Appendix "E" to Report PED22001 Page 1 of 98

Waterdown Community Node Urban Design Guidelines

February 2022



BrookMcllroy/

Contents

1.0	Introduction	1
1.1	Role of the Guidelines	2
2.0	Study Area	3
2.1	Evolution of Waterdown	7
2.2	Design Opportunities	9
3.0	Urban Design Vision	15
4.0	General Community Node Site Design Guidelines	21
4.1	Sustainable Site Design	23
4.2	Landscaping	25
4.3	Parking, Circulation & Site Servicing	29
4.4	Mid-Block Connections & Crossings	31
4.5	Public Realm	33
5.0	General Community Node Building Design Guidelines	37
5.1	General	39
5.2	Articulation, Façade Design & Materials	41
5.3	Compatibility with Heritage Resources	43

Appendix "E" to Report PED22001 Page 3 of 98

6.0	Historic Commercial Character Area Guidelines	45
6.1	Site Design Guidelines	49
6.2	Building Design Guidelines	49
6.3	Public Realm Considerations	53
7.0	Hamilton-Dundas Character Area Guidelines	57
7.1	Site Design Guidelines	63
7.2	Building Design Guidelines	65
7.3	Public Realm Considerations	73
8.0	Low-Rise Neighbourhood Guidelines	77
8.1	General	81
8.2	Cultural Heritage Landscapes	87
9.0	Definitions	93

Appendix "E" to Report PED22001 Page 4 of 98

1.0 Introduction

1.1 Role of the Guidelines

The Waterdown Community Node Urban Design Guidelines are intended to provide direction for the design of all new development and redevelopment within the Waterdown Community Node. The guidelines also provide high level guidance for the area's residential neighbourhoods related to the design of compatible infill and redevelopment.

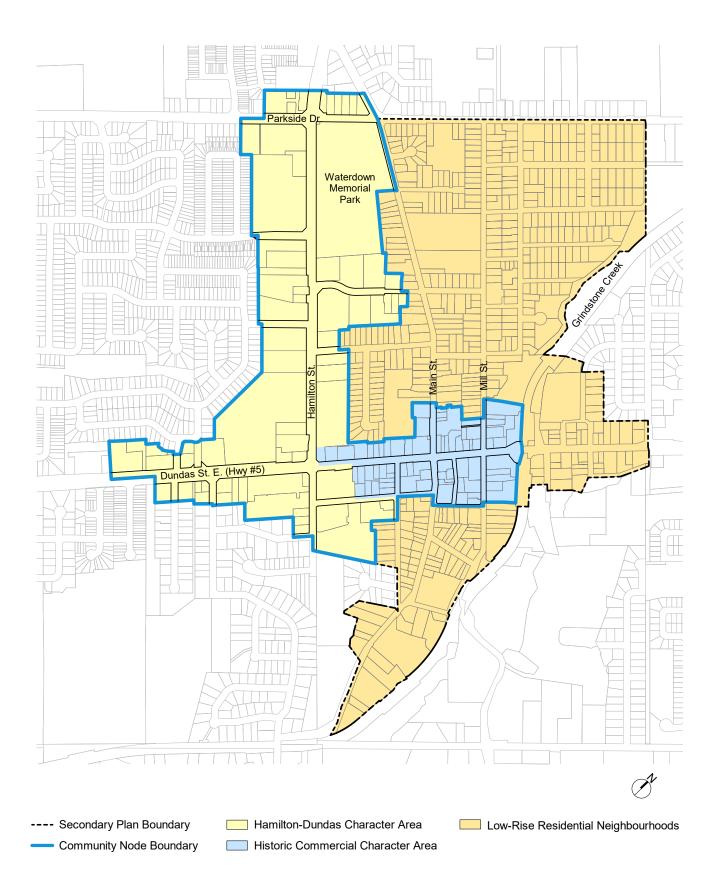
The guidelines consider opportunities associated with the development of commercial, residential, and mixed use buildings and sites within the Community Node as well as design considerations for the public realm. The document provides recommendations related to best practices in built form, site planning, and public realm design that will ensure that new development is complementary and compatible with the Waterdown context. The guidelines do not apply to public parks. The guidelines will be used by urban planners, designers, and City staff to understand the holistic design vision for the Waterdown Community Node. They will be used by City staff to evaluate the design merits of development applications (new development, redevelopment, expansions, and additions) for sites located within the Waterdown Community Node Secondary Plan. The guidelines are intended to complement policies and directions in the Urban Hamilton Official Plan. the Waterdown Community Node Secondary Plan, and other relevant urban planning and urban design documents. They will also support and inform existing, ongoing, and future work by the City, including policy initiatives, design master planning processes, and street improvements.

Appendix "E" to Report PED22001 Page 6 of 98

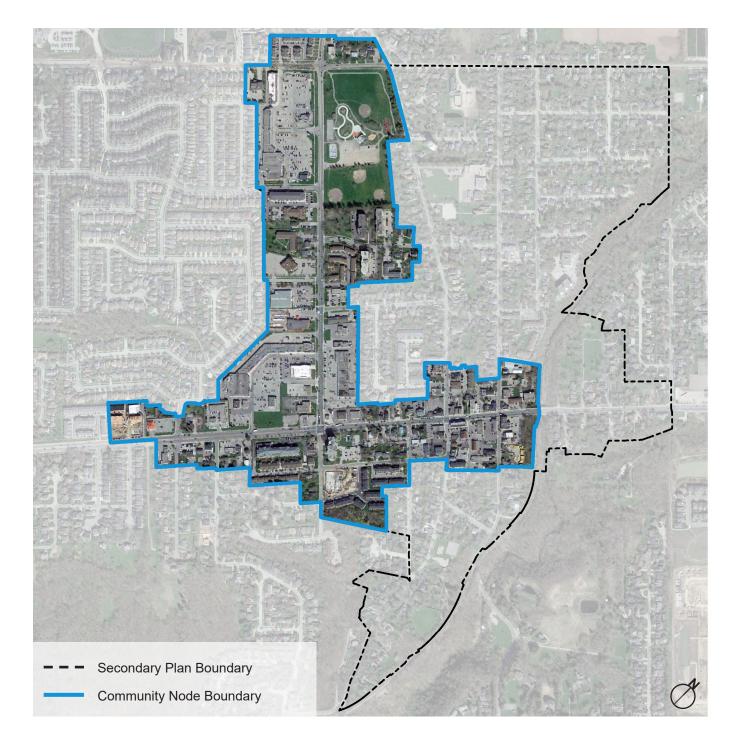
2.0 Study Area

The Waterdown Community Node Urban Design Guidelines apply primarily to the Waterdown Community Node, which is a subset of the larger Waterdown Community Node Secondary Plan Area. The Community Node includes the lands outlined in blue on the Study Area Map (page 5), centred around Hamilton Street and Dundas Street.

Chapter 8 of the Guidelines provides design direction for residential neighbourhoods located outside of the Node within the Secondary Plan. The Waterdown Community Node contains a diverse mix of land uses. It includes both large and small commercial blocks, residential uses, and a large park. Waterdown Memorial Park is located near the northern boundary of the Community Node, and occupies a significant frontage along Hamilton Street. Grindstone Creek runs along the eastern boundary of the Community Node in line with an existing rail corridor. Low-rise residential uses are the predominant use adjacent to the Waterdown Community Node on all sides.



Waterdown Community Node Aerial Map



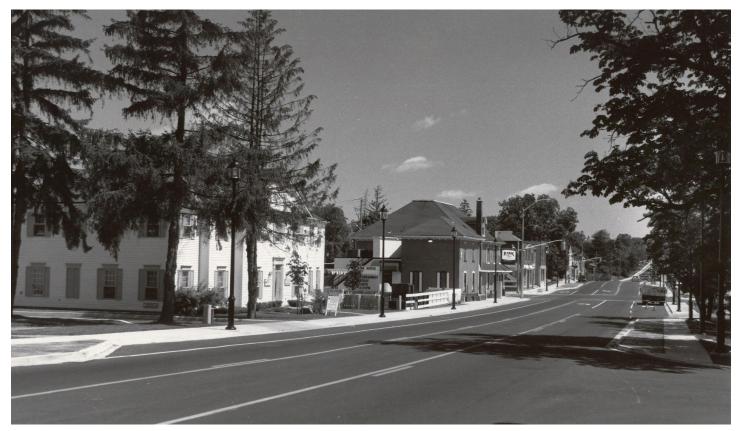
2.1 Evolution of Waterdown

From its Indigenous roots tracing back thousands of years, to the Euro-Canadian settlement that constitutes much of the cultural heritage resources seen in today's urban setting, the Village of Waterdown is a community with a rich history. The Village of Waterdown Euro-Canadian settlement can be experienced today through its cultural heritage resources, series of streets and lots that incorporate pre-Confederation buildings, various historical housing types, and other industrial, institutional, and commercial buildings. Most of this development began after the American Revolutionary War of 1775-1783.



Unpaved Dundas Street, Flamborough Archives, 1912 (City of Hamilton Heritage Inventory, 2019).

Appendix "E" to Report PED22001 Page 11 of 98



Reconstructed Dundas Street, Flamborough Archives, 1993 (City of Hamilton Heritage Inventory, 2019).

The name Waterdown is thought to be derived from its proximity to the area where Grindstone Creek falls over Niagara Escarpment. In the early 19th century, the area functioned primarily as an industrial site, harnessing the creek's waterflow to operate local mills. This activity was beneficial for Euro-Canadian settlement and complementary to agricultural development in the 1800s. Ebenezer Griffin was thought of as initiating much of the Village's early development, dividing the village into blocks and lots to establish the community that would be eventually known as Waterdown.

Dundas Street bisects Waterdown from the southwest to the northeast, running parallel to Lake Ontario, and was established as a major transportation artery early in the community's history. It maintains this same function today, connecting people throughout the Greater Toronto Area. Mill Street and Main Street also have historical prominence as they were some of the first roads established in Waterdown and host of a large number of the community's heritage buildings. Hamilton Street marked the boundary of the historic Village and was also an early circulation route. Hamilton Street contains many of the contemporary commercial centres in Waterdown.

The Village of Waterdown has evolved from its early settlement configuration, and is still growing. Despite this growth, much of the community has maintained its unique heritage and distinct character over time. The presentday community is comprised of a mix of cultural heritage resources and more recent development.

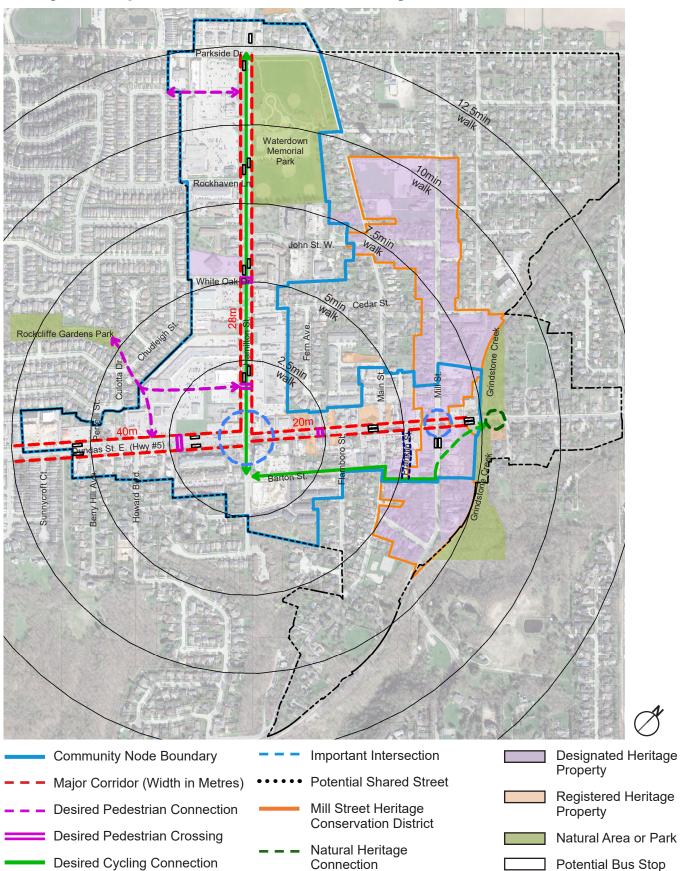
2.2 **Design Opportunities**

There are many design opportunities within the Waterdown Community Node that can inform the design of strategic intensification, while maintaining and enhancing the area's historic village character.

Connection, Consistency & Walkability

An analysis of the Community Node's existing urban structure reveals many unique characteristics and opportunities that can be enhanced and addressed through the application of the urban design guidelines. As illustrated in the Analysis Map (see page 10), the two main corridors of Dundas and Hamilton Streets vary in width from 20 to 40 metres, presenting opportunities for better connectivity including safe and comfortable walking and cycling, as well as frequent and convenient access to bus transit. Most destinations within and adjacent to the Community Node, including parks and natural areas, shopping, entertainment, commercial services, and other community amenities can be accessed on foot within ten minutes or less. Streets such as Franklin Street present possibilities for shared streets that become 'people places' by serving pedestrians first.

The abundance of cultural heritage resources in Waterdown, including the Mill Street Heritage Conservation District and the many recognized heritage properties in the core of the village, communicates the rich history of Waterdown. The urban form of the village core presents opportunities to bring the look and feel of the historic village on Dundas Street, including the uniquely walkable streets, to other areas of the Community Node on Hamilton Street and Dundas Street. This can create a Community Node that is more consistent in its form, aesthetics, and walkability.



Analysis Map of Waterdown Community Node



Large commercial site along Hamilton Street with low-rise strip commercial building and surface parking (Brook McIlroy).

Intensification & Infill Development Potential

There are a variety of opportunities for intensification and infill development in the Waterdown Community Node. Large and deep sites exist along Hamilton Street, which contain primarily one or two storey commercial buildings and significant surface parking. This reflects an inefficient use of land and resources, and an excess of impermeable surfaces.

The size and depth of lots along Hamilton Street, particularly the west side, offer the highest potential for comprehensive intensification and redevelopment. These large sites could accommodate taller and more dense building forms such as mid-rise buildings, while also providing appropriate transitions to sensitive uses such as adjacent neighbourhoods. Intensifying these large sites along Hamilton Street can improve existing conditions by providing an improved physical relationship between the public sidewalk and the design of buildings. It can help to diversify housing types, create new commercial and retail spaces, community and institutional uses, and public spaces, and improve internal site connections for pedestrians and cyclists. Redevelopment of these sites can also provide opportunities for grade-related uses that reinvigorate the public realm and encourage 'eyes on the street'. Redevelopment of sites along Hamilton Street will create opportunities to redesign the right-ofway and boulevard to make it more comfortable, accessible, safe, and accommodating to a mix of users.



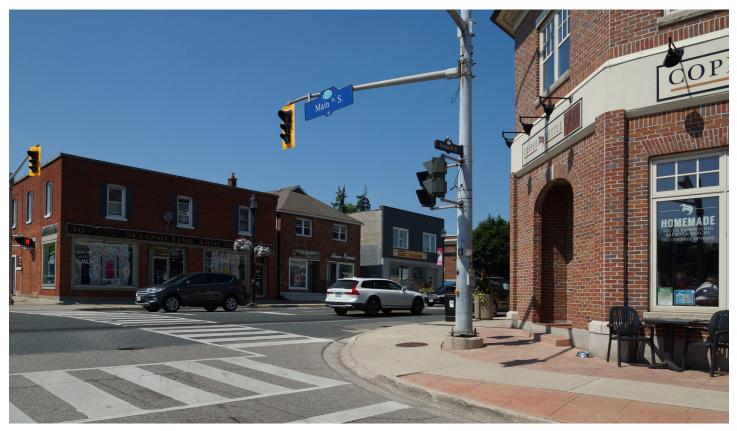
Dundas Street looking towards Mill Street (Brook McIlroy).

Development opportunities also exist along portions of Dundas Street for mixed use and/ or commercial development in low or mid-rise forms that are compatible with the existing context. Limited residential intensification opportunities may also exist in the low-rise neighbourhoods abutting Hamilton and Dundas Streets.

Improving Streetscape Design & Mobility

The Waterdown Community Node should be designed to accommodate multiple modes of transportation safely, comfortably, and efficiently. Mobility issues in Waterdown include relatively narrow sidewalks that limit pedestrian comfort and impact mobility; traffic congestion along Dundas Street, Parkside Drive, Mill Street, and Main Street; and limited cycling infrastructure within the Node. The configuration of existing sites along Hamilton Street provides mobility challenges for pedestrians and cyclists, as few or no defined pathways connect from the rightof-way to building entrances.

Appendix "E" to Report PED22001 Page 16 of 98



Corner of Main Street and Dundas Street (Brook McIlroy).

The large commercial sites along Hamilton Street, particularly on the west side of the street, are vehicular oriented and contain a large proportion of surface parking. Many street frontages are lined with surface parking and have limited landscaping features. Many buildings are located a significant distance from the street. This results in a lower quality street character and a lack of animation, enclosure, and pedestrian comfort. Existing building and site design is reflective of past vehicle-oriented approaches and does not reflect contemporary urban design best practices. Future streetscape improvements in the public right-of-way may provide opportunities to redesign and rebalance the right of way along both Hamilton Street and Dundas Street, and to improve conditions that aid safety and improve mobility for pedestrians, cyclists, and motorists. This may include wider pedestrian clearways, pedestrian seating and amenities, enhanced landscaping, and clearly marked cycling routes and infrastructure.

Bird's eye view of study area and surrounding natural areas (Google Earth)

-

CALL SA

MILL

and the second second

TTELLO

Cherry !!

Cable

C.

CONTRACTO

Appendix "E" to Report PED22001

Page 17 of 98

Appendix "E" to Report PED22001 Page 18 of 98

3.0 Urban Design Vision



Appendix "E" to Report PED22001 Page 20 of 98

The Waterdown Community Node Urban Design Guidelines have been crafted to achieve an urban design vision that builds on the exceptional urban qualities that make the Waterdown Community Node a special and unique place to live, work, play, and visit. The human-centred scale, walkability, and variety of residential, commercial, retail, and restaurant services housed in the historic Waterdown Village Core exemplify high quality urban design and provide a model for urban development that puts people first.

As growth continues to occur in Waterdown, the Guidelines will steer development toward the realization of an urban environment that features high quality design for buildings, sites, and the public realm. It will be a place where children, adults, and seniors feel safe and comfortable walking, cycling, and accessing transit in order to fulfill all of their daily needs including recreating, shopping, eating, socializing, and connecting with nature.

The guidelines aim to strengthen the Village Core's strong people-focused pedestrian environment through responsible, contextually-appropriate intensification, and to extend the principles of good urban design, pedestrian comfort, and walkability throughout the entire Community Node. The vision for Waterdown's future includes an improved overall quality of life for residents and visitors alike, strengthening of community village character, and celebration of Waterdown's cultural and natural heritage.

Future development within the Waterdown Community Node will work incrementally to achieve the vision by adhering to the following urban design guiding principles:

1. Create a Connected Waterdown

Ensure safe ease of travel within the community through enhanced pedestrian and cyclist connections along public boulevards and within larger sites, and improved access to public transit.

2. Create Animated Streetscapes

Create human-scaled streetscapes including wide sidewalks, street trees, pedestrian seating and amenities, open spaces, and street-fronting buildings with publicly accessible at-grade uses.

3. Create More Compact and Efficient Development Through Intensification

Encourage intensification in key locations that allows for more compact and efficient development. This will help to diversify the mix of uses and building types, and provide opportunities for street fronting development and an enhanced public realm.

4. Protect Neighbourhoods

Ensure sensitive infill development and appropriate transitions between new development within the Community Node and existing low-rise neighbourhoods.

5. Conserve and Enhance Natural and Cultural Heritage

Ensure that valued resources are retained and conserved. Strengthen Waterdown's unique character through compatible and sympathetic redevelopment.

6. Promote High Quality Site and Building Design

Employ contemporary urban design best practices for new development that complements and enhances Waterdown's unique character.

Appendix "E" to Report PED22001 Page 21 of 98



Existing pedestrian-friendly streetscapes with restaurant spill-out space in Waterdown (Brook McIlroy).



Wide sidewalks with retail/restaurant frontages and large trees and plantings in East Union, Seattle (Weinstein A+U).



Small-scale retail frontages with wide sidewalks at a recent mid-rise development in Halifax (Brook McIlroy).

Character Area Approach

The vision for the Waterdown Community Node is premised on the establishment of two Character Areas: the Historic Commercial Character Area (the Village Core) and the Hamilton-Dundas Character Area. These two areas have grown differently over time and feature distinct urban conditions as a result. The implementation of these guidelines will serve to unite the entire Community Node through common design principles and features, while distinguishing each Character Area based on its own unique attributes. Overall, the future form of the Community Node will reinforce and increase the pedestrian-friendly nature, the humanfocused scale, and the beauty and generosity of public spaces currently featured in the historic and walkable Village Core.

The Historic Commercial Character Area will be further enhanced through complementary

contextually-appropriate infill development and enhancements to the public realm and streetscape. By filling in the 'missing teeth' along the streetscape with throughtfully-designed low-rise development that respects the area's cultural and built heritage, the area will be further improved with new small-scale retail and restaurant space on the ground floor of mixeduse buildings, wide sidewalks with spill-out space for businesses, street trees, landscaping, seating, lighting, and street furnishings.

The positive urban features of the Historic Commercial Character Area will be expanded into the Hamilton-Dundas Character Area where compact, urban development patterns can occur in medium-density mid-rise mixed-use forms. The level of intensification in this area can be higher than that of the Historic Commercial Character Area due to larger lot sizes with

Appendix "E" to Report PED22001 Page 23 of 98



Existing mixed-use building in the Waterdown Community Node (Brook McIlroy).

development potential, separation between adjacent sensitive land uses, and potential for creation of a new fine-grained walkable street network.

The two identified character areas will appear unique in their built form as they accommodate a range of building types, uses, and responses to existing cultural heritage, yet united in their overall identity through enhanced walkability, connectivity, aesthetics, high quality built form and open spaces, and consistent streetscape elements. As new development occurs over time, design and enhancements of streetscapes in both character areas will contribute to consistency in pedestrian comfort, street enclosure, and streetscape elements including wide sidewalks, safe cycling infrastructure, human-scaled lighting, landscaping, and attractive and comfortable furnishings. Future development will create a density and frequency of goods and services that draw people to spend time in the Waterdown Community Node.

The future of Waterdown is bright. Over the next 30 years, Waterdown will continue to be a vibrant community, and one that embraces community life through compact, mixed-use, transit-oriented development. It will be a safe, desirable, and healthy place to live, work, and grow. It will be walkable, connected, and humanscaled in recognition of the fact that community life takes place on foot, not in a car. The public realm will feature amenities that serve users of all ages and abilities at all times of the day and year. As these existing elements strengthen and new ones emerge over time, the vitality and character of Waterdown will be strengthened, ensuring long-term resiliency and a better guality of life for all its citizens.

Appendix "E" to Report PED22001 Page 24 of 98

4.0 General Community Node Site Design Guidelines

The design and layout of building sites is an important consideration for the creation of complete communities. The design of sites within the Waterdown **Community Node should consider** the relationship between varying urban design elements, including the placement and orientation of buildings, the integration of landscaping and open space, and the design and layout of circulation and parking for a variety of users. Consideration should be given not only to how the elements on a singular site respond to each other but also should ensure compatibility with adjacent areas.

Site organization and design should contribute to a safe, attractive, and a comfortable private and public realm. Site design should contribute to holistic site sustainability and reinforce identified objectives and priorities within the City's Climate Change Action Plan. Accessibility for Ontarians with Disabilities (AODA) requirements shall also inform site design.

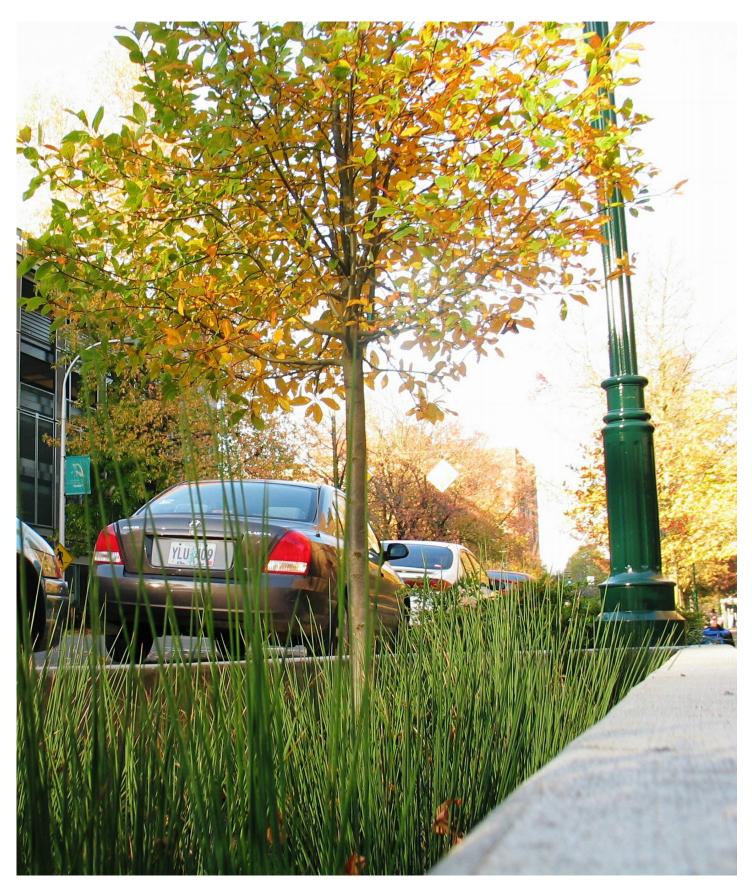
4.1 Sustainable Site Design

As Waterdown continues to evolve, sustainability should inform all elements of site design to maximize the performance of each site and minimize its ecological footprint, while working to minimize emissions that affect air quality for residents and to combat climate change. Site design decisions, including landscape design, can help the Waterdown Community Node to become a more beautiful and sustainable place to live, work, and visit.

4.1.1 Guidelines

- a. Site and building design should be energy efficient and contribute to improved air quality and reduced water consumption.
- b. Site design should prioritize and promote alternative modes of transportation including walking, cycling, and public transit.
- c. Building location and orientation should optimize exposure to natural light and consider microclimate effects.
- d. Low impact development measures should be incorporated as part of site layouts, engineering, and landscaping.
- e. Green roofs should be installed on mid-rise buildings to mitigate the urban heat-island effect, increase areas of vegetation, and reduce energy consumption. High-albedo roof surfaces should be installed on low-rise buildings and on roof surfaces of mid-rise buildings where green roofs are unfeasible.

- f. Landscape design should contribute to stormwater management on site, minimizing the need for discharge into municipal stormwater systems, including the integration of bioswales, rain gardens, retention ponds, rainwater collection tanks, and rain chains.
- g. Permeable paving should be integrated into site design where appropriate as an alternative to impervious asphalt and concrete surfaces.
- h. To conserve and improve stormwater management and the ecological function of sites, developments should refer to the TRCA's Healthy Soil Guidelines ("Preserving and Restoring Healthy Soil: Best Practices for Urban Construction").



Example of biofiltration trench within the public boulevard to increase soil infiltration and improve stormwater management (Brook McIlroy).

4.2 Landscaping

Site landscaping is an integral part of site design and should be used to enhance the aesthetic quality of a site, expand the tree canopy with large-growing native shade trees, contribute to stormwater management by incorporating soft and permeable surfaces, and provide transitions between land uses.

4.2.1 Guidelines

- a. Site landscaping should be comprised of a mix of both hardscape and softscape elements to provide visual interest.
- Soft landscaping should include a diverse species mix with coniferous and deciduous vegetation, including trees, shrubs, perennials, and grasses.
- c. Soft landscaping should include predominantly native plant species that are salt and drought resistant to reduce the risk of invasive species and to provide support for pollinators and birds. Only native species should be planted within and adjacent to core areas and regulated areas.
- d. Drought-tolerant native groundcover should be considered in lieu of sod in areas where mowed turf areas/strips are contemplated. Minimizing mowed turf improves sustainability and resiliency to climate change, minimizes management/ mowing labour requirements, improves soil condition (and therefore infiltration and stormwater management function) and improves ecological support for pollinators simultaneously.
- e. Landscaping palettes should consider four season design and provide various plantings that provide colour and texture at all times of the year.

Appendix "E" to Report PED22001 Page 29 of 98



Landscaping and seating area providing transition between the street and public boulevard (AJ Landskap).

- f. Landscaping should be used as buffers for wind, visual screening, privacy, and shade, where appropriate.
- g. Landscape buffers should be used to provide transitions between differing land uses, and between the public and private realm.
- h. Landscape buffers located in side yards should have a minimum width of 3.0 metres to provide sufficient soil volumes and should contain a combination of soft landscaping (perennials, grasses), low plantings, and trees. Where a width of 3.0 metres is not possible, landscape buffer widths as narrow as 2.0 metres may be accepted, at the discretion of the City.
- i. Plantings and hedges should not inhibit the safety or visibility of pedestrians, cyclists, or motorists.

- j. New native large-growing shade trees should be included as part of all site designs to contribute to the expansion of Waterdown's existing mature tree canopy.
- Trees should be located in key areas including along walkways and within surface parking areas.
- Existing trees should be retained in-situ wherever possible in Waterdown. Where it is unavoidable that trees be removed to accommodate critical site design elements, a 1:1 replacement of a comparable native species (e.g. similar size of tree at maturity) is required. A 3:1 replacement is preferred where possible.
- m. Tree selection should be informed by the City's Tree Species List and should include native species only.

Appendix "E" to Report PED22001 Page 30 of 98



Programmed courtyard common amenity space in a mid-rise multi-unit development (Pollard Thomas Edwards)



Programmed courtyard common amenity space in a low-rise multi-unit development (Architekturos Linija)

- n. Trees should have sufficient soil volume to ensure healthy and mature growth, with a minimum of 15 cubic metres per tree. When located in predominantly hardscaped areas, trees should be planted within continuous open soil trenches and/or within structural soil cells such as silva cells, employing Low-Impact Development principles.
- o. Outdoor common amenity spaces should be incorporated on properties containing larger residential buildings or mixed use buildings.
- A minimum of 50% of outdoor common amenity spaces should be accessible atgrade outside in one contiguous area.

- q. Outdoor common amenity spaces should be directly connected to a local street, park, open space, or a building.
- r. Outdoor common amenity spaces should be located away from servicing, parking and loading functions. If this is not possible, they should be screened with a landscape buffer and a fence.
- s. Site design for larger developments with residential uses should reflect pet-friendly design, including pet relief areas that do not conflict with other uses or the enjoyment of the grounds.

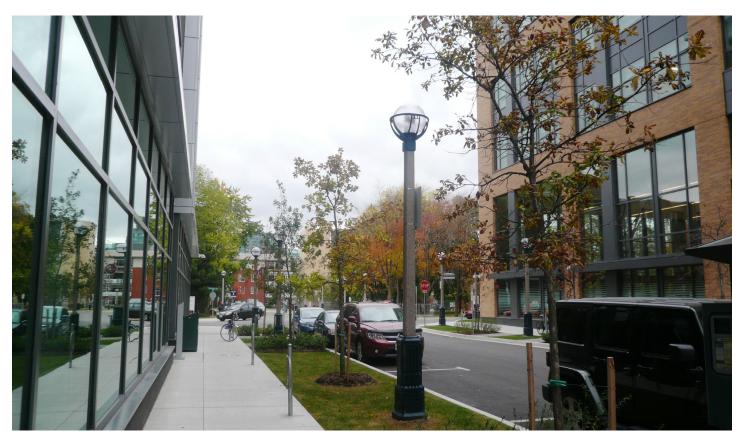
4.3 Parking, Circulation & Site Servicing

The design of parking areas, access points and circulatory routes, including areas for servicing, storage, and loading, is essential to ensure safe and efficient connections to and throughout a site for pedestrians, cyclists, and motorists. The design and location of these areas should take into consideration travel routes in relationship to building entrances and key activity areas.

4.3.1 Guidelines

- a. Vehicular access should be provided from side streets where possible to facilitate a high quality pedestrian environment along Hamilton and Dundas Streets that is uninterrupted by vehicle access points.
- b. Curb cuts should be consolidated to minimize disruption to boulevard landscaping and sidewalks, and to maximize on-street parking opportunities where possible.
- c. Create defined pedestrian and cyclist routes within and between sites to minimize opportunities for conflict between pedestrians, cyclists, and motorists.
- To ensure barrier free design, a minimum width of 1.5 metres is required for walkways connecting the main entrance(s) of all buildings to public sidewalks and parking areas.

- e. Parking and areas for storage, servicing, and loading for should be located within a building envelope. Where this is not possible, these areas should be placed away from the public realm, at the side or rear of properties, and screened by landscaping or architectural features that are compatible with the design of the development and its context.
- f. Underground parking or structured parking should be integrated where possible to minimize the need for surface parking.
- g. Structured parking should be wrapped with active commercial uses at grade to contribute to an animated public realm. Where active uses are not included at grade, high quality landscaping and architectural screening methods should be used to hide cars from public view. Stand-alone structured parking buildings should not be permitted.



On-street parking buffered from the public boulevard by landscaping and streetscaping elements (Brook McIlroy).

- Surface parking should not be located adjacent to the public realm. Where this is unavoidable, parking should be buffered from the public realm through landscaping buffers, street trees, and architectural treatments, as appropriate.
- Clearly demarcated grade-separated pedestrian and cyclist pathways should be integrated into the design of larger surface parking lots to improve pedestrian and cyclist safety. Pathways should be sufficiently buffered and protected from vehicle areas.
- j. All accessible parking spaces should load directly onto an adjacent walkway.
- k. Coordinate the placement of servicing, storage areas and loading with parking areas for efficient use of space, to minimize conflicts between site users, and to limit impacts on existing trees and valuable landscaping.
- Larger surface parking lots should be divided into smaller sections through the location of walkways, trees, landscaping, and varying paving treatments. This provides opportunities for shorter, safer, and more comfortable pedestrian access and crossing points. It can minimize heat island effects by providing landscaped surfaces between parking areas and providing adequate soil volumes for large shade trees that reduce sun penetration onto paved surfaces.
- m. Cluster and screen utilities such as gas and hydro meters and Electric Vehicle (EV) charging infrastructure, to minimize their impact on the public realm.
- Ensure that site design accommodates safe circulatory routes for servicing, storage and loading areas. Circulation areas should not require backing in or out from a public street and should not conflict with identified circulatory routes for pedestrians, cyclists, or motorists.

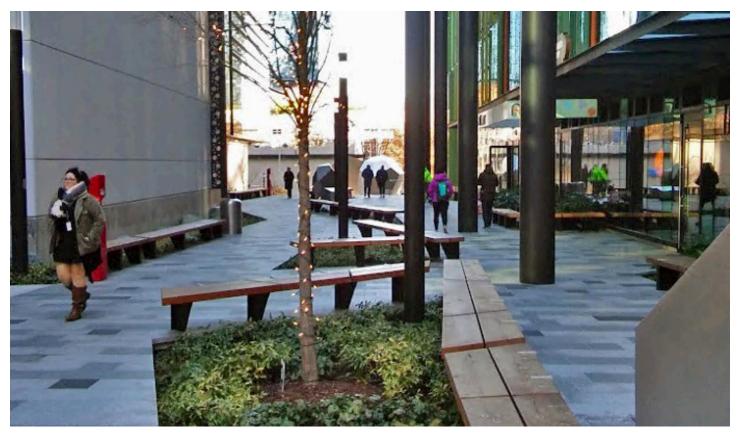
4.4 Mid-Block Connections & Crossings

Mid-block connections for pedestrians and cyclists should be integrated into the design of sites within the Waterdown Community Node to ensure safe and comfortable multi-modal access into, between, and through sites from the right-of-way. Pedestrian crossings should be incorporated along rights-of-way to provide safe mobility options and to create continuous mid-block active transportation routes between multiple sites.

4.4.1 Guidelines

- a. Sites containing multiple buildings should incorporate mid-block pedestrian connections to increase site permeability and facilitate safe and efficient pedestrian and cyclist access.
- b. Mid-block connections within the Node should be located where right-of-way connections are separated by more than 75 metres, to achieve block permeability every 30 to 60 metres on average.
- c. Mid-block connections should maintain a minimum width of 5.0 metres to accommodate two-directional movement for pedestrians and/or cyclists, and landscaping on both sides of the connection. The design and location of planting areas and trees should ensure sufficient space and sun exposure to ensure healthy long-term growth.

- d. Mid-block connections should connect the interior of sites to adjacent rights-of-way.
- e. Where mid-block connections intersect public rights-of-way, mid-block pedestrian crossings should be created where feasible to connect to adjacent sites and pedestrian routes. These crossings should use a combination of various design measures to enhance pedestrian safety, where appropriate, such as curb extensions, raised speed tables, and high-visibility paving and painting.
- f. Mid-block connections should contribute to a high-quality, safe and comfortable pedestrian environment. They should be lined with pedestrian scale lighting, high-quality landscaping, and pedestrian amenities such as seating, waste and recycling receptacles, and bicycle parking infrastructure.



Mid-block connection providing efficient pedestrian access through a site (Brook McIlroy).

- g. Mid-block clearways should be free from clutter and constructed to universally accessible standards to facilitate ease of movement for all.
- Mid-block connections and pedestrian crossings should follow Crime Prevention Through Environmental Design (CPTED) principles to encourage pedestrian safety.
- i. Signalized pedestrian crossings should be incorporated along both Hamilton Street and Dundas Street where feasible to provide safe connections for pedestrians and to improve Waterdown's walkability.

4.5 Public Realm

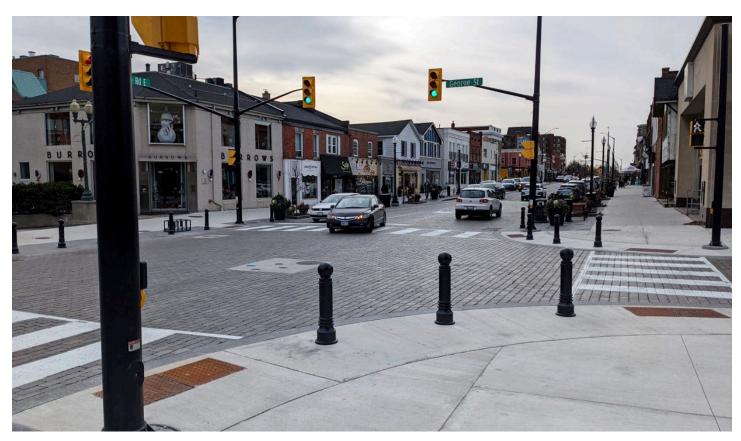
A high-quality public realm that emphasizes active transportation contributes to animated and comfortable spaces. Public realm elements should be consistently integrated within the Waterdown Community Node to encourage pedestrian activity, as well as safe, convenient cycling and transit connections.

Design of the public realm should be used to establish a united sense of place across the entire Community Node through a common language of paving, lighting, and street furnishings. Public realm improvements may be realized through City-led streetscaping initiatives, or agreed on as part of the development of private lots.

4.5.1 Guidelines

- a. Public boulevards should be designed to create animated, comfortable, and safe pedestrian environments.
- b. Pedestrian boulevards between 2.0 and 5.0 metres are desirable to accommodate a range of pedestrian amenities along the public boulevard (e.g. trees, furnishings, display areas, patios).
- c. Pedestrian connections, pathways, and cycling routes should be clearly identifiable, directly linked to adjacent public streets, and designed with appropriate paving and lighting to enhance safety and ease of use.

- d. Public realm elements should be clustered and incorporated with utilities to minimize visual clutter.
- e. Public realm elements should not impede the pedestrian clearway.
- f. Unobstructed pedestrian clearways within boulevards should be no less than 2.0 metres in width in all areas throughout the Community Node. Where feasible, clearways within pedestrian-focused areas should be a minimum of 2.5 metres in width to accommodate higher pedestrian traffic volumes.



View of high-quality intersection with special paving, clearly marked crossings, and bollards (Brook McIlroy).

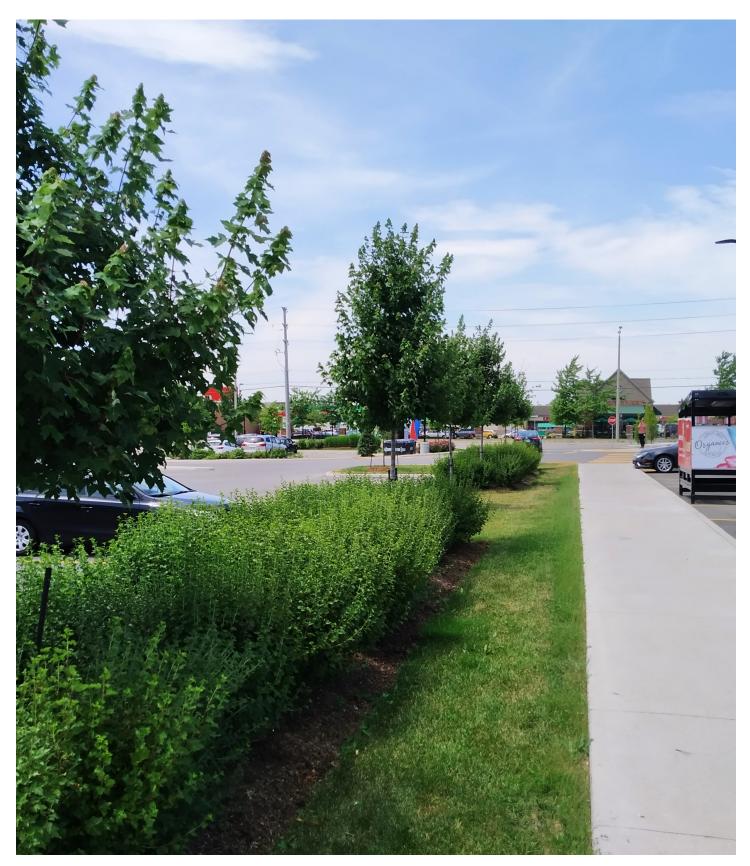
- g. A consistent palate of public realm elements should be incorporated within the public realm along both Hamilton Street and Dundas Street within the Waterdown Community Node to create a sense of continuity within the Node. This includes paving materials, seating, pedestrian-scaled lighting, high quality landscaping, street trees, bollards, bicycle racks, and waste and recycling receptacles. Public realm features within the Node should be complementary to local architectural character.
- Public realm elements should be located along key circulatory routes, along key building frontages, along walkways, and in areas of pedestrian activity.
- Public realm design should emphasize important gateways into the Waterdown Community Node including the Hamilton Street and Dundas Street intersection and the Mill Street and Dundas Street intersection. Design elements may include special paving and landscaping treatments, signage, public art, and the siting of open spaces.
- j. The design of public realm elements should adhere to the City's Coordinated Street Furniture Guidelines.

Appendix "E" to Report PED22001 Page 38 of 98



Example of high-quality streetscape design along a main street with consistent furnishings, lighting, street trees, and special paving (Brook McIlroy).

Appendix "E" to Report PED22001 Page 39 of 98



Landscaped surface parking lot with pedestrian path, trees, and plantings (Brook McIlroy).

Appendix "E" to Report PED22001 Page 40 of 98

5.0 General Community Node Building Design Guidelines

The design of buildings is an important consideration that will influence the look and feel of Waterdown. Building design should consider the intended density and scale of built form and consider compatibility with adjacent land uses.

The design of buildings within the Waterdown Community Node, within each character area, and between character areas, should demonstrate appropriate massing, scale, transitions, high quality ground floor design, and carefully considered building articulation, façade design, and material use.

5.1 General

The mass, shape, scale, and siting of buildings are critical design considerations and should be compatible with adjacent uses and contribute to high quality site, building, and public realm design.

5.1.1 Guidelines

- a. The mass, scale, shape, and footprint of buildings within Waterdown Community Node should be compatible with, and adequately transition to adjacent buildings and land uses.
- b. The ground floor design of mixed use buildings and commercial buildings should contain transparent glazing at grade to encourage visibility of uses and eyes on the street.
- c. The ground floor uses of buildings should contribute to a human-scaled environment. This may include the integration of canopies, overhangs, transparent windows, building entrances, pedestrian-scaled building signage, and seating areas.

- d. All building entrances should be designed to be universally accessible and located at equal grade with the adjacent public sidewalk.
- e. New development should contribute to the creation of a primary streetwall along Hamilton Street and Dundas Street to ensure a comfortable, human-scaled public realm. Where a continuous streetwall has been established, the primary streetwall of new development should align with the predominant streetwall height.
- f. Wherever feasible and particularly in areas where a continuous streetwall has not been established, buildings should incorporate a minimum ground floor height of 4.5 metres where the ground floor contains nonresidential uses. This allows for flexibility of use over time, including for non-residential uses.



Intersection of Dundas Street and Mill Street (Brook McIlroy).

- g. Opportunities for seating, patios, and landscaping features should be located where possible between the building edge and the adjacent public street.
- h. Buildings located on corner sites should treat both facades with a comparable level of design and should provide articulation to the street edge. Opportunities for seating, patios, and landscaping features should be located in the setback between the building edge and the adjacent public street to encourage pedestrian activity in these locations.
- i. Buildings should not contain false upper building storeys.
- j. Balconies included as part of residential or mixed use buildings should be contained within the building massing and should not overhang a public sidewalk or pedestrian walkway.
- k. The design of the Hamilton Street and Dundas Street intersection is an important location within the Waterdown Community Node. The redevelopment of sites at the four corners of the intersection should include thoughtfully-designed buildings that frame the intersection. Buildings should address the corner and both streets with high quality cladding materials, soft landscaping treatments, and entrances facing the street. The area should be designed as a gateway with notable landscape elements on all corners as well as integration of public art and lighting to establish a distinct sense of place. The design of the streetscape should provide connectivity between both the Hamilton-Dundas and Historic Commercial Character Areas.

5.2 Articulation, Façade Design & Materials

Thoughtful consideration should be given to building materials, façade design, and the use of vertical and horizontal articulation along all building façades.

5.2.1 Guidelines

- a. New development should conserve existing cultural heritage resources and cultural heritage landscapes. It should be compatible with and sympathetic to the existing built form character of the Waterdown Community Node through façade design, material use, and building articulation.
- b. High quality authentic building materials should be employed for buildings within the Waterdown Community Node. Materials should be compatible with the existing predominant building materials, including brick, stone, and wood. Materials that mimic or approximate historical or original building materials, such as aluminum panels with wood prints, or manufactured stone veneer products, should not be used.
- c. Façades should be composed to complement and enhance the existing streetscape while exhibiting contemporary 21st century design. Façades should distinguish the base, middle, and top of buildings through façade articulation, materials, and finishes.
- d. Roof profiles of new buildings should be designed to enhance the prevailing rhythm of rooflines along established streetscapes. Various roof forms may be appropriate depending on the location and established streetscape, and should be designed in the context of neighbouring buildings to create a harmonious and consistent streetscape.
- e. Primary building façades facing public rightsof-way should feature the highest quality of architectural design and materials.

Appendix "E" to Report PED22001 Page 45 of 98



A contemporary development adjacent to an existing heritage building creates a variation in materials and roof lines, while continuing the scale and rhythm established by the heritage building (Kiku Obata & Company).

- f. Building façades should be articulated to subdivide the massing and to minimize the impact of building length on the public realm. This can be achieved through elements such as recesses, projections, windows, awnings, landscaping features, and corner treatments. Buildings façades should not be intentionally divided through stylistic and/or material changes to convey a false impression of individual buildings across a single building's length.
- g. Building signage should be located at a consistent height on building facades that are pedestrian scale in nature, such as the ground floor. Signage should be visible and legible from the public realm.

- h. The design and scale of building signage should be complementary to scale and character of the adjacent context, including compatibility with cultural heritage properties and features.
- i. All buildings should employ bird-friendly design through the appropriate use of façade building materials and visual markers on glazed surfaces, such as fritted or patterned glass. Masonry and other non-reflective surfaces should also be used on building facades to decrease reflectance and transparency.

5.3 Compatibility with Heritage Resources

The Waterdown Community Node contains many properties, structures, and areas with identified cultural heritage value. It is critical that these resources be maintained and conserved in order to sustain and enhance the exceptional and unique sense of place in Waterdown.

New construction in the Waterdown Community Node, including additions, renovations, and development adjacent and in proximity to identified cultural heritage resources should be visually compatible and sympathetic with existing heritage features to allow the heritage elements to maintain their presence and prominence in the streetscape, and to remain readily recognizable.

5.3.1 Guidelines

- Significant cultural heritage resources and significant cultural heritage landscapes should be conserved by protecting, maintaining and/or stabilizing existing heritage features and ensuring continuing or compatible uses.
- b. Site layouts for new development should acknowledge the scale and siting of existing heritage buildings, with new buildings sited such that they complement and enhance the primacy of heritage elements in the streetscape.
- c. The adaptive reuse and rehabilitation of identified cultural heritage resources should occur where redevelopment of an identified heritage property is proposed. Where new development is proposed adjacent to, or attached to an identified heritage building, exterior heritage elements of the existing building should be maintained and conserved in-situ.
- d. Façade design should complement but not mimic historic architectural styles and should reflect contemporary design that blends harmoniously with existing historic buildings and streetscapes. Contemporary additions to buildings should maintain the prominence of the original construction.

Appendix "E" to Report PED22001 Page 47 of 98



The contemporary addition to a 1932 Bank of Montreal building in Ottawa maintains the original building's prominence and respects its integrity through complementary materials, height, massing, reveals, and setbacks without mimicking its heritage form (Norr).

- e. Infill buildings should respect massing, heights, fenestration, use of traditional materials, and colours and roofing patterns. They should be compatible with and sympathetic to Waterdown's existing heritage streetscapes.
- f. Streetwall height should be maintained and recognized by responding to existing cornice lines or parapets.
- g. Where infilling occurs between buildings with varying ground floor heights, the taller height should set the datum line for the new building.
- h. New buildings should respond to the heights and proportions in the first storey of adjacent buildings, such as:
 - i. Sign band height and size;
 - ii. Window proportions; and,
 - iii. Door proportions including size, height and setbacks.

- i. Infill buildings that are wider than 15 metres should apply vertical articulation to break the mass up into smaller, finergrained components, to ensure compatible integration and continuation of the established streetscape rhythm.
- Front entrances of infill buildings should follow the predominant pattern of the entrances for nearby heritage buildings.
 Where existing entrances are built flush with the property line, infill buildings should recess entrances for safety and accessibility.
- k. Infill buildings should maintain similar floor to ceiling heights to those of existing buildings' ground floors to create a consistent scale in the pedestrian frontage.
- Where infilling between heritage buildings of different setbacks occurs, the new development should provide an appropriate transition to reconcile the difference in setbacks.

Appendix "E" to Report PED22001 Page 48 of 98

6.0 Historic Commercial Character Area Guidelines The Historic Commercial Character Area includes areas along Dundas Street (Highway 5) east of Hamilton Street to Grindstone Creek. The Character Area also includes properties along parts of local streets just north and south of Dundas Street.

This area is a very special place within Waterdown. It is sometimes difficult to pinpoint exactly what makes the area so comfortable and friendly, but locals agree that the sense of history, walkability, and the variety of shops, cafes, and restaurants make it a favourite destination in Waterdown to explore on foot.

The area features a unique concentration of heritage stone and brick structures set along a fine-grained street network lined with small-scale local shops, services, and eateries. It exemplifies principles of good urban design and serves as a model for development throughout the Community Node. It is also the gateway to the Grindstone Creek natural area which winds through Waterdown to the edge of the escarpment and Smokey Hollow Waterfall. The Urban Design Guidelines for the Historic Commercial Character Area are intended to build on the existing small scale village character with contextually-appropriate low-rise building forms 2 to 3 storeys in height. New infill development and redevelopment should maintain and conserve heritage elements and continue the rhythm of narrow shop frontages along the street edge to expand the variety of commercial offerings while maintaining the village scale. Development should sensitively integrate into the existing built context with consideration for existing cultural and natural heritage, including identified cultural heritage resources and landscapes along Dundas Street, Main Street, and Mill Street.

Urban design in the Historic Commercial Character Area should prioritize walking and active transportation and ensure pedestrian safety and comfort. Built form and high-quality landscaping should define the street edge and blend seamlessly into the pedestrian boulevard, and generous public green spaces and plazas should expand the public realm as an integral component of future peoplecentred development.



Historic Commercial Character Area Boundaries

Appendix "E" to Report PED22001 Page 51 of 98

Aerial Map of Historic Commercial Character Area



--- Secondary Plan Boundary



Community Node Boundary

Appendix "E" to Report PED22001 Page 52 of 98

6.1 Site Design Guidelines

6.2 Building Design Guidelines

6.1.1 General Guidelines

- a. To increase overall pedestrian permeability of the Historic Commercial Character Area, interior-block publicly accessible open spaces and mid-block connections should be created where possible on properties on the south side of Dundas Street between Flamboro Street and Mill Street.
- Future development adjacent to Grindstone Creek should create a transition to the natural area and its associated Vegetation Protection Zones using naturalized plantings.

6.2.1 Setback Guidelines

- a. New buildings within the Historic Commercial Character Area should be set back between 0.0 metres and 3.0 metres from the front property line to create a pedestrian-friendly, street-oriented public realm.
- A minimum setback of 7.5 metres from the rear property line should occur when a building in the Mixed Use-Medium Density area is directly abutting low density residential uses to provide comfortable separation between adjacent uses.



Example of low-rise buildings with active, ground floor uses and appropriate building transitions (Audax Architecture).

6.2.2 Building Form, Height & Massing Guidelines

- a. Dundas Street should be complementary in scale, form, massing, and architectural details to the existing historic residential and commercial buildings along this corridor. New development should maintain a compatible low-rise scale and building height. It should be located close to the street and front the right-of-way.
- b. Main Street is a cultural heritage landscape. The design of development along Main Street within the Historic Commercial Character Area should be complementary to the street's role as part of the historic village core. New development should maintain a compatible low-rise scale and building height and contribute to existing variation in architectural styles.
- c. To maintain the presence and prominence of heritage resources along the street, appropriate built form transitions should occur where development is located adjacent to identified cultural heritage resources within the Historic Commercial Character Area. This includes the Mill Street Heritage Conservation District and cultural heritage landscapes along Dundas Street and Main Street.
- Mill Street is a Heritage Conservation District (HCD). The design of development within the Mill Street HCD should adhere to the policies of the Mill Street Heritage Conservation District Plan.

Appendix "E" to Report PED22001 Page 54 of 98

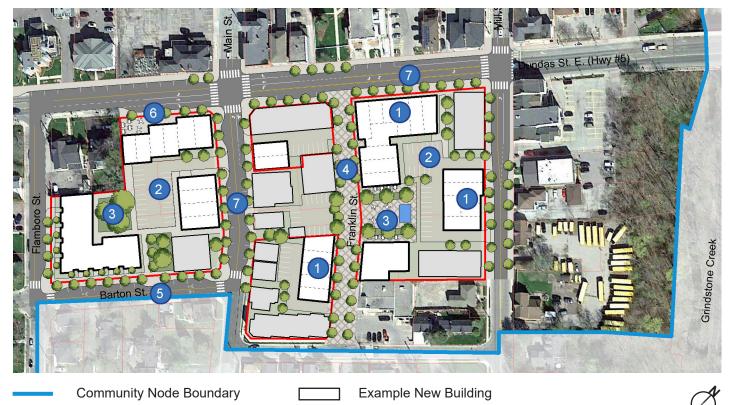


A regular rhythm of narrow shopfronts provide visual interest along the streetscape and a concentration of goods and service providers in close proximity to one another, enhancing the walkability of the area. (Brook McIlroy)

- e. Buildings should be sited and designed to establish, add to, and strengthen the streetwall condition along the street edge, particularly on Dundas Street. Opportunities to establish a streetwall on connecting side streets through the introduction of new built form should be explored as new development occurs.
- f. Development should acknowledge predominant horizontal articulation, roof lines, and cornice lines of existing adjacent buildings within the character area in their massing and facade articulation to provide consistency in scale and proportion in the primary streetwall and streetscape.
- g. Infill development and redevelopment should continue the existing rhythm of regular, narrow commercial frontages to encourage activity along the street along Dundas Street east of Main Street. Divisions of groundoriented units, commercial bays, or entrances should occur at a maximum of 6.0 to 7.0 metres apart.
- h. The ground floor condition of buildings within the Historic Commercial Character Area should contribute to an animated street condition. Buildings should incorporate a range of retail and service uses, including opportunities for spill over retail, patios, seating areas, and other open spaces, both in the front of buildings, and at the rear of buildings in certain instances.
- i. New building façades should incorporate unobstructed vision glazing along 80% of the first storey building frontage facing a street to provide visibility and promote animation of the street.

Future Vision: Example Lot Development

Historic Commercial Character Area



Property Lines

Example Development Lot

Vehicle Access Driveway

Existing Building

Key Features

- 1 All buildings are located and oriented toward the street, with small-scale commercial and retail spaces directly accessible from the public sidewalk
- 2 Parking for commercial/retail and mixed-use blocks is located at the interior of the lot where possible
- 3 Publicly-accessible green space and plaza space is provided within lots
- Franklin Street becomes a pedestrian-focused shared street

- 5 Barton Street becomes the designated east-west cycling route
- 6 Buildings in proximity to cultural heritage structures use setbacks to bridge from larger heritage setbacks to desired setbacks within the Historic Commercial Character Area
 - Trees are planted along all street frontages, in rear yards, parking areas, and open spaces

Diagram demonstrating one potential future development scenario in the Historic Commercial Character Area that reflects best practices identified in the Urban Design Guidelines.

This development scenario is illustrative only. No evaluation of heritage resources was used to develop this concept. All future development will require detailed review and consideration of heritage resource impacts to determine appropriate development solutions.

6.3 Public Realm Considerations

Public realm design within the Historic Commercial Character Area is an important design consideration. The portion of Dundas Street within this character area is viewed as a valued community village street that presently suffers from traffic congestion resulting from high vehicle volumes, including large trucks. Opportunities to improve the quality and safety of the street for pedestrians in coordination with enhancements to public amenities and landscaping will help to improve the user experience and ensure street animation and vibrancy.

Public Realm Considerations for the Historic Commercial Character Area include the following.

Prioritizing Pedestrians & Enhancing Pedestrian Safety

Dundas Street should be designed to prioritize pedestrian movement between Hamilton Street and Grindstone Creek, with a commercial village along Dundas Street as well as along the side streets extending north and south of Dundas Street. Design moves that enhance pedestrian safety are important to encourage animation along the street. Recommendations for improved pedestrian safety include wide sidewalks with a minimum 2.0 metre unobstructed pedestrian clearway that is buffered from traffic; frequent, visible, and safe pedestrian crossings; gateway treatments that signal entry into a pedestrian focus area; and the incorporation of bus bays into streetscape design where active or planned bus routes exist. Enhancements should not impede transit vehicle movement or the function of transit infrastructure.

Incorporating Cycling

Cycling facilities, including bike lanes and lock stations, should be located within the Historic Commercial Character Area to encourage active forms of transportation in Waterdown. Cycling infrastructure in the village area should ensure safe and efficient travel for cyclists throughout the Waterdown Community Node, with direct connections to a separated cycle track along Hamilton Street as well as other cycling routes within the City. Opportunities for a safe cycling route parallel to Dundas Street should be explored in the future. Bicycle racks should be provided in the public boulevard to promote cycling as an alternative mode of transportation to and through the Historic Commercial Character Area.

Appendix "E" to Report PED22001 Page 57 of 98



Accessible features including tactile paving and braille on signage provide wayfinding elements for people with vision impairments (SmallSize / Darren Bates)

Universal Accessibility

Urban Braille features should be incorporated into the streetscape as an essential component of streetscape improvements. These features will enhance the overall accessibility of the pedestrian environment within the Historic Commercial Character Area for all users, including the elderly, those with low or impaired vision, or those using strollers or mobility aid devices. These features include orientation aids that provide both high contrast visual as well as tactile feedback to help with navigating sidewalks and street crossings. Urban Braille elements should be embedded into the surface of sidewalks along major pedestrian routes to demarcate safe pathways, at curb edges and corners, and at street crossings and transit stops.

Enhancing the Village Feel

Opportunities exist to improve the aesthetic nature and animation of Dundas Street within the Historic Commercial Character Area. These may include upgraded pedestrian paving, enhanced landscaping and street tree planting, seating, waste and recycling receptacles, cycling infrastructure, and the identification of sites within the right-of-way or on individual lots for public open spaces and public art installations. Streets such as Franklin Street present possibilities for shared streets that become 'people places' by serving pedestrians first. The repurposing of some existing surface parking lots may present opportunities for new publicly accessible public and private open spaces as part of new development. The eventual extension of these streetscape elements toward Hamilton Street and beyond will help to

Appendix "E" to Report PED22001 Page 58 of 98

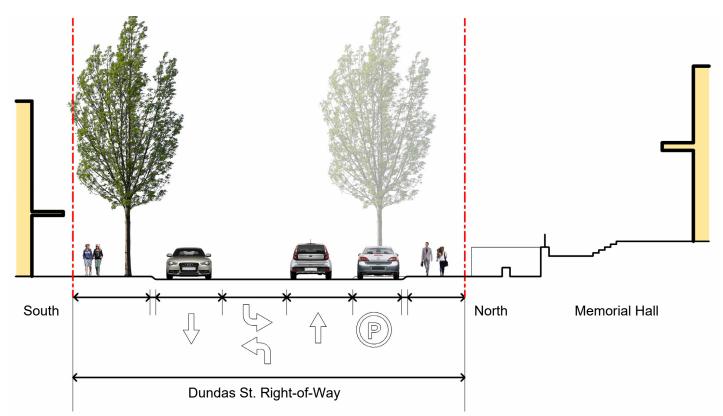


Diagram of the Dundas Street Right-of-Way at the Memorial Hall, with new development shown at the south (left) side. Building setbacks along Dundas Street will provide a minimum 2-metre clearway for pedestrians, as well as space for trees and furnishings.

create consistency in the look and feel of the Community Node, and to expand the walkability and other identified positive aspects of the village.

The design of the Mill Street and Dundas Street intersection is an important location with the Waterdown Community Node. The four corners of the intersection should include special paving and unique elements to distinguish the intersection as the entrance to Downtown Waterdown.

Creating Wide Sidewalks and Pedestrian Clearways

Enhancement of walkability within the Historic Commercial Character Area includes maintenance of generous pedestrian sidewalks with a minimum clearway of 2-metres on all public streets. In the future, wider sidewalks with a consistent edge will be achieved, along with new tree plantings, landscaping, street furnishings, and pedestrian-oriented lighting. In the near term as Dundas Street continues to function as a designated truck route, widths will vary slightly but will aim to establish a minimum 2-metre clearway on all sidewalks for safety and universal accessibility.

Appendix "E" to Report PED22001 Page 59 of 98



The Wentworth Park entrance features a combination of landscape elements and signage to signal arrival and tell a story (Ken Heaton)

Providing Parking to Serve Businesses

Ensuring appropriate access to vehicular parking should be considered to serve businesses within the Historic Commercial Character Area. Access to on-street parking and opportunities for additional public parking should be considered. On-street parking should not detract from the aesthetic quality of the public realm or negatively impact pedestrian comfort or safety. Surface parking lots should be minimized over time and be located behind buildings. Parking lots should not front Dundas Street under any circumstances.

Creating a Gateway to the Historic Commercial Character Area from the East

The creation of gateway design elements within the public right-of-way along Dundas Street at Grindstone Creek will help to signal arrival in Waterdown. The gateway should feature a combination of landscape elements (year-round and seasonal) as well as street furnishings including banners, signage, lighting, and public art. By signaling arrival in the Historic Commercial Character Area, drivers will be welcomed and informed that this section of Dundas Street is an urban village and speeds should be reduced for safety of pedestrians. Built form in proximity to the Grindstone Creek Bridge should reinforce the gateway condition with street-oriented development built near the front property line.

Appendix "E" to Report PED22001 Page 60 of 98

7.0 Hamilton-Dundas Character Area Guidelines

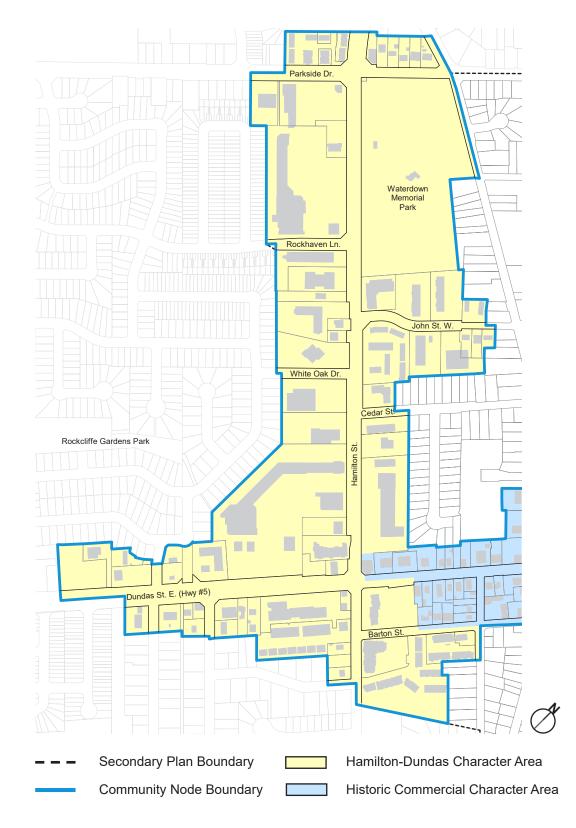
The Hamilton-Dundas Character Area includes areas along Hamilton Street from Parkside Drive to Orchard Drive, and those along Dundas Street (Highway 5) from just east of the intersection, west of Hamilton Street towards Goldenview Court.

Future intensification within the Waterdown Community Node should be focused in the Hamilton-Dundas Character Area, due to the area's potential to accommodate larger, taller buildings on large lots with adequate lot depths that allow sufficient transitions to the surrounding residential neighbourhoods. The area's three existing commercial plazas will ultimately be the drivers of future mixed use development along Hamilton Street. The area's large lots provide the highest opportunity within the Community Node for diversified forms of housing and a mix of commercial, retail, and community uses. This area will achieve a range of heights and densities, with a focus on mid-rise built form.

Deep sites, particularly on the west side of Hamilton Street, will provide opportunities for both street-facing and internal developments that are well connected to the broader community by a new network of finer-grained streets, open spaces, and mid-block connections. Existing connections to adjacent communities should be maintained and incorporated into future redevelopment of these sites, including the pedestrian connection at the south end of Hamilton Street to Chudleigh Street and the pedestrian connection at the north end of Hamilton Street to Harnesworth Crescent.



Higher density housing forms, including low-rise apartment buildings, are present in the Hamilton-Dundas Character Area (Brook McIlroy).



Hamilton-Dundas Character Area Boundaries



Aerial Map of the Hamilton-Dundas Character Area

-- Secondary Plan Boundary

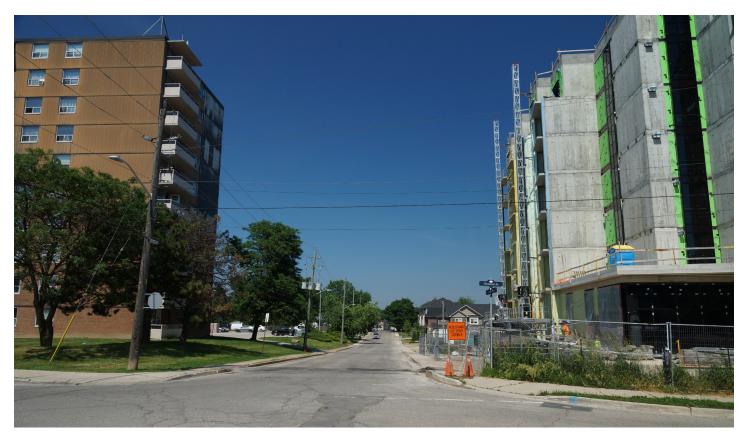
Community Node Boundary

Enhanced permeability into these sites will improve the pedestrian experience and walkability within the area. New built form and high quality landscaping will define the street edge and contribute to an animated and comfortable public realm.

The design of the Hamilton-Dundas Character Area should be distinct in its built form as a contemporary, mid-rise mixed use node, but should unite seamlessly in its identity with the adjacent Historic Commercial Character Area through the design of the public realm, streetscape, its sense of walkability and connectivity, and appropriate transitions in building height and massing between the two character areas. New development in the Hamilton-Dundas Character Area should exhibit the same high quality of design, materials, built form, and open spaces as the neighbouring Historic Commercial Character Area.

The new secondary street network within larger lots may include a combination of public rights-of-way and private streets. They should be developed in coordination with various City departments to ensure the coordination of other site design elements including municipal servicing and emergency services access.

Future development in the Hamilton-Dundas Character Area should complement a future bus transit hub to improve the area's access to public transit.



Development within the Hamilton-Dundas Character Area includes mid-rise apartment buildings (Brook McIlroy).

Appendix "E" to Report PED22001 Page 65 of 98





Numerous 'big box' and commercial plaza style developments currently exist along Hamilton Street (Brook McIlroy).



In its current form with large setbacks and street-facing surface parking areas, Hamilton Street does not present a walkable streetscape as the sidewalks are located a large distrance from goods and services (Google Earth)

7.1 Site Design Guidelines

7.1.1 Site Organization & Design

- a. Site design, building design, landscaping, and connections should be planned concurrently and comprehensively and respond to the adjacent existing and planned context. Sites should demonstrate high quality design and material use.
- b. Development within the Hamilton-Dundas Character Area should introduce a secondary fine-grained street network grid of both public and private streets and laneways where major redevelopment of a large site is proposed, particularly on the west side of Hamilton Street. New streets should provide improved connectivity throughout the area and connect with existing public rights-ofway.
- c. New development should utilize the new network grid of secondary streets for access to surface and underground parking to minimize curb cuts and access points directly from Hamilton Street and Dundas Street.

- d. As sites are developed and the secondary street network grid is established, corresponding utilities and landscaping should be coordinated with improvements to the road network.
- e. New roads should be designed to safely and comfortably accommodate pedestrians, cyclists, and vehicles. They should facilitate movement around, through, and between sites, and provide access to building and parking entrances.
- f. Increasing the mature tree canopy with large-growing native species and overall area of permeable landscaping in the Hamilton-Dundas Character Area should be prioritized as redevelopment occurs.
- g. Landscape buffers a minimum of 3.0 metres and up to 5.0 metres in width should be located along all property side yards to provide soil volumes for large, healthy shade trees.

Appendix "E" to Report PED22001 Page 67 of 98



Street-oriented mixed-use mid-rise development helps to define the street edge and bring vitality to the public realm with active ground-floor uses and residential units above (Weinstein A+U)

- Landscape buffers a minimum of 3.0 metres in width should be located along all rear yards to provide soil volumes for large, healthy shade trees.
- i. Side yards, front yards, rear yards, and courtyards should maximize soft landscaping and prioritize planting of large shade trees.
- j. New mid-block connections should provide safe and convenient access for pedestrians to move from rights-of-way to the interior of sites, as well as between sites and streets. As these connections are designed, opportunities should be explored for the creation of publicly accessible open spaces, courtyards, and plazas in the interior of blocks.

Appendix "E" to Report PED22001 Page 68 of 98



Thoughtfully-composed mid-rise architecture rendered with high quality materials helps to create a beautiful, pedestrianoriented streetscape with a sense of enclosure while protecting privacy and access to sun and sky views. (Brook McIlroy)

7.2 Building Design Guidelines

7.2.1 Building Form, Height & Massing

- The minimum building height for new development within the Hamilton-Dundas Character Area is 2 storeys. 1 storey commercial structures may be considered at the discretion of the City in areas outside of Waterdown's pedestrian focus area.
- b. Mid-rise development up to 6 storeys should be located fronting the west side of Hamilton Street and on the northwest corner of Hamilton and Dundas Streets.

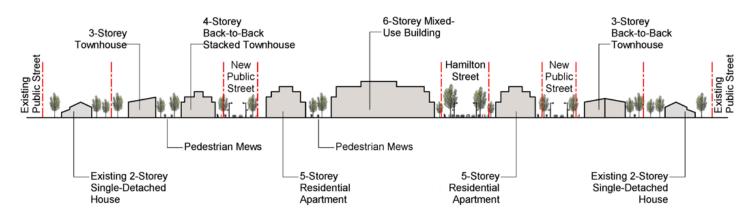
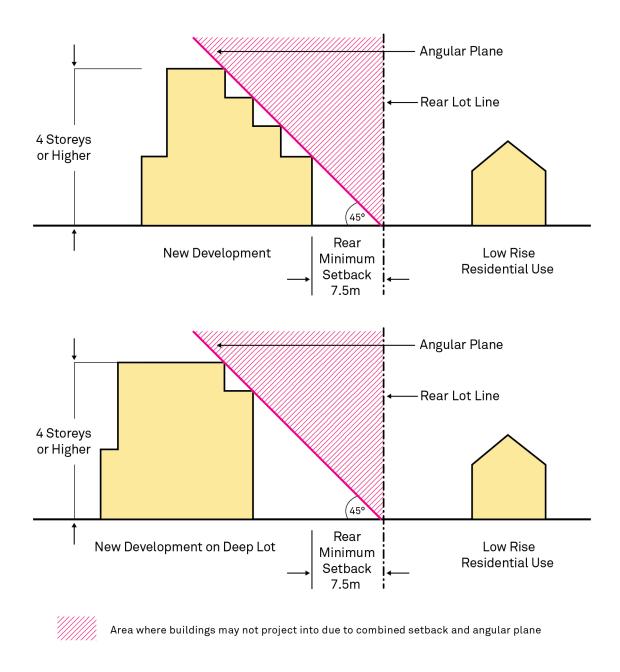


Diagram showing examples of transitions in building height within the Hamilton-Dundas Character Area.

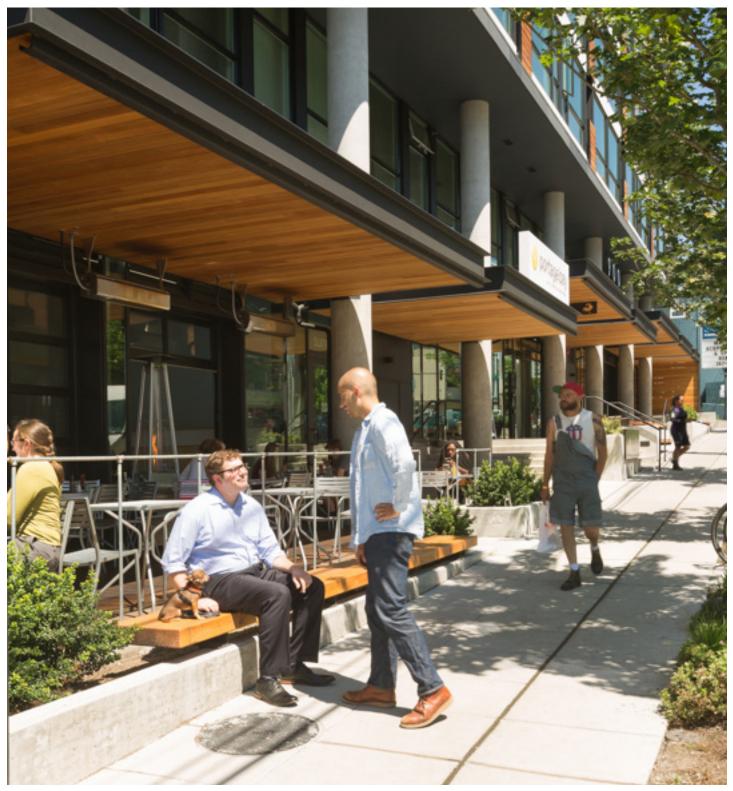
- c. Mid-rise development up to 5 storeys should front the east side of Hamilton Street, with the exception of locations that are significantly buffered from adjacent lowrise neighbourhoods where heights up to 6 storeys are acceptable. This height allowance recognizes shallower average lot depths on the east side of Hamilton street, the abutting existing low-rise neighbourhood context, and the low-rise scale of the adjacent Historic Commercial Character Area.
- d. A height transition should occur within sites on both sides of Hamilton Street, from a mid-rise built form along the street edge to a low-rise built form between 2 to 3 storeys approaching the adjacent low-rise residential neighbourhoods. This transition in height should ensure compatibility with adjacent neighbourhoods and mitigate potential impacts on shadowing, privacy, and access to sky views.
- e. Appropriate built form transitions should occur where development is located adjacent to Waterdown Memorial Park, including the use of setbacks and step backs in building massing to ensure minimal shadow impacts and access to sunlight and access to sky views.

- f. Buildings up to 8 storeys in height may be permitted in the Hamilton-Dundas Character Area on the west side of Hamilton Street where they demonstrate appropriate built form transitions and minimal adverse impacts on neighboring properties. Step backs and setbacks should be applied where appropriate to reduce the perceived height and bulk of the building, while ensuring the maintenance of privacy, access to sun, and sky views.
- g. Where development at or below 3 storeys is proposed adjacent to an existing low-rise residential neighbourhood, a rear setback of 7.5 metres should occur from the shared property line.
- h. Where development at or above 4 storeys is proposed, a rear transition should occur in the form of a 7.5 metre setback in tandem with a 45 degree angular plane from the shared property line to provide appropriate built form transition between adjacent uses.



Rear angular plane and setback requirements for the Hamilton-Dundas Character Area when development at or above 4 storeys is adjacent to a low-rise residential use (Guideline 7.2.1h). Both examples show compliance with angular plane requirements and depict varying approaches to rear setbacks and step-backs used to achieve compliance.

Appendix "E" to Report PED22001 Page 71 of 98



The public-private interface at the ground floor of a mid-rise building can be enhanced through increased ground-level setbacks, providing weather-protected space for retail spill-out, seating, signage, and other amenities (Weinstein A+U)

Appendix "E" to Report PED22001 Page 72 of 98



Façade materials within the Hamilton-Dundas Character Area shouldbe robust, high quality, and timeless (Mission Group).

7.2.2 Streetwall

- a. The streetwall condition along Hamilton and Dundas Streets should read as a continuation of the scale of commercial development in the Historic Commercial Character Area. For mid-rise buildings, front step backs in building massing of a minimum of 2.0 metres in depth should occur at either the third or fourth storey to maintain a consistent primary streetwall height of 2 to 3 storeys.
- b. Buildings fronting Hamilton Street and Dundas Street should have a front yard setback between 2.0 and 3.0 metres for pedestrian focus areas from the front property line to provide an appropriate transition between the public and private realm including landscaping and pedestrian furnishings. These setbacks may include enhanced landscaping treatments, widening of the boulevard and sidewalks, tree planting, retail and restaurant spill-out space, and the placement of pedestrian amenities including seating, lighting, and bicycle lock stations. A front yard setback of between 3.0 to 4.5 metres can be applied to areas outside of the pedestrian focus area.

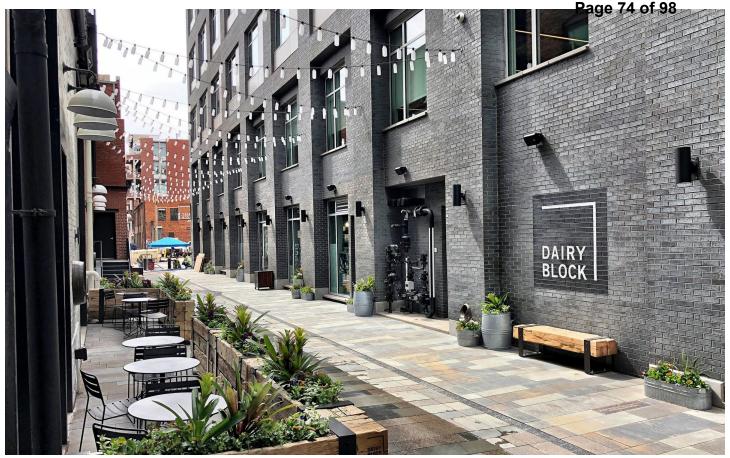
Appendix "E" to Report PED22001 Page 73 of 98



Diagram showing requirements for side yard setback and streetwall conditions within the Hamilton-Dundas Character Area.

- c. Buildings along Hamilton Street and Dundas Street should be built between 3.0 and 5.0 metres from the side property lines to create a contiguous streetwall and sense of enclosure along these streets, with the exception of locations where pedestrian or vehicular access is provided to the interior of the lot. For portions of the building above the primary streetwall height, buildings should stepped back between 2.5 and 4.5 metres from the base building side yard setback, to ensure access to privacy, sunlight, and sky views.
- Building facades should incorporate unobstructed vision glazing along a minimum of 60% of the first storey building frontage facing a street to provide visibility and promote animation of the street.

Appendix "E" to Report PED22001



A simple pallette of high quality materials including brick, stone, metal, glass, and concrete can create a timeless aesthetic that complements without mimicking heritage building designs (Creme).

7.2.3 Design & Materials

- Acceptable façade materials in the Hamilton-Dundas Character Area include brick, stone, glass, concrete, ceramic, porcelain or cementitious tile, and wood. Aluminum panel, EIFS, or stucco façade treatments should not be used.
- b. Where multiple buildings on a site are proposed, buildings should incorporate complementary design features and materials to create a cohesive development. This includes establishing a compatible material palette for buildings within a site that effectively balances visual and aesthetic harmony with diversity for visual interest. Variations in height, massing, materials, and finishes between buildings should be thoughtfully composed and relate to one another visually.

Future Vision: Example Lot Development Plan

Hamilton-Dundas Character Area



buildinas

close proximity to residential and mixed-use

Diagram demonstrating one potential future development scenarios in the Hamilton-Dundas Character Area that reflects best practices identified in the Urban Design Guidelines.

10

parking areas, and open spaces

7.3 Public Realm Considerations

Public realm design within the Hamilton-Dundas Character Area is a critical design consideration for the Waterdown Community Node as the area evolves from one that is vehicle-dominated and hostile to pedestrians, to a place that is pedestrian-friendly and human-scaled. The allocation of rights-of-way and the design of roads, sidewalks, and pedestrian amenities will influence the decisions people make on how to get from one point to another within the Community Node. By enabling and encouraging active transportation modes through the design of streetscapes in the Community Node, greater opportunities can be realized for street animation, vibrancy, and community connections.

Public Realm Considerations for the Hamilton-Dundas Character Area include the following.

Prioritizing Pedestrians

Both Hamilton Street and Dundas Street within the Hamilton-Dundas Character Area should be designed as 'green corridors' lined by trees and high quality landscaping on both sides of the street. Active transportation should be prioritized along both streets through improvements to the boulevard that enhance pedestrian safety and comfort. This includes wide sidewalks, continuous tree planting and landscaping features, seating, waste and recycling receptacles, bicycle infrastructure, and pedestrian scale lighting. Opportunities to activate the street through at-grade retail uses and publicly accessible outdoor spaces should be encouraged; surface parking should not line or be directly visible from these streets.

The intersection of Hamilton Street and Dundas Street should be designed as a gateway location, with high quality landscaping, coordinated public art, and high quality buildings addressing the street on each of the four corners of the intersection.

Appendix "E" to Report PED22001 Page 77 of 98



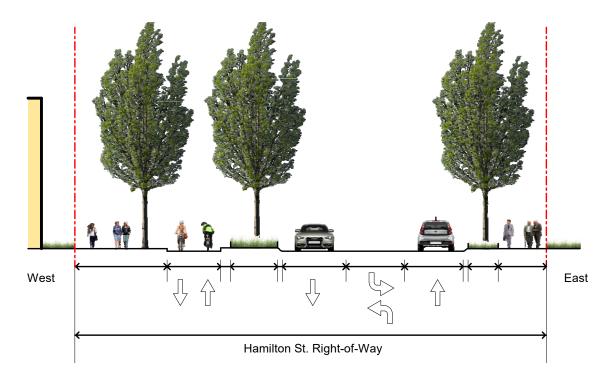
Streetscape design with wide sidewalks, landscaping, street trees, and spill out retail areas (MKSK).

Incorporating Cycling Infrastructure

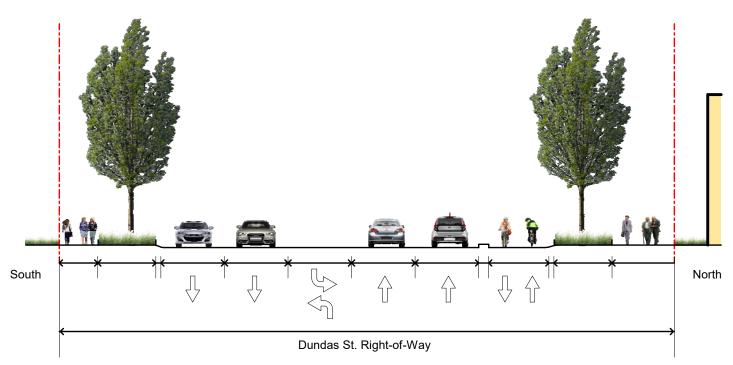
Cycling infrastructure should be included in the design of streetscapes within the Hamilton-Dundas Character Area. The creation of separated bi-directional cycle tracks is a priority for both Hamilton Street and Dundas Street within the Hamilton-Dundas Character Area to provide convenient and safe cycling connections. Important connections from the Hamilton-Dundas Character Area include between Waterdown Memorial Park and Dundas Street, as well as connections to the Hamilton Public Library Waterdown Branch, and other cycling routes within the Historic Commercial Character Area and beyond.

Improving Access to Public Transit

Hamilton Street should be envisioned as an important north-south corridor for public transit within the Waterdown Community Node. This priority should be emphasized through highly visible and easily accessed infrastructure including covered transit shelters and curbside transit stops that are appropriately integrated into street design.



Conceptual street section demonstrating a potential future vision for the design of Hamilton Street within the Hamilton-Dundas Character Area.



Conceptual street section demonstrating a potential future vision for the design of Dundas Street within the Hamilton-Dundas Character Area.



Two-way cycle tracks protected by wide landscaped buffers provide enhanced safety and comfort for cyclists of all ages and abilities (Brook McIlroy)



Integration of transit infrastructure into the streetscape, including provisions for amenities like seating and bicycle parking can enhance the transit experience and contribute to a well-designed pedestrian realm (RootBRT / ITDP).

Appendix "E" to Report PED22001 Page 80 of 98

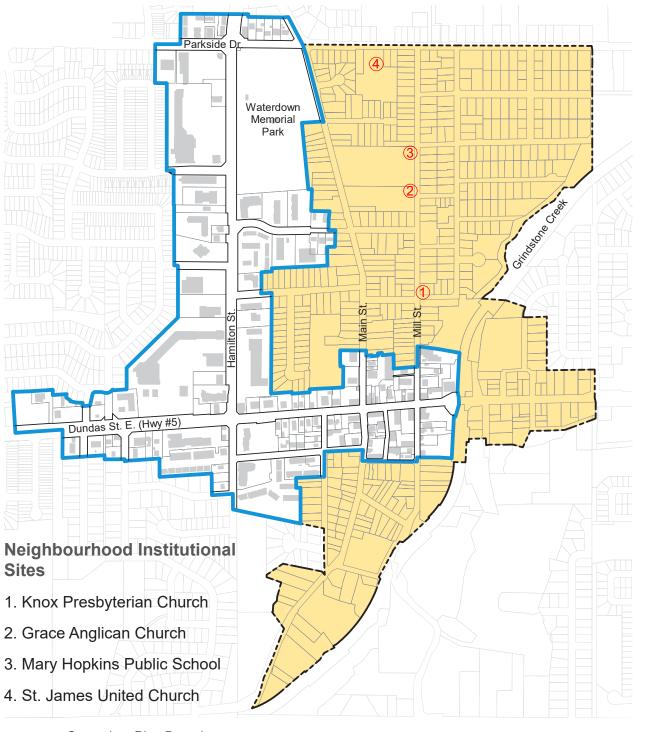
8.0 Low-Rise Neighbourhood Guidelines

The Waterdown Community Node is surrounded by a number of residential neighbourhoods. Properties in these neighbourhoods primarily consist of low-rise development, particularly one to two storey, single detached buildings constructed with wood, brick, or stone. The neighbourhoods are generally lowrise, with development of two-and-a-half storeys or less, and on occasion up to 3 storeys. The neighborhoods contain numerous properties with recognized cultural heritage value. These include properties within the Mill Street Heritage **Conservation District. those within** identified cultural heritage landscapes, and other heritage properties.

Multi-unit developments including townhouses currently exist within the neighbourhoods and provide a wider range of housing options for a more inclusive and diverse population within Waterdown. Well-designed townhouse and secondary dwelling units provide density and smaller unit sizes within the neighbourhoods at a scale that complements the existing neighbourhood character. Sensitively-integrated multiunit developments support access to housing for new residents moving to Waterdown and provide options for seniors to age in place without leaving the community.

The low-rise neighbourhoods surrounding the Waterdown Community Node are stable, but they are not static. Although significant change is not anticipated in the neighbourhood areas, additions, renovations or rebuilds on residential properties may occur over time. Larger institutional sites within the neighbourhoods have potential to be redeveloped over time with various forms of low density housing. If designed sensitively and appropriately for the neighbourhood context, these developments can help to make Waterdown more inclusive and diverse while maintaining the cherished community character.

It is essential that any development within the low-rise neighbourhoods maintain the prevailing low-rise form. New development should consider the design of buildings, landscapes, and relationships between buildings and the street. Development of any scale within the neighbourhoods should complement and enhance the existing character, and exhibit design characteristics that enhance the beauty, walkability, and local charm of Waterdown.



Low-Rise Neighbourhood Boundaries

--- Secondary Plan Boundary

- Community Node Boundary
- Low-Rise Neighbourhoods



View of low-rise houses in a neighbourhood adjacent to the Waterdown Community Node (Brook McIlroy).

8.1 General

The following identifies best practices in urban design that should inform future development, including renovations, additions, and new buildings within Waterdown's established low-rise neighbourhoods.

8.1.1 Compatibility, Scale & Relationships

Future development within the neighbourhoods should be complementary and compatible with prevailing design character, with attention to the scale of development and relationships to existing buildings and site design elements.

8.1.1.1 Guidelines

- a. Development within the neighbourhoods should be complementary and compatible with the prevailing design character of existing neighbourhood properties. This includes consideration of building scale, height, massing, lot coverage, roof lines, material use, garage design and placement, and landscaping.
- b. High quality, sustainable cladding materials should be used for residential development. Material use should be compatible with the neighbourhood and prevailing materials, including brick, stone, historic stucco, and wood or wood composite siding. Exterior Insulation and Finish Systems (EIFS) should not be used as a cladding material. The removal or covering of existing high quality compatible materials is discouraged.
- c. New low-density residential buildings should not feature flat roofs unless it can be shown that the design complements the existing surrounding character.
- d. New development on sites designated for low density residential uses should be low-rise in scale up to two-and-a-half storeys in height in order to be complementary to the low-rise heights of existing residential development.
- e. Development within neighbourhoods should maintain the established average street setbacks, side setbacks, and rear setbacks.
- f. Development within neighbourhoods should ensure minimal impacts to existing properties, including the provision of adequate privacy and minimal shadow impacts.

Appendix "E" to Report PED22001 Page 85 of 98



Contextually-appropriate complementary addition to a brick Victorian home (Sarah Richardson).

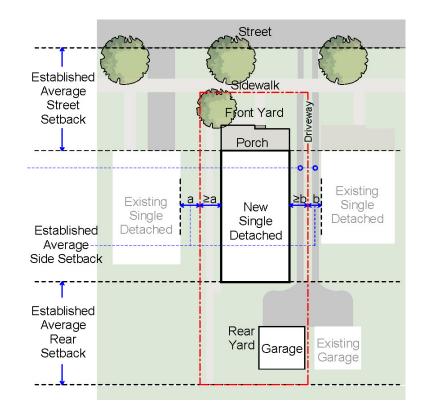
- g. Front doors and porches should be designed as prominent features along the primary house façade.
- Detached side and rear garages should be integrated into lot designs where possible.
 When attached, garages should be set back from the principal façade of the house and visually deemphasized.
- i. Detached secondary dwelling units within neighbourhoods should be compatible with adjacent uses, and should be located in the interior side yard or rear side yard.
- Garage doors and driveways should not occupy more than 50% of the linear frontage of an individual single-detached, semidetached, or duplex unit.

- k. Development within neighbourhoods should maintain and expand the existing mature tree canopy. Where tree removal is unavoidable, replacement should occur on-site with a comparable native tree in both species and size at maturity.
- I. Mature trees should not be removed to facilitate severance of a lot or lot redevelopment.

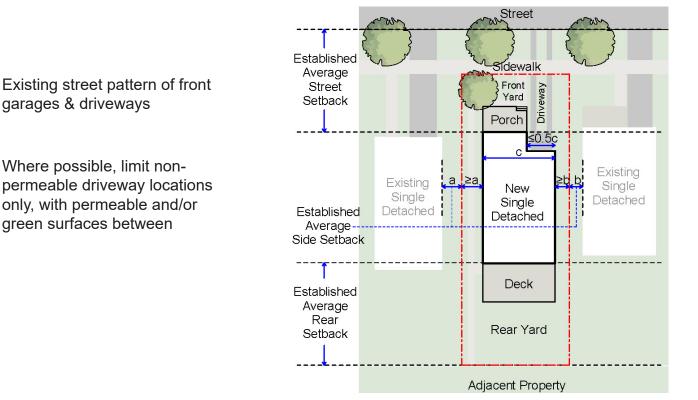
Best Practice: Rear, Front-Facing Garage

Existing street pattern of front and/ or rear garages & driveways

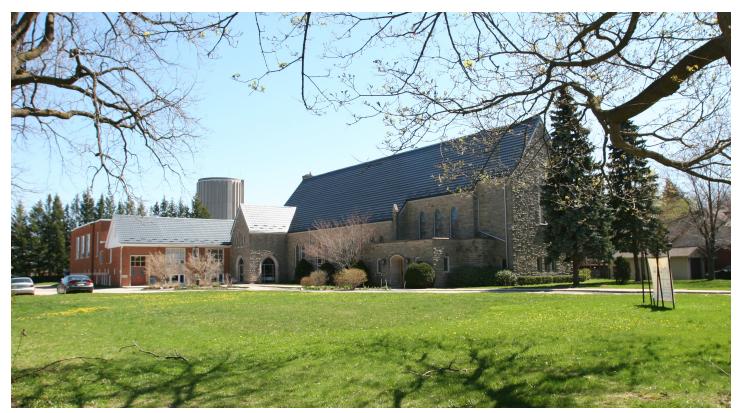
Ideally the driveway straddles two lots, but may be located on one lot if shared access is not feasible



Best Practice: Front Yard Garage



Appendix "E" to Report PED22001 Page 87 of 98



Existing large sites within Waterdown may redevelop over time. Future development of large sites should be compatible with existing residential context (Robert Clackett).

8.1.2 Large Site Intensification

Neighborhoods within the Waterdown Community Node Secondary Plan contain several large institutional sites such as churches and a school. These sites may intensify over time and should appropriately integrate into the existing context.

- All low-density residential intensification, including single-detached, semi-detached, duplex, and townhouse development on large sites should comply with guidelines established in section 8.1.1 of this document, in addition to guidelines in section 8.1.2.
- b. The form, height, and scale of new development on large sites within neighbourhoods should be compatible with existing residential context.
- c. Facade materials in new multi-unit development in neighbourhoods should integrate with the surrounding area, and be contextually-appropriate and high in quality, including brick, wood, and stone.
- d. Development on large sites within the neighbourhoods should retain and integrate existing buildings.



Existing multi-unit townhouse development along Grindstone Creek (Brook McIlroy).



Townhouse development adjacent to a restored historic brick building in Manchester, UK (Calderpeel).

Appendix "E" to Report PED22001 Page 89 of 98



Street-fronting townhouse development fronting onto a street (Rndsqr).

- e. New multi-unit development within neighbourhoods should protect privacy, sky views, and sunlight access for all users and residents.
- f. Development up to 2 storeys in height are generally permitted, and 3 storey buildings may be permitted where appropriate.
- g. Built form transitions should occur within a site and to adjacent properties. This includes changes in building height, setbacks, stepbacks, or landscaping to maintain access to sunlight, sky views, and privacy.
- h. Separation distances between all new multi-unit development and existing lowrise detached houses should be at least 15.0 metres. Where a 7.0 metre rear or side yard setback does not achieve at least a 15.0 metre building separation, the setback should be increased to achieve the minimum separation distance.

8.2 Cultural Heritage Landscapes

The residential neighbourhood areas in the Waterdown Community Node Secondary Plan contain numerous properties that are located within a cultural heritage landscape or the Mill Street Heritage Conservation District. The following design guidelines should inform the design of infill development or redevelopment within these landscapes.

8.2.1 Mill Street Heritage Conservation District

The Mill Street Heritage Conservation District (HCD) is located along Mill Street, with commercial properties at and near Dundas Street and residential properties north and south of Dundas Street. It also includes John Street, Union Street, and Griffin Street. All properties within the Mill Street Heritage Conservation District are designated under Part V of the Ontario Heritage Act.

- New development within the Mill Street HCD should adhere to the policies of the Mill Street HCD Plan.
- New development within the Mill Street HCD should retain and/or integrate existing heritage buildings.
- c. The design of development within the Mill Street HCD should sensitively conserve, manage, and protect the district's features, notably its wealth of nineteenth and early twentieth century buildings, boulevards, and street trees.

Appendix "E" to Report PED22001 Page 91 of 98



Single-detached residential houses along Mill Street North within the Mill Street Heritage Conservation District (Brook McIlroy).

8.2.2 Waterdown Heights Subdivision Cultural

Heritage Landscape

The Waterdown Heights Subdivision, located along Parkside Drive at Victoria Street, is a residential neighbourhood that is an identified cultural heritage landscape (CHL) within Waterdown. Its heritage value is related to its creation as the earliest post-Second World War subdivision in the village of Waterdown.

- a. New development within the Waterdown Heights Subdivision CHL should conserve significant built heritage resources and significant cultural heritage landscapes by protecting, maintaining, and/or stabilizing the existing heritage features and ensuring continuing or compatible uses.
- b. The design of development within the Waterdown Heights Subdivision CHL should be compatible with identified heritage attributes of the neighbourhood to reinforce its heritage character, including:
 - Scale, form, and height of new development that complements the modest scale, form, and low-rise height of existing buildings;
 - ii. Establishing setbacks and front yard open space that are compatible with existing streetscapes; and
 - iii. Maintaining the existing lot configuration of deep, back-to-back lots.

8.2.3 Dundas Street Cultural Heritage Landscape

Residential Areas

The residential portion of the Dundas Street Cultural Heritage Landscape (CHL) consists of properties fronting onto the street between the east side of Grindstone Creek and the eastern edge of First Street. This corridor contains residential uses dating from the nineteenth and early-twentieth century.

- a. New residential development within the Dundas Street CHL should conserve significant built heritage resources and significant cultural heritage landscapes by protecting, maintaining, and/or stabilizing the existing heritage features and ensuring continuing or compatible uses.
- b. The design of development within residential areas of the Dundas Street CHL should be compatible with identified heritage attributes of the neighbourhood to reinforce its heritage character, including:
- Scale, form, and height of new development that complements the modest scale, form, and low-rise height of existing buildings;
- ii. Maintaining the varied residential street setbacks;
- iii. The use of cladding materials that are complementary to existing masonry and wood-frame construction; and
- iv. The retention and integration of existing mature trees.

8.2.4 Main Street Cultural Heritage Landscape

Main Street is an evolved mid-nineteenth and twentieth-century streetscape with historic commercial, public, and residential uses. The Main Street Cultural Heritage Landscape (CHL) consists of properties fronting onto the street between its northern terminus at Parkside Drive and the south boundary near the Waterdown Pumping Station. Residential properties exist along the majority of Main Street, except where it intersects with Dundas Street.

- a. New development within the Main Street CHL should conserve significant built heritage resources and significant cultural heritage landscapes by protecting, maintaining and/or stabilizing the existing heritage features and ensuring continuing or compatible uses.
- b. The design of development within residential areas along Main Street should be compatible with identified heritage attributes of the neighbourhood to reinforce its heritage character, including:
- Scale, form, and height of new development that complements the modest scale, form, and low-rise height of existing buildings;
- ii. Maintaining the varied residential street setbacks;
- iii. The use of cladding materials that are complementary to existing masonry and wood-frame construction;
- iv. The retention and integration of existing mature trees; and
- v. Maintaining significant views of the water tower from Main Street looking north.

Appendix "E" to Report PED22001 Page 95 of 98



Low-rise residential property along Main Street North (Brook McIlroy).



View towards the area's existing water tower from Main Street (Brook McIlroy).

Appendix "E" to Report PED22001 Page 96 of 98

9.0 **Definitions**

Angular Plane: An imaginary inclined plane rising over a lot, drawn at a specific angle from the horizontal, which helps to shape the maximum bulk and height of buildings to ensure adequate access to privacy, sun, and sky views.

Compatibility: Characteristics of buildings, including scale, height, materials, and landscaping, which allow buildings to be complementary in design with the existing area.

Cultural Heritage Landscape: A defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts.

Examples may include, but are not limited to, heritage conservation districts designated under the Ontario Heritage Act; and villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, trailways and industrial complexes of cultural heritage value.

Cultural Heritage Property: A property that contains cultural heritage resources.

Cultural Heritage Resources: Structures, features, sites, and/or landscapes that, either individually or as part of a whole, are of historical, architectural, archaeological, and/or scenic value that may also represent intangible heritage, such as customs, ways-of-life, values, and activities.

Development: The creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act, R.S.O., 1990 c. P.13. This does not include activities that create or maintain infrastructure used by a public

body and authorized under an environment assessment process; or, works subject to the Drainage Act. (PPS, 2005, as amended). For the purposes of Section 8.0 of these Guidelines, the term development shall include the building of new low-density housing types, additions, and exterior renovations within the Neighbourhoods.

Façade: The exterior wall of a building that faces public view, usually referring to the front wall.

Heritage Building: A building on a property that is listed on the City of Hamilton's Municipal Heritage Register or designated under the Ontario Heritage Act.

Low-Rise Building: A building of 3 storeys in height or less.

Mid-Rise Building: A building between 4 and 6 storeys in height, and in special cases up to 8 storeys in height.

Scale: The relative size of a building as perceived by pedestrians, which is a product of multiple factors including size, height, bulk, massing, material use, and local context.

Separation Distance: The minimum distance between two buildings.

Setback: The minimum distance from the property line from which a building must be built.

Step Back: A recess at the top of a building podium, base, or upper levels that ensures an appropriate built form scale along the street edge and reduces the perception of mass in a building's upper levels.

Streetwall: The condition of enclosure along a street created by the fronts of buildings, and enhanced by the continuity and height of the lower facades. Upper levels, when set back, have less impact on the streetwall.

Appendix "E" to Report PED22001 Page 98 of 98