B3 MOBILITY

Brampton Plan promotes improved access and mobility through safe, equitable and efficient transportation systems, including access to transit and active transportation options.

The most vulnerable population groups including children, elderly, people with health conditions, and lower income individuals are the most affected by choices available to them for mobility and access to services and amenities.

To ensure that a variety of transportation options are available to residents, a community should be designed such that land uses and transportation planning are integrated and proximity to amenities is enabled. Designing a safe, convenient, and accessible environment for walking and cycling encourages alternative modes of transportation.

B3.1 TRANSIT SUPPORTIVE DESIGN

Brampton Plan promotes higher densities and patterns of development that connect people to homes, jobs and other places linked to their lifestyles and that support higher order transit.

A transit supportive and complete community needs to also ensure that compact, mixed use developments, with a variety of residential forms, are oriented to transit to encourage transit use.

1 Transit facility amenities shall be designed in accordance with Transit Authority standards.

2 For most residents within a Neighbourhood, ensure a walking distance of 400m (5-minute walk) to Neighbourhood Centres and 800m to higher order transit.

3 Provide direct connections from residential areas to collector/arterial roads where higher order transit is located.

4 Consider means to reduce the overall footprint of commuter parking areas at higher order transit through structured parking to promote compact development and conserve land.

5 Ensure the coordination of the transit network with the multi-use trail system to enhance accessibility to transit.

6 Provide direct pedestrian/ cycling connections to bus stops from adjacent sidewalks, multi-use / recreational trails and buildings such as schools and commercial plazas.

7 Avoid connections to higher order transit through parking lots and when necessary, ensure safe and comfortable pedestrian and cycling access.

8 Provide coordinated streetscape elements to support transit amenities, such as:

a. Street trees.

b. Seating and bicycle lock-ups.

c. Garbage and recycling receptacles.

d. Accessible paving and well-marked crossings.

e. Pedestrian-level lighting (maximum 4.6m in height).

9 Provide a range of transit facility amenities including but not limited to:

a. Route information (electronic schedules), wayfinding and automated fare machines.

b. Transit shelter or other structures for weather protection; where 4-sided transit shelters are not possible, provide overhead canopies.

c. Public Wifi access / connection.

10 Encourage adjacent developments to leave adequate space for a bus pad/shelter and connecting pathway as per Transit's standards, and to provide lighting for CPTED purposes.

11 Locate bus stops close to intersections and designated crossings to discourage potential jaywalking.

12 Ensure communities promote transit supportive land uses at existing and future higher order transit such as higher density residential and employment development forms.

13 Promote bike use by providing bike racks, storage, and lockers at transit stops and stations. Ensure public facilities are weather-protected and encourage private facilities to be as well.

14 Locate transit stops close to major institutions such as secondary schools, community centres, libraries, etc.

Where development is proposed adjacent to or in proximity to railway corridors, applicants will be required to demonstrate how applicable requirements and guidelines established by the Canadian National Railway (CN) and/or Metrolinx have been addressed to the satisfaction of CN, Metrolinx, and, where applicable, the City and other relevant authorities. This may include the identification and implementation of appropriate mitigation measures to ensure compatibility with railway operations.

B3.2
STREET NETWORK AND BLOCK DESIGN

Street network and block design in Brampton shall adhere to Brampton Plan, the Active Transportation Master Plan (ATMP) and the Brampton Complete Streets Guide (BCSG).

The Complete Streets Guide outlines the vision and guiding principles for a comprehensive, integrated transportation network with streets that provide safe, equitable and convenient travel for people of all ages and abilities. These include:

- Create Safe and Accessible Streets.
- Improve Sustainability and Resiliency.
- Promote Healthy and Active Living.
- Improve Transportation Choice and Balance Priorities.
- Develop Connected Networks.
- Respect Existing and Planned Contexts.
- Create Vibrant and Beautiful Places.
- Enhance Economic Vitality.

These guidelines build upon the Complete Streets Guide by providing further design direction for street network and block design for all forms of development.

A. STREET PATTERN / NETWORK (A)

1 Design a fine-grained grid of streets and a well-connected street network to support ease of movement and facilitate orientation.

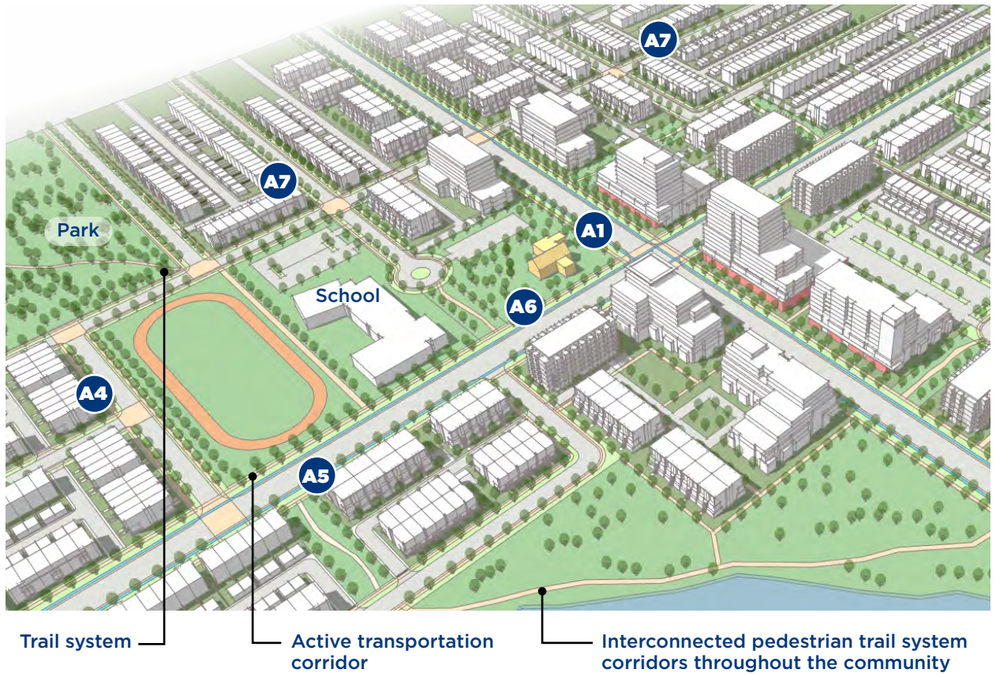
2 Create a clear hierarchy of street types and functions.

3 Create street patterns that incorporate natural heritage features.

a. Provide single-loaded streets along edges of natural heritage features and incorporate traffic calming in these locations.

b. Align streets to provide views/vistas to natural heritage features.

4 Connect any new street network to existing and planned roads in adjacent developments. If a road connection is not possible, sidewalks /trails connections are encouraged.



5 Maximize connectivity for all travel modes by ensuring the street network incorporates multiple options for moving between destinations.

6 Design street patterns to reinforce focal points, Neighbourhood Centres, Mixed-Use nodes and public spaces by providing street frontage and direct connection to these areas.

7 Provide frequent local road connections to collector roads to enhance connectivity and permeability.

8 On local roads, encourage block lengths of 150m or less to promote walkability, and avoid uninterrupted sections longer than 250m to discourage excessive vehicle speeds.

9 Design local roads with appropriate streetscape elements to enhance the pedestrian and cyclist scale.

B. TRAFFIC CALMING (B)

Peel Region's Vision Zero is an approach to road safety adopted from Sweden which states that 'no loss of life is acceptable due to a motor vehicle collision'.

In today's Vision Zero jurisdictions, decisions are based on considerations that include designing transportation systems to be forgiving and prioritizing safety. As such, traffic calming should be incorporated into the planning and design of communities.

1 Provide Traffic Calming to enhance pedestrian safety, particularly in areas of high activity such as Mixed-Use nodes and Neighbourhood Centres; this may include:
   a. Enhanced pedestrian crosswalks, raised crossings and intersections.
   b. Pedestrian-level lighting (maximum 4.6m in height).
   c. Raised and potentially landscaped medians.
   d. Curb bump-outs / on-street parking.
   e. Speed bumps.
   f. Narrowed pavements to reduce driver speeds.
   g. Signage.

2 In greenfield development, or where new streets are introduced through infill development, achieve traffic calming by using any of, but not limited to, the following:
   a. Minimum traffic lane widths.
   b. Minimum number of traffic lanes in the roadway.
   c. Pedestrian-priority streets, woonerfs or homezones (i.e., the speed limit is under 15km/hr and vehicles must yield to pedestrians and cyclists).

3 Integrate a multi-use trail system and create linkages that ensure continuous and varied pedestrian routes throughout the community.

B3.3
ACTIVE TRANSPORTATION

A balanced and inclusive transportation network facilitates all modes of movement including walking and cycling by way of appropriate infrastructure.

1 Support community health and improve air quality by providing infrastructure that promotes walking, cycling, and use of transit as the primary means of transportation, thereby reducing dependency on the private automobile for daily activities.

2 Implement a network of active transportation facilities, interconnected pedestrian and cycling routes, trails, walkways, sidewalks and bicycle facilities that link the community with surrounding neighbourhoods, are integrated with existing and future public transit infrastructure and connected to regional and local trail systems.

3 Design communities with a typical walking distance of 400m (5 minutes) to daily activities, or 800m to higher order transit or community centres.

4 Design the street and block pattern to facilitate connections and walkability both internally and with surrounding neighbourhoods, through a grid or modified grid pattern. Discourage cul-de-sacs, P-loops and crescents, except where necessary due to grading and topography. Where these are necessary, sidewalks/trails should be provided to facilitate pedestrian/cyclists connections.

5 Provide for a continuous, linked, legible, and clearly marked system of multi-use pathways throughout the community as part of the Parks and Open Space System.

6 Encourage sidewalks or MUPs on both sides of the street.

7 Provide facilities in retail, commercial and employment developments to support active transportation, including secure short and long term bicycle parking, shower facilities and change rooms.

8 Provide paths to connect commercial plazas to residential areas.

9 Consider lands adjacent to the NHS as opportunities to implement active transportation trails to support healthy active living.

A. CYCLING (A)

1 Accommodate a cycling network that is safe, convenient and legible, including on-road cycling facilities, off-road cycling paths, and multi-use paths that are interconnected. Ensure the active transit system complies with the standards of the ATMP and BCSG.

2 Encourage cycling by providing:
   a. Dedicated, separated and signed cycling facilities on collector roads. Collector roads with direct frontage should also provide on-street parking along with cycling facilities.
   b. Clearly marked and signed cycling routes on shared streets.
   c. Reduced vehicle speeds on local streets.
   d. Appropriate street widths to accommodate dedicated and/or shared cycling facilities/routes.
   e. Bicycle parking facilities.

3 Consider providing measures to separate cycling facilities from traffic and to enhance safety including for example, planters, planted strips, bollards and barrier curbs.

4 Ensure pedestrian and cycling routes connect to the Transit Network.

5 Provide safe routes to schools and other community services and amenities by developing a network of connected local streets with traffic calming measures encouraging walking and cycling (see 3.1.B Traffic Calming).

6 Provide accessible and secure bicycle parking in Mixed-Use developments, as well as in retail, commercial, and employment developments; requirements for bicycle parking are outlined in the CZBL.

B. TRAILS AND MULTI-USE PATHS (MUP) - (B)

1 Design trails and MUPs to accommodate a range of users and abilities and be barrier-free, where appropriate, including street/intersection crossings and curb cuts.

2 Pedestrian Cross Overs (PXOs) should be considered at all mid-block trail crossings.

3 Provide wayfinding signage and/or trail markers throughout the trail network.

4 Avoid siting of trails and MUPs close to significant and sensitive natural areas or features. Where they are permitted to be located, MUPs shall be designed to minimize and mitigate impacts on natural heritage features.

5 Enhance safety by providing pedestrian-level lighting (maximum 4.6m in height) at trail entrances and connections, while minimizing disturbance to adjacent natural habitats.

6 Incorporate interpretive signage at key locations along trails and MUPs, where appropriate, such as near significant natural features or open space elements.

7 Provide benches and waste / recycling receptacles at trail heads and at regular intervals along the trail/MUP. Consider incorporating pedestrian amenities such as water fountains and cooling/misting stations, where appropriate.

8 Consider special landscape treatments at trail/MUP entrances including plantings, enhanced paving, seating, wayfinding and bicycle parking.


B6


B7

B3.4
STREETSCAPE DESIGN

The Complete Streets Guide is the City's comprehensive reference for the planning and design of streets in Brampton. Building on the existing roadway functional classification system, it identifies 11 Street Types, along with their intended roles, character, and composition, to support the wide range of uses and users found on Brampton's streets. Streetscape design within the various components of the City Structure (Centres, Boulevards, Corridors, Neighbourhoods, and Employment Areas)should reflect the Character-Based Network Plan outlined in the Complete Streets Guide.

The Complete Streets Guide also provides direction on the organization and design of the boulevard, cycling infrastructure, roadway, intersections, and green infrastructure. The following provides additional guidance specific to elements within the Boulevard Zone and the Roadway Zone.

BOULEVARD DESIGN

Boulevards are a key component of public streets and play an important role in facilitating walking as a safe, accessible and attractive choice for people of all ages and abilities. The boulevard includes the area between the curb edge and the face of a building or a property line. It is made up of the Pedestrian Clearway Zone, Furnishings and Planting Zone, Frontage and Marketing Zone and Edge/Curb Zone.

In addition to guidance provided in the Complete Streets Guide, the following shall be considered:

A. SIDEWALKS (A)

Sidewalks should be continuous throughout the community, and designed as an integral part of the pedestrian system to promote active transportation.

1 Design sidewalks to applicable municipal accessibility standards to accommodate the needs of persons with disabilities, visual impairments, and the elderly.

2 Where sidewalks are required, sidewalks will be encouraged on both sides of all streets. In instances such as the following (Brampton Plan 3.4.2.8), a sidewalk may only be required on one side of the street:

   a. Portions of streets flanking the Natural Heritage System;

   b. Existing window streets where sidewalk extensions join a sidewalk on an arterial or collector street;

   c. Portions of streets that have a designated multi-use pathway within the boulevard on one side; and,

   d. Street reconstruction or retrofit projects where existing conditions such as mature trees, right-of-way widths, or Civic Infrastructure would present a barrier to sidewalks on both sides of the street.

3 Ensure sidewalks are clear of obstructions (pedestrian clearway) and there is sufficient space in the boulevard to provide for street furnishings, public utilities, tree plantings, and transit shelters (furnishings zone).

4 In existing Mixed-Use areas consider flexible spaces, opportunities to reclaim underutilized roadway, or repurpose parking spaces to create additional public space for benches, planters, landscaping, bike parking, and café tables and chairs, where feasible.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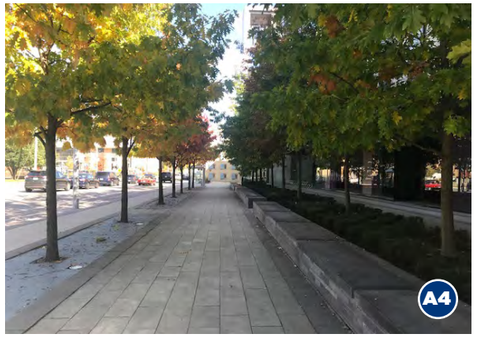
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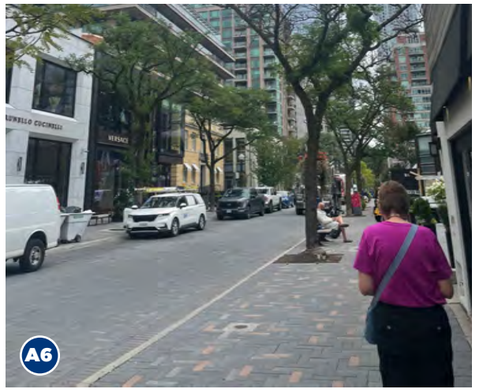


5 In new Mixed-Use areas:
   a. Design sidewalks with sufficient width to accommodate and support pedestrian activity, spill out areas (spill out zone) and a robust furnishings zone.
   b. Consolidate driveway access to public roads to minimize sidewalk crossings of private driveways and improve pedestrian safety.

6 Use alternative pavement markings or materials to highlight pedestrian areas and minimize conflict between vehicular and pedestrian users.

B. STREET FURNITURE (B)

1 Provide street furniture in areas with high pedestrian traffic, such as Mixed-Use areas, Neighbourhood Centres, key intersections, and open spaces.

2 Incorporate comprehensive and coordinated streetscape furnishings that reinforce the function of the streets as public space, including pedestrian-level lighting (maximum 4.6m in height), seating, bicycle parking, waste and recycling receptacles.

3 Provide street furnishings that accommodate a wide range of users with diverse abilities and needs.

4 Design street furniture/furnishings as a coordinated family of elements that fit and complement the overall streetscape design.

5 Select street furniture/furnishings that are high quality, durable, vandal resistant, and easy to maintain/replace. Consider streetscape elements manufactured from recycled material.

6 Incorporate enhanced designs/elements into street and site furnishings to distinguish key areas of the community (MTSAs, Mixed-Use areas, community nodes, heritage areas). In consultation with the City, developers shall work to develop such enhancements based on the City's standard, where appropriate.

C. SIGNAGE (C)

1 Develop a comprehensive wayfinding strategy, including directional signage and mapping at key locations, such as Urban Centres, Town Centres, Neighbourhood Centres, trails and key intersections.

2 Provide wayfinding signage that has a high level of clarity, visibility, and visual interest; is made of high-quality materials; and aids pedestrians and drivers in navigating the area, especially at night, while also directing active transit users to nearby services and amenities.

3 Provide signage with a unified design vocabulary.

ROADWAY DESIGN

A roadway designed using complete streets principles will provide an environment that maximizes safety for all road users, optimizes and balances the key street functions of mobility, access and place, and promotes sustainability.

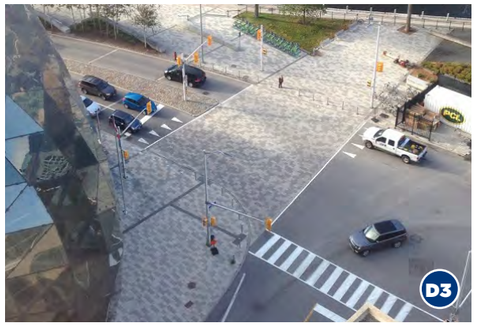
The roadway includes the area between the curb edge and the curb edge. In addition to guidance provided in the Complete Streets Guide, the following shall be considered:

D. PEDESTRIAN CROSSINGS (D)

1 In addition to designated pedestrian crossovers (PXO), provide additional PXOs at intersection in areas of high pedestrian activity (e.g., mixed-use areas, schools, libraries) to promote safety and a pedestrian-friendly environment.

2 Provide signalized pedestrian crosswalks at locations where important civic destinations and/or significant walking traffic is anticipated. Crosswalks are ideal near retail shops, community amenities, schools and recreation centres, provided traffic warrants and minimum spacing requirements are met.

3 Design pedestrian crossings to minimize conflict, and enhance safety and visibility, including:
   a. A marked travel path of a minimum width of 3m connected from sidewalk to sidewalk.
   b. Distinctive pavement markings using painted lines, enhanced paving materials, raised paving, textured pavement.
   c. Signage.



4 Provide curb ramps (or curb cuts) at crossings to ensure accessibility and accommodate wheelchair and stroller use. Curb ramps should include tactile surfaces and other design elements to assist pedestrians with physical, visual and/or audible impairments, as per AODA standards.

5 At pedestrian crossings, consider incorporating bump outs, bollards, or refuge medians to further enhance safety, particularly where curb-to-curb distances are greater.

6 At pedestrian crossings, consider expanding the implementation of Crossrides to allow cyclists to ride safely through intersections alongside pedestrians.

E. ON-STREET PARKING (E)

On-street parking serves a number of important functions. In addition to supporting Mixed-Use and Commercial areas, on-street parking also provides traffic calming to streets and acts as a buffer to separate pedestrians from traffic.

1 Consider on-street parking on both sides of the street in Mixed-Use areas, Neighbourhood Centres and along urban main streets.

2 Design on-street parking to enhance traffic calming and the streetscape environment, including:
   a. Bump outs (with opportunities for planting).
   b. Enhanced paving (coloured, textured, etc.).
   c. Rolled curbs (if rolled curbs are provided bollards are also required to separate the boulevard from the parking lane).

3 Where on-street parking is provided, it should be designed to minimize negative aesthetic and environmental impacts. This may be achieved by incorporating the following:
   a. Tree planting;
   b. Landscaping;
   c. Stormwater management;
   d. Porous/permeable surfaces; and,
   e. Light-coloured materials instead of black asphalt.

4 Account for and provide a curbside zone to allow for unobstructed car door swing.

F. LANDSCAPING (F)

The City of Brampton Landscape Development Guidelines (2019) provides detailed direction with respect to Architectural Components, Planting, Street Furnishings and Special Elements in the following areas:

- Street boulevards owned by the City of Brampton.
- Buffers owned by the Region of Peel.
- Privately-owned open space regulated by the City's Site Plan control process.
- Within close proximity to bus stops.

The overarching directions for landscaping, as it relates to the Streetscape are to:

1 Coordinate the public and private landscape elements that make up the street environment, including coordination of fencing, walls, planting, paving and site furnishings in order to present a cohesive and beautiful public realm.

2 Encourage enhanced landscaping:
   a. Within the public boulevards and pathways.
   b. In the front yards of adjacent residential, commercial, institutional and employment developments.

3 Provide appropriate buffers, including landscaping, to transition between private and public areas.

4 Develop connected tree canopies, enhance the urban tree canopy and provide shade over sidewalks.

5 Encourage the use of green infrastructure paving materials such as permeable/porous pavement, light-coloured materials, etc.