in conjunction with an indoor amenity; and
- (vi) variation in form and expression, particularly at the upper two levels.

Different lot configurations will enable different building forms. Typical arrangements are described below, however variations are possible. Proposals should be reviewed against the objectives in (a).

(b) 6 Storey Apartment: Standard form

On shallow sites (110 ft and less) buildings will likely be configured around a double-loaded corridor. Where possible, designs that vary from the double-loaded corridor typology will be considered, to enable increased daylight and cross ventilation to units.

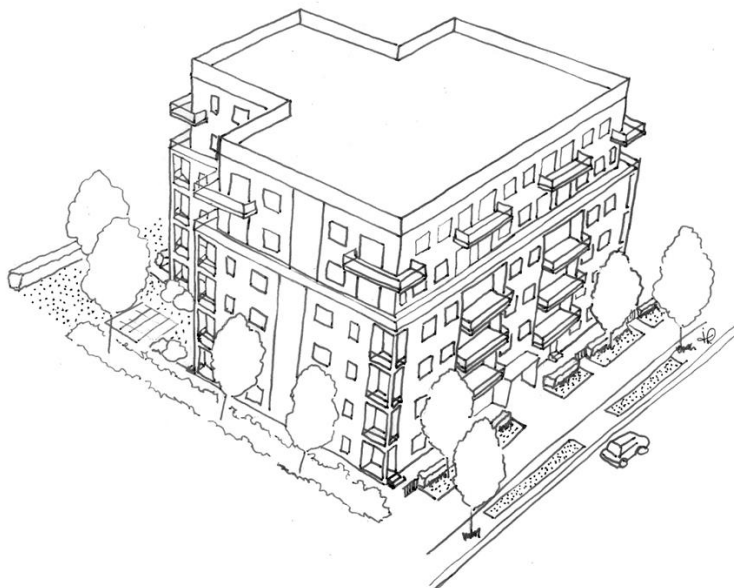
Figure 2: 6-Storey Apartment



(c) 6-Storey Apartment: Alphabet form

On a standard depth sites (110ft to 130ft) a T-form building may be proposed. This building type is most efficient on a site with a minimum frontage of 132 ft. The T-form building has a street expression similar to the standard form 6-storey apartment, but has a “wing” extending toward the rear of the site from the centre of the building. This building type presents a strong primary building face at the street, and allows two generous courtyards toward the rear of the building.

Figure 3: 6 Storey Apartment – “T” Form



On corner sites, where the rear of the subject site abuts the side yards of sites in lower-density zones, the T-form may not be appropriate. In these situations, the building wing may extend along the flanking street(s).

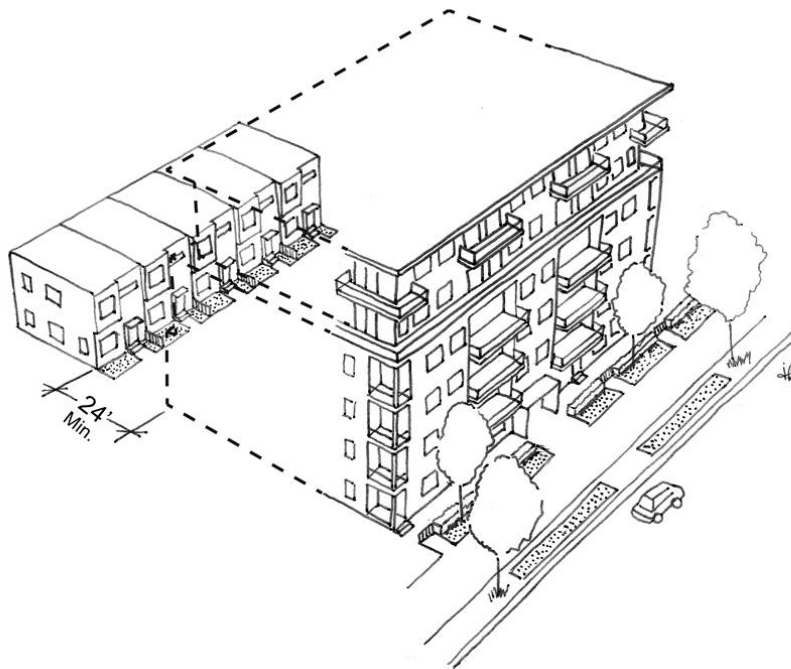
In both forms, the building wing should reduce in height adjacent to lower density sites.

(d) Courtyard building at lane or street at rear:

Deeper sites (130ft or deeper) may accommodate a second building at the lane, (or street, if a double-fronting site) in conjunction with a 6-storey apartment. The second building could be a rowhouse, or stacked townhouse.

- (i) A rowhouse is comprised of side-by-side units. Units are not stacked on top of each other.
- (ii) A stacked townhouse is comprised of units that are stacked on top of each other. (e.g. two-level units stacked on top of one-level units). Other layout solutions may be possible.
- (iii) Dwelling units will include entries that are directly accessible from grade, facing the courtyard or street. Access to and identity of unit entries on the courtyard should be made clear and welcoming from the street.
- (iv) All dwelling units will have private outdoor space located at grade or on a roof-top.

Figure 4: 6 Storey Apartment with townhouse at lane



2.3 Orientation

New buildings should present an active, social edge to streets and lanes where feasible. Direct street access to ground level units should be provided. Private outdoor spaces for ground-level dwelling units may be located in front yards, and rear yard where there is a building at the rear of the site. An apartment building with a single entry to the building will be considered, but only when site conditions prevent individual entries.

- (a) Developments should orient the main entrances to the street, and entries should be clearly visible from the street and the sidewalk. Entries should be made welcoming with front entry porches and steps, landscaped patios, lighting and street-facing living room windows.

- (b) On corner sites, building entrances should be located facing both streets. The primary face should be oriented to the primary (arterial) street, or, if no primary street is apparent, that with the pattern of building frontages. All elevations which face a street should be fully designed and detailed as a “front”.
- (c) Units in a building located at the rear of the site, where the site is not double-fronting, should have front entrances oriented to the internal courtyard. A generous and clearly marked passage from the street to the courtyard should be provided (See 2.11 Access and Circulation). Discrete lighting of paths should be provided.
- (d) Commercial and live-work units should only be located along a street and be distinguished from the residential units.

2.5 Topography

Many sites in these districts are sloping. Care must be taken when siting the building to ensure that units have adequate access to daylight and that large blank walls are not created adjacent to the front yard. The main building (entry) level may need to be stepped to avoid units that are too far below grade, or excessively (greater than 1.5m) above grade.

The Districts Schedule offers a height relaxation for sloping sites that may be requested in exceptional situations where other design measures do not resolve the height overage. (See 4.3 Height).

2.6 Light and Ventilation

Access to natural light and ventilation affects the livability of dwelling units. A focussed design effort is required to ensure these qualities in multiple dwellings.

2.6.1 Access to Natural Light

- (a) Daylight for interior and exterior spaces for all dwelling units should be maximized.
- (b) For all dwelling units (including lock-offs), all habitable rooms (not including bathrooms and kitchens) must have at least one window on an exterior wall
- (c) Ceiling heights greater than 2.4 m (8 ft.) are supported, and are encouraged for floors at the ground level.
- (d) Dwelling units that do not have two exterior walls should not be any deeper than 9.1 m (30 ft) to ensure adequate natural light to the primary dwelling spaces.
- (e) Some shadowing on adjacent sites is expected but should be minimized.

2.6.2 Natural Ventilation

Natural ventilation allows the exchange of stale indoor air with fresh outdoor air and has an impact on the heating and cooling of spaces that is not energy intensive. Natural ventilation is affected by several factors, such as the size, type and placement of windows, ceiling heights, and prevailing winds. Natural ventilation is greatly increased when two windows on two different exposures are opened within a dwelling unit.

- (a) Building design should maximize units with two major exposures that face opposite directions or at right angles to each other where the building typology allows;
- (b) The provision of natural ventilation should work in conjunction with Horizontal Angle of Daylight regulations to ensure that each habitable room is equipped with an openable window;
- (c) Where a dwelling unit is located directly beneath the roof of a building, the stack effect of internalized air may be exploited by placing openable skylights in the roof;
- (d) Employing window types that facilitate air exchange are encouraged. Windows with openers at both a high and low level can help create air flow. Casement windows, when oriented with prevailing winds, can facilitate air flow from outside into interior spaces (scoop effect).

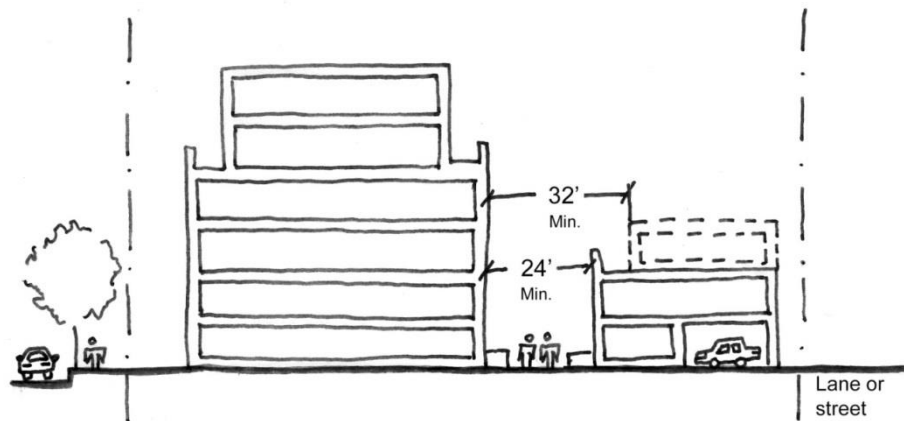
2.6.3 Light and Ventilation for Courtyard Buildings:

Courtyard building scenarios include a central courtyard, or in alphabet buildings, courtyards at the side yards. Both play a role in providing light and ventilation to adjacent units.

- (a) Courtyards between buildings at the front and rear of the site should be an absolute minimum of 7.3 m (24 ft.) clear width on the first and second levels, and a minimum of 9.8 m (32 ft.) on levels above to improve light access.(Figure 5). If there are external stairs to access stacked units, the 24 ft dimension should be increased to 30 ft. Courtyards should be increased beyond the minimum to accommodate outdoor common areas;
- (b) Courtyards for T-form buildings should each be a minimum of 12m (40 ft) wide, measured from the side property line (See 4.5 Side Yard);
- (c) There are no restrictions on what rooms can face the courtyard, but privacy and light access should be considered;
- (d) Projections into the clear courtyard width should be absolutely minimized to ensure that natural light is not restricted. Regular balcony or bay projections should be outside of the minimum dimension.

Figure 5. Courtyard

Minimum 24' width on first and second levels, increase to 32' on upper levels



2.8 Noise

Noise from both internal and external sources can disrupt the comfort of dwelling environments. Measures should be undertaken to ensure that noise is minimized, through design and construction methods.

2.8.1 External noise sources

Vehicular traffic along arterial roads is heavy and the noise impacts adjacent sites. Sites adjacent to rapid transit lines also experience noise disruption. New development should minimize the noise impacts to their habitable areas through measures which may include:

- (a) Sensitive site and building planning where flexibility exists (e.g. setback, stairwell location, single loaded corridor, locate living rooms and bedrooms away from noise sources).
- (b) Building construction (e.g. masonry construction, triple glazing), noise buffers (e.g. glazed balconies and landscaping) and alternate ventilation system (e.g. baffled wall vents). Note that while “enclosed” balconies may be permitted as a noise mitigation measure, they are not excluded from floor area.
- (c) Details reflecting the method of noise mitigation proposed for the exterior walls should be included with the drawing set as required in section 4.15 of the RM-10N District Schedule.

Noise mitigation measures should not detract from the recommendations in other sections of these guidelines such as Streetscape Character and Orientation and Access.

2.8.1 Internal noise sources

The intent of this section is to guarantee an acceptable level of acoustic separation between dwelling units within a development.

- (a) All shared walls between separate dwelling units should strive to achieve an STC rating of 65. This will most likely require a wall thickness of 25 cm (10 in.).
- (b) The overall room layouts and their relationship to adjacent units should be considered. Noise-sensitive rooms, such as bedrooms, should be located adjacent to noise-sensitive rooms in the neighbouring unit.
- (c) Locating building elements such as stairs and closets to act as noise buffers against shared walls is also an effective design solution to minimize noise impact from neighbouring units.
- (d) For structural floors between units, a high acoustical rating is recommended. Furthermore, other measures designed to dampen the transfer of vibrations should also be provided.

2.9 Privacy

While overlook of private open space and some lines of sight into windows may be unavoidable, reasonable effort should be taken to ensure that privacy is not unduly compromised.

- (a) The location and orientation of windows, decks and balconies in new development should be carefully considered to reduce looking into close-by windows of existing adjacent development;
- (b) Visual privacy for units, balconies and private open space should be enhanced as much as possible through unit planning, landscape screening, and other elements, such as solid or translucent railings.

2.11 Access and Circulation

- (a) As many units as possible should have pedestrian access to front doors from the street.
- (b) Corridors in apartment buildings should be limited in length to assist with wayfinding and a sense of place. Corridors should not exceed 22.9m in any one direction from the main entry point. To assist with orientation and improve atmosphere, introduce natural light and ventilation into corridors, whenever possible.
- (c) For courtyard development, a pedestrian access with a minimum width of 3.6 m (12 ft.) should be provided from the street to the building at the rear of the site, to provide fire-righting minimums and landscape buffer space. This requires a modest increase to the standard side yard. No part of the building, aside from eaves should continuously overhang this set back. Access to entry doors in the rear building should be from the common courtyard.
For double-fronting developments the increased side yard is not necessary, as primary access to the rear building can be from the second street. However, a side yard less than 3.0m (10 ft) should only be considered on one side of the principle building, to allow for a comfortable pathway to the courtyard on the other side.
- (d) For proposals with buildings containing dwelling units at the rear of the site, applicants should review specific siting conditions with Building By-law and Fire Prevention staff. Additionally, in order to provide fire access to buildings at the rear of sites:
 - (i) Pedestrian access route(s) to buildings at the rear must maintain an absolute minimum building separation of 2.4 m (8 ft.) and clear path of 2.0 m (6.5 ft.); and
 - (ii) On lots without lanes, additional requirements for firefighter access, or upgrades to fire protection standards may affect the placement, separation, or construction of buildings.
- (e) Hard surface circulation should be minimized to provide only what is necessary to access dwelling units, common outdoor space or services located at the rear of the site.
- (f) Vehicular access should be from the lane, where one exists.
 - (i) Sites must be assembled in such a way that vehicular access from a lane is possible.

- (ii) On sites without lane access, and with no means to acquire lane access through consolidation, and on double-fronting sites access may be from the street and the curb cut should be minimized.
- (d) Vehicle parking will be located below grade.
 - (i) Stair exits from, and access to the below grade parking should not be located in yards, as they impede at-grade site circulation, and impact privacy. Ideally, these stairs should be located in, or incorporated in to the building forms. Their location and access points should be reviewed with regard to the principles of CPTED (crime prevention through environmental design).
 - (ii) Vehicle ramps should provide the minimum buffer from a property line of 1m, as required by the Parking Bylaw.

2.12 Internal Storage

The internal design of dwelling units should consider the storage needs of families. In-suite storage areas should be provided within individual dwelling units (preferred) and/or within residential storage areas located in underground parking structures. A floor space exclusion is provided for bulk residential storage space. Refer to the administration bulletin *Bulk Storage and In-Suite Storage – Multiple Family Residential Developments*.

3 Uses

3.1 Multiple Dwelling

Multiple dwellings with four or more units are required to include a minimum number of 2- and 3-bedroom units. This is to ensure that there continues to be a good supply of housing suitable for families, as an alternative to single-family houses. The required distribution of 35 percent reflects the historic percentage of family households in the city. The requirement for 10 percent 3-bedroom units help augment the supply of 2-bedroom units typically provided in apartment buildings.

To support social connections and enable outdoor play for children, a minimum amount of outdoor space is required for multiple dwellings. On most sites an area of 85m² should be provided. A portion of the open space should be programmable as children’s play area. The *High Density Housing for Families with Children Guidelines* should be consulted to direct the size and design of these spaces.

See also sections 7 Open Space and 8 Landscaping.

On some sites, such as those with a shallow depth (110 ft and less), it may not be possible to accommodate the full amount of open space at grade. The at-grade area may need to be reduced to accommodate services. Every effort should be made to maximize usable at-grade open space. To accomplish this, the permitted building depth in the district schedule may not be achievable across the building width, and private outdoor space for at-grade units may need to be inset. As an alternative, some, or all of the common open space may be provided on the building roof.

In all cases, the provision of common open space takes preference over the provision of private open space at grade.

3.2 Lock-off Units

- (a) The Districts Schedule permits a “Principal Dwelling with a Lock-off Unit” in multiple dwellings. A lock-off unit is a portion of the main dwelling unit that can be locked off to be used separately or rented out. The intent of allowing lock-off units in multiple dwellings is to increase the rental stock in the neighbourhood and to provide the option of having a mortgage helper for the owner of the unit (similar to the option of having a secondary suite in one- and two-family dwellings).
- (b) Principle dwelling units that provide a lock-off unit may include the lock-off in the bedroom count. That is to say that a 2-bedroom unit with a studio lock-off can be considered a 3-bedroom unit in this district.

- (c) A lock-off unit is an optional and flexible use, and therefore the lock-off unit has to be equipped with an internal access to the main unit.
- (d) A lock-off unit cannot be strata-titled. This is secured by covenant.
- (e) While lock-off units do not require additional vehicle parking, they do need separate bicycle parking .
- (f) In order to ensure safety and acceptable standards of liveability, lock-off units must comply with the ***Lock-off Unit Guidelines***.
- (g) The maximum number of lock-off units in developments is one lock-off for every three units. This may be increased modestly if there is no negative impacts to the livability of the building or the area.

3.3 Commercial Uses

This zone permits retail, cultural and live-work uses in conjunction with a multiple dwelling. These uses may be permitted on the ground floor of developments on sites located on arterials. These uses may be considered in locations off-arterials, however the impact on adjacent residential uses must be considered.

- (a) Uses that serve the surrounding residential neighbourhoods are encouraged, such as a small grocery store or café.
- (b) Commercial and live-work uses, which could expect an increased number of visitors, should not be accessed from internal courtyards.
- (c) Requirements of the Vancouver Building By-law should be reviewed. Parking and loading for these non-residential uses should meet the requirements of the Parking Bylaw, and should be separated from residential spaces.
- (d) Inclusion of commercial uses for a significant portion of the ground floor may require relaxation of the requirement to locate 50% of 2-and 3- bedroom units on lower 3 floors.

For further direction on live-work uses, see ***Live-Work Use Guidelines***.

4 Guidelines Pertaining to Regulations of the Zoning and Development or Parking By-laws

4.2 Frontage

- (a) The minimum frontage in the Districts Schedule for a multiple dwelling with four or more units (not including lock-off units) is 30 m (99 ft.). This is a practical minimum for apartment buildings to accommodate efficient underground parking. The T-form buildings perform better on a site with a minimum frontage of 132 ft.
- (b) The Districts Schedule prescribes a maximum frontage width to encourage a variety of smaller developments. The Director of Planning can relax this maximum only to ensure that individual lots are not “locked in” or “orphaned” with no opportunity to consolidate and develop with other adjacent lots.

Where the maximum frontage is relaxed, an exceptional effort should be made to avoid a monotonous street frontage, such as a deep courtyard entry. Assemblies that are wider than 50 m (164 ft.) should create the appearance of two buildings with the use of a deep courtyard, with minimum dimensions of 3.6 m (12 ft.) by 7.3 m (24 ft.). Consolidations that exceed 70m (230 ft) should be treated as separate developments with multiple buildings. The architectural expression of the buildings on site should vary.

- (c) Section 5.0 of the Districts Schedule provides options to individual lots that are “Locked in” or “orphaned” with no opportunity to consolidate and develop with adjacent lots.

4.3 Height

The permitted height for multiple dwellings is significantly higher than the existing single-family dwellings. It is challenging to create any meaningful modifications to be compatible with adjacent existing buildings in the multiple dwelling zone as the area transitions. The Districts Schedule describes decreased heights and increased setbacks for sites immediately adjacent to single-family zones.

- (a) The Districts Schedule permit a generous height. For sloping sites the lower storey may be recessed into grade up to 0.9 m (3ft.) The entry level floor may need to be stepped to avoid units that are too far below grade, or excessively above grade(greater than 1.5m). Upper floors may need to be stepped back to remain in the height envelope.
- (b) In exceptional conditions where the building cannot reasonably be accommodated in the height envelope the Director of Planning may permit an increase in building height to 21.3 m (70 ft.) for limited portions of buildings adjacent to the fronting street. Any height increase should achieve good livability or functionality for units located at the lowest level.
- (c) Commercial uses on the ground level should have a minimum ceiling height of 3.6m (12 ft). The discretionary height increase in the Districts Schedule may be used to account for this height.
- (d) For the portion of a T-form building “wing” toward the middle of the site, the height should be reduced to 4 storeys within approximately 10.7 m (35 ft.)
- (e) of the rear property line.
- (f) For buildings in the rear of the site, the maximum height of 10.7 m (35 ft.) and 3 storeys should be maintained.
- (g) For buildings located in the rear of the site and:
 - (i) adjacent to a zone or policy area where permitted heights are 12.2 m (40 ft.) or higher, or;
 - (ii) facing a street (double-fronting),

the Director of Planning may permit an increase in building height to 12.2 m (40 ft.) and 4 storeys.

4.4 Front Yard

The front yards of existing development vary among properties, but are often 7.3 m (24 ft.). New development will have shallower front yards. To better assist with this transition the sidewalls of these new buildings should be treated with materials and fenestration that avoid the appearance of a “blank wall”. Inset balconies should be located at corners to soften the transition between properties.

The Districts Schedule allows a relatively shallow front yard of 3.7 m (12 ft.):

- (a) to enable apartments on lots with a shallow depth;
- (b) to enable courtyard developments with improved liveability; or,
- (c) to enable outdoor common space at the rear of the site.

Developments that are facing the SkyTrain guideway should increase the minimum front yard setback to achieve a better buffer and increased planting opportunity.

Yards are measured from the ultimate property line, i.e after any dedication. The ultimate streetscape should have consistently set back primary building faces (See Figure 1).

4.5 Side Yard

A side yard setback of 3.0m (10 ft) is required for multiple dwelling developments.

- (a) The Director of Planning may allow a reduction in the side yard for buildings at the front of the site to 2.1 m (7 ft.) over approximately 50 percent of the building depth to improve livability and access to light and air to dwelling units.

On sites with a depth of 36.5m (120 ft) or more, where a T-form building is proposed, the side yard reduction to 7ft will apply to the portion of the building closest to the street (the top of the “T”). Wider side yards toward the rear of the site will form courtyards. These courtyards should have a minimum width of 12.2m (40ft.) for the remainder of the site depth. On sites with a width less than 130ft, this courtyard may be reduced in width to 7.3m (24 ft.).

This reduction should not be permitted for sites which share a property line with a site that is in a RS or RT zone and are developed with a residential use. Nor should it be provided on both sides of an apartment building on a central courtyard development.

- (b) Generally, exterior side yards on corner sites should be treated as front yards, and should generally have a setback of 3.7m (12ft).
- (c) The Director of Planning may allow a reduction in the side yard setback for multiple dwellings at the rear of the site as part of a courtyard development:
 - (i) for buildings not exceeding 3 storeys in height and not deeper than approximately 10.7 (35ft) in building depth (eg. Townhouse units), to 1.5 m (5 ft.);
 - (ii) for buildings higher than 3 storeys, or with a building depth exceeding 9.1m (30 ft) (e.g. back-to-back units) to 2.1m (7 ft.)

Pedestrian access to the lane or street (if double-fronting) as well as a landscape buffer must always be provided from the courtyard. The maximum side yard relaxations may not be possible.

- (d) The Districts Schedule prescribes a larger side yard setback for the fourth storey and above for sites adjacent to existing zones that will remain at a lower scale. This setback is intended to reduce the impact of scale and shadow on the lower-scale residential development. In most cases it should not be reduced.

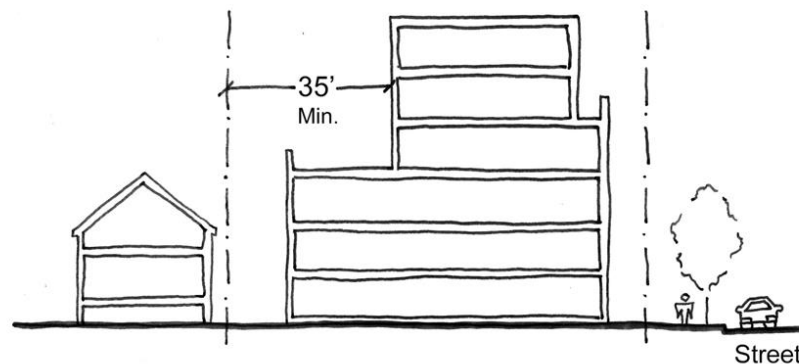
For sites adjacent to a mid-block pedestrian connection the permitted side yard will be increased to improve privacy and public access.

4.6 Rear Yard

The Districts Schedule allow a relatively shallow rear yard to enable apartments on shallow lots. A greater set back is required above the 4th floor to assist with compatibility with lower density development across the lane, and shadow reduction.

For sites abutting the side yard of a site in a zone that will remain at a lower scale (e.g. RS or RT), the Districts Schedule prescribes a larger rear yard setback for the fourth storey and above. The rear yard and setback is intended to reduce the impact of scale and shadow on the lower-scale residential development and should generally not be reduced. The maximum FSR may not be achievable on these sites.

Figure 6. Lower-scale zone adjacency



The Director of Planning may allow a reduction in the rear yard setback to 1.8m:

- (a) for the rear building of a courtyard development; and
- (b) for building “wings” adjacent to a flanking street;

that are no higher than 10.7 m (35 ft.) and 3 storeys.

Rear yards of sites that are double-fronting should be treated as a front yard, respond to existing context and generally have a setback no less than 3.7m (12ft).

4.7 Floor Space Ratio (FSR)

These Districts Schedules offer a range of floor space ratios, based on site size and proportion. Shallower sites are more efficient for double-loaded apartment buildings, which should generally not exceed 70ft in depth, and will yield a higher FSR. Depending on the site, form of development chosen, and site features, such as trees, it may not be possible to achieve the highest FSR.

This zone offers the purchase of an amenity share or an affordable housing share to increase FSR within conditional limits. For more information, refer to the information bulletin *Joyce-Collingwood Station Precinct – Density Bonus Zoning & Public Benefits*.

4.8 Site Coverage and Impermeability

Generally, site coverage should not be relaxed, as provision of open space and landscaped surfaces are encouraged. However, for apartment buildings otherwise achieving the intent of the guidelines, the Director of Planning may increase the area of site coverage to 65 per cent of the site area.

For developments providing underground parking, the Director of Planning may increase the area of impermeable materials of the site, provided landscaped surfaces are maximized and impermeable surfaces minimized to what is absolutely necessary for site function. Provision of green roof infrastructure to aid with the on-site retention of rainwater will also be considered.

4.9 Off-Street Parking, Loading and Bicycle Storage

4.9.1 Parking and Loading

Parking, and access to underground parking, should be located at the rear of the site, from the lane. For all multiple dwellings, underground parking is permitted and will receive a standard exclusion for the purpose of FSR calculations (see Districts Schedule).

For “T”-form buildings the parking access should enter into the portion of the building closest to the rear yard, rather than through the large side yards.

Parking structures should be absolutely minimized, and held back from site edges to allow for tree planting. Where required parking numbers makes this unfeasible, an angled slab edge can provide additional space for landscape.

Some parking or loading spaces may be required at-grade at the lane where there is no street parking available due to transit priority.

- (a) Open parking spaces should be treated with pavers that are permeable to reduce stormwater sewer loads. However, since most permeable pavers lose their permeability over time, parking areas with permeable pavers are counted as impermeable surface;
- (b) These spaces need to have a barrier-free path to the building elevator;
- (c) They should be located to limit impact on outdoor open space.

4.9.2 Bicycle Storage

- (a) Bicycle parking should be accommodated in the underground parking structure;
- (b) Creative bike parking solutions can be considered in above grade locations. However they should not detract or compete with at-grade open space.

4.10 Horizontal Angle of Daylight

The Horizontal Angle of Daylight regulation helps to ensure the liveability within a dwelling unit by requiring a window for each room (except bathrooms and small kitchens). Priority is

placed on the major living spaces in which longer periods of time are spent, such as living rooms.

- (a) The relaxation of horizontal angle of daylight requirements provided for in the RM-10 and RM-10N Districts Schedule should be used to achieve a minimum standard of natural light access for rooms that are not primary living spaces, such as bedrooms, dens and dining rooms.
- (b) The main living space for each dwelling unit should face a street, rear yard, or courtyard. Relaxation of the horizontal angle of daylight for primary living spaces (i.e. living rooms) should not reduce the requirement to less than 15.2 m (50 ft.) of uninterrupted sightlines, or 7.3 m (24 ft.) in courtyard developments;
- (c) To ensure the liveability of rooms at the ground level, the floor should not be more than 0.9 m (3 ft.) below the adjacent exterior grade. A minimum ceiling height of 2.7 m (9 ft.) should be provided.
- (d) In the case of lock-off units, the required distance for an unobstructed view is detailed in the *Lock-Off Unit Guidelines*.

4.16 Building Depth

A maximum building depth of 21.3m (70 ft) is specified for multiple dwellings with 4 or more units. This is intended to ensure good daylight access into units with only one exterior wall. This dimension should generally not be increased for mid-block Standard Form (double-loaded corridor) buildings.

For alphabet-form buildings, or for corner sites that propose a wing along the flanking street, the building depth may be increased. To allow the increase the Director of Planning should consider the resulting livability of units, including access to light and ventilation.

T-form apartment buildings aim to provide relatively shallow building depths across each “leg” of the “T”. It is expected that the depth (or width) across each “leg” is 15m-20m (50 ft-65 ft.). The shallow building depth allows a high degree of natural light into the units. The “T” form allows standard depth sites to be used efficiently to enable more dwelling units.

As new buildings will project further into the site, designs should consider the impacts on privacy and shadowing to neighbours. Design revisions that still achieve the building allowance for the subject site, and minimize overlook and shadowing to neighbour sites should be explored, such as creating larger side yards in the rear portion of the site, and setting back upper storeys.

4.19 Number of Buildings on Site

The Director of Planning may permit more than one building on a site to allow an optimized use of the site to provide high-quality housing, improved access to natural light and fit with the longterm context.

- (a) On sites that are deeper than approximately 130ft to enable a courtyard development with a lower building at the rear of the site.

Buildings at the lane should generally be limited to 24 m (79 ft.) in width. Therefore, on wider sites, more than one building can be permitted. Limiting the building width improves compatibility with lower-scale buildings across the lane, and allows for better access to natural light.

- (b) On sites that has been granted discretion to exceed the maximum frontage width, and are wider than 70m (230 ft). More than one apartment building should be constructed along the street to minimize building width.

In all cases, allowing more than one building on a site should provide a superior site planning solution, maintain common outdoor space, and assist with achieving natural light and ventilation as discussed in Section 2.

5 Architectural Components

New development will differ significantly in scale from existing buildings in most areas. Development should not seek to emulate “house-like” architectural styles, but rather compose a design appropriate to the larger scale of the building. In spite of the generally larger scale, the building form should respond to particular site conditions, e.g. corner locations, adjacent heritage buildings, and create an appropriate transition.

High- quality design is expected of all developments. All walls that are visible from the street should include a cohesive and well-scaled composition of cladding materials, trim, fenestration and relief elements -such as bays, recesses, porches, balconies which provide shadow play.

5.1 Roof and Massing

5.1.1 Roofs

- (a) New development is not expected to emulate the building style of existing lower-scale development. However, roof forms on new development should have a clear, simple concept, and provide variety and texture (see Figure 11).

Figure 7: Varied rooflines on multiple dwellings



- (b) Roof top terraces should be set back from the building edge to minimize the view into adjacent yards.
- (c) Elevator penthouses, mechanical rooms, equipment and vents should be integrated with the architectural treatment of the roof, and located to minimize their visibility.
- (d) Green roofs are encouraged for all buildings, whether accessible or passive.

5.1.2 Building Massing

A variety of architectural expression is encouraged. To maintain a cohesive street expression consistent front yard should be applied.

(a) Massing of Apartment Buildings

For apartments, a variety of architectural expression is encouraged. To maintain a cohesive streetscape, the primary building face should be aligned with neighbouring apartment developments. As development occurs, where necessary, step the building face to create a transition to existing buildings and a unified and consistent character for the street.

The upper storeys should have a reduced and/or varied massing to assist with visual interest, and architectural variety. This can be achieved in several ways such as setting back or angling the walls of the upper levels from those below, creating a “crenelated” solid and void (inset balcony) rhythm. Alternately, the full building could have

intermittent increased setbacks and/or vertical articulation. In all cases, the architectural expression should relate with the long-term streetscape,

Buildings exceeding 140ft in width, should create the appearance of two buildings with the use of a deep courtyard, with minimum dimensions of 3.6 m (12 ft.) by 7.3 m (24 ft.).

Buildings on arterials need not provide deep street-facing courtyards as they can amplify street noise, but can provide these at the rear or sides of the building. Vertical articulation and modulation can be created through other architectural devices on the front of the building.

(d) **Massing of Buildings at the Rear of the site**

It is expected that buildings at the rear of the site, as secondary principle buildings, will be rowhouses, or stacked townhouses. Other building types can be considered, however they should have a similar scale and individual entries, like townhouses. In most cases the rear of the site is adjacent to a lane, however, in some instances, double-fronting sites have another street at the rear.

Individual buildings should not exceed 24 m (79 ft.) in width (approximately 5 to 6 rowhouses). Architectural articulation can be used to create visual interest the massing of rowhouse developments and to articulate the boundaries of individual townhouse units.

Buildings at the rear of the site should be designed to reduce apparent massing adjacent to the lane and minimize shadowing impacts on adjacent residential properties. Consideration should be given to stepping back the upper floor along the lane to reduce the massing along this exposure, or providing a deeper than permitted (1.8m) rear yard. Along streets at the rear of the site, buildings should be massed to relate to existing multiple dwelling developments along the street.

5.3 Entrances, Stairs and Porches

Entrances are a place of interest and interaction on the street or in the courtyard. They provide opportunities for individual expression and identity. Provision of individual entries to all ground level dwellings should be provided.

5.3.1 Entrances

- (a) Each street-fronting principal dwelling unit should have a clearly expressed main entrance area facing the street, including a door, porch or canopy, path or gate.
- (b) The common entrance to the building should be clearly identified, and differentiated from the individual private entries. It can be a welcoming place with weather-protection, a glazed lobby and seating.
- (c) On a corner or double-fronting site, all elevations that face a street should be treated as front elevations, and incorporate individual entries.
- (d) Courtyard units in the rear building will have main entrances oriented to the internal courtyard to accommodate fire-fighting requirements, but should also have a secondary entry at the lane to activate and animate the lane. Ideally, units will be located 0.6m to 1.2m above the lane to create privacy for the dwelling.
- (e) Pedestrian access to all entries should be easily visible from the street. Pedestrian pathways to units facing the courtyard should be clearly visible for way-finding purposes (such as through lighting, addressing and posting). The side yard should be increased to 12 ft to accommodate a safe and visible entry.
- (f) Commercial units should have entries that are definitively commercial in nature and differentiated from the residential entries. Weather protection should be provided with a minimum depth of 1.5 m.

5.3.2 Porches

- (a) Entries to all ground-level units should have an entry porch or stoop, which should be comfortably sized so that 2 people can stand at the door (minimum 1.5m x 1.2m). Larger porches to accommodate seating may be possible. Entry stoops or porches should have weather protection to provide comfort and identity.
- (b) Lane entries to units should also provide a porch or stoop – at a minimum to provide a safe landing adjacent to the lane, but ideally to provide some semi-private open space.

5.3.3 Stairs

- (a) Ground level entries to individual units in apartment buildings may have a couple of steps to the entries. Excessively high stairs should be avoided. Where stairs need to climb more than 1.2m, they will need to be designed carefully to ensure that there is adequate space for a landing in the front yard and to ensure they are well-incorporated into the design.
- (b) In stacked townhouses, stairs to the upper level units become a major design element. They should be incorporated into the overall design and not have a “tacked-on” appearance. Exterior stairs should not climb more than 2.1 m (7 ft.). Beyond this height they create excessive projections into the courtyard. The minimum courtyard widths need to be increased to accommodate stair projections.
- (c) The Building By-law should be consulted to ensure compliance for exiting requirements.
- (d) Steps are allowed in required side yards only where they are designed to facilitate grade changes from the front to the rear of the site.
- (e) Stairs from underground parking must be incorporated into the building wherever possible. They are not supportable in required yards.

5.4 Windows and Skylights

Window placement and design play important roles in the overall visual composition of a building. Windows are also significant for the liveability of a unit, because they let in natural light and air.

- (a) Windows should be placed to create a rationale pattern on the building exterior, not just function of interior layout;
- (b) When a window or skylight is the only source for natural light for a room, it should also be possible to open it to guarantee natural ventilation throughout the dwelling;
- (c) Operable skylights can provide a source of natural ventilation to upper level units. A floor area is available through the Districts Schedule for compliant skylights;
- (d) Commercial frontages should have primarily transparent treatment to provide pedestrian interest and to differentiate the units from the residential units.

5.5 Balconies and Decks

- (a) Private outdoor space for each unit is a requirement of the Districts Schedule, and should be a minimum of 5.6 m² in area, and with a minimum dimension of 1.8 m;
- (b) In limited situations, Juliet” balconies that maximize light and opening, may be used for 1-bedroom or studio units where it is not practicable to provide a balcony or roof deck;
- (c) Balconies and decks should be designed as integral parts of the building massing and façade composition;
- (d) Inset, rather than projecting, balconies should be used where privacy of neighbouring properties may be a concern;
- (e) Balconies should not project into yards.

5.6 Exterior Walls and Finishing

The finishing materials of new development should be durable. High-quality materials that last longer are more sustainable and create less waste. Materials that perform well over a long period of time also increase the affordability of the dwelling.

In addition to durability, the following guidelines should be considered when choosing exterior materials:

- (a) Create a cohesive image by limiting the number of different finishing materials used;
- (b) Material changes and transitions should have a strong relationship to the overall design of the building;
- (c) Materials should be used in a way that is true to their nature. For example, stone facing should be used as a foundation element, and as the base of columns, but should not be used as a facing on upper levels with no clear means of support below;
- (d) In general, the same materials should be used in consistent proportions on all facades and not just on the street face. Materials should carry around corners and terminate at logical points to avoid appearing as a thin veneer or ‘false front’;
- (e) All sides of a building that extend in front of an adjacent building are visible from the public realm and warrant appropriate design. For corner buildings, the side façade should be articulated and have sufficient windows and detailing, comparable to the front façade;
- (f) Large blank walls should be avoided whenever possible. Window openings, detailing, materials, colour, wall articulation and landscaping should be used to enliven them and reduce their scale;
- (g) Exposed concrete foundations should be limited to 30 cm (12 in.).

7 Open Space

7.1 Public Open Space

A goal of this District is to foster neighbourliness and social connection. One way this can be accomplished is to make walking safe, comfortable, convenient and delightful. This ensures that streets and sidewalks support a vibrant public life that encourages a walking culture, healthy lifestyles, and social connectedness.

7.1.1 Mid-block Pedestrian Connections

To enable better neighbourhood connectivity, with connections to parks and transit, a pedestrian connection should be provided mid-block on the west side of Joyce Street, generally in line with Cherry Street, as identified in the *Joyce-Collingwood Station Precinct Plan*. The pedestrian connection should be adjacent to and along the existing Metro Vancouver Sewer easement.

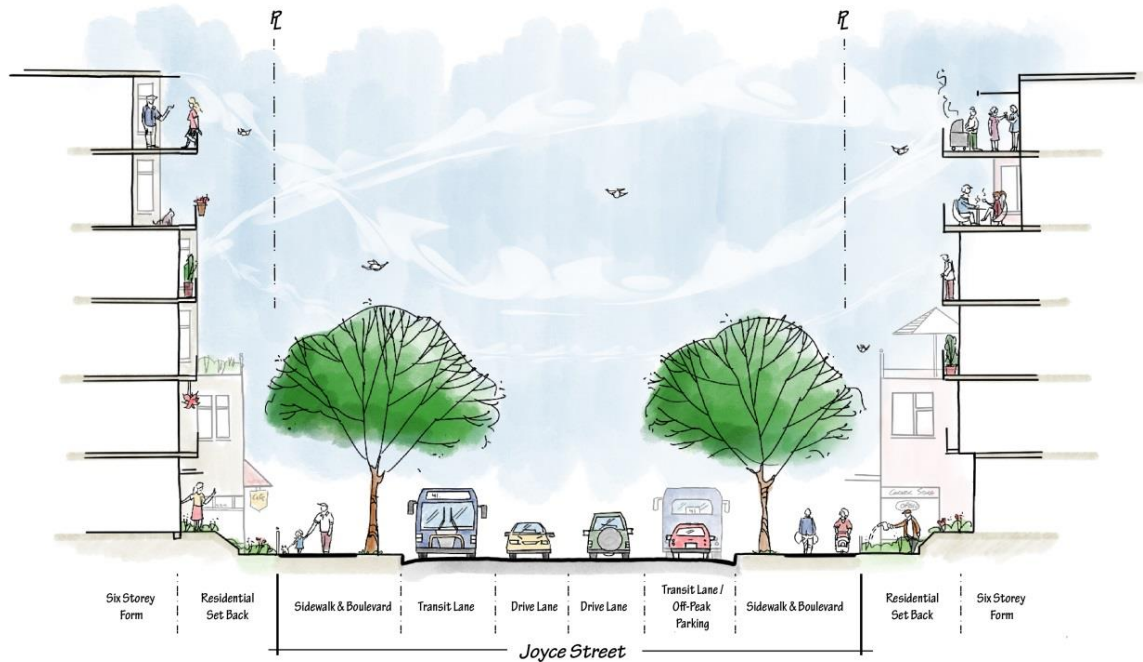
A mid-block connection can be shared between two adjacent developments or be entirely on one. The space between buildings on either side of the connection should not be less than 7.3m (24 ft.). This means that, if shared between two developments, the minimum side yards, need to be increased on each property to 3.7m (12 ft.). The connection should be comprised of a 2.4m (8 ft.) wide hard surface barrier-free walkway, centred in the space. This pathway should be secured for public access with a Right of Way agreement, and not be gated.

Each side of the walkway should be landscaped to provide privacy to the adjacent units, and visual amenity to the walkway. Retaining walls, if required, should not exceed 1m in height. Windows, and where space permits, patios should overlook the walkway to ensure safety.

7.1.2 Sidewalks and Street Trees

The streets adjacent to new development should be provided with wide sidewalks and street trees, if none exist. Along Joyce Street, a minimum sidewalk width of 1.8 m, and an outside boulevard of 1.6 m should be provided to create a comfortable and safe pedestrian environment.

Figure 8. Joyce Street section



7.1.3 Street furniture and other features

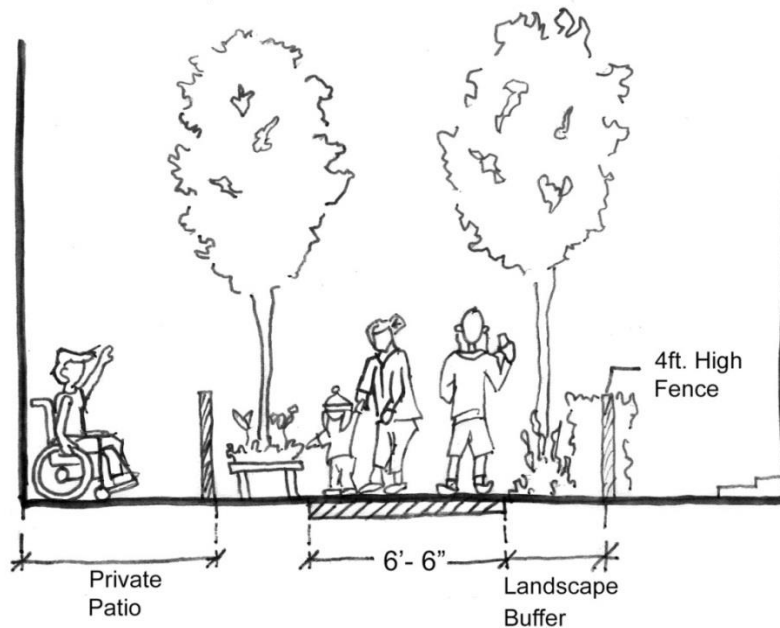
Where possible, developments are encouraged to support the enhancement of pedestrian and public life through the provision with street furniture, including seating, bike racks, and other amenities, public or community art, placemaking or environmental features (including landscaping and/or environmental features). Note, placement of these features should take into account the need to ensure ease of movement for pedestrians.

7.2 Semi-Private Open Space

The provision of open space is required as part of an overall site development and landscape plan and should take into consideration general site circulation patterns, including parking, existing landscape features, sun access, privacy and usability. Open space should be varied, including a mix of soft and hard surfaces, passive and active areas, canopied and open spaces.

- (a) The Districts Schedule requires that any multiple dwelling with four or more units provide open space on site of which a portion is programmable as children's play area. The *High Density Housing for Families with Children Guidelines* should be consulted to direct the design;
- (b) Organize semi-private open space as an organizing element, not as 'leftover' space. Provide sufficient distance, screening, landscape, and outlook considerations for the mutual comfort of dwellings overlooking or adjacent to the space;
- (c) Opportunities to use semi-private open space to encourage neighborliness (between building residents, as well as with the broader neighbourhood) is encouraged. This can be supported through the provision of seating, tables, or other fixtures, placemaking and design elements, as well as thoughtful utilization of transitional spaces such as the building entry or, where appropriate, the front "stoop."
- (d) In developments with a central courtyard, once the main open space is located, it may be possible to have private patios flanking a central walkway. The walkway should be treated as a linear social space, rather than just a corridor. Planting can create some screened privacy, however fences should be kept low. See Figure 9.

Figure 9. Courtyard circulation should allow some social interaction.

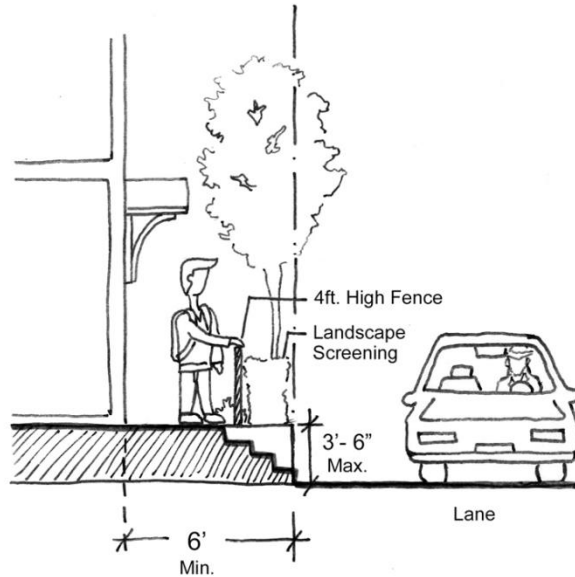


- (e) In “T”-form buildings the larger side yards at the rear of the property should be used as semi-private open space, rather than being broken up into smaller, private patios;
- (f) Utilities such as sumps should be integrated with a paved pathway and not interrupt open space.

7.3 Private Open Space

- (a) Provide useable private open space for all units:
 - (i) For ground-oriented units, a private garden and/or patio;
 - (ii) For apartment or stacked townhouse units, a generous balcony or roof deck with a minimum depth of 1.8 m (6 ft.) should be provided. Units with 2 or 3 bedrooms should have a minimum area of 5.6m² (60 sf);
 - (iii) “Juliet” balconies that maximize light and opening, may be used in limited situations for 1-bedroom or studio units where it is not practicable to provide a balcony or roof deck.
- (b) Roof decks add considerably to the amenity of any unit. Care should be taken to avoid direct sightlines to neighbouring windows, balconies and yards. Roof decks should be well-integrated into the overall form.
- (c) For courtyard units in the rear building a fence and landscape may be provided for privacy, but it they should be kept low, to allow some visibility between the lane and the rear yard. See Figure 10;
- (d) For units in “T”- form buildings that face the side courtyards a small area may be used as a private patio, however it should not be closed off from the semi-private courtyard. Rather soft landscaping can provide some privacy between units, but retain visual openness to the common open space. See 8 Landscaping.

Figure 10. Residential Lane Interface



8 Landscaping

- (a) Existing trees should be kept wherever possible and new trees introduced. To enable this, below grade parking structures should be held back from site edges, or designed with a notched or angled top edge to allow for tree root development;
- (b) Patio areas in the front yard should be screened with planting that provides some visual porosity, and can be maintained at a height of 1.5m or less;
- (c) Visually undesirable building features, such as exposed foundation or utilities, should be screened with landscaping.
- (d) The front and back boulevard should be landscaped as green space, although some provisions for seating other street furniture, and placemaking elements (see 7.1.3, and 7.2 above) can also be considered. At a minimum, they should be retained as grassed areas, but more intense planting or environmental design (e.g. bioswale or rain garden) is encouraged where appropriate (see also *Guidelines for Planting City Boulevards*).
- (e) In general, the by-law fencing height limit of 1.2 m (4 ft.) in front yards, and 1.8 m (6 ft.) in rear and side yards should be respected. However:
 - (i) fences at the rear of the site, adjacent to a building at the lane or street should be reduced in height to 4ft. At a lane, they may transition back up to 6ft within 2 ft of the rear property line. Soft landscape should be used to provide privacy screening, while still allowing some visibility between the public and private property;
 - (ii) exceptions may be made for entry arbours, and trellises or screening elements immediately adjacent to patio or deck areas. Over height elements in the front yard should assist with the definition of outdoor space but should not prevent all views or glimpses of the outdoor space from the street. Any over height element should be largely transparent and limited in extent.
- (f) Where walls or fences are provided, they should be combined with soft landscaping to provide visual depth, screening and layering.
- (g) Landscaping in semi-private common spaces should be designed to provide screening and filtering of views, relying on plant material, rather than fences. Planting larger caliper trees is particularly necessary in these locations.
- (h) Where dwelling units are located at the lane, every opportunity to enhance the lanescape with landscaping should be taken. This includes:
 - (i) Entry gates and arbors over pedestrian entrances;
 - (ii) Arbors over driveway entrances;

- (iii) Planting of trees near the lane, taking into account any overhead infrastructure and protective measures for the tree base.

9 Garbage and Recycling

For multiple dwelling developments, garbage and recycling will be collected by private contractors. Measures should be taken to ensure that waste bins are not left in the lane. Appropriate areas for garbage and recycling bins should be provided to ensure convenient pick up – either in the underground parkade or directly off the lane. The document, *Garbage and Recycling Storage Facility Supplement*, provides detailed information on the number of containers required and dimensions and specifications of commonly used storage containers. It is available online or at the Enquiry Centre, 1st floor, 515 West 10th Avenue.