

Urban Design Guidelines



May 2018

Back to Back and Stacked Townhouses

Table of Contents

1	Introduction	1
1.1	Purpose	1
1.2	Urban Design Objectives	1
1.3	Building Types	2
2	Checklist of Principles	3
2.1	Zoning By-law	3
2.2	Building Height	3
2.3	Building Setbacks	4
2.4	Separation Between Buildings	4
2.5	Block Length and Unit Width	4
2.6	Natural Features	4
2.7	Grading and Retaining Walls	5
2.8	Below Grade Units	6
2.9	Building Elevations	7
2.10	Exposed Parking Structures	8
2.11	Landscaped Soft Areas	8
2.12	Common Outdoor Amenity Area	9
2.13	Private Outdoor Space	9
2.14	Pedestrian Connectivity	10
2.15	Waste Collection and Storage	10
2.16	Surface Parking	11
2.17	Utilities and Services	11
2.18	Property Management and Maintenance	12
2.19	Other Considerations	12
3	Design Standard Diagrams	13
3.1	RM9 Stacked Townhouses Design Standards	13
3.2	RM10 Back to Back Townhouses on Condominium Road Design Standards	14
3.3	RM11 Back to Back Townhouses on CEC - Road Design Standards	15

Introduction

The City of Mississauga is at the end of its greenfield development phase. New growth is being accommodated through infill and development on vacant and underutilized sites. Development patterns are becoming more compact, using land and resources more efficiently, while maximizing existing infrastructure and community facilities, and promoting alternative modes of transportation. Traditional forms of housing are becoming less common, as land values rise and market demands shift. Back to Back Townhouses (BBT) and Stacked Townhouses (ST) are becoming increasingly popular throughout the GTA for several reasons:

- achieve increased densities in a low-rise form of housing
- a sensitive way to transition between low-density and high-density built forms
- contribute to a diversity of housing choices to meet different needs and preferences
- less expensive construction methods and reduced maintenance fees allow for a more affordable form of housing
- viewed as being grade related, with a front door directly to the outside

1.1 Purpose

The purpose of these guidelines is to ensure new developments that include BBTs and STs are designed to be compatible with, and sensitive to, the established context, and to minimize impacts on adjacent properties. The guidelines are intended to establish a design expectation for landowners, the development industry and the public, to ensure high quality development that meet the City of Mississauga's minimum development standards. These guidelines shall be read in conjunction with: the Official Plan, Zoning By-law, and other City guidelines and standards.

1.2 Urban Design Objectives

The following objectives provide the framework for the design guidelines:

- ensure compatibility with the existing and planned context
- design to meet the needs of people of all ages, abilities and incomes
- balance functional design and aesthetics with long-term sustainability
- protect and enhance natural features
- connect streets and provide pedestrian linkages
- provide high quality private and common amenity areas

1.3 Building Types

BBTs and STs are typically:

- three to four storeys in height
- comprised of units that are stacked vertically and/or horizontally with access from grade
- front onto a public street, condominium road, pedestrian mews or open space
- include surface and/or underground parking

These are illustrated in Figure 1 and Figure 2

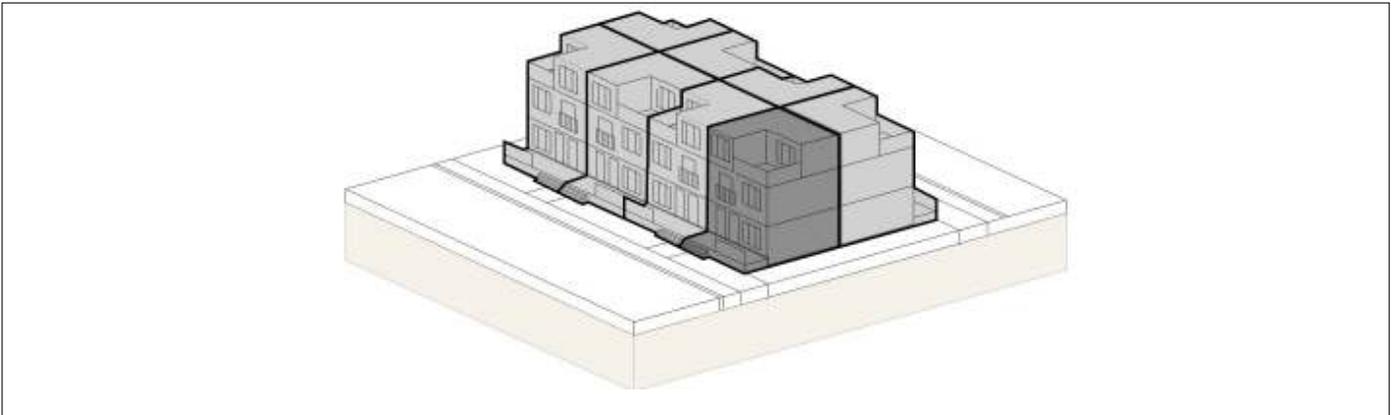


Figure 1: Example of a Back to Back Townhouse

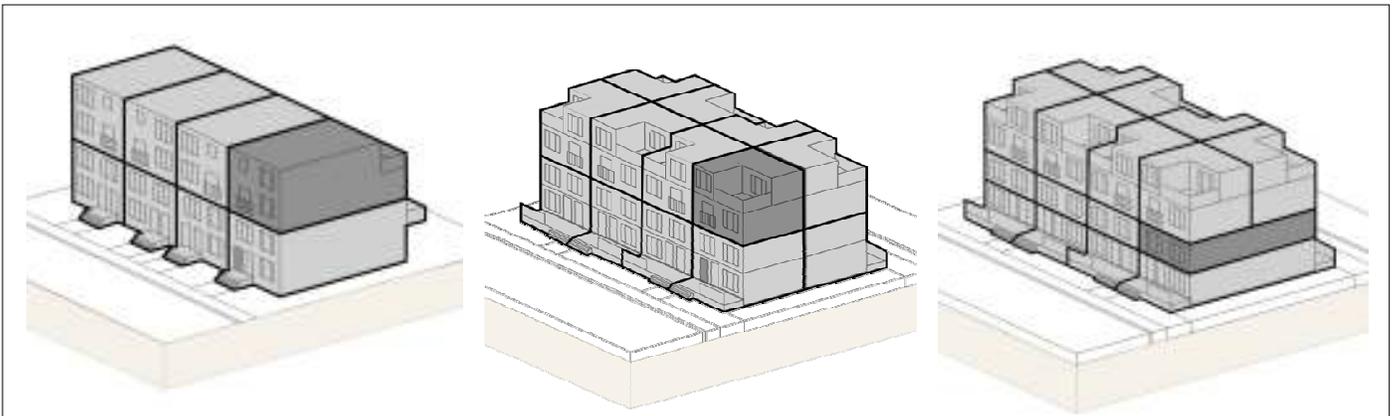


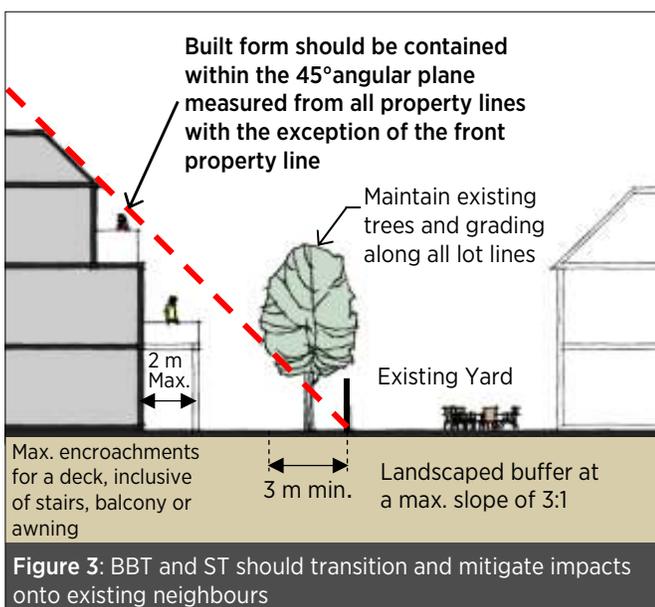
Figure 2: Examples of a Stacked Townhouse

Checklist of Principles

The following principles are to be considered when designing a development that includes BBTs and/or STs. These principles are intended to ensure that new developments are compatible with and respect the existing and/or planned context through appropriate setbacks, tree preservation and landscaped buffers. Consideration shall be given to site design, building massing, orientation, height and grading relative to the street, to ensure new developments are compatible with, and sensitive to the surrounding context.

This checklist is to be used as a guide for developers, design professionals, property owners and the public to ensure they have considered key issues associated with this residential built form.

Review and check **each** principle when complete

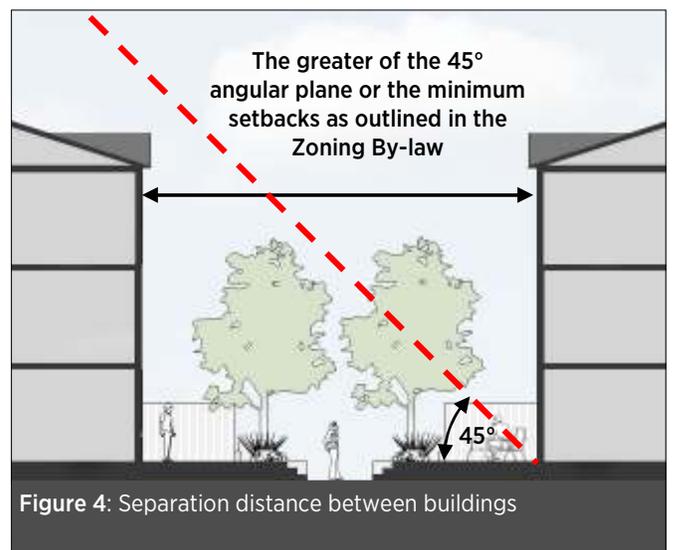


2.1 Zoning By-law

- Refer to the Zoning By-law regulations that apply to the proposed built form. Generally BBTs and STs are zoned RM9, RM10, RM11 and RM12 or in combination with other zones

2.2 Building Height

- New developments will be required to demonstrate an appropriate transition in building heights
- Buildings heights shall be contained within a 45° angular plane, measured from all property lines with exception of the front street line (See Figure 3)
- Maximum building heights of three storeys for BBTs and four storeys for STs



2.3 Building Setbacks

- When existing adjacent front yard setbacks vary, new buildings should align with the average setback between the two adjacent properties or the minimum zoning requirement, whichever is greater
- Where applicable, the planned context should be considered in determining the front yard setback

2.4 Separation between Buildings

- Separation distance between buildings should be the minimum setbacks as outlined in the Zoning By-law
- In the case of a front wall to front wall condition, the separation distance should be the greater of the 45° angular plane or the minimum setbacks as outlined in the Zoning By-law (See Figure 4)
- Where a basement unit forms part of a three storey development the minimum separation distance will be 15 m

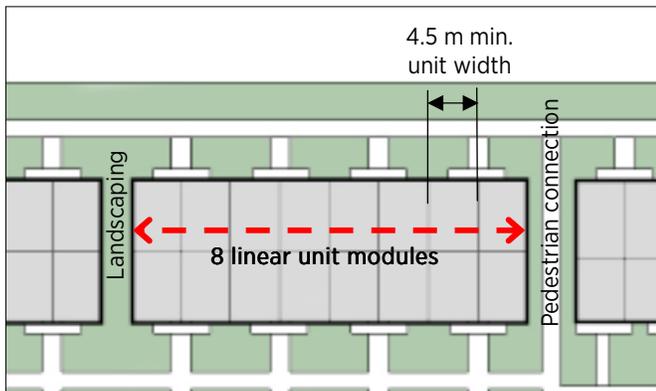


Figure 5: Blocks should be broken-up to allow green space and pedestrian connections

2.5 Block Length and Unit Width.....

- Excessively long blocks should be avoided
- The maximum length of a block should generally not exceed eight linear unit modules to promote pedestrian connections, allow for landscaping and provide a break in the massing (See Figure 5)
- Unit widths should be a minimum of 4.5 m to ensure sufficient sunlight into the unit

2.6 Natural Features

- New developments should preserve and enhance natural heritage features; including, trees, woodlands, valleys and wetlands
- Appropriate setbacks and buffers should be provided to existing and proposed natural features to ensure their health and continued growth

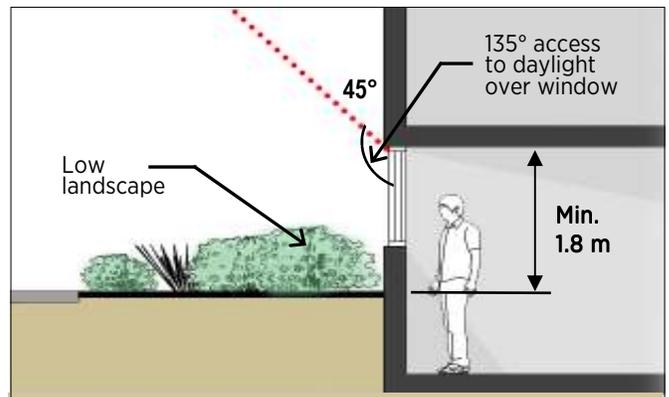


Figure 6: Definition of first storey

2.7 Grading and Retaining Walls □

- Manipulation of site grades should be avoided
- Match existing grades along all property lines and provide a minimum 3 m wide landscaped buffer around the property
- The landscaped buffer should be unencumbered by below grade parking structures, easements, retaining walls, utilities, severe grade changes and hard surface areas

- The first storey means a storey of a building that has its floor closest to the Context Grade and its ceiling more than 1.8 m above the Context Grade (See Figure 6)
- Each individual building will establish a grade elevation based on 'Context Grade'. Context Grade means the average of 12 points, eight of which are taken around the perimeter of the site and four of which are taken around each individual building (See Figure 7)

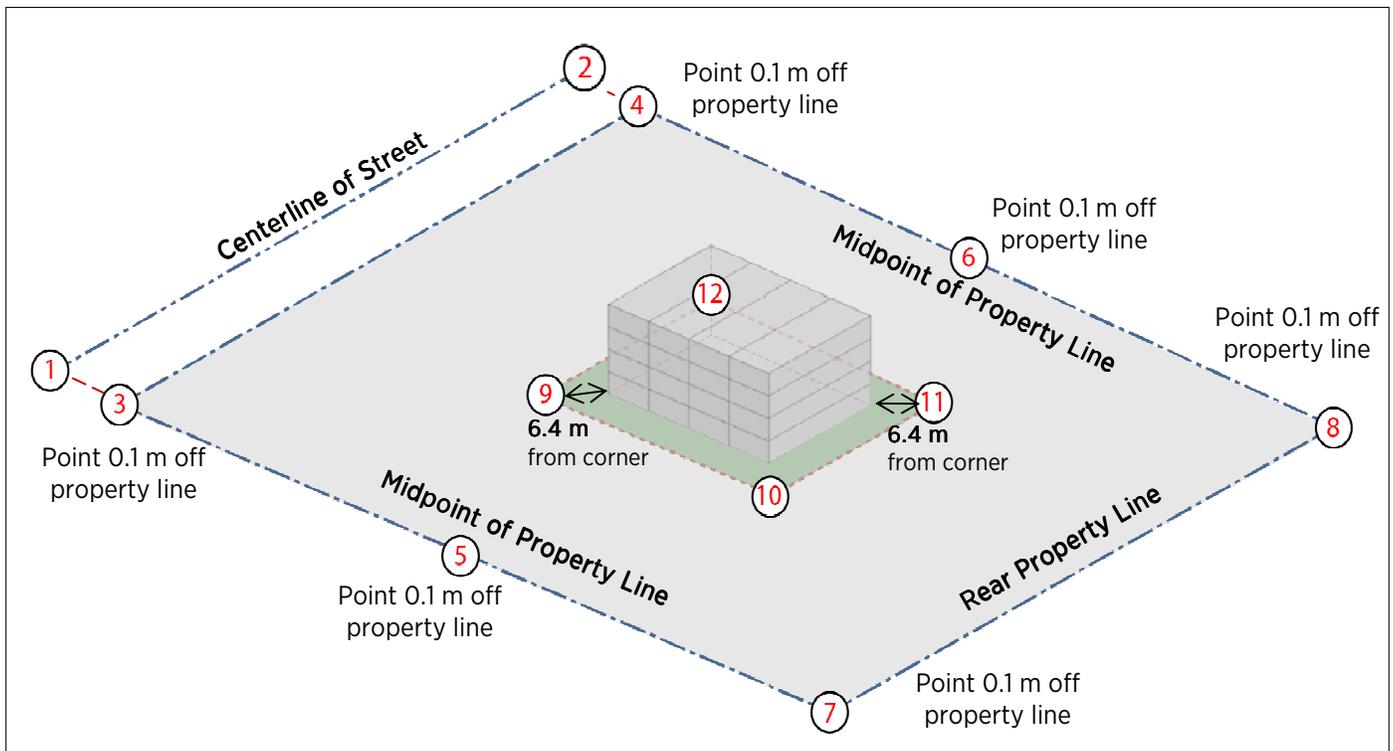


Figure 7: Context Grade: The average of 12 points, eight of which are around the perimeter of the site and four points located 6.4 m at a 45 degree angle from each building corner

- The use of retaining walls should be avoided. Where retaining walls are required, their height should be limited to a maximum of 0.6 m to eliminate the need for railings and to reduce long-term maintenance costs (See Figure 8)

2.8 Below Grade Units □

- Below grade units should be avoided
- Manipulation of site grades requiring retaining walls to accommodate below grade units is discouraged
- If a below grade unit is proposed, it must be a through-unit that has windows on both the front and rear of the building (See Figure 9), or be a double wide back to back unit (min. 9 m wide) (See Figure 10)

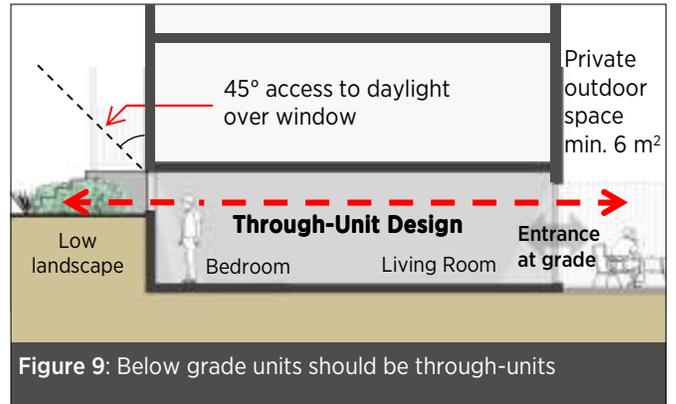


Figure 9: Below grade units should be through-units

- Below grade units require a minimum of 6 m² of private outdoor space located at the unit's floor level with unobstructed views and access to daylight (See Figure 6 and 9)
- All building projections including balconies and porches located over private outdoor spaces or windows of below grade units should not obstruct access to daylight. See the Zoning By-law for projection regulations (See Figure 9 and 11)



Figure 8: Landscape retaining walls should not be higher than 0.6 m

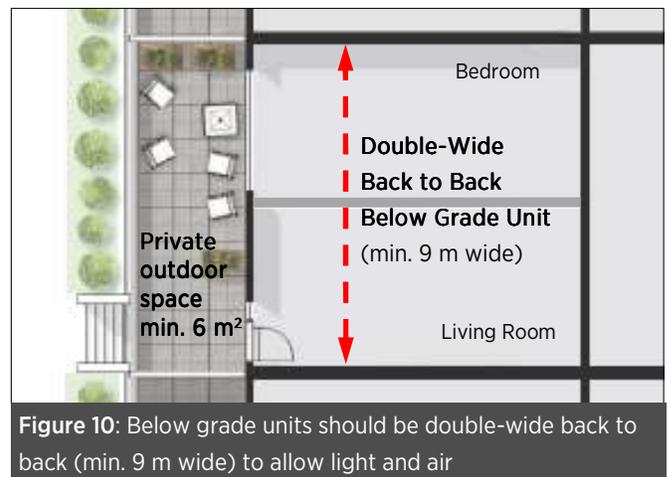


Figure 10: Below grade units should be double-wide back to back (min. 9 m wide) to allow light and air

2.9 Building Elevations □

- New development should be compatible with the existing context in terms of height, scale, massing and materials
- For buildings over 3 storeys and where appropriate, stepback the upper floors or incorporate sloped roofs and half storeys with dormer windows to reduce perceived height, scale and massing
- Ensure new developments have a variety of facade articulation, building materials and colours for visual interest
- Blank facades on the visible end unit elevation are unacceptable. End units that are visible should have entrances, windows and architectural interest to animate the elevation

- Buildings should be designed with high quality and durable materials to avoid long-term maintenance costs. Stone and brick is preferred. Stucco and wood are discouraged
- Stepback the structure for rooftop access (i.e. rooftop mechanical room) a minimum of 3 m from the exterior edges of the building to reduce visual impact (See Figure 12)
- The structure for rooftop access should not be greater than 20 m², inclusive of stairs
- Rooftop outdoor amenity areas (common or private) should be setback a minimum of 1 m from the building's exterior edge to mitigate overlook concerns onto existing adjacent low density residential properties. This setback will not be required for internal units (See Figure 12)

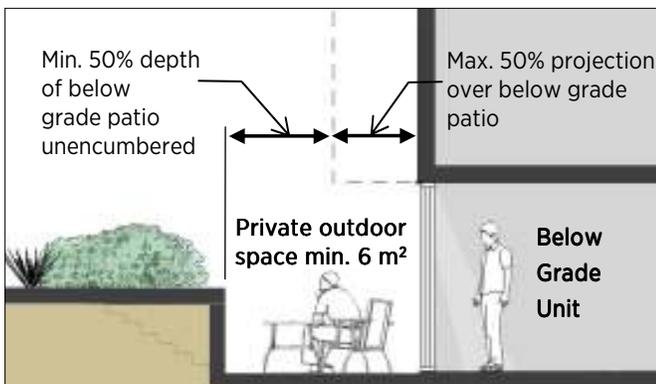


Figure 11: Permitted projections over below grade private outdoor patios

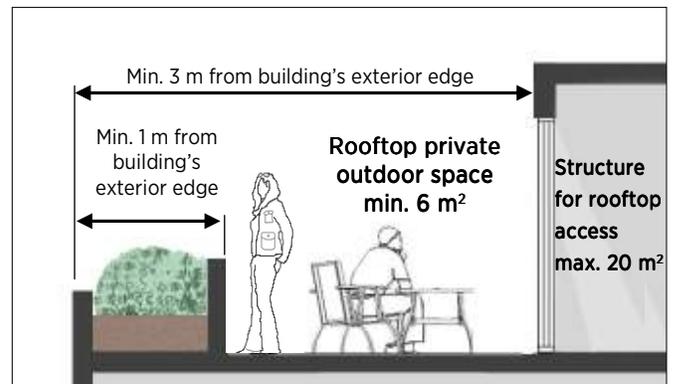


Figure 12: Setbacks from the building's exterior edge to mitigate overlook concerns onto existing adjacent low density residential

2.10 Exposed Parking Structures □

- Exposed parking structures should be avoided. Where portions of the underground parking structure are exposed, they should match the building materials
- Consolidate the entrances to underground parking structures within the same development to minimize the number of overhead doors
- Maintain the minimum soil volume over the parking structure to support the growth of the vegetation. The minimum soil volume varies based on the type of vegetation
- Stairs exiting underground parking should be fully enclosed in glass to increase visibility and address issues of safety, security and weather protection

2.11 Landscaped Soft Areas □

- Landscaped soft areas are required adjacent to paved areas and around the perimeter of the site. To provide relief between buildings, landscaped soft areas should be distributed throughout the development
- Landscaped soft areas should be provided between entrances to individual units and sidewalks, public streets and condominium roads
- Pair individual landscaped soft areas to increase soil volume for tree growth particularly where there is a driveway (See Figure 13)
- Limit the number of stairs to a unit entrance from three to seven risers to maximize landscaped soft area, mitigate safety issues in the winter and reduce maintenance costs (See Figure 13)
- All stairs should be poured in place concrete. Precast stairs are not permitted

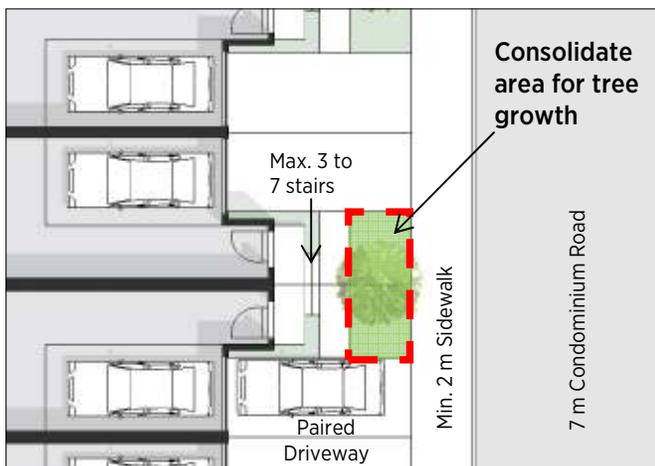


Figure 13: Combine landscaped soft areas for tree growth



Figure 14: Common outdoor amenity areas should be centrally located, accessible and highly visible

2.12 Common Outdoor Amenity Area

- A common outdoor amenity area is required for all new residential developments with more than 20 units.
- The total space required is 2.8 m² per dwelling unit or 5% of the site area whichever is greater
- Common outdoor amenity areas should be located in one central area, highly visible and accessible by all residents (See Figure 14)
- Unless a mews space is greater than the required separation distance in the Zoning By-law, a mews will not be considered a common outdoor amenity area
- Refer to the Outdoor Amenity Area Design Reference Note for additional details
http://www7.mississauga.ca/documents/pb/main/2015/Amenity_Space_Reference.pdf

2.13 Private Outdoor Space

- Each unit requires a private outdoor space with a minimum contiguous area of 6 m². When located on an upper storey balcony the private outdoor space should be a minimum of 4.5 m²
- The private outdoor space may be located at-grade, on a balcony, deck, porch or on a rooftop
- Recessed or partially recessed balconies are preferred. Projecting balconies shall be avoided (See Figure 15). If a projecting balcony is proposed, it may project a maximum of 2 m beyond any building façade.
- Balconies should be designed with solid or opaque materials or tinted glass when adjacent to existing low density residential

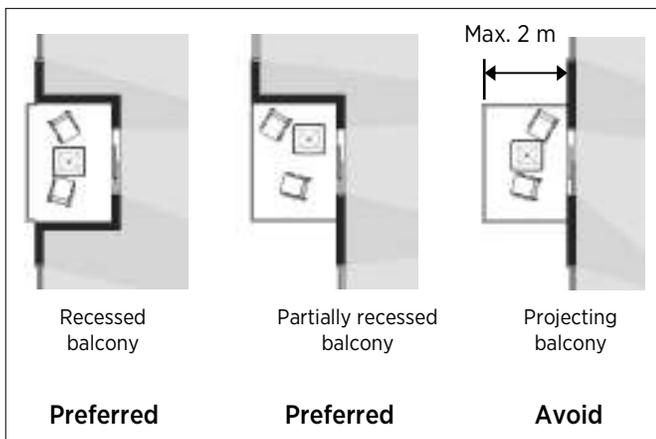


Figure 15: Balconies as private outdoor space

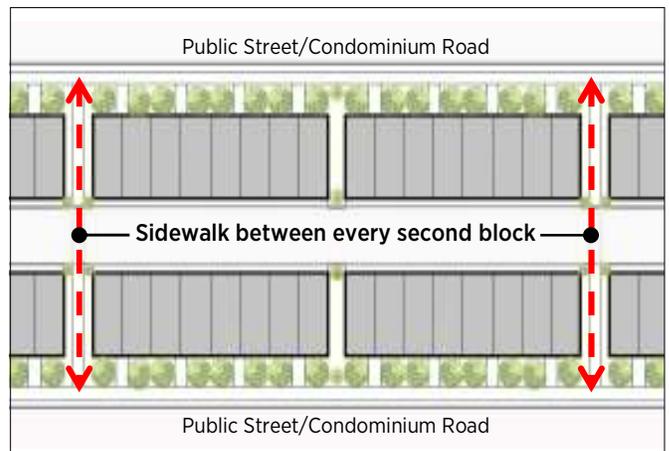


Figure 16: Pedestrian connections should be located between every second block

- Mechanical equipment, including air conditioning units located within a private outdoor space will be excluded from the minimum 6 m² calculation

2.14 Pedestrian Connectivity

- Provide a sidewalk between every second block to allow connectivity (See Figure 16)
- Sidewalks will be located on one side of a condominium road. Sidewalks on both sides of the condominium road maybe required for large developments
- The following sidewalk widths will be required:
 - sidewalks abutting a road, where traversed by a driveway, minimum 2 m
 - sidewalk in all other areas, minimum 1.5 m

- There should be at least one barrier-free path of travel that meets AODA (*Accessibility for Ontarians with Disabilities Act*) standards throughout the site
- Where accessible parking is located below grade (i.e. underground parking) it should be accessed via an elevator and forms part of a barrier-free path of travel

2.15 Waste Collection and Storage

- Waste storage rooms, drop-off locations (i.e. garbage chutes) and waste collection points (temporary pick-up areas) should be considered early in the site design stage to ensure appropriate placement and functionality
- The waste storage rooms and the waste collection points (pick-up areas) should be located internal to the site and should not be visible from a public street or impact residential units or adjacent properties (See Figure 17)
- Above grade waste storage rooms/enclosures should be well screened and appropriately setback from existing uses and proposed dwelling units to minimize undesirable noise, odour and visual impacts (See Figure 17)
- The waste collection facility should consider the space requirements for waste, recycling and green bins, along with bulky items (min. 10m²)



Figure 17: Waste storage room and waste collection areas should be constructed of durable materials

- Waste drop-off areas should not be greater than 100 m from a dwelling unit and be easily accessible via a sidewalk
- Waste collection points (pick-up areas) should not encumber parking stalls or access to other elements of the development (i.e. fire route, entry to the underground parking garage, mailboxes, etc.)
- Waste collection points should be made of durable concrete and be at the same level as the road
- Refer to the Region of Peel’s Waste Collection Design Standards Manual for more information <https://www.peelregion.ca/pw/standards/design/waste-collection-design-manual-2016.pdf>

2.16 Surface Parking

- Surface parking lots should be centrally located within the site and accessed by a sidewalk
- Surface parking lots should be setback a minimum of 3 m from a lot line and not located between the front face of a building and the street
- A minimum 3 m setback should be provided between the side wall of a building and a surface parking space

2.17 Utilities and Services

- The location of above and below grade utilities and services should be considered early in the site design stage to ensure they meet utility requirements (i.e. ease of maintenance, access) and ensure any visual impacts from the public street are mitigated
- Through the development process, provide the locations of above and below grade utilities, easements, etc., to ensure sufficient unencumbered space is provided for public and private trees, and landscaped soft areas
- Transformer vaults are typically located on a streetline and generally on a serviceable pad (i.e. minimum 3 m x 3 m pad for smaller developments). Contact Alectra Utilities for further requirements



Figure 18: Community mailboxes covered and in a central location

- Community mailboxes should be centrally located and accessed by a sidewalk (See Figure 18)
- Conceal or recess hydro and gas meters into the building's exterior walls or in a less visible location (See Figure 19)

2.18 Property Management and Maintenance

- Long-term maintenance and property management should be considered early in the development process to avoid costly maintenance issues
- Use durable and high quality building and site materials. Stucco is discouraged on the first two storeys of a building

2.19 Other Considerations

- Review Mississauga's Fire Route By-law 1036-81 early in the site design stage for the fire route design, building access requirements, etc.
- Review the Ontario Building Code to ensure that site and building designs comply with the relevant requirements
- Review the Bell Urban Design Manual for utility standard requirements



Figure 19: Place hydro and gas meters and other utilities in concealed or recessed locations

3.1 RM9 Stacked Townhouses Design Standards

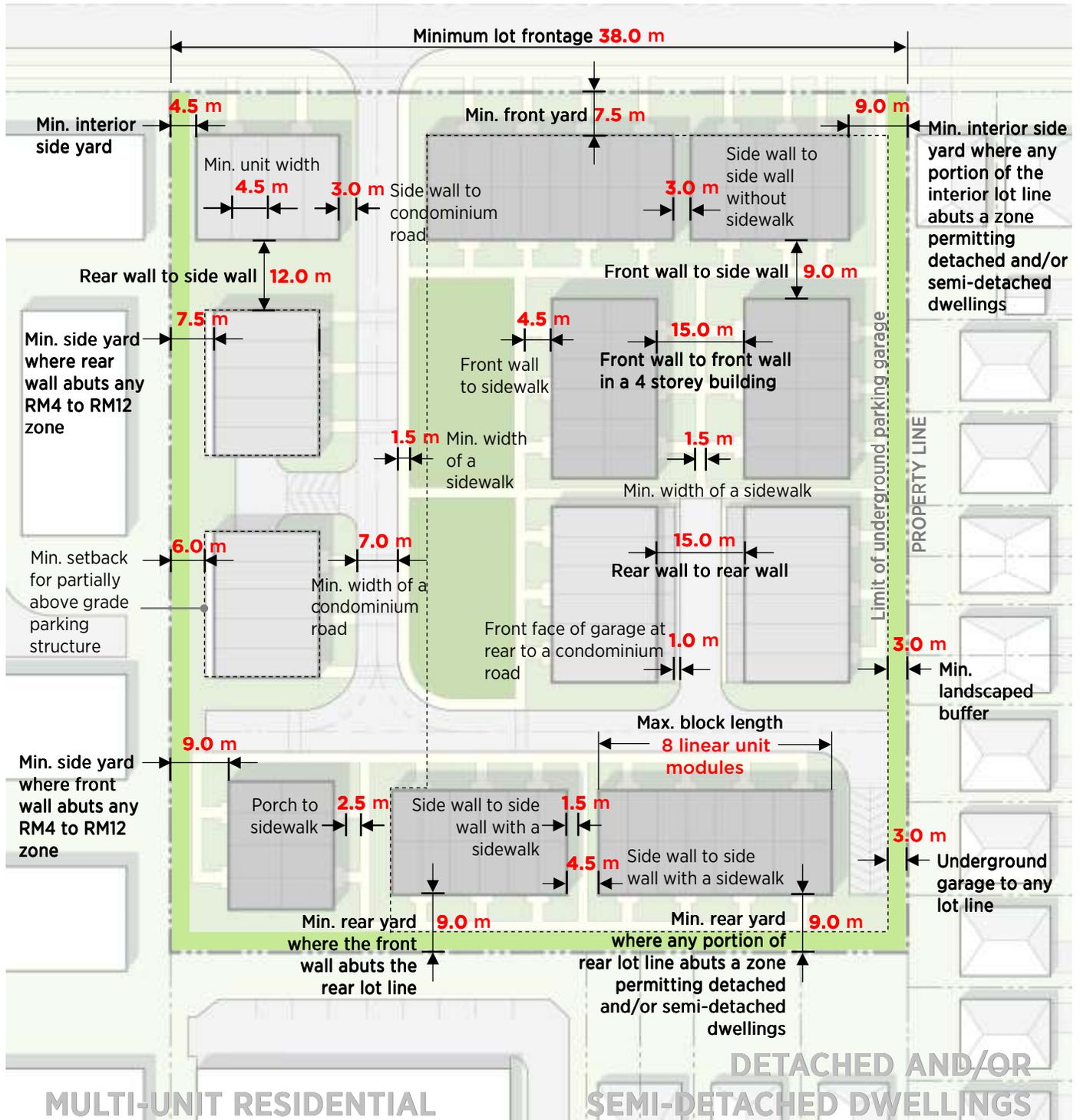


Figure 20: Standard dimensions for Stacked Townhouses (RM9). For additional standards refer to the Zoning Bylaw. The above drawing is for illustration purposes only and is not to scale.

3.2 RM10 Back to Back Townhouses on Condominium Road Design Standards

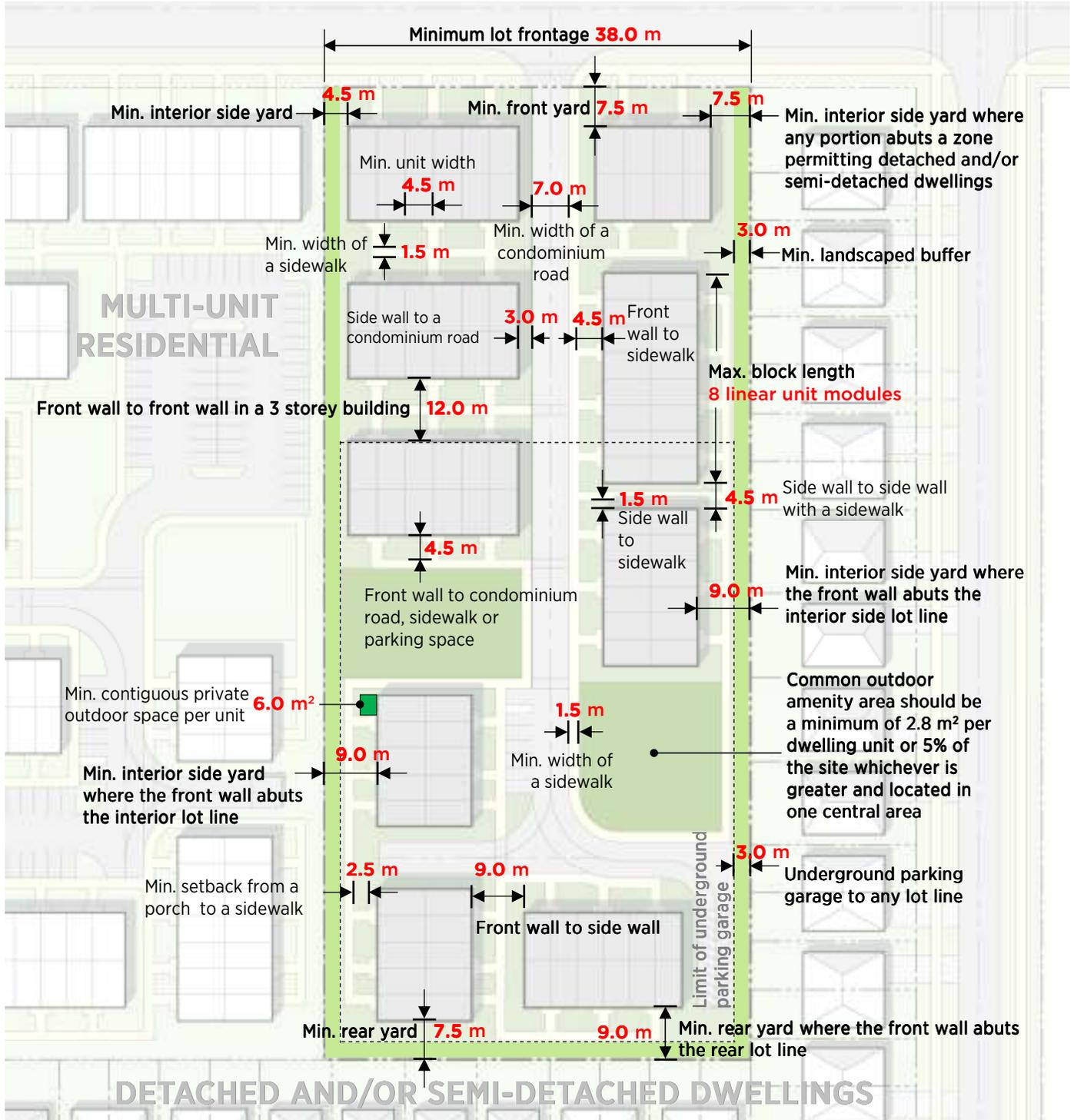


Figure 21: Standard dimensions for Back to Back Townhouses (RM10). For additional standards refer to the Zoning By-law. The above drawing is for illustration purposes only and is not to scale.

3.3 RM11 Back to Back Townhouses on a CEC - Road Design Standards

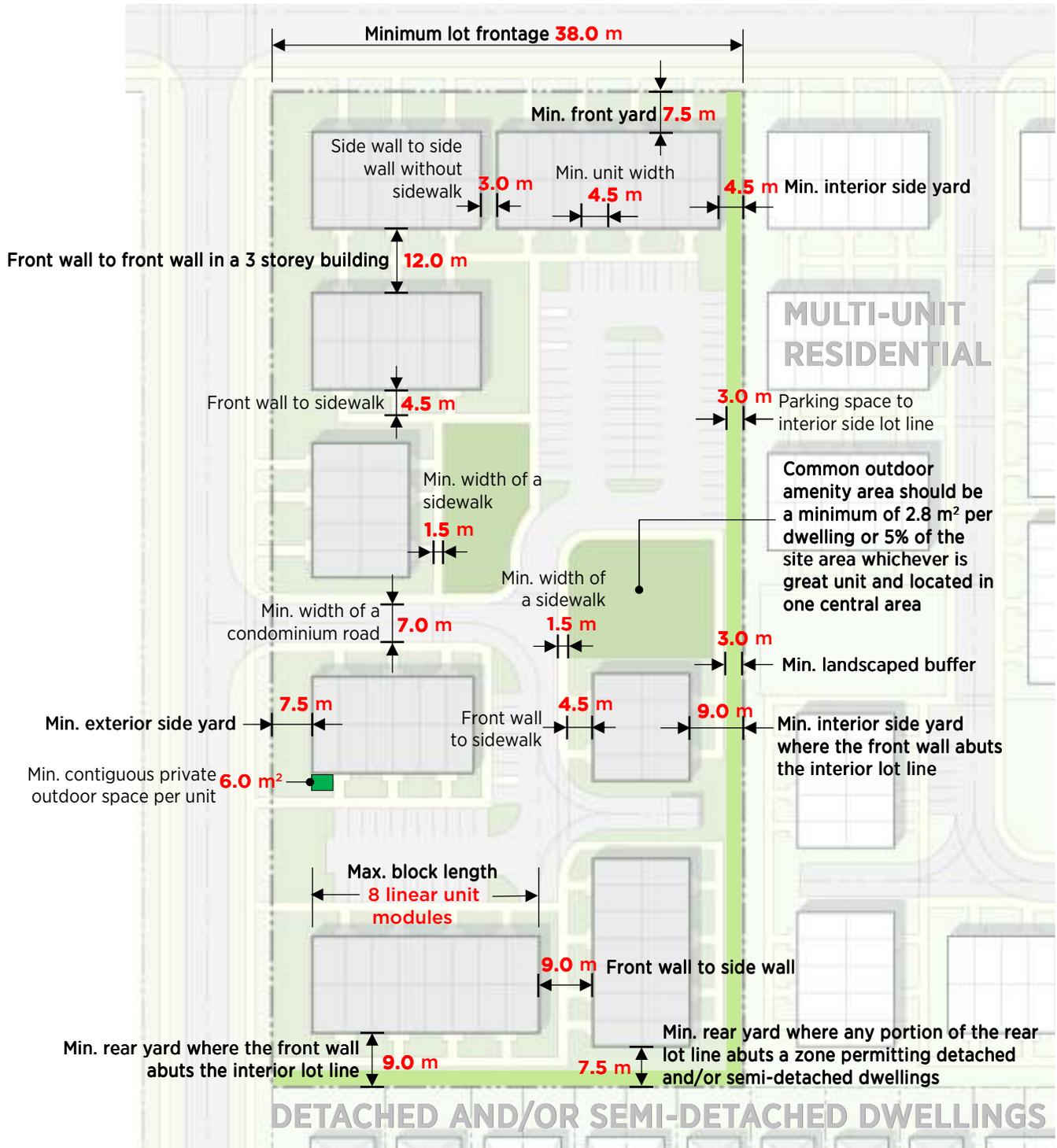


Figure 22: Standard dimensions for Back to Back Townhouses (RM11). For additional standards refer to the Zoning By-law. The above drawing is for illustration purposes only and is not to scale.

City of Mississauga

Planning and Building Department, Development and Design Division
300 City Centre Drive, 6th Floor, Mississauga, ON L5B 3C1- Tel: 905-896-5511 Fax: 905-896-5553
www.mississauga.ca

