3

> Enhance the public realm and promote pedestrian use through the coherent and collaborative design of streets, building interfaces and public spaces."
>
> 2.4.3 Enhancing the public realm, Municipal Development Plan

3.0 THE STREETSCAPE GUIDE

IN THIS SECTION:

URBAN DESIGN OBJECTIVES

DEFINE STREETSCAPE TYPOLOGIES

PRIORITIZE DIFFERENT TRAVEL MODES

INTEGRATE STREETSCAPE ELEMENTS

ENHANCE PEDESTRIAN EXPERIENCE

Defined Zones

There are three general zones (with sub-zones under each) that accommodate various streetscape elements of a complete street:

- Roadway Zone (from curb to curb)
- Pedestrian Zone (from property line to curb)
- Frontage Zone (from building face to property line)

Policy Reference

- Centre City Plan
- Centre City Mobility Plan
- Complete Streets Guide
- Cycling Strategy
- Pedestrian Policy
- Bicycle Policy
- Bylaw 33P2013

Guideline Sections

- 2.1 Streetscape Characters
- 3.2 Streetscape Elements
- 4.0 The Development Guide

3.1 Streetscape Zones

Approach to Centre City Streetscape

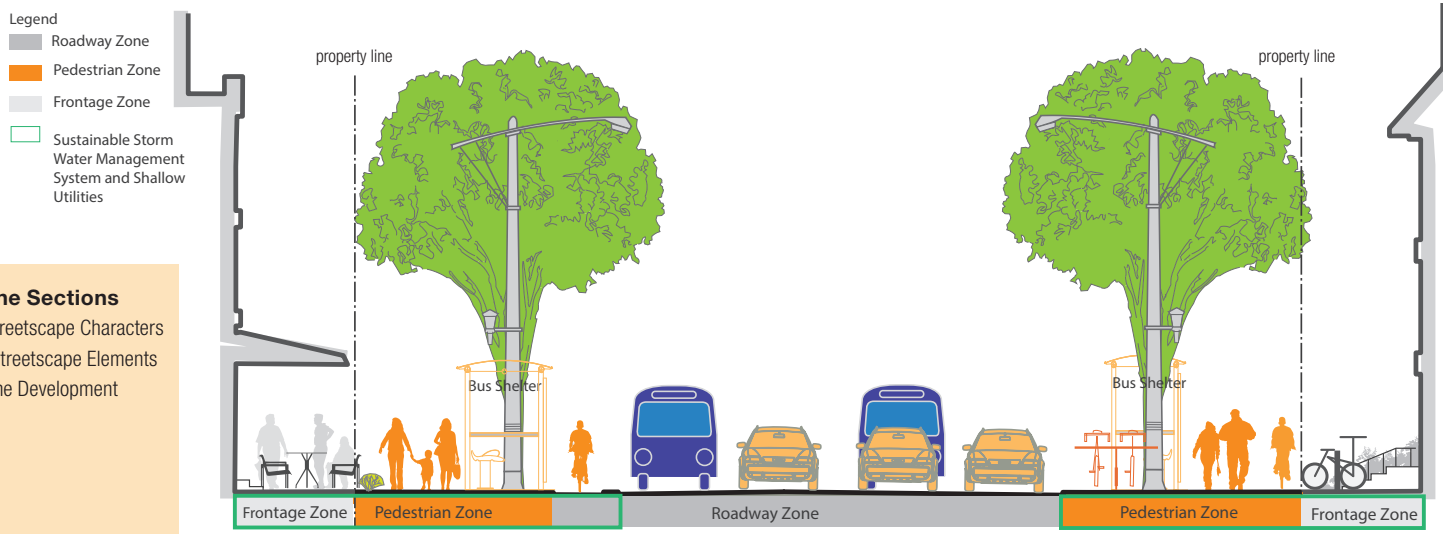
Good streetscape design begins with an approach that emphasizes cohesiveness and considers how various elements interact to create an overall streetscape composition that enhances pedestrian experience.

This section provides guidance regarding what street elements should be accommodated in each of the defined zones in relation to the streetscape typologies and travel mode priorities (as identified in 2.1 Streetscape Characters, which is a synthesis of the Centre City Plan street typologies and the Centre Mobility Plan street classifications).

Given the street right-of-way (ROW) widths, all Centre City street typologies should be able to achieve the defined streetscape characters based on different composition of streetscape elements. In some cases, the location of the curb may need to be moved to accommodate pedestrian/bike/transit needs. In other cases, private development may need to setback the building frontage or provide colonnades to give more pedestrian space (in this case the space is considered bonusable as per Bylaw 33P2013). Creating an overall streetscape composition based on travel mode priorities helps to achieve desirable streetscape characters and a coordinated implementation process.

Bike infrastructure improvement in the Centre City (both on-street and off-street as shown in 2.11 and 3.2.3) have some impact on the function of the Roadway Zone and the Pedestrian Zone. The integration of off-street, multi-use pathways, considering their impact on public sidewalks and building frontages, should also be carefully considered.

Defined Zones for a Pedestrian, Bike, and Transit Priority Corridor (Map 5)



3.1.1 Roadway Zone

The street elements that must be accommodated in the Roadway Zone are determined by defined streetscape typologies, travel mode priorities (see 2.1 Streetscape Characters), space availability and specific site conditions. The following street cross section is for illustration purposes only. It illustrates the highlighted Roadway Zone of a Pedestrian, Bike, Transit Priority Corridor (PBT Street, Map 5) in the context of the entire street cross section, and what streetscape elements should be included in order to achieve the defined streetscape characters.

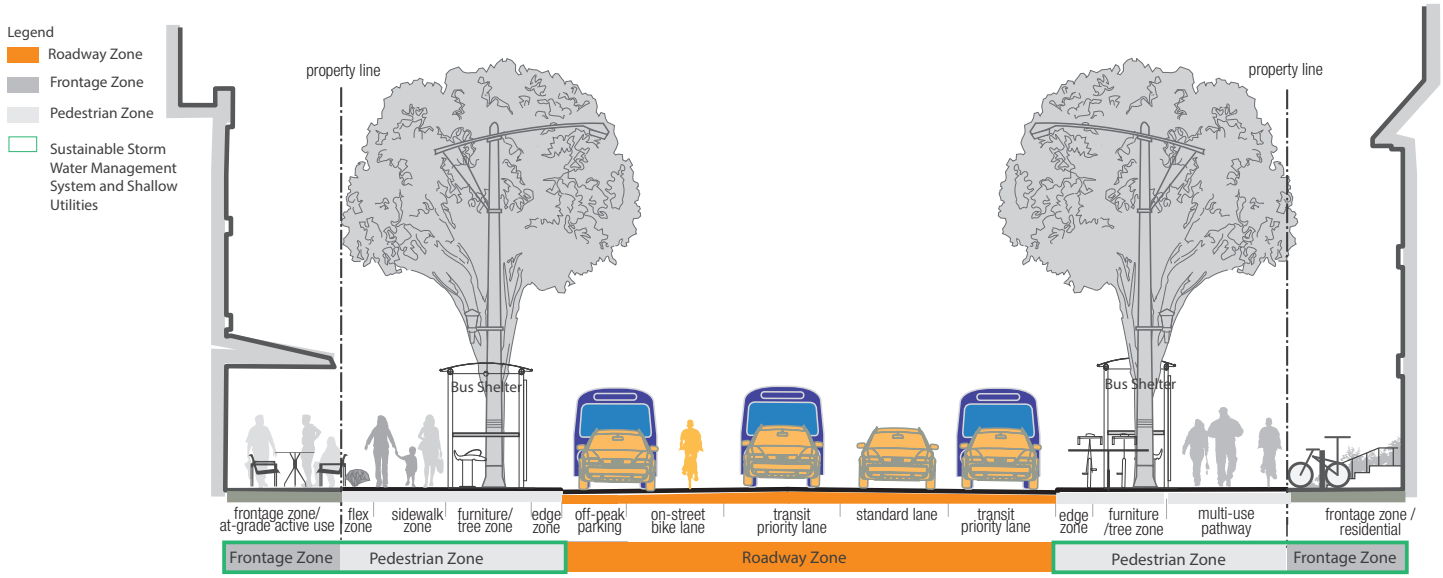
The Roadway Zone may include streetscape elements such as standard travel lanes, transit priority lanes, on-street shared vehicle/bike lanes, on-street cycle tracks, on-street parking, hard or soft landscaped medians and a sustainable stormwater management system where possible.

The Roadway Zone should incorporate the recommended streetscape elements based on travel mode priorities (see the table on the next page). When space is limited, expand the zone to accommodate transit priority lanes, on-street bike facilities, on-street parking or medians while balancing the need for other pedestrian amenities. In some cases, the Roadway Zone may be narrowed to add pedestrian amenities to the Pedestrian Zone, such as sidewalk space, off-street bike facilities, street trees, a stormwater management system, etc. Sidewalk curb extensions can also be considered at busy street corners.

Public improvement projects within the Roadway Zone should take a coordinated approach to address the overall streetscape. For example:

- Traffic calming projects in the Roadway Zone that add medians, curb extensions, etc. should add features such as trees, landscaping, stormwater facilities or site furnishings where feasible.
- Intersection safety improvement projects should incorporate other pedestrian amenities such as landscaping, lighting, furnishing, raised intersections or curb extensions where feasible.

Roadway Zone Design for a Pedestrian, Bike, and Transit Priority Corridor (PBT Street, Map 5)



Roadway Zone Streetscape Elements

	Streetscape Elements	Recommended Streetscape Elements Based on Travel Mode Priorities (Map 5) Pedestrians (P) Bikes (B) Transit (T) Unclassified/residential (U)								Areas of Particular Attention	Min. Space Required	Reference
		P	T	B	PT	PB	BT	PBT	U			
Roadway Zone	Standard Travel Lanes	X	X	X	X	X	X	X	X		3.35m	
	Transit Priority Lanes		X		X		X	X		Transit priority corridors and transit stations, Map 20	3.5m	2.11; 3.2.2
	On-street Shared Vehicle/Bike Lanes			X*		X*	X*	X*		Bike Corridors and Cycle Tracks (5-year plan), Map 19	4.0-4.5m	2.11; 3.2.3
	On-street Cycle Tracks			X*		X*	X*	X*		Bike Corridors and Cycle Tracks (5-year plan), Map 19	1.2-2.5m	2.11; 3.2.3
	On-street Parking									Streets with on-street parking opportunities including off-peak parking opportunities, Map 6 Note: Balance on-street parking needs with the space requirements for other streetscape elements (pop-up patios, sidewalk widening, bike facilities, curb extensions, landscaping, stormwater management system, etc.)	2.25m; or 2.0m on Residential Streets (Map 3)	2.1; 3.2; 4.1.6
	Hard or Soft Landscaped Medians									Streets with wider right-of-way widths (i.e., 30.5m) where space allows Note: Maximize street tree opportunities; when trees are not possible, incorporate streetscape elements such as planters, lower shrubs, public art, lighting, banners, etc.	Min. 2.0m	2.1; 3.2; 3.2.5; 4.3
	Stormwater Management System									All green highlighted zones shown in the cross sections included in 3.1, wherever space allows	Refer to relevant sections	2.1; 3.1; 3.2.5; 4.3

X* Apply only one of the bike facility types based on Bike Committee recommendations (Map 19 Bike Integration)

3.1.2 Pedestrian Zone

Pedestrian Zone often consists of competing streetscape elements which all demand sufficient space. The sub-zones and street elements in this zone may include:

- sidewalk zone;
- furniture/tree zone (furniture, street trees, transit passenger amenities, bike racks, above ground utilities, etc.);
- edge zone (signs, utility posts, snow storage, space for parked car doors, etc);
- off-street bike facilities;
- flex zone (as described on the right, to accommodate pedestrian amenities such as landscaping, furniture, transit passenger waiting areas, public art, pedestrian lighting, wider sidewalks, stormwater management system, etc.); and
- stormwater management system where possible (e.g. space under sidewalks for tree trenches, etc.).

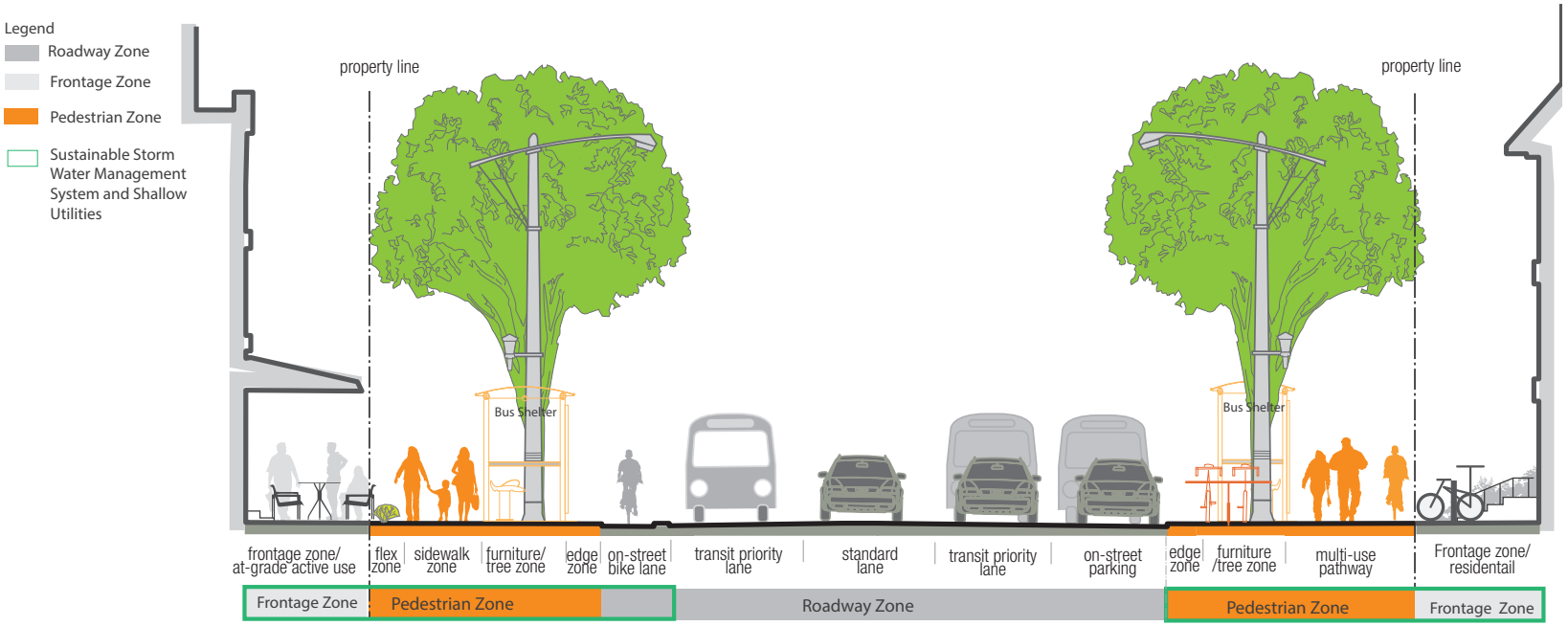
The following street cross section is for illustration purposes only. It illustrates the highlighted Pedestrian Zone of a Pedestrian, Bike, Transit Priority Corridor (PBT Street, Map 5) in the context of the entire street cross section, and what streetscape elements should be included in order to achieve the defined streetscape characters.

What is a Flex Zone?

Where additional space beyond the minimums is available in any given right-of-way (ROW), the 'flex zone' describes suggested uses.

Flex zones allow the intention of the street character to be fully realized in relationship to the contextual elements and specific constraints of any given street. For example, a pedestrian priority corridor in the downtown core has a flex zone between the sidewalk zone and the building frontage. Where extra space is available in the ROW, the higher volumes of pedestrian traffic will be accommodated.

Pedestrian Zone Design for a Pedestrian, Bike, and Transit Priority Corridor (PBT Street, Map 5)



Pedestrian Zone Recommended Streetscape Elements by Urban Context

	Streetscape Elements	Recommended Streetscape Elements Based on Travel Mode Priorities (Map 5) Peds (P) Bikes (B) Transit (T) Unclassified/ residential (U)								Areas of Particular Attention	Min. Space Required	Reference
		P	T	B	PT	PB	BT	PBT	U			
Pedestrian Zone	Sidewalk Zone	X	X	X	X	X	X	X	X		Refer to 3.2.1	3.2.1
	Furniture/Tree Zone	X	X	X	X	X	X	X	X		1.5m	3.2.4; 3.2.5
	Transit Passenger Amenities		X		X		X	X		Transit Priority Corridors and Transit Stations, Map 20	Refer to Transit-friendly Design Guide	2.11; 3.2.2; Transit-friendly Design Guide
	Bike Racks			X*		X*	X*	X*		Bike Corridors and Cycle Tracks (5-year plan), Map 19	Refer to Bicycle Parking Handbooks	2.11; 3.2.3; Bicycle Parking Handbooks
	Street Trees	X	X	X	X	X	X	X	X	Green Streets, Map 4	Refer to 3.2.5	Map 4; 3.2.5
	Edge Zone	X	X	X	X	X	X	X	X		Min. 0.46m	
	Off-street Cycle Track			X*		X*	X*	X*		Bike Corridors and Cycle Tracks (5-year plan), Map 19	1.5-2.0m	Map 19; 3.2.3
	Multi-use Pathway			X*		X*	X*	X*			3.0-5.0m	Map 19; 3.2.3
	Flex Zone: to accommodate pedestrian amenities such as landscaping, furniture, transit passenger waiting areas, public art, pedestrian lighting, wider sidewalks, stormwater management system, etc.	X	X	X	X	X	X	X	X	Whenever additional right-of-way space beyond the minimums is available	For patios, min. 1.0m	3.1.2
	Stormwater Management System									All green highlighted zones shown in the cross sections included in 3.1, wherever space allows.	Refer to relevant sections	2.1; 3.1; 3.2.5; 4.3

X* Apply only one of the bike facility types based on Bike Committee recommendations (Map 19 Bike Integration)

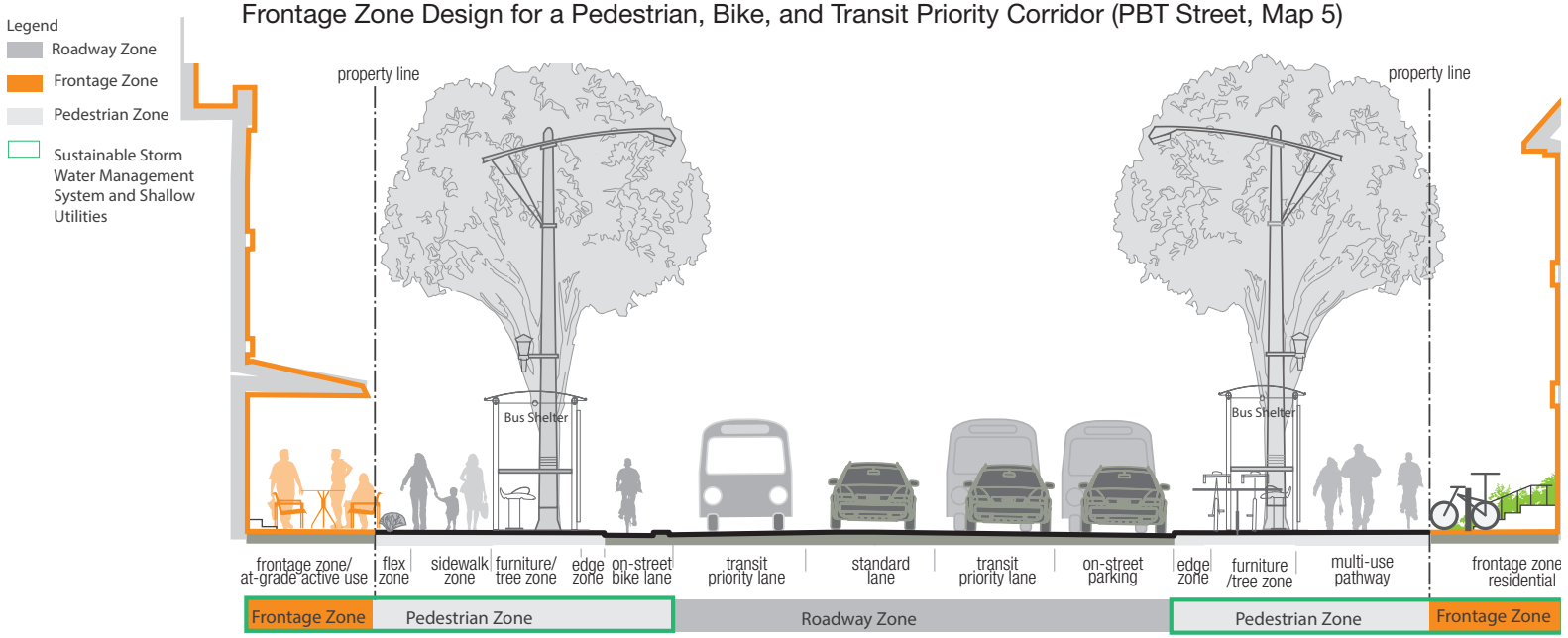
3.1.3 Frontage Zone

Private development plays an important role in shaping the overall streetscape design and character. According to Bylaw33P2013, many featured frontage design elements in the Downtown land use district, which contribute to enhanced pedestrian experience, are eligible for density bonusing. When the right-of-way space is limited to achieve the defined streetscape character, private development should consider providing additional space within the Frontage Zone for on-site pedestrian amenities and public open spaces to accommodate the required streetscape elements that cannot be realized within the Pedestrian Zone.

In the Frontage Zone, the key design elements may include:

- continuous street walls;
- at-grade active uses;
- featured facade articulations, including building signage and lighting;
- on-site pedestrian amenities (e.g. an extension of the public sidewalk, green strip/street trees, urban grove, bike racks, bike station, pedestrian scaled lighting, public art, colonnades, arcades, corner recesses, min. 1.0m patios, sheltered public transit waiting areas, +15 Skywalk System featured access, etc.);
- on-site public open spaces;
- private bike racks and bike stations (they should not conflict with storefronts); and
- stormwater management system where possible (e.g. space under sidewalk for tree trenches, setback area for soft landscaping and permeable paving).

Frontage Zone Design for a Pedestrian, Bike, and Transit Priority Corridor (PBT Street, Map 5)



Frontage Zone Recommended Streetscape Elements by Urban Context

	Streetscape Elements	Recommended Streetscape Elements Based on Travel Mode Priorities (Map 5) Peds (P) Bikes (B) Transit (T) Unclassified/residential (U)								Areas of Particular Attention	Reference
		P	T	B	PT	PB	BT	PBT	U		
Frontage Zone	Continuous Street Walls	X	X	X	X	X	X	X	X		4.2.2
	At-grade Active Uses (e.g. restaurant use with outdoor patios)	X			X	X		X		Retail Nodes and Corridors, Map 8	2.3; 4.2.1
	Featured Facade Articulations (including building signage and lighting)	X			X	X		X		Retail Nodes and Corridors, Map 8 Character Areas, Map 13 Centre City Nightscape, Map 22	2.3; 2.8; 2.12; 3.2.6; 3.2.7; 4.2.4
	On-site Pedestrian Amenities (e.g. an extension of the public sidewalk, green strip/street trees, urban grove, bike racks, bike station, pedestrian scaled lighting, public art, colonnades, arcades, corner recesses, min. 1.0m patios, sheltered public transit waiting areas, +15 Skywalk System featured access, etc.)	X	X	X	X	X	X	X	X	Wherever there is limited right-of-way width, the recommended streetscape elements within the Pedestrian Zone cannot be realized (The on-site pedestrian amenities may be eligible for density bonus, check out Bylaw33P2013)	Various sections: 2.0; 3.2; 4.1; 4.2; Bylaw33P2013 for bonusable on-site pedestrian amenities
	On-site Open Spaces	X			X	X		X		Recommended Corporate Plazas and Pocket Parks, Map 13	2.5; 4.1.2; Bylaw33P2013
	Bike Racks and Bike Stations			X		X	X	X		Bike Corridors and Cycle Tracks (5-year plan), Map 19	2.11; 3.2.3; Bicycle Parking Handbooks
	Stormwater Management System									All green highlighted zones shown in the cross sections included in 3.1, wherever space allows	2.1; 3.1; 3.2.5; 4.3

STREETSCAPE ELEMENTS

URBAN DESIGN OBJECTIVES

- Achieve design **consistency** and coordination
- Provide sufficient sidewalk **widths** related to streetscape characters
- Ensure **safe** and **accessible** pedestrian traffic for pedestrians of all abilities
- Formulate continuous **variety** and **active** building frontages
- Facilitate **placemaking** and provide pedestrian amenities

Policy Reference
- Pedestrian Policy 2008
- Centre City Mobility Plan
- Centre City Plan
- Complete Street Guide

Guideline Sections
- 2.1 Streetscape Characters
- 3.1.2 Pedestrian Zone
- 5.2 Areas of Particular Concern

Sufficient sidewalk space and building frontage design contributes to better pedestrian experience.

3.2 Streetscape Elements

3.2.1 Public Sidewalks

It is critical to coordinate all parties responsible for public sidewalks (regulation, design, improvement, construction, maintenance) and balance the competing uses within the right-of-way and frontage zone to ensure that:

- Sufficient sidewalk widths are provided based on streetscape typologies and travel modes priorities.
- Pedestrian amenities are incorporated.
- Building frontage design contributes to a safe, continuous and comfortable pedestrian experience.

DESIGN GUIDELINES

1. Design Consistency and Coordination

   a. To enhance the pedestrian experience and achieve design consistency and coordination, all streetscape improvement projects should adhere to the following guidelines:

      i. Wherever possible, streetscape improvements should be constructed for an entire corridor, or at minimum the length of one block, on both sides of the block for design consistency.

      ii. Overall streetscape concepts or precinct studies should identify paving material palettes, lighting palettes, furniture palettes, sidewalk widening, building setbacks and street wall heights, so that the individual project complies with the overall streetscape concept design.

      iii. Street improvement projects should widen sidewalks that don't meet the recommended sidewalk widths (in this section), where feasible.

iv. Street improvement projects should consider incorporating transit and bike facilities based on recommendations included in 2.11.

v. Sidewalk repair, utility trenching, and other sidewalk excavations should add street trees, landscaping, stormwater facilities and site furnishings where feasible.

vi. Curb ramp construction and intersection improvement projects should include curb extensions where feasible.

2. Sufficient Width

a. Determine (1) the streetscape elements that should be incorporated in the limited right-of-way space, and (2) if these elements demand any sidewalk expansion onto public right-of-way or private lands. Refer to the minimum sidewalk widths (clear path of travel) by streetscape character recommended in this section. Also see 2.1 Streetscape Characters and 3.1.2 Pedestrian Zone.

b. If the minimum sidewalk width cannot be met due to limited right-of-way space, or more than minimum sidewalk width is expected in a specific context (i.e., the project is adjacent to the nodes and corridors of high pedestrian volume, including busy street corners, transit stops, high streets, transit corridors, etc.):

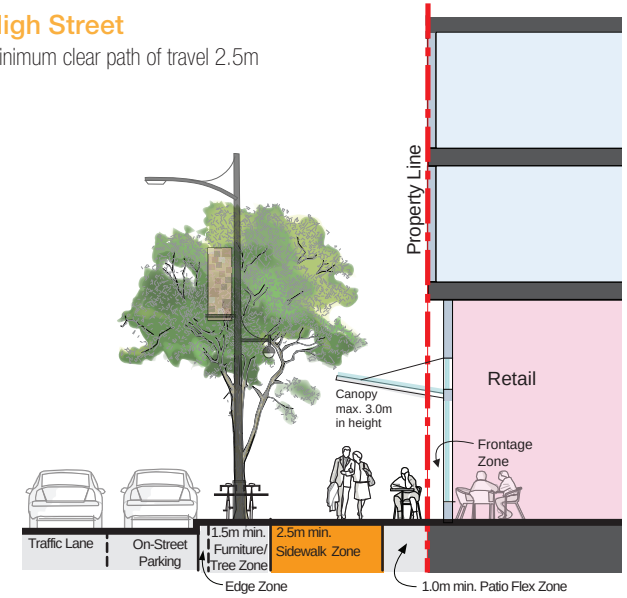
i. Private developments should consider sidewalk widening through building setbacks and provision of high quality on-site pedestrian amenities including colonnades, arcades, recessed corner plazas, etc. Some of these features may be eligible for density bonus at the discretion of the Approval Authority (refer to Bylaw33P2013 for density bonus details).

ii. Public improvement projects should consider applying sidewalk curb extensions at busy street corners or create sidewalks within the existing right-of-way by using bylaw-enforced setback areas, removing or narrowing excess travel lanes, where appropriate.

c. Trees, seating, café patios, kiosks and other street furniture and utilities (e.g. signal poles, lighting bases, garbage cans, fire hydrants, parking metres) should be coordinated and should not impede normal pedestrian traffic on the public sidewalk.

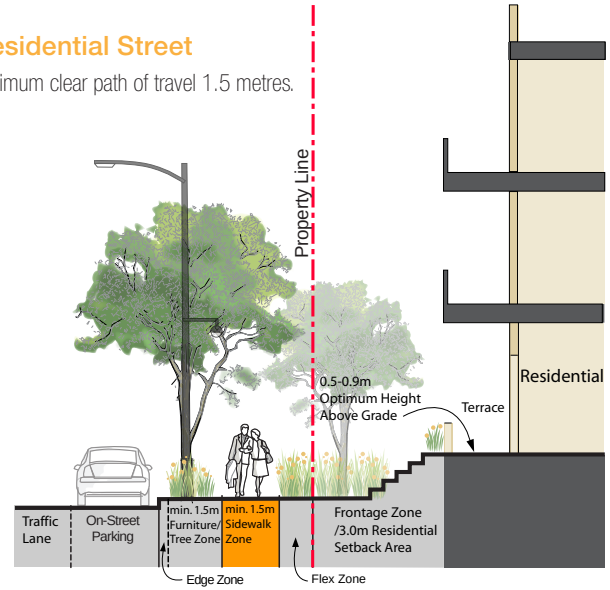
High Street

Minimum clear path of travel 2.5m



Residential Street

Minimum clear path of travel 1.5 metres.



d. Where Bylaw setbacks exist, the following regulations as included in the Beltline Area Redevelopment Plan (ARP) may be relaxed with the discretion of the Development Authority, depending on the purpose and possibility of the future right-of-way expansion:

   i. setting buildings back from the sidewalk where the sidewalk may in fact never be widened;

   ii. preventing arcades, cantilevers or other structures from encroaching the setback area; and

   iii. limiting or prohibiting the placement of street amenities such as trees, planters and lighting.

3. Pedestrian Experience

   a. Sidewalk design and enhancement (width, placement, connectivity, and paving material) must be comprehensively considered together with street, site and building design elements and pedestrian amenities.

The comprehensive design strategies include (detailed guidelines can be found in the relevant Streetscape Guide and Development Guide sections):

   i. Formulate an active, transparent, pedestrian scaled, well-articulated and continuous street wall with frequent entries directly accessible from the sidewalk.

   ii. Increase architectural detailing and variation at grade level when building to property lines.

   iii. Setback building or ground floor only to provide on-site pedestrian amenities (such as an extension of the public sidewalk, green strip/ street trees, urban grove, bike racks, bike station, pedestrian scaled lighting, public art, colonnades, arcades, corner recesses, patios, sheltered public transit waiting areas, +15 Skywalk System featured access, etc.). Most of these amenity items are bonusable (see Bylaw 33P2013 for details).

   iv. A minimum 1.5m Furniture/Tree Zone should be provided between traffic lane and sidewalk.

   v. Facilitate placemaking along the streets by providing sidewalk connections to pedestrian nodes including transit stops, wayfinding stations, bike parking, public art, seating and landscaping/stormwater management areas.

4. Pedestrian Access and Safety

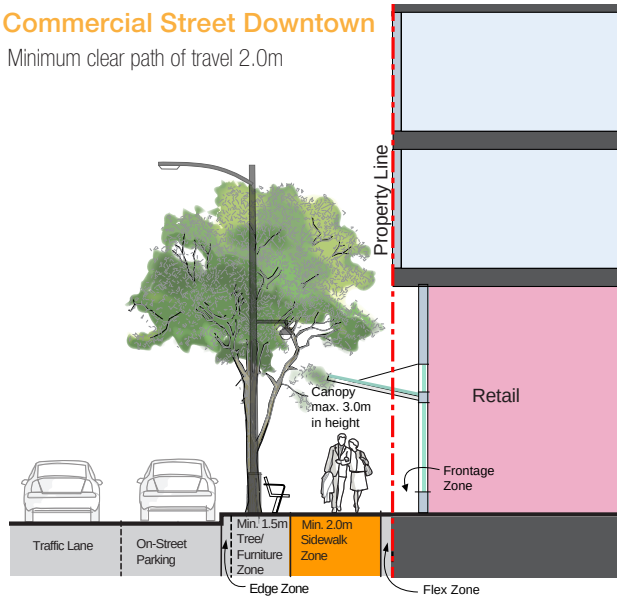
   a. Depending on the surrounding context and pedestrian traffic volumes, establish pedestrian priority by incorporating special design features (such as highly visible crosswalks, raised intersections, curb extensions, etc.).

   b. Avoid multiple driveways and minimize the number of curb cuts. Where there are conflicts with pedestrian flows on street frontages:

      i. Define the area with ample lighting, special paving patterns and unrestricted pedestrian access between the sidewalk and parking area.

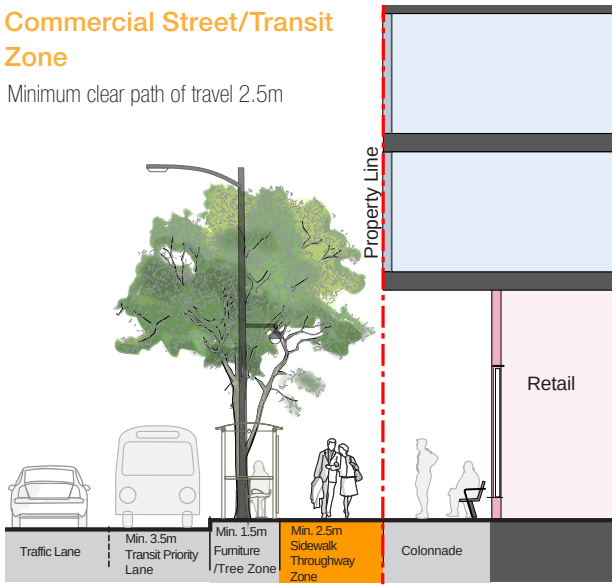
Commercial Street Downtown

Minimum clear path of travel 2.0m



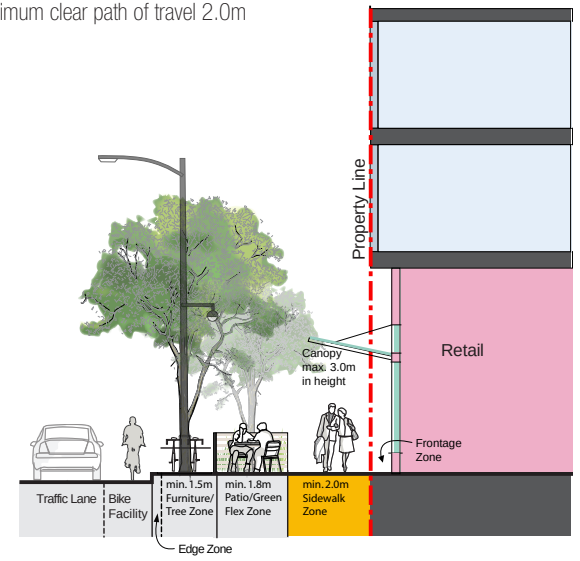
Commercial Street/Transit Zone

Minimum clear path of travel 2.5m



Commercial Street/Beltline

Minimum clear path of travel 2.0m



ii. Ensure that driveways and access to parking are no wider than 24 feet (7.3m).

iii. Consider the option of a one-way back lane to reduce the number of locations where vehicles exit from the lane and across the pedestrian realm.

c. Provide smooth and moderate grades and cross slopes to ensure comfortable walking and seamless transition between different grades (e.g. street corners, CTrain platforms, sidewalks/multi-use pathways, building entrances) according to relevant codes and standards.

d. To provide a seamless transition between the sidewalk and building frontage in grade-separated areas, the entire sidewalk or a portion of the sidewalk adjacent to the building may be ramped, and/or internal stairs and ramps may be provided. Refer to 4.2.4 Frontage for additional guidelines.

e. Balance the different needs of pedestrians including seniors, persons using wheel chairs and other mobility devices, and visually impaired pedestrians.

f. Give clear indication of the transition between the sidewalk and road to reduce confusion presented to blind and visually impaired pedestrians.

g. The grade of the sidewalk corridor should not exceed 5 per cent; the slope of the curb ramp should not exceed 8 per cent and should use textured concrete.

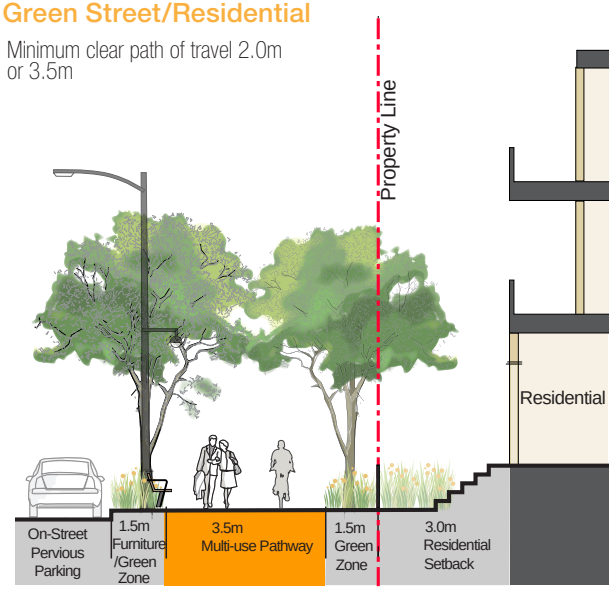
h. When the slope of a curb ramp is less than 6.7 per cent, use colour and brightness contrast detectable warning surfaces (i.e. tactile paving) for the ramp to give clear indication of the transition from the sidewalk to the road intersection.

i. Audible signals can be combined with detectable warning surfaces at busy intersections, or raised intersections, to help further reduce the confusion presented to blind and visually impaired pedestrians.

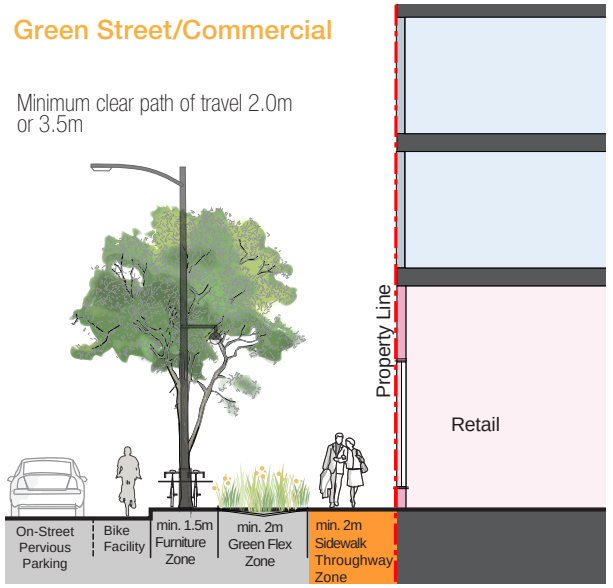
j. For raised parking lanes, give clear indication of the transition between the sidewalk and parking lane to avoid a potential tripping hazard and the confusion presented to blind and visually impaired pedestrians.

k. When pavers are used, they should be large and smooth enough to avoid uncomfortable vibration for cyclists and people using wheeled conveyances.

Green Street/Residential



Green Street/Commercial



Consistent paving materials are used at the building entrance plaza and its adjacent public sidewalk.

The two-coloured concrete paving material is used to accent the residential building entrance while coordinating with the textures of both the building facade material and adjacent sidewalk surface material.

Continuous and consistent paving materials define the streetscape character and the pedestrian zone.

Permeable paving can be used to provide increased stormwater infiltration and minimize runoff.

5. Sidewalk Surface Materials
   a. Consistency
      i. Private development and public improvement projects should contribute to defined streetscape characters by using consistent or complementary surface materials, patterns, colours and textures.
   b. Location
      i. Paving materials should define the pedestrian zone, indicate pedestrian priority and assist with wayfinding.
      ii. Paving materials should be varied to accent special areas (such as building entrances, plaza edges and transit zones).
   c. Design
      i. Paving materials should be high quality, hard surfaced, even, stable, durable, slip-resistant and easy to maintain considering the winter conditions in Calgary.
      ii. Paving materials should ensure Calgary's sidewalks are accessible to people of all ages and abilities.
      iii. Paving materials should consider multiple freeze-thaw cycles in Calgary.
      iv. Permeable materials (especially along the Furniture/ Tree Zone, Edge Zone and Frontage Zone of the Green Streets) should be considered to encourage natural water infiltration.
      v. Refer to 3.2.3 Bike Facilities for multi-use pathway design details.
      vi. Catch basins, ventilation grills, vault lids and tree grates located in the sidewalk zone should be avoided, and if not, mitigate their impact on pedestrians through the use of durable, even, slip resistant materials.

d. Character

i. Paving materials in the Character Areas (2.8) should be suited to their context, embody local character and follow coordinated local area plans.

ii. Use brushed concrete as the standard paving material for the Sidewalk Zone; for high pedestrian volume streets, explore the use of coloured asphalt, coloured and stamped concrete, and other decorative materials (tile, stone and brick) along Furniture/Tree Zone, Edge Zone, Frontage Zone, or the trim zone of a multi-use pathway.

iii. Preserve original sidewalk stamps or reuse them as part of the historical preservation practice.

iv. Wayfinding, lighting, public art or historical interpretive features can be embedded in the paving surfaces (especially for high pedestrian volume streets) to enhance the streetscape character.

Varied paving materials at this multi-use pathway help to define pedestrian and cyclist zones and highlight potential conflict zones (i.e. pedestrian crossing).

Colours and patterns should be selected based on their material appropriateness and contribution to the Centre City's identity.

Materials can address context and contribute to local characters.

A historical interpretive feature is embedded in the paving surface to enhance the streetscape character.

TRANSIT FACILITIES

URBAN DESIGN OBJECTIVES

- **Integrate** transit facilities in the selection of new multi-modal streets that emphasize walking, cycling and transit
- Identify areas, corridors and nodes of particular attention and provide **transit-supportive** urban design
- Provide transit passenger amenities to support the **use, functionality** and **enjoyment** of the public transit system
- Provide **active uses** and **public spaces** along transit corridors and around transit nodes
- Ensure that transit priority corridors are capable of accommodating public transit needs
- Integrate multiple **travel modes** (walking, cycling, public transit and driving)
- Support the implementation of planned transit **alignments**

Policy Reference

- Transit Friendly Design Guide
- Centre City Plan
- Beltline ARP
- Centre City Mobility Plan
- Complete Street Guide

Guideline Sections

- 2.11 Transit Integration
- 5.2 Areas of Particular Concern

3.2.2 Transit Facilities

Centre City is a major focus of Calgary's transit network. 50 per cent of Centre City workers travel to work on transit. According to ImagineCALGARY, the transit/vehicle modal split target for the Centre City is 60 per cent. To achieve this target, the overall system needs to be planned and designed around the provision of a high-quality pedestrian and bicycle realm to support the use, functionality and enjoyment of the public transit system.

DESIGN GUIDELINES

1. Pedestrian Access

   a. Design transit stations, and vertical and horizontal connections to transit stations, that provide seamless, efficient and barrier-free access for pedestrians with all levels of physical abilities.

   b. Whenever possible, avoid walls, berms, steep slopes or steps that isolate the buildings from transit access. If unavoidable, provide short and direct pedestrian access to transit facilities.

   c. Carefully design landscaped setbacks to avoid long walking distances on the part of transit riders and to avoid isolating those waiting for transit services.

2. Streetscape Design

   a. Provide adequate street space and sidewalk width (min. 2.5m sidewalk width adjacent to building face is recommended at transit stops) to allow for pedestrian circulation and transit loading and off-loading.

   b. If space allows, carefully locate street trees in transit stations away from the curb to avoid obstruction and ensure proper spacing of trees (approximately every 4.0m within the transit stop).

   c. Orient building entrances to priority transit corridors and provide short and direct access to transit stops and stations.

Transit facilities are an integral part of Centre City's multi-modal streets that emphasize walking, cycling and transit.

Transit stops should be integrated with other streetscape elements (street trees, furniture and public sidewalks) and building frontages.

3. Transit Passenger Amenities

   a. Design transit stations as vibrant, mixed-use areas or focal points incorporating transit-supportive passenger amenities (such as active uses, urban plazas/public gathering areas, public art, etc.) to provide for natural surveillance and an active street.

   b. Provide transit passenger amenities (such as adequate lighting, furniture, wayfinding systems, accurate passenger information and communication systems, electronic surveillance, etc.) that do not impede access to and from transit vehicles or transit stations and stops.

   c. Integrate transit passenger amenities with local streetscape design and building facade articulations (i.e. provision of active uses, urban plazas, public washrooms and weather protection features, such as enclosed space, colonnades, canopies, communal ground-level heaters, or heat lamps).

   d. Where possible, incorporate deeper setbacks at bus zones to provide additional space for bus waiting and tree planting (this may be eligible for density bonus).

   e. Where possible, set back transit passenger amenities from the curb to allow for circulation when space is available.

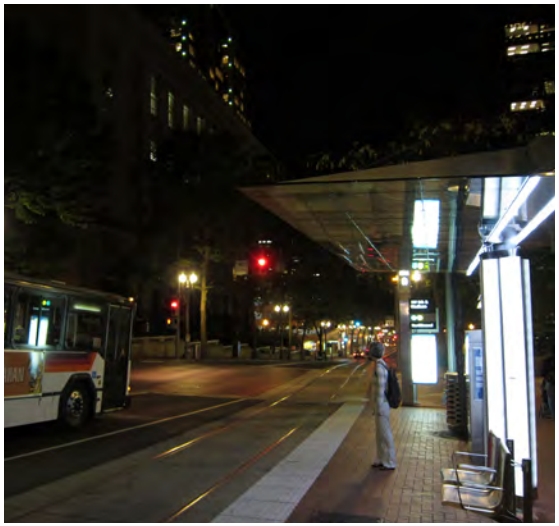
   f. Use transparent materials for transit shelters and any enclosed waiting areas. At maximum, one side of a transit shelter may be used for advertisements.

   g. Integrate transit passenger amenities with other modes of transportation, including the +15 Skywalk System.

   h. For bus zone detailed design and common transit design dimensions (bus vehicle dimensions, standard bus turning template, standard bus, BRT zone dimensions, typical bus station, bus turnarounds, bus passenger shelter, light rail vehicle dimensions), refer to the Transit Friendly Design Guide.

Front setbacks and canopies along busy transit corridors provide additional space and weather protection for pedestrians and transit passengers.

Transit stations should be integrated with the +15 Skywalk System where applicable.



Lighting at transit stops as part of transit passenger amenities provide pedestrian safety and comfort.

Transit stops are set back from the curb to allow for pedestrian circulation and the provision of additional streetscape elements (street trees, seating, etc.).

4. Area-specific Guidelines

a. Centre City Transit Priority Corridors

Proposed Location: See Map 23 for identified transit priority corridors.

Specific Guidelines

i. Along identified transit priority corridors, require a minimum of one wide lane (3.5m) per direction that is not encroached on by leaning poles, trees, signs, etc. to accommodate public transit needs.

b. 7 Avenue Primary Transit Corridor

Specific Guidelines

In addition to the general guidelines included in this section, the following specific guidelines should apply:

Roadway Zone

i. Minimum clearance over LRT corridors shall be 6.0m at the intersection, although a lower clearance may be permitted in mid-block locations where transit standards can be maintained.

Pedestrian Zone

i. Integrate wayfinding, street furniture, street lighting and public art features into the furniture zone of the LRT stations or platforms.

ii. Incorporate downtown branding with any public improvement initiatives to facilitate a seamless downtown branding program.

Frontage Zone

i. Strengthen 7th Avenue as a transit-oriented development zone with at-grade active uses:

- Support convenience-type retail such as food, specialty food, health and personal services and banking as well as flagship retailers.
- Focus retail on the main intersections in relation to the north/south streets, with a particular emphasis between Barclay Mall and Centre Street.

ii. Use building frontages with a variety of at-grade facade articulations to create a sense of human scale.

iii. Incorporate transit waiting areas and weather protection such as canopies, shelters, and/or waiting areas integrated into adjacent buildings.

iv. Consider large, animated, electronic displays for civic information and commercial advertising, and digital public art to add interest, comfort and visual attractiveness to the 7 Avenue streetscape.

v. Use reflective facade materials along south-facing facades to brighten the north side of the avenue.

c. Proposed 2 Street SW Transit Station

Proposed Location: A transit station at 2 Street SW between 5 and 10 Avenue SW (Map 20).

Specific Guidance (as per the Centre City Plan)

i. Plan for a transit station that integrates underground and at-grade LRT lines, the BRT routes, high speed rail to Edmonton, regional commuter rail/bus lines, parking facilities for automobile and bicycle and the appropriate supportive land uses. A station may include purpose-built structures and connections (above, below or at street level) through other private and public facilities and structures. Taken together, these structures and connections will form an integrated station complex.

d. Public Transit Terminal Plazas

Proposed Locations (as per the Beltline ARP)

Two locations have been identified as preferred locations for a Transit Mall or Public Transit Terminal Plazas (Map 20), which are:

- the north block at the intersection of MacLeod Trail and 17 Avenue SE; and
- the intersection of 10 Avenue and 2 Street SW along the proposed new SE LRT line.

Specific Guidelines

In addition to the general guidelines included in this section, the following specific guidelines should apply:

i. The plazas should be designed for either a shorter stay or as a gathering place.

ii. The plazas should provide commercial/retail and hospitality uses at-grade.

iii. Public transit terminal plazas should be enclosed (temperature controlled) with opened waiting areas.

iv. The public transit terminal plazas should be integrated with the +15 connection.

v. Public restrooms, sitting areas, canopies, colonnades and public clocks should be provided in these plazas.

7 Avenue Primary Transit Corridor.

BIKE FACILITIES

URBAN DESIGN OBJECTIVES

Safety

- Increase **pedestrian** and cyclist **safety** and convenience throughout the Centre City
- Provide pedestrian scaled lighting

Connectivity

- **Complete** the defined Centre City Bicycle Network and implement Centre City Cycle Track 5-year Plan
- Improve **bike connectivity** between Downtown and Beltline
- Connect Centre City **bicycle network** to the regional pathway system

Streetscape Integration

- **Balance** the competing needs of space for all streetscape elements based on travel mode priorities (2.1)
- Integrate **bike-friendly street design** solutions
- **Integrate** bike facilities with surrounding uses and other travel modes
- Integrate **bike parking** in all street **improvement projects** and new developments

Best Practice Metrics

- Implement recommended best practice **metrics**, and if not possible, explore mitigating solutions

Policy Reference

- Centre City Mobility Plan
- Centre City Plan
- Cycling Strategy
- Complete Street Guide
- Downtown Underpass Urban Design Guidelines
- Bicycle Parking Handbook

Guideline Sections:

- 2.11 Bike Integration
- 5.2 Areas of Particular Concern

3.2.3 Bike Facilities

DESIGN GUIDELINES

1. Location and Type

a. Determine the location and type of bike facilities, such as on-street wide-curb lanes, on-street bike lanes, off-street cycle tracks, off-street multi-use pathways, etc. (see Map 19 Bike Integration for Centre City bike network and 5-year cycle track plan recommended by Centre City Bike Committee).

b. Determine the location and type of bike amenities (such as bike racks, bike stations, public bike share stations, etc.) based on pedestrian traffic, cyclist needs, overall streetscape design, surrounding uses and site plan of the private development. For example, a bicycle station in the vicinity of Eau Claire Plaza is encouraged based on comprehensive analysis of the above criteria.

c. Provide bicycle routes to, and bicycle parking at, transit stations, hubs and corridors.

d. Improve bike connectivity between Downtown and Beltline by implementing Recommended Bike Infrastructure Types at underpasses and investigating the feasibility of the following bicycle improvements:

i. A pedestrian and bicycle-only crossing of CPR tracks at 2 Street SW;

ii. A pedestrian and bicycle-only crossing over 14 Street SW at 10 Avenue S; and

iii. A pedestrian and bicycle-only overpass to connect the 13 Avenue Greenway over Macleod Trail and the LRT tracks into Stampede Park and 12 Avenue SE.

2. Design

a. Bike-friendly Street Design

i. Provide a smooth surface on roads clear of obstacles (potholes, debris, sewer grates, uneven asphalt, gravel, snow, etc.) to avoid uncomfortable vibration for cyclists and people using wheeled conveyances.

	Recommended Bike Facility Types at Underpasses (based on the recommendations from Downtown Underpass Urban Design Guidelines)
7 Street SE	Off-street, multi-use pathways
4 Street SE	Off-street, multi-use pathways
Macleod Trail	Off-street, multi-use pathway along east side of the street
1 Street SE	Off-street, multi-use pathway along west side of the street
1 Street SW	On-street, shared travel lanes
2 Street SW (future)	Off-street, multi-use pathway or on-street bike lanes
4 Street SW	On-street, shared travel lane along east side of the street
5 Street SW	On-street, shared travel lane along west side of the street
8 Street SW	On-street bike lanes (see 8 Street SW Corridor Public Realm Plan)
11 Street SW	On-street bike lanes

Off-street, multi-use pathway at 4 Street SE underpass.


Bike parking at building frontage.


Bike parking at curb extension area.


Cycle track with planter buffer, painted pedestrian/cyclist conflict zones and convenient bike parking.

ii. In the case of a multi-use pathway design, use the combination of concrete/asphalt and decorative materials (e.g. concrete sidewalk with asphalt cycle track and brick/stone trim). Provide a visible transition edge between the sidewalk and the cycle track. Level changes should be avoided. Small lighting elements embedded in the trim zone can be considered to ensure visibility during evenings for cyclists and pedestrians, including the visually challenged.

iii. Encourage the installation of bike-friendly street design solutions (such as bike boxes, speed humps, bicycle-actuated signals, reversed stop signs, etc., depending on surrounding context) to increase cyclists' safety.

iv. Curb extensions should maintain an adequate width for a cyclist and motor vehicle to pass side-by-side.

v. Enhance consistency on planning, design approval and inspections in regards to a safety buffer (minimum 0.5m, or 1.0m when adjacent to a parking lane or travelling uphill). If not possible, mitigation measures must be applied.

b. Bike Parking Streetscape Integration (public and private)

i. Bicycle racks should be of high quality design and in a well lit location.

ii. Encourage creative bike rack design and the installation of public art functioning as bike racks in Character Areas (Map 13).

iii. Bike rack shelter should be visually light with a transparent cover.

iv. Bike racks should not conflict with retail/restaurant visibility.

c. On-Site Bicycle Racks (private)

i. Racks must be located within 15.0m of the public entrance and have passive surveillance to maximize convenience and security, but should not interfere with pedestrian movement.

ii. On-site bicycle racks should be integrated with the building envelope to minimize the inset size and reduce the appearance of gaps in the facade.

d. Public Bicycle Racks (public)

i. Public bike racks should be located in the public ROW (preferably the furniture zone) in areas that will support adjacent land uses, particularly areas of high pedestrian intensity. Where not possible, public bike facilities may require encroachment agreements with adjacent landowners.

ii. Bike racks in the furniture zone should be parallel to street/property lines.

3. Climate

a. Appropriate priority must be established for maintenance, snow clearing and repairs to ensure bike facilities remain available and usable.

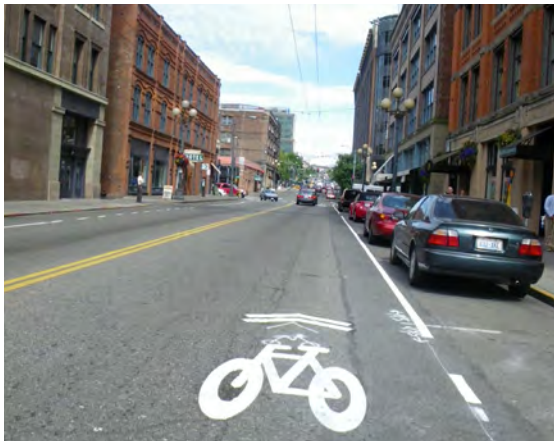
b. Bike racks should be protected from weather (sheltered bike racks) whenever possible.

c. Bike rack shelters should be designed to prevent rain from dripping and the creation of icicles.

4. Recommended Bike Facilities Types and Design Metrics for Streetscape Integration

On-street, shared travel lane

Minimum dimensions:	4.0m
Recommended dimensions:	4.5m
Description:	On-street, shared travel lane with frequent bike symbol marks and "share the road" signs. A 1.0m wide bicycle stencil is painted on the roadway.



On-street bike lane

Minimum dimensions:	1.5m; 1.2m permitted in retrofit projects where there are constraints.
Recommended dimensions:	2.0m, including 0.5m buffer; or 2.5m, including 1.0m buffer when adjacent to a parking lane or travelling uphill.
Description:	On-street, marked bike lane with frequent bike symbol marks and painted or textured buffer.

Off-street cycle track

Minimum dimensions:	1.5m
Recommended dimensions:	2.0m, including 0.5m physical buffer
Description:	Off-street, separated bike lane with physical buffer.

Off-street, multi-use pathway

Minimum dimensions:	3.5m
Recommended dimensions:	3.5m-5.0m, combining 1.5m-3.0m sidewalk, 1.5-2.0m cycle track and buffer.
Descriptions:	Off-street, separated pathway with physical buffer shared by pedestrian and cyclist. A visible transition edge (using material and colour difference) between sidewalk and cycle track with no level changes is preferred.

Regional pathway

Recommended dimensions:	3.0m uplands and 4.0m for river and creek valleys

STREET TREES

URBAN DESIGN OBJECTIVES

- Maximize **safety, comfort,** and **function**
- Reduce clutter and maintain **pedestrian flow**
- Define special **characters**
- **Activate** streets, buildings and places
- Enhance pedestrian comfort in all **seasons**

Policy Reference

- Transit Friendly Design Guide
- Bicycle Parking Handbooks
- Universal Design Handbook
- Access Design Standards

Guideline Sections:

- 2.1 Streetscape Characters
- 2.8 Character Areas
- 3.1 Streetscape Zones
- 3.2.1 Public Sidewalks

3.2.4 Furniture

Street furniture consists of all elements and amenities installed in the public right-of-way and frontage zone for the use and convenience of the pedestrians, such as transit shelters, garbage/recycling bins, public seating, wayfinding signage, lighting, shelters, bike racks, utility poles, etc. Well-designed and carefully located street furniture can make the streetscape more comfortable and life on the sidewalk more convenient.

DESIGN GUIDELINES

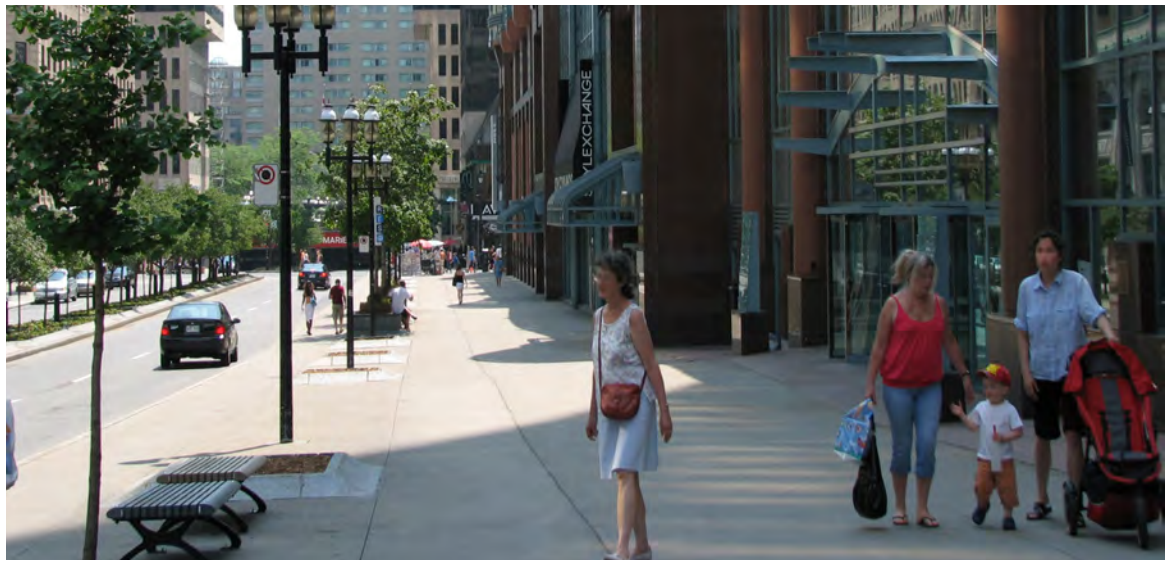
1. Location

(See 3.1 and 3.2.1 for streetscape zones and cross sections to accommodate the streetscape elements within pedestrian and frontage zones.)

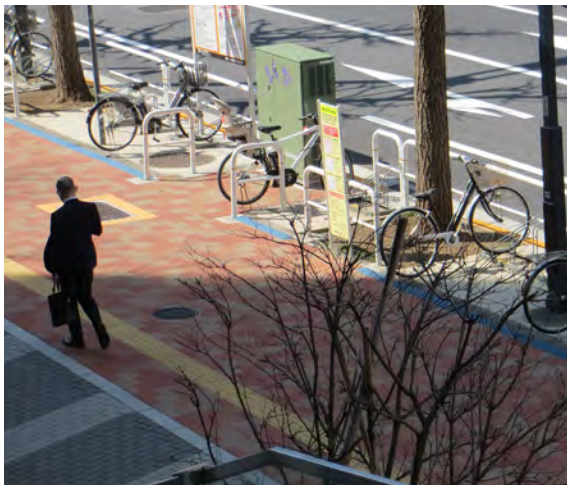
a. Public furniture should be integrated within the furniture zone (or flex zone if there is additional space available), and private furniture within the frontage zone so as to avoid obstructions and clutter.

b. The width of the sidewalk clear path of travel should be determined prior to the width of the furniture zone (see 3.2.1); the minimal space for furnishing should be no less than 1.0m.

c. As pedestrian amenities, furniture should be located in areas that will support adjacent land uses, particularly areas of greater pedestrian activity, including parks and open spaces, the riverfront promenades, pedestrian corridors, transit corridors, commercial areas, +15 Skywalk System, corner plazas, pocket plazas and squares.



Public furniture (e.g. seating, lighting, signage, etc.) should be located in areas that will support adjacent land uses and pedestrian activities, and be integrated within the furniture zone so as to avoid obstructions and clutter.



Bike racks, street trees, street lights and utility boxes are all located in a distinctive zone to reduce clutter and maximize pedestrian comfort.

The magazine stand helps to activate the street without hindering pedestrian flow.

d. Furniture should not interfere with building entrances, busy street corners, heavily used loading zones, parked vehicles, transit stops, or access to fire hydrants and underground services.

e. Furniture zone must allow signage throughout and be designed to allow access to/from parked vehicles.

f. Furniture should maintain sight lines at intersections and allow the visibility of signage.

g. Wayfinding signage should identify destinations, gateways, neighbourhoods, the +15 Skywalk System, entrances and transit stops.

2. Character

(See 2.1 for defined streetscape characters and 2.8 for character areas.)

a. For identified Character Areas (Map 13), create a unique street character that responds to the architectural theme and quality of an area through the use of cohesive and coordinated street furniture elements (e.g. banners, entrance signs, signage, lighting and other street furniture). Existing palettes (such as those in East Village, Stephen Avenue, Chinatown, 17 Avenue, etc.) should be considered and the number of choices should be limited to facilitate the ongoing coordinated street furniture program.

b. Street Furniture should be allowed to be customised in special character areas by using different colour, graphics, materials and finish details. Depending on defined streetscape characters and character areas, furniture/tree zone may be characterized by decorative paving features using different materials, design elements and graphic treatments.

c. Signage should enable heritage interpretation and promote local character.

3. Design

a. Furniture should be of high quality in design and materials, durable, easy to maintain and replace (e.g. replaceable modular parts), and compatible with the existing environment.

b. Furniture should engage pedestrians, reduce clutter and maximize pedestrian visibility, safety and comfort.

c. The number of furniture elements should reflect and respond to use patterns, placement opportunities, accessibility and pedestrian flow.

d. Seating areas should be designed as pedestrian nodes grouping key furniture pieces and amenities together (such as lighting, wayfinding signage, bollards, seating, tables, newspaper dispensers, trash receptacles, bicycle racks, drinking fountains, tree grates, tree guards, etc.).

e. Furniture can be artful, simple, creative in design, or combined with other uses (such as seating surface on planter ledges, or bike racks designed as public art)

f. Distinctive, movable and multipurpose street furniture is encouraged to allow users the flexibility of creating their own desired configurations for social interaction.

g. Street furniture elements should be designed to accommodate pedestrians of all abilities.

h. The use of sustainable materials and energy saving/ efficient design is encouraged (e.g. solar energy through the use of solar panels, recycled materials, energy efficient lighting, etc.)

4. Climate

a. Furniture should enhance pedestrian comfort in all seasons.

b. Covered bike racks may be provided to increase usability in winter.

c. Seating location and configuration should consider maximum sunlight access and minimum wind impact.

5. Ownership

a. Public furniture should be located in the public right-of-way where possible. Where not possible, public furniture may require encroachment agreements with adjacent landowners (this is particularly relevant for bike racks).

b. Calgary Transit is responsible for the maintenance of 7th Avenue, including placement of furniture and other items.

This pop-up seating area located at a street corner adjacent to a small retail use helps to activate the street and provide pedestrian comfort.

Furniture with wooden surface enhances pedestrian comfort in all seasons.

Movable and multipurpose street furniture is encouraged to allow users flexibility.

Furniture can be artful, simple, creative in design, or combined with other uses.

STREET TREES

URBAN DESIGN OBJECTIVES

- **Link** all green spaces to form an interconnected green system at the Centre City (2.5)
- **Protect** and **enhance** existing trees and forest ecosystems at all parks and green spaces within the Centre City
- **Increase** tree planting and green spaces in all new development on both public and private lands
- Provide quality, **sustainable** landscapes and trees at sidewalks and boulevards of commercial, residential and special streets
- Integrate **low impact development** with street tree planting to improve a street's ecological performance

Policy Reference

- Design Guidelines for Street Lighting
- Parks' Development Guidelines and Standard Specifications, Landscape Construction
- Sustainable development Guidelines for Trees, Shrubs & Groundcovers 2009
- Parks Water Management Strategic Plan

Guidelines Sections

- 2.1 Streetscape Characters/ Green Streets
- 2.4 The Riverfonts
- 2.5 Parks and Open Space
- 3.1.2 Pedestrian Zone
- 3.2.1 Public Sidewalks
- 3.2.9 Utilities

3.2.5 Street Trees

Street trees and other landscaping can make streets and neighbourhoods delightful, memorable and comfortable places. Used together with other streetscape elements, they can define the character of streets and enhance the visual enjoyment of our urban fabric. In addition, street trees provide us with many environmental and social benefits.

DESIGN GUIDELINES

1. Street Tree Planting

   a. Tree location and Spacing

      i. Prioritize total tree canopy size over the quantity of trees.

      ii. Integrate street tree planting with the planning of proposed utility alignments, including existing utility alignment and connections. Identify tree planting opportunities and locations in early design stages, and coordinate these with the placement and alignment of underground and/or overhead utilities.

      iii. Use planting design and construction practices that accommodate a minimum 50-year tree lifespan target. Refer to Parks' Development Guidelines and Standard Specifications, Landscape Construction for technical details of these practices.

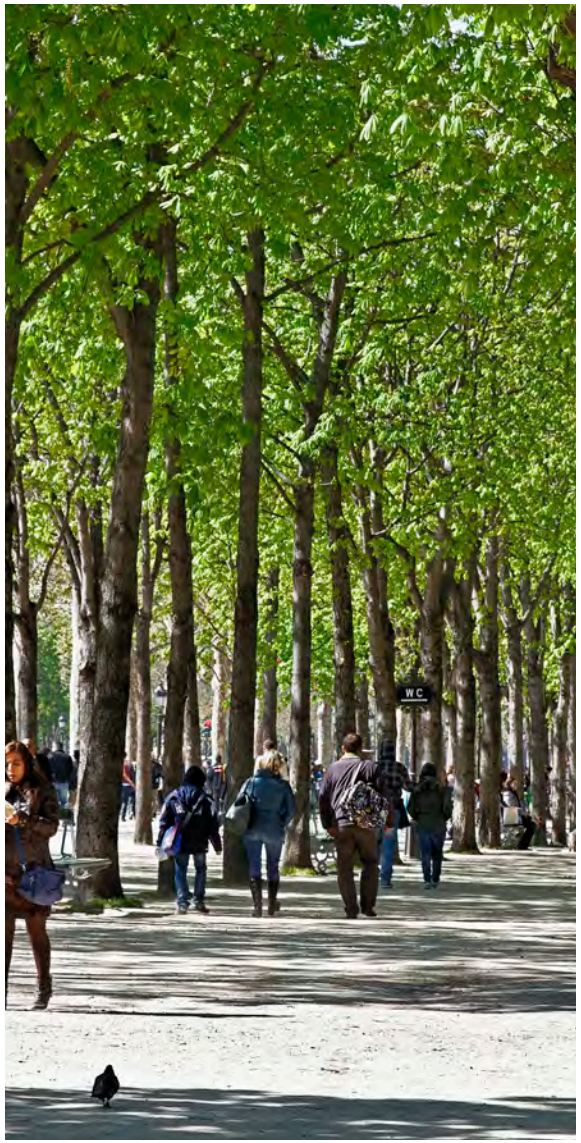
      iv. Create a continuous tree canopy and buffering effect between the roadway and the sidewalk.

      v. Use closer street tree spacing for heavily travelled streets to visually and physically strengthen the separation between roadways and sidewalks.

      vi. Adjust street tree spacing to suit local street conditions and minimize conflicts with setbacks at street corners, utilities, driveways, building access and entries, street lighting, transit stops and crosswalks.

      vii. Position a street tree slightly off the desired rhythm or spacing instead of having a gap in a planting pattern, should site limitations prevent the exact tree spacing.

      viii. Align tree trenches and/or planters to run in a straight line along the city block and parallel to sidewalks.



Double rows of trees create tree tunnels at sidewalks providing pedestrian comfort from bustling street traffic, noise and heat.

ix. Space the trees out regularly, 6.0m to 10.0m apart, and with a minimum set back of 1.5m from the road curb. Consider tree spacing with the expected mature tree sizes in mind.

x. Plant trees as much as possible in trenches, and in interconnected groups or clusters. Target a minimum lifespan of 50 years for planting design.

xi. Use permeable surface treatment of sidewalks to increase water and oxygen for intake by tree roots where possible, when optimal tree basins or trenches cannot be used.

xii. Space street trees to spread out between street lights. See current Design Guidelines for Street Lighting for separation and clearance distances.

xiii. Adapt new tree planting strips, pits, trenches or planters to the location of existing lighting, if necessary.

xiv. Do not plant street trees adjacent to accessible parking and passenger zones where sidewalks are less than 3.5m wide.

xv. Maintain a minimum clearance of 2.4m between curb face and edge of tree pit or trench along the length of accessible parking and passenger zones where street trees are planted.

xvi. Space trees about every 6.0m within the transit stop zone to permit transit passengers to board and alight without obstruction.

xvii. Reflect Crime Prevention Through Environmental Design (CPTED) principles in tree beds and planting design. Ensure there is no interference with sightlines, access, parking/loading, or access to fire hydrants, utilities and services.

xviii. Integrate street trees with street furniture at the furnishing zone. Street furniture includes traffic signage, street benches, bike racks, lighting, waste bins and way-finding signage.

xix. Place awnings, canopies, signs and temporary structures to avoid conflicts with street trees.

xx. Use hard landscaping within areas adjacent to roadways that are subjected to intensive ice and snow management activities. These include intersections, hills, school zones, bus routes, expressways, arterials and medians.

b. Character and Street Legibility

i. Protect and retain street trees wherever possible to maintain and/or enhance the character of a street or place, be this historical, commercial, residential and/or green space.

ii. Use street trees to reinforce street hierarchy, way-finding and views by:

- breaking continuous tree lines at places of interest;
- using flowering trees to accentuate and enhance entrances at neighbourhoods as well as buildings;

Large tree openings allow more water, oxygen and unobstructed growing medium for trees to develop. Open planter systems also allow fairly free access to maintain utilities within the root zones of trees. Repairs of curbs or retaining walls around the planting zones become conveniently accessible.

Please note the following bonusing provisions of 1P2007:

Land Use Bylaw 33P2013 Part 13: Commercial Residential Districts

- Bylaw 1294: General Landscaped Area Rules
- Bylaw 1298: Low Water Irrigation System
- Bylaw 1332: Incentive Density Calculation Method, Schedule A, Table 8: Public Amenity Items, item 8.2 Public Open Space; item 8.4 Urban Grove

Less trees and greater tree spacing allow more soil for each tree. The trees and canopy can grow larger, significantly enhancing the streetscape quality.

(Note: These are adaptations of figures taken from Tree Planting Solutions for Hard Boulevards - Best Practices Manual (City of Toronto)


Mature street trees add distinctive value to the streetscape.


Large trees defining the character of a place.


Street trees buffer amenity space like this park from traffic on roadways. Here, pedestrians can take momentary refuge from busy urban streets.

Keep street trees clear of pedestrian and passenger movement at transit stops and zones.

- setting back street trees at transit stops and zones to facilitate passenger movement (including universal access) between transit vehicles and the sidewalk, as well as pedestrian movement around these stops;
- planting a double row of trees to create a formal, consistent planting design distinctive for ceremonial streets, commercial streets, special streets and major thoroughfares, or to create tree tunnels at sidewalks and roadways;
- lining street trees to frame vistas; or
- varying tree planting pattern or design, as well as tree species, to create a relaxed mixed landscape at residential streets for neighborhood character.

iii. Select tree species to reflect the urban design goals of a streetscape character. Consider the form, mature size, colour and texture of tree species for the local climate. In addition, consider root growth and mature tree canopy impacts on sidewalks, curbs, utilities, street or pedestrian lighting, views of signage and building fronts.

c. Scale

i. Line streets with street trees to give the streets a sense of enclosure and a human-scale.

ii. Provide tree planters/planting beds with raised seat walls, where sidewalk widths allow, to support soil volume as well as to have shaded street seating.

iii. Plant trees at medians of very large streets to visually narrow the roadways and calm traffic.

d. Climate Impact

i. Plant only salt tolerant species of street trees in medians, where possible.

ii. Plant high-headed canopy deciduous trees at locations where cooling summer shade and warming winter solar heating is desired.

iii. Do not use coniferous trees as street trees, as these interfere with sightlines.

iv. Avoid planting street trees where they would shade and cause icing of paved surfaces in winter.

v. Locate street trees to mitigate known wind impact and heat island effect.

2. Biodiversity

a. Tree Species and Native Vegetation

i. Balance tree species to maintain biodiversity by following The City of Calgary's urban forestry provisions.

ii. Preserve or establish native vegetation along roadway greens wherever possible.

3. Low Impact Development

a. Incorporate low impact development in any major street improvement project. Where possible, use existing infrastructure like raising sewer manholes to form overflow drain inlets at either existing or new landscaped beds and/or planters, to create new storm water facilities.

4. Tree Clearances from Utilities

a. See the Design Guidelines for Subdivision Servicing for minimum tree clearance distances from shallow and deep utilities. Obtain confirmation of no conflict from the relevant utility owner for any clearance less than the specified minimum distances.

b. Setback trees from all streetlight poles to a minimum of 4.0m.

c. Coordinate with and obtain approvals from all relevant utility owners on the design of tree trenches that incorporate any existing utility infrastructure, prior to any construction.

SIGNAGE

URBAN DESIGN OBJECTIVES

- Reinforce **legibility** and **wayfinding** for users of different travel modes
- Identify Centre City **public realm system** (2.0 Urban Context)
- Contribute to the defined streetscape **characters** (2.1)
- Avoid clutter and **visual pollution**
- Promote local character
- Accommodate **new technology** trends

Policy Reference
- Land Use Bylaw1P2007
- Bylaw33P2013

Guideline Sections:
- 2.0 Urban Context
- 3.1 Streetscape Zones

Wayfinding signage located in the furniture zone is integrated with other streetscape elements.

Signage should be used as branding for the city and can bring human-scale to the street environment.

3.2.6 Signage

There are generally four types of signage - traffic signs, pedestrian wayfinding signs, advertising signs, and building signage. The guidelines focus on pedestrian wayfinding signs and building signage.

DESIGN GUIDELINES

1. Location

a. Signage should identify gateways, character areas, parks and open spaces, the +15 Skywalk System, entrances and transit stops (see 2.0 maps for locations).

b. Signage should contribute to the defined streetscape character (2.1); As part of the coordinated street furniture program, signage should be incorporated within the furniture zone and edge zone, or in some cases, frontage zone, depending on the local area plan (if any), the type of signage and the space availability (3.1).

c. Signage should help to improve areas of blank walls, surface parking, grade separation, utilities, or construction sites.

d. Signage should not hinder movement or sightlines.

e. Signage should not block view corridors (Map 14).

f. Signage in the furniture zone should be located a minimum of 0.75m from the curb line.

g. Signage may be accommodated on streetlight poles (with a minimum of 1.0m^2 of signage).

h. Third-party advertising at bus shelters (one side only) should be allowed, and arts and cultural organizations based in Centre City should receive first consideration.

i. Allow digital building signage (including “animated public art”) at the Retail Nodes and Corridors (2.3) and the Entertainment Districts (2.8), only if it has minimal impact on residential areas and adequately meets the guidelines included in this section.

2. Design
   a. General
      i. Refer to Land Use Bylaw regarding signage approval procedure, location, type, size, lettering, colour, illumination, etc.
      ii. Signage should be distinct in design so as not to be confused with traffic or hazard signage.
      iii. Signage should accommodate new technology trends and changing environmental graphic design concepts.
   b. Building Signage
      i. Building signage should be appropriately designed based on its function and location, as well as for its ability to add interest and animation to both the street and the skyline.
      ii. Building signage should promote both wayfinding and building identity.
      iii. Building signage should clearly express the main entrance, name and location of building use.
      iv. Building signage should be well-integrated into the facade, be appropriate for the setting and complement architectural materials and colours.
      v. See 3.2.6.1 for digital building signage locations.
3. Legibility
   a. Signage should be considered as an integral part of the built environment and public realm system.
   b. Signage should be informative, and reinforce legibility and wayfinding.
   c. Signage should promote the efficient use of parking resources in the Centre City.
   d. Signage should help to integrate the +15 system into the overall public realm system in the Centre City, especially at identified key street level entries (Map 14).
   e. Transit signage should be highly visible so that it may be seen from afar and night.
4. Scale
   a. Signage should reflect a human scale and be integrated with the surrounding streetscape context so as not to create clutter and visual pollution.
   b. Blade signage is encouraged at retail facades, but should have a minimum of 2.5m overhead clearance.
5. Identity
   a. Signage should be used as branding for The City and help to promote and market Centre City as a place to live, work, play and visit (e.g. branding signs on the balustrades of an underpass gateway).
   b. Signage should respect historical context, enable heritage interpretation and promote local character.
   c. Historical signs should be preserved, repaired and reused to provide a vivid image of the local history.
   d. Land Use Bylaw provides rules governing all signs in the Stephen Avenue Mall Heritage area (Map 8) to preserve its unique historic character.

The brand at the entrance of RÉSO, Montreal's Underground City.

Blade signs along a high street add to the pedestrian scale.

Digital signs may be allowed at certain locations.

LIGHTING

URBAN DESIGN OBJECTIVES

- Facilitate a coordinated process for The City to develop a comprehensive **lighting palette** and a separate **pedestrian lighting system** for the Centre City
- Identify priority districts, edges, corridors and nodes for the implementation of both **functional** and **experiential** lighting
- Contribute to the real and perceived **safety** and the **legibility** of urban places
- Create an **animated** environment during the night and winter season
- Enhance the urban characters and express **identity** of a neighbourhood
- Reduce **lighting impact** on surroundings, residential neighbourhoods and migratory birds
- Maximize natural **sunlight,** reduce **energy** consumption and support the use of new **technologies**

Policy Reference

- Centre City Illumination Guidelines
- Traffic Policy
- Design Guidelines for Street Lighting
- Downtown Underpasses Urban Design Guidelines
- Bird-friendly Urban Design Guidelines

Guideline Sections:

- 2.12 Seasonal and Night Design
- 5.2 Areas of Particular Concern

3.2.7 Lighting

Calgary has a long winter; therefore, lighting is important to create a nighttime environment in which people can see comfortably and safely navigate between destinations. Lighting can lend character to a street and contribute to the unique identity of a place.

In this section, lighting refers to both functional lighting (street lighting and pedestrian lighting to address safety) and experiential lighting (pedestrian lighting and site/building/structure lighting designed primarily to enhance the environment).

The City is currently planning to develop a comprehensive lighting palette and a separate pedestrian lighting system for the Centre City. The current Design Guidelines for Street Lighting should be followed before a separate pedestrian scale lighting system is developed by The City.

The future lighting palette should be developed based on a coordinated process. The identified Areas of Particular Attention (2.12), should be considered when determining where to put emphasis on lighting and what lighting types to use (i.e., decorative vs. standard) in relation to the Centre City public realm system and special character areas. The Design Guidelines for Street Lighting will then be modified to reflect the changes to current standards. Increased maintenance and power requirements, as well as life cycle replacement costs, will be considered when developing the new pedestrian scaled lighting system.

DESIGN GUIDELINES

1. Location and Legibility

a. Pedestrian lighting should be placed in the furniture zone, flex zone if space allows, or frontage zone if provided by private development.

b. Lighting should put more emphasis on the identified Areas of Particular Attention (2.12).

c. Lighting should facilitate wayfinding at night.

d. Particular attention should be given to the lighting of public and private areas at grade to provide effective and attractive at-grade light.

Pedestrian-scaled lighting elements at the building frontage and the tree/furniture zone contribute to pedestrian comfort during dark winter days.

e. Considerations should also be given to the impacts of any lighting strategy on residential uses based on Bylaw requirements.

f. Lighting on private property should not replace roadway lighting, but be used to contribute to a sense of character/place.

2. Safety

a. Lighting should facilitate the safe movement of all street users and consider CPTED principles.

b. In areas of vehicular and pedestrian/cyclist conflicts, an appropriate level of pedestrian-oriented lighting should be provided to increase a sense of personal safety.

c. Underutilized spaces, such as unused dark spaces under the transportation flyovers, remnant undeveloped spaces, parking lots or unused spaces adjacent to the CPR corridor, should be improved and reclaimed by their property owners through appropriate lighting combined with other CPTED design techniques (e.g. transparency, openness and space flow, active uses, enlivened blank walls, graffiti resistant paint).

d. Colonnades should be designed to have sufficient light levels and lighting features that provide a sense of safety and pedestrian comfort (4.2.4).

e. Special lighting features and colours should be provided at the underpasses.

f. Illumination levels should be increased to emphasize stairs, entrances, obstacles, information signs and hazardous areas.

g. Illumination levels for pedestrian and experiential lighting should not outcompete with traffic control devices.

h. Trees need to maintain minimum distances from streetlight wires as per Design Guidelines for Street Lighting.

3. Scale

a. A pedestrian scaled lighting system should be developed by The City to lighten the pedestrian zone of the streetscape, especially in the identified Areas of Particular Attention (2.12).

b. A denser rhythm of pedestrian scaled street lighting, among other streetscape elements, may help to enhance the sense of human scale.

c. Pedestrian lighting should not be obtrusive or dominant in the overall streetscape design.

The featured lighting on the building facade and the entrance structure for the subway station creates a colourful, animated environment during the night.

Lighting at the LRT station creates a sense of character and facilitates wayfinding and safe movement.

d. Combined pedestrian/road way lighting poles should be considered as one of the future street lighting palettes when appropriate lighting levels and uniformity ratios are achieved.

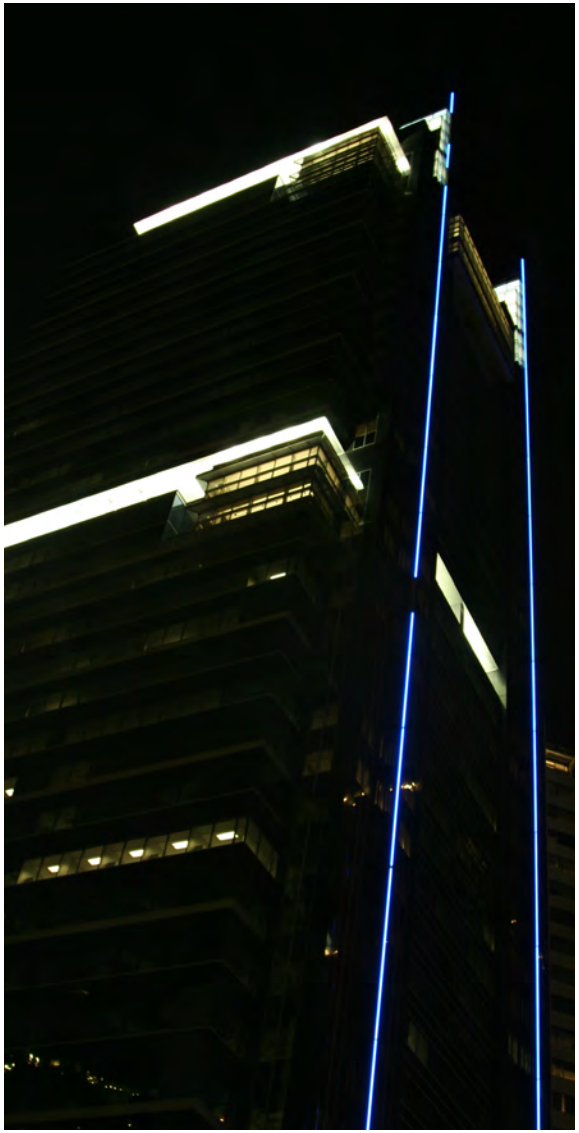
4. Character

a. Decorative street lighting should be considered as part of the overall street lighting palette, especially within the identified Areas of Particular Attention (2.12), to create a sense of character/place within the streetscape.

b. Street lighting should develop mood and ambiance.

c. Experiential lighting should be used to highlight heritage and contemporary architectural landmarks, structures, riverfront promenades, +15 Skywalk System, transit corridors and stations, parks and open spaces, gateways, character areas and the overall skyline (see 2.0 for relevant maps).

Featured pedestrian lighting in the furniture zone can add vibrancy and animation to the streetscape.



Tall buildings should use distinctive lighting design for the top floors, combined with building massing techniques.

The lighting elements help to define the characters of the historic building and the streetscape.

The building facade design should avoid creating dark areas (e.g. the space under the colonnades).

5. Design
   a. General
      i. New development should provide a comprehensive site and building lighting strategy and pay attention to the Areas of Particular Attention (2.12).
      ii. Glare, spill light and light trespass should be minimized to reduce light impact on surroundings and migratory birds.
      iii. Lighting should be designed to reduce energy consumption and support the use of new technologies.
      iv. Building design should maximize sunlight access and avoid creating dark areas; if not possible, use lighting fixtures to compensate for the lack of natural light.
      v. Tall buildings should use distinctive lighting design for the top floors, combined with building massing techniques, such as reducing floor plate sizes, stepping the building mass, etc.
      vi. Trees need to maintain minimum distances from streetlights as indicated in the Design Guidelines for Street Lighting.
      vii. In the vicinity of residential buildings, placement of light fixtures should be done so as to avoid lighting up bedrooms. The poles should be strategically placed to achieve minimum lighting levels and uniformity ratios.
   b. Building Facades
      i. Enhance and complement adjacent lighting in the public realm.
      ii. Use different lighting levels for the different building uses.
      iii. Allow digital building signage (including “animated public art”) at the Retail Nodes and Corridors (2.3) and the Entertainment Districts (2.8), only if it adequately meets the guidelines included in this section.

iv. Install pedestrian-scaled featured lighting on columns or walls to reduce the mass of the building and to brighten the arcade space.

v. Direct light both upward and downward to brighten the dark areas, such as the ceiling of the overhang, under colonnades and under awnings.

vi. Add light shelves to reflect sunlight onto arcade ceilings.

vii. Explore lighting for entrance stairs to enhance the grandeur of the entrance.

viii. Provide lighting fixtures to enhance safety and openness in grade separated areas.

c. Ground Floor Parking

i. Provide lighting fixtures to enhance safety and openness in parking areas and grade separated areas.

ii. Add light shelves to reflect sunlight onto parking areas.

d. +15 Skywalk System

i. Lighting of all +15 bridges, lane links, walkways and stairs should maintain the minimum standard of 43 lux (4 foot candles).

ii. Ensure that +15 entryways are well lit to enhance safety and wayfinding.

iii. Install ceiling lighting design across the bottom of the triple-deck +15 bridge, creating a unified portico space.

iv. Use up-lighting to create a bright and iconic space beneath the bridge.

v. Ensure that +15 walkways are well lit to enhance safety and wayfinding.

vi. Where possible, use windows and skylights to maximize natural lighting.

vii. Consider adding bold colours or lighting features on bridges to create vibrant environments.

e. Underpasses

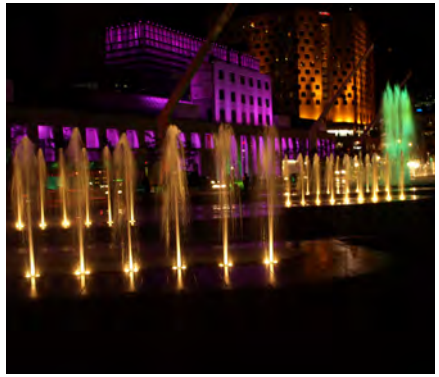
i. Install lighting beneath underpass bridges and against the walls of underpasses to enhance safety and signify a gateway.

ii. Project lights up towards the ceilings of bridges for more aesthetic and gateway character.

iii. Consider the use of coloured lights or light displays.

Lighting on the building facade adds colour and a sense of character to this residential building.

The well-lit +15 bridge contributes to safety and wayfinding.



Lighting at the public open space and its surrounding building facades creates a vibrant environment.

Featured lighting on the bridge and the retaining wall of this underpass helps to enhance safety and signify a gateway.

PUBLIC ART

URBAN DESIGN OBJECTIVES

- Contribute to a **visually rich** environment and art opportunities that are freely accessible to all
- **Celebrate** Centre City's unique **characteristics**, mixed-use neighbourhoods, history, and urban and natural environment
- Strategically place public art to create a unique sense of place and **identity**
- Improve and enhance **streetscapes, public open spaces** and **site/building design**

Policy Reference
- Corporate Public Art Policy
- Bylaw 33P2013
- Public Sculpture Opportunities for Downtown and Central Calgary

Guideline Sections:
- 2.0 Urban Context
- 3.1 Streetscape Zones

3.2.8 Public Art

"Art in public space must speak profoundly to a larger portion of the population - people who will use the public space in which it is located. The selected work is interpreted by the public as a gesture of the space's owners towards the population, so that it should generously benefit the public and create a sense of well-being." (1987 - Suzanne Crowhurst Lennard)

Public art is an integral part of our urban environment. Creating opportunities for public art must be part of the agenda in planning and building public spaces. This section is prepared to assist in creating those opportunities by providing locational criteria and general guidelines for public art.

There are two definitions that must be clarified to ensure we all understand the terms referred to in this document, and the roles of both public and private parties:

Public Art

Public art is works of visual art, in any media, that have been planned and executed with the specific intention of being sited or staged in the public domain, often incorporating elements of site specificity, community engagement and collaboration (Definition from Corporate Public Art Policy).

Public Art - On Site

Public art is publicly accessible art of any kind that is permanently suspended, attached to a wall or other surface, or otherwise integrated into a development. It is privately owned and must be an original piece of art in any style, expression, genre or media, created by a recognized artist (Definition from Bylaw33P2013 related to Downtown District density bonus).

DESIGN GUIDELINES

1. Location

Locational criteria may include:

a. Who is the expected audience and how will they see and interact with the public art? Consider the following:
   i. urban context (see the maps in 2.0);
   ii. pedestrian use;
   iii. vehicle use;
   iv. aerial views (e.g. can it be seen from an office tower?); and

Public art should be used to activate the streets, engage pedestrians and animate wayfinding.

Public art should be used to enliven urban places.

v. directional views (e.g. one-way traffic system)

b. Where are the priority districts/corridors/nodes for public art?

i. The following listed areas should be considered priority districts, corridors and nodes for public art:

- Centre City parks and open spaces (2.5);
- pedestrian priority corridors (2.1);
- recommended corporate plazas and pocket parks (2.5);
- key intersections/road terminus (e.g. the confluence of 8th Street SW and 17 Ave SW);
- river promenade connection points with the streets/ street connections to Fort Calgary;
- underpass connections/bridge crossings;
- +15 Skywalk System and amenity roofs
- gateways (2.6); and
- sites with historic or cultural value (2.7).

c. What should be considered to integrate public art in streetscape design?

i. Public art should be considered as one of the streetscape elements and be located in the furniture zone, flex zone if space allows, or frontage zone if provided by private development (3.1).

ii. Private development should consider integrated architectural and public art treatments, especially at block corner locations.

iii. Public art should be located so as not to hinder pedestrian, cyclist or vehicular movement.

2. Character

a. Public art should create an authentic sense of place.

b. Public art should define local character and respond to the local context (see 2.8).

c. Public art should incorporate seasonal and night design considerations (see 2.12).

d. Public art should be used to reinforce key views (see 2.6).

e. Public art should stimulate curiosity and interest in a community's heritage and foster community spirit.

The public art located in an urban plaza integrates with the streetscape elements and other pedestrian amenities.

The public art located at a street corner of a raised public park helps to mitigate the effect of grade separation.

f. Public realm improvement projects should incorporate local history interpretive elements. (see 2.7) through public art in the form of plaques, concrete etchings or other textural and photographic inserts.

3. Design

a. General

i. Public art should beautify the public realm, engage pedestrians and activate the street with interactive elements.

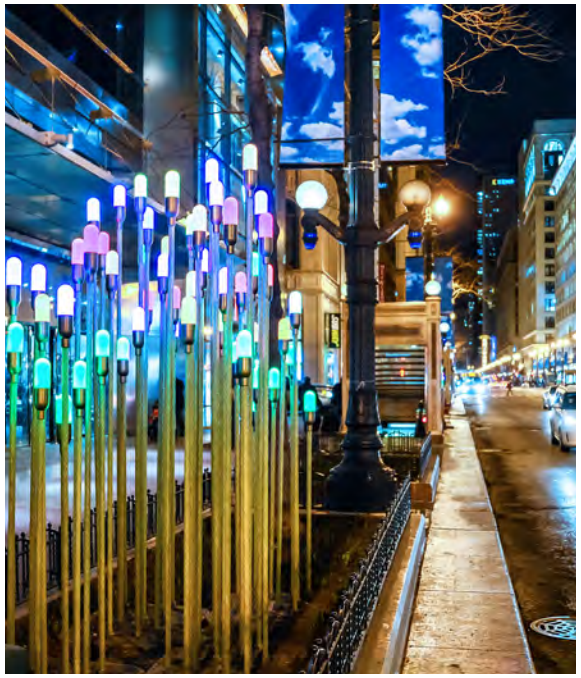
ii. Public art should be integrated with overall streetscape design.

iii. Public art should improve orientation and animate wayfinding through visual cues.

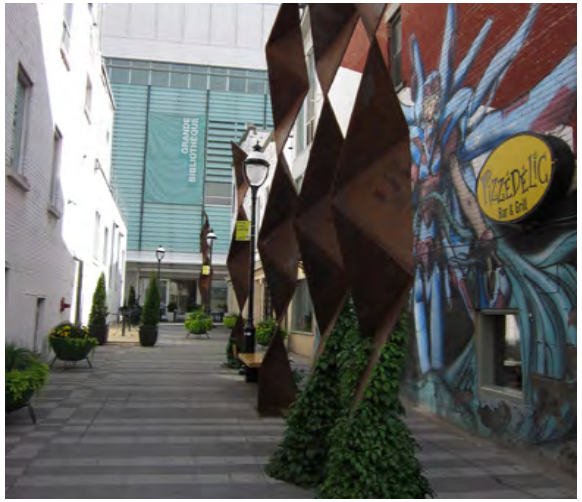
iv. Both permanent or temporary public art should be permitted.

v. Public art should be easy to maintain with seasonal considerations.

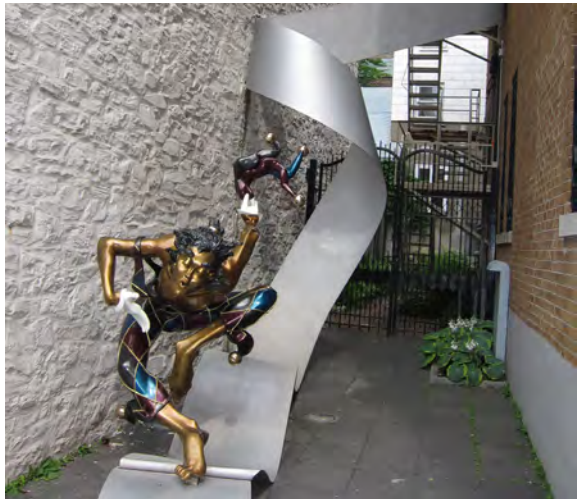
vi. Public art should provide educational opportunities.



Seasonal lights installed in the tree/furniture zone function as a public art piece for pedestrians to enjoy.



This back lane is transformed into an urban oasis through the provision of a public art piece, decorative paving, wall murals, planters, pedestrian lighting and seating.



This public art piece located in the leftover space between two buildings stimulates pedestrian curiosity and interest.

b. Public Art Opportunity Areas

i. In Downtown Land Use District, public art on-site is a bonusable public amenity item (See Bylaw33P2013 for Public Art – On Site).

ii. At block corners, architectural and public art treatments should be integrated because they are the confluence of streets and sidewalks—points ideal for pedestrian interaction, building entries, public spaces, expanded sidewalks, public art and landscaping.

iii. For corner pocket plazas, unique public art pieces can be installed to activate the streets and engage pedestrians, such as kinetic art pieces that move with the wind, or interactive art that reacts to users.

iv. For large, blank wall space in pedestrian views, murals or other public art installations can be considered.

v. In an underpass, public art can be installed at retaining walls, underpass bridges, or below-grade stories of buildings abutting underpasses in the form of murals, 3-D sculptural elements or any new electronic media that would enliven the environment throughout the year.

vi. At building frontages, especially where at-grade retail use is not possible, public art can be installed in the form of:

- art in display windows;
- art on lobby curtain walls and large windows on the ground floor;
- overhead public art and lighting pieces; and
- public art displays on upper floors.

vii. Public art should be used to enliven building facades and create human scale under the following circumstances:

- Where the ceiling of the colonnade is high, install hanging public art pieces to add light and colour to the colonnade
- Soften harsh overhang angles with public art, draping canopies or lighting design. These strategies can also appear to reduce the overhang's dramatic height.
- Utilize tall columns as a venue for bold and iconic public art features. Consider using kinetic art combined with LED lighting and landscape design.

viii. Where possible, sections of alleys should be developed to include public art and active uses.

ix. The +15 Skywalk System should be enhanced with public art, colours and high quality lighting; sky bridges can be featured with large scale art installations while allowing for transparency.

UTILITIES

URBAN DESIGN OBJECTIVES

Plan and locate surface and underground utilities to:

- Minimize the impact of surface utilities on the **visual environment**
- Minimize **clutter** and interference with potential locations for streetscape elements
- Maximize space for **planting**
- Improve **efficiency** and integrate **alignment** with stormwater facilities
- Maintain **safety** and **access** to utilities
- **Consolidate** utilities, parking meters, and street signs and poles where feasible

Policy Reference
- Complete Street

Guideline Sections
- 3.1.2 Pedestrian Zone
- 3.2.5 Street Trees
- 3.2 Lane Character Typologies

3.2.9 Utilities

DESIGN GUIDELINES

1. Consult with The City's Utility Line of Assignment office (ULA) and individual utilities for existing and future required utility information.
2. Give due consideration to the underground infrastructure of the road right-of-way at the start of any development project by submitting utility plans with initial development proposals.
3. Utilities should be consolidated for efficiencies and to minimize disruption to the streetscape.
4. Any abandoned utilities should be either reused or removed when possible.
5. Integrate utility alignment with stormwater facilities by using state-of-the-art technologies.
6. Minimize the impact of surface utilities on the pedestrian path of travel by consolidating and placing surface utilities away from crosswalks, sidewalks and building access points.
7. New development should incorporate alleys for vehicle, utility, and service access to maintain a more consistent streetscape.
8. Integrate tree boulevards with buried and surface utilities to avoid any potential conflicts.
9. For safety and access, maintain minimum separation distances between trees and utilities as required by ULA and individual utility owners.
10. Buffer above-ground equipment with landscaping while maintaining the minimum required separation distances.
11. Ensure the minimum required space within the City-owned right-of-way to permit the utility infrastructure to be installed, repaired and accessed safely with little or no impediments.

This modular structure for tree boulevards should prevent damage of adjacent pavement and underground utilities by spreading roots and will provide predictability for future nearby work under the pavement.

LANE CHARACTER TYPOLOGIES

URBAN DESIGN OBJECTIVES

- **Retain, enhance** and **celebrate** rear lanes
- Provide a variety of lane **character typologies** and uses to enrich urban fabric
- Support and contribute to the character and **function** of the street
- Create attractive and multi-functional **built form interfaces** with lanes
- Create fine-grain and **active** urban spaces at strategic locations
- Reduce **pedestrian/vehicle conflicts**
- Incorporate **pedestrian amenities** appropriate for the lane character typology

Policy Reference
- Centre City Plan
- Centre City Mobility Plan

Guideline Sections
- 2.0 Urban Context
- 4.1.6 Pedestrian and Vehicle Access

3.3 Lane Character Typologies

3.3.1 Lane Interface Design

DESIGN GUIDELINES

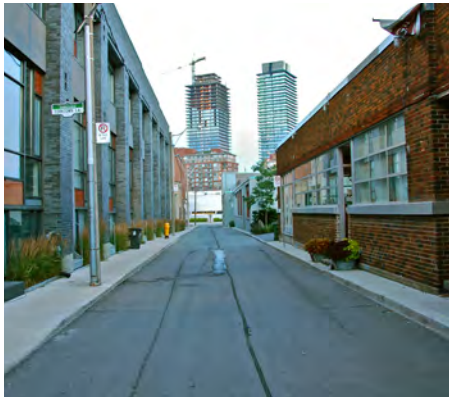
a. Access, safety and connectivity
   i. Accommodate the safe and efficient movement of private and service vehicles.
   ii. Orient loading docks and ramps to prevent obstructions and/or interference with public realm.
   iii. Consider for more one-way lanes to reduce pedestrian/vehicle conflicts at high pedestrian volume street interfaces.
   iv. Strongly discourage lane closures, other than for enhanced lanes.
   v. Connect to on-site open space and/or the +15 Skywalk System, where possible.
   vi. Refer to 4.1.6 for guidelines related to pedestrian and vehicle access at lanes

b. Interface/Edge Condition
   i. Support and contribute to the character and function of the street through appropriate selection of the lane character typology. Refer to 3.3.2 and the Lane and Streetscape Characters map on the following page to determine appropriate lane character typology (Service, Enhanced or Residential).
   ii. Create safe, attractive and multi-functional built form interfaces with lanes by providing the key design elements appropriate for the lane character typology (see 3.3.2 tables).
   iii. Carefully design the areas where lanes transition into the public realm at the edge of street, and pay special attention to the lanes with the following interfaces:
      - Pedestrian Priority Corridors (2.1)
      - High Streets
      - Green Streets
      - Public and on-site open spaces
      - Neighbourhood Centres
   iv. Activate the entrances to lanes at the above-locations by wrapping active, at-grade uses at the corner and situating servicing at mid-block locations.
   v. Incorporate green edges that contain sustainable stormwater amenity, where possible. Pay particular attention to the lanes which interface with Green Streets.

3.3.2 Lane Character Typologies

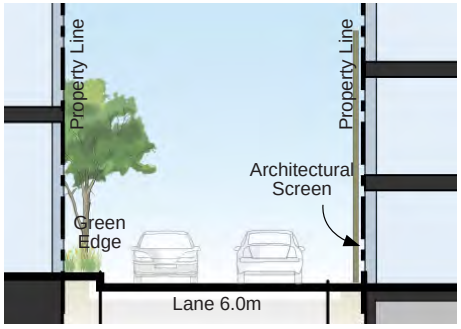
a. Service Lane Character Typology

	Service Lane Character
Vehicle Access (4.1.6)	• Primarily for vehicle and service access
Location Criteria (Refer to 2.1 for streetscape typologies and travel modes priorities)	The Lanes that intersect with, or within one block vicinity of (see Lane and Streetscape Characters map): • A Commercial Street
Key Design Elements (Refer to 3.0 and 4.0 for relevant design guidelines)	• Active frontages at the entrances to the lanes • Landscaping/sustainable stormwater amenities • Building Lighting • Architectural/landscaping screens for parking accesses and service areas

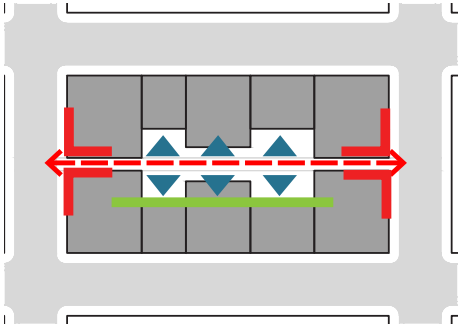


Service lanes with green edges and on-site bio-filtration planters contribute to sustainable stormwater management.

Active wrap-around uses to activate and allow natural surveillance to service lanes.



Service Lane Typology Illustrative Section

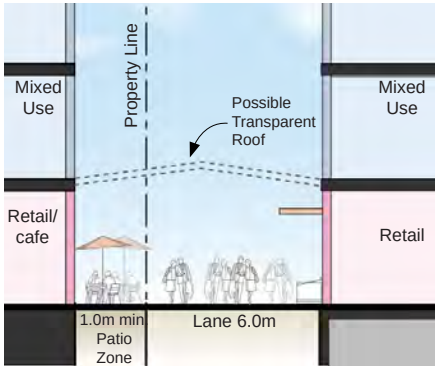


Service Lane Typology Diagram

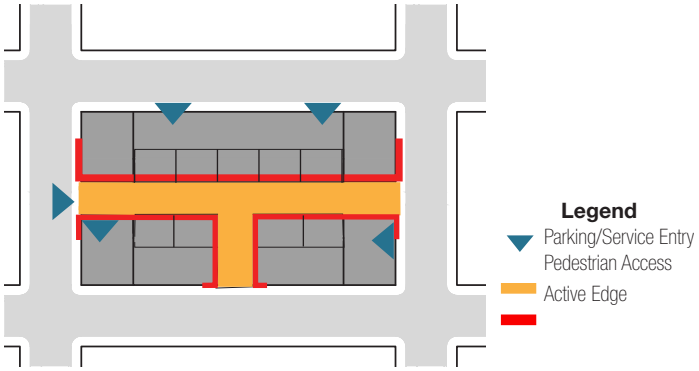
b. Enhanced Lane Character Typology

	Enhanced Lane Character
Vehicle Access (Refer to 4.1.6)	• Pedestrian priority/limited or no vehicle access • Consolidated street access points where possible
Location Criteria (Refer to 2.1 for streetscape typologies and travel modes priorities)	The lanes that intersect with, or within one block vicinity of (see Lane and Streetscape Characters map): • A High Street • A Downtown Retail Area • 7 Avenue transit corridor
Key Design Elements (Refer to 3.0 and 4.0 for relevant design guidelines)	• Active frontages along lanes • Landscaping/sustainable stormwater amenities • Sunlight access • Public art • Featured paving, building lighting and signage • Weather protection (i.e. transparent roofs, canopies)

Enhanced laneway with active edges at ground level.



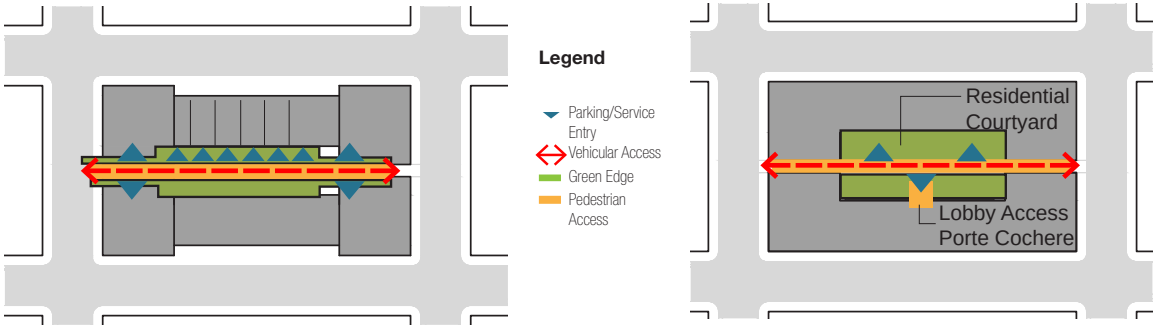
Enhanced lane with active edges at ground level



Enhanced lane with active edges at ground level

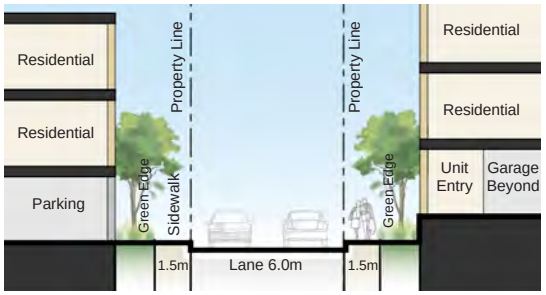
c. Residential Lane Typology

	Residential Lane Character	
Vehicle Access (Refer to 4.1.6)	• Pedestrian and vehicle and service access	
Location Criteria (Refer to 2.1 for streetscape typologies and travel modes priorities)	The lanes that intersect with, or within one block vicinity of (see Map 23): • A Residential Street	
Key Design Elements (Refer to 3.0 and 4.0 for relevant design guidelines)	• Elevated townhouse frontages, where applicable • Landscaping and sidewalk interfaces • Sustainable stormwater amenities • Sunlight access	• Building lighting • Architectural/landscaping screens for parking accesses and service areas • Other pedestrian amenities

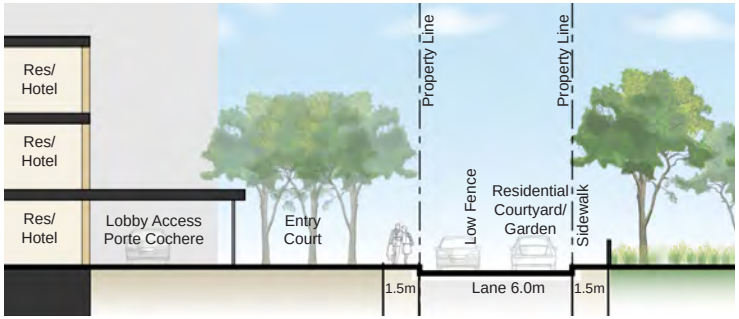


Residential lane with courtyard interface to entrance of a multi-residential building.

Residential lane with townhouse interface. A pedestrian – friendly service lane with townhouses, green edges, good lighting, neat and well-maintained.



Residential Lane Typology with Townhouse Interface



Residential Lane Typology with Courtyard Interface

Appropriate lane character typology (Service, Enhanced, or Residential) should be determined based on the surrounding streetscape characters and proposed uses. The location criteria for each lane character typology are included in 3.3.2 tables as a general guidance.

Map 23 Lane and Streetscape Characters