



Milton / May 2020 / Urban Design Guidelines

Milton Mobility Hub Study

Urban Design Guidelines

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1.0

INTRODUCTION & BACKGROUND

1.0 INTRODUCTION & BACKGROUND

Milton is at an important and exciting moment in its evolution into a more mixed use, transit supportive, and urban place.

1.1 INTRODUCTION

Development in Milton will intensify in preferred locations such as the Urban Growth Centre, Major Transit Station Areas, Secondary Mixed Use Nodes, Intensification Corridors and the Milton Education Village.

In line with provincial policy, the Milton Major Transit Station Area (MTSA) is expected to redevelop in a manner consistent with responsible city-building as a result of the Milton GO Station's designation as a Mobility Hub in Metrolinx's Regional Transportation Plan and as a MTSA in the updated Growth Plan (2019).

Purpose

The following Urban Design Guidelines provide an overview of the recommendations developed as part of the Milton Mobility Hub Study, and should be read in conjunction with the Study's Final Report.

Document Structure

This document is presented in two parts:

Urban Design Guidelines provide an overarching vision and design framework to guide and direct development towards a coherent collective future that is scaled to a compact, transit supportive, and pedestrian friendly environment. The framework will support ongoing implementation and provide

a broad perspective for incremental change. The Urban Design Guidelines provide high-level guidance and recommendations for built form, privately-owned spaces and public spaces. These recommendations are based on background analysis, the testing of alternatives from previous phases of the Study, and input received through public and stakeholder engagement. Refer to the Final Report for a full summary of the Study process and findings.

Streetscape Guidelines provide high level guidance and recommendations for the design of streets both public and private. These guidelines include a series of cross sections that demonstrate the typical street elements and configuration, and organized by street type. A detailed transportation report is included as an appendix to the Final Report.

The Urban Design and Streetscape Guidelines are part of a series of documents that together form the Mobility Hub Study. Alongside these guidelines are the following:

- Final Report (Planning Report)
- Milton Area Transportation Plan Report
- Servicing Plan Report
- Community Services and Facilities Strategy

Study Area

The Study Area is centered on the Milton GO Station, which is located toward the eastern end of Milton’s Urban Growth Centre as identified in the Growth Plan for the Greater Golden Horseshoe (2019) and the Halton Region Official Plan (2009).

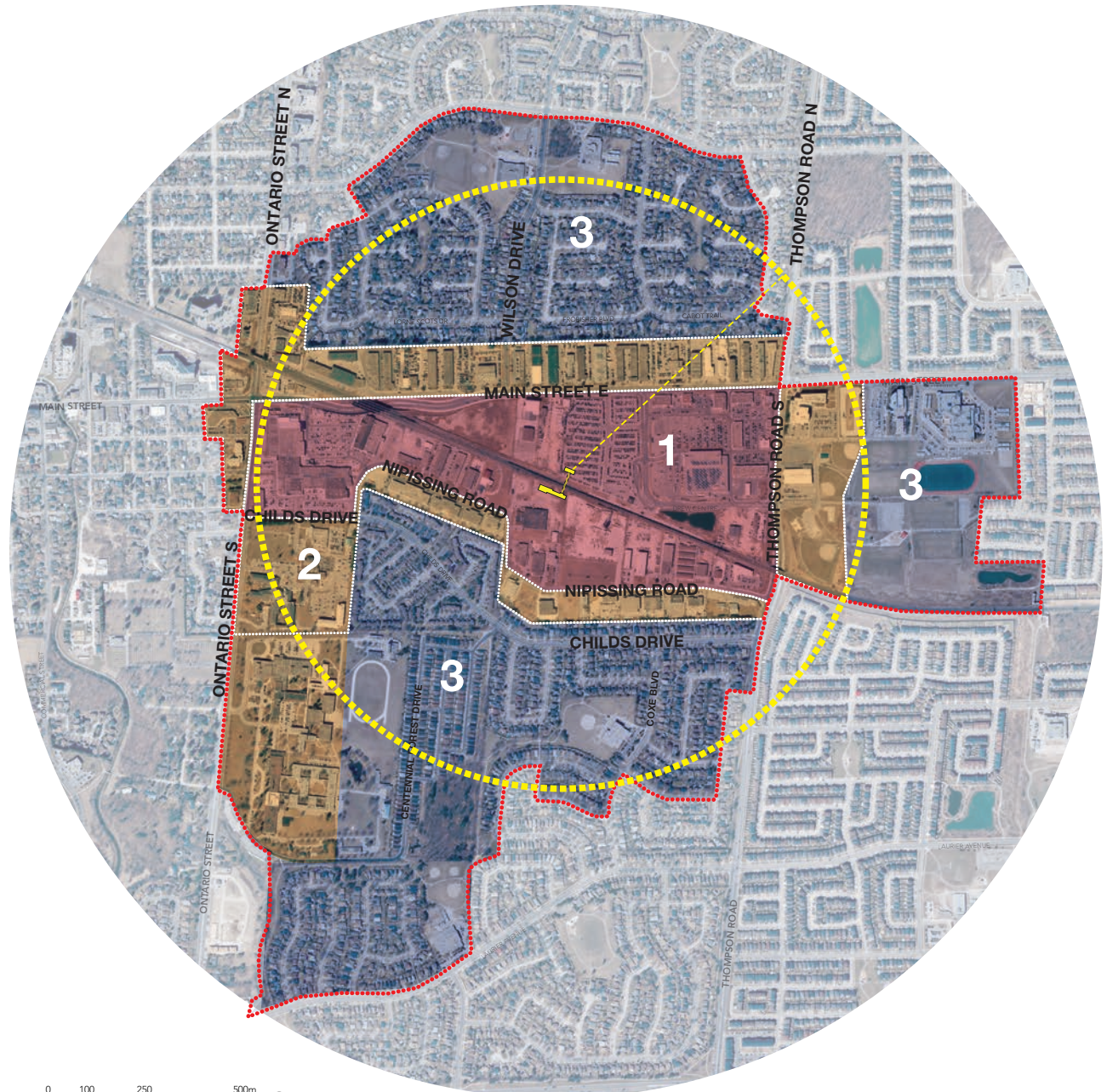
Mobility Hub boundaries are determined based on an approximate 10 minute (800m) walking distance to and from the station. This distance considers existing environmental features, infrastructure barriers and established planning policies. The Study Area is organized into Primary, Secondary and Tertiary Zones as described below. The focus of the Urban Design Guidelines is on the Primary and Secondary Zones.

Fig 1 Study Area

..... Study Area Boundary / Tertiary Zone

- 1 Primary Zone.** Includes the Milton GO Station and immediate surrounding areas. This area will likely be the area of greatest intensification and focus for public realm improvements.
- 2 Secondary Zone.** Extends further along Main Street East, Thompson Road South and Ontario Street South. This area will provide opportunities for transit-oriented development.
- 3 Tertiary Zone.** Will serve as the transition from the mobility hub to the broader community and its focus will include sensitive transitioning to established neighbourhoods and improved connectivity.

■■■ Walking Distance (800m or 10 minutes)



1.2 AREA DESCRIPTION: TODAY

Change is already underway. The Metrolinx GO Rail Station Access Plan will improve active transportation connections and infrastructure, and a number of recently constructed and approved developments with mid-rise and tall buildings provide a sense of what is to come.

Built Form

Existing buildings adjacent to the GO station are generally one and two storey auto-oriented retail-commercial buildings with parking lots located between the front of the building and the street. Stable residential neighbourhoods with single detached houses and townhouses are located along the northern and southern edges of the Study Area.



Fig 2 Built Form



Existing residential neighbourhoods



716 Main Street East (under construction)



Milton Centre for the Arts



Auto-oriented retail buildings

Parcel Fabric

The central part of the Study Area includes large and irregular blocks, designed for parking or auto-oriented retail-commercial uses. Deep and narrow fronted properties are located along the north edge of Main Street East. Larger properties south of Main Street East are associated with commercial, institutional and park uses. The historic street and block pattern of downtown Milton is located to the west of the Study Area.

The Study Area can readily accommodate a new urban structure and support a range of building types. The large, single-ownership blocks around the GO Station can introduce new streets of a more comfortable and inviting pedestrian scale. The surface parking is well used in the area, but these sites also provide an excellent opportunity for redevelopment.

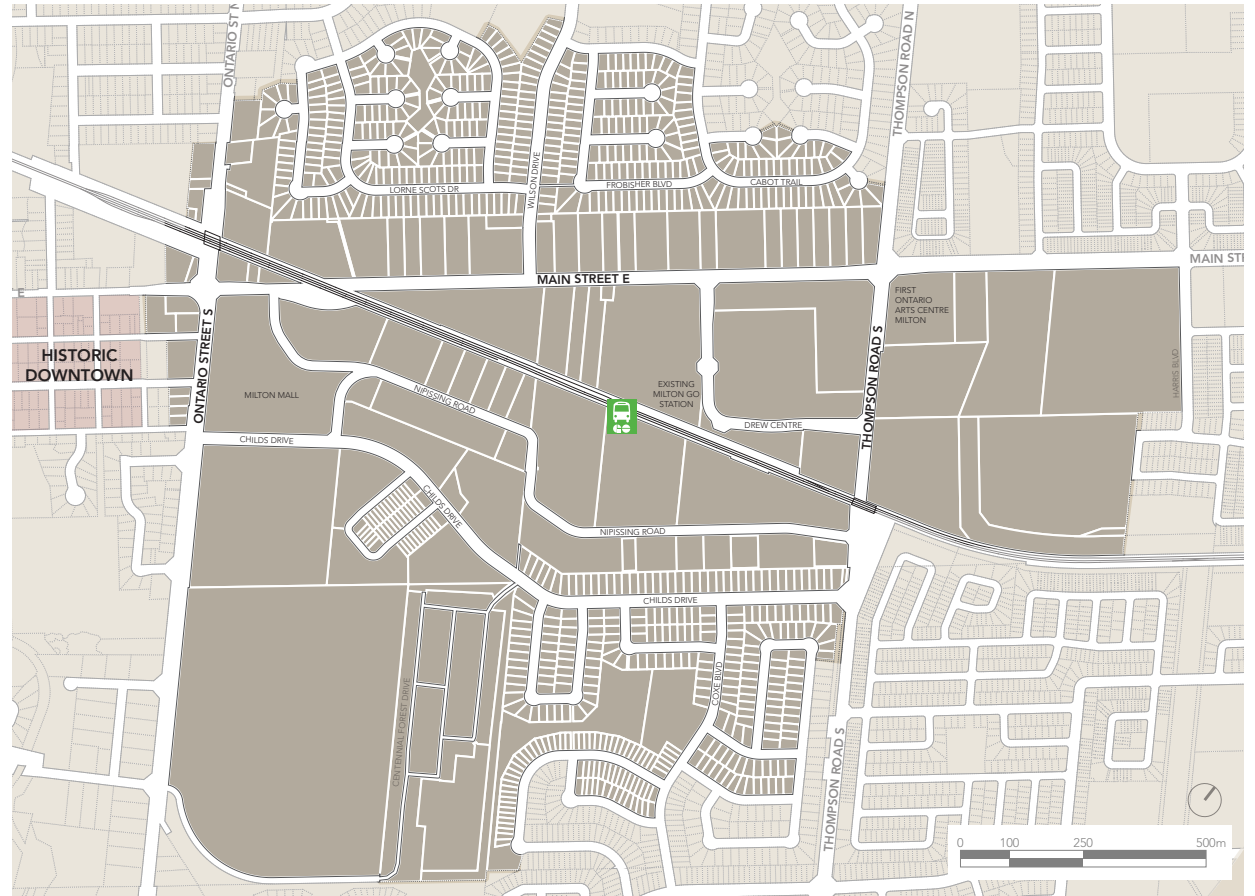


Fig 3 Parcel Fabric



Downtown Milton



Large blocks south of Main Street East



Long, narrow properties on north side of Main Street East

Parks and Open Spaces

The Study Area generally lacks an interconnected system of public spaces with features such as parks, pedestrian lighting, landscaping, street furniture and sidewalk related buildings that would contribute a more pedestrian friendly environment.

Existing parks and Natural Heritage Areas are located around the edges of the Study Area with Lions Sports Park, a major recreation destination, defining the eastern edge. Part of this Park is designated as a Natural Heritage Area and contributes to a larger green corridor.

A recently constructed urban plaza at Thomson Road and Main Street East provides a sense of entry into the Mobility Hub. The Parks and Open Spaces Framework identifies opportunities for a network of new parks and open spaces that connect with and complement Lions Sports Park.

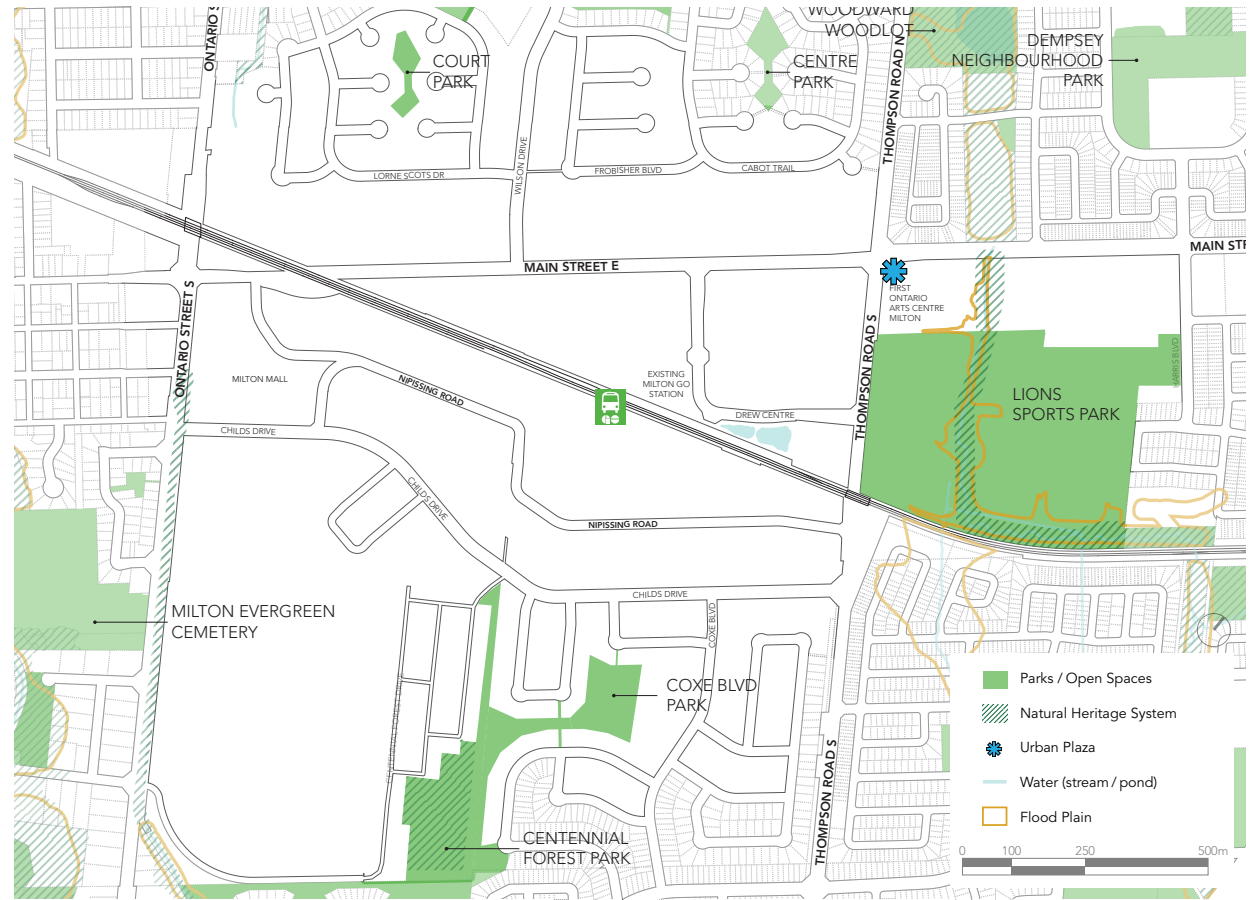
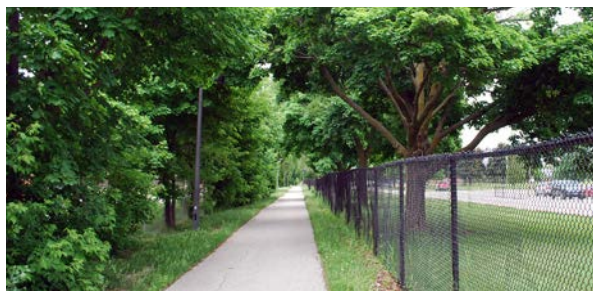


Fig 4 Parks and Open Space



Multi-use pathway south of Childs Drive



Milton Centre for the Arts Entrance Plaza



Lions Sports Park

Streets

The street network in the Study Area primarily supports vehicle movement to and from the GO station. Generally, the existing street rights-of-way are wide with large roadways featuring up to four and five travel lanes. Main Street East and Thompson Road South have grade separations as they intersect and pass beneath the rail corridor.

Barriers

There are several existing barriers to pedestrian movement in the Study Area, including the rail corridor, high volume and speed roadways, grade changes and large surface parking lots.

Active Transportation

The existing active transportation network is incomplete and will not support future anticipated levels of pedestrian and cycling activity. Where present, sidewalks and multi-use trails vary in width from 1.5m to 3.0m. There is little to no physical separation between sidewalks and roads other than boulevard buffer space that varies from 0 to 0.3m in width. Marked bicycle lanes exist along a segment of Main Street East west of Wilson Drive up to the access to Lowes and Shoppers Drug Mart. East of the station, there are multiple trails within Lions Sports Park.



Fig 5 Movement and Connectivity



Main Street East



GO Station



Thompson Road

Views

A number of distinct views and vistas are provided by the Study Area's irregular street grid, orientation of Main Street East and the Niagara Escarpment to the west. Key existing views and vistas include:

- Niagara Escarpment views looking westward along Main Street East and from within the immediate vicinity of the GO Station;
- Views of Lions Sports Park

Future development provides an opportunity to frame and enhance landmark views, particularly of the Escarpment.

Heritage

The original grid of historic streets and collection of landmark heritage buildings to the west of the Study Area define a sense of transition into historic downtown Milton. There are no listed or designated buildings within the Study Area.

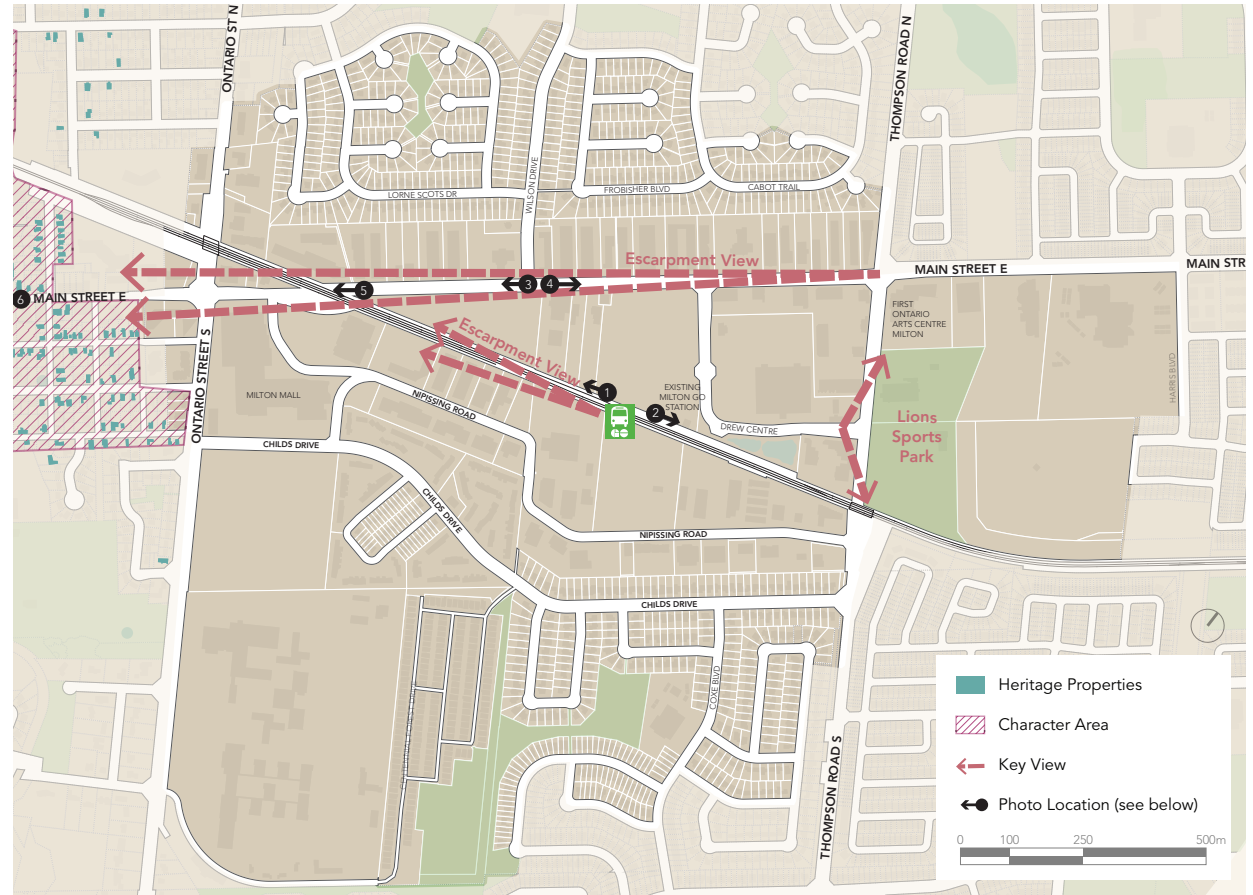


Fig 6 Heritage and Views



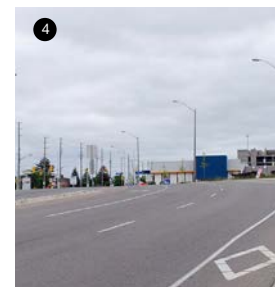
Escarpment views along the tracks looking north-west



South-east view along the rail tracks from the GO Station



Escarpment views looking west along Main St. E.



Looking East on Main St. E.



Rail bridge over Main St. E.



Historic Downtown Milton

1.3 GUIDING PRINCIPLES

A series of principles will guide development within the Milton Mobility Hub Study Area. The principles are organized into three categories, based on Metrolinx's Mobility Hub Guidelines (2011): Seamless Mobility, Place-making and Successful Implementation, and were informed by public and stakeholder input.



Balanced, Safe and Efficient Mobility

Accommodate all modes of transportation, ages and abilities in a safe and efficient manner, with priority given to the most vulnerable users. Movement throughout the Mobility Hub will be characterized by seamless connectivity between transportation modes and barrier-free accessibility.



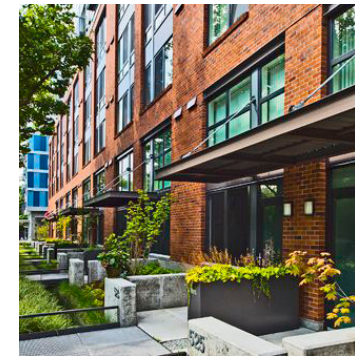
Strong Visual and Physical Connectivity

Provide strong connections to the GO Station and key destinations. Provide a network of streets, parks, paths and open spaces to form a convenient and inviting public realm connecting the GO Station, local transit routes and key community destinations, ensuring a seamless integration with transit facilities. A new underground pedestrian connections will link the north and south sides of the rail corridor.



Walkable and Inviting Public Realm

Create a green, safe and attractive place with high-quality public parks, boulevards, streets and privately owned publicly-accessible open spaces that are designed to promote walking and support a range of local, social and recreational activities. Among other features, the Mobility Hub will include active street frontages, comfortable spaces for people to sit and socialize, and mid-block connections.



Intensification at an Appropriate Scale and Form

Promote compact built form to achieve a critical mass that supports transit and the efficient use of land by meeting minimum density targets. Focus intensification within the Primary zone, particularly within the immediate GO Station area, along Main Street East and the existing Super Centre and Milton Mall. Provide appropriate transitions to minimize impacts on stable residential neighbourhoods to the north and south.



Mix of Uses in the Primary and Secondary Zones

Provide a mix of uses to create a vibrant complete community that supports existing and future planned conditions and transit infrastructure, including parks and open spaces, community services and facilities, as well as employment, commercial and residential uses.



Design Excellence

Ensure that all new public and private sector development – including buildings, infrastructure, streetscapes and open spaces – are high-quality in design and incorporate low-impact development practices. Consideration will be given to new mobility technologies and Vision Zero principles at all stages of planning, design and implementation.



Realistic and Achievable Plan for Growth

Plan for realistic and achievable growth that appropriately addresses a changing environment as well as the physical, economic and regulatory constraints of the Mobility Hub using a flexible framework that responds to changes in conditions and opportunities. Incorporate phasing strategies to accommodate long-term growth and changes in market demand, in addition to measures for evaluating and monitoring implementation progress.



Strategic and Holistic Approach to Parking Supply

Provide an appropriate supply of parking that meets the needs of users, while incentivizing transit use and prioritizing pedestrian safety. Encourage reduced parking and maximize opportunities for shared parking. Carefully integrate parking structures into the overall built form, designed with future adaptability in mind. Minimize surface parking and incorporate parking configurations that can transition to other uses over time.



Partnerships and Innovative Solutions

Seek public-private partnerships to advance new development, and identify partnership structures to ease the consolidation of commercial condominium properties along Main Street East. Explore innovative approaches for building, flood management, parks and open spaces, community services and facilities, and transportation technology, as well as urban design and public realm features.



SUCCESSFUL IMPLEMENTATION



2.0

URBAN DESIGN GUIDELINES

2.0 URBAN DESIGN GUIDELINES

The Milton Mobility Hub Study Area is a tremendous place making opportunity. The following recommendations promote an attractive, livable, and green community with a mix of uses, walkable streets, context sensitive building design, distinctive neighbourhoods, and new parks and open spaces.

The Urban Design Guidelines provide direction and design recommendations for built form and the public realm in the Primary and Secondary Zone of the Milton Mobility Hub. These recommendations are based on the background analysis by the consulting team and the testing of alternatives completed in earlier phases of the study (Refer to the Final Report).

The Urban Design Guidelines are divided into sections that address the design components of the study area. Each section contains guidelines, reference figures and precedents, where applicable. The Urban Design Guidelines include a demonstration model and two pedestrian level renderings of the preferred alternative as one potential outcome if the guidelines are followed for the study area.

2.1 URBAN DESIGN OBJECTIVES

New development shall contribute to a strong sense of place and the increasing sustainability of Milton's built and natural environment.

The overall urban design objective is to develop a connected and complete community focused around the Milton GO Station, one with a strong green character and mix of uses that reinforces the role of this area as a regional transit hub.

Main Street East will become a landmark street with wide sidewalks, large trees and plantings, active transportation facilities and active uses at grade. It will connect the Community and Cultural District in the east to the historic downtown in the west. New gateways at Ontario Street, Thompson Road and the GO Station will provide a sense of arrival and departure from the Mobility Hub.

The Milton GO Station Redevelopment and Expansion Project is currently underway and will include a new station building, new parking, improved bus infrastructure, accessible connections to train and bus platforms, and improved pedestrian and cycling connections and storage.

The GO lands are one of the largest properties in single ownership within the Study Area. The street and block network within the Metrolinx lands should allow for the incremental conversion of surface parking to become a mixed-use community.

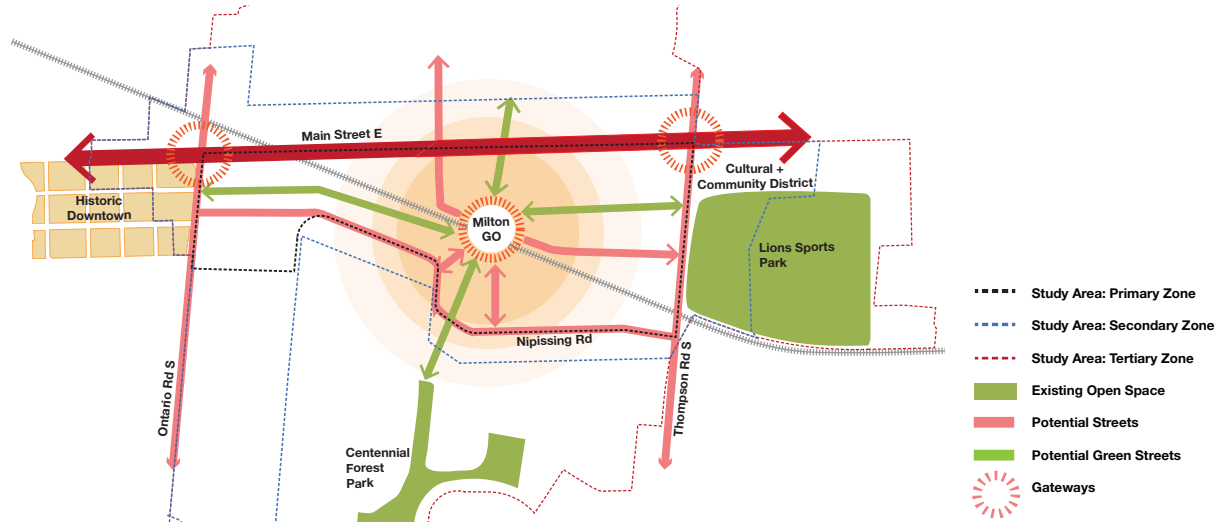


Fig 7 Big Moves

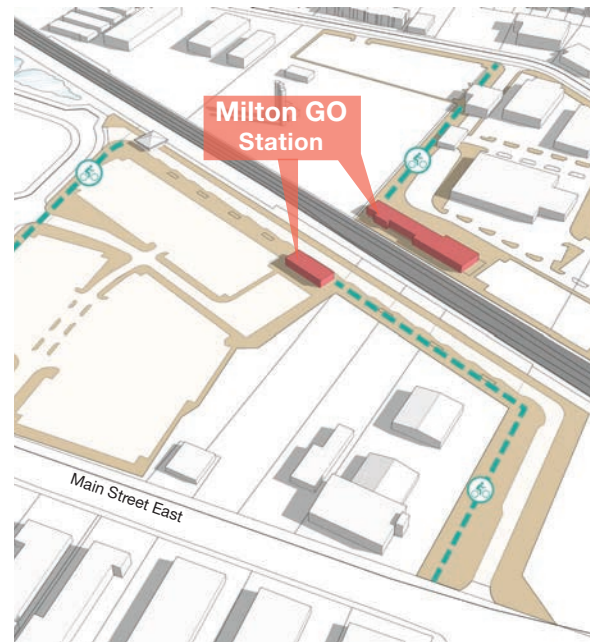


Fig 8 Milton GO Station Redevelopment and Expansion Project: The GO Lands today, showing the street and block layout proposed as part of the Metrolinx GO Rail Station Access Plan. (Aerial view looking southeast)

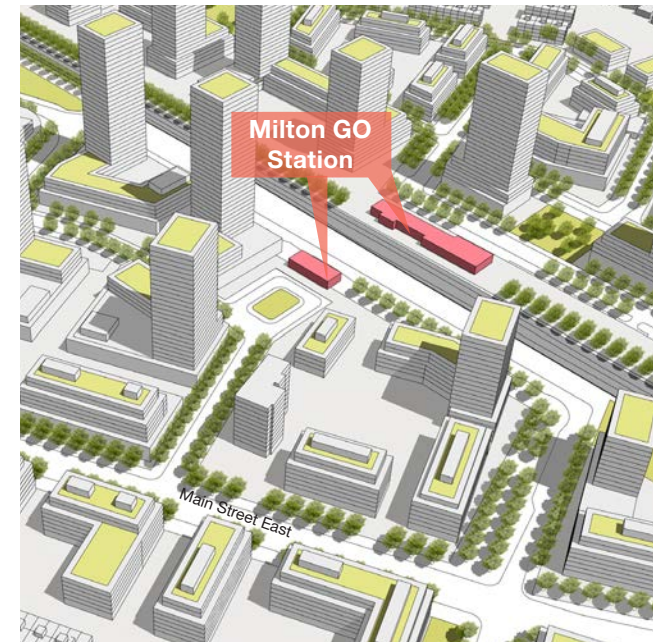


Fig 9 Potential: The urban design strategy incorporates a pattern of urban scaled development blocks that build from the proposed pattern of streets, parking lots and transit infrastructure. (Aerial view looking southeast)

2.2 URBAN DESIGN FRAMEWORK PLAN

The Urban Design Framework Plan represents the preferred alternative for the Study Area. This framework was informed by the Guiding Principles and input from stakeholders and the public.

The Framework Plan envisions a range of uses in street related buildings, provides for a walkable environment, identifies place-making opportunities, identifies new streets and paths, and supports a green character for the Study Area. The Framework Plan is intended to provide an unambiguous pattern of (private) development blocks connected by an armature of public streets, open spaces and pathways that are scaled to pedestrian activity and movement and offer a multiplicity of alternative walking routes. These Framework Plan components are described further on the following pages.

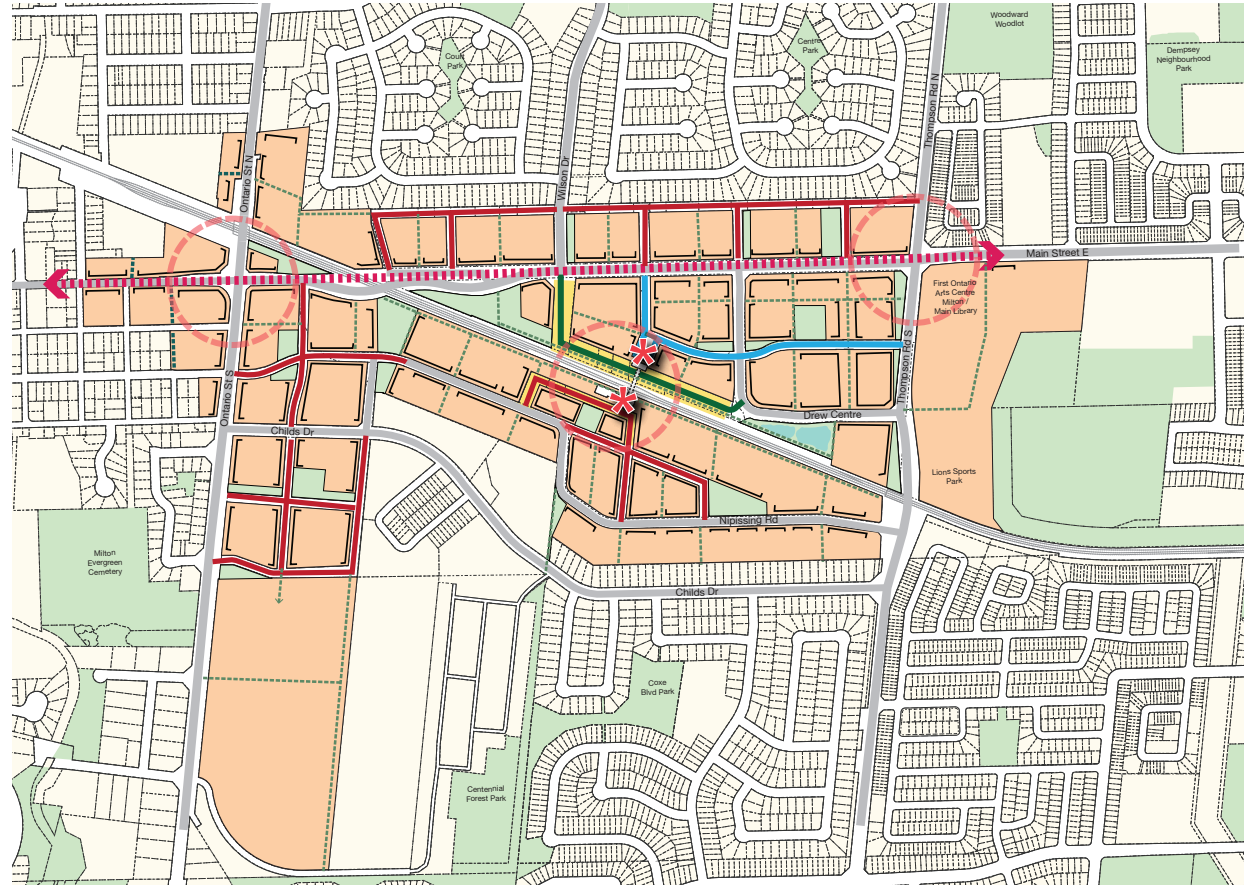


Fig 10 Framework Plan

- Open Space
- Blocks
- Frontages
- Existing Streets
- Potential New Streets
- Mid-Block/Pedestrian Connections
- Retail Priority Street
- Transit Hub and Transit Plaza
- Main Street Revitalization
- Gateways

2.3 STREETS AND BLOCKS

As the Mobility Hub redevelops the “roads” will evolve into “streets” that are places for people to live, work, shop and play.

At present the Study Area contains a number of large blocks that will require new streets to facilitate redevelopment and improve access and permeability. A fine grain network of streets and pedestrian linkages will promote safety, visibility, and legibility.

The enhanced street network will provide choice for how people move around, emphasize safe and comfortable travel, provide improved physical and visual connections to the GO Station and provide a green and comfortable setting for all users.

The design of all streets in the Milton Mobility Hub should anticipate the full build-out of proposed changes in use, intensity and character.

Further information regarding street sections, street character and details are in Chapter 3.0, Streetscape Guidelines. Detailed travelway dimensions are included in the Transportation Master Plan component for this Study. The recommendations are informed by the following Town guidelines, standards, and approved studies:

- Milton Major Transit Station Area Transportation Plan Report (2019)
- Town of Milton Transportation Master Plan (2018)
- Town of Milton Streetscape Strategy (2014)

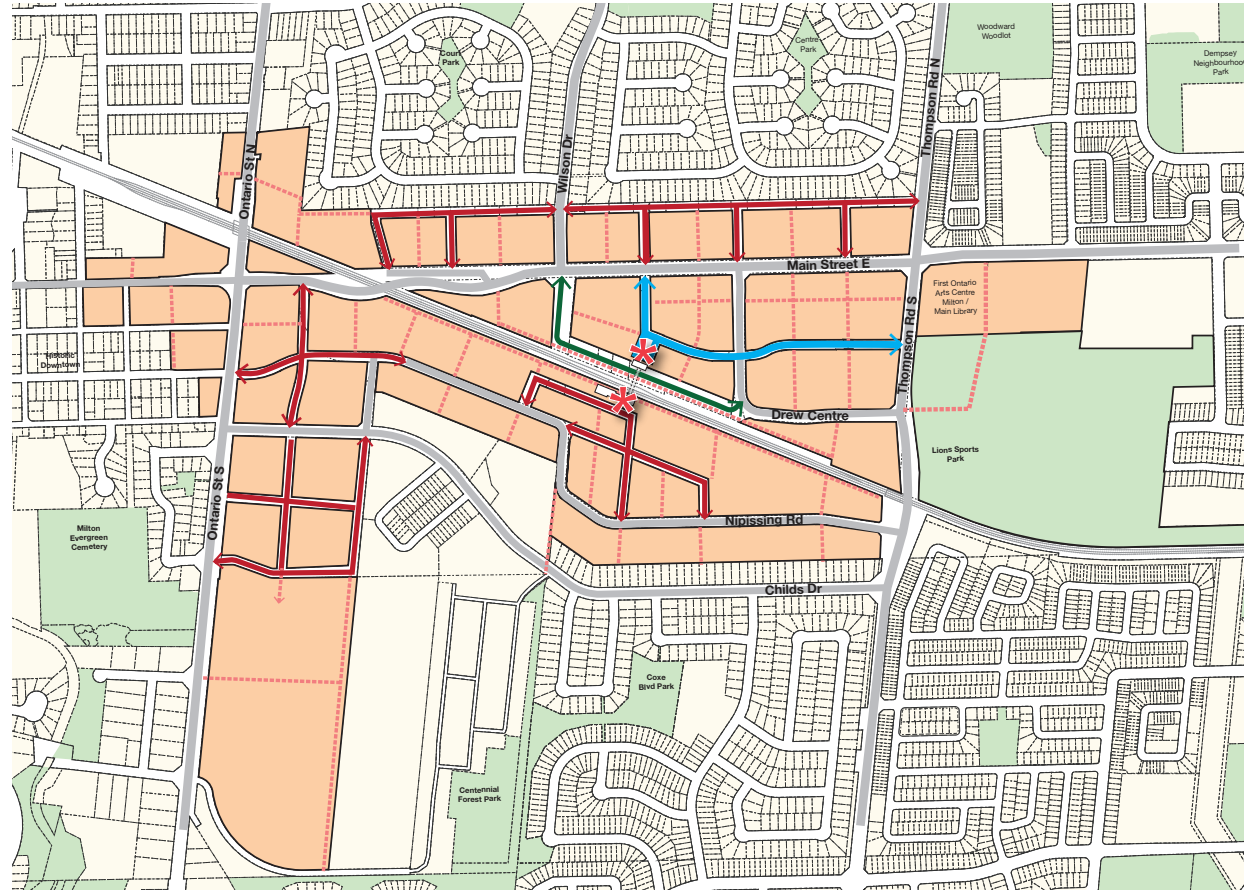
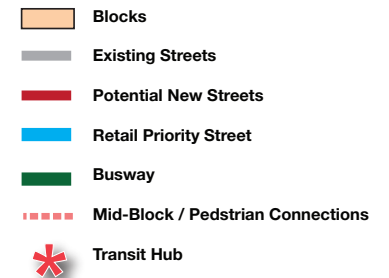


Fig 11 Streets and Blocks



The recommended street and block network illustrated on page 14 includes:

Potential New Streets are recommended through this Mobility Hub Study. These potential new street locations build on the street pattern proposed in the Central Business District Secondary Plan (June 2010 Amendment), the Metrolinx Station Site Plans (2018) and approved development applications within the Study Area. For the most part, the location of these new streets are fixed as identified in the Streets and Blocks Strategy on page 14, specifically where they extend or upgrade existing streets or where they connect with adjacent existing streets. However, their location is flexible within a block provided they guarantee a minimum number of connections and satisfy anticipated transportation and active transportation needs. Private streets and lanes are possible but only in special circumstances where public dedication is not feasible.

Pedestrian Connections are walkways, trails and mid-block connections throughout the Study Area. Pedestrian Connections form a well-connected pedestrian network and promote pedestrian activities and are generally located between buildings to help break down larger blocks and provide more direct routes between key locations. While typically not programmed, pedestrian connections should include active building elements, lighting and small scale gathering and seating areas to provide a sense of animation. Pedestrian Connections are required in a particular orientation, but the exact locations and design will take place during the development approval process.

The Retail Priority Street is a special street design proposed for the street located with the Retail Sub-Area, just southeast of the Main Street East and Thompson Road South intersection. This street provides a pedestrian focused retail connection between the GO Station and Lions Sports Park.

The Busway is a new bus loop proposed as part of the Metrolinx plans for the redevelopment of the Milton GO Station. The street design includes bus bays, bus shelters, new sidewalks and a multi-use trail and cycle parking.

Refer to the Milton Major Transit Station Area Transportation Plan Report for proposed intersection signalization locations.

GUIDELINES AND STANDARDS

- 001.** Divide large sites (defined as sites that can comfortably fit more than one stand-alone building) with streets and/or pedestrian routes to ensure a high level of permeability for public circulation and to encourage a scale of urban sized blocks that can flexibly accommodate a wide range of uses and built form.
- 002.** Design the streets, sidewalks and pedestrian network to provide direct and convenient pedestrian access to transit, retail and other public destinations.
- 003.** Connect new streets into the existing pattern of streets and open spaces.

- 004.** Regardless of a block's length, provide a high-quality mid-block connection at a maximum of 90m spacing, consistent with the Town's Mid-Rise Guidelines and urban grain of Milton's historic downtown street pattern.
- 005.** Provide visible sightlines and direct access to the GO station, transit stops and other publicly accessible spaces such as building entrances and lobbies for pedestrian comfort and safety.
- 006.** Execute both public and private streets and pathways to a high degree of quality, in terms of materials, and overall design, exceeding municipal standards.
- 007.** Incorporate the Streets and Blocks Plan into a Secondary Plan that includes public streets and lanes, privately owned streets and lanes with guaranteed public access, and potential long-term redevelopment blocks.

Evolution of the Milton Street Grid

The Streets and Blocks strategy is inspired by the pedestrian scaled street and block pattern of downtown Milton which was established before the introduction of the automobile. This pattern encourages walking by providing a choice of routes and having intersections spaced approximately 80-90m apart.

A combination of public streets, publicly accessible lanes and walkways will form a pattern of urban development blocks that can accommodate a wide range of development models and buildings types, promote a more predictable form, and support the evolution of a transit-oriented community.



Fig 12 Milton's historic pattern of street and blocks

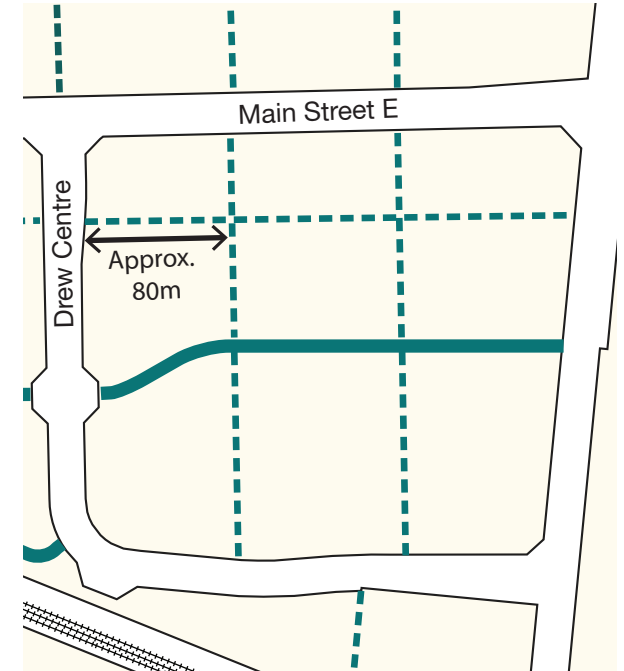


Fig 13 A combination of streets and mid-block connections spaced at approximately every 80m provides a high level of permeability for public circulation

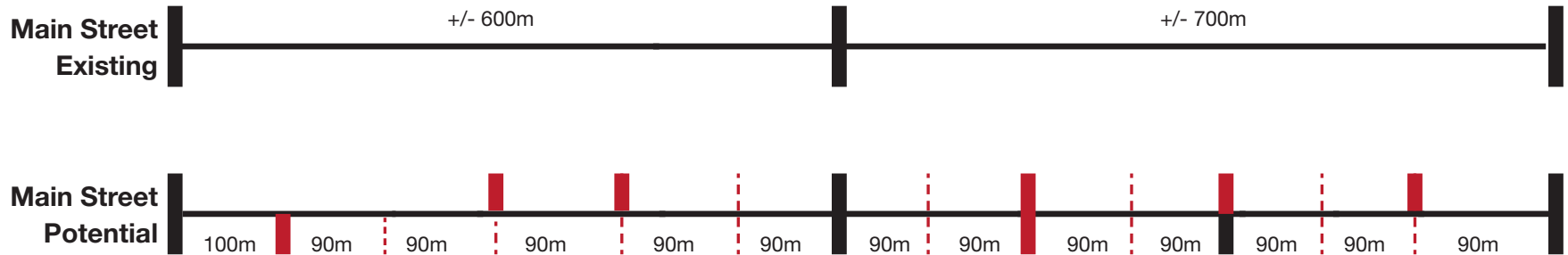


Fig 14 A pattern of streets and mid-block connections form urban scaled walkable blocks that are approx. 80 to 150m

- Existing Streets
- Proposed New Streets
- Existing Pedestrian Connections
- Proposed Pedestrian Connections



Market Street (Toronto) is an example of a retail street.



Retail uses at grade combines a pattern of windows and entrances in combination with a high-quality streetscape character to support a vibrant public realm.



Mid-block connections should have a high-quality of design and construction, and be visually and physically connected to the adjacent streets and open spaces.



Transit should be fully integrated within the streetscape.



A residential street with front-yard open space creates an interesting character along the streetscape.



A fine-grained network of blocks, streets and well-framed parks, plazas and public open spaces scaled to pedestrian activity and movement.

2.4 PUBLIC REALM FRAMEWORK

Redevelopment and intensification present the opportunity to contribute to a range of high-quality parks and public spaces that provide a setting for civic and community life by enhancing the identity and character of the Mobility Hub.

High-quality parks, open spaces, plazas and streets for people are critical components of a complete community. New parks and open spaces will provide additional greening, support community vitality and complement and connect with Lions Sports Park, located just to the east of the Primary Study Area. As more people live, work and play within the Mobility Hub, the parks and public realm system will expand and improve. Improvements to the public realm will be secured on public and private lands as part of development and Town-initiated projects.

Parks, urban plazas and other privately owned but publicly accessible open spaces are to form a coherent and accessible green space system. These spaces should have individual character and functions but contribute to the whole open space system. New public spaces will be high-quality environments that support a wide range of programming, allow for a variety of pedestrian uses, and be distinct yet visually connected through the use of contemporary materials and details.

The public realm framework identifies the recommended locations for new open spaces and public realm improvements. These may include a combination of privately and publicly owned spaces. The key elements are described on the following page.

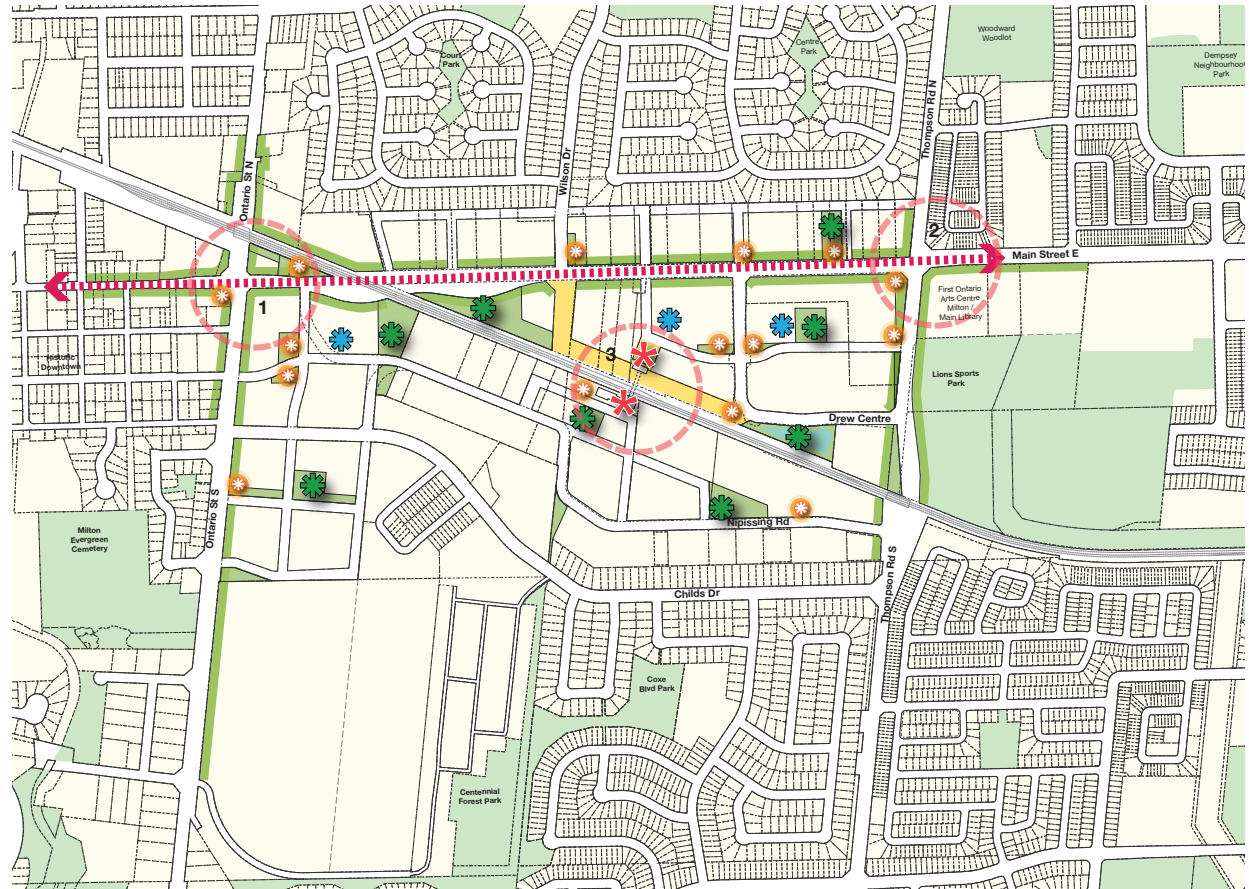










Fig 15 Public Realm: Parks and Privately-Owned Public Spaces (POPS)

-  Existing Open Space
-  Transit Hub and Transit Plaza
-  Street Greening
-  Main Street Revitalization
-  Potential Open Space
-  Potential POPS
-  Potential Community Nodes
-  Gateways

Potential Open Spaces/ Privately Owned Publicly-Accessible Spaces (POPS) are required in the locations identified in the plan. Privately Owned Publicly-Accessible Spaces (POPS) are a specific type of open space which the public are invited to use, but remain privately owned and maintained. They are intended to augment and complement, but not replace, the public parks and open space within the public realm network. POPS can include urban plazas, courtyards and mid-block connections.

Urban Plazas are small, privately owned, publicly accessible areas with a predominantly hardscape character. Urban Plazas can occur at key nodes where pedestrian or retail activity is anticipated to be most intense.

Street Greening to the main streets (Main Street East, Ontario Road South and Thompson Road South) will include generous public boulevards, pedestrian amenities, and street trees planted with enough un-compacted soil volume to grow into large trees with broad canopies. Refer to page 26 for guidelines on private setbacks.

Gateways are recommended to enhance the sense of entry and departure from the GO station and adjacent neighbourhoods. Three Gateways are recommended:

1. The Western Gateway is located at the intersection of Ontario Street and Main Street East to mark the entrance to and from the historic downtown.
2. The Eastern Gateway is located at the intersection of Thompson Road and Main Street East to mark the entrance to the Community and Cultural District

3. The GO Station Gateway should announce sense of arrival by train and include new urban plazas with active grade related buildings at both entrances.

Public Art is encouraged within the Mobility Hub to contribute to local identity and enhance the character of the public realm. Public art contribution is recommended for development proposals within the larger blocks. Public art is encouraged within each of the three gateways.

Main Street East connects the Community and Cultural District in the east to the historic downtown in the west and is envisioned as a landmark street and a central focus for the Study Area. The design of Main Street East should include active pedestrian boulevards, wide sidewalks, consistent paving treatment, street tree planting and supportive buildings frontages. Buildings along Main Street East should include a generous setback along the south side for an additional row of trees and plantings within the private setback. Refer to the Streetscape Guidelines in Chapter 3.0 for more details.

The Transit Hub and Transit Plaza are important new public spaces proposed within the Milton GO Station Redevelopment and Expansion project. These spaces are being planned as the origin, destination, and transfer point for a significant portion of trips. Their design should exemplify design excellence and be a focal point for the community. New development should frame and animate the public realm with supportive building frontages and active ground floor uses.

GUIDELINES AND STANDARDS

Parks

- 008.** A hierarchy of open spaces and outdoor environments in a range of publicly accessible, communal, and private open space types will be created through development to augment public parks and open spaces.
- 009.** Where continuity of parks is interrupted, they should be linked through urban areas with special tree lined streets or multi-use trails.
- 010.** All parks will front onto public streets.
- 011.** Parks are to be visible and accessible from adjacent public streets, and be of a usable shape, topography and size that reflect their intended use.
- 012.** Consider parks as part of a network, provide appropriate space for recreational needs and ensure good visibility, access and safety.
- 013.** Parks are to provide a high-quality design, be sustainable and provide a sense of place for residents.
- 014.** New buildings will be positioned to define the shape and function of the public park as well as frame and support adjacent public parks with active and interesting building elevations. Backlotted housing, or housing with the rear property line against parks or primary streets, should be avoided.

- 015. Where viable, neighbourhood retail uses and cafes should face directly onto parks and open spaces.
- 016. New parks and open spaces are to provide for a range of uses and amenities.
- 017. Prior to the redevelopment of any parcel on a large block, the proponent will submit a conceptual Precinct Plan for the comprehensive redevelopment of the entire block. Proposed parkland provided through dedication requirements should be located at the mutual property line, in order to permit its eventual expansion to the second abutting parcel.

Privately Owned Publicly-Accessible Spaces (POPS)

- 018. The development of POPS is encouraged at the ground level of developments to add to the public realm network.



High-quality parks are necessary to serve the new population that will call the Mobility Hub home

- 019. Locate POPS adjacent to active uses, including retail (where viable), institutions and/or employment uses with active ground floor uses to create a lively interface.
- 020. Locate and position new buildings to define the shape and function of POPS
- 021. A range of uses and amenities is encouraged for all POPS.
- 022. Safe and comfortable mid-block connections are encouraged through development blocks, by providing active grade-related uses, building setbacks and pedestrian scaled lighting.
- 023. POPS will be of a high-quality design, be sustainable and provide a sense of place for residents.
- 024. Storm Water Pond improvements to make a sustainable open space at the MTSA that will function as a hybrid of vital stormwater management infrastructure and create an innovative public space design.



POPS can have a hard or soft landscape character that invite and support urban life and energize places.

Urban Plazas

- 025. New buildings should be positioned to positively define the shape and function of urban plazas.
- 026. Urban plazas are required at key nodes where pedestrian or retail activity is anticipated to be most intense as shown in the Public Realm Framework Plan.

Streetscape Greening

- 027. Street trees should be planted on both sides of all existing or proposed streets in the Study Area, wherever possible.
- 028. Setbacks will be provided as part of the animation of the of the public realm and connection paths. They will provide amenity space for retail or pedestrian access and will allow the streets to take on a 'green' character and create opportunities for transition from public to private spaces.



Urban squares with expanded ground floor uses promote an active and inviting streetscape.

The setbacks will vary depending on the nature of the adjacent uses and can be referenced in the Streetscape Guidelines of this document.

Gateways

- 029.** Gateways will be located at the GO Station, the Main and Thompson Intersection and the Main and Ontario intersection within the Study Area.
- 030.** Gateways should reinforce a sense of entrance and arrival to the neighbourhood through enhanced wayfinding, public art, landscape and architecture.
- 031.** Support gateway areas with high-quality designed buildings with ground floor land uses that animate the street and generate intensive pedestrian activity.



The greening of streets will further contribute to a sense of place and identity and provide pedestrian comfort

Public Art

- 032.** The location and design of public art features should generally be considered as part of a broader public art strategy for the MTSA.
- 033.** Public art will contribute to the overall cultural vitality of Milton and complement specific qualities of sites and enhance wayfinding in the Study Area.
- 034.** Public art should be located throughout the MTSA, with more prominent pieces focused at select and highly visible locations that will best showcase the installation. These locations include gateway sites, gathering places such as urban plazas and key redevelopment sites (i.e. the GO Station).
- 035.** Public art is encouraged to be integrated with its site.



Public art should enliven and animate public spaces

- 036.** Public art can be included with all types of development including retail, office, and industrial as well as residential and institutional.

Trails

- 037.** New trails linking to the existing network of trails outside of the Study Area will connect throughout the Milton Mobility Hub and supplement the pedestrian and cycle network, as identified in the Transportation Master Plan.
- 038.** All trails within the 30m Metrolinx setback will require coordination with Metrolinx.
- 039.** Trails should be safe for all users, at all times of the day and should adhere to the principles of CPTED.
- 040.** New trails will adhere to the Town's Trail and Cycling Facility Design: A Designers Toolbox.
- 041.** Multi-use way trails should have a minimum 3.0-metre width, accommodated within a minimum 5.0-metre wide public right of way.
- 042.** Design trails to include landscape buffers and adequate amenities (i.e. seating, lighting, waste receptacles, signs and interpretive information) outside the clear zone of the pathway edge.

2.5 BUILT FORM

Good urban places are composed of many buildings, varied in type and size. These buildings, including low-rise buildings, mid-rise buildings and tall buildings, will frame the streets, provide an important interface with the public realm and include at-grade uses that activate and animate the adjacent streetscapes.

New buildings play a role in shaping the pedestrian realm, and are to respect existing land uses and incorporate the most recent advances in sustainable building and sound community development principles. All new buildings will adhere to Milton's Mid-rise and Tall Building Guidelines (2018).

Built form testing conducted through this study concluded that the policy context, Guiding Principles, and direction received from the public engagement activities can be satisfied if street related mid-rise or podium buildings are the primary form of intensification with tall buildings reserved for key locations around the station and along the rail corridor.

The built form strategy includes a mix of building types and promotes a shift from surface parking to underground parking and structured parking. These buildings frame, define and animate public spaces and create a consistent street edge and give shape and sense of enclosure, which reinforces the public realm. Grade related uses, including retail where appropriate, animate the pedestrian environment and provide connections between public and private spaces. This varies based upon the location of a building and its frontages on main streets.

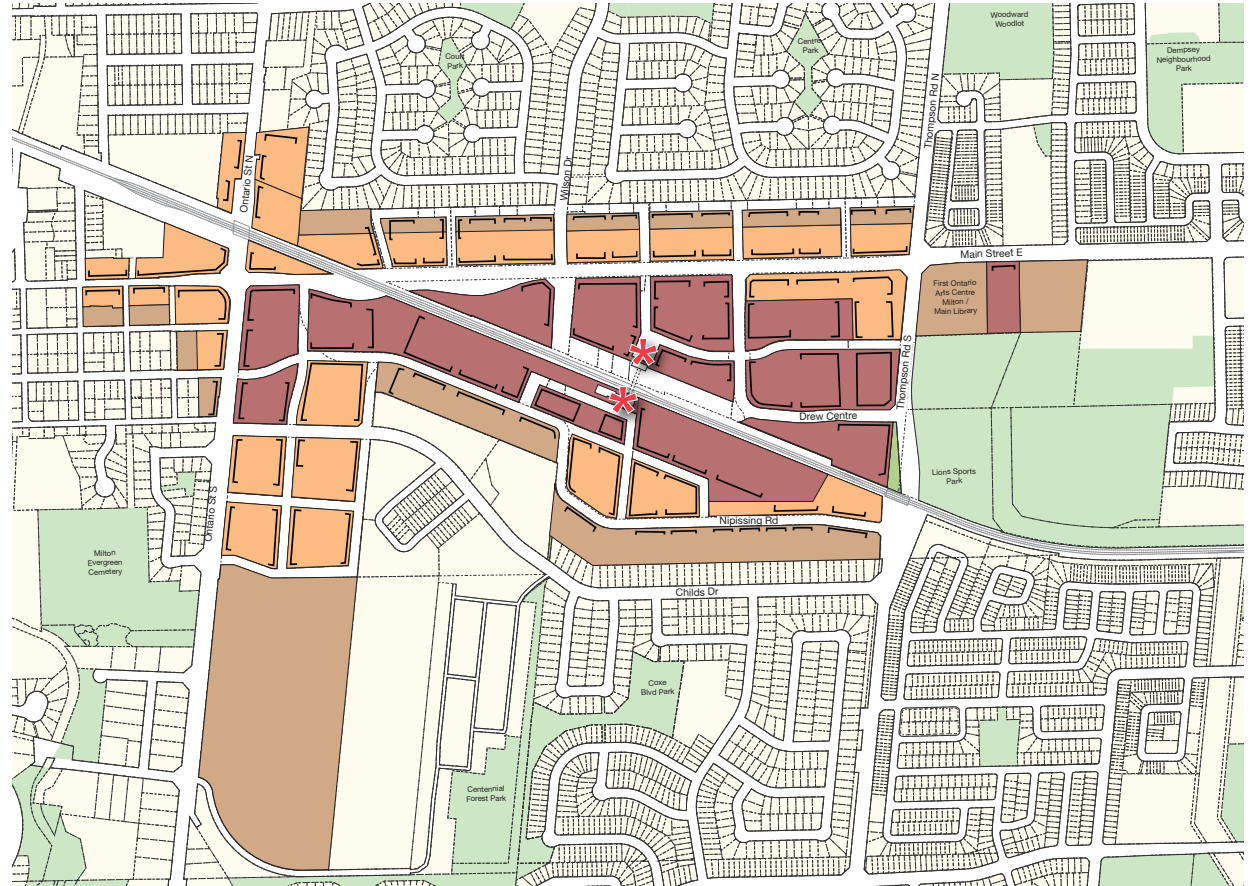


Fig 16 Built Form

- Low-Rise (up to 4 storeys)
- Mid-Rise (5-8 storeys)
- Tall Building (More than 8 storeys)
- Frontages

Buildings along Main Street East should uphold a consistent level of design that supports and elevates this as a special place within the urban fabric to foster and support a sense of social activity along the corridor.

The range of building types and building heights included in the Preferred Concept is shown in Figure 16 (to the left) and described below:

Tall Buildings will become focal points and landmarks in key locations of the Study Area. It is critical that they do not compromise the integrity of the surrounding public realm. Future tall buildings will be evaluated against the Town's Tall Building Design Guidelines (2018).

Tall buildings are permitted in the areas identified in Figure 16 where they can serve as landmarks within the Study Area, emphasize important intersections and give prominence to the GO Station. The Demonstration Plan shows the tallest buildings marking the GO Station with a transition in height downwards towards Main Street East to the north, and Nipissing Road to the South. Tall buildings strategically positioned at Ontario Street and at Thompson Road should mark the limits of the station oriented precinct.

Tall building location and siting will be designed to minimize shadow cast on the public outdoor spaces and parks within and surrounding the Study Area.

Mid-Rise Buildings are comprised of stand-alone mid-rise buildings and podiums of tall buildings. Mid-rise buildings are recommended as the main building type through-out the Study Area to frame and spatially define streets, squares and open spaces.

The design of all mid-rise buildings within the Study Area is to follow Milton's Mid-rise Guidelines.

Low-Rise Buildings are recommended along the northern and southern edges of the Study Area. In these areas, townhouses, either stacked or back-to-back are encouraged to create a finer building scale within the larger blocks and as a transition from the taller, more intense building types.

All low-rise retail buildings should not exceed four storeys in height and be no less than three storeys (10.5 metres).

Streetwalls

The building streetwall (the part of a building closest to the sidewalk before stepping back to the upper floors) defines the frontages for all blocks. On Main Street East and around the GO Station, buildings should collectively provide a contiguous street edge with a strong architectural presence. Continuity in the built-up street wall edge at these locations will strengthen a sense of place and vitality for the pedestrian boulevards.

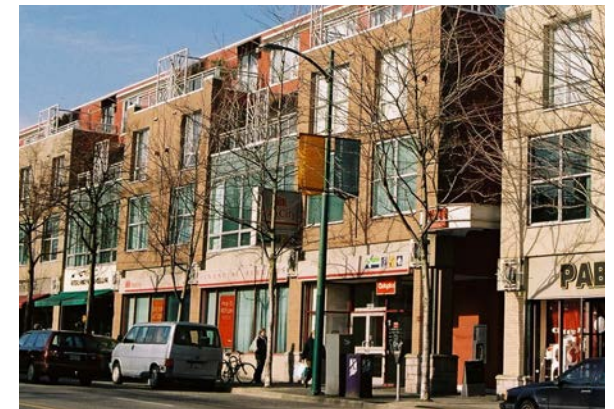
GUIDELINES AND STANDARDS

- 043. A 10.0m minimum stepback from the face of the podium along the Arterials (Thompson Road, Ontario Street and Main Street East) is required to create a mid-rise pedestrian scaled frontage.
- 044. The minimum ground floor height is 4.5m to support a diverse mix of uses and allow for flexibility and adaptation.
- 045. Street wall height to right-of-way width ratio will be 1:3 minimum and 1:1.25 maximum in accordance with Milton's Mid-Rise Guidelines.

- 046. Building street walls can vary in height to create an interesting and variable composition for the public edge.
- 047. Building lengths should be reduced to allow for frequent pedestrian routes through buildings, whether by means of mew, mid-block connections, lobbies or pedestrian friendly driveways.
- 048. Building facades should be well-articulated to 'break-up' the perception of overly long frontages while also maintaining continuity and character of the streetwall.
- 049. All buildings shall provide a 1.5m min. stepback at the maximum streetwall height.
- 050. An additional stepback of min. 1.5m is encouraged between the 4th and 8th floor.

Setbacks

Setbacks assist in improving the civic and pedestrian experience. As such, setbacks will reinforce the vision of the Study Area, enhance retail uses, add greening and encourage pedestrian



The scale and continuity of the street wall defines the street and provides a comfortable scale for pedestrians.

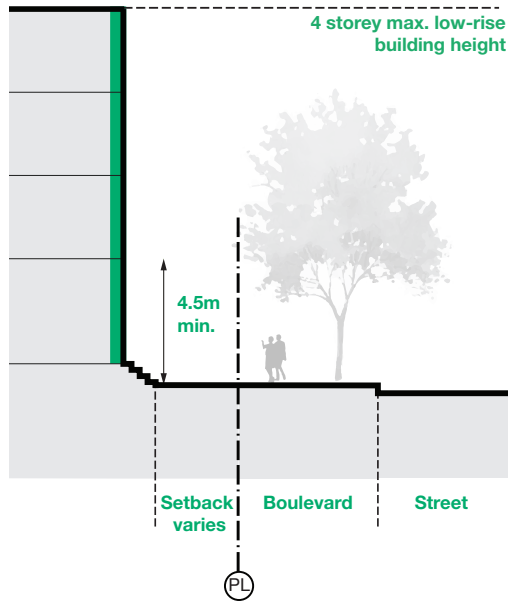


Fig 17 Low-Rise Building

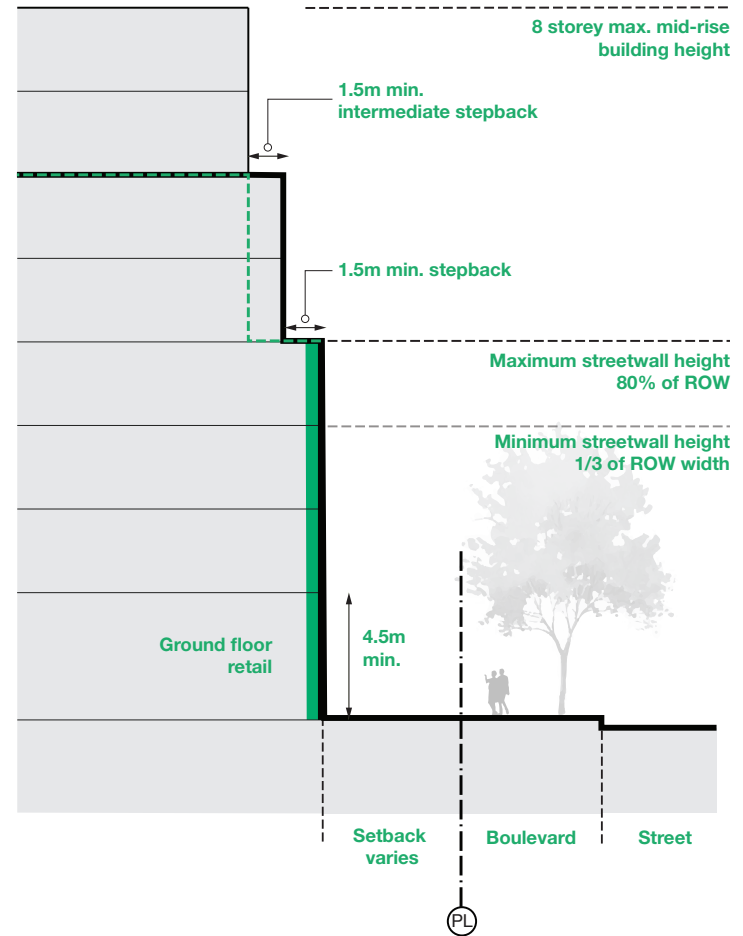


Fig 18 Mid-Rise Building

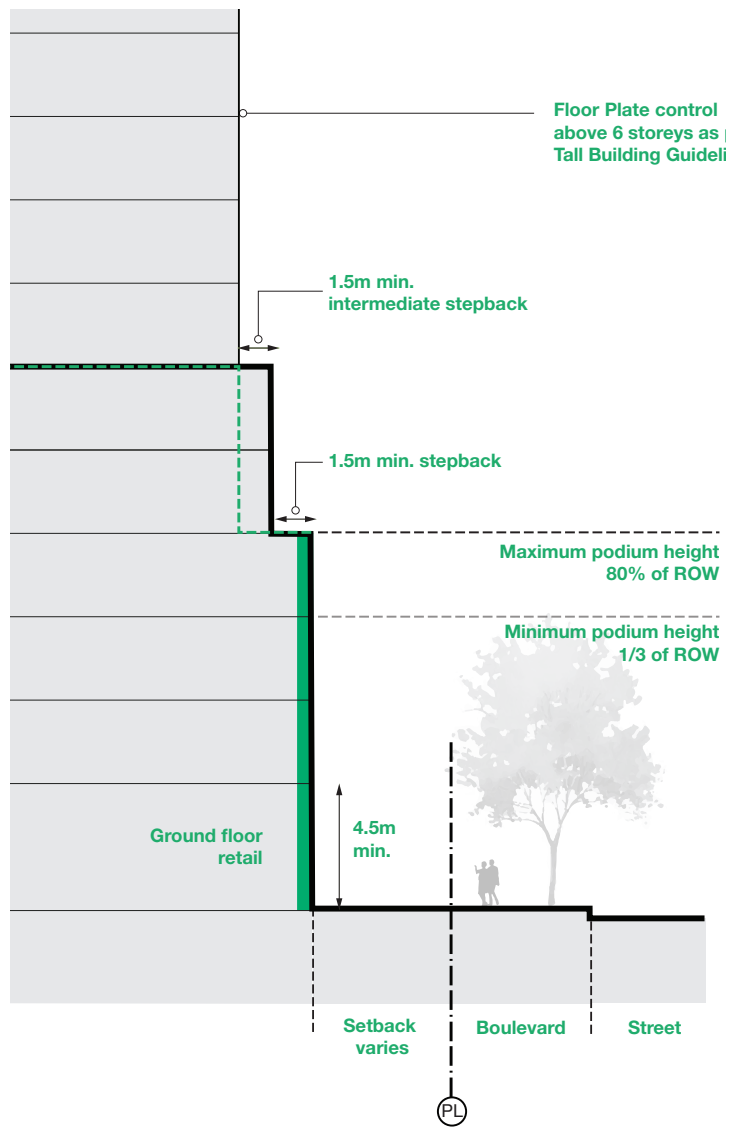


Fig 19 Tall Building

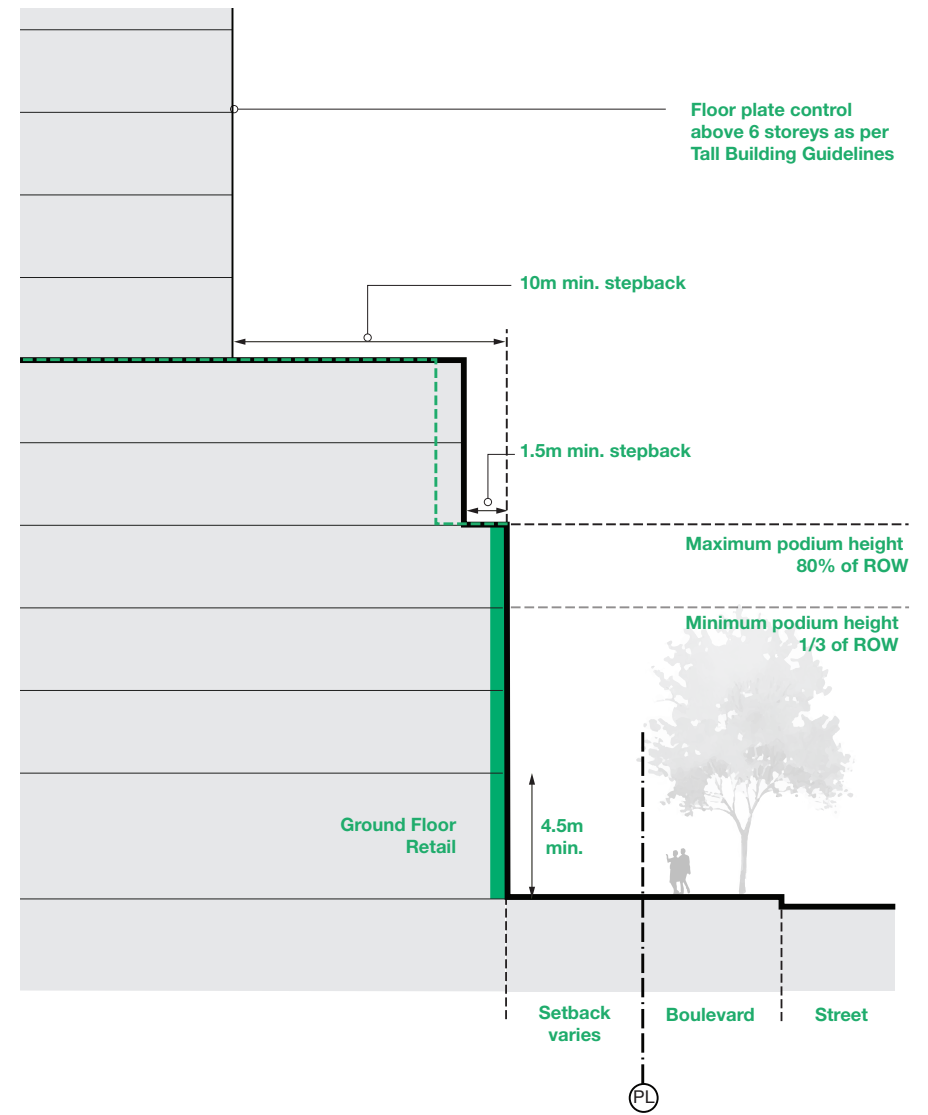


Fig 20 Tall Building Setback: Main Street East, Ontario Street South and Thompson Road South

activities. Setbacks also provide transition between public and private realms where residential uses are at grade. All new buildings within the Study Area should be set back relative to the type of street frontage to allow for engagement with the public realm.

3.0m Setback. A building setback of 3.0m (in addition to the planned right-of-way widening) is required along the north side of Main Street East and the east side of Ontario Street north of Childs Drive to encourage retail activity.

6.0m Setback: Main Street East Promenade. A building setback of 6.0m (in addition to the planned right-of-way widening) is required along the south side of Main Street East to achieve an additional row of trees, landscape elements and frontage and marketing zones to create a Main Street Pedestrian Promenade. This deeper setback will also serve to maintain an enhanced view corridor of the Escarpment. The small number of deep properties with wide frontages along the south side of Main Street East provide an opportunity to achieve continuity in the setback treatment from Ontario Street to Thompson Road. This setback area should be unencumbered with no below grade structures so that trees and other planting can grow to a mature size.

6.0m Landscape Setbacks. Along Ontario Street South, south of Childs Drive and along the west side of Thompson Road a 6.0m min. building setback is required to create a landscape frontage. This setback area should be unencumbered with no below grade structures so that trees and other planting can grow to a mature size.

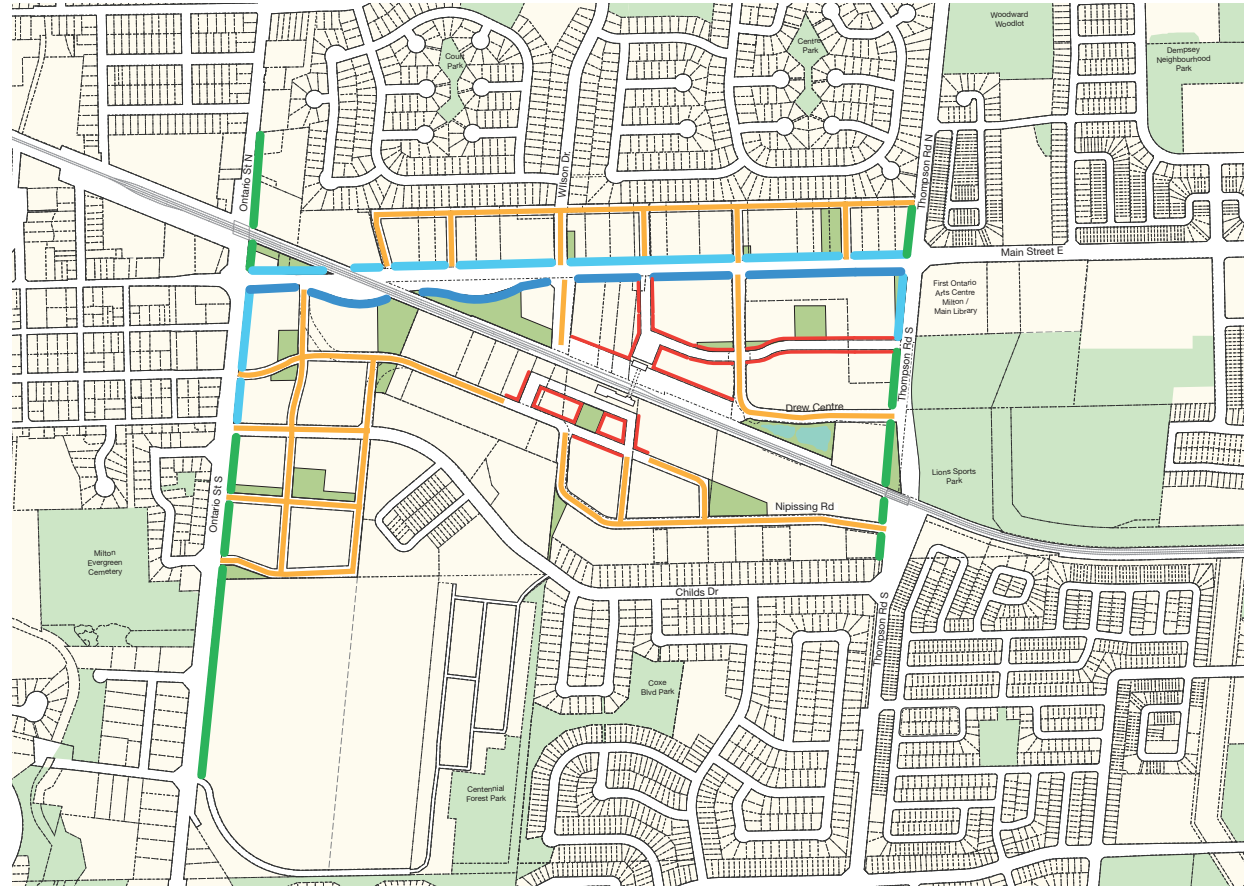


Fig 21 Setbacks

- **6m Setback**
- **3m Setback**
- **Landscape Setback**
- **Internal Street Setback**
- **GO Station Area & Retail Priority Street Setback**

GO Station Area & Retail Priority Street. Setbacks at buildings surrounding the GO Station and along the Retail Priority Street should be minimal or to the established lot line to encourage retail activity.

Internal Streets. On all internal streets, a minimum of 3m and maximum of 5m building setback is required to create a clear sense of building address along the street. In streets with a residential character townhomes on the lower floors with entrances from the sidewalks are encouraged in mid-rise and podium buildings. Residential frontages should maximize the number of entrances to individual residential units.



Main Street East Promenade: Potential Animated Building Frontages



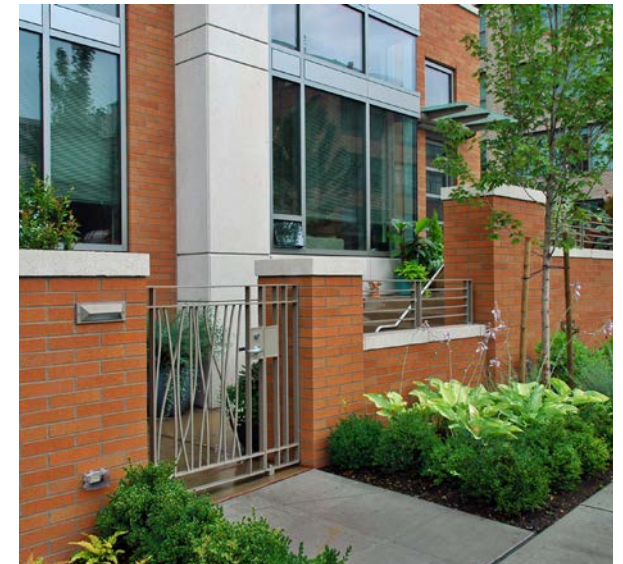
Main Street East Promenade: Potential Street Greening



Example of frequent entrances and details at grade to animate streetscape.



Example of a minimal setback on a retail street to provide a sense of intimacy.



Steps, low walls and planting provide a degree of separation from the sidewalk-- a transition from the public to the private realm along residential streets.

Angular Planes and Transitions

All buildings will be appropriately scaled to adjacent neighbourhoods through strategies such as angular planes, setbacks and stepbacks.

Within blocks that contain a variety of uses, special attention is to be paid to the transition zones and buffer zones between the different uses of built form. This requires addressing functional aspects of separation distance and heights, while maintaining a continuity of uses along street edges as required.

This study applies the front and rear angular planes informed by the Town’s Mid-Rise and Tall Building Design Guidelines. These guidelines apply to the transition of built form towards the public right-of-ways and to adjacent uses, not for establishing overall height of buildings.

Fig 22 Rear lot transition

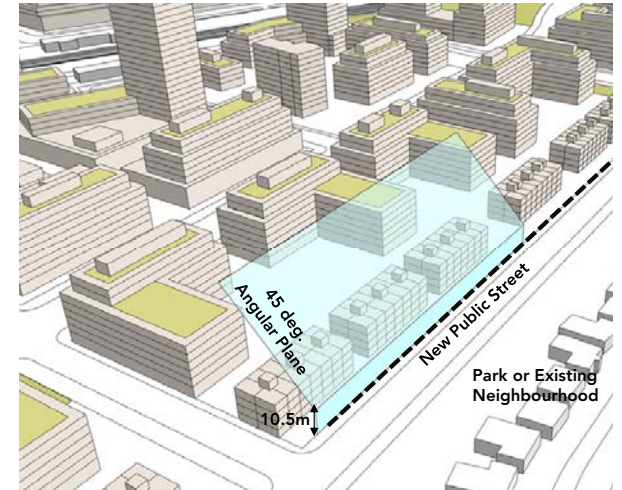
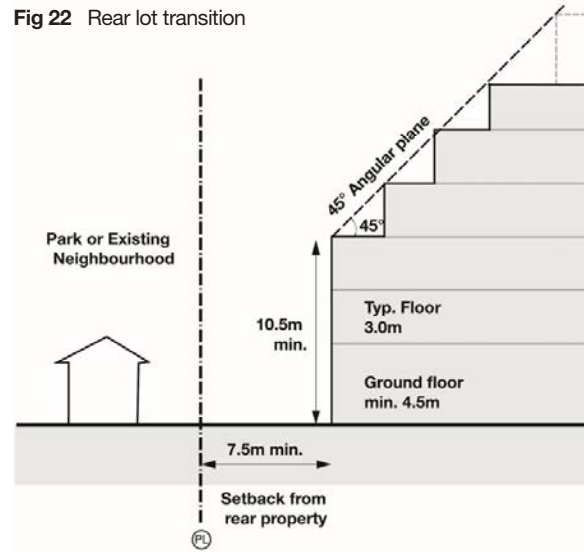
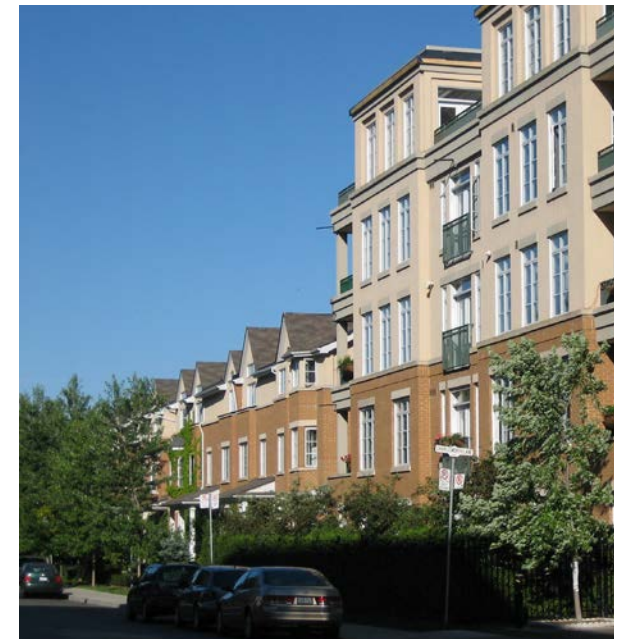


Fig 23 Street transition

GUIDELINES AND STANDARDS

- 051.** Any new building shall adhere to the Town of Milton’s Mid-Rise and Tall building Guidelines angular plane and transition standards.



Examples of transition of mid-rise buildings down to adjacent low-rise neighbourhoods.

Supporting a Mix of Uses

Lands in the Study Area are primarily zoned as Urban Growth Centre Mixed Use, which provides a broad mix of compatible uses. All new buildings should be designed to support the land-uses identified for the mixed-use sub-area in which they are located.

GUIDELINES AND STANDARDS

- 052. Encourage a mix of uses within individual buildings such as retail, restaurants, office, institutional, cultural and residential.
- 053. Enhance connections to existing community facilities, including: Lions Sports Park; the Milton Public Library; the First Ontario Arts Centre; local schools and the historic downtown.
- 054. Animate the streets and public open spaces with active grade related buildings.
- 055. Encourage grade-related retail and commercial uses within the Main Street East Sub-Area and Retail Street Sub-Area to animate the streetscape and provide a central focus of the Study Area.
- 056. Use setbacks to accommodate spill-over uses from retail activities (patio, displays and/or marketing areas), within the Main Street East Sub-Area, the Retail Street Sub-Area and in adjacent Urban Plazas.
- 057. Low- to mid-rise built forms are encouraged with the Transitional Sub-Areas to provide transition and to help minimize impacts on the stable neighbourhoods to the north and south.

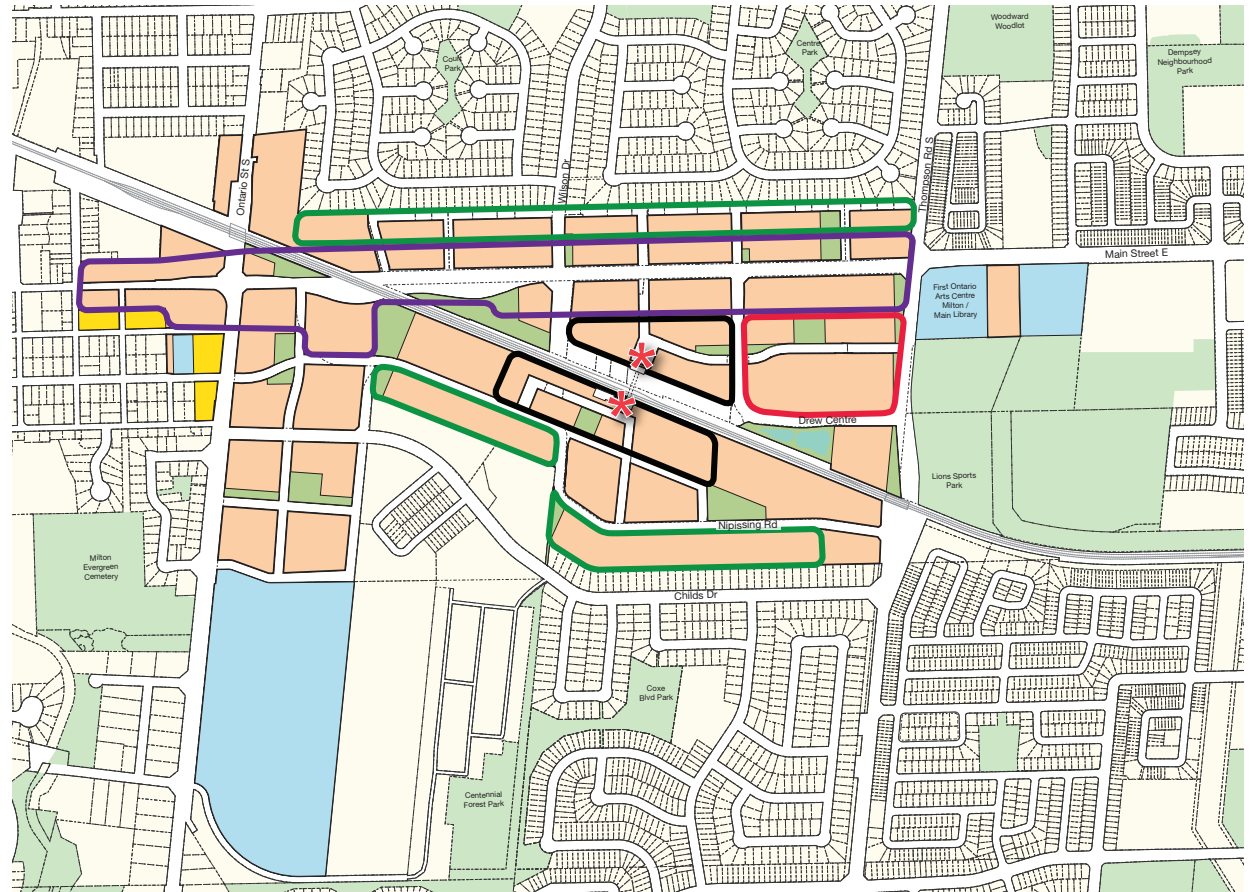
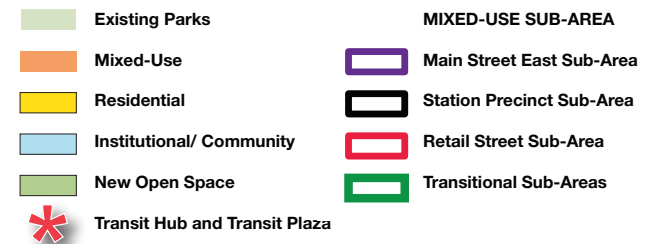


Fig 24 Mix of Uses



Density

Density recommendations were developed based on land use and built-form modeling, existing precedents and context. The recommendations were also informed by what densities are possible, given the location within the Urban Growth Centre. The growth Plan (2019) requires a minimum density target of 200 residents and jobs combined per hectare for the Downtown Milton Urban Growth Centre, to be achieved by 2031 or earlier.

This Study recommends an appropriate built-form that creates: a human-scale street wall along the primary roads; effective transition to areas of lower development intensity and scale; offers ample opportunities for new open spaces and public realm improvements; and responds to the angular plane, stepback and setback provisions achievable pursuant to the Towns guidelines for mid-rise and tall buildings. Accounting for these factors, a range of net developable densities between 1.0x and 6.0x (FSI) is recommended for the Study Area, apportioned distinctly by the areas identified in Fig. 25, to the right. This density target is in keeping with other MTSA's with similar conditions.

The density strategy for the Study Area concentrates the highest density around the GO station area and along the railway tracks. Lower density areas are located adjacent to the stable residential neighbourhood to the north and south.

The density figures are based on the calculated areas of all blocks, exclusive of any future streets or parks that may be constructed there (i.e. Net Density). A specific apportioning of that density is assigned to density zones inclusive of already-approved developments.

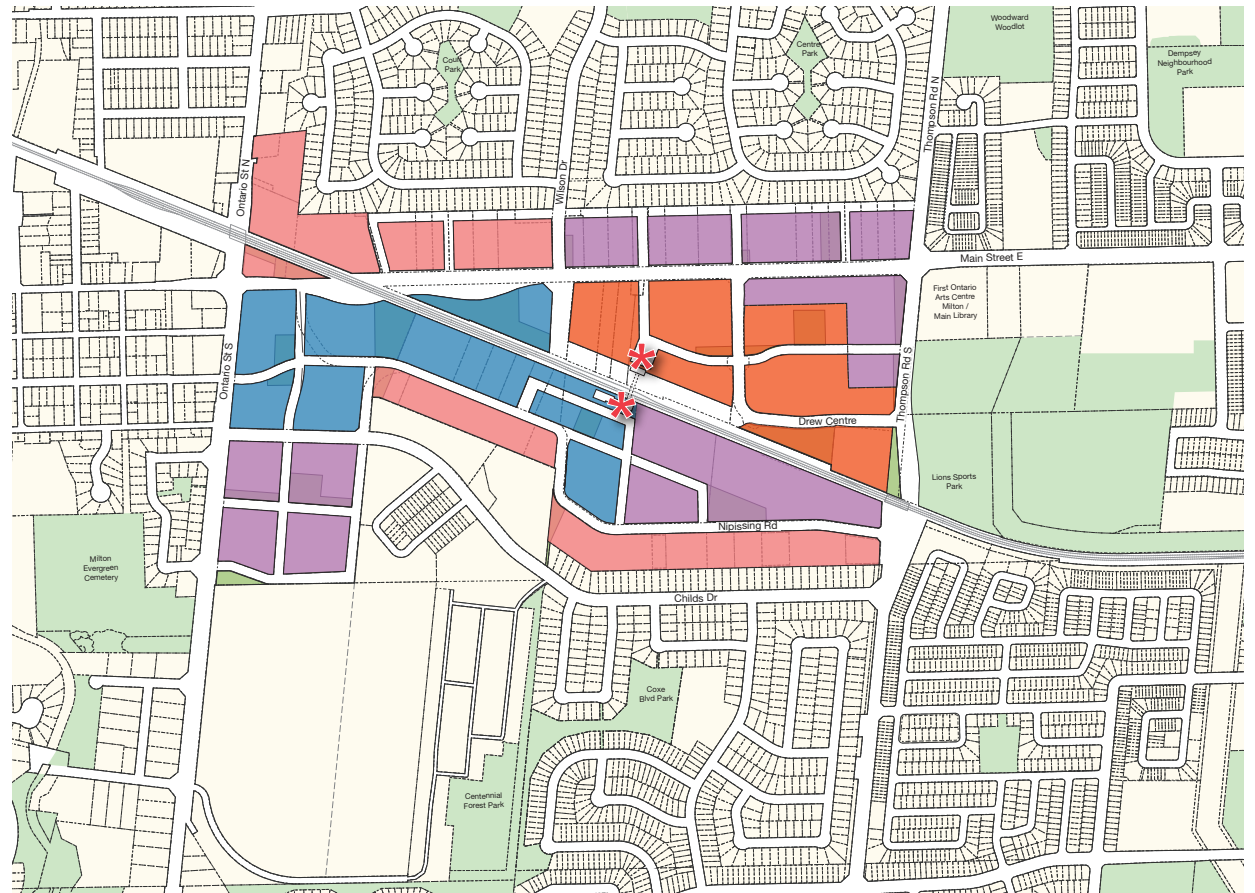


Fig 25 Density Zones

Net Developable FSIs

- 1.0-2.0 FSI
- 1.5-3.0 FSI
- 3.0-5.0 FSI
- 3.0-6.0 FSI

2.6 VIEWS AND VISTAS

View corridors and vistas play an important role in creating a distinct identity for the Study Area and assist with orientation and place-making.

View corridors are intentional openings in the built environment to direct a viewer's attention to important scenic vistas or landmarks. This can be accomplished through protecting and directing views, providing a consistent street wall and relating buildings to the street and pedestrian activities. In Milton there is an existing view corridor eastwards towards the Niagara Escarpment along Main Street East.

GUIDELINES AND STANDARDS

- 058.** Locate buildings and building elements to enhance key views and vistas towards special features such as prominent sites, landmarks and parks, particularly the view eastward towards the Niagara Escarpment.
- 059.** Exploit terminus views along the north side of Main Street East by integrating distinguished building elements on axis of new streets or mid-block connections.
- 060.** Prominent Sites will employ wayfinding tools and establish destination points to orient users within the Study Area.
- 061.** Public art is encouraged to assist with wayfinding, specifically at gateways and points of interest.

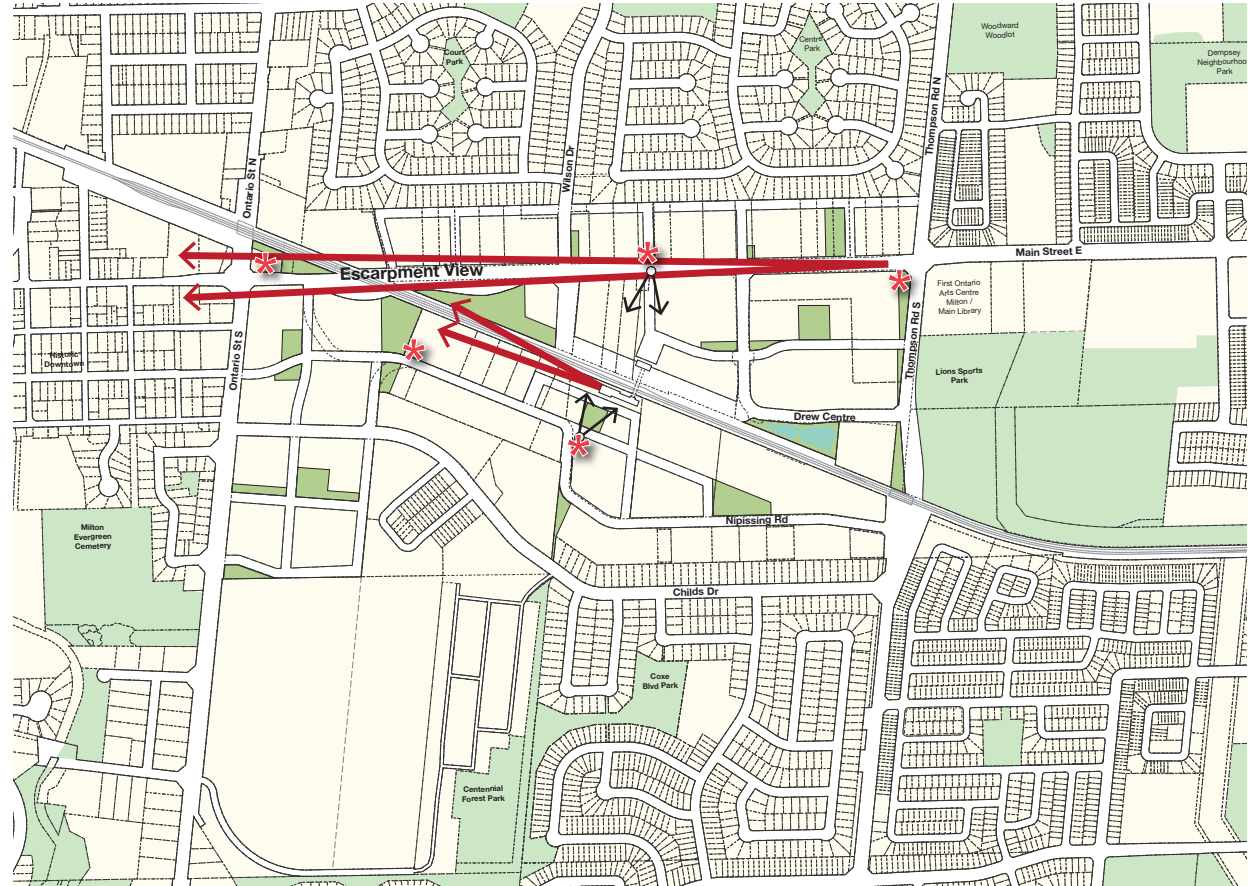
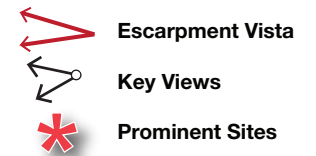


Fig 26 Views and Vistas



2.7 PARKING AND ACCESS AND SERVICING

Parking, servicing and access are functional requirements of new development. When properly integrated and considered early in the design process, these elements can be incorporated in a manner that reduces visual clutter and potential pedestrian/ vehicle conflicts.

GUIDELINES AND STANDARDS

- 062. Design buildings to address the main streets and any street with an anticipated high intensity of pedestrian movement at main building facades. Provide materials handling access from either a rear lane or a side street. Locate pedestrian grade level entrances at key locations along sidewalks. Coordinate internal pedestrian circulation to best serve existing and anticipated desire lines, for example to transit stops and crosswalks.
- 063. Vehicle access into blocks will not interrupt the pedestrian movement sidewalk along the following street frontages: Main Street East, Thompson Road, Ontario Street, where possible.
- 064. Consolidate vehicular entrances to serve multiple buildings. Within each block, minimize the number of interruptions in the street wall and to reduce the number of potential conflicts with pedestrians and cyclists.

- 065. On-street parking is generally allowed within the local road network subject to policy restrictions (i.e. times of day, length of stay, transit operations). This will reduce vehicle speed and create additional convenience parking.
- 066. Encourage below grade parking within each mixed-use and residential redevelopment
- 067. Surface parking lots should be restricted to the minimum necessary to meet the drop-off and pick-up needs of visitors and customers. Surface parking should be subdivided in to smaller parking courts. The layout and configuration of the parking area should be designed to easily facilitate infill development and intensification over time.
- 068. Discourage above grade parking structures with frontage along high intensity pedestrian routes. If above grade parking structures are located along a street, design buildings to contribute to the overall sense of place. Provide continuous street frontages and active grade related uses.
- 069. Encourage vehicular entrances designed as portals or archways which do not unduly break-up the continuity of the street wall.
- 070. Where parking access and service areas are located in courtyards, design the buildings and landscapes to minimize the visual and noise impacts on the quality of the outdoor space.
- 071. Refer to the Mid-Rise and Tall Building Guidelines for parking.

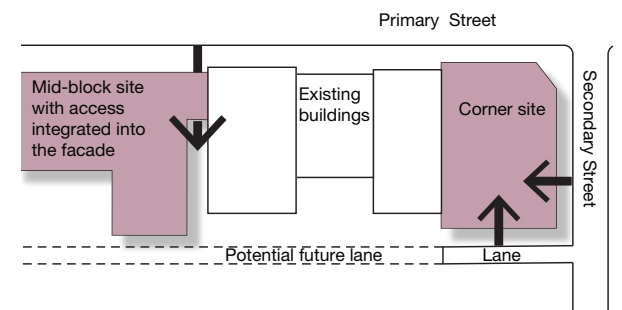
- 072. Bicycle parking is important. Its smaller space requirements are easy to accommodate but often overlooked. Bicycle parking should be provided both outside and inside new buildings.



Parking access integrated into the design of the facade



Above-grade parking should be wrapped with active uses



Parking and service access options

2.8 DEMONSTRATION PLAN

To visualize the intention of the Milton Mobility Hub recommendations the Study Team developed a Demonstration Plan massing model. The Demonstration Plan illustrates one possible outcome if the principles and recommendations are applied to a full build-out condition.

The Demonstration Plan is not a Master Plan. It is presented for illustrative purposes only and not the only potential outcome of the recommendations, which give flexibility for a number of approaches.

The built form testing undertaken throughout this study takes an aggressive approach to not underestimate potential change; not every site tested will necessarily redevelop. This demonstration model exercise provided input to assessments for servicing infrastructure, transportation, and community services and facilities.

In addition to the Demonstration Plan are two renderings to illustrate the potential built form and public realm character that is possible by following the recommendations. Included are a view of the Station Plaza and revitalized Main Street East.

Fig 27 Demonstration Plan looking towards the northeast

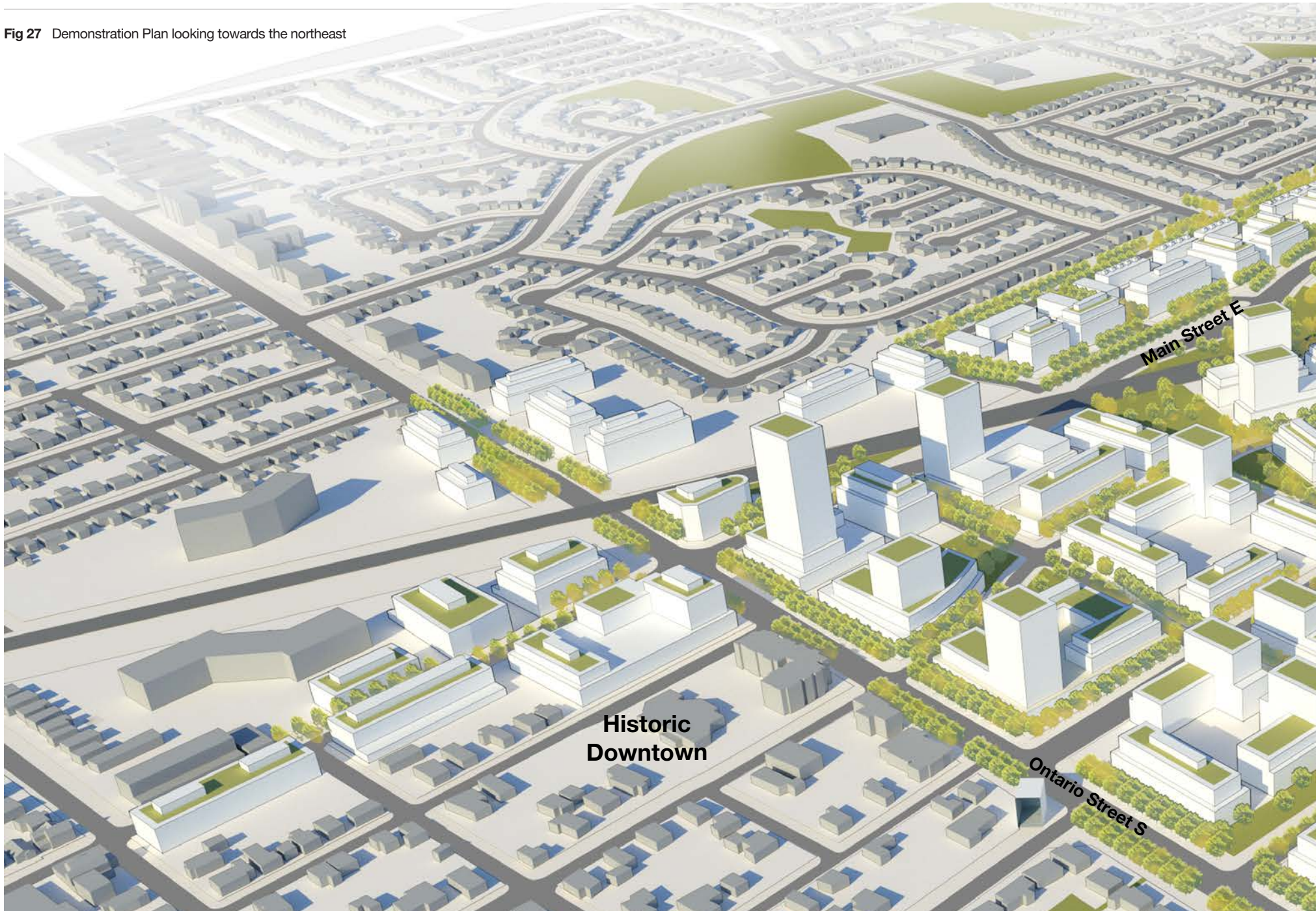






Fig 28 Demonstration Plan looking towards the southeast

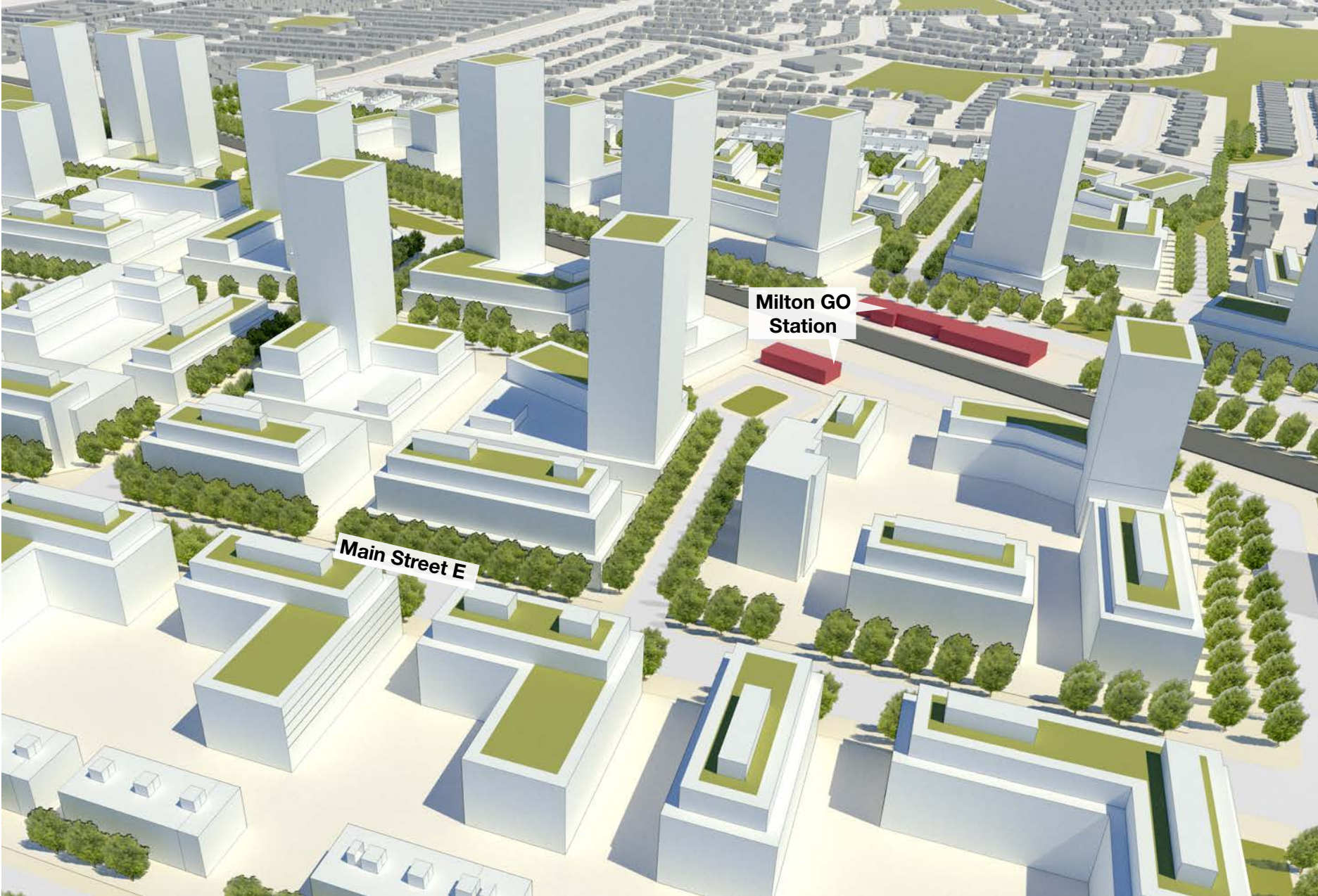


Fig 29 Development around the GO Station (aerial view looking south west)



Station Plaza

The Milton GO Station will be a key destination in the City and have a strong presence in the urban landscape, seamlessly integrating different modes of transportation and offering safe convenient and visible pedestrian links to nearby jobs, retail and housing. New urban plazas with active grade related buildings are proposed at both station entrances.

Fig 30 Station Plaza



Main Street East Revitalization
Main Street East connects the Community and Cultural District in the east to the historic downtown, just west of the Study Area. Main Street East is envisioned as a landmark street and central focus of the Mobility Hub with street tree planting, widened sidewalks, cycling infrastructure, supportive building frontages.

Fig 31 Main Street East Revitalization

3.0

STREETSCAPE GUIDELINES

3.0 STREETSCAPE GUIDELINES

Streets have dual roles: as places that support community life and as movement and infrastructure corridors.

High-quality streetscapes create vibrancy throughout the day and encourage residents, employees and visitors to gather, socialize and take advantage of spill-out retail and other street features. Street design contributes significantly to the economic, environmental and social life of a place. New streets within the Study Area should be designed to encourage opportunities for social interaction in the public realm.

All streets in the Study Area will support a strong sense of enclosure, support a wide range of informal social and recreational activities, and meet appropriate engineering standards.

Streets as Public Spaces

Design streets as three-dimensional urban rooms with floors, walls, ceilings or canopies and furnishings to create a safe environment that facilitates ease of movement by all people. The quality of this space relies heavily on the attention given to design (and stewardship), the materials and finishes applied to the area that is closest to the pedestrian.

- Provide cohesive street-walls, street-trees, and other elements that give enclosure to the street spaces.
- Maximize eyes and feet on the street throughout the day.
- Provide clear, if subtle, indications of what is public and what is private in choice of paving, walls, steps, materials, planting.

Streets as Engineering Infrastructure

Engineering standards should be appropriate to the type and use of each street.

- Provide traffic lane dimensions, intersection geometries and other transportation design standards that are consistent with the multi-purpose nature of the streets.
- Coordinate and consolidate underground utilities to ensure operational and maintenance efficiency and the protection of undisturbed areas of street-tree planting.

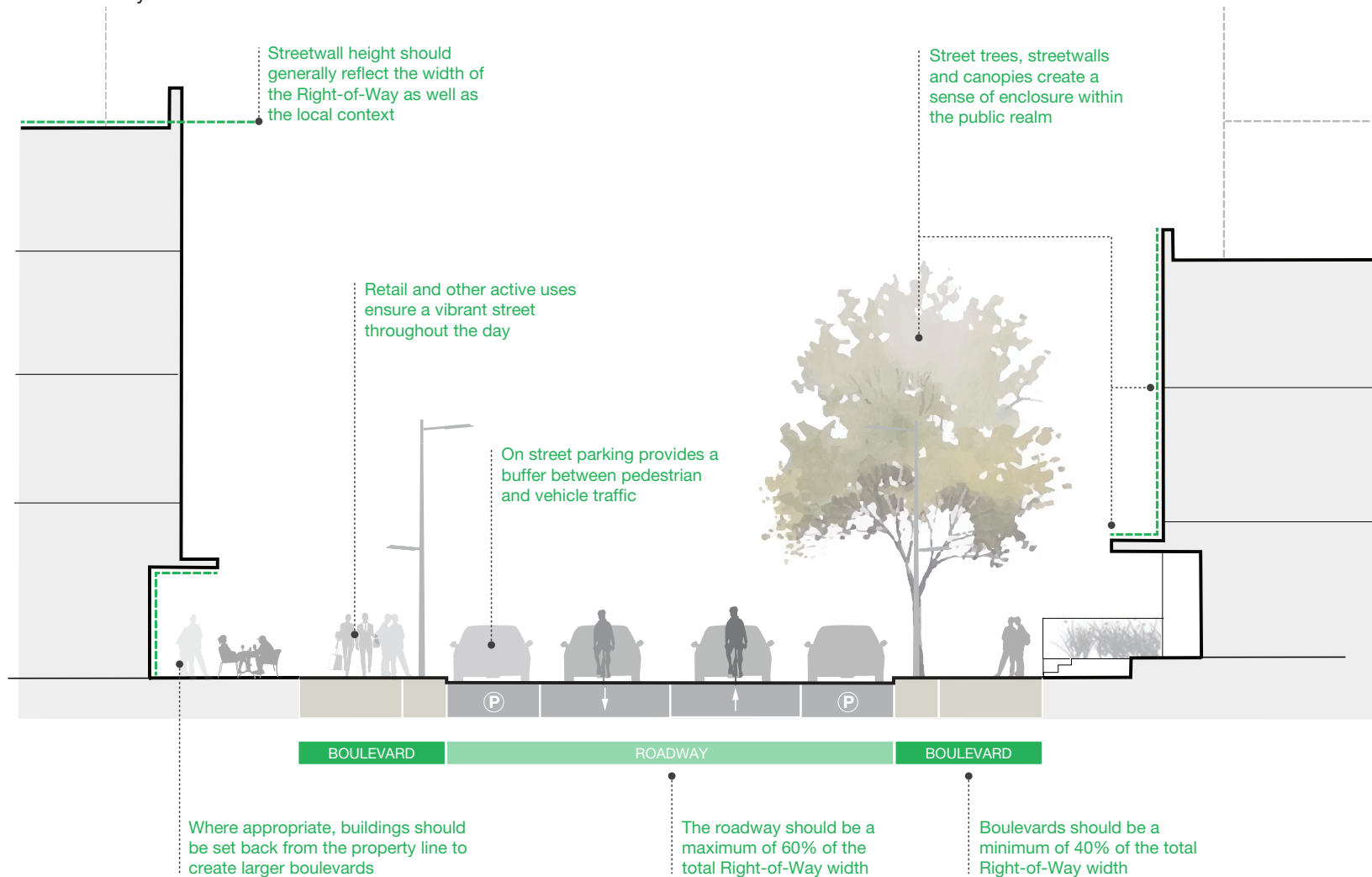
Streets as Social Settings

The best streets are supportive settings for a wide range of social and recreational activities – places for sidewalk games, shopping, cycling, strolling, dog walking, porch sitting, people watching, window shopping and a host of unplanned social encounters that make for local news-gathering, and conversation. The necessary supports for these kinds of activities are often quite simple but require careful design coordination. For example:

- On-street parking for vehicles and bicycles.
- Traffic calming measures (and visual cues) such as appropriate traffic lane dimensions and curb radii, pedestrian pavers on roadways, intersection “tables”, etc.
- Optimum unobstructed sidewalk dimensions scaled to the anticipated uses.
- Sidewalks with patios and squares that optimize micro-climatic conditions for pedestrian comfort with access to shade, sunlight and shelter.
- Paving surfaces, catch basins, grates, street furniture etc. that do not impede universal access.
- Residential stoops, terraces, porches and canopies that encourage residents to linger at the entrance to their homes and canopies and screens to shops and cafes that can extend the outdoor season.

Street Proportions

Different streets should have different spatial proportions (height and width proportions) as well as varied streetscape treatments, to reflect their various roles in the neighbourhood and provide a sense of enclosure and adequate sun exposure. A minimum of 40% of the right of way dedicated to pedestrian and landscape use is a target ratio for good, pedestrian-friendly transit streets.



3.1 BOULEVARD DESIGN

The boulevard is between the curb edge and the face of a building. Within the Study Area, boulevards are a key public realm element and an important component of the open space network, providing vibrant spaces for residents, employees and visitors to gather and socialize.

All new streets within the Study Area should reinforce wide, well-landscaped and pedestrian-supportive boulevards characterized by active at grade uses, spill-out retail, street trees and landscaping, pedestrian furniture and public art.

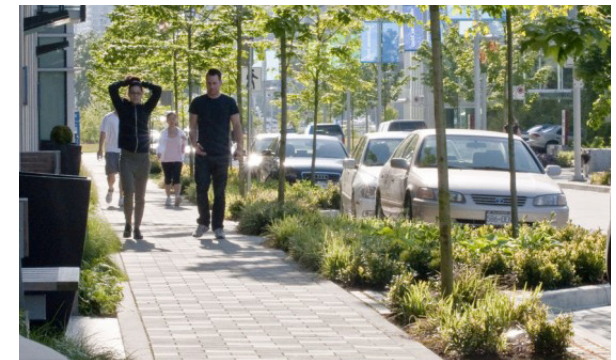
DESIGN GUIDELINES

- 001. The design of boulevards should reflect adjacent land uses. For example, where at grade retail is provided, boulevard width and design should accommodate opportunities for spill-out retail.
- 002. Curb extensions may be provided at intersections to mediate traffic flows; define the areas of lay-bys for on-street parking; provide areas for street-furniture and planting; and reduce visually the scale of a street corridor.
- 003. Furnishings and trees should be centered within the Furniture and Planting Zone (see Fig. 36).
- 004. Depending on soil conditions, permeable unit paving within the Furniture and Planting Strip are encouraged above all soil trenches to passively irrigate trees, allowing for water and oxygen to reach tree roots.

- 005. The design of the boulevard, and particularly the Pedestrian Clearway Zone (see Fig. 36), should create a safe environment that facilitates ease of movement by persons using a range of mobility aids (including wheelchairs, walkers, crutches, etc.).
- 006. Surface materials should create a firm, level surface that facilitates ease of movement by persons using a range of mobility aids (including wheelchairs, walkers, crutches, etc.)
- 007. Surface materials should use colour, tonal and textural contrast consistently to assist in delineating the safe walking surface from the vehicular routes from main and secondary pedestrian routes, these features aid in navigation for everyone, but particularly for persons with vision disabilities and cognitive disabilities.
- 008. Boulevards should provide equitable routes for ambulatory persons as well as persons who use mobility aids.
- 009. Where sidewalks intersect with driveways, they should clearly indicate pedestrian priority to minimize conflicts.
- 010. All boulevards must be free of barriers, firm and slip resistant, and be wide enough to facilitate persons using mobility aids to pass each other.
- 011. Where there are changes in grade, there should be sufficiently gradual slopes and where necessary, choices of routes.



Target boulevard dimension is approximately 40 per cent of the right-of-way width.



Street trees and furnishings should be provided in a dedicated Furniture and Planting Zone to maintain a continuous, unobstructed pedestrian clearway



Example of a curb extension

Components of the Boulevard

The design of all boulevards within the Study Area include the following elements:

- The **Pedestrian Clearway Zone** should generally be located at the property line and be a minimum of 2.1m on both sides of the street. A 3.0m clearway is recommended on the arterials (Main Street East, Thompson Road and Ontario Street) where higher levels of pedestrian activity area anticipated. This zone accommodates unencumbered pedestrian movement at all times.
- The **Furnishing and Planting Zone** will generally be provided between the Edge Zone and the Pedestrian Clearway Zone and accommodate landscaping, street furniture and street lighting. This zone also provides sufficient space to create optimal growing conditions for street trees. Where appropriate, or within bump-outs on Local Streets, this zone may be replaced with Low Impact Development such as bio-swales.
- The **Edge Zone** is a 500mm wide area behind the curb, between the roadway and the Planting and Furnishing Zone. This zone plays an important role in road maintenance, especially for snow storage in winter and acts as a buffer between the roadway and the boulevard or cycle track.
- The **Frontage and Marketing Zone** is located between the Pedestrian Clearway Zone and the building face, either within the right-of-way or as part of a setback. This zone can accommodate active at-grade uses such as retail or residential front-yards.

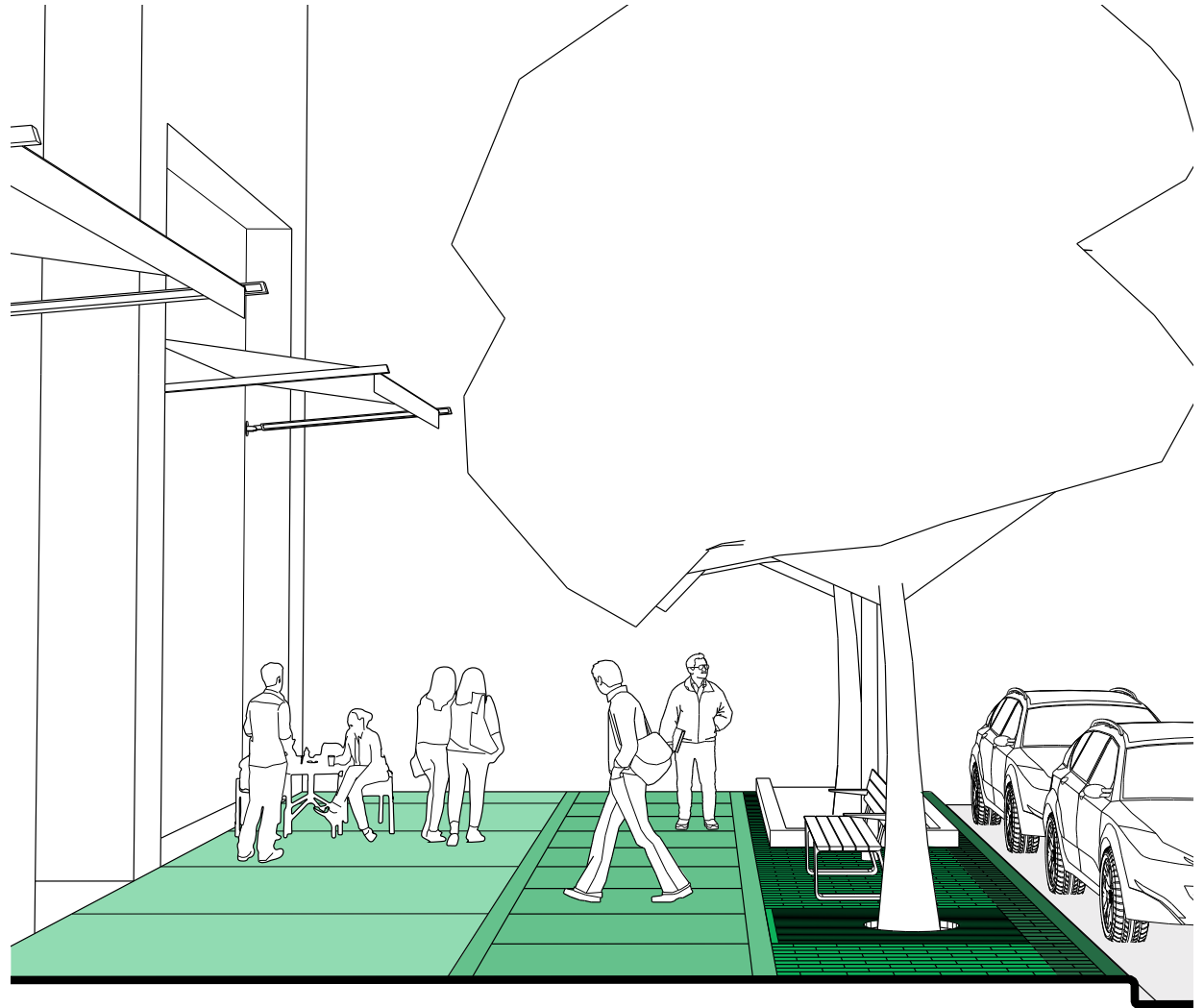


Fig 32 Components of a Boulevard

3.2 STREETScape DESIGN

Streets will provide choice for how people move around and emphasize safe and comfortable travel.

The street cross sections that follow demonstrate the preferred typical street design. The streets will provide a green and comfortable setting for all the users and the uses that will take place in the emerging neighbourhood.

The design of all streets in the Study Area should anticipate the proposed changes in use, intensity and character as redevelopment occurs. All the travelway detailed dimensions can be viewed in the Transportation Master Plan for this Study.

Cross Sections are included for the following streets:

- Main Street East
- Nipissing Street
- Arterials (Thompson Road/Ontario Street)
- Childs Drive
- Neighbourhood Streets
- Retail Priority Street
- Mid-Block/Pedestrian Connections

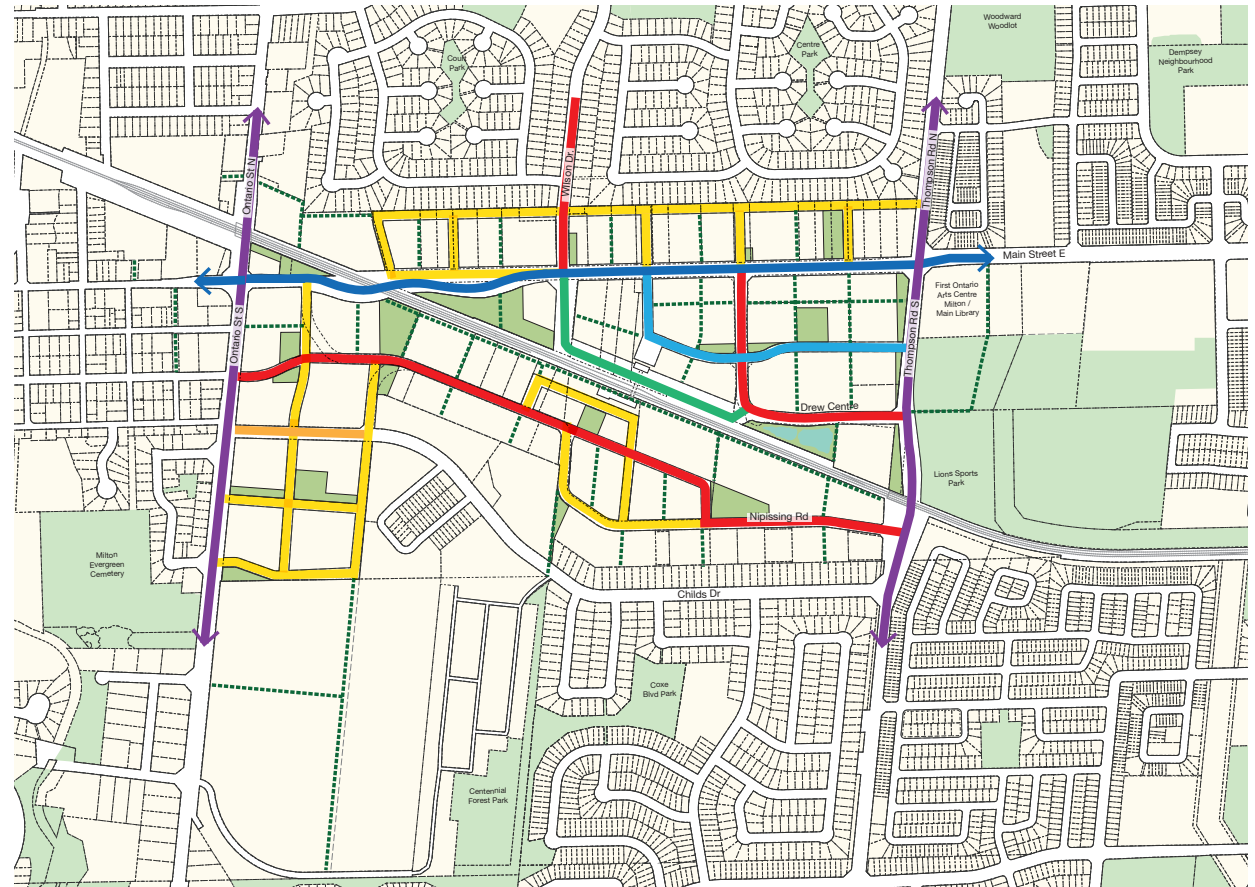


Fig 33 Street Types



Main Street East

Main Street East is envisioned as a landmark street and central focus of the Study Area with street tree planting, widened sidewalks, cycling infrastructure, supportive building frontages and consistent paving treatment.

New buildings along the north side of the street will be set back 3.0m from the right of way to provide generous boulevards for increasing pedestrian activity and broad frontage zones for outdoor cafes and seating. New buildings along the south side will be set back 6.0m to achieve an additional row of trees, landscape elements and frontage and marketing zones to create a pedestrian promenade.

Protected cycling tracks should be included to further invite and support active transportation and connect with the existing cycle network to the east of Thompson Road north and west of Wilson Drive.

The Official Plan identifies the right-of-way of this segment of Main Street East to be widened to 35.0m. This accommodates a 18.4m pavement and 8.3m wide boulevards on both sides, which equates to over 40% of the public street right-of-way dedicated to pedestrian and cyclist use.

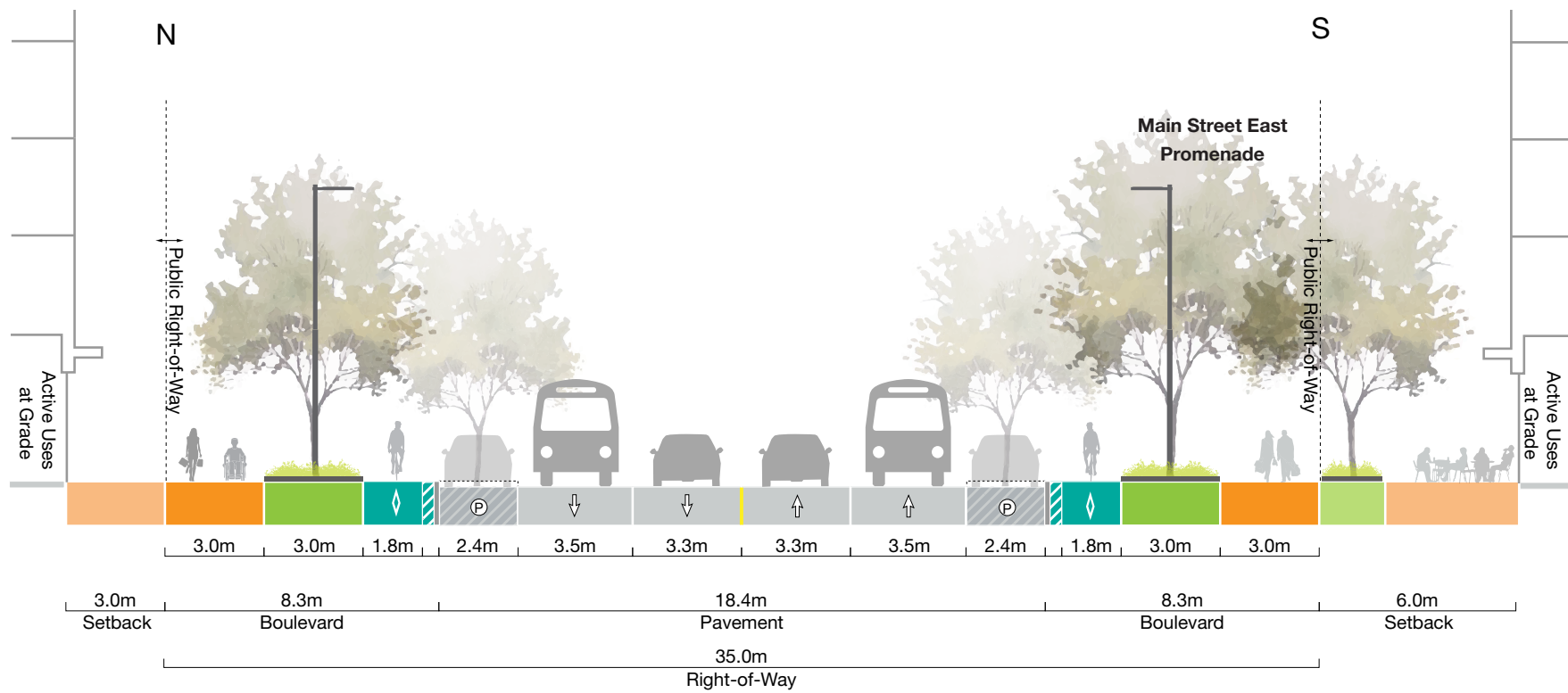


Fig 34 Main Street East Typical Section

Arterials: Ontario Street

Ontario Street South and Thompson Road South are defined as Arterial streets in the Region’s Official Plan. Both streets are important north-south routes through the Study Area. There is an opportunity to transition these streets over time into streets with a strong green character that support the transformation of the Mobility Hub.

Ontario Street is planned to be a Transit Priority Corridor in the Mobility Management Strategy for Halton. Corridor improvements offer the opportunity to consider HOV, BRT or LRT lanes and other transit supportive measures such as transit signal priority, queue jump facilities, bus shelters and transit stop improvements.

The Ontario Street right-of-way (below) is 35m and can accommodate a 16.6m pavement and 9.2m boulevards, which includes protected cycle tracks. The Preferred Concept includes broad 6.0m setbacks for additional tree planting and greening to the landscape frontages of new developments. North of Childs Drive, where ground floor retail uses are encouraged, the setback is reduced to 3.0m.

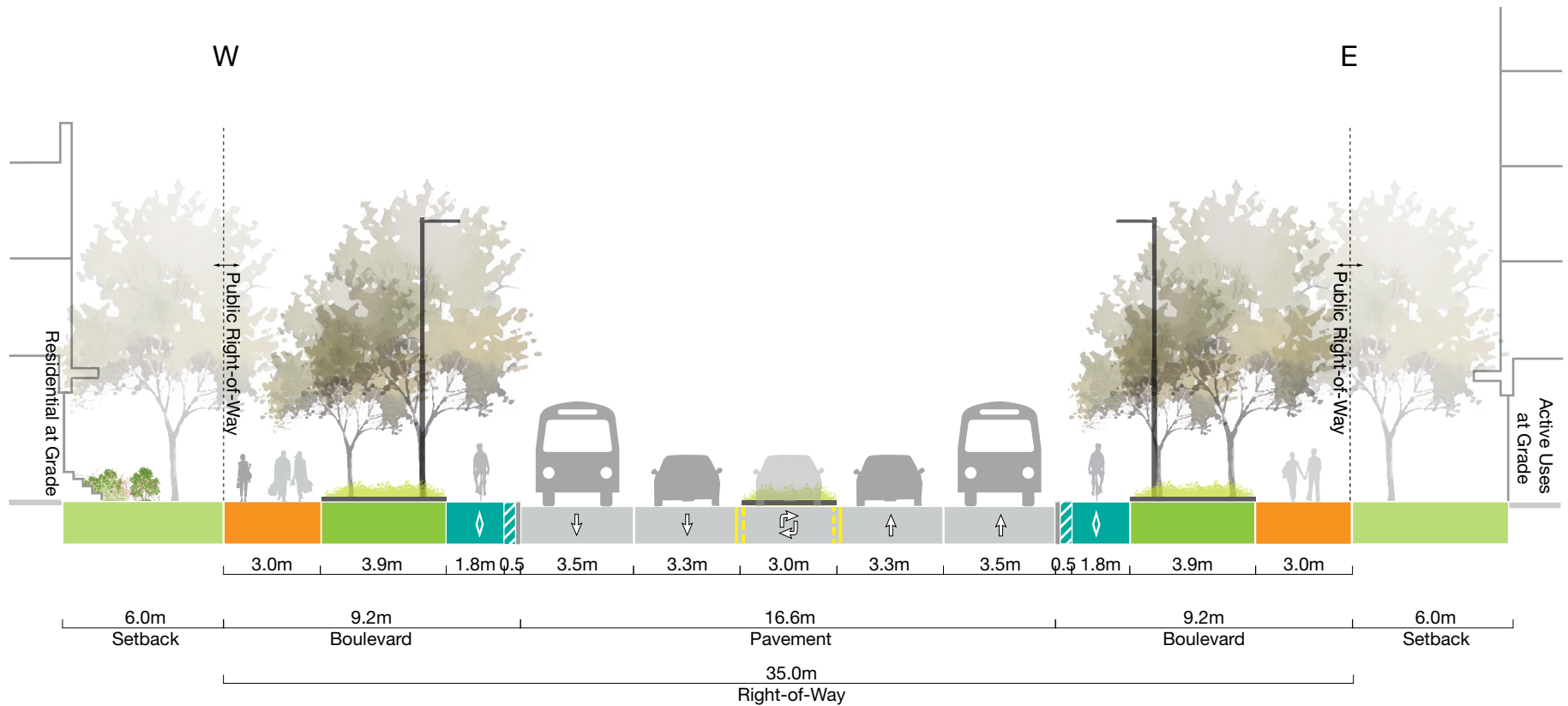


Fig 35 Ontario Street Typical Section

Arterials: Thompson Road

The character of Thompson Road transitions from a mixed-use place with primarily commercial uses at grade in the north to a landscape dominant streetscape along the Park edge where it is partly at a lower elevation than its surroundings.

The Thompson Road right-of-way (below) is planned for 35m, which can accommodate a 16.9m pavement and 9m boulevards. A multi-use path is located on the east side of the street.

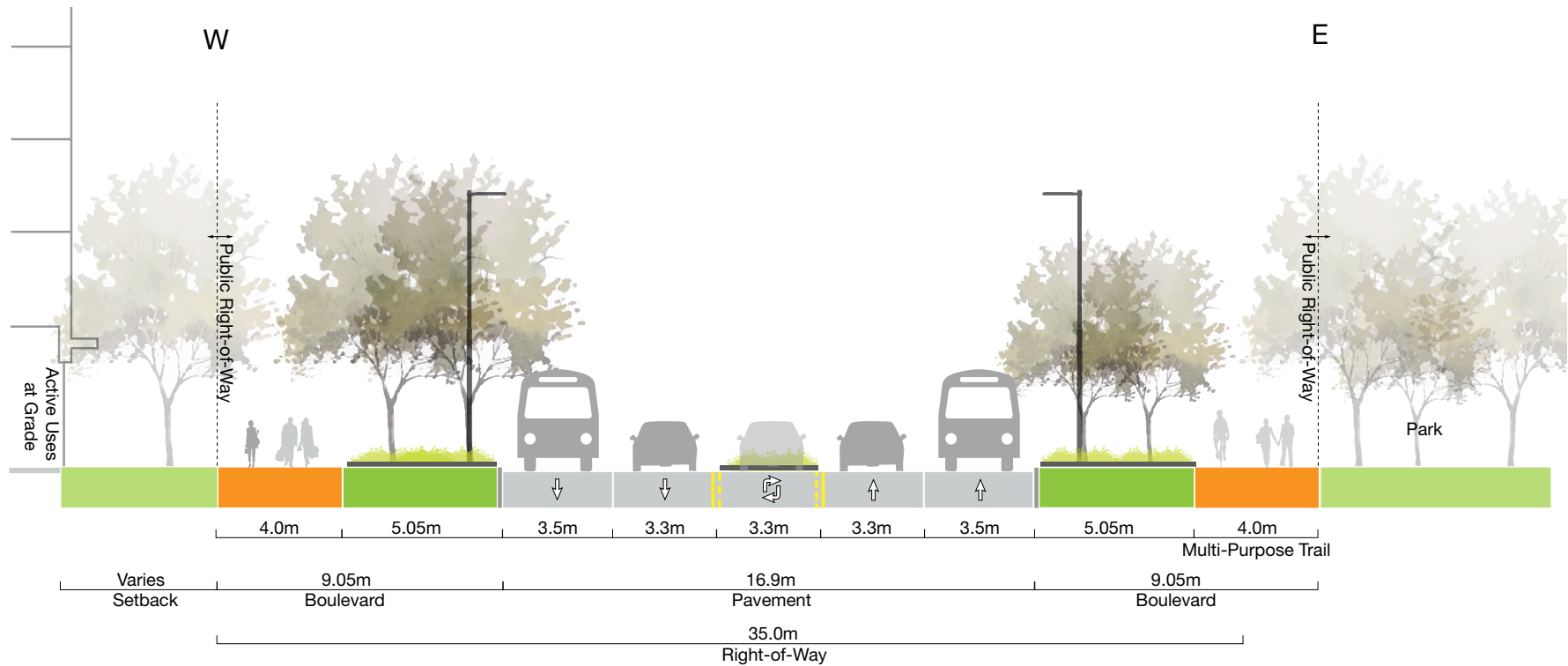


Fig 36 Thompson Street Typical Section

Collectors: Nipissing

Nipissing Road is an important east-west transit and active transportation connection to and from the GO Station. It is proposed to be urbanized as a part of the Metrolinx GO Station Access Plan.

The 26.0m cross section proposed as part of the Metrolinx Station Access Plan includes a three lane travelway with a centre turn lane and on-street bike lanes. It is recommended that cycling facilities are to be protected from roadway vehicles, by separation or on street with physical curbed buffers.

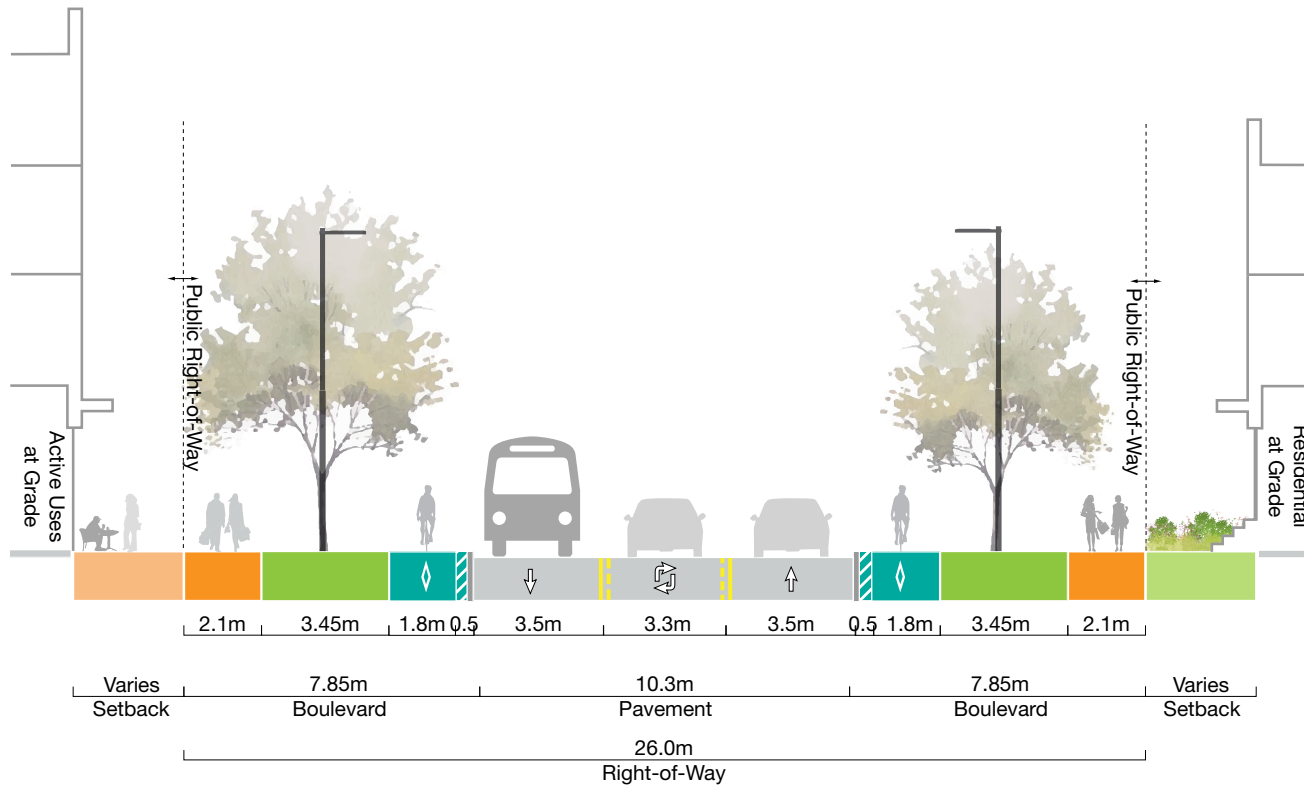


Fig 37 Nipissing Typical Section

Collectors (Childs Drive)

Childs Drive is a major neighbourhood connection. It will be where higher density redevelopment and the existing low-rise residential neighbourhood interface. Childs Drive should have a streetscape character that symbolizes the opportunity that redevelopment can bring to the community, and provide an open and green amenity for new and old residents alike.

The Childs Drive right-of-way is 26m between Ontario Street South and Nipissing Road and 20m between Nipissing Road and Thompson Road.

The Childs Drive right-of-way (below) is indicative of the 26m right-of-way segment and can accommodate a 10.0m pavement and 8.2m boulevards.

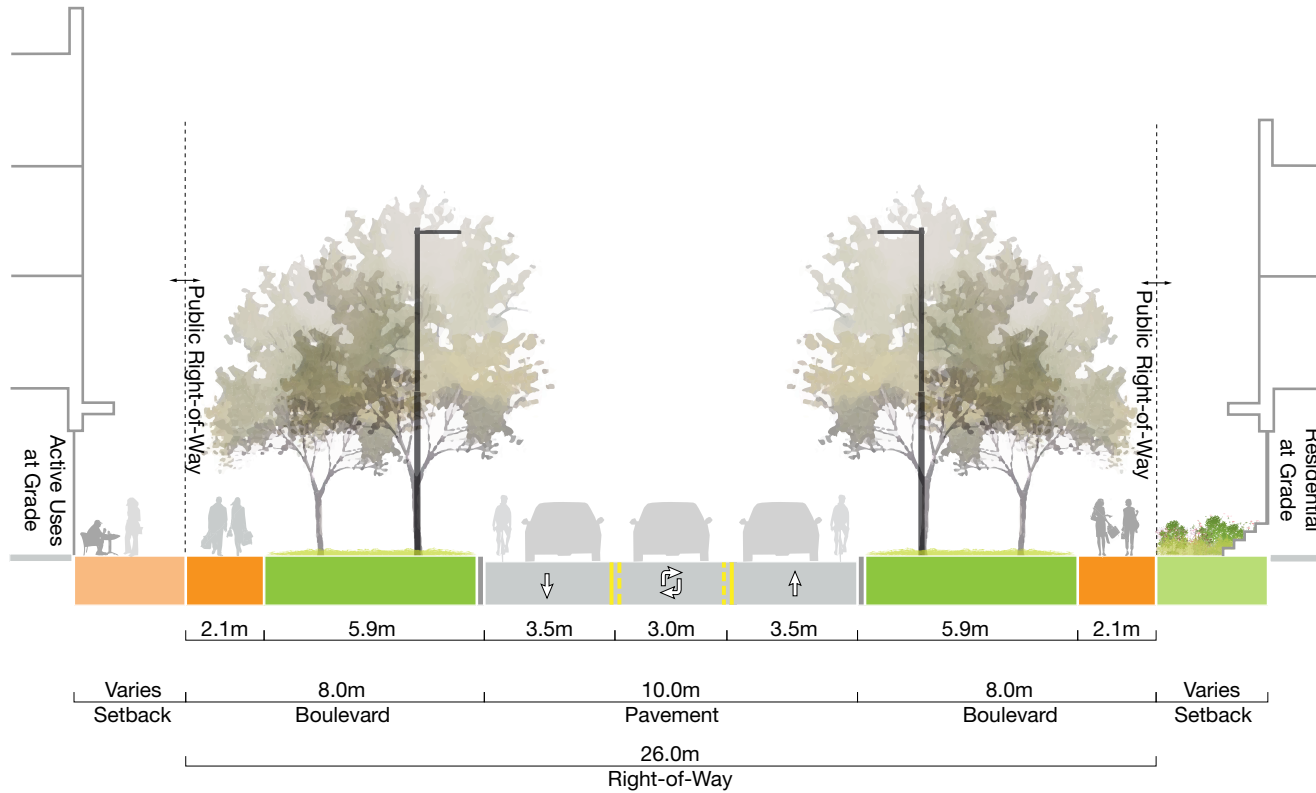


Fig 38 Childs Drive (Typical 26m Right-of-Way Cross Section)

Neighbourhood Streets

Neighbourhood Streets in the Mobility Hub should be designed to accommodate a mix of at grade uses, slow-moving vehicular traffic with on-street cycling, and an enhanced pedestrian environment with street tree planting and greening.

Neighbourhood streets have a consistent and minimum 18.0m to 20m public-right-of-way. This accommodates an 11.4m pavement with on-street parking along either one or both sides of the street, on-street cycling, a 2.1m pedestrian clearway zone and 2.2m furnishing and planting zone. Narrower rights-of-way and roadways are possible, mostly by removing parking on one or both sides of the street.

Neighbourhood streets should consider complete streets elements, such as mid-block curb extensions or chicanes to reduce speeds and support a high level of pedestrian activity. Neighbourhood streets north of Main Street East, may consider a shared street/ lane approach to accommodate neighbourhood vehicle access and circulation needs while deterring through traffic.

Mid-Block Connections



Example of a Neighbourhood Street



West Don Lands, Toronto. Example of a shared street approach where the surface treatment is designed to read as pedestrian territory on which vehicles can trespass with care.

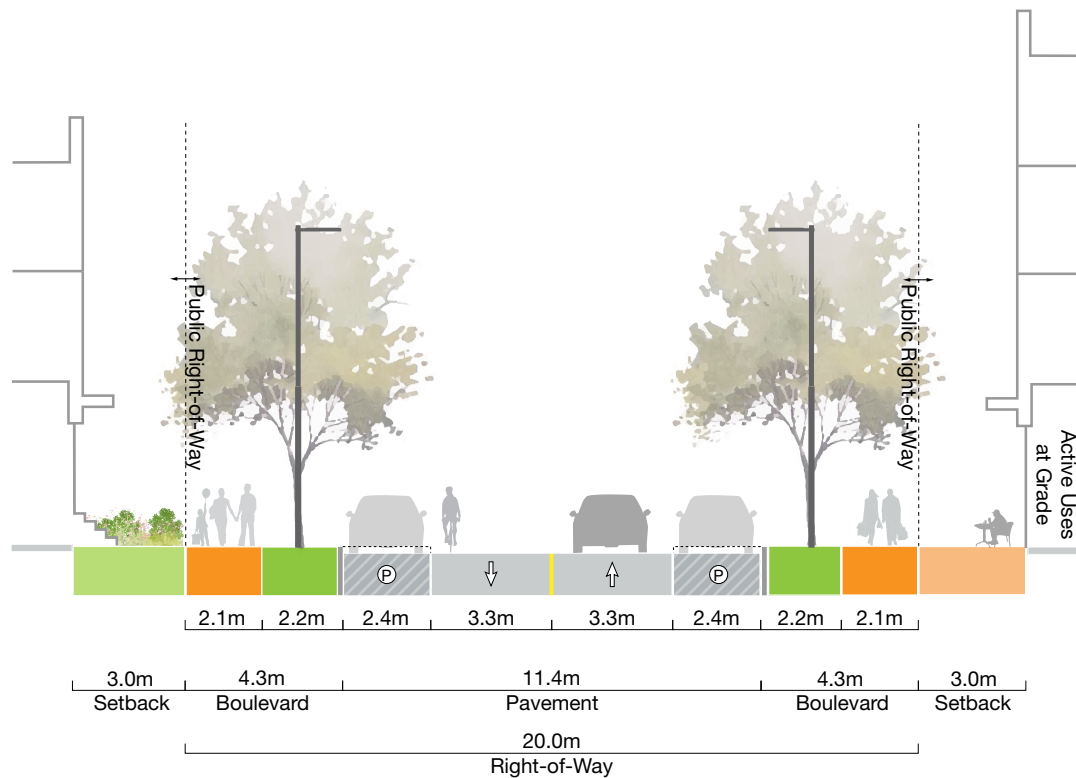


Fig 39 Neighbourhood Street Typical Section

Retail Priority Street

A special design is proposed for the street located within the Retail Sub-Area, just southeast of the Main Street East and Thompson Road South intersection.

The Retail Priority Street provides a pedestrian focused retail connection between the GO Station and Lions Sports Park.

Unlike other streets in the Mobility Hub, it is designed for flexibility in responding to occasional and seasonal use. The 2.4m Flex Zone provides space for parking that can be given over to pedestrian uses. During winter months, parking can be provided on both sides of the street with sidewalks adjacent to the building frontages

During the summer, however, parking can be given over to pedestrian uses and the sidewalk occupied by outdoor seating, café patios and so on. The areas of change in use are simply indicated through changes in paving materials and implemented through a system of both permanent and removable bollards, patio fences or seasonal planters.

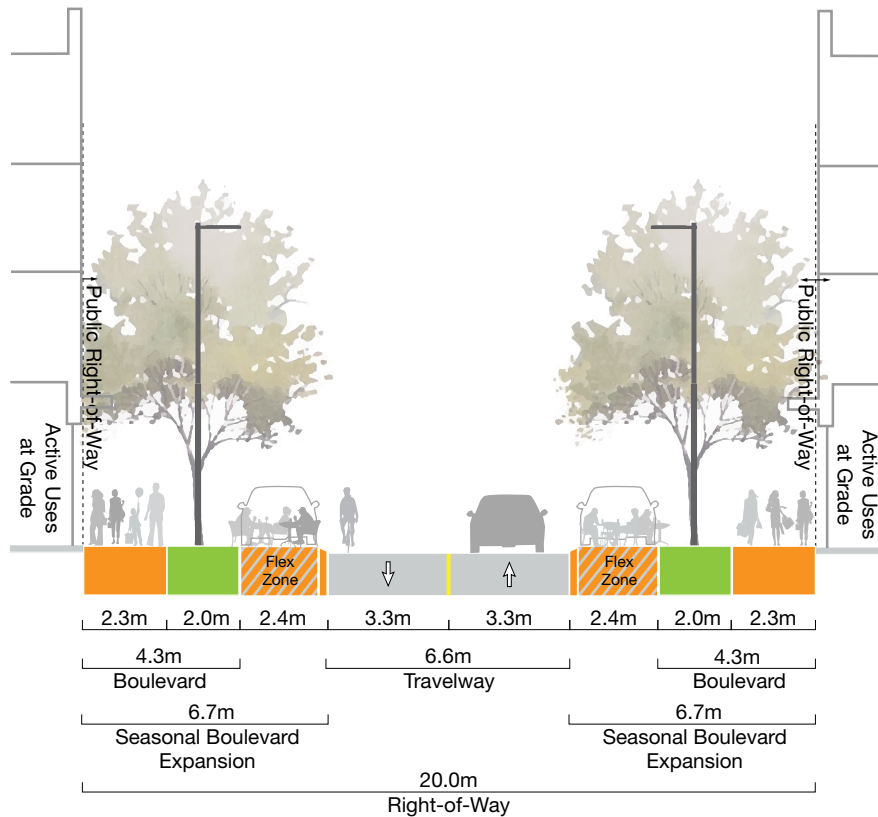


Fig 40 Retail Priority Street Section



Market Street, Toronto. Example of a flexible street design

A network of mid-block connections with an intimate and shared character will enhance pedestrian connectivity. Several variations on the mid-block connections, including lanes/shared streets and pedestrian only or pedestrian priority lanes, are anticipated depending on the location and context within the Study Area.

In most instances, the mid-block connections will provide access to parking and loading facilities as well as form important parts of the tertiary pedestrian and cycling network.

Mid-block connections, in some blocks, may also include frontages for townhouses, live/work or small commercial units.

An 18.0m building to building provides a good dimension for a central driving area and lateral areas for pedestrian movement, entrance forecourts and occasional tree planting.



Fig 41 Mid-Block Connection Section



Georgetown, DC. Example of a shared mid-block connection



Vancouver, BC. Example of a pedestrian only mid-block connection.

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