



Columbus Community Urban Design Guidelines

Draft

September 2, 2021

Brook McIlroy

Contents

- 1 Introduction..... 3**
 - 1.1 Study Area Overview 3
 - 1.2 Role of the Guidelines..... 4
 - 1.3 How to use this Document 4
- 2 Vision and Context 5**
 - 2.1 Study Area Vision 5
 - 2.2 Land Use and Road Plan 5
 - 2.3 Evolution of Columbus 7
 - 2.4 Urban Design Principles..... 8
 - 2.5 Character Area Approach 10
- 3 Community Design Guidelines 12**
 - 3.1 Streets and Blocks 12
 - 3.1.1 Street Network and Block Layout 13
 - 3.1.2 Arterial Roads 14
 - 3.1.3 Collector Roads 15
 - 3.1.4 Local Roads 15
 - 3.1.5 Laneways 17
 - 3.1.6 Multi-Use Trails 18
 - 3.1.7 Boulevard Design 19
 - 3.2 Parks and Open Space 21
 - 3.3 Stormwater Management Facilities 23
 - 3.4 Interface with the Columbus Special Policy Area 24
 - 3.5 Interface with Cultural Heritage Properties 25
 - 3.6 Interface with Natural Heritage System 27
- 4 Columbus Special Policy Area Guidelines..... 28**
 - 4.1 Introduction 28
 - 4.2 Site Design Guidelines 29
 - 4.2.1 Landscaped Open Space 29
 - 4.2.2 Streetscapes, Circulation, Access, and Parking 30
 - 4.3 Building Design Guidelines 32
 - 4.3.1 General..... 32
 - 4.3.2 Articulation, Façade Design & Materials..... 32

4.3.3	Heritage Compatibility.....	33
5	Neighbourhood Area Guidelines	36
5.1	Introduction.....	36
5.2	Site Design Guidelines.....	37
5.2.1	Sustainable Site Design.....	37
5.2.2	Landscaped Open Space	38
5.2.3	Amenity Areas	39
5.2.4	Grading.....	41
5.2.5	Mid-Block Connections	42
5.2.6	Parking, Access, and Circulation.....	43
5.2.7	Loading, Utilities and Waste Management.....	45
5.3	Building Design Guidelines	46
5.3.1	Massing, Scale and Transition	46
5.3.2	Ground Floor and Street Edge Design	48
5.3.3	Articulation, Façade and Materials	49
5.3.4	Residential Buildings.....	50
5.3.5	Mixed Use Buildings	55
6	Highway 407 East Area Guidelines	56
6.1	Introduction.....	56
6.2	Site Design Guidelines.....	56
6.2.1	Site Organization and Design	56
6.2.2	Parking, Access, and Circulation.....	57
6.2.3	Landscaped Open Space	60
6.3	Building Design Guidelines	62
6.3.1	General Guidelines	62
7	Definitions	65

1 Introduction

1.1 Study Area Overview

The Columbus Community Urban Design Guidelines apply to the Columbus Part II Plan Study Area, generally bounded by Howden Road to the north, the east branch of the Oshawa creek to the east, Winchester Road to the south, and the Oshawa-Whitby boundary to the west (the “Study Area”).

At present, the Study Area contains a mix of land uses. It is generally defined by large agricultural parcels and rural residential lots, built heritage resources, and natural open spaces. The heart of the Columbus community is centered at the intersection of Columbus Road and Simcoe Street North. Other key features include the existing Natural Heritage System and the community’s proximity to Highway 407.

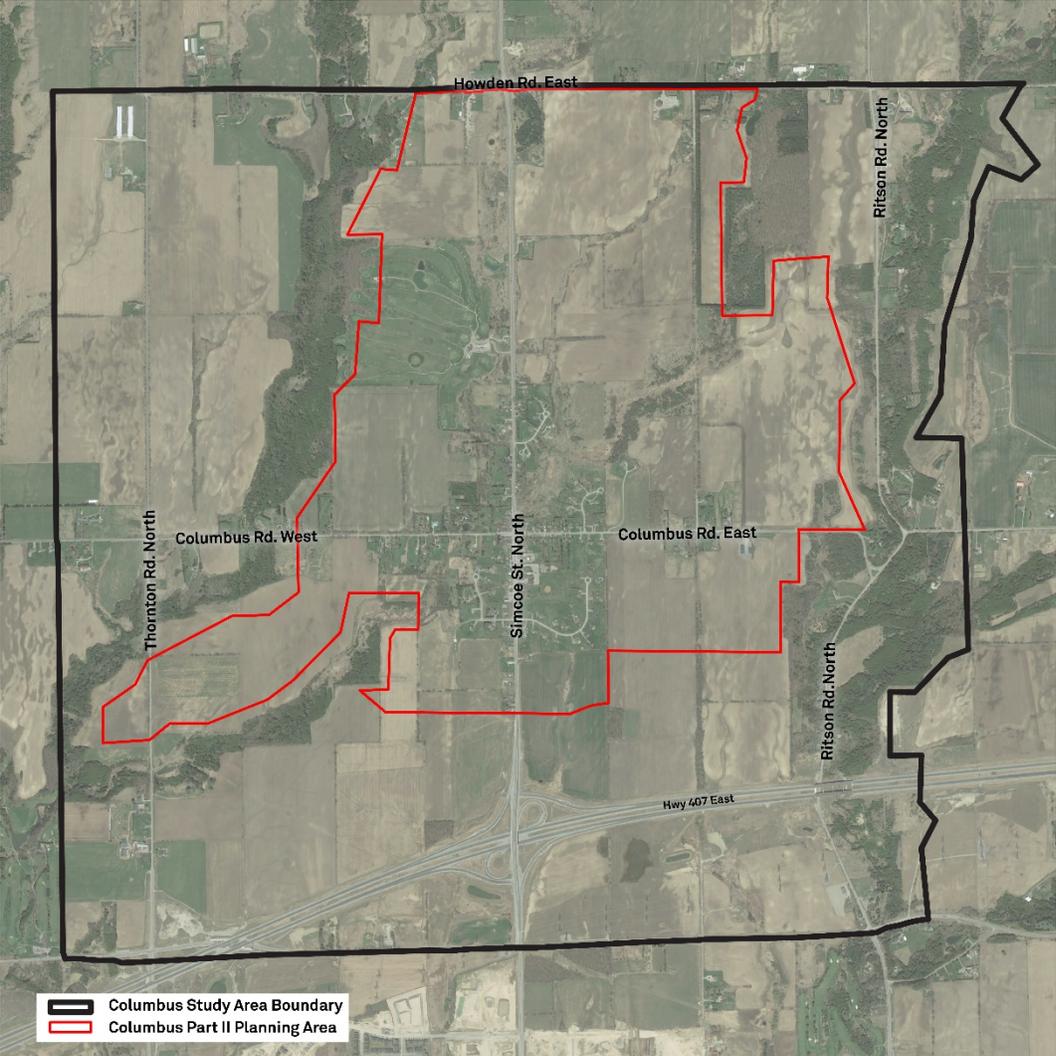


Figure 1. Map of the Study Area.

1.2 Role of the Guidelines

The Columbus Community Urban Design Guidelines (the Guidelines) provide detailed direction and design criteria for the implementation of the City’s Official Plan, and the Columbus Part II Plan’s (the “Part II Plan”) vision and related policies. The Guidelines will assist Council, City staff, landowners, developers, and the public with clear direction to guide new development in the Study Area.

Urban design guidelines are a critical tool to ensure that development in the Study Area supports a diverse and active community, while maintaining and enhancing the existing community character. The Guidelines provide direction related to best practices in community, site, and building design to ensure that new development is compatible with the existing Columbus community. The Guidelines provide specific guidance for the existing community, and its interface and transitions to new neighbourhood areas.

The Guidelines address all aspects of design and should be referenced in their entirety in the design and review of all projects. 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 Study Area, in addition to direction identified within the City of Oshawa Official Plan, the Columbus Part II Plan, and other relevant urban planning and urban design documents. They will support and inform existing, ongoing, and future work by the City including policy initiatives, design master planning processes, and street improvements.

1.3 How to use this Document

Section 1 provides an overview of the Study Area, the purpose of the Guidelines, and the structure of the document.

Section 2 of the document outlines the Study Area vision and land use concept, reviews the evolution of Columbus, provides urban design principles, and outlines the Character Area approach.

Section 3 includes community-wide guidelines that apply to the entire Study Area and should be used to inform all future public and private realm development.

Sections 4 through 6 provide design guidelines for the private realm based on the Character Areas described in Section 2.



Figure 2. Recommended process diagram.

2 Vision and Context

2.1 Study Area Vision

Columbus will be a vibrant, healthy and complete urban community that is focused on the historic four corners at the intersection of Columbus Road and Simcoe Street North and the approaches to the intersection. Future growth will be sensitive to the Community's historical context and cultural heritage, considering land use compatibility, scale of development, and urban design. The Natural Heritage System and a system of parks, open spaces and trails will provide the framework for the balanced, sustainable development of the community including interconnected neighbourhoods.

To ensure that the vision for the Study Area is achieved, a series of principles and objectives were developed to inform the land use concept and the Urban Design Guidelines. These include: creating a vibrant and complete community; designing the community for healthy and active living; establishing a connected and multi-modal mobility network; creating a balanced and livable community; and ensuring a green and resilient area.

2.2 Land Use and Road Plan

The Land Use and Road Plan below reflects the vision, principles, and objectives for the Study Area. Within the Part II Plan Area, the existing community area is recognized as the Columbus Special Policy Area, which is intended to ensure that new or future growth is limited and designed to reflect the character of the existing neighbourhood. The balance of the Part II Plan Area includes low, medium, and high-density residential uses, as well as mixed uses at planned intersections. Elementary schools and secondary schools are located in central locations within the residential areas and are often adjacent to parks. A Community Use hub is located east of the Columbus Special Policy Area, adjacent to mixed uses and medium-density uses. Planned stormwater management facilities are located throughout the Part II Plan Area and are typically adjacent to the Natural Heritage System. The Natural Heritage System runs through the Part II Plan Area, while also framing its boundaries on the north, east and west, and portions of its southern boundary.

A network of planned arterial and collector roads provide connectivity throughout the Study Area and complement the existing road network. Industrial and commercial uses are included within the Study Area, adjacent to Highway 407 East. Additionally, a Community Park is planned in the northeast quadrant of the Part II Planning Area, with a number of additional parks located throughout the Part II Planning Area. Prime Agricultural uses are located along the western edge of the Study Area.



DRAFT Preferred Land Use and Road Plan

Integrated Columbus Part II Planning Area & Municipal Class EA Study

August 2021
Development Services Department

Legend

<p>Residential</p> <ul style="list-style-type: none"> Columbus Special Policy Area Low Density Residential Medium Density I Residential Medium Density II Residential High Density I Residential Subject to Policy X.X.X.X. in the Columbus Part II Plan <p>Mixed Use</p> <ul style="list-style-type: none"> Mixed Use Node I Mixed Use Node II <p>Open Space and Recreation</p> <ul style="list-style-type: none"> Open Space and Recreation Neighbourhood Park I Neighbourhood Park II Community Park <p>Industrial</p> <ul style="list-style-type: none"> Industrial <p>Commercial</p> <ul style="list-style-type: none"> Planned Commercial Centre 	<p>Community Use</p> <ul style="list-style-type: none"> Community Use Public Elementary School Separate Elementary School Public Secondary School <p>Agricultural</p> <ul style="list-style-type: none"> Prime Agricultural <p>Proposed Columbus Expansion Area</p> <ul style="list-style-type: none"> Proposed Columbus Expansion Area outside of the Major Urban Area Boundary <p>Transportation</p> <ul style="list-style-type: none"> Type 'A' Arterial Road Type 'B' Arterial Road Type 'C' Arterial Road Collector Road <p> Stormwater Management Facilities</p> <p> Columbus Study Area Boundary</p> <p> Columbus Part II Plan Area</p> <p> Boundary of Major Urban Area</p>
---	---

0 125 250 500 750 1,000 Meters

North arrow pointing up.

Figure 3. Preferred Land Use and Road Plan.

*Please note that Figure 3 reflects the most recent version of the land use plan but is subject to approval by Council. The final document will reflect the final approved map.

2.3 Evolution of Columbus

The Study Area is in the traditional territory of the Michi Saagiig and Chippewa Nations, collectively known as the Williams Treaties First Nations. The Williams Treaties First Nations include Alderville First Nation, Beausoleil Island First Nation, Chippewas of Rama First Nation, Curve Lake First Nation, Georgina Island First Nation, Hiawatha First Nation, and Mississaugas of Scugog Island First Nation.

In 1828, the construction of Simcoe Street North was authorized by the colonial government and Euro Canadians gradually settled the area. Much of the built heritage of the Study Area dates to the 19th century and is concentrated around the intersection of Columbus Street (formerly Church Street) and Simcoe Street North.

The early community was identified as Back Station or English Corners and became known as “Columbus” around 1850 when a post office was established. Between 1850 and 1870, the population of the village expanded to 500 people, and Columbus acted as a service centre for the surrounding area, providing four inns, blacksmith and copper shops, shoe shops, flour and woolen mills, and a harness shop. The town maintained a similar size through the later nineteenth and twentieth centuries and was amalgamated with the City of Oshawa when the Region of Durham was created in 1973 (A.S.I. Columbus Cultural Heritage Assessment, April 2019).



Figure 4. 1895 atlas map of Columbus (left) and 1910 photo looking west at Columbus Road West and Simcoe Street North (Oshawa Museum).

2.4 Urban Design Principles



Figure 5. Development in the Study Area should reflect and respect the existing context (Brook McIlroy).

Development in the Study Area will be guided by the following urban design principles:

1. Respect and Embrace the Columbus Context

The design of buildings and sites should consider the existing context, giving special consideration to the rural heritage of the Columbus community. Development within the Study Area should enhance the unique attributes and character of Columbus and conserve cultural heritage resources and key natural heritage features. Site features such as rolling topography and existing hedgerows should be considered where possible through site sensitive design.

2. Protect and Enhance the Natural Heritage System

Recognize the importance of the Natural Heritage System and associated waterways, and the need to protect the air, water, and land resources for future generations. Properties abutting the Natural Heritage System should consider the sensitivity of the natural area and conserve views and access to the natural area where appropriate.



Figure 6. The Natural Heritage System should be preserved and enhanced.



Figure 7. Streets should be designed for pedestrians, cyclists, and vehicles.



Figure 8. Sustainable community and site design should be promoted in all forms of development.

3. Design for the Pedestrian Scale

Create pedestrian-scaled streetscapes including wide sidewalks, street trees, pedestrian seating and amenities, and street fronting buildings with publicly accessible at-grade uses. Ensure safe connected transportation systems for all modes of travel within the community through enhanced pedestrian and cyclist connections.

4. Encourage Sustainable Design

Promote sustainable community, site and building design, including Low Impact Development (L.I.D.) techniques, consideration for solar orientation, and measures to promote energy efficiency.

2.5 Character Area Approach

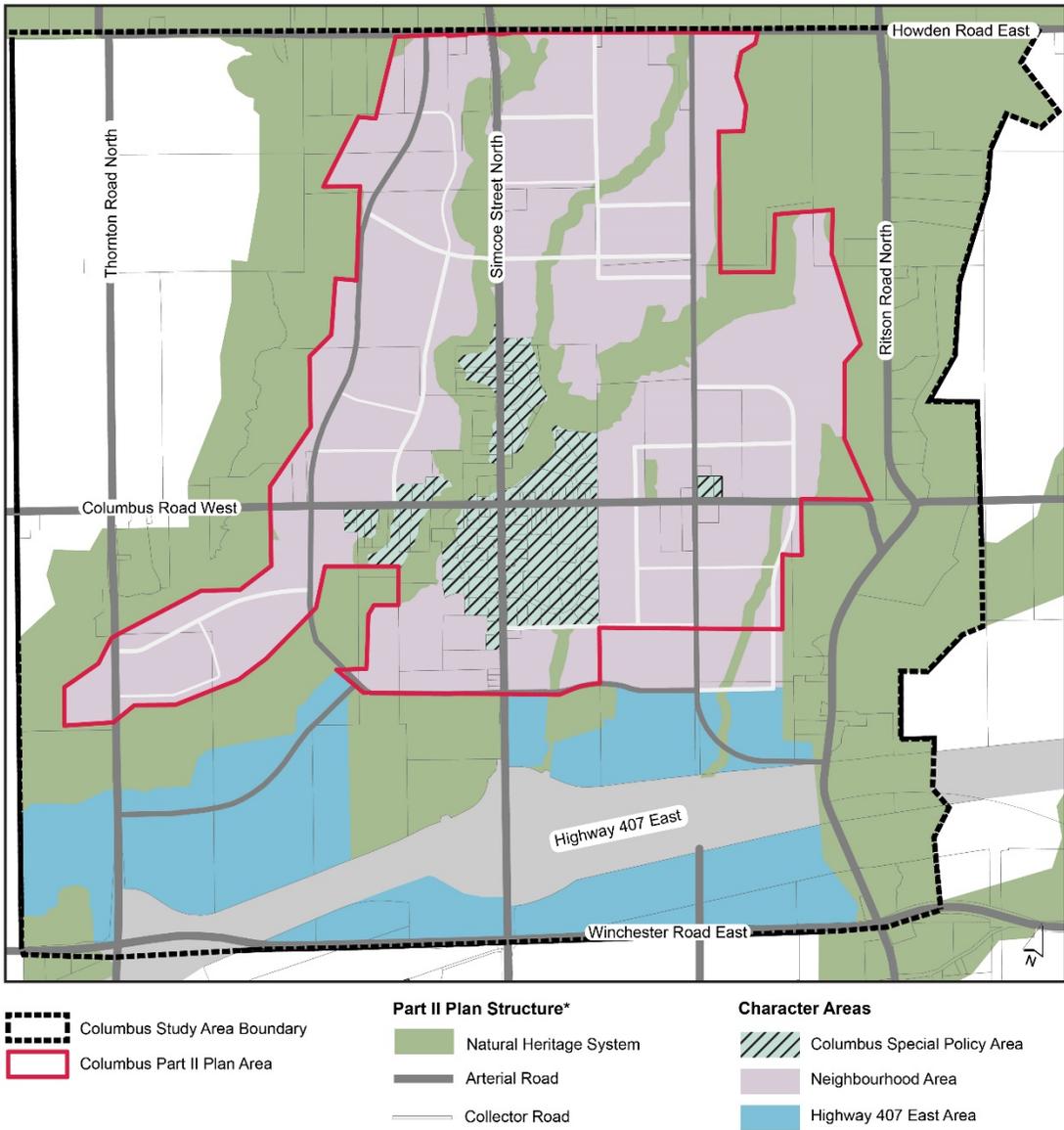
The Urban Design Guidelines are premised on the establishment of three character areas: the Columbus Special Policy Area, the surrounding Neighbourhood Area, and the Highway 407 East Area, illustrated below.

The existing community, including the historic four corners at the main intersection of Columbus Road and Simcoe Street North and the approaches along Columbus Road and Simcoe Street North leading to the main intersection, is generally recognized as the Columbus Special Policy Area.

Surrounding the Columbus Special Policy Area, the Neighbourhood Area will accommodate a range of residential and community uses, as well as two mixed use nodes serving as neighbourhood focal points. Section 3 of the Urban Design Guidelines provide community, site and building design guidance for the Neighbourhood Area.

To the south of the Part II Plan Area, the Highway 407 East Area consists predominately of industrial uses, as well as prime agricultural and open space and recreational uses.

The Columbus Special Policy Area and the surrounding Neighbourhood Area generally comprise the lands associated with the Columbus Part II Plan Area. The Highway 407 East Area does not form part of the Columbus Part II Plan Area. Accordingly, the Urban Design Guidelines contained in this document and pertaining to the Highway 407 East Area are primarily intended to address the interface between the Highway 407 East Area and the Part II Plan Area.



*Note: Detailed Natural Heritage System and Transportation Network can be found on Schedule X, Land Use and Transportation Plan

Figure 9. Character Areas Map.



Figure 10. The existing community features varying topography and a well-established tree canopy (Brook McIlroy).

3 Community Design Guidelines

Development within the Study Area should be informed by design considerations that influence the broader community, including the design of streets and blocks, parks and open space and interfaces with natural heritage, cultural heritage properties, and the Columbus Special Policy Area. The design of all sites should contribute to a vibrant built environment that is contextually appropriate and connected to Columbus’s unique sense of place.

3.1 Streets and Blocks

The design of public and private streets and blocks should provide easy access and permeability for pedestrians, cyclists, and motorists, and promote a continuous grid-like street network. New development should encourage a smaller network of blocks and streets through the use of mid-block connections, and street-oriented forms of development that create active frontages and enhance safety, vibrancy, and walkability.

3.1.1 Street Network and Block Layout

Streets serve an important functional role in the movement of pedestrians, cyclists, and vehicles through the Study Area. In addition to accommodating movement, streets should be designed to be equally important as a place for members of the community to meet and socialize. The careful design of boulevards, and inclusion of pedestrian amenities, will ensure pedestrians and vehicular traffic safely share the streets.

The street network will be developed as a modified grid of arterial, collector, and local streets that responds to the Natural Heritage System and ensures appropriate intersection spacing. The street and block network within the Neighbourhood Area will be characterized by short block lengths, which will reduce congestion, and promote active transportation, including walking, cycling and public transit.

Guidelines:

- a. To maximize connectivity, streets should be based on a grid pattern that is modified in response to natural open space, built heritage or existing street conditions.
- b. New streets adjacent to existing built areas should connect to existing streets to maximize permeability.
- c. Variation in block sizes and street layouts is recommended to encourage the development of a mix of housing forms and densities.
- d. Block lengths should not exceed 150 metres and should generally range between 100 and 150 metres.
- e. In special circumstances, where a block is longer than 150 metres, a through-block pedestrian walkway should be provided. The mid-block connections should have a minimum width of 9.0 metres, to support a 3.0-metre-wide walkway with a 3.0-metre-wide landscape strip on either side, sufficient to support healthy tree growth.
- f. Lanes are recommended in appropriate locations where low and medium density residential development featuring such housing forms as single detached, semi-detached and townhouse dwellings fronts onto arterial roads and collector roads, to eliminate the need for driveways and/or window roads, as well as provide opportunities for additional on-street parking.

3.1.2 Arterial Roads

Arterial roads are high-capacity transportation corridors that accommodate regional and local travel demands. Arterial roads should have an urban character and include a high level of design in the pedestrian realm. The development of arterial corridors includes buildings with densities that support transit, and the provision of well-landscaped, pedestrian-supportive boulevards that include wide sidewalks, street trees, consistent paving and pedestrian-scaled lighting.

Guidelines:

- a. Arterial roads should be designed to serve a variety of functions, including transit, connections between communities and neighbourhoods, and connections to other roads.
- b. Boulevards along arterial roads should range from 5.0 metres to 11.0 metres in width to provide a comfortable pedestrian realm and to accommodate future road widening needs.
- c. Arterial roads should provide high-quality pedestrian amenities including street trees, benches, and transit shelters where appropriate.
- d. Continuous sidewalks should be provided along both sides of arterial roads.
- e. Sidewalks along arterial roads should be a minimum of 1.8 metres in width to facilitate two-directional pedestrian travel.



Figure 11. Arterial roads should provide boulevards for street enhancement elements such as street trees and lighting (Brook McIlroy).

3.1.3 Collector Roads

Collector roads are medium capacity transportation corridors that connect local roads to one another and to intersecting local roads, collector roads, and arterial roads. As a result, the design requirements for collector roads should be more substantial than local roads and should include boulevards with wide sidewalks on both sides, consistent paving, and lighting.

Guidelines:

- a. Collector roads should be designed to serve a variety of functions, including active transportation, transit, connections between neighbourhoods, and connections to other roads.
- b. Boulevards along collector roads should range from 5.0 to 7.0 metres in width to provide opportunities for enhanced streetscape elements.
- c. Enhanced streetscape elements should include wide sidewalks, high-quality landscaping, street trees, benches, waste receptacles, transit shelters, and pedestrian scale lighting.
- d. Continuous sidewalks should be provided along both sides of collector roads.
- e. Sidewalks along collector roads should be a minimum of 1.8 metres in width to facilitate two-directional pedestrian travel.
- f. In multi-use areas, curb cuts and disruptions to pedestrian and cyclist movement should be minimized through the use of joint access driveways where possible.

3.1.4 Local Roads

Local roads are lower capacity transportation corridors that connect individual properties to collector roads. Reducing the paved portion of local road right-of-ways to as narrow as is practical is recommended along local roads to create a more intimate, pedestrian scaled neighbourhood setting, while maintaining boulevards having a width appropriate to accommodate street trees, sidewalks and servicing infrastructure. Local roads should be designed with a high degree of active transportation amenities.

Guidelines:

- a. Local roads should be designed to serve a variety of functions, including active transportation, transit, connections between and within neighbourhoods, and connections to other roads.
- b. Boulevards along local roads should range from 4.5 metres to 6.0 metres in width to provide opportunities for enhanced streetscape elements.
- c. Enhanced streetscape elements should include wide sidewalks, high-quality landscaping, street trees, benches, waste receptacles, and pedestrian scale lighting.
- d. Continuous sidewalks should be provided along both sides of local roads where adjacent residential development is served by laneways for driveway access, or which serve as active transportation routes identified in the City's Active Transportation Master Plan.

- e. Sidewalks along local roads should be a minimum of 1.8 metres to facilitate two-directional pedestrian travel.
- f. In multi-use areas, curb cuts and disruptions to pedestrian and cyclist movement should be minimized through the use of joint access driveways where possible.



Figure 12. Local roads should have as narrow right-of-ways as practical to slow traffic and provide space for pedestrian circulation and street trees (Brook McIlroy).

3.1.5 Laneways

Where low and medium density residential uses featuring such housing forms as single detached, semi-detached and townhouse dwellings front onto arterial roads or collector roads, vehicular access should be encouraged to be provided in appropriate locations by laneways to maintain a continuous, pedestrian supportive streetscape and augment the supply of on-street parking.

Guidelines:

- a. Where laneways provide access to residential parking facilities, the primary façade of the building should not face the laneway.
- b. Single car garages located in laneways are encouraged to attach as pairs to provide a consolidated appearance.
- c. Areas shall be set aside for snow storage. This may include providing wider lots at periodic intervals along the laneway to increase the separation distance between adjacent garages, as well as wider corner lots at the end of laneways to allow for wider exterior side yards for storage of snow pushed by snow removal vehicles out of the laneway.
- d. In cases where block lengths exceed 150 metres, an additional access point should be provided for laneways in a central location.
- e. Public laneways should provide a minimum right-of-way cross section width of 8.5 metres.
- f. To maintain adequate distance between vehicular traffic on the laneway and the rear of the garage, the separation between the detached garage and the rear lane should be a minimum of 0.5 metres, as measured from the part of the garage closest to the laneway.

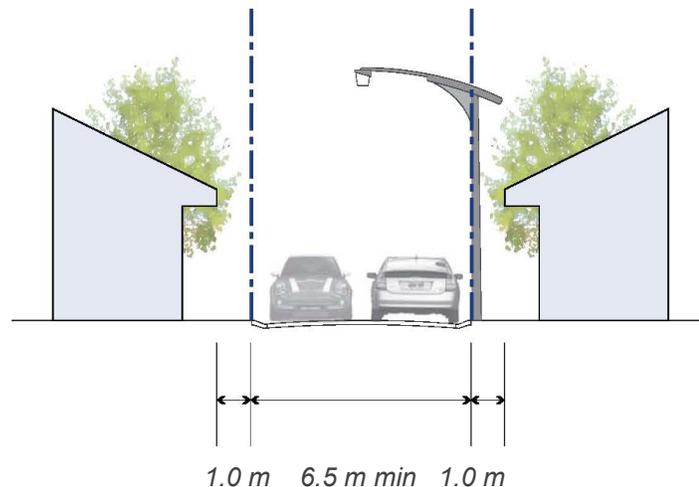


Figure 13. Laneway diagram showing suggested widths (Brook McIlroy).

3.1.6 Multi-Use Trails

Multi-use trails may be included in the Study Area to support active transportation such as walking and cycling for the Columbus community. Multi-use trails will be designed to allow people to connect with areas throughout the Study Area, as well as to the Natural Heritage System and open spaces.

Guidelines:

- a. Multi-use trails should connect to each other, and to existing trails, streets, and open spaces including those to the east and west of the Study Area to create a linked trail network that provides pedestrians and cyclists with connections and recreation opportunities.
- b. Trails should link to key activity areas such as schools, community centres, mixed use areas, and employment areas.
- c. The design of trails located in the Natural Heritage System or open space areas should reflect the function and nature of the type of open space it occupies.
- d. Generally, trails should be constructed of asphalt, unless located in areas of the Natural Heritage System deemed by the Central Lake Ontario Conservation Authority to be particularly sensitive. All trails should be designed according to site-specific conditions.
- e. Trail widths should range in width from 3.0 to 4.0-metres, depending on the type of trail, to allow for two-way cyclist or pedestrian passage depending on site specific conditions.
- f. Where applicable, multi-use trails should be designed to distinguish between walking and cycling areas to minimize conflicts.
- g. Multi-use trails should include multiple access points along the network to promote permeability into the system. The design of access points should consider that people arrive by a variety of means, including foot, bicycle, car, or transit.
- h. Where appropriate, multi-use trails should include adequate amenities, such as seating, waste receptacles, lighting, signage, route information, and educational and historic information. Amenities should be designed according to site-specific conditions.



Figure 14. A two-way multi use trail. (Philippe Hamelin Paysagiste).

3.1.7 Boulevard Design

A boulevard is generally the area of the street between the front lot line or exterior side lot line, and the outer edge of the curb. The design of the boulevard plays a significant role in the success of a street as not only a transportation route, but as a destination and an integral part of the public realm, where members of the community can meet and socialize. All streets within the Study Area should be characterized by well-designed, pedestrian-supportive boulevards with ample room for shade trees. Individual components of boulevards containing active transportation facilities such as sidewalks and multi-use trails should include:

Street Furniture and Landscape Zone: The Street Furniture and Landscape Zone should be located between the sidewalk/multi-use trail and vehicle traffic. The zone contains street trees and, where appropriate, landscaped areas with site furnishings, such as benches, bicycle rings and transit shelters.

Pedestrian Clear Zone: The Pedestrian Clear Zone is the area designated for pedestrian movement, and may feature a sidewalk or a multi-use trail. The sidewalk or multi-use trail abuts the Transition Zone. It is dedicated to the movement of pedestrians and should remain clear of obstructions, horizontally and vertically, at all times.

Transition Zone: The Transition Zone is located between the sidewalk/multi-use trail and the adjacent lot line. This zone provides for uses such as building entrances, street furniture and signage. In areas not bounded by buildings, the Transition Zone may include landscaping such as a second row of trees. Boulevards should reflect their adjacent land use.

Guidelines:

- a. The sidewalk should generally be constructed of brushed concrete to facilitate pedestrian movement and barrier free accessibility.

- b. Where sidewalks cross driveways and intersections, the Pedestrian Zone should be continuous and marked to provide visual contrast.
- c. In high use areas, feature paving bands constructed of materials other than concrete may be used. These materials should continue across driveways and signalized intersections to indicate pedestrian priority.
- d. A minimum 2.0-metre-wide Street Furniture and Landscape Zone should be provided between the curb and the sidewalk.
- e. A minimum 0.6-metre to 1.0-metre-wide transition zone buffer should be situated between the sidewalk and the private property boundary, where feasible, to provide options for locating underground services within the street right-of-way.

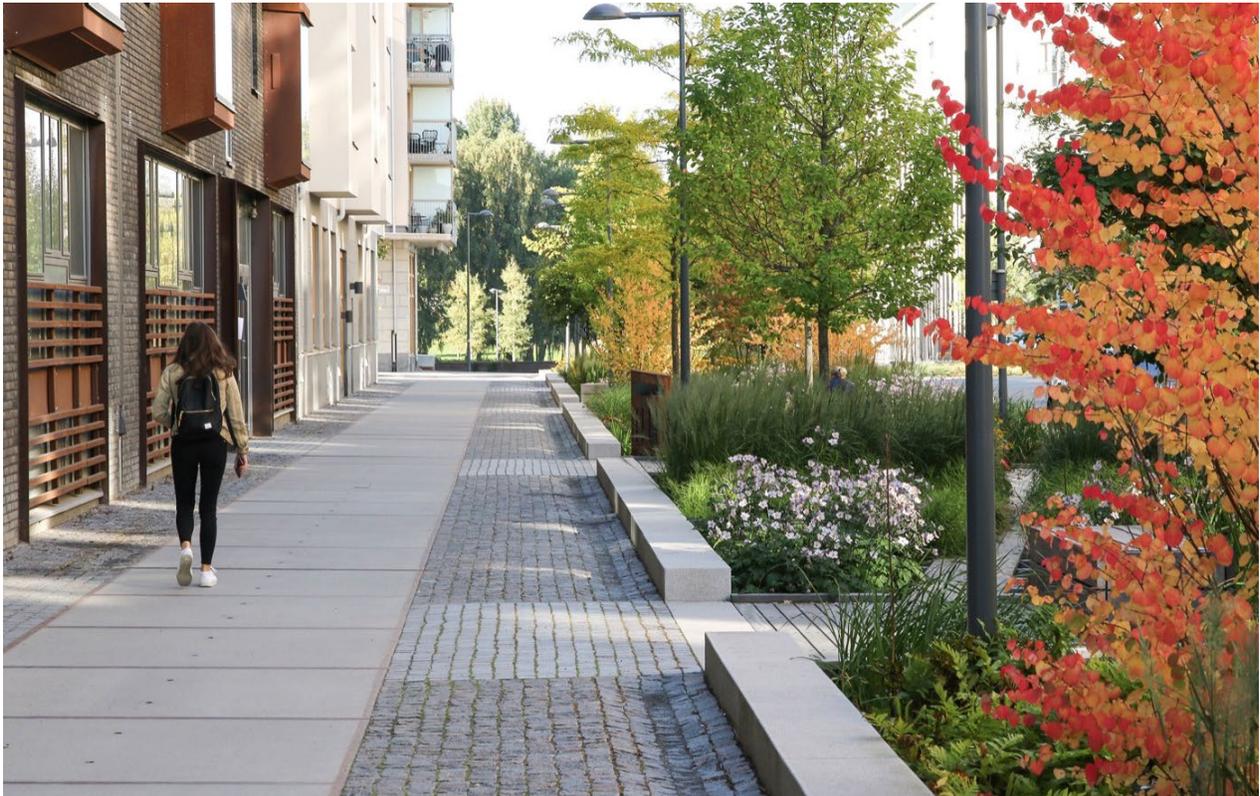


Figure 15. This boulevard features a generous street furniture and landscape zone and a well-articulated pedestrian sidewalk. (AJ Landskap).

3.2 Parks and Open Space

Parks and open spaces are important public amenities that provide access to leisure and recreation facilities and contribute positively to the health and wellbeing of residents. Parks and open spaces should be local destinations and support a wide variety of programming. In addition to the Community Park planned to be located in the northeast quadrant of the Neighbourhood Area, new parks will be introduced throughout the residential areas. Parks and open space should generally be co-located with schools and other community uses.

Development adjacent to parks and open spaces should maintain and enhance visual and physical connections between these spaces.

Guidelines:

- a. The new Community Park will become a community destination and will serve as a space for gathering and activity for people of all ages and abilities.
- b. The new Community Park will celebrate and enhance the Natural Heritage System it abuts and will pursue design opportunities to extend the Natural Heritage System into the public park through creative planting approaches.
- c. Parks in Neighbourhood Areas should generally be co-located with schools and share recreational amenities where possible.
- d. Parks and open spaces shall generally be fronted by a public street on at least two complete sides, and abut residential development on no more than one side unless the abutting residential development consists of dwelling units having frontal quality façades directly facing onto the park/open space area, in which case such development should abut on no more than two sides.
- e. High visibility and accessibility to parks and open spaces should be ensured through the siting of buildings, streets, and pedestrian connections. Mid-block connections to facilitate convenient access to park amenities and trails are encouraged.
- f. Parks and open spaces should be connected to adjacent multi-use trails, and pedestrian and cyclist connections. Safe, convenient, and well-lit bicycle parking should be provided.
- g. Contextually appropriate building and landscape transitions should occur between new development and parks and open spaces.
- h. The design and massing of development adjacent to parks and open spaces should maintain maximum sun exposure onto active park spaces including playgrounds and playing fields.
- i. Private developments should provide sidewalks abutting public parks and direct sidewalk connections to adjacent parks and open spaces. Tree planting to provide a green transition to the park is encouraged.
- j. Where new development is adjacent to a park or open space, the proposed buildings should provide an appropriate interface between the development and the park or open space.

- k. Recreational trails are to be designed with minimum slopes where feasible, the appropriate use of ramps, appropriate shade through tree planting, and rest areas and amenity spaces.
- l. Park amenities and facilities are to, wherever possible, provide opportunities for shade over play structures, adjacent viewing areas, picnic and seating areas, and along circulation routes.
- m. Park amenities and facilities, including washrooms, playgrounds, and sporting facilities, are to be designed and constructed to meet the Accessibility for Ontarians with Disabilities Act (A.O.D.A.) and to align with the City of Oshawa's Accessibility Design Standards.

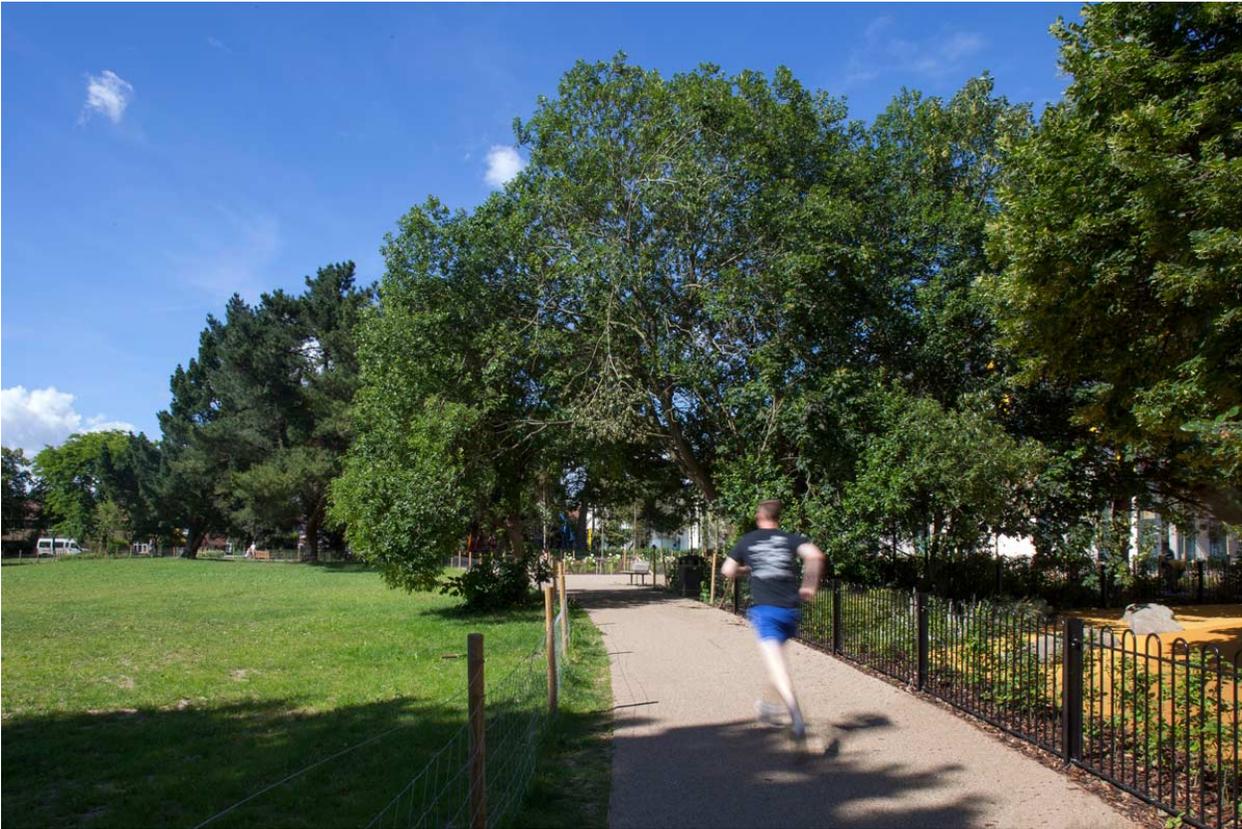


Figure 16. Parks and open spaces should serve the local community and provide spaces for people of all ages and abilities (Levitt Bernstein).

3.3 Stormwater Management Facilities

Stormwater management in Columbus will use a landscape-based approach. Stormwater flows should be managed to meet or exceed municipal and provincial objectives for water quality, water quantity, and water balance. Stormwater management facilities should be designed as integral components of the community and natural heritage system.

Guidelines:

- a. Stormwater management facilities will be sited in locations approved by City staff and as generally identified in the Columbus Land Use and Road Plan.
- b. Wherever possible, street and block patterns should enhance views and access to stormwater management facilities.
- c. Stormwater management facilities should incorporate naturalized planting featuring native and drought resistant species to manage access, improve aesthetics, and promote biodiversity.
- d. The use of grass species that require regular scheduled mowing is discouraged.
- e. The edges of stormwater management facilities abutting natural heritage features should remain naturalized, subject to providing adequate maintenance access.
- f. Stormwater management facilities should be designed in a way that limits the use of fencing to promote public surveillance opportunities.
- g. Where possible, pathways and public seating that overlook stormwater management facilities are encouraged.
- h. Educational signage should be provided near stormwater management facilities to increase awareness of urban systems and human impact.



Figure 17. Stormwater management facilities help manage stormwater while providing habitat for wildlife and amenity space for the community (Native Plant Solutions).

3.4 Interface with the Columbus Special Policy Area

The Neighbourhood Area interfaces with the Columbus Special Policy Area in select locations. Lots adjacent to the Columbus Special Policy Area will have low-density residential uses or mixed uses on Columbus Road West.

Further, new development located adjacent to the Columbus Special Policy Area should ensure the prominence and character of the existing buildings are maintained and any impacts to the Columbus Special Policy Area related to matters such as privacy, landscaping, servicing and traffic are minimized.

Guidelines:

- a. New development on Columbus Road and Simcoe Street North adjacent to the Columbus Special Policy Area should have regard for existing or planned development with respect to matters such as design, height and density.
- b. Where new development is adjacent to a lot line of an existing property in the Columbus Special Policy Area, visual screening should be provided by fencing as well as a significant open space buffer between the two properties as determined to be appropriate by the City on a site-specific basis.
- c. New development should maintain the privacy of existing properties within the Columbus Special Policy Area by avoiding overlook, and providing high-quality fencing and landscaped buffers.
- d. New development adjacent to the Columbus Special Policy Area should ensure that parking areas, accessory buildings, garages, and utilities and other activity areas are sited away from existing buildings and structures in the Columbus Special Policy Area.

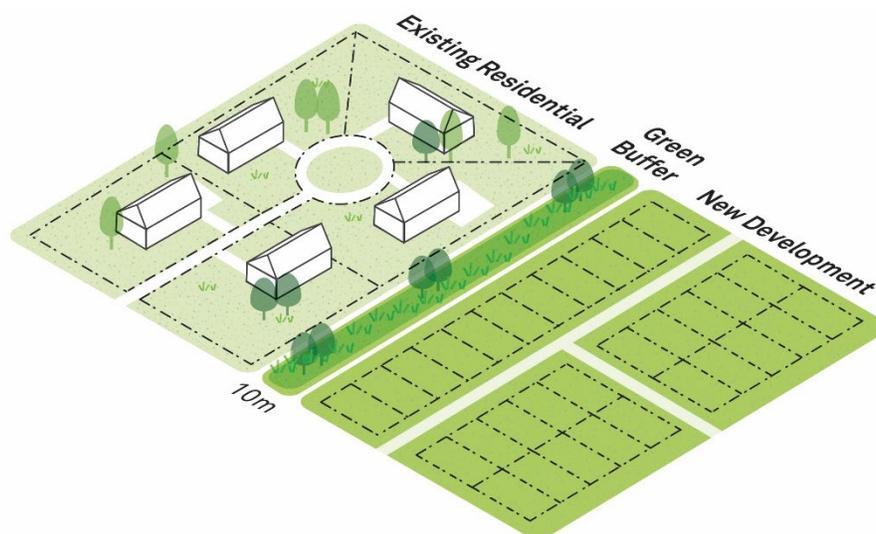


Figure 18. New development adjacent to existing residential areas incorporating a green buffer of 10.0 metres (Brook McIlroy).

3.5 Interface with Cultural Heritage Properties

Significant built heritage resources and significant cultural heritage landscapes shall be conserved consistent with the Provincial Policy Statement, 2020 (P.P.S.). Cultural heritage resources include buildings, structures, features, sites, and landscapes of historical, architectural, archaeological, and/or scenic value, and are valued elements of the community. Development and site alteration on adjacent lands to protected heritage property is not permitted except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved (P.P.S. 2.6.3).

The City of Oshawa Official Plan contains policies regarding cultural heritage resources. The Official Plan discourages the removal of cultural heritage resources, and notes that development “shall have regard for cultural heritage resources” (Policy 5.15.3). In addition, the Columbus Part II Plan also provides direction regarding the conservation of cultural heritage resources which reflects the results of the Cultural Heritage Resource Assessment Study Existing Conditions Report, 2019, prepared by ASI.

Guidelines:

- a. Where preservation of a cultural heritage resource cannot be achieved, the adaptive reuse of existing cultural heritage properties is encouraged. Adaptive reuse projects should respect and enhance identified heritage attributes.
- b. Where new development is located on lands adjacent to cultural heritage properties, particularly protected properties, development should consider compatibility of design and massing to ensure the heritage attributes will be conserved. This includes consideration for, but not limited to, the following:
 - i. The use of comparable building height and width ratio to existing heritage buildings;
 - ii. Maintaining compatible streetwall and base building height;
 - iii. Using building setbacks and stepbacks to appropriately transition new buildings to harmonize with and highlight the architectural features, horizontal datums, façade heights, setbacks, and façade rhythms of heritage buildings;
 - iv. Maintaining comparable floor to ceiling heights;
 - v. Coordination with existing datum lines and fenestration patterns;
 - vi. The use of durable, high-quality building materials that complement the texture, colour, and scale of the heritage resource, and do not mimic or approximate authentic materials;
 - vii. Maintaining the adjacent heritage property’s access to light, views, and privacy; and,
 - viii. Maintaining views of cultural heritage attributes.
- c. New development adjacent to cultural heritage resources should ensure that parking areas, accessory buildings, garages, and utilities and other activity areas are sited away from heritage buildings and structures.

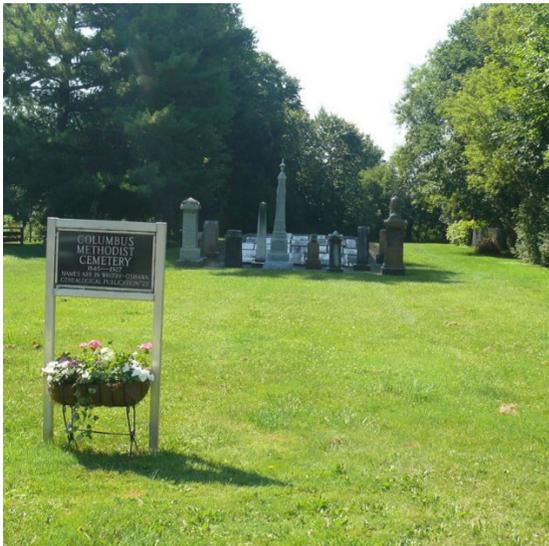


Figure 19. Cultural Heritage sites in Columbus include the Columbus United Church, the Columbus Methodist Cemetery, and the Columbus Community Centre (source: Brook McIlroy, City of Oshawa).

3.6 Interface with Natural Heritage System

Columbus' Natural Heritage System consists of an integrated system of natural heritage features that contribute to the area's beauty, rural character, and quality of life.

Columbus is home to abundant natural heritage features, including streams and creeks with riparian corridors which are part of the Natural Heritage System ("Open Space and Recreation" as identified on the Land Use and Road Plan). These natural heritage features perform functions that are necessary for ecological health and wellness, as well as providing aesthetic benefits to the community.

Development adjacent to the Natural Heritage System should protect and, where appropriate, restore these areas to maintain their ecological significance, and allow their continued use as valued resources.

Guidelines:

- a. The location and orientation of buildings, roads, active transportation facilities, and other site design elements should minimize their impact on the Natural Heritage System.
- b. New buildings should be designed to appropriately transition to the Natural Heritage System including consideration for building massing, scale, separation distances, setbacks, and stepbacks.
- c. Improving the net ecological benefit of sites adjacent to Natural Heritage System is encouraged. This includes improvements to environmentally degraded sites through tree and planting revitalization, the removal of invasive species, and the application of L.I.D. techniques including green roofs, rain gardens, rainwater harvesting, and bioswales.
- d. Landscaping on sites adjacent to the Natural Heritage System should consist of native trees and shrubs and should be drought tolerant.
- e. Locating parks and open spaces adjacent to the Natural Heritage System is encouraged.
- f. Maintaining and creating views to the Natural Heritage System is encouraged at-grade as well as at varying vantage points, through the design and siting of buildings, connections, and open spaces.
- g. Where roads are planned to be adjacent to the Natural Heritage System, a continuous minimum 10.0-metre-wide uninterrupted landscape buffer, which may include a 2.0-metre-wide publicly accessible sidewalk where appropriate, should be created.
- h. On sites adjacent to the Natural Heritage System, outdoor lighting shall be directed away from the Natural Heritage System and the use of downcast lighting is encouraged to prevent light spillover and mitigate risks to wildlife.

4 Columbus Special Policy Area Guidelines

4.1 Introduction

The Columbus Special Policy Area includes most of the existing residential and commercial development within the Part II Plan Area. It is intended to recognize the special character of this area where the former hamlet is focused. The Columbus Special Policy Area is centered around the intersection of Columbus Road and Simcoe Street North, and features a small-scale rural hamlet character. Buildings in the Columbus Special Policy Area are typically no higher than 2 to 3 storeys in height, and are mainly residential with some community and commercial uses.

Higher density development within the Part II Planning Area should be focused away from the Columbus Special Policy Area. Development in the Columbus Special Policy Area will be limited to single-detached residential infill, other than on lands which abut or are adjacent to Simcoe Street North and Columbus Road where community and limited office, retail and personal service uses may be permitted where appropriate.

Infill development within the Columbus Special Policy Area should be sensitive to its adjacent context as well as the overall character of the Columbus Special Policy Area. It is especially important that any new development respects existing cultural and natural heritage resources.



Figure 20. The Columbus Road and Simcoe Street North intersection in the Columbus Special Policy Area (Brook McIlroy).

4.2 Site Design Guidelines

Informed by site characteristics and adjacent land uses, site design should be carefully considered and well-integrated with the existing context. In addition, by establishing a relationship between buildings and the street, site organization and design should contribute to a safe, attractive, and accessible public realm.

4.2.1 Landscaped Open Space

A major contributor to the character of the Columbus Special Policy Area is the generous yards and well-established mature tree canopy. Site landscaping for any new development should be used to enhance the aesthetic quality of the site, expand the tree canopy, provide transitions between land uses, and contribute to stormwater management by incorporating soft and permeable surface.

Guidelines:

- a. Wherever possible, preserve existing mature trees in good health that are 300 mm in diameter at breast height or larger.
- b. Where it is not possible to preserve existing mature trees, trees should be replaced at a 1:1 ratio, where every 100 mm of existing tree diameter at breast height is replaced by one tree.
- c. Large growing, native shade trees should be planted along street frontages and spaced 6.0 to 8.0 metres apart.
- d. A single tree should have access to a minimum of 30.0 m³ of high-quality soil. Groups of two or more trees should have access to a minimum of 15.0 m³ high-quality soil per tree.
- e. At least 75% of the landscaped site area should be soft landscaping.
- f. The use of native plantings and trees that are salt and drought resistant are encouraged as the predominant landscaping material to reduce the risk of invasive species and to provide support for pollinators and birds.
- g. Landscaping palettes should consider four season design and provide various plantings that provide colour and texture at all times of the year.
- h. Landscaping should be used as buffers for wind, visual screening, privacy, and shade, where appropriate.
- i. Planting and hedges should not inhibit the safety or visibility of pedestrians, cyclists, or motorists.
- j. Landscape buffers should be used to provide transitions between differing land uses, and between the public and private realm.



Figure 21. The Columbus Special Policy Area has an impressive collection of mature trees that contribute to its character.

4.2.2 Streetscapes, Circulation, Access, and Parking

The intersection of Simcoe Street North and Columbus Road was developed in the 1800s with small residential or mixed use buildings located at the intersection and approach. These century buildings have moderate setbacks from the public right-of-way containing sidewalks with a green boulevard.

A number of estate-style residential developments branch off from Columbus Road and Simcoe Street North, including Northview Court, Steepleview Court, Ridge Top Court, and Brookfield Court. Characterized by their cul-de-sac form and generous setbacks from the public right-of-way, these streets typically do not feature sidewalks.

While no new streets and blocks are anticipated in the Columbus Special Policy Area, guidance on access, circulation, and parking are important to ensure that any future development in the Columbus Special Policy Area is in keeping with its existing character.

General Guidelines:

- a. New development should acknowledge and incorporate existing and historical patterns of built form and streetscape design.
- b. Buildings should be located to face streets and connections to create an animated streetscape.
- c. Provide safe, direct, and accessible pedestrian routes that connect buildings to any existing off-site active transportation networks and priority destinations.
- d. Where appropriate extend or create new active transportation routes, or provide access to existing routes.

- e. New driveways should generally be a maximum of 7.0 metres to minimize interruption to the pedestrian realm.
- f. Front driveways should have a minimum depth of 6.0 metres to ensure that parked vehicles do not impact adjacent sidewalks.
- g. To ensure that garages do not dominate the streetscape and to promote “eyes on the street”, integrated front garages should be no wider than 50% of the width of the unit frontage.

Guidelines for Simcoe Street North and Columbus Road:

- a. The design of streetscapes should reinforce the role and function of the street, and support efficient and accessible travel by pedestrians, cyclists and motorists.
- b. Surface parking areas should generally be located at the rear or side of buildings and within the required setback. Surface parking areas shall not be permitted immediately adjacent to the corners of an intersection.
- c. Side yard parking should generally not exceed more than 30% of the street line, to ensure that surface parking does not dominate the street.
- d. Shared driveways are encouraged to reduce access points and conflicts with pedestrians. Opportunities to consolidate driveway access points should be investigated and all curb cuts should be kept at a minimum size.
- e. New driveways should generally be a maximum width of 7.0 metres.
- f. Loading and servicing areas should be functional and easily accessible while also not becoming a primary visual element.
- g. Loading bays, waste service areas and building utilities/ mechanical equipment should be located within a building where feasible. If permitted outside a building, they should be located at the side or rear of buildings, and screened from view.



Figure 22. Simcoe Street North and Columbus Road (left) include sidewalks, while most cul-de-sac streets (right) do not (Brook McIlroy).

4.3 Building Design Guidelines

New buildings within the Columbus Special Policy Area will be limited to single-detached residential infill, other than on lands which abut or are adjacent to Simcoe Street North or Columbus Road where community and limited office, retail and personal service uses may be permitted where appropriate. Additional changes to buildings in the Columbus Special Policy Area may include renovations or additions to existing buildings. The following building design guidelines apply to all instances of development within the Columbus Special Policy Area.

It is important that changes to the built fabric in the Columbus Special Policy Area maintain the established character of the existing community.

4.3.1 General

Guidelines

- a. The bulk, scale, and shape of buildings within the Columbus Special Policy Area should be compatible with adjacent buildings and land uses.
- b. Contextually appropriate transitions in building massing and scale should occur between new development and existing sensitive uses, including low-rise residential areas, natural and cultural heritage resources, parks, and open spaces.
- c. New buildings within the Columbus Special Policy Area should be set back from the front yard line at a distance similar to the adjacent neighbouring buildings to create a cohesive streetwall.
- d. The ground floor uses of buildings should contribute to a pedestrian-scaled environment. This may include the integration of canopies, overhangs, transparent windows, building entrances, pedestrian-scaled building signage, and seating areas.
- e. 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”.
- f. For buildings along Simcoe Street North and Columbus Road, opportunities for seating and landscaping features are encouraged between the building edge and the adjacent public street.
- g. Buildings located on corner sites should treat both façades with a comparable level of design and should provide articulation to the street edge.
- h. The creation of false upper building storeys is strongly discouraged.

4.3.2 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.

Guidelines

- a. New development should be complementary and compatible with the existing built form character in the Columbus Special Policy Area through façade design, material use, and building articulation.
- b. High-quality authentic building materials should be used for buildings within the Columbus Special Policy Area. Materials should be compatible with the existing predominant building materials, including brick, stone, and wood. Materials that mimic or approximate authentic materials, such as aluminum panels with wood prints, or manufactured stone veneer products, are strongly discouraged.
- c. 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 rights-of-way should feature the highest quality of architectural design and materials.
- 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. The intentional dividing of façades through stylistic and/or material changes in order to convey a false impression of individual buildings across a single building's length is strongly discouraged.

4.3.3 Heritage Compatibility

The Columbus Special Policy Area contains numerous properties exhibiting cultural heritage value. New construction in the Columbus Special Policy Area should be visually compatible with, and distinguishable from historic buildings and properties to allow heritage resources to be readily recognizable. The following guidelines are applicable unless a Heritage Conservation District and related Plan are approved by the City, in which case such a Plan shall take precedence.

Guidelines:

- a. The retention and integration of existing heritage resources is strongly recommended within the Columbus Special Policy Area.
- b. Site layouts for new development should acknowledge the scale and siting of existing heritage resources, 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 built heritage resources should occur where redevelopment of an identified heritage property is proposed. Where new development is proposed adjacent to, or attached to a built heritage resource, conservation of both the exterior and interior of the existing building(s) is strongly encouraged.

- d. Façade design should complement, but not mimic, historical architectural styles and should reflect contemporary design that blends harmoniously with existing built heritage resources and streetscapes. Contemporary additions to existing built heritage resources should maintain the prominence of the original construction.
- e. Contemporary development adjacent to, and in the vicinity of built heritage resources should be readily distinguishable from, and complementary in design to identified cultural heritage resources.
- f. Infill buildings should respect massing, heights, fenestration, use of traditional materials, and colours and roofing patterns to successfully blend into Columbus's existing heritage fabric.
- g. Streetwall height should be maintained and recognized by responding to existing cornice lines or parapets.
- h. 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.
- i. Where infilling occurs between buildings with varying ground-floor heights, the taller height should set the datum line for the new building.
- j. New buildings should respond to the heights and proportions in the first storey of adjacent heritage buildings, such as:
 - a. Window proportions; and,
 - b. Door proportions including size, height and setback.
- k. Infill buildings that are wider than 15.0 metres should apply vertical articulation to break the mass up into smaller, finer-grained components, to ensure compatible integration and continuation of the established streetscape rhythm.
- l. Front entrances to infill buildings should follow the pattern of the entrances of adjacent built heritage resources.
- m. Where infilling between built heritage resources of different setbacks occurs, the new development should provide an appropriate transition to reconcile the difference in setbacks.
- n. Views of cultural heritage resources should be maintained where possible.
- o. The historical means of access to heritage resources, including driveways, paths, and doorways, should continue to be used where possible. Where new entrances to a building are installed, these entrances should be placed in secondary elevations located at the side or rear yard.

Additions to Built Heritage Resources:

- a. Additions should be subordinate to the primary built heritage resource and of high-quality materials.
- b. Additions should be set back from the existing front wall plane in order to be unobtrusive in the streetscape and differentiated from the existing structure.
- c. Existing additions that are not recognized as heritage attributes may be replaced with new additions.
- d. New additions should be designed in a manner that distinguishes between old and new, and that avoids duplicating the exact style of the existing built heritage resource or imitating a particular heritage style or period of architecture. This does not preclude the imaginative interpretation of historically-derived styles.

- e. Contemporary design for additions is appropriate when such additions do not destroy significant architectural, historical, or cultural material and when the design is compatible with mass, ratio of solid to voids, colour, material, and character of the property, neighbourhood, or environment.
- f. Exterior additions, including garages, porches, and balconies, are encouraged to be located at the rear of the building, limited in size and scale to complement the existing building and neighbouring properties.
- g. Parking areas and accessory buildings should be set at the side or rear of built heritage resources.



Figure 23. Additions to cultural heritage resources should be complementary to and distinct from the heritage building (Historic home in Caledon with addition by Harry Morison Lay Architect).

5 Neighbourhood Area Guidelines

5.1 Introduction

The Neighbourhood Area includes areas that are expected to develop as an extension of the existing community.

The Neighbourhood Area will accommodate a series of residential neighbourhoods with mixed-use nodes to create a complete community. Parks and schools will be important community anchors, while stormwater management facilities will generally be located near the Natural Heritage System. Simcoe Street North and Columbus Road outside of the Columbus Special Policy Area will be the primary focus for new development, and new arterial and collector roads will be carefully sited to contribute to the creation of a complete community.



Figure 24. The Neighbourhood Area will feature low and medium density residential uses, with a small number of high-density uses.

5.2 Site Design Guidelines

Site design considers the design and location of elements on a site individually and as a whole, including buildings, landscaping and open spaces, streets, vehicular and pedestrian connections, parking, site circulation, and servicing areas. Site design should promote multi-modal access and high-quality building and landscape design that complement the current and emerging context.

Relationships between new streets, buildings and sites will embrace the vision for the Study Area and contribute to a sense of place that respects and celebrates the current and emerging context of Columbus.



Figure 25. Site design should consider the relationships between new streets, buildings, and sites.

5.2.1 Sustainable Site Design

As the Neighbourhood Area evolves, sustainability should inform all elements of site design. Care should be taken to minimize the ecological footprint of each site while working to minimize greenhouse gas emissions that affect air quality, and to combat climate change. Site design, including landscape design, will help to transform the Neighbourhood Area into a beautiful and sustainable place to live, work, and visit.

Guidelines:

- a. Site and building design should contribute to energy efficiency, improved air quality, and reduced water consumption, in alignment with Official Plan Policy 2.3.4.2.
- b. Site design should prioritize and promote alternative modes of transportation including walking, cycling and public transit. Safe and accessible connections, including walkways and bike paths, are required at the City's discretion, in alignment with Official Plan Policy 2.3.4.3.

- c. Building location and orientation should ensure optimal exposure to natural light and consider microclimate effects.
- d. L.I.D. measures should be incorporated as part of site landscaping.
- e. The use of green roofs and white roofs is encouraged to mitigate the urban heat-island effect, increase areas of vegetation, and reduce energy consumption. Such roofs are particularly encouraged for high-density residential and mixed-use buildings.
- f. Landscape design should contribute to stormwater management on site to minimize the use of the external stormwater drainage system. Design measures include the integration of bioswales, rain gardens, retention ponds and rainwater collection tanks.
- g. Opportunities for water re-use, such as rainwater harvesting should be considered where feasible.
- h. Paved areas such as streets, driveways and surface parking should be reduced to minimize the volume of runoff flowing into the storm drainage system and to maximize landscaped surfaces. Where appropriate, permeable pavers or other similar materials should be integrated into site design to replace asphalt or impermeable concrete.
- i. Impervious areas and snow storage areas should be graded to drain towards semi-permeable and permeable surfaces.
- j. Bioretention areas should be incorporated into the edges of walkways, parking lots and other paved areas to minimize the dependency on the external stormwater drainage system. They should also be located to capture runoff from building roofs.
- k. Bioretention areas should contain native grasses and other plants that can thrive in a wet environment. Salt tolerant species should also be selected when planted near paved surfaces. Snow storage areas should be located in areas with access to sunlight in winter and soft landscaping to assist in spring drainage.



Figure 26. Rain gardens are bioretention areas that help manage stormwater (Climate Connections).

5.2.2 Landscaped Open Space

Landscaped open spaces may include a range of hard and soft landscaping treatments that create visual interest and provide a sense of enclosure at the street level. Landscaped open space should be designed with a diversity of colours, textures and plant materials and provide a comfortable environment for pedestrians.

Guidelines:

- a. Approximately 30% of each total residential lot area should be soft landscaped area.
- b. Wherever possible, preserve existing mature trees in good health that are 300 mm in diameter at breast height or larger.
- c. Where it is not possible to preserve existing mature trees, trees should be replaced at a 1:1 ratio, where every 100 mm of existing tree diameter at breast height is replaced by one tree.
- d. Large growing shade trees should be planted along street frontages and generally spaced 6.0 to 8.0 meters apart.
- e. A single tree should have access to a minimum of 30.0 m³ of high-quality soil. Groups of two or more trees should have access to a minimum of 15.0 m³ high-quality soil per tree.
- f. The use of native plantings and trees that are salt and drought resistant are encouraged as the predominant landscaping material to reduce the risk of invasive species and to provide support for pollinators and birds.
- g. Landscaping palettes should consider four season design and provide various plantings that provide colour and texture at all times of the year.
- h. Landscaping should be used as buffers for wind, visual screening, privacy, and shade, where appropriate.
- i. Planting and hedges should not inhibit the safety or visibility of pedestrians, cyclists, or motorists.
- j. Landscape buffers should be used to provide transitions between differing land uses, and between the public and private realm.
- k. Particular attention should be given to the planting density, quality and variety at main building façades on public street frontages and in landscape buffers.
- l. Landscaping treatments should contribute towards stormwater management.
- m. Where landscaped open space is located above an underground parking structure, adequate soil volumes will be provided to ensure healthy tree growth.
- n. Inclusive, barrier free designed community gardens are encouraged.

5.2.3 Amenity Areas

Amenity areas are an important site design consideration for medium-density and high-density residential areas. Amenity areas should not be 'left over' space following the design of buildings, but instead should be planned purposefully and with due consideration to microclimate and access to sunlight. The location, size and design of amenity areas should be appropriate given the building type, unit mix, and adjacent land uses and amenities. Amenity areas should provide comfortable, universally inclusive, and safe spaces for residents with a range of active and passive programming.

Guidelines:

- a. If a development has more than 20 units, a children's play area should generally be provided unless there is a park or other public amenity area within walking distance to the development.

- b. Amenity areas should include multiple functions or activities that encourage meeting, gathering or play (i.e. play area, seating, community garden, shade structure, barbecues, water features, etc.).
- c. Complementary common elements should be co-located where possible. For example, locating common mailboxes or bicycle parking near amenity areas.
- d. Amenity areas may include structures that directly support the amenity space uses, such as storage sheds or shade structures. However, other accessory buildings or structures, mechanical equipment or above-ground utility boxes should not interrupt the amenity areas.
- e. Amenity areas should be directly connected to a local street, a park, natural heritage or open space. They should not be isolated by parking.
- f. Amenity areas should be located away from building servicing, parking and loading functions. If this is not possible, servicing areas should be heavily screened with a landscaped buffer and a fence.
- g. Where amenity areas have direct visual connection with the interior of the building, these building spaces should preferably be interior amenity space or shared common areas.
- h. Microclimate effects should be considered through the orientation, location, and landscaping of amenity areas and provide a balance of sun, shade and protection from wind.
- i. Site lighting should be incorporated, though such lighting should ensure that it does not trespass into individual units or encourage use beyond acceptable daytime hours.
- j. All outdoor at grade amenity areas should have barrier free connections to the building and public right-of-way and host site furnishings that meet A.O.D.A. standards and the City of Oshawa Accessibility Design Standards.
- k. The location and orientation of amenity areas should be designed to reduce the noise level due to transportation and other noise sources.
- l. Rooftop amenity areas are permitted in high-density residential buildings. Consider location and placement to ensure compatibility with adjacent properties. Rooftop amenity areas should have a minimum setback of 2.0 metres from the roof edge.



Figure 27. Amenity areas should provide play areas and places for gathering (Architektūros Linija).

5.2.4 Grading

Site grading affects the physical accessibility of a site, its ability to effectively contribute to stormwater management, and its aesthetic quality. Site grading should be carefully executed to ensure that the development is compatible with its context. Columbus' natural topography should be maintained to the extent possible.

Guidelines:

- a. New development should use the existing site grading to the greatest extent possible to inform building, site, and parking design.
- b. Site grading should manage stormwater and groundwater to maintain pre-development flows.
- c. Existing drainage courses and storm sewers on site should be intercepted and incorporated into the new design.
- d. Stormwater design should manage flow on-site to ensure that water will not discharge to the surrounding streets, adjacent properties, or existing storm sewers. This can be accomplished using bioswales, rain gardens, retention ponds, permeable surfaces, and other sustainable landscape features.
- e. The grading of parking lots and driveways should allow for safe vehicular movements.
- f. Where retaining walls are required, a landscape design should reduce the overall impact of the wall.

- g. Retaining walls can be designed as signage or landscape features within the site.
- h. The site should be graded to ensure that pedestrian site circulation conforms to A.O.D.A. standards, and the City of Oshawa Accessibility Design Standards.



Figure 28. Site design should embrace the existing rolling topography where feasible (Brook McIlroy).

5.2.5 Mid-Block Connections

To ensure that the Neighbourhood Area grows as a walkable and active community, mid-block connections are encouraged where appropriate. Mid-block connections are to be created within sites to support connected and comfortable pedestrian mobility.

Guidelines:

- a. Preferred locations for mid-block connections will be identified in consultation with the City.
- b. To allow for a minimum 3.0-metre-wide pedestrian walkway and 3.0-metre-wide landscape strips on both sides, mid-block connections should have a minimum width of 9.0 metres (or as required by the Ontario Building Code).
- c. Mid-block connections should feature hard and soft landscaping, with a mix of low plantings and trees where possible, to ensure visibility and to create a clear transition between public and private spaces.
- d. Mid-block connections should connect sites with public right-of-ways.
- e. Mid-block connections should include lighting features, seating and signage, where appropriate, to promote pedestrian safety and comfort.



Figure 29. Mid-block connections improve pedestrian access to sites (Brook McIlroy).

5.2.6 Parking, Access, and Circulation

Parking, access, and circulation are important site components. Site organization should create efficient circulation for pedestrians, vehicles, and cyclists, and appropriate transitions between the public and private realm. Parking should not dominate the visible edges of a site and should minimally interrupt the public realm. Bicycle parking should be accommodated in a safe and secure area.

Guidelines:

- a. Parking, access, and circulation design should conform to the City of Oshawa Accessibility Design Standards.
- b. Surface parking areas should generally be located at the rear or side of buildings and within the required setback. Surface parking areas should be located away from street corners to minimize safety risks.
- c. Side yard parking should generally not exceed more than 40% of the street line, to ensure that surface parking does not dominate the street.
- d. Shared driveways are encouraged to reduce access points and reduce conflicts with pedestrians. Opportunities to consolidate driveway access points should be investigated and all curb cuts should be kept at a minimum size.

- e. Front driveways for low and medium density residential development should have a minimum depth of 6.0 metres to ensure that parked vehicles do not impact adjacent sidewalks:
 - i. Individual front driveways should have a maximum width of 3.0 metres; and,
 - ii. Shared front driveways should have a maximum width of 7.0 metres.
- f. Where driveways wider than 3.0 metres are desired for individual residential buildings, they are encouraged to be located at the rear side of the building, and accessed from a laneway.
- g. Underground or structured parking is encouraged for high-density buildings to reduce or eliminate the need for surface parking. Where parking cannot be located underground due to water table or other constraints and surface parking is required, parking should be located in rear or side yards set back from the street and screened by building placement and/or extensive landscaping features.
- h. Where underground or structured parking is not feasible in medium and high-density residential development blocks, parking is encouraged to be accommodated at the rear of the buildings.
- i. Surface parking areas for medium or high-density residential uses or non-residential uses adjacent to residential uses should be separated by a landscaped buffer strip incorporating combinations of landscaping and/or decorative fencing or walls.
- j. Where larger surface parking areas are required, they should be divided into smaller and defined sections through the use of appropriately-sized landscape strips, islands and/or pedestrian walkways to minimize their visual and stormwater impacts.
- k. Articulated, safe, accessible and integrated dedicated pedestrian walkways should be incorporated through surface parking areas through differentiated and permeable paving materials and landscaping, and should be a minimum of 1.8 metres wide.
- l. Front yard paths should provide direct access to each ground related unit from the sidewalk.



Figure 30. Landscape buffering can improve larger surface parking areas (Stormwater Coalition of Tompkins County).

Bicycle Parking Guidelines:

- a. Bicycle parking for high-density residential and non-residential development should be provided in a convenient location. Visitor bicycle parking spaces should be located in visible and accessible locations: at grade and near building entrances and pedestrian walkways.
- b. Provide permanent bicycle storage on site for high-density residential and office or other similar development that is protected from the weather and is secure. Sheltered bicycle parking should be integrated into built form.
- c. The location of bicycle racks should not impede pedestrian movement, accessibility or snow clearing.

5.2.7 Loading, Utilities and Waste Management

Loading, utilities, and waste management are necessary functions for any site. Through design, these functions can have a minimal impact on the experience of a site for pedestrians and other visitors.

Guidelines:

- a. Loading and servicing areas should be functional and easily accessible while also not becoming a primary visual element.
- b. Service areas should generally be separated from pedestrian amenity areas, open spaces, and walkways.
- c. To reduce noise impacts, loading bays, waste service areas, building utilities, and mechanical equipment should be located within a building. If this is not possible, the areas should be screened from public view with a landscape buffer. These areas should not be located immediately adjacent to an intersection.
- d. When occupied, loading areas should not impede on-site vehicular, pedestrian and cyclist circulation.
- e. The placement of utilities and waste management areas should be coordinated with servicing, parking, loading and trees.
- f. Utilities such as gas meters and hydro should be co-located and screened from view from both the public realm and amenity areas. The appearance of utilities should be minimized from public frontages, but should be accessible for servicing.
- g. Utility meters should be placed on the side of buildings, out of view from the street level to avoid front-facility utility meters. Meters recessed into exterior walls are encouraged.
- h. Waste management requirements should be considered early in the site design process.
- i. Site design should include adequate space for waste vehicles and containers, including set out locations. Waste management locations should not block sidewalks, fire routes, or accessible parking.

5.3 Building Design Guidelines

The design of individual buildings can shape the look and feel of the Neighbourhood Area in Columbus and contribute to the local character and community life. New buildings constructed in Columbus should be traditional in expression and complementary to adjacent land uses and building forms. Appropriate massing, scale, transitions, façade design, and material use should be prioritized.

To respect the natural and cultural heritage of Columbus, building designs should prioritize sustainability, visual beauty, and universal accessibility. Buildings should create spaces that are conducive to interaction between residents, and supportive of community resilience and vitality.

5.3.1 Massing, Scale and Transition

Consideration of the scale and shape of buildings is important to ensure compatibility with adjacent buildings and land uses, and to reinforce the special character of Columbus.

Well-designed buildings should frame streets with a pedestrian-scaled primary front wall, and ensure appropriate access to sunlight, views, and privacy. As the portion of

the building that influences the pedestrian experience most directly, the primary streetwall should create a pedestrian-scaled experience that relies on high-quality materials that complement the special character of the Columbus Special Policy Area.

Guidelines:

- a. The massing and scale of new buildings should be compatible with adjacent existing buildings and land uses and contribute to a comfortable pedestrian experience on streets, and within parks, schools, and open space.
- b. Though buildings are encouraged to be compatible with adjacent existing buildings, they should not replicate the design of adjacent buildings.
- c. Buildings should appropriately transition to adjacent uses to ensure access to sunlight, views, and privacy. This can be accomplished using landscape buffers and design tools including separation distances, setbacks, and stepbacks.
- d. Buildings should transition in height to existing and planned buildings of different heights both within sites and on adjacent sites.
- e. Contextually appropriate transitions in building massing and scale should occur between new development and existing uses, such as low-rise residential areas, natural and cultural heritage resources, parks, and open spaces.
- f. The creation of false upper building storeys is strongly discouraged.
- g. Buildings should utilize the existing natural grade of a site, where possible.
- h. Buildings, including townhouse blocks, should generally be no longer than 50.0 metres, to minimize the impact of massing on the public realm, and to ensure a porous and walkable built form with access to sunlight and views.



Figure 31. Compatible buildings can be achieved using similar, but distinct, materials and architectural elements (Peak Builders).

5.3.2 Ground Floor and Street Edge Design

The design of the ground floor of buildings and their relationship to the street edge impacts the pedestrian realm and how pedestrians perceive the scale of the building along the street. Ground floor and street edge design signals a transition between the private and public realm. The ground floor design of buildings should be pedestrian-scaled and contribute to a comfortable and attractive public realm.

Guidelines:

- a. Residential and mixed-use buildings should present an active front façade toward adjacent streets, parks, and open spaces. This may be achieved through transparent glazing, primary pedestrian entrances, and direct at-grade user entrances from the adjacent sidewalk.
- b. The principal entrances of buildings should be oriented toward the street for both shared and individual residential entrances.
- c. Where an established consistent desirable setback exists, the front setback of new buildings should generally align with the prevailing setback of existing buildings.
- d. Buildings located on corner sites should treat both façades with a comparable level of design and should provide articulation to the street edge. Opportunities for seating and landscaping features are encouraged in the setback between the building edge and the adjacent public street, where applicable to assist in creating a high-quality public realm.
- e. The siting of rear façades (backlotting) against adjacent streets, parks, and open spaces should be avoided.
- f. A minimum first storey height of 4.5 metres is encouraged for all new buildings where non-residential uses are permitted at grade to allow for flexibility of use over time.
- g. Access to all publicly accessible entrances should be provided at the established grade of the adjacent sidewalk and street. Where a minor grade differential exists between the sidewalk and the access doorway, grading should reflect the City of Oshawa Accessibility Design Standards.



Figure 32. Buildings on corner sites should address each street edge with comparable architectural design (Brook McIlroy).

5.3.3 Articulation, Façade and Materials

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

Guidelines:

- a. A consistent application of building materials and design elements should be used for a singular building. The use of a variety of architectural styles and materials for a singular building is discouraged.
- b. Building materials should be complementary to the character of the area in which a building is located.
- c. High-quality façade materials are encouraged to promote visual diversity in texture and colour, reduce maintenance, and extend the façade’s useful life.
- d. The use of building materials such as wood siding and high-quality brick are encouraged to reinforce the existing character of Columbus. The use of other robust, timeless materials is encouraged where appropriate.
- e. All buildings should employ bird-friendly design through the appropriate use of façade building materials and visual markers on glazed surfaces. The use of masonry or wood and non-reflective surfaces is encouraged.
- f. The use of highly reflective or mirrored glass is discouraged.
- g. The massing of long buildings should be articulated to break up the length of the façade through design elements such as recesses and projections, and the placement of doors and windows.
- h. Blank façades facing a street, open space, or park are strongly discouraged.

- i. Architectural variation within development blocks is strongly encouraged to reduce sameness in design. Design components should be complementary within the development as a whole.



Figure 33. Articulation can break up the massing of housing blocks and provide visual interest (Realtor.com).

5.3.4 Residential Buildings

The Neighbourhood Area will incorporate a range of housing types, including single and semi-detached dwellings, townhouses, and apartment buildings to provide a stable housing stock that will allow for people to age in place. A high standard of architectural quality should be achieved.

5.3.4.1 Single and Semi-Detached and similar Low Density Development Guidelines:

The following guidelines apply to single and semi-detached dwellings and other similar development such as duplexes, which are free-standing residential buildings. They are usually occupied by a single household, but may contain an accessory dwelling unit.

- a. Single and semi-detached dwellings should be limited to 2 to 3 storeys.
- b. Single and semi-detached dwellings should be oriented to address the street.
- c. Single and semi-detached dwellings should generally be set back 6.0 metres from the property line to accommodate usable front yard space, while providing an appropriate transition between the public and private realm. No encroachments should generally be proposed within the first 3.0 metres of this

setback (from the property line). Beyond this, private porches and/or stairs are encouraged.

- d. Side yard setbacks should generally be a minimum of 1.5 metres, including roof overhangs.
- e. To ensure garages are not a dominant feature of the streetscape, front garages should be recessed from the front wall of the house and take up no greater than half the width of the building.
- f. The façades of street facing rooms should be comprised of a substantial percentage (30-40%) of surface window area.
- g. Flanking walls should include at least 20% surface window area.
- h. Porch and deck dimensions should be large enough to accommodate furnishings and ensure their active use. Steps to porches should have generous proportions and a gentle rise and run to encourage safety and active use.
- i. Wraparound porches/verandas are encouraged on corner lots or other locations where the side yard of the dwelling is visible.
- j. A variety of rooflines and shapes should occur within each residential block, and new buildings/additions should maintain a consistent scale and height with adjacent buildings.
- k. Roof elements such as chimneys, dormers, pitches, and vents should be designed as distinct elements and used to provide variety from one dwelling to the next.

5.3.4.2 Townhouse Development Guidelines:

Townhouses will provide more compact, higher-density housing choices than single or semi-detached dwellings. Townhouses may provide the transition between low-density housing and apartment forms. Variations in townhouse form include back-to-back units, stacked units or block townhouse units, but generally townhouses should comprise a continuous row along the street within a 2 to 4-storey building.

- a. Townhouses should be limited to 2 to 4 storeys. Stepbacks are recommended above the second storey to create terraces and reinforce a pedestrian-scaled public realm.
- b. Townhouses should be oriented to address the street. Where located at a corner, the internal configuration of the building should ensure units front onto both streets.
- c. Townhouse units should be a minimum width of 6.0 metres.
- d. Side yard setbacks at the end of townhouse blocks should be a minimum width of 2.0 metres.
- e. Townhouse blocks should include no more than 6 units without a break.
- f. Townhouses should generally be set back from the property line to accommodate usable front yard space, while providing an appropriate transition between the public and private realm. No encroachments should be proposed within the first 3.0 metres of this setback (from the property line). Beyond this, private porches and/or stairs are encouraged.
- g. Private front-yard amenity space should provide a soft transition to, and high visibility between the public and private realm.

- h. All townhouse developments with more than 20 units should have access to usable outdoor amenity space for all ages such as, but not limited to community gardening plots, play areas or seating areas.
- i. Front yard parking/garages are discouraged. Parking should be at the rear of the site and/or underground (as part of a comprehensive development) and accessed via a rear lane, where deemed appropriate. If parking is provided in the form of an underground garage, long term bicycle storage should be considered and incorporated into the design of the parking garage.
- j. Architectural variation within development blocks is encouraged to enhance the individuality of the dwellings. Dwelling units with different but compatible façade design and building articulation should be explored.
- k. Each townhouse unit which fronts onto a street should have an entrance from the street at or near grade-level. Steps to the front entrance of a townhouse unit should have a gentle rise and run to encourage safety.



Figure 34. Townhouse developments can provide articulated façades and pedestrian-scaled streets (Mike Stewart).

5.3.4.3 Apartment Building Guidelines:

Apartment buildings can provide housing that meets the needs of a variety of ages and lifestyles. Apartment buildings will be located in mixed use and higher-density land use designations, and will include appropriate transitions to neighbouring properties. Low-rise apartment buildings include buildings from 3 to 4 storeys, while mid-rise apartment buildings include buildings from 4 to 6 storeys.

- a. Apartment buildings should be limited to 3 to 6 storeys.
- b. Apartment buildings will create consistent intensification along key intersections and corridors through built form that frames streets.
- c. The building envelope will be designed to mitigate the impacts of built form as it relates to access to sunlight and proximity to neighbouring properties. In mixed use areas, a 4.5-metre ground floor-to-ceiling height can allow for adaptation over time.
- d. The front yard of an apartment building that has residential uses at-grade should generally be built 6.0 metres from the front property line.
- e. Buildings should incorporate a stepback of a minimum of 1.5 metres between the fourth and fifth floors to ensure the appropriate scale and massing of the building. Stepbacks should relate to the existing context, planned use of adjacent properties, and consider transitioning of built form.
- f. Building design should be informed by the existing and planned neighbourhood context, including significant architectural datum lines or cornices.
- g. Where buildings are located on a site with variable topography, stair and/or ramp access should be provided at the established street grade where required.
- h. Balconies should generally be included within the building envelope and should not project over sidewalks to reduce building massing and shadowing and overlook on the pedestrian realm.
- i. In areas where built form will abut natural areas, ensure that development applies appropriate transitions to these areas that minimize the impact of development.
- j. Where a building is proposed to exceed the height of adjacent buildings, the City may require the new building to be stepped back, terraced, or set back to reduce adverse impacts on adjacent properties and/or the streetscape. Mid-rise developments should have sensitive transitions between the public and private realm, including landscaping and seating elements.
- k. When a building site is transitioning to adjacent low density residential designations at the rear or side lot line (such as a low-density residential, parks or natural areas) a 45-degree angular plane between uses should be used to ensure that the impacts of height, overlook and shadow are mitigated.
- l. Buildings located on a street corner may be subject to sight line triangles, which may impact building placement.
- m. Building footprints are to consider existing conditions, such as trees and grades. Such features should be embraced on the site as assets.

- n. Where a mid-rise building features residential uses at grade, the base should feature significant semi-private front yards which include steps, landscaping, and seating where appropriate.
- o. Primary entrances to the base of buildings should be barrier free and provide sufficient clearance for pedestrian walkways.
- p. Pedestrian access should be provided to the principal entrance from the public realm.
- q. Buildings should employ 'bird-friendly' design. Designs should avoid the use of untreated reflective glass and reduce light pollution in the night sky. The use of visual markers on design surfaces (i.e. fritted glass, fenestration patterns) is strongly encouraged.
- r. A range of materials for façade design are encouraged to promote visual diversity in texture and colour, including brick and stone. Architectural variation within development blocks is encouraged to reduce sameness in design. Design components should be complementary within the development as a whole.
- s. Façades should feature designs that emphasize both horizontal and vertical elements including windows, projections, recesses and canopies.



Figure 35. Apartment buildings should include considerate massing and landscaped open space (Clayton Perry).

5.3.5 Mixed Use Buildings

Mixed use buildings can include a range of uses as deemed appropriate by the Official Plan and the Columbus Part II Plan. Mixed use buildings contribute to the vibrancy of the community by encouraging local services that can be accessed by foot, bike, transit, or car.

Guidelines:

- a. Non-residential uses are encouraged to occupy the at-grade level of mixed use buildings to animate the public realm.
- b. Mixed use buildings are encouraged to be designed at a height of 2 storeys or more to promote compact, but contextually appropriate development forms.
- c. Primary building entrances should be directly connected to public sidewalks and visible and accessible from the public realm.
- d. At-grade and publicly accessible amenities that can enhance the public realm and support active transportation should be provided as part of a mixed use development. Opportunities to provide enhanced landscaping, seating areas, patios, and bicycle parking should be explored.
- e. If a mixed use building contains residential uses, the residential entrances should be highly visible and distinct from other frontages. This can be achieved through architectural design and the use of distinct materials, canopies, recesses, or lighting.



Figure 36. Mixed use buildings should thoughtfully integrate with and transition to adjacent building types (TND Partners).

6 Highway 407 East Area Guidelines

6.1 Introduction

The Highway 407 East Area is bounded by Winchester Road to the south, the Oshawa-Whitby Boundary to the west, the Neighbourhood Area to the north and the Natural Heritage System to the east. Since Highway 407 East runs through the area, planned uses within the area reflect this proximity.

These Guidelines focus on the northern portion of the Highway 407 East Area north of Highway 407, which includes planned industrial, prime agricultural and open space and recreational uses.



Figure 37. Employment buildings should integrate green space and incorporate welcoming façades (GSP Group).

6.2 Site Design Guidelines

6.2.1 Site Organization and Design

Site organization relates to the location and organization of components of a site including buildings, parking, access and circulation, storage and loading, and landscaping. The design and layout of sites within the Highway 407 East Area must consider the development of sites comprehensively to create high-quality sites that are compatible with adjacent land uses.

Guidelines:

- a. Development adjacent to the Highway 407 East Corridor should feature site design and built form with high-quality frontages facing both the highway corridor and internal roads.
- b. The design of buildings and sites should, where feasible, minimize their impact on existing topography and be informed by natural heritage and changing site grade conditions.
- c. In employment areas, the siting and location of buildings should be considered as part of a comprehensive site plan that reflects a more contemporary, campus-style layout. Considerations should include shared open spaces and amenity areas, and continuous connectivity between the area and any proposed multi-use trails and other open spaces.
- d. Building location and orientation should maximize exposure to natural light and consider microclimate effects.
- e. Site design should promote alternative modes of transportation including walking, cycling and public transit.
- f. The use of L.I.D. in landscape design should be addressed as part of overall site design, including rainwater harvesting, green roofs, blue roofs, bioretention, permeable pavement, and vegetated swales.
- g. The design of sites should be planned in coordination with the design of the public realm. Building design, site design and public realm design should be coordinated and complementary and contribute to the overall vision of the site.

6.2.2 Parking, Access, and Circulation

Parking, access, and circulation should enable barrier-free and efficient circulation for pedestrians, cyclists, and motorists. Design of development should ensure appropriate transitions between the public and private realm to create an attractive, safe, and functional public realm.



Figure 38. The surface parking lot above includes bioswales and tree plantings to improve stormwater management (Mayot & Toussaint Paysagistes).

General Guidelines:

- a. Consolidate vehicular site access points where appropriate to optimize curb cuts and minimize the interruption of the boulevard for pedestrians, landscaping, and furnishings.
- b. Clearly marked pedestrian walkways should be integrated into overall site design. They should include pedestrian scaled lighting and landscaping features. Weather protection features should be incorporated as appropriate.
- c. Pedestrian walkways should be provided directly from parking areas and public sidewalks to main building entrances.
- d. Pedestrian walkways should have a minimum width of 2.0 metres.

6.2.2.1 Surface Parking

Surface parking should be carefully implemented to ensure that aesthetic, safety, and functional attributes are met. Surface parking should be located in a manner to not impede the public realm.

Guidelines:

- a. Surface parking should generally be located at the rear side of buildings where feasible. Where parking is located between the street and the building and/or

Highway 407 East and the building, parking will be designed to minimize visibility from the public realm.

- b. Surface parking areas should not be located adjacent to an intersection.
- c. Where surface parking lots or servicing occupy a frontage, these areas should be screened from public view by either a combination of tree planting and low landscaping (e.g. maximum 1.5 metres in height for visibility), or tree planting in a minimum 3.0 metre-wide landscape strip.
- d. Landscaped buffer strips around surface parking lots should be integrated into site design.
- e. Trees should be grouped or evenly spaced throughout surface parking areas. Groupings of trees are preferred to ensure adequate soil volumes and to promote sustainable irrigation practices.
- f. Landscaping and/or paving articulation should be used to define smaller areas, improve edge conditions, and provide for pedestrian walkways.
- g. Areas identified for pick-up or drop-off should not conflict with pedestrian circulation.

6.2.2.2 Structured Parking

Structured parking can be used to condense parking into a smaller area, decreasing the overall footprint dedicated to parking. Where appropriate, structured parking should be integrated into the Highway 407 East Area.

Guidelines:

- a. Above-grade parking structures fronting onto public streets and open spaces should be developed with building uses wrapping the façade to preclude blank façades, where possible.
- b. Parking within a structure should be screened from view at sidewalk level. The street level wall should be enhanced by architectural detailing, artwork, landscaping, or similar treatments that will add visual interest.
- c. Access to structured parking should be from planned local roads or through private driveways in interior blocks. Ramps and access points at street corners are discouraged.
- d. Pedestrian entrances for parking structures should be located adjacent to main building entrances, public streets, or other highly visible locations.
- e. The materials used for parking structures should be complementary with surrounding employment buildings. Raw, unpainted and untextured concrete should be avoided.

6.2.2.3 Servicing, Loading and Storage Areas

Servicing, loading and storage areas should be appropriately located and integrated into the Highway 407 East Area.

Guidelines:

- a. Areas for servicing, loading and storage areas should be enclosed within the building envelope where possible.
- b. Outdoor storage, servicing, and loading areas should be located at the rear or side of lots, screened by building placement or by landscaping.
- c. Outdoor storage areas are not permitted between buildings and Highway 407 East.
- d. Coordinate servicing, storage areas, and loading with parking locations to ensure efficient use of space.
- e. Service areas should be separated from pedestrian amenity areas and walkways.
- f. Ensure the safe design of circulatory routes for servicing, storage areas and loading to discourage backing in or out from a public road.

6.2.2.4 Bicycle Parking

Encouraging active transportation can reduce auto dependency and can contribute to complete and healthy communities.

Guidelines:

- a. Bicycle parking should be provided within all developments throughout the Highway 407 East Area.
- b. In addition to bicycle racks, weather-protected bicycle lockers are strongly encouraged for large office or industrial development. These facilities should be located near building entrances and pedestrian walkways.

6.2.3 Landscaped Open Space

Landscaping provides visual interest, pedestrian comfort, and sustainability benefits. Landscaping should be incorporated to improve the built environment of the Highway 407 East Area.

Guidelines:

- a. Wherever possible, preserve existing mature trees in good health that are 300 mm in diameter at breast height or larger.
- b. Where it is not possible to preserve existing mature trees, trees should be replaced at a 1:1 ratio, where every 100 mm of existing tree diameter at breast height is replaced by one tree.
- c. Large growing shade trees should be planted along street frontages and spaced 6.0 to 8.0 metres apart where feasible.
- d. A single tree should have access to a minimum of 30.0 m³ of high-quality soil. Groups of two or more trees should have access to a minimum of 15.0 m³ high-quality soil per tree.

- e. The use of native plantings and trees that are salt and drought resistant are encouraged as the predominant landscaping material to reduce the risk of invasive species and to provide support for pollinators and birds.
- f. Landscaping should be used as buffers for wind, visual screening, privacy, and shade, where appropriate.
- g. Planting design should contribute to the creation of a high-quality public realm, especially along building façades and site elements facing public streets and Highway 407 East.
- h. Where it is not possible for building frontages to be located adjacent to streets, ample landscape buffers should be provided to foster a welcoming streetscape.
- i. Trees should be planted in key locations, such as walkways and other key pedestrian areas.
- j. Landscaped open space should contribute towards stormwater management.

6.3 Building Design Guidelines

6.3.1 General Guidelines

Buildings within the Highway 407 East Area are expected to provide a range of industrial and commercial uses in a variety of building formats. The design and layout of these buildings should contribute to a vibrant public realm and encourage alternative modes of transportation such as walking, cycling, and the use of public transit.



Figure 39. Buildings should contribute to a high-quality public realm and appropriately transition to sensitive areas (Hixson Architecture Engineering Interiors).

6.3.1.1 Massing, Scale and Transition

Guidelines:

- a. Development should appropriately transition in height and massing to sensitive areas within and adjacent to the Highway 407 East Area, including residential neighbourhoods, the Natural Heritage System and open spaces.
- b. The front yard setback and/or exterior side yard setback of industrial buildings should generally be a minimum of 3.0 metres from the corresponding property line. The front yard and/or exterior side yard setbacks should respond to adjacent street typology and function.
- c. Development facing Highway 407 East and corner buildings should reinforce their prominent location through appropriate building massing, setbacks and building base design.

6.3.1.2 Articulation, Façade and Materials

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

Guidelines:

- a. Development should create a positive interface between both Highway 407 East and planned streets through high-quality façade design and material use.
- b. Architectural features to emphasize entry areas and to relieve large expanses of blank walls are encouraged. Considerations may include canopies, awnings, double-height glazing, or taller architectural elements.
- c. A range of high-quality materials for façade design are encouraged to promote visual diversity in texture and colour.
- d. Primary building façades, or main building façades should feature a high-quality of design. Where a building lot has frontages along both Highway 407 East and an internal road, both façades should be treated as primary building façades.
- e. Secondary building façades fronting onto public streets should demonstrate a level of design quality equal to the front or primary building façade.
- f. Blank façades facing Highway 407 East, a street, open space, or park are discouraged.
- g. Building materials should be chosen for their functional and aesthetic quality as well as for energy and maintenance efficiency.
- h. Cladding materials may include brick, stone, and pre-cast concrete. Large areas of vinyl or stucco are discouraged as a principal wall material.
- i. Roof materials and colours should complement the building cladding material. On sloped roofs, a single roofing colour and material is recommended for visual continuity.

6.3.1.3 Building Signage



Figure 40. An employment building with signage integrated into the building design. (GKC Architects).

Guidelines

- a. Permitted signage types must comply with the City of Oshawa Sign By-Law.
- b. Building signage should be integrated into building design to reduce clutter and should be well proportioned in relation to the base building.
- c. Electronic messages on digital building signage with visible effects during the message transition, including fading, flashing, or motion are discouraged for safety reasons.
- d. To reduce the impacts of light pollution, the illumination of digital signage is discouraged between off-peak hours.
- e. Rooftop signs are discouraged.

7 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.

Boulevard: A boulevard is the area of the street between the building face or the front property line, and the edge of the curb.

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

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, amended).

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

Loading Area: An area other than a street or laneway used for the loading or unloading of vehicles.

Low Impact Development (L.I.D.): A design approach to manage stormwater runoff and promote green infrastructure.

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

Median: The portion of the roadway separating opposing directions of traffic.

Mid-Rise Building: A building between 4 and 6 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.

Servicing Area: The portion of a building or site that contains services critical to building function. This may include waste storage and pickup areas, as well as material loading and unloading areas.

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

Stepback: 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 façades. Upper levels, when set back, have less impact on the streetwall.

Storage Area: A portion of a building or site used for the storage of equipment.