THE CORPORATION

OF THE

TOWN OF NIAGARA-ON-THE-LAKE

BY-LAW NO. ####-25

Official Plan Amendment No. 99

Glendale Secondary Plan

A BY-LAW PURSUANT TO SECTION 17 OF THE ONTARIO PLANNING ACT TO

AMEND THE TOWN OF NIAGARA-ON-THE-LAKE OFFICIAL PLAN.

WHEREAS the Town of Niagara-on-the-Lake Council is empowered to enact this By-law by virtue of the provisions of Section 17 of the *Planning Act, R.S.O. 1990, c.P.13, as amended*;

The Council of The Corporation of the Town of Niagara-on-the-Lake, in accordance with the provisions of Section 17 of the *Planning Act,* hereby enacts as follows:

1. Amendment No. 99 to the Official Plan for the Town of Niagara-on-the-Lake consisting of the attached explanatory text and schedule is hereby adopted.

2. Amendment No. 99 to the Official Plan for the Town of Niagara-on-the-Lake is exempt from the approval of the Regional Municipality of Niagara and will come into force and take effect on the day of the final passing thereof.

Enacted and passed this ___day of _____, 2025.

_____ _____

LORD MAYOR GARY ZALEPA TOWN CLERK GRANT BIVOL

Amendment No. 99 to the Official Plan

for the Town of Niagara-on-the-Lake

PART A – THE PREAMBLE	Part A does not constitute part of this amendment. Part A describes the purpose and basis for this amendment.
PART B – THE AMENDMENT	Part B constitutes Amendment No. 99 to the Official Plan for the Town of Niagara-on-the-Lake.
PART C – ADDITIONAL INFORMATION	Part C does not constitute part of this amendment but outlines additional information available upon request.

PART A - THE PREAMBLE

The preamble does not constitute part of this amendment.

PURPOSE

The purpose of this Amendment is to update the current Glendale Secondary Plan in the Town of Niagara-on-the-Lake Official Plan with a new set of detailed policies and guidelines that establish a framework for growth and development in the Glendale Secondary Plan area to the year 2051. It is intended to build on the vision of becoming a complete community with a mix of built form and land uses, which protects natural heritage, and supports economic prosperity.

BASIS

The basis of the amendment is as follows:

1. The amendment applies to all lands within the Urban Area boundary, as demarcated in the Niagara Official Plan (2022) and Town of Niagara-on-the-Lake Official Plan (2017 Consolidation), within the area generally bounded by Queenston Road to the north, Concession 7 Road to the east, the Niagara Escarpment to the south and Homer Road to the west.

2. The amendment will update the policies and mapping of the existing Glendale Secondary Plan to align with and build upon the vision and land use concept established in the Town and Regional council-endorsed Glendale Niagara District Plan.

3. The amendment has been prepared to align with and implement a wide range of Regional and Provincial policies, including the policies of the Niagara Official Plan, which identify Glendale as a Strategic Growth Area with a high priority for intensification and development in the Region. The Niagara Official Plan requires the Glendale area shall be planned to achieve a minimum density target of 100 people and jobs by the year 2051.

4. The planning framework established by the amendment will guide decision making about future growth and intensification to promote compact development that incorporates a mix of uses and built form within its urban districts and protects the natural and rural features and functions in the area.

5. The amendment is supported by the following technical studies: natural heritage/subwatershed study, transportation study, infrastructure study, commercial/employment study; and fiscal impact study.

6. The amendment provides long range policy guidance for:
    - Land use and built form;
    - Transportation, service infrastructure and utilities;
    - Public realm improvements and active transportation; and
    - Implementation.
7. The amendment is consistent with the Provincial Planning Statement (2024), the Niagara Official Plan (2022) and the general intent of the Town's Official Plan (2017 Consolidation).

Part B – The Amendment

Part B – The Amendment, consisting of the following text and schedules, constitutes Amendment No. 99 to the Official Plan for the Town of Niagara-on-the-Lake.

Deletions are shown in strikethrough lettering, while additions are shown in bold font.

DETAILS OF THE AMENDMENT

1. That Section 4 is amended through the strikeouts for deleted text and bold for new text as follows:

   Section 4:

   Since the approval of those two Official Plans, 45 amendments have been made in total to the joint documents. Many of the amendments are site specific, however, the Town has approved three Secondary Plans: Amendment No. 30 is a Secondary Plan for the Virgil Urban Service Area; Amendment No. ~~32~~ **99** is a Secondary Plan for the Glendale ~~Industrial District~~ **area**; Amendment No. 45 is a Secondary Plan for the Dock Area of Niagara/Old Town

2. That Section 7 (20.3) is amended through the strikeouts for deleted text and bold for new text as follows:

   Section 7 (20.3)

   The Town of Niagara-on-the-Lake may consider facilitating the planning of a transit system for the Region of Niagara, in consultation and cooperation with the Regional Municipality of Niagara, other municipalities in the Region and any other appropriate agency. The planning of such a transit system would review the need for and feasibility of public transportation servicing Niagara/Old Town, Virgil, Queenston, St. Davids and the Glendale **Secondary Plan Area** ~~Industrial Area~~.

3. That Section 6.32.6 is replaced with the new text as follows:

6.32.6 SPECIAL POLICY AREA A-7 (GLENDALE SECONDARY PLAN):

1. INTRODUCTION

1.1. Approach

a) Glendale has been identified as a Strategic Growth Area in the Niagara Region Official Plan and has been assigned a high priority for development and intensification in Niagara Region. Glendale is expected to:

i. **Transform into a vibrant and complete community for people of all ages, lifestyles and abilities;**

ii. **Incorporate a mix of uses and built form within its urban districts;**

iii. **Protect, integrate, celebrate and connect to the natural and rural surroundings reflecting the distinct character of the area; and**

iv. **Put mobility first with a robust transit system and active transportation routes seamlessly connecting areas north and south of the QEW highway.**

b) **This Secondary Plan (this Plan) is purposefully written to celebrate inclusivity and diversity, and therefore avoids the identification of any person, or group of people in the vision, principles and subsequent land use policy frameworks.**

c) **This Plan establishes a framework for growth and development to the year 2051. It is the Town's primary tool for guiding development within Glendale. The detailed policies of this Plan build upon the vision for the future and a number of supportive principles that have been established through both the Glendale District Plan and this Plan. Together, the vision, principles and policies of this Plan provide a comprehensive framework to guide decision making about future growth, and to manage change in a way that ensures that the evolution of Glendale occurs in a way that enhances it as a successful and desirable place to live, work, play and to invest in.**

1.2. Application

a) **The lands affected by this Plan are identified on Schedule F, and are known as the Glendale Secondary Plan Area. The vision, principles, policies and schedules contained in this Plan constitute the Glendale Secondary Plan. Decision making will be based on conformity with all the relevant policies of this Plan. The text of this document and the following schedules constitute this Plan:**

i. **Schedule F - Land Use Designations;**

ii. **Schedule F2 - Building Height;**

iii. **Schedule F2B – Enhanced Building Height;**

iv. **Schedule F3 - Natural Heritage System;**

v. **Schedule F4 - Pedestrian Realm and Active Transportation Network; and**

vi. **Schedule F5 - Street Network.**

b) **This Plan shall be read and interpreted in its entirety. The vision, principles and policies of this Plan must be considered together to guide its implementation and determine conformity. Individual policies should not be read or interpreted in isolation from other relevant policies.**

c) **The following associated appendices are non-statutory elements of this Plan, and are provided for clarification purposes only:**

i. **Appendix A - The Natural Heritage System; and**

ii. **Appendix B - The Urban Design Guidelines.**

d) **Council adopted companion documents, including the applicable Urban Design Guidelines, are needed to fully implement this Plan. All development shall be consistent with the relevant concepts and directives of those companion documents. Where there is a conflict between the policies of this Plan and the concepts and directives of any Council adopted Guidelines/Master Plans, the policies of this Plan shall prevail.**

e) **This Plan forms part of the Niagara-on-the-Lake Official Plan and provides more detailed local development policies to guide growth and change within Glendale. This Plan is to be read in conjunction with the relevant policies of the Niagara-on-the-Lake Official Plan. Where there is a conflict between the designations and policies of this Plan and any policy of the Niagara-on-the-Lake Official Plan, the policies of this Plan shall prevail.**

f) **Where there is a conflict between this Plan and any existing development approval, the existing development approval shall prevail. All development applications deemed complete by the Town prior to the approval of this Plan shall be subject to the Official Plan policies in place at the time the development application was deemed complete by the Town. For further clarity, amendments, extensions or revisions to existing approvals that require new applications under the Planning Act, after the adoption and approval of this Plan, shall be subject to the policies this Plan.**

2. VISION & PRINCIPLES

2.1. Vision

Glendale will be a beautiful, healthy and complete urban community that fulfills its role in the urban structure of the Town and includes a full array of opportunities to live, work, learn and play in proximity.

Glendale aspires to be a diverse community that is inclusive, accessible, compact and well connected through all modes of travel. Future development in Glendale will put its mobility first with a robust transit system, cycling trails and pedestrian routes seamlessly connection areas north and south of the QEW.

Glendale will be framed by connection to green space along the Welland Canal, the creek valleys, the Niagara Escarpment and adjacent agricultural lands. Future development in Glendale will contribute to protecting, integrating and celebrating the natural and rural surroundings reflecting the distinct character of the area.

2.2. Fundamental Principles

a) **To achieve the vision, the policies of this Plan build upon the following fundamental principles:**

Principle 1	**Be a healthy community - Glendale will be a healthy community that is accessible and connected, and inclusive with diverse mobility options and a range of housing options. Amenities and Public Service Facilities, including parkland, will be close to where people live and will be connected through a comprehensive active transportation system. Glendale will be a community where diversity is celebrated, residents are engaged, socially connected, and have equitable access to housing, support services and cultural activities.**
Principle 2	**Protect and enhance natural features and functions - All of the significant natural heritage features and associated ecological functions within Glendale will be protected and their natural beauty and quality will be enhanced for the enjoyment of everyone.**
Principle 3	**Promote compact development and intensification - New development will support the ongoing evolution of the Glendale secondary plan area into a more compact, walkable, and transit-supportive community. New development will be efficient, and will be provided with municipal infrastructure systems, including a full range of mobility options, Public Service Facilities and parkland in a cost-effective and fiscally responsible manner.**

Principle 4 **Provide a full range and mix of land uses - Glendale will be a welcoming and inclusive community, providing a full range of residential, retail and service commercial uses, restaurants, educational, recreational, employment and cultural opportunities. Public Service Facilities, and parkland will be accessible to everyone.**

Principle 5 **Provide a diverse range of housing options, ensuring choice and affordability - Glendale will provide a variety of housing options that meet the social, health, economic and well-being requirements of future residents, including additional needs housing and needs arising from demographic changes and employment opportunities. The range and mixture of housing options will accommodate a full spectrum of households, including housing options that meet the economic and affordability requirements of a growing and diverse population.**

Principle 6 **Encourage high quality design - High quality urban design will promote the importance of Glendale within the structure of the Town. New development will demonstrate high quality urban design that contributes to the recognition of Glendale as a beautiful and successful mixed-use community. Existing low-rise residential communities will be protected from adverse impacts resulting from surrounding new development. Public Parkland, buildings and infrastructure will set the standard and will define the quality of development that is expected. Urban Design Guidelines will assist the Town is ensuring high quality design.**

Principle 7 **Promote sustainability, resiliency and a response to climate change - Glendale will respond to a changing climate by promoting intensified and higher density development in support of an evolving high order transit system and robust active transportation network. In addition, this Plan will protect the natural heritage system and conserve biodiversity. Policies in association with the attached Urban Design Guidelines will identify a host of opportunities to promote green building technologies and green infrastructure emplacement in support of enhanced sustainability and resiliency.**

Principle 8 **Establish an Integrated Pedestrian Realm and Active Transportation Network - The Pedestrian Realm and Active**

Transportation Network will be recognized as highly interconnected, safe and conveniently located. Enhanced and connected parkland and sidewalk networks, including cycling facilities, will provide mobility options and enhanced connectivity making Active Transportation an attractive and practical travel option for everyone.

Principle 9 **Support all mobility options, with a focus on transit to serve Glendale, Niagara and beyond - This Plan supports all forms of mobility through a safe, connected transportation network. In addition to accommodating vehicular traffic, ongoing transit planning in Glendale will be integrated with land use planning to ensure that new development supports an enhanced level of transit service over time. The transit network will grow to connect core user groups and key destinations within Glendale and throughout the Town and beyond, with direct routes and street-side amenities that make taking public transit an attractive and practical travel option for everyone. Transit supportive development will be supported. The Niagara Transit Commission, in cooperation with the Town, shall explore opportunities to establish a centrally located Transit Hub within Glendale.**

Principle 10 **Create a new "main street" as a community focal point - New development will create a new "main street" that will accommodate a range of smaller scale retail and service commercial uses in combination with residential apartments, an urban square and enhanced streetscapes. Collectively, this area will be recognized as having high quality urban design, a rich and balanced mixture of activities with a distinct, definable identity. This area will become the vibrant heart of the community - a gathering place for everyone to enjoy.**

Principle 11 **Support a flexible approach to economic development - A flexible approach to local economic development will ensure the Town is able to adapt as trends change and remain prosperous, with a diversity of employment opportunities for its residents and a focus on entrepreneurial opportunities, including the rural/agricultural economy. The Town will leverage Glendale proximity to the Niagara District Airport to support and improve social and economic links.**

Principle 12 **Focus the funds generated by development in Glendale into Glendale - The array of funds and required land contributions that are generated over time by the development activity within Glendale through various instruments under the Planning Act and the Development Charges Act need to be spent by the Town and the Region on appropriate projects in Glendale. This focus will ensure that there is a clear recognition, and response to the link between growth and the requirements for municipal investment in Public Service Facilities, as well as the municipal service infrastructure requirements, transportation and transit investments required to properly accommodate anticipated growth.**

3. GROWTH MANAGEMENT

3.1. Population and Employment Growth

a) **Glendale is identified as a Strategic Growth Area. This Plan is intended to guide growth and development in Glendale to the year 2051. It is understood that Glendale will evolve over the time horizon of this Plan to achieve the vision and principles outlined in this Plan, and transform into an integrated mixed-use community, to be developed at higher densities and in taller buildings than exist today.**

b) **To the year 2051, it is estimated that:**

   i. **The population of Glendale could grow to approximately 14,000 people, representing an increase of some 12,600 people.**

   ii. **The employment base in Glendale, currently estimated at 5,200 jobs, is anticipated to increase by some 4,000 jobs by 2051, to a level of 9,200 jobs.**

c) **The Niagara Region Official Plan (2022) establishes a long-term density target for Glendale at 100 people and jobs combined per hectare. Notwithstanding the identified population and employment growth, nothing in this Plan is intended to limit the achievement of the identified minimum density target within Glendale, provided applicable Airport Zoning Regulations for the Niagara District Airport are complied with, and the Town, in consultation with the Region, is satisfied that appropriate municipal service infrastructure capacity is available to service the area.**

3.2. Phasing

a) **As a result of the long-term vision established in this Plan, the phasing of development, and particularly the harmonious accommodation of new development within the context of the existing development, will be a key consideration in the review of development applications within Glendale.**

b) **Development approval will be considered on the basis of the following criteria:,**

   i. **Conforms with all of the relevant policies of the Official Plan and this Plan, and is consistent with the attached Urban Design Guidelines;**

   ii. **Assists the Town in achieving the affordable housing target;**

   iii. **Delivers needed Public Service Facilities, including the key elements of the Pedestrian Realm and Active Transportation Network;**

   iv. **Considers compatible development, community impacts and community benefits; and**

   v. **Integrates sustainable design elements, including green building technologies.**

c) **Development applications will be considered in tandem with the capacity of the municipal service infrastructure systems (sewer, water, storm water management and transportation) as well as with Public Service Facilities and the identified components of the Pedestrian Realm and Active Transportation Network, over time.**

d) **Prior to any development approval being granted, all required agreements must be in place, including financial agreements and development agreements, to provide for the identified and required elements of the municipal service infrastructure systems (sewer, water, stormwater management and transportation) as well as with the requirements for Public Service Facilities and the identified components of the Pedestrian Realm and Active Transportation Network, to the satisfaction of the Town and, where applicable, the Region.**

3.3. Niagara Regional Native Centre

a) **The lands identified as the Niagara Regional Native Centre are not subject to any of the policies of this Plan. Nothing in this Plan is intended to limit the opportunity for the Native Centre to enjoy the use of their property for future development or for its use as a cultural/recreational facility. The Town will continue to cooperate with the Native Centre on any development plans on their**

lands, or on lands in proximity to the Native Centre, to ensure ongoing compatibility.

It is however, important to require that development on lands that directly abut the Niagara Regional Native Centre be made aware, through notifications registered on title, that activities on the Native Centre Site may, from time to time, generate noise, or other impacts that are not regulated by the Town and are part of the ongoing enjoyment of the property by those who participate in the activities of the Niagara Regional Native Centre.

b) **The statements included in this Section of this Secondary Plan would be applicable to any additional lands acquired by the Niagara Regional Native Centre within Glendale.**

c) **Development on the Native Centre is to be excluded from the calculations related to overall density targets, and the land area of the Native Centre will not be considered part of the gross land area of the Secondary Plan Area.**

3.4. Niagara College

a) **The lands identified as Niagara College on Schedule F are occupied by the Niagara-on-the-Lake Campus of Niagara College, an important institution and asset to the Town. Niagara College is accommodated in a campus of well-designed buildings and set in a landscape setting that reflects the College's role as a focal point for the Glendale community.**

b) **The College has prepared, in consultation with the Town, a College Master Plan of the site indicating the location and form of future development. The Town acknowledges that as the College grows and evolves, any such plan is subject to change. The Town is not an approval authority for development on the Niagara College lands, but will continue to cooperate with the College on any development plans and the Master Plan and provide comments as necessary.**

c) **The preparation of any Amendment to the College Master Plan should include direction regarding the design treatment of any affected element of the Pedestrian Realm and Active Transportation Network. It is an objective of the Town to encourage students and employees of the College to walk, cycle or use transit to access the Campus. To achieve this objective, consideration should be given to the establishment of maximum on-site vehicular parking standards and minimum on-site bicycle parking requirements. In addition, wider sidewalks and bike lanes on key access routes and locations on transit routes should be pursued.**

d) **The Region of Niagara will continue to monitor or assign infrastructure capacity for the Niagara College lands.**

e) **The Niagara College lands have been fully considered as part of the contextual evaluations for municipal service infrastructure and transportation capacity, as well as within the Natural Heritage System background evaluations in support of this Plan. However, development on the Niagara College lands is to be excluded from the calculations related to overall density targets, and the land area of the College will not be considered part of the gross land area of the Secondary Plan Area.**

4. GENERAL POLICIES FOR BUILDING A SUCCESSFUL COMMUNITY

a) **This Plan promotes Glendale as a Successful Community - A great place to live, to work, to play and to invest in. Being a Successful Community means making informed choices that take into consideration the stated vision, a number of interrelated principles and the implementing policy framework. Every decision has implications for municipal service infrastructure, for growth management, for economic development and, importantly, for quality of place and quality of life. Decision making must be interdisciplinary, integrated and strategic to ensure economic, cultural, environmental and social rewards.**

4.1. Housing Affordability

a) **The Town will encourage a range and mix of higher density housing types, styles, tenures and affordability characteristics to meet the economic requirements and affordability needs of a growing and diverse population.**

b) **The following agreements/partnerships and associated implementation tools may be considered by the Town in an effort to achieve the affordable housing target of the Niagara-on-the-Lake Official Plan:**

i. **Enact a Municipal Housing Capital Facilities By-Law under the Municipal Act to enable the Town to enter into agreements with private and non-profit partners for the provision of affordable housing;**

ii. **Coordinate and collaborate with local housing groups, community partners, government agencies and the private sector to support the affordable housing policies of this Plan and to promote innovative housing forms, development techniques and incentives that will facilitate the provision of affordable housing; and**

iii. **Become directly involved in the supply of affordable housing through land acquisitions, use of surplus land, development partnerships, the provision of financial incentives and/or establishment of a not-for-profit housing corporation.**

c) **The following strategies may be considered by the Town to achieve the affordable housing target:**

i. **Encourage the development of smaller dwelling units, where housing is considered to be more affordable due to lower construction costs;**

ii. **Encourage all forms of affordable housing to be cost-effective to manage and maintain;**

iii. **Establish alternative development standards and ensure that the provisions of the Zoning By-Law are sufficiently flexible to permit a range of innovative housing types and tenure models, including, for example, Additional Residential Units, tiny dwellings, cohousing, communal housing, and life-lease housing;**

iv. **Work with all levels of government and institutional land owners to make surplus land available to providers of affordable housing;**

v. **Apply for government grants and/or subsidies, including land dedication;**

vi. **Provide financial incentive programs established through a Community Improvement Plan;**

vii. **Streamline the approvals process for projects that provide affordable housing; and**

viii. **Establish/support reduced Development Charges, parkland dedication requirements and/or parking requirements for projects that provide affordable housing.**

4.2. Economic Development

a) **It is recognized that the Industrial/Business Park lands within Glendale represent one of Niagara's premier prestige business parks and is an important resource for both the Town and the Region in terms of attracting high quality jobs and businesses. This Plan includes the protection of the lands within the Industrial/Business Park designation for employment generating land uses. The key advantages of the Industrial/Business Park lands within Glendale are as follows:**

i. **Direct access/exposure to the QEW and close proximity to Highway 405;**

ii. **Proximity to the Niagara District Airport, the international border and Niagara College;**

iii. **Contains an available supply of serviced employment land; and**

iv. **A strategic gateway location for Niagara-on-the-Lake.**

b) **It is estimated that growth in Glendale will warrant close to 24,000 square metres of new retail and service commercial facilities by 2043. Additional facilities will be required to serve growth to 2051. This space estimate summarizes the total warranted space based on the expenditure (retail) and per capita space ratio (services) demand analyses.**

The space estimate ensures that full range of local-serving retail and services to support weekly and day-to-day shopping needs are available to support anticipated Glendale population growth. The space estimate also recognizes the proximity of existing regional shopping facilities.

Collectively, the lands within the Regional Commercial designation, as well as the lands within the Mixed-Use I and Mixed-Use II designations will provide significant opportunities to accommodate a complete range of commercial goods and services to foster competition and choice for the residents of Glendale, as well as for residents of the Town and the broader Region. The New Residential designation provides opportunities to accommodate more local serving retail and service commercial uses.

c) **To help attract diverse opportunities for jobs, the Town will support a strong and healthy economy within Glendale by:**

i. **Constructing, upgrading and maintaining high quality, universally accessible municipal service infrastructure systems and Public Service Facilities;**

ii. **Facilitating efficient and convenient transportation options for the movement of people and goods;**

iii. **Planning for an appropriate range of housing to support the local labour force, home occupations, and home-based businesses, including artist studio/maker spaces and live/work units; and**

iv. **Supporting the ongoing physical and functional expansion of the nearby Niagara District Airport.**

d) The Town recognizes the important contribution of Niagara College, libraries and education service providers to the life-long learning opportunities for residents. The Town will support the growth and expansion of educational facilities as well as creative and cultural industries and institutions throughout Glendale as an important sector of the economy.

4.3. Urban Design

a) All public and private sector development within Glendale shall be consistent with the Urban Design Guidelines attached to the Plan as Appendix B, and shall, where applicable, be subject to Site Plan Control. To promote high quality urban design, the Town may require the submission of an Urban Design Brief in support of development applications within Glendale.

b) All development within Glendale shall be compatible with the surrounding community. The following shall be considered when evaluating the compatibility of development proposals:

i. The use, height, massing, orientation and landscape characteristics of nearby properties to ensure an appropriate transitions between the built forms and uses;

ii. On-site amenity space is provided and is reflective of, or enhances, the existing patterns of private and public amenity space in the vicinity; and

iii. Appropriate streetscape patterns, including block lengths, setbacks and building separations are implemented.

The transition between different building types will be a key consideration in determining compatible development. This Plan provides guidance on the various planning and design tools to be implemented to ensure compatible development and an appropriate transition between different building types, heights and land uses.

c) The Niagara Escarpment is an essential part of the character of Glendale, and views to the Escarpment are important assets to protect. This Plan recognizes the importance of the relationship between topography and building height and the impacts on significant views to and of the Niagara Escarpment.

d) All development within Glendale, with a focus on the Pedestrian Realm and Active Transportation Network, parking lots and other publicly accessible areas, consistency/adequacy of achieving the following CPTED considerations:

i. **Adequate lighting shall be provided and should be designed, where possible, with regard for vehicular, cyclist and pedestrian requirements so that the size, height, and style of lighting reflects and complements the character of the community;**

ii. **Clear sight lines, for example allowing view from one end of the walkway to the other;**

iii. **Appropriate landscaping, but avoiding landscaping that might create blind spots or hiding places;**

iv. **Adequate fencing;**

v. **Clear signage that delineates permitted use and speed; and**

vi. **Streetscape and building design that promotes "eyes on the street".**

e) **All Town or Region-owned, leased, funded, or operated Public Service Facilities, parks or open spaces, municipal service infrastructure systems and any other space that is accessible to the public shall comply with the Accessibility for Ontarians with Disabilities Act. Further, barrier free design for all development shall be achieved through Site Plan Approval, where applicable, and the enforcement of the Accessibility for Ontarians with Disabilities Act.**

4.4. Compatible Development

a) **A key element of this Plan is to ensure that new development is compatible with its surrounding built form and landscape context. It is recognized that all communities evolve over time, and one of the most important challenges for decision makers is to establish an approach to development approval that ensures that change is understood on the basis of "Compatible Development". The concept and definition of compatible development is intended to ensure that all new development within the Town is appropriately integrated into the existing built form and landscape and enhances the image, livability and character of Glendale. The starting point is to consider the tested definition of "Compatible Development", as follows:**

> **"Compatible development means development that may not necessarily be the same as, or even similar to the existing buildings/development in the vicinity, but, nonetheless, enhances an established community and coexists with existing development without causing any undue, adverse impact on surrounding properties."**

b) Compatible development shall be considered in the evaluation of all development proposals throughout Glendale, in consideration of the use, height, massing, orientation and landscape characteristics of nearby properties. Key to this consideration is the transition between different uses and built forms, and how impacts can be mitigated through the application of angular planes, setbacks, stepbacks and landscape features.

c) To ensure compatible development, all development applications shall be consistent with the Urban design Guidelines attached to the Plan as Appendix B.

4.5. Environmental Sustainability

a) This Plan promotes the development of Glendale based on a vision, fundamental principles and policies that aim to maximize the environmental benefits of complete communities and sustainable development through the efficient use of land and infrastructure. The Town will utilize planning and capital investment tools, as well as urban design and low impact development approaches, in its strategic planning for infrastructure and the approval of new development. In addition, the Town will encourage:

i. Initiatives related to biodiversity enhancement, water conservation, energy conservation, air quality enhancement and integrated waste management opportunities;

ii. Opportunities for energy efficiency and alternative energy strategies, such as district energy generation, renewable/alternative energy systems and distribution and demand management plans;

iii. Innovative residential and public building designs that utilize green building technologies and contribute to low carbon design, energy use reduction and natural resource conservation, as well as synergies between buildings and site management practices;

iv. Green infrastructure technologies that complement existing infrastructure, including the requirement for innovative low impact development opportunities and best practices that minimize the risks associated with natural hazards; and

v. Tools such as the Community Benefits Strategy and By-law, Community Improvement Plans, and associated incentive programs to assist with the implementation of development standards that promote environmentally sustainable design and resiliency and that respond to a changing climate.

b) **The Town will encourage and support alternative energy systems, renewable energy systems, and district energy systems to accommodate current and projected needs of the community. In addition, the Town will, in consultation with the Region and other agencies, encourage and support:**

   i. **The preparation of a Community Energy Plan, designed to identify opportunities for back-up power sources, to improve energy efficiency, reduce greenhouse gas emissions and foster local sustainable energy solutions;**

   ii. **Energy efficient building design that meets Leadership in Energy & Environmental Design (LEED) standards, or equivalent;**

   iii. **The development of renewable energy sources and systems in appropriate locations, and may provide for the provision of on- site renewable energy installations (i.e. roof-top and ground mounted solar, geothermal) developed in accordance with Provincial and Federal legislation, policies and regulations;**

   iv. **Reductions in energy consumption in all Town owned, maintained and operated facilities and equipment. The Town will ensure that all new Town facilities are designed to meet a high standard of environmentally conscious design for energy and water conservation; and**

   v. **Development patterns that promote design and building orientation which will maximize energy efficiency and considerations, considers the mitigating effects of vegetation, maximizes opportunities for the use of renewable energy systems and alternative energy systems, and maximizes vegetation within Glendale.**

c) **The Town will evaluate the contribution to sustainability and resiliency of each development application in accordance with the policies of this Plan. The Town shall support and encourage strategies to reduce energy use and carbon neutrality for buildings and infrastructure to reduce its greenhouse gas emissions and increase its climate resiliency.**

d) **To support reducing emissions in the transportation sector, the Town shall encourage the installation of a publicly accessible electric vehicle charging network throughout Glendale.**

5. LAND USE AND BUILT FORM POLICIES

5.1. Land Use Specific Policies

5.1.1. Land Uses Permitted in All Land Use Designations

a) **Within all of the land use designations, with the exception of the Environmental Protection designation, the following uses are permitted, subject to the relevant policies of this Plan:**

   i. **Any element of the Pedestrian Realm and Active Transportation Network;**

   ii. **Emergency services facilities, generally having convenient access to Regional or Collector Streets and appropriately integrated with the surrounding development, including appropriate architectural design, landscaping and buffering from residential buildings;**

   iii. **Renewable energy systems, subject to relevant Provincial legislation and regulations;**

   iv. **Municipal service infrastructure (sewer, water stormwater management) and public and private streets; and**

   v. **Public and private utilities, including electricity generation facilities and transmission and distribution systems, as well as telecommunication facilities subject to any regulatory requirements, such as the provisions of the Environmental Assessment Act.**

The location of such uses and facilities shall be justified and compatible with surrounding land uses.

5.1.2. Permitted Land Uses

a) **Each land use designation identified in this Plan includes a specified list of permitted uses. In addition to the specified list of permitted uses, uses accessory to any of the identified permitted uses are also permitted.**

b) **The specified list of permitted uses within each land use designation may be further refined through the implementing Zoning By-law to ensure that new development is appropriate in the context of the adjacent and surrounding community.**

5.1.3. Land Uses Prohibited in All Land Use Designations

a) **The following uses are prohibited in all land use designations in this Plan:**

i. **Any use that is considered noxious due to materials used or produced, or methods or processes employed, that emit pollution from noise, vibration, odours, smoke, dust or any other forms of pollution;**

ii. **Uses or produce or store hazardous substances;**

iii. **Uses that involve waste management, recycling and/or the storage of contaminated materials; and**

iv. **Uses that are prohibited pursuant to the provisions of the Environmental Protection Act.**

b) Noxious and/or Offensive Uses means any land use or industrial/manufacturing process that discharges contaminants and has an adverse effect on any existing sensitive land use. Noxious and/or Offensive Uses shall be prohibited anywhere within Glendale.

For the purposes of this definition:

i. **Adverse Effect means one or more of:**

- **Impairment of the quality of the natural environment for any use that can be made of it;**
- **Injury or damage to property or plant or animal life;**
- **Harm or material discomfort to any person;**
- **An adverse effect on the health of any person;**
- **Impairment of the safety of any person;**
- **Rendering any property or plant or animal life unfit for human use;**
- **Loss of enjoyment of normal use of property; and**
- **Interference with normal conduct of business (definition from the Environmental Protection Act);**

ii. **Contaminant means any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them resulting directly or indirectly from human activities that causes or may cause an adverse effect (definition from the Environmental Protection Act); and**

iii. **Discharge means when used as a verb, includes to deposit, leak or emit and, when used as a noun, includes addition, deposit, emission or leak (definition from the Environmental Protection Act).**

c) **The implementing Zoning By-law may incorporate general provisions setting out those specific uses which are prohibited in all zone categories.**

5.1.4. Sensitive Land Uses

a) **Sensitive Land Use means buildings, amenity areas or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more adverse effects from contaminant discharges generated by a nearby major facility. Sensitive land uses may be a part of the natural or built environment. Examples may include, but are not limited to: residences, day care centres, and educational and health facilities (definition from the Provincial Policy Statement).**

b) **Proposals for new uses permitted within the Industrial/Business Park Designation within Glendale in proximity to existing sensitive land uses shall demonstrate compatibility through the preparation of a Land Use Compatibility Study to identify appropriate measures to mitigate adverse impacts. Such a study shall be completed in accordance with the Ministry of Environment, Conservation and Parks Land Use and Compatibility Guidelines, to the satisfaction of the Town and in consultation with other agencies, as required and shall:**

i. **Identify any appropriate measures to mitigate adverse impacts from the source; and**

ii. **Ensure compliance for adjacent regulated industries is maintained.**

5.1.5. Building Heights

a) **Unless specifically identified in the policies of this Plan, the building heights for various locations throughout Glendale are identified on Schedule F2. The maximum building heights shown in Schedule F2 (including the height of any mechanical penthouses or roof ornamentation) comply with the Airport Zoning Regulations. The building heights are expressed in number of storeys, as well as the more specific height expressed in metres in the legend of Schedule F2. Where there is a question of which limitation specifically applies, it is the height limitation in metres, as expressed in the legend of Schedule F2.**

5.1.6. Additional Building Heights

a) **The height limitations established in this Plan are in accordance with the requirements of the existing Airport Zoning Regulations for the Niagara District Airport and are not subject to change without prior approval from Transport Canada. Under sub-section 5.9(2) of the Aeronautics Act, the Minister of Transport may exempt an applicant from the application of Airport Zoning Regulations, if the exemption is in the public interest and not likely to affect aviation safety or security and the current or future usability of the Niagara District Airport.**

b) **The building height restrictions of the Airport Zoning Regulation apply unless a permanent exemption to the in-force Airport Zoning Regulation has been granted by Transport Canada, in which case the maximum building height shall not exceed the height specified within the granted exemption. The Niagara District Airport, Transport Canada and Town are encouraged to collaborate in undertaking a comprehensive update to the Airport Zoning Regulations to address provisions related to maximum building height.**

c) **For development throughout Glendale to achieve the maximum height identified on Schedule F2B, the Town shall be satisfied that that the building is compatible with, and can be sensitively integrated with, the surrounding and abutting land uses, including providing an appropriate transition to adjacent Low-Rise built forms. The Town may implement special measures in the Zoning By-law, such as angular planes, step backs, increased building setbacks, or enhanced landscape buffers to ensure sensitive integration.**

d) **The Town may consider taller and denser buildings in locations as identified by the Enhanced Building Height Overlay on Schedule F2B, subject to confirmation from Transport Canada that additional height and/or density can be appropriately accommodated on the subject site without any undue impact on airport operations.**

   Further, taller and denser buildings in locations identified within the Enhanced Building Height Overlay on Schedule F2B, shall be implemented through an Amendment to this Plan, and any Implementing Zoning By-law may be subject to an 'H' Hold Provision.

   Notwithstanding the above, a temporary exemption may be required for any equipment which exceeds Airport Zoning Regulations for the Niagara District Airport.

e) **For a development site to achieve the identified maximum height or density, as identified on Schedule F2B, the Town shall be satisfied that that the building is**

compatible with, and can be sensitively integrated with, or transitioned to residential uses in Low-Rise built forms. In these circumstances, the Town shall require supporting studies, such as shadow, wind and privacy assessments, as well as an urban design brief which demonstrates how the proposed development represents high-quality and context sensitive design that implements policies of this secondary plan.

f) Approved Official Plan Amendments that permit heights exceeding those determined by the Airport Zoning Regulation are identified on Schedule F2B, and include:

i. OPA No. 93 (By-law 2024-039) which redesignates the subject lands to "Hospitality Precinct (EX-HP-02)" to permit residential uses in conjunction with commercial uses, limit the maximum building heights, and enables the use of a Holding (H) symbol respecting an exemption to the Airport Zoning Regulation. OPA No.93 permits an 8-storey hotel and a 10-storey residential apartment building; and

ii. OPA No. 95 (By-law 2024-048) which redesignates the lands to site-specific "Village Centre (EX-VC-01)" to permit an increased building height, additional commercial uses, reduced setbacks to Taylor Road and Glendale Avenue, increased density, the provision of internal public amenity space, and enables the use of a Holding (H) symbol respecting an exemption to the Airport Zoning Regulation. OPA No. 95 permits one 25-storey landmark building along Taylor Road and maximum heights of 17 to 25 storeys for all other buildings located on the southern portion of the subject lands.

5.1.7. Contaminated Sites

a) Potentially contaminated sites include lands where contaminants may be present due to previous industrial, transportation, utility or similar uses. Sources of site contamination can include disposal of waste materials, raw material storage, residues left in containers, maintenance activities and spills. Some commercial uses such as gasoline stations and automotive repair garages have a similar potential.

b) Prior to considering a proposal for redevelopment of potentially contaminated sites, the Town and the Ministry of Environment and Climate Change will be satisfied that the soil quality is suitable for the proposed use. Studies which document the present and past uses of the site and surrounding lands may be required by the Town and MECP, to show the presence, types and

concentration of contaminants, and remedial action plan for decommissioning and clean-up of contaminated sites.

5.1.8. Additional Residential Units

a) **For the purpose of this Plan, an urban residential lot is a parcel of land that accommodates a single detached, semi-detached, or townhouse dwelling and is serviced by appropriate water and wastewater services.**

b) **Where Additional Residential Units are specifically identified as a permitted use, they can be either within an existing dwelling, or within an accessory detached building on a residential lot. Each specified residential lot is permitted to have either 1 or 2 Additional Residential Units (attached), or an Additional Residential Unit (detached), as identified below, up to a maximum of 3 residential dwelling units (1 primary unit and 2 accessory units) per residential lot.**

c) **Up to 2 Additional Residential Units (attached) may be created and used in accordance with the implementing Zoning By-law. An Additional Residential Unit (attached) that is wholly enclosed within an existing single detached, semi-detached, and/or townhouse dwelling is permitted, subject to conformity with the implementing Zoning By-law.**

d) **An Additional Residential Unit (detached) is permitted in a detached accessory building on a lot that includes a primary single detached, semi-detached, and/or townhouse building, subject to conformity with the following policies:**

   i. **The Additional Residential Unit (detached) shall only be created and used in accordance with the implementing Zoning By-law. The implementing Zoning By-law will establish a maximum and minimum distance from the primary dwelling;**

   ii. **The detached building that accommodates the Additional Residential Unit (detached) shall be clearly subordinate to the primary building on the lot in terms of height and building footprint; and,**

   iii. **The property containing the Additional Residential Unit (detached) will be prohibited from being severed from the property.**

e) **All Additional Residential Units conform with the Ontario Building Code, Fire Code, and any other applicable legislation, regulation, or standard.**

f) **The Town shall require a maximum of 1 parking space for any Additional Residential Unit, regardless of whether there are 1 or 2 Additional Residential Units developed. The required parking space may be provided as a tandem parking space.**

5.1.9. Additional Needs Housing

a) **Additional Needs Housing includes all types of residences licensed or funded under a Federal or Provincial statute for the accommodation of persons living under supervision and who, by reason of their age, emotional, mental, social, or physical condition, require a group living arrangement for their well-being.**

b) **Additional Needs Housing shall conform to the associated criteria for uses/buildings that are also identified as permitted within the relevant designation, subject to the implementing Zoning By-law.**

5.1.10. Live-Work Units

a) **Live-work units are subject to the associated development policies identified in this Plan. Where live-work units are specifically identified as a permitted use, they shall provide:**

i. **Amenity areas and buffering with planting and/or fencing from adjacent residential dwellings; and**

ii. **Adequate parking and drop-off/pick-up facilities.**

5.1.11. Home-Based Businesses

a) **Where home-based businesses are identified as a permitted use they shall only be permitted in accordance with the following provisions:**

i. **The use does not substantially alter the character of the property, and the use is compatible with the adjacent community;**

ii. **The use is primarily carried out within the dwelling unit;**

iii. **The use is clearly secondary to the primary use of the property as a residence in terms of floor space utilization;**

iv. **The property is the principal residence of the person carrying on the home occupation use;**

v. **Outside storage of goods, materials, or equipment related to the home occupation use shall not be permitted; and**

vi. **Compliance with on-site parking requirements, including parking for service vehicles such as trailers and commercially licensed vehicles and other provisions regulating home occupations in the implementing Zoning By-law.**

b) **The implementing Zoning By-law may include additional provisions regulating home-based businesses. The Town may implement a Licensing By-law to regulate home-based businesses.**

5.1.12. Day Care Facilities

a) **Where day care facilities are identified as a permitted use they shall be permitted subject to specific regulations in the implementing Zoning By-law and in accordance with the following policies:**

i. **The use will not cause any traffic hazards or an unacceptable level of congestion on surrounding streets;**

ii. **The use is intended to serve and support the surrounding community; and,**

iii. **The site is large enough to accommodate the building, on-site play areas, parking and pick-up/drop-off facilities and appropriate buffering, where required.**

iv. **Where possible, day care facilities should be provided in the early phases of the development of Glendale and integrated with Public Service Facilities, mixed-use developments and residential developments.**

5.1.13. Neighbourhood Scale Public Service Facilities & Retail and Service Commercial Uses

a) **Neighbourhood scale Public Service Facilities, or neighbourhood scale retail and service commercial uses may be permitted in both the Existing Residential and New Residential designations, subject to an implementing Zoning By-law and Site Plan Approval, and subject to the following locational criteria:**

i. **Direct or convenient access to a Regional or Collector Street;**

ii. **Design which is compatible with surrounding land uses, and maintains the scale, density and character of the area. The implementing Zoning By-law will establish an appropriate Gross Floor Area limitation for each individual**

use/business, and will limit the number of individual uses/businesses permitted within a cluster of such uses;

iii. Provision of adequate buffering and transition to ensure compatibility with surrounding existing sensitive uses; and

iv. Provision of adequate off-street parking to serve the particular use, while retaining sufficient usable yard space to maintain the existing visual characteristics of the area.

b) Neighbourhood scale Public Service Facilities, or neighbourhood scale retail and service commercial uses may be developed as part of a mixed use building.

c) When neighbourhood scale retail and service commercial uses are proposed in a cluster format, they shall be limited to a maximum of 4 individual businesses and to between 1,800 and 3,800 square metres of total gross Floor area. Individual, stand alone businesses shall be limited in scale to 1,800 square metres.

5.1.14. Places of Worship

a) Where a place of worship is specifically identified as a permitted use in a designation in this Plan, it shall be permitted, subject to the following criteria:

i. The use will not cause any traffic hazards or an unacceptable level of congestion on surrounding streets; and

ii. The site is large enough to accommodate the building, on-site parking areas and appropriate amenity areas and buffering, where required.

5.1.15. Public Service Facilities

a) The relevant policies of the Niagara-on-the-Lake Official Plan will guide the provision of Public Service Facilities. Public Service Facilities include facilities designed to meet the recreational, health, social, educational, self-directed learning and cultural needs of the residents including elementary and secondary schools, public libraries, museums, cultural centres, or other similar uses. Public Service Facilities will be encouraged to provide multi-functional and shared-use facilities and services to better serve the residents and achieve capital and operating cost efficiencies.

b) The Town shall ensure that the Public Service Facilities required for development are secured as a part of the development approvals process and appropriately phased in accordance with the proposed development.

c) In determining appropriate locations for Public Service Facilities, the Town shall have regard for the type of service provided by the facility, recognizing that some uses will serve a localized population, while others will serve the whole or large portions of the Town. Where appropriate, Public Service Facilities are encouraged to be incorporated within both public and private development.

d) Where Public Service Facilities are specifically permitted within a designation in this Plan, they will be subject to the specific regulations in the Zoning By-law. It is desirable that Public Service Facilities can be clustered together to promote cost-effectiveness and facilitate service integration. The development of Public Service Facilities shall be subject to the following criteria:

i. The use will not cause any traffic hazards or an unacceptable level of congestion on surrounding streets;

ii. The site is large enough to accommodate the building, on-site parking areas and appropriate amenity areas and buffering, where required; and

iii. Direct access shall be provided to Public Service Facilities from all parts of the surrounding community through a comprehensive Active Transportation Network.

6. LAND USE DESIGNATIONS

a) In accordance with Schedule F, Glendale is comprised into the following land use designations:

i. The Existing Residential designation;

ii. The New Residential designation;

iii. The Regional Commercial designation, including the Regional Commercial Mixed-Use Overlay;

iv. The Mixed-Use I designation;

v. The Mixed-Use II designation;

vi. The Industrial/Business Park designation;

vii. **The Public Parkland designation (included in Section 7.0);**

viii. **The Transportation Facilities designation; and**

ix. **The Environmental Protection designation, including the Adjacent Lands Overlay.**

b) **In addition to the identified land use designations, Schedule F also identifies existing stormwater management facilities. Stormwater management facilities are not considered as a land use designation. They are, however provided with a planning policy framework within Section 8.2.3 of this Plan.**

6.1. The Existing Residential Designation

6.1.1. Intent

a) **The Existing Residential designation recognizes existing low-rise neighbourhoods and estate style lots within Glendale. It is the intent of this designation to ensure that existing housing stock and the existing character of the neighbourhood are appropriately conserved.**

6.1.2. Permitted Uses

a) **The following uses may be permitted on lands within the Existing Residential designation, as shown on Schedule F, subject to the relevant policies of this Plan:**

i. **Single-detached dwellings, semi-detached dwellings, duplex dwellings, multi-plex dwellings and all forms of townhouses;**

ii. **Additional residential units;**

iii. **Additional needs housing;**

iv. **Home-based businesses;**

v. **Neighbourhood scale Public Service Facilities;**

vi. **Neighbourhood scale office uses, retail and service commercial uses; and**

vii. **Day care facilities.**

6.1.3. General Development Policies

a) **This Plan encourages sensitive infill development of vacant or underutilized parcels of land, where such development will be compatible with the existing character of the neighbourhood and where it will contribute to the more efficient use of municipal infrastructure, parkland and Public Service Facilities.**

b) **Within the Existing Residential designation, any additions to existing structures, or any new development is required to complement existing adjacent development in terms of its scale, character, height, design and mass. Specifically, the following policies apply to any application for development:**

i. **Changes to lot frontage and/or lot depth may be permitted subject to an implementing Zoning By-law;**

ii. **Development will respect and reinforce the existing physical character of the neighbourhood, including in particular:**

- **Patterns of streets, blocks and lanes and public building sites;**
- **Size and configuration of lots;**
- **Heights, massing, scale and dwelling type of nearby residential properties;**
- **Setbacks of buildings from the street or streets;**
- **Prevailing patterns of rear and side yard setbacks and landscaped open space; and**
- **Continuation of special landscape or built-form features that contribute to the unique physical character of a neighbourhood.**

c) **Some lands within the Existing Residential designation directly abut, or are in proximity to the Niagara Regional Native Centre. It is a requirement that all new development be made aware, through notifications registered on title, that activities on the Native Centre Site may, from time to time, generate noise, or other impacts that are not regulated by the Town and are part of the ongoing enjoyment of the property by those who participate in the activities of the Niagara Regional Native Centre.**

6.2. The New Residential Designation

6.2.1. Intent

a) **The New Residential designation will promote new well-designed and attractive residential communities that act as a transition to rural landscapes and/or environmental features that are adjacent to, and outside of the boundaries of Glendale.**

6.2.2. Permitted Uses

a) **The following uses may be permitted on lands within the New Residential designation, as shown on Schedule F, subject to the relevant policies of this Plan:**

   i. **Single-detached dwellings, semi-detached dwellings, duplex dwellings, multi-plex dwellings, all forms of townhouses and apartments;**

   ii. **Additional residential units;**

   iii. **Additional needs housing;**

   iv. **Live-work units;**

   v. **Home-based businesses;**

   vi. **Neighbourhood scale Public Service Facilities;**

   vii. **Neighbourhood scale office uses, retail and service commercial uses;**

   viii. **Day care facilities; and**

   ix. **Places of worship.**

6.2.3. General Development Policies

a) **The Town may require a Development Concept Plan be prepared prior to the approval of any development application - Draft Plan of Subdivision/Condominium, or Zoning By-law Amendment - within the New Residential designation identified on Schedule F. The determination of whether a Development Concept Plan is required shall be to the satisfaction of the Town based on an assessment of the scale of the proposed development, its proximity to other lands expected to be developed and the general complexity of the issues that need to be resolved.**

b) **Maximum net densities within the New Residential Designation shall be linked to the maximum building height and based on a lot coverage of 60 percent. Maximum densities are as follows:**

i. **Where the maximum height is up to 3 storeys - 1.8 FSI;**

ii. **Where the maximum height is up to 4 storeys - 2.4 FSI;**

iii. **Where the maximum height is up to 5 storeys - 3.0 FSI;**

iv. **Where the maximum height is up to 6 storeys - 3.6 FSI; and**

v. **Where the maximum height is up to 7 storeys - 4.2 FSI.**

The Town may consider additional density in the implementing Zoning By-law where over 75 percent of the required parking is provided in structured parking facilities (above grade, or below grade)

c) **Neighbourhood scale office uses, retail and service commercial uses shall be further defined and regulated by the implementing Zoning By-law to ensure that they are compatible with the surrounding residential neighbourhood.**

d) **The height, mass, scale and arrangement of buildings and structures will achieve a harmonious design and integrate with the surrounding area. Development plans shall be designed to:**

i. **Create a pedestrian-oriented and highly interconnected street and block pattern, with connections to adjacent districts within Glendale, and to Public Service Facilities and the Pedestrian Realm and Active Transportation Network and the transit system;**

ii. **Provide appropriate transition to/integration among adjacent uses/built forms; and**

iii. **Avoid back lotting along any public street or any element of the Pedestrian Realm and Active Transportation Network.**

iv. **Ensure the majority of residents are within a 5-minute walk (approximately 400 metres) to any, or all of the following community features:**

- **Parkland;**
- **Public Service Facilities, particularly schools and recreation facilities; and/or retail and service commercial uses; and**

v. **Ensure adequate municipal services can be provided to accommodate the needs of the development.**

e) **Where development abuts a Regional Street right-of-way, the design of vehicular access, pedestrian and amenity areas shall be subject to regulation by the Region, and shall be consistent with any applicable Regional Design Guidelines.**

f) **Some lands within the New Residential designation directly abut, or are in proximity to the Niagara Regional Native Centre. It is a requirement that all new development be made aware, through notifications registered on title, that activities on the Native Centre Site may, from time to time, generate noise, or other impacts that are not regulated by the Town and are part of the ongoing enjoyment of the property by those who participate in the activities of the Niagara Regional Native Centre.**

6.3. The Regional Commercial Designation

6.3.1. Intent

a) **The lands within the Regional Commercial designation serve as a major inter-regional shopping and entertainment destination, complementing the Town's other attractions. It is the intent of this Plan to facilitate the ongoing evolution of this district, keeping in mind that there is the potential for future opportunities for development contributing to Glendale's long-term build-out as a more complete community by providing amenities for residents, workers and students and integrating a mix of land uses over time.**

6.3.2. Permitted Uses

a) **The following uses may be permitted on lands within the Regional Commercial designation, as shown on Schedule F, subject to the relevant policies of this Plan:**

i. **Restaurants, retail and service commercial uses of all types and scales;**

ii. **Winery and brewing facilities;**

iii. **Entertainment uses;**

iv. **Office and major office uses;**

v. **Private education, recreation and health-related facilities;**

vi. **Public Service Facilities;**

vii. **Day care facilities; and**

viii. **Commercial and/or accessory parking facilities at-grade and/or in structures.**

6.3.3. General Development Policies

a) **Development shall be pedestrian-friendly. Buildings shall be oriented to streets or other open spaces. Sidewalks shall be generous, interconnected and designed to a high standard. The arrangement and width of stores shall encourage walking.**

b) **Mixed use buildings containing retail or service uses on the ground floor and other permitted, compatible uses on upper floors shall be encouraged.**

c) **Requirements for building setbacks, minimum landscaped areas, buffer strips, maintenance of existing trees, privacy screening and other appropriate measures to enhance the greening of commercial uses and to protect adjoining residential areas from the effects of commercial activity will be applied in all new commercial development. Further, prior to approval, applications for development in the Regional Commercial designation shall be subject to an urban design and architectural review process.**

d) **Along the south side of the Regional Commercial designation, development shall provide an appropriate built form transition to abutting development within the New Residential designation. Large parking lots and service areas generally should be screened or buffered by development.**

e) **Adequate off-street parking shall be provided for all new commercial development. Parking generally shall be located at the rear or side of buildings. Large parking areas shall be divided by landscape strips planted with trees. Landscaped berms should buffer parking areas from the south service street to obscure views of the parking areas from the QEW.**

f) **Above-ground parking structures should be designed to appear as fenestrated buildings with a regular pattern of openings and materials that are compatible in type and quality with those of surrounding buildings.**

g) **Loading, servicing and garbage areas should generally be located at the rear of buildings and screened from public view.**

h) **Vehicular accesses for new commercial developments will be restricted, as necessary, to minimize the effect of turning movements on adjoining streetways. Wherever possible, joint accesses will be designed to serve multiple commercial uses.**

i) **Buildings facing the QEW shall have enhanced design features and use high quality building materials.**

6.3.4. Regional Commercial Mixed-Use Overlay

a) **Ongoing development within the Regional Commercial designation must be responsive to current trends in retail development. As such, a Regional Commercial Mixed-Use Overlay has been included on Schedule F to recognize the long-term potential of this area to support additional uses, including residential apartments, and to facilitate the arrangement of land uses, configuration of streets, parkland, Public Service Facilities and parking, and the form and density of buildings to be determined when a future development proposal is submitted.**

b) **The Town may require that a Development Concept Plan be prepared prior to the approval of the Draft Plan of Subdivision/Condominium, or implementing Zoning By-law Amendment application, to the satisfaction of the Town based on an assessment of the scale of the proposed development, its proximity to other lands expected to be developed and the general complexity of the issues that need to be resolved. Minor changes/additions within the Regional Commercial designation may be exempt from the requirement for a Development Concept Plan, at the discretion of the Town.**

c) **New development within the Regional Commercial Mixed-Use Overlay that is not already permitted by the existing zoning, shall be subject to an implementing Zoning By-law Amendment, as well as Site Plan Approval, where applicable.**

6.4. The Mixed-Use I Designation

6.4.1. Intent

a) **The Mixed-Use I designation is intended to provide a focal point for commercial and social activities for residents, workers, students and visitors in Glendale. The lands within the Mixed-Use I designation are expected to become a community "main street" and shall include a diverse mixture of retail and service commercial uses and restaurants at-grade, as well as office uses and a range of apartment dwellings above the first floor.**

6.4.2. Permitted Uses

a) **Permitted uses on lands within the Mixed-Use I designation as identified on Schedule F may include, subject to the relevant policies of this Plan:**

i. **Restaurants, retail and service commercial uses;**

ii. **Winery and brewing facilities;**

iii. **Artisan studios and maker spaces;**

iv. **Entertainment uses;**

v. **Home-based businesses;**

vi. **Hotels, including ancillary uses;**

vii. **Office uses;**

viii. **Private education, recreation and health-related facilities;**

ix. **Places of worship;**

x. **Public Service Facilities;**

xi. **Day care facilities;**

xii. **Residential apartment units above or behind a non-residential permitted use**

xiii. **Additional needs housing;**

xiv. **Commercial and/or accessory parking facilities at-grade and/or in structures.**

6.4.3. General Development Policies

a) **It is estimated that the amount of retail commercial facilities within the Mixed-Use I designation should be between 7,500 and 11,000 square metres of retail commercial gross floor area, in addition to other opportunities for service commercial uses and offices. The scale, range and mix of retail commercial facilities would ideally include a supermarket or major grocery store, a pharmacy together with a range of other services and specialty retail outlets.**

b) **In addition to the maximum building height within the Mixed-Use I designation as identified on Schedule F2, the minimum building height shall be 2 storeys, or 8 metres, whichever is greater.**

c) **Maximum net densities within the Mixed-Use I Designation shall be linked to the maximum building height and based on a lot coverage of 60 percent, where parking is to be provided in unstructured, outdoor parking lots. In that circumstance, the maximum densities are as follows:**

i. **Where the maximum height is up to 4 storeys - 2.4 FSI;**

ii. **Where the maximum height is up to 5 storeys - 3.0 FSI;**

Where at least 75 percent of the required parking is to be provided in structured parking facilities (above grade, or below grade), the maximum densities shall be linked to the maximum building height and based on a lot coverage of 90 percent. The maximum densities are as follows:

i. **Where the maximum height is up to 4 storeys - 3.6 FSI; and**

ii. **Where the maximum height is up to 5 storeys - 4.5 FSI.**

d) **Buildings and sites throughout the Mixed-Use I designation may develop as individual sites or as comprehensively planned complexes. Comprehensive planning will promote a unified approach to urban design, traffic impact and access, and stormwater management. Larger or proximal sites, or multiple vacant/underutilized sites may be required to prepare a Development Concept Plan to illustrate how these properties could be developed comprehensively, to the satisfaction of the Town.**

e) **Restaurants, retail and service commercial uses shall be limited in size. The scale of all permitted land uses shall be further regulated by the implementing Zoning By-law to ensure that the desired community "main street" character is achieved. Notwithstanding that limitation, a food store is specifically exempt from this policy.**

f) **The Mixed-Use I designation promotes mixed-use buildings and developments that include second floor residential apartments and/or office space that is appropriate for the accommodation of local serving businesses, including health and wellness facilities, finance uses, co-working space, professional offices and other similar activities. The following policies are applicable:**

i. **Stand-alone, non-residential buildings may be permitted within the Mixed-Use I designation. Stand-alone residential buildings are prohibited. Where residential development is proposed, it is a requirement of this Plan that no dwelling units be permitted at-grade and a minimum of 75% of the at-grade Gross Floor Area be occupied by non-residential uses, to the satisfaction of the Town; and**

ii. **An array of non-residential uses are encouraged at-grade in the Mixed Use I designation. Where these uses and facilities are proposed for sites with primary frontage along Niagara-on-the-Green Boulevard, development will**

be designed in a manner that prioritizes street and sidewalk frontage for retail, service commercial and restaurant purposes. Buildings shall address and have main entrances on Niagara-on-the-Green Boulevard.

g) It is encouraged that parking facilities in the Mixed-Use I designation be located in a structure either above or below grade. Above-ground parking structures shall be designed to appear as fenestrated buildings with a regular pattern of openings and materials that are compatible in type and quality with those of surrounding buildings.

h) Parking shall not be located between the front of buildings and Niagara-on-the-Green Boulevard. Loading, servicing and garbage areas generally shall be located at the rear of buildings, and shall be screened from public view.

i) Development in the Mixed Use I designation shall enhance the quality of the Pedestrian Realm and Active Transportation Network by:

i. Requiring that front and exterior side elevations address the adjacent streetscape with minimal or no setback, forming a strong and identifiable urban edge;

ii. Requiring articulated façades using window displays or outdoor patios that contribute to a pedestrian friendly street environment; and

iii. Incorporating wayfinding signage to direct residents and visitors to shops, services and attractions.

6.5. The Mixed-Use II Designation

6.5.1. Intent

a) It is the intent of this Plan to promote within the Mixed-Use II designation, as identified on Schedule F, the development of a diverse mixture of retail and service commercial uses, restaurants, cultural, entertainment and recreational land uses, as well as office uses and a range of residential apartment dwellings.

6.5.2. Permitted Uses

a) Permitted uses on lands within the Mixed-Use II designation identified on Schedule F, may include, subject to the relevant policies of this Plan:

i. Restaurants, retail and service commercial uses;

ii. Winery and brewing facilities;

iii. **Artisan studios and maker spaces;**

iv. **Entertainment uses;**

v. **Home-based businesses;**

vi. **Hotels, including ancillary uses;**

vii. **Convention/conference facilities;**

viii. **Office and major office uses;**

ix. **Private education, recreation and health-related facilities;**

x. **Private clubs;**

xi. **Places of worship;**

xii. **Public Service Facilities;**

xiii. **Day care facilities;**

xiv. **Residential apartments**

xv. **Additional needs housing;**

xvi. **Commercial and/or accessory parking facilities at-grade and/or in structures.**

b) **In addition to the identified list of permitted uses within the Mixed-Use II designation, modestly scaled research and development facilities, light manufacturing uses and warehousing facilities, or other low-impact employment generating uses in wholly enclosed buildings may also be permitted, subject to the implementing Zoning By-law.**

6.5.3. General Development Policies

a) **The Town shall encourage compatible development, redevelopment and rehabilitation throughout the Mixed-Use II designation by supporting development applications that conform to the policies of this Plan and the implementing Zoning By-law.**

b) **In addition to the maximum building height within the Mixed-Use II designation as identified on Schedule F2, the minimum building height shall be 3 storeys, or 12 metres, whichever is greater. Notwithstanding the minimum building height limit, no minimum building height shall be required for buildings that**

accommodate only modestly scaled research and development facilities, light manufacturing and warehouse facilities or other low impact employment generating land uses.

c) Maximum net densities within the Mixed-Use II Designation shall be linked to the maximum building height and based on a lot coverage of 60 percent, where parking is to be provided in unstructured, outdoor parking lots. In that circumstance, the maximum densities are as follows:

i. Where the maximum height is up to 4 storeys - 2.4 FSI;

ii. Where the maximum height is up to 5 storeys - 3.0 FSI;

iii. Where the maximum height is up to 6 storeys - 3.6 FSI;

iv. Where the maximum height is up to 7 storeys - 4.2 FSI;

Where at least 75 percent of the required parking is to be provided in structured parking facilities (above grade, or below grade), the maximum densities shall be linked to the maximum building height and based on a lot coverage of 90 percent. The maximum densities are as follows:

i. Where the maximum height is up to 4 storeys - 3.6 FSI;

ii. Where the maximum height is up to 5 storeys - 4.5 FSI;

iii. Where the maximum height is up to 6 storeys - 5.4 FSI; and

iv. Where the maximum height is up to 7 storeys - 6.3 FSI.

d) Buildings and sites throughout the Mixed-Use II designation may develop as individual sites or as comprehensively planned complexes. Comprehensive planning will promote a unified approach to common issues such as urban design, traffic impact and access and stormwater management. Larger sites, or proximal sites, or multiple vacant, or underutilized sites may be required to prepare a Development Concept Plan as identified in this Plan to support development, to the satisfaction of the Town.

e) Stand-alone, non-residential buildings may be permitted within the Mixed-Use II designation. Stand-alone residential buildings are prohibited. Where residential development is proposed, it is a requirement of this Plan that no dwelling units be permitted at-grade and a minimum of 50% of the at-grade Gross Floor Area be occupied by non-residential uses, to the satisfaction of the Town.

f) Notwithstanding the policy above, on comprehensively planned, larger sites, with multiple buildings proposed, the Town may consider stand-alone residential buildings, as long as the site is developed as a mixed-use site. Mixed-use sites shall include approximately 50% of the total Gross Floor Area at grade for non-residential uses, to the satisfaction of the Town.

g) An array of non-residential uses are encouraged at-grade in the Mixed Use II designation. Buildings shall address and have main entrances on a street or abutting parkland.

h) It is encouraged that parking facilities in the Mixed-Use II designation be located in structure. Above-ground parking structures shall be designed to appear as fenestrated buildings with a regular pattern of openings and materials that are compatible in type and quality with those of surrounding buildings.

i) Parking shall not be located between the front of buildings and the street. Loading, servicing and garbage areas generally shall be located at the rear of buildings and screened from public view.

j) The design of buildings shall enhance the quality of the Pedestrian Realm and Active Transportation Network by including transparent frontages, the articulation of facades and the use of quality materials at the street level. Development in the Mixed Use II designation shall enhance the quality of the Pedestrian Realm and Active Transportation Network by:

i. Requiring that front and exterior side elevations address the adjacent streetscape with minimal or no setback, forming a strong and identifiable urban edge;

ii. Requiring articulated façades using window displays or outdoor patios that contribute to a pedestrian friendly street environment; and

iii. Incorporating wayfinding signage to direct residents and visitors to shops, services and attractions.

k) Where any lands within the Mixed-Use II designation immediately abut any lands within the Industrial/Business Park designation, or an existing industrial use, it shall be the responsibility of any new development within the Mixed-Use II designation to provide an appropriate transition condition, including enhanced setbacks, landscaping, angular planes or height reductions, and to mitigate any adverse impacts that may emanate from any permitted use within the abutting Industrial/Business Park designation or existing industrial use, in

accordance with the Ministry of Environment, Conservation and Parks Land Use and Compatibility Guidelines, to the satisfaction of the Town and in consultation with other agencies, as required.

l) Some lands within the Mixed-Use II designation directly abut, or are in proximity to the Niagara Regional Native Centre. It is a requirement that all new development that includes sensitive land uses be made aware, through notifications registered on title, that activities on the Native Centre Site may, from time to time, generate noise, or other impacts that are not regulated by the Town and are part of the ongoing enjoyment of the property by those who participate in the activities of the Niagara Regional Native Centre.

m) Buildings facing the QEW shall have enhanced design features and use high quality building materials.

6.6. Industrial/Business Park Designation

6.6.1. Intent

a) It is the intent of this Plan to recognize the existing employment generating land uses within the Industrial/Business Park designation, and to build upon the accessibility and visibility attributes of these lands in proximity to the Glendale Avenue interchange, along the QEW and abutting Niagara College.

6.6.2. Permitted Uses

a) Permitted uses on lands within the Industrial/Business Park designation identified on Schedule F, may include, subject to the relevant policies of this Plan:

i. Industrial uses, including:

- **Light manufacturing facilities;**
- **Warehousing and distribution centres;**
- **Municipal works yard;**
- **Research and development facilities;**
- **Data processing facilities;**
- **Transportation servicing and maintenance facilities;**

- **Construction and agricultural equipment sales and rental facilities; and**

ii. **Office and major office uses;**

iii. **Institutional and major institutional uses;**

iv. **Private education, recreation and health-related facilities;**

v. **Winery and brewing facilities; and**

vi. **Commercial and/or accessory parking facilities at-grade and/or in structures.**

b) **In addition to the identified list of permitted uses within the Industrial/Business Park designation, the following uses may also be permitted, subject to the implementing Zoning By-law:**

i. **Retail commercial uses that sell products manufactured, or assembled on-site; and**

ii. **Restaurant, retail and service commercial uses catering to the daily needs of employees within the Industrial/Business Park area.**

6.6.3. General Development Policies

a) **Development within the Industrial/Business Park designation will accommodate built forms that support Niagara College and major office uses. Development is also expected to attain high-quality urban design, at densities that are transit-supportive. Development within the Industrial/Business Park designation should ultimately aim to achieve an overall density of 60 jobs per hectare. Development will incorporate identified elements of the Pedestrian Realm and Active Transportation Network, as shown on Schedule F4.**

b) **The conversion of lands within the Industrial/Business Park designation to non-employment generating uses is not encouraged and shall only be considered through an Official Plan Amendment, supported by a comprehensive assessment, which demonstrates all of the following:**

i. **There is an identified need for the conversion;**

ii. **The lands are not required over the long term for the employment purposes for which they are designated;**

iii. **The Town will meet employment density targets identified in this Plan;**

iv. The conversion will not adversely affect the overall viability of lands within the Industrial/Business Park designation, and the overall achievement of the employment density targets and other policies of this Plan; and

v. There is existing or planned infrastructure and public service facilities in place to accommodate the proposed use.

c) The following policies shall apply to parking, outside storage and loading areas within the Industrial/Business Park designation:

i. Parking areas shall be encouraged at the side or rear of buildings. Parking between the front wall of a building and the public right-of-way shall be limited to two tiers. Landscaped areas shall be used to provide a buffer between parking areas and buildings and between parking areas and the street; and

ii. Loading areas shall be located at the side or rear of a building. Garbage areas shall be screened and located at the rear of buildings. Servicing and garbage areas enclosed within the building are encouraged.

Exceptions to the these identified policies are permitted without Amendment to this Plan, provided the exceptions satisfy the principles and objectives for the Industrial/Business Park designation and the broader community of Glendale.

d) Development within the Industrial/Business Park designation shall be compatible with existing and planned sensitive land uses in proximity. Appropriate transition conditions, including enhanced setbacks, landscaping, angular planes or height reductions, and other mitigation techniques shall be employed to resolve any adverse impacts that may emanate from any permitted use within the Industrial/Business Park designation on any existing or planned sensitive land uses in proximity.

e) Buildings facing the QEW shall have enhanced design features and use high quality building materials.

6.7. The Transportation Facilities Designation

6.7.1. Intent

a) It is the intent of this Plan to recognize lands owned by the Ministry of Transportation Ontario that are incorporated within the infrastructure of the Glendale Avenue and QEW Interchange in accommodating transportation related facilities that will benefit Highway users and the Glendale community.

6.7.2. Permitted Uses

a) **Permitted uses on lands within the Transportation Facilities designation identified on Schedule F, may include, subject to the relevant policies of this Plan:**

   i. **Commuter parking facilities, either at grade or in structure;**

   ii. **Tourist information booths; and**

   iii. **A Transit Hub facility.**

6.7.3. General Development Policies

a) **Any development of any permitted use within the Transportation Facilities designation shall only occur through the approval of the Ministry of Transportation Ontario, and shall be subject to all of the design criteria of the Ministry, including any applicable setback requirements.**

6.8. The Environmental Protection Designation

6.8.1. Intent

a) **It is the intent of this Plan to ensure that lands within the Environmental Protection designation are protected from the impacts of development and that the biodiversity, ecological and hydrological function of the features incorporated within the designation are protected, maintained, restored or, where possible, enhanced for the long-term, as established through the comprehensive subwatershed study completed in support of this Plan.**

6.8.2. Permitted Uses

a) **Permitted uses, subject to the results of an Environmental Impact Study, on lands within the Environmental Protection designation may include:**

   i. **Conservation uses;**

   ii. **Small-scale buildings or structures appropriate and supportive of public parks and trails and other associated passive recreational opportunities and facilities; and**

   iii. **Buildings or structures necessary for flood or erosion control.**

b) **In addition to the permitted land uses listed, the following uses may also be considered:**

i. **Environmentally sensitive elements of the Pedestrian Realm and Active Transportation Network, which are supported by an Environmental Impact Study;**

ii. **Municipal service infrastructure (sewer, water stormwater management) and public and private streets which are supported by a completed Environmental Impact Study or similar study; and**

iii. **Public and private utilities, including electricity generation facilities and transmission and distribution systems, as well as telecommunication facilities subject to any regulatory requirements, such as the provisions of the Environmental Assessment Act.**

The impact of these facilities on the environment will be minimized. Municipal service infrastructure and public and private utilities, including private streets, will only be permitted if it can be demonstrated that the advantages of any project outweigh its disadvantages. All assessments must be supported by an Environmental Impact Study (EIS) or similar study. The evaluation will require consideration of the:

i. **Ecological value and sensitivity of the particular feature(s);**

ii. **Expected impact of the proposed project on the agricultural and conservation lands. and ability to mitigate those impacts;**

iii. **Need for and benefits of the proposed project; and**

iv. **Advantages and disadvantages of alternative locations for the proposed project.**

Town will consult with the authority having regulatory jurisdiction over the feature prior to allowing any public utility to locate in the Environmental Protection designation.

6.8.3. Components

a) **The detailed inventory of all of the components of the Natural Heritage System are identified in Appendix A, attached to this Plan. The Environmental Protection designation, which is derived from the detailed inventory, is identified on Schedule F, and is comprised of core areas, recommended buffers, linkages, and recommended restoration/enhancement areas that are identified as supporting features and areas. Core areas are comprised of wetlands, significant woodlands, significant valley lands, significant wildlife**

habitat, other woodland and habitat for endangered and threatened species, permanent and intermittent watercourses and fish habitat. Buffers of various widths have been included in the Environmental Protection designation, with the recommended width relating to the ecological sensitivity of the core area and with regard for existing Provincial policies.

6.8.4. General Development Policies

Boundaries

a) **The boundaries of the Environmental Protection designation shown on Schedule F and on Schedule F3 has been conceptually delineated. It is the intent of this Plan that their precise locations be determined in consultation with any other agency having jurisdiction, at the time of the consideration of specific development applications.**

b) **Minor adjustments to the boundary of the Environmental Protection designation may be facilitated through an Environmental Impact Study without the need to Amend this Plan. Where a minor adjustment to the boundary of the Environmental Protection designation is approved by the Town, in consultation with any agency having jurisdiction, the abutting land use designation as identified on Schedule F and on Schedule F3, shall apply**

c) **Significant changes to the Environmental Protection designation as identified on Schedule F and on Schedule F3 shall only be considered through an Environmental Impact Study, submitted in support of an Amendment to this Plan.**

Limited Development

d) **No new lot creation, buildings or structures, nor the cutting of trees, or the removal or placing of fill of any kind whether originating on the site or elsewhere, may be permitted within the Environmental Protection designation, except with the approval of the Town, in consultation with any agency having jurisdiction. Lands within the Environmental Protection designation shall generally not form part of any new lots to be created for the purposes of development, other than to facilitate the establishment of the uses permitted by this Plan.**

Environmental Impact Study

e) **Where development, redevelopment and/or site alteration is proposed within the Environmental Protection designation, the Town shall require that an**

Environmental Impact Study be prepared by a qualified professional with appropriate in-season field work, and in accordance with any applicable Federal, Provincial, Regional, and Town requirements that demonstrates that there will be no negative impacts on any natural heritage features, and/or their ecological functions, to the satisfaction of the Town, in consultation with any agency having jurisdiction.

f) Where fish habitat and/or the habitat of endangered species and/or the habitat of threatened species are identified, the required Environmental Impact Study shall ensure that all Provincial and Federal requirements have been satisfied.

Scoping/Waiving of an Environmental Impact Study

g) Where an application for development, redevelopment and/or site alteration within the Environmental Protection designation is of a minor nature, the Town, in consultation with any agency having jurisdiction, may scope or waive the requirement for an Environmental Impact Study.

No Negative Impact

h) The establishment of any permitted use shall demonstrate no negative impact to any natural heritage feature and/or associated ecological functions, as demonstrated through the required Environmental Impact Study. Where a permitted use requires impact mitigation, the mitigation shall result in no negative impact on the natural heritage features and/or their ecological functions.

Existing Uses and Structures

i) Existing legal non-conforming uses and structures within the Environmental Protection designation are permitted and may be replaced if destroyed by natural causes. An application for the expansion or enlargement of such uses and structures may be considered by the Town, subject to the submission of an Environmental Impact Study, in consultation with any agency having jurisdiction. The application shall demonstrate no negative impact to the natural heritage features and/or their ecological functions, and may require an application for rezoning.

j) Schedule F and Schedule F4 identify symbolically an existing stormwater management facility that is identified within the Environmental Protection designation. The limits of the stormwater management facility shall be determined through appropriate study. On the basis of the required study, the

facility may be removed from the Environmental Protection designation, without Amendment to this Plan, to the satisfaction of the Town.

Existing Approvals

k) Where an existing development has received approval from the Town prior to the date of the approval of this Plan, has not yet been developed, but is now within the Environmental Protection designation identified on Schedule F, the Town will work with the developer to mitigate the impacts of that development on the natural heritage features and/or their ecological functions, or consider allowing the existing approval to lapse, if applicable.

l) Where a development has been partially, but not fully approved, and still requires subsequent approvals under the Planning Act, or where a request to extend an existing approval is made, the Town may require that an updated Environmental Impact Study or scoped environmental review be carried out to ensure that there is no negative impact to any natural heritage feature and/or their ecological functions in support of an extension to an existing approval, or any new approval required under the Planning Act.

Removal or Destruction of a Natural Feature

m) The removal or destruction of any natural heritage feature, trees/woodlots, and/or any associated ecological function by unauthorized development, tree cutting or site alteration is prohibited. Such removal or destruction will not provide the rationale for the removal of these lands from the Environmental Protection designation. Restoration, to the satisfaction of the Town, in consultation with any agency having jurisdiction, will be required where the removal or destruction of a significant natural heritage feature and/or their ecological functions by unauthorized development or site alteration has occurred. Charges or penalties may be imposed pursuant to a Site Alteration By-law or Tree Cutting By-law.

Dedication of Lands

n) Lands within the Environmental Protection designation may be dedicated to the Town, other public authority, or to a Land Trust, or other not-for-profit agency, subject to the approval of the Town, without cost.

o) Where lands within the Environmental Protection designation are proposed for dedication to the Town, they shall be conveyed in a satisfactory physical condition and if an open watercourse is involved, the dedication shall provide

sufficient land for property maintenance operations to be carried out. Such land shall not be acceptable as parkland dedication.

6.8.5. The Adjacent Lands Overlay

a) **The intent of the Adjacent Lands Overlay is to trigger the requirement for the preparation of an Environmental Impact Study to support applications for development. Lands within 120 metres and abutting the Environmental Protection designation are shown on Schedule F3 as the Adjacent Lands Overlay. Adjacent Lands may have ecological functions or linkages that are important to the long-term health of the identified natural heritage features and/or their ecological functions.**

b) **Where development, redevelopment and/or site alteration is proposed within the Adjacent Lands Overlay, the Town shall require that an Environmental Impact Study be prepared by a qualified professional with appropriate in-season field work, and in accordance with any applicable Federal, Provincial and Town requirements that demonstrates that there will be no negative impacts on any natural heritage features, and/or their ecological functions, to the satisfaction of the Town, in consultation with any agency having jurisdiction.**

c) **Depending upon the scale of the proposed development, and in consideration of the context of the subject site, the Town, in consultation with any agency having jurisdiction, may scope or waive the requirement for an Environmental Impact Study.**

d) **The uses permitted and the associated development policies on any specific site or area within the Adjacent Lands Overlay may include those land uses permitted by the underlying land use designation, as identified on Schedule F, subject to the results of an Environmental Impact Study when required by the Town. In addition to any permitted land uses, the extension of existing municipal infrastructure projects where the alignments or locations of those facilities have been established in this Plan, and/or an approved Environmental Assessment, may be permitted on lands within the Adjacent Lands Overlay, subject to the application of specific mitigation measures as set out in an approved Environmental Impact Study.**

e) **Where an application for development, redevelopment and/or site alteration within the Adjacent Lands Overlay is of a minor nature, the Town, in consultation with any agency having jurisdiction, may scope or waive the requirements for an Environmental Impact Study.**

f) **In cases where an Environmental Impact Study was completed and approved in support of the existing planning approval within the Adjacent Lands Overlay, further Environmental Impact Study requirements may be waived by the Town, in consultation with any agency having jurisdiction.**

6.9. Policies for Land Use Symbols

6.9.1. Potential Regional Transit Hub Symbol

a) **The Potential Regional Transit Hub Symbol has been applied to a number of properties on Schedule F, in a number of land use designations throughout Glendale. Further study and refinements will be required as part of a Transit Hub Feasibility Study/Environmental Assessment to identify the appropriate location, function and land needs of this facility. Any development which occurs in proximity to the location of the Potential Regional Transit Hub Symbol prior to the planning for this facility shall demonstrate how transit will be supported and accommodated.**

b) **The Regional Transit Hub facility may be a stand-alone facility that is acquired and developed by the Niagara Region Transit Commission, or it may be part of a mixed-use development that is developed as part of an agreement between the landowner/developer and the Niagara Region Transit Commission.**

c) **Where an agreement to acquire the site for the Regional Transit Hub has not been established within a maximum of 5 years from the date this Plan is approved, the removal of the Potential Regional Transit Hub Symbol may be facilitated without the need for an Amendment to this Plan.**

6.9.2. Potential School Location Symbol

a) **Schools are included in the definition of Public Service Facilities and are a permitted use in a number of land use designations, however, on Schedule F the Potential School Location Symbol identifies locations within Glendale that prioritize proximity to residential neighbourhoods. The detailed location, size and configuration of each School site is to be determined through the subsequent development approval processes.**

b) **Where possible, Schools should be located adjacent to Parks to provide opportunities to maximize efficiencies and encourage shared use of amenities and facilities. The School Boards are encouraged to work with the Town to establish urban school development parameters that are appropriate for an evolving urban community context, including smaller sites and multi-storey**

buildings and consideration of co-locating with compatible uses to support the urban vision for the area .

c) The Town shall consult with School Boards as part of the development approval process for lands that include the Potential School Location Symbol. It shall be the responsibility of the applicable School Board to identify the need for a School Site, and to subsequently acquire the lands.

d) It shall be a requirement of this Plan that agreements for the purchase of lands for School Sites be executed in a timely manner to ensure that acquisition decisions do not frustrate the achievement of ongoing development within Glendale. Where the need for a School, or an agreement to acquire the site has not been established within a maximum of 5 years from the date this Plan is approved, the removal of the Potential School Location Symbol may be facilitated without the need for an Amendment to this Plan.

6.9.3. Potential Community Centre Location Symbol

a) A Potential Community Centre is identified as a Public Service Facility and is a permitted use in a number of land use designations, subject to the relevant policies of this Plan. The Potential Community Centre Location Symbol is identified on Schedule F in 1 location within Glendale. It is the intent of this symbol to identify potential location for the Community Centre, which is to be acquired by the Town. The detailed location, size and configuration of the Potential Community Centre site is to be determined through the subsequent development approval processes. A Community Centre may be co-located on Public Parkland.

b) Where an agreement to acquire the site for a Community Centre has not been established within a maximum of 5 years from the date that a development application affecting lands with the Potential Community Centre Location Symbol is deemed complete, the removal of the Potential Community Centre Location Symbol may be facilitated without the need for an Amendment to this Plan.

6.9.4. Potential Urban Park Location Symbol

a) An Urban Park is an important element within the Pedestrian Real and Active Transportation Network and is a permitted use in a number of land use designations, subject to the relevant policies of this Plan. It is the intent of the Potential Urban Park Symbol, as identified on Schedule F and on Schedule F4, to identify potential locations for the Urban Park Spaces. The detailed location,

size and configuration of the Potential Urban Park Spaces are to be determined through the subsequent development approval processes.

7. THE PEDESTRIAN REALM AND ACTIVE TRANSPORTATION NETWORK

7.1. Defining The Pedestrian Realm and Active Transportation Network

a) **Moving people into, out of and through the community easily and safely, and providing a variety of spaces for socializing, special events and recreation, is a priority of this Plan. Each element of the Pedestrian Realm and Active Transportation Network must be considered in concert with one another and within the context of the evolving Glendale community. A comprehensive understanding of how these spaces work together, complement each other and support their adjacent uses, will lead to a more connected, accessible and logical network of pedestrian spaces and mobility options throughout the Glendale.**

b) **The Pedestrian Realm and Active Transportation Network, identified on Schedule F4, in Glendale shall be comprised of various and diverse components that will all play vital roles in animating Glendale and connecting the various components of the community together with all modes of transportation.**

c) **The components of the Pedestrian Realm and Active Transportation Network, along with the lands within the Public Parkland designation, represent significant contributions to the provision of recreational opportunities and for social activity within Glendale. Specific planning, design and maintenance considerations are required to ensure the vitality and longevity of these spaces. The various components of the Pedestrian Realm and Active Transportation Network include:**

   i. **Public Parkland designation;**

   ii. **Urban Park Spaces; and**

   iii. **Connecting Links.**

   Streetscapes are also an important component of the Pedestrian Realm and Active Transportation Network, and they are discussed in more detail in Section 8.1.

d) **Components of the Pedestrian Realm and Active Transportation Network are permitted in multiple land use designations in this Plan. Public Parkland is identified as a land use designation, while the other components are identified**

symbolically and/or conceptually on Schedule F and on Schedule F4. All components of the Pedestrian Realm and Active Transportation Network will:

i. **Be connected - Promote accessibility throughout the community by linking all of the community elements together with mobility options for vehicles, transit, pedestrians, and cyclists as well as opportunities to accommodate all other forms of micro-mobilty;**

ii. **Be designed to the highest standards - Top quality building materials meeting accessibility needs and standards informed planting choices and environmental sustainability are priorities in the design of all components of the Pedestrian Realm and Active Transportation Network;**

iii. **Be safe and secure - It is crucial that all elements of the Pedestrian Realm and Active Transportation Network be designed to maximize user safety and security;**

iv. **Prioritize pedestrian and cyclist comfort - Access to sunlight and protection from wind and other elements will be considered to support year-round use. Amenities, such as backed seating, tables, washrooms, water fountains and waste receptacles shall be of a high quality and readily available within all components of the Pedestrian Realm and Active Transportation Network;**

v. **Be well maintained - Comprehensive maintenance schedules will be developed by the Town for all components of the Pedestrian Realm and Active Transportation Network, including existing and new, to ensure safe, accessible and healthy landscapes.**

7.2. The Public Parkland Designation

7.2.1. Intent

a) **The intent of the Public Parkland designation is to recognize existing public park space elements that have already been established in Glendale prior to the approval of this Plan, and to identify important new elements of the Public Parkland System to be established throughout Glendale as development occurs over time. It is also the intent of this Plan for the lands within the Public Parkland designation to be fully integrated and connected to the other elements of the Pedestrian Realm and Active Transportation Network.**

7.2.2. Permitted Uses

a) **Existing and new, larger elements of the Public Parkland System are identified on Schedule F as being within the Public Parkland designation. Permitted uses in the Public Parkland designation may include:**

i. **Active and passive recreational uses;**

ii. **Public Service Facilities, including Community Centres; and**

iii. **Existing stormwater management facilities.**

b) **Limited retail commercial and restaurant uses which serve the main permitted use may be permitted subject to the relevant policies of this Plan, and the requirements of the implementing Zoning By-law.**

7.2.3. General Development Policies

a) **All accessory buildings and structures within the Public Parkland designation shall be subject to the implementing Zoning By-law. No building or structure within the Public Parkland Designation shall exceed 15 metres. The actual height of any development will be calculated from established grade to the top of the building, including the mechanical penthouse and any roof ornamentation.**

b) **Existing parks within the Public Parkland designation are embedded within Exiting Residential Neighbourhood designation and have an established role and function within the current community. Any subsequent changes to the role, function, design or programing within these existing park spaces will be facilitated through a public consultation process.**

c) **The lands identified within the Public Parkland designation on Schedule F and on Schedule F4, that are not yet owned by the Town are generally intended to serve the development accommodated within the New Residential designation, and shall be acquired as fee simple parkland through the development approval process. The Town may utilize parkland dedication tools and funds received through the receipt of cash-in-lieu of land to acquire these parks.**

d) **Lands within the Public Parkland designation may, in some instances, include existing stormwater management facilities. They area a permitted use, however, changes to their scale and function shall be supported by an appropriate technical justification.**

7.3. Urban Park Spaces

7.3.1. Key Components

a) **It is the intent of this Plan to ensure that the Town actively seeks out opportunities to assemble the full range of parkland opportunities, including larger parcels of land acceptable for a range of recreational programing, as identified on Schedule F and Schedule F4 as within the Public Parkland designation. Urban Park Spaces, identified symbolically on Schedule F and Schedule F4 are to be linked to the Public Parkland components via the Active Transportation Network.**

b) **All development applications shall make a public parkland contribution and/or cash-in-lieu of land in accordance with the policies of this Plan and the requirements of the Planning Act.**

c) **The Urban Park Spaces are to be located outside of the adjacent street right-of-way. The Urban Park Spaces appropriate for Glendale are comprised of the following elements:**

   i. **Urban Squares; and**

   ii. **Pocket Parks.**

d) **Adjustments to the general location of the Urban Park Spaces identified symbolically on Schedule F and Schedule F4 can be made through the development application process without an Amendment to this Plan, subject to the Town being satisfied that Urban Park Spaces are being accommodated on the identified site and are appropriately connected to the broader Pedestrian Realm and Active Transportation Network.**

7.3.2. Policies for Urban Park Spaces

a) **The lands identified as subject to the Potential Urban Park Symbol on Schedule F and on Schedule F4 may be secured through the development approval process as:**

   i. **Fee Simple parkland dedication (Town ownership);**

   ii. **Strata Parks - acquired through Strata Title arrangements under the Condominium Act (Town ownership); or**

   iii. **A Privately Owned Public Space (POPS).**

   The Town may utilize parkland dedication tools and funds received through the receipt of cash-in-lieu of land to acquire these parks, where applicable.

b) Strata Parks and POPS shall be secured through appropriate legal agreements to ensure ongoing public access, as well as appropriate design and maintenance standards over the long-term. Given concerns about life-cycle costs, and programing control, Strata Parks and POPS may not be fully credited toward the achievement of parkland dedication requirements.

c) On any development site within the Mixed-Use I designation, or Mixed-Use II designation that is greater than 1,500 square metres of gross land area shall provide a land dedication to the satisfaction of the Town. Smaller sites may include a land dedication and/or cash-in-lieu of land, to the satisfaction of the Town. Land dedication may be secured through fee simple dedication, strata ownership arrangements, or as a Privately Owned Public Space, subject to appropriate agreements.

d) Urban Squares, which are the largest element of the Urban Park Spaces anticipated within Glendale, are to be distributed throughout Glendale, generally on larger development sites/blocks. Urban Squares are pedestrian spaces that accommodate socializing in a dense urban area.

e) Pocket Parks, which are the smallest component of the Urban Park Spaces anticipated within Glendale, are to be distributed throughout Glendale. Pocket Parks are small scaled components of the Pedestrian Realm and Active Transportation Network. They are expected to be generally greater than 75 square metres in size.

7.4. Connecting Links

7.4.1. Key Components

a) The Connecting Links element of the Pedestrian Realm and Active Transportation Network includes a number of linear components intended to provide a fine-grained and highly connected network that maximizes access to, from and within Glendale for pedestrians, cyclists and all forms of micro-mobility options. The various Connecting Links are identified conceptually on Schedule F4, and include:

i. The sidewalk system - to be located within the street right-of-way, for use primarily by pedestrians;

ii. Bike lanes - to be located within the street right-of-way, for use by cyclists as well as other forms of micro-mobility; and

iii. **Multi-use trails - may be located within, or outside of a street right-of-way, for the shared or for the exclusive use of pedestrians, cyclists and other forms of micro-mobility.**

7.4.2. Policies for Connecting Links

a) **Connecting Links are sometimes included within the various street right-of-ways (sidewalks and bike lanes) and are sometimes provided within their own right-of-way (off street multi-use trails). All Connecting Links must be safe and comfortable to ensure the greatest amount of encouragement for travelers in Glendale to travel by means other than the private automobile. All Connecting Links shall be designed to be consistent with the Urban Design Guidelines attached to this Plan as Appendix B, and in accordance with the following:**

i. **Provide comfortable, people-friendly environments with sufficient boulevard separation from vehicular traffic which may include shade trees, street furniture, parking for bicycles, lighting and signage, safe street crossings and other traffic controls;**

ii. **Ensure a sufficient width to accommodate mobility aids and comfortable pedestrian flows, personal mobility devices and incorporate suitable travel surfaces appropriate for the intended type of traffic and be of a material that requires minimal maintenance;**

iii. **Minimize hazard and conflict exposures through the provision of adequate lighting, signage and wayfinding as well as the management of vehicle speeds where on-street facilities are provided;**

iv. **Minimize street crossings and, where viable, provide pedestrian overpasses/underpasses where Connecting Links intersect with Regional or Collector Streets;**

v. **Connect to:**

- **Other components of the Pedestrian Realm and Active Transportation Network;**
- **Lands within the Environmental Protection designation and the Public Parkland designation; and**
- **Key destinations within Glendale, including Niagara College, Elementary Schools, Public Parkland, Community Centres and retail shopping opportunities.**

b) **Sidewalks shall be provided on both sides of all Collector Streets and new Local Streets within Glendale. Sidewalks shall, at a minimum, meet the requirements of the Accessibility for Ontarians with Disabilities Act. Additional sidewalk width may be specified through the relevant policies for Enhanced Streetscapes.**

c) **Bike lanes built within the street right-of-way shall be required on all Collector Streets within Glendale. Bike lanes built within the street right-of-way may be considered on new Local Streets where cycling traffic, where warranted by use levels.**

d) **Multi-use trails are identified conceptually on Schedule F4. The actual location and design of the identified off-street multi-use trails will be determined by the Town through the development approval process. The Town may adjust the location and/or alignment of the off-street multi-use trails to accommodate the actual on-ground route, and to respond to new opportunities and/or constraints that arise from time-to-time, without the need for an Amendment to this Plan.**

8. TRANSPORTATION, SERVICE INFRASTRUCTURE + UTILITIES

8.1. A Multi-Modal Transportation System

8.1.1. Intent

a) **It is the intent of this Plan to:**

i. **Maintain a safe, muti-modal, and integrated Transportation System, including Active Transportation facilities, that permits the safe and efficient movement of people and goods within Glendale and beyond; and**

ii. **Enhance the Transit System by ensuring that transit routes and stops are connected to the Pedestrian Realm and Active Transportation Network, and that transit is frequent and reliable enough to serve Glendale's anticipated population and business community, and to foster a seamless, multi-modal community where daily travel does not rely primarily on the use of a private automobile.**

b) **The multi-modal Transportation System in Glendale, consists of two equally important and entirely inter-connected elements: the Pedestrian Realm and Active Transportation Network (Schedule F4) and the Street Network (Schedule F5). The Transportation System serves as the framework on which to provide for travel by all modes, with a focus on, but not limited to, walking, cycling, emerging micro-mobility opportunities and transit.**

c) **The multi-modal Transportation System is premised on the pattern of development and increases in traffic volumes anticipated within Glendale over time. All development, including all public works related to the Transportation System, shall conform with the relevant policies of the Niagara-on-the-Lake Official Plan and this Plan. This Plan provides a broad based policy framework with respect to:**

i. **The Street Network;**

ii. **Streetscapes;**

iii. **Public Transit;**

iv. **Transportation Demand Management;**

v. **Parking, Access and Service Facilities; and**

vi. **The Niagara District Airport.**

8.1.2. The Street Network

Intent

a) **The Street Network is intended to establish the pattern of development Blocks within Glendale. All new development will only be permitted where a lot has frontage onto a public streetway. To provide for flexibility in land tenure and subject to a site-specific implementing Zoning By-law, consideration may be given to permitting the creation of Development Sites/Blocks where lands front onto a Private Street or Laneway. Permission will only be given where the Private Street or Laneway will be constructed and maintained to the satisfaction of the Town.**

Streetscapes

b) **Streetscapes associated within Glendale will accommodate key components of the Pedestrian Realm and Active Transportation Network - which solidifies their importance as a defining feature of the community. Glendale is expected to accommodate a wide variety of pavement widths and street rights-of-way, which requires a flexible approach to streetscape design, including trees/planting programs, street furniture and lighting. Inherent to this design flexibility, programming strategies are also a key element of street life activation.**

c) All streetscapes within Glendale are to be defined by their attractive, tree-lined open space character and by their emphasis on environmental quality. Streetscape design will place an emphasis on creating comfortable and convenient facilities for all users, and they may also incorporate transit routes.

Street Typologies

d) The Street Network identified on Schedule F5 includes facilities that are not under the jurisdiction of the Town, including:

i. The Queen Elizabeth Way (QEW): The main function of the QEW is to accommodate large volumes of inter-regional and regional traffic. All development adjacent to the QEW and the Glendale interchange is subject to the requirements and permits of the Ministry of Transportation Ontario;

ii. Existing Regional Roads - including Glendale Avenue, Taylor Road, Airport Road, York Road and Homer Road. Existing Regional Roads are under the jurisdiction of Niagara Region. Their main function is to move large volumes of vehicles over long distances, accommodate public transit routes, stops and associated facilities, and provide for active transportation options inside these right-of-ways.

Right-of-way widths, access and design treatments for Regional Roads within Glendale shall be consistent with the Region's Complete Streets Design Manual and shall conform with any relevant Niagara Region Official Plan policies and/or engineering standards.

e) The Street Network identified on Schedule F5 includes facilities that are under the jurisdiction of the Town. All streets under the jurisdiction of the Town shall be designed to be consistent with the Urban Design Guidelines attached to this Plan as Appendix B, Town and to conform with any relevant policies of the Niagara-on-the-Lake Official Plan and the following policies:

i. All Streets will be safe, accessible, secure and shall implement the relevant policies of the Accessibility for Ontarians with Disabilities Act;

ii. Street furnishings, plantings, materials, and techniques must be consistent in physical form and spacing and be of the highest quality. Pattern and repetition are essential to imprint a recognizable sense of place;

iii. The design of streetscapes shall create defined and continuous zones for planting, street furnishings, utilities and pedestrian, cyclist and vehicular traffic.

iv. Street design shall ensure:

- **That the ultimate right-of-way width for any Street will be sufficient to accommodate the intended traffic volumes as well as appropriate Active Transportation Facilities and streetscape amenities; and**

- **That the number, type, and design of permitted entrances onto streets shall protect the existing, or planned function of the street. Development abutting Collector and Local Streets shall consolidate vehicular accesses wherever possible to minimize conflicts with the Pedestrian Realm and Active Transportation Network and to limit impacts on traffic flow.**

f) The following street types are under the jurisdiction of the Town:

i. Existing and Proposed Collector Streets: Collector Streets are intended to afford organization for the street system and to provide the main connecting points to the Regional Roads. They are expected to be reasonably continuous, and to carry significant traffic volumes. Collector Streets shall have the ability to accommodate transit;

ii. Character Streets - including Queenston Road and Concession 7 Road. Character Streets are intended to provide access to individual lots, or Development Sites/Blocks and to establish an appropriate transition between the more urban elements of Glendale to the surrounding rural/agricultural landscape;

iii. Industrial/Business Park Streets: Industrial/Business Park Streets are under the jurisdiction of the Town. They are intended to provide access to individual lots, or Development Sites/Blocks;

iv. Main Street: The Main Street (Niagara-on-the-Green Boulevard) is expected to support significant pedestrian traffic as well as to provide access to individual development lots and blocks in a traditional "main street" built form; and

v. Existing and Proposed Local Streets:. Local Streets are intended to provide access to individual residential lots, or Development Sites/Blocks;

g) In addition to the components of the Street Network that are under public sector jurisdiction, the Town may also facilitate Private Streets/Rear Laneways. Private Streets and Laneways are the responsibility of the owner. They are intended to provide access to individual residential lots, or Development

Sites/Blocks. Right-of-way widths, access and design treatments for Private Streets and Laneways within Glendale shall be consistent with the Urban Design Guidelines attached to this Plan as Appendix B, and shall conform with any relevant Niagara-on-the-Lake Official Plan policies or engineering standards.

The Town shall promote Shared private driveways will provide vehicular and servicing access to Development Sites/Blocks and shall be coordinated within the Sites/Blocks to give access to multiple buildings. Shared private driveways will be designed to meet technical standards of the Region or the Town.

8.1.3. Public Transit

a) **The Town will collaborate with the Niagara Region Transit Commission in supporting the expansion of Local, Regional and Inter-Regional transit service to Glendale. This Plan encourages the use of transit by connecting patrons and residents with transit services through the accommodation of local transit service and the Pedestrian Realm and Active Transportation Network. The provision of high-quality walking and cycling facilities is encouraged to further increase the potential catchment area of transit services within Glendale.**

b) **The Town will ensure, as part of the development approval process, that lands are secured where appropriate for transit routes, transit stops and associated facilities, including assisting the Niagara Region Transit Commission with the securement of an appropriately located Transit Hub facility.**

8.1.4. Transportation Demand Management

a) **Transportation Demand Management (TDM) refers to a variety of strategies to reduce congestion, reduce reliance on the single- occupant vehicle, and achieve a more sustainable transportation system. TDM is a multi-modal approach that supports cycling, walking, transit and carpooling, by introducing incentives and disincentives to reduce reliance on the single-occupant vehicle. TDM works to change how, when, where and why people travel.**

b) **The Town may implement a comprehensive Transportation Demand Management program and may consider reduced parking requirements for development and/or redevelopment where a comprehensive Transportation Demand Management Report is submitted to the satisfaction of the Town.**

8.1.5. Parking, Access and Service Facilities

a) **It is the intent of this Plan to minimize the amount of surface automobile parking in Glendale in order to realize the intensity of built-form anticipated by this Plan. Vehicle parking will be managed to minimize adverse impacts including environmental and visual impacts.**

b) **Adequate parking, loading and garbage collection/storage facilities for all permitted land uses shall be provided on-site. Parking facilities for Low-Rise Buildings are encouraged to be in structure. Parking facilities for Mid-Rise Buildings shall be primarily accommodated in structure and, where possible, so should loading and garbage collection areas.**

c) **It is recognized that surface parking may be provided for development on an interim basis in the early phases of new development. It is a requirement of this Plan that all applications for development demonstrate the transition to an end state scenario where buildings, rather than parking, become the predominant feature of the streetscape.**

d) **Where provided, the design of surface parking shall consider:**

   i. **Planting strips and landscaped traffic islands, medians, or bump-outs shall also be provided within lots to break up the expanse of hard surface;**

   ii. **Pedestrian-scaled lighting, walkways, landscaping, and signage to enhance pedestrian safety, movement and comfort through parking lots to the adjacent sidewalks; and**

e) **The majority of parking, other than short-term surface parking (taxi, delivery, pick-up and drop-off), for any Mid-Rise Building shall be primarily provided in underground, or in above-ground parking structures. Parking structures shall:**

   i. **Have well designed facades which appear as a fenestrated building, with well- articulated openings and high-quality materials;**

   ii. **Have entrances off of public or private streets and be integrated with the design of the building; and**

   iii. **Have pedestrian entrances to integrated parking structures which are easily identified, well-lit and designed with consideration for CPTED principles.**

f) **Access to parking/loading facilities that are within buildings shall be designed to accommodate trade vehicles, moving vans, garbage trucks and delivery vehicles. In general, loading, garbage collection and parking areas should not be located where they are perceived from the Streetscape and should be hidden**

from view. Where possible, access to parking, loading and garbage collection areas should be located on the street with the least pedestrian traffic.

g) Where above-ground parking structures front onto a public or private street or element of the Pedestrian Realm and Active Transportation Network, active ground floor uses are encouraged to provide attractive facades, animate the streetscape and enhance pedestrian and cyclist safety. An above-ground structure should incorporate minimum 4.25 m floor to floor height requirements for future conversion of the at-grade parking level to active, non-residential land uses. Parking within above-ground structures shall be screened from view at the sidewalk level. The street and park frontage wall where an active use is not provided for, shall be enhanced by architectural detailing such as architectural panels and display windows.

h) Service and loading facilities, including garbage storage, shall be enclosed within a building for all Mid-Rise Buildings and in all cases shall be accessed from a Local Street. Where loading and servicing is visible at the rear or side of a building, it shall be screened by the main building, landscape treatment or other screening. Underground loading and service areas shall be encouraged.

i) The Town may consider permitting parking, including access to parking, under Local Streets or under the elements of the Pedestrian Realm and Active Transportation Network provided the purpose, function and character of these facilities is not materially or qualitatively compromised, and subject to the Town's design and construction requirements and a strata title agreement with conditions established to the satisfaction of the Town.

j) Where a development cannot provide off-street parking on its own site, the Town may permit the provision of the required parking spaces on an alternative site, provided that the alternative site is within convenient walking distance (approximately 200 metres) of the proposed development, and the developer enters into an agreement with the Town to ensure the continued availability of the alternative site as a parking area.

k) The provision of automobile parking shall be encouraged to be minimized in accordance with the relevant provisions of the implementing Zoning By-law. If through the development approval process relief from either the minimum or maximum parking rates is sought, the proposed rates must be justified by a Parking Study.

Further, and where appropriate, the Town may accept cash-in-lieu of parking as an alternative to providing any required parking. Where cash-in-lieu of parking is

accepted, the funds generated shall be used to provide additional public parking or the aesthetic and/or functional improvement of existing public parking areas within Glendale.

l) The Town shall monitor the need for public parking in Glendale and may prepare a public parking strategy that addresses, among other matters, the role of a municipal parking authority.

m) Bicycle parking, carpool and carshare parking should be prioritized and located in convenient and accessible locations in proximity to main entrance points or destinations.

n) Both short-term street-level bike parking, as well as long-term sheltered bike parking shall be provided. Bicycle parking facilities shall be designed to maximize user convenience in terms of physical location, weather protection, security and ease of use, including but not limited to meeting the provisions of the implementing Zoning By-law. Bicycle parking requirements will be identified through the development approval process.

8.1.6. Niagara District Airport

a) While outside the Glendale area, the Niagara District Airport represents a significant local and regional asset that enhances the development potential of the lands immediately next to the airport and the surrounding area. The Airport conducts its own master planning and is subject to relevant Federal legislation and regulations.

8.1.7. Implementation of the Transportation System

a) The implementation of the Transportation System for Glendale will be planned and designed to accommodate all modes of travel and for universal accessibility, prioritizing walking, cycling and transit. The planned street network will balance the needs of all users while recognizing the importance of encouraging a range of active street life during both day and night.

b) The Transportation System will be established incrementally through the development approval process. The network will be developed in conformity with the policies of this Plan, as well as the relevant policies of the Town and the Region. The intent is to ultimately develop a connected and continuous network, while recognizing constraints that create barriers which limit the achievement of a completely connected network.

c) **The Street Network identified on Schedule F5 shall be conveyed to the municipality as a condition of approval of development. The Town, at its discretion, in exceptional circumstances, may also directly purchase lands for planned infrastructure improvements.**

d) **Adjustments to the Transportation System identified on Schedule F5, through the development approval process, will not require an Amendment to this Plan provided the general intent and purpose of this Plan is maintained and the Town is satisfied that the role and function of such streets and facilities are maintained.**

e) **The Town shall assist the Region in protecting and obtaining lands required for rights-of-way, street widening, parking, transportation facilities through the development process.**

f) **The Town shall assist the Niagara Transit Commission in protecting and obtaining lands required for the provision of public transit services, including the Transit Hub facility, through the development process.**

8.2. Municipal Service Infrastructure and Utilities

8.2.1. General Policies

a) **Municipal service infrastructure includes water, wastewater and stormwater facilities that are a critical element in the development of Glendale. The objectives of this Plan with respect to municipal service infrastructure are to:**

i. **Provide adequate and sufficient systems of water supply, sanitary sewage disposal and storm drainage to all areas of development in Glendale in accordance with the phasing policies this Plan and based on sound financial planning.**

ii. **Develop necessary municipal service infrastructure enhancements and undertake improvements to existing servicing infrastructure bearing in mind the ultimate servicing requirements of the municipality, and the municipality's ability to finance such projects.**

b) **Municipal service infrastructure in Glendale shall be planned in an integrated and financially sustainable manner, having regard for the long-term development potential for Glendale and including evaluations of long-range scenario-based land use planning and financial planning supported by infrastructure master plans, asset management plans, environmental assessments and other relevant studies and should involve:**

i. **Leveraging investments in municipal service infrastructure enhancements to direct growth and development in accordance with the policies of this Plan;**

ii. **Providing sufficient municipal service infrastructure capacity for the ultimate intensification of Glendale;**

iii. **Identifying the full life cycle costs of municipal service infrastructure and developing options to pay for these costs over the long-term, as determined by the Town and Region; and**

iv. **Considering the impacts of a changing climate.**

c) **All development within Glendale shall be provided with full municipal servicing infrastructure, unless otherwise exempted by this Plan.**

d) **In planning for the expansion of existing municipal service infrastructure corridors, the Town will encourage the co-location of linear water, wastewater and stormwater service infrastructure, wherever possible.**

e) **The processing and approval of development applications shall be contingent upon the availability of water and wastewater capacity within the local municipal system in addition to capacity identified by the Region.**

f) **Planned municipal service infrastructure enhancements shall be implemented through the development process as set out in this Plan and the relevant policies of the Niagara-on-the-Lake Official Plan. The Town, at its discretion, in exceptional circumstances, may also directly purchase lands for planned infrastructure improvements.**

8.2.2. Municipal Water and Wastewater Servicing Infrastructure

a) **All new development within Glendale is required to connect to urban municipal water and wastewater service infrastructure upon confirmation that capacity is available within those systems. The phasing of development shall be coordinated with the phasing of municipal water and wastewater service infrastructure.**

8.2.3. Stormwater Management Infrastructure

a) **Existing stormwater management facilities are identified on Schedule F and Schedule F3. They are expected to remain as stormwater management facilities in the long-term. Opportunities to modestly redesign or reconfigure any existing stormwater management facility may be considered by the Town**

without the need for an Amendment to this Plan. However, any significant application to remove, reuse, or reconsider the configuration of any existing stormwater management facility shall require an Amendment to this Plan.

b) New stormwater management facilities in Glendale shall be consistent with the attached Urban Design Guidelines and in accordance with the following policies:

i. Planning for stormwater management will:

- **Minimize, or where possible, prevent increases in contaminant loads;**
- **Minimize changes in water balance and erosion;**
- **Not increase risks to human health and safety and property damage;**
- **Maximize the extent and function of vegetative and pervious surfaces;**
- **Provide controls on invasive species where possible;**
- **Promote stormwater management best practices, including stormwater attenuation and re-use, and low impact development;**

ii. No development will occur without appropriate regard for storm run-off, on-site collection and channeling of stormwater to an adequate outlet. Drainage will be to a storm sewer outlet satisfactory to the Town;

iii. Detention ponds may be used in areas with open drainage channels as part of the storm drainage system to maintain pre-development flows into the outlet stream.

iv. Proposals for large-scale development proceeding by way of a Plan of Subdivision/Condominium, Consent or Site Plan Approval will be supported by a stormwater management plan or equivalent, that:

- **Incorporates an integrated treatment approach to minimize stormwater flows and reliance on stormwater ponds, which includes appropriate low impact development and green infrastructure - including consideration of porous pavements, bioretention basins, enhanced swales, green roofs and rain gardens among others;**
- **Establishes planning, design and construction practices to minimize vegetation removal, grading and soil compaction, sediment erosion and impervious surfaces;**

v. **Design of development proposals will incorporate on-site control techniques to minimize peak stormwater flows, provide erosion control and to ensure adequate water quality treatment in accordance with current Provincial, Regional and Town policies and guidelines;**

vi. **Permanent or temporary sediment retention basins may be required to control quantities of suspended materials washed from the sites;**

vii. **Development will be permitted only on lands having soil and drainage conditions which are suitable for development and only with appropriate stormwater management and sediment control;**

viii. **The design of artificial channelization of watercourses, which use concrete-lined channels and can sterilize the natural environment and fish habitat, is discouraged. The use of naturalized methods of stormwater management is promoted;**

ix. **Stormwater management facilities that service development within Glendale shall be located within the defined boundaries of Glendale.**

8.2.4. Utilities and Telecommunications Networks

a) **All new development will be required to be served by adequate public and private utilities and telecommunications networks, that are or will be, established to serve the anticipated development. These utilities and networks can be phased in a manner that is cost-effective and efficient.**

Public and Private Utilities

b) **Public and private utilities will be installed, where possible, within public street allowances. Where facilities cannot be located in a public street allowance, the provision of easements shall be permitted provided that their location does not detract from the function, amenity or safety of adjacent land uses.**

c) **In planning for the expansion of existing and planned transportation and/or infrastructure corridors, the Town will encourage the co-location of linear public and private utilities.**

d) **Public and private utilities where feasible, shall be located underground and be grouped into a single utility conduit, in a street allowance or easement. Where facilities are required to be located above grade, such as telecommunications towers, the Town shall require that appropriate locations are identified in**

consideration of the location requirements for larger infrastructure elements, whether within public rights-of-way, or on private property.

e) Public and private utilities involving outdoor storage will require special attention and may not be permitted in all areas if deemed incompatible.

f) Right-of-ways or easements for public and private utilities and telecommunications networks may be provided without Amendment to this Plan.

Telecommunications

g) The Town has developed a Comprehensive Telecommunications Plan and Telecommunication Facilities Protocol that establishes an approach to the location and development of telecommunication facilities in the Town.

h) The Town supports initiatives to improve telecommunications coverage and capacity in the Town.

i) New equipment sites:

i. Are to be directed to locations that are technically suitable to meet the vast majority of each carriers' network requirements into the near future;

ii. Shall be designed to accommodate the colocation of additional providers and equipment, including that of new or emerging carriers;

iii. Compatible and appropriate with surrounding uses, having limited impact on existing land uses in the vicinity; and

iv. Consistent with the Telecommunications Facilities Protocol.

j) Right-of-ways or easements for telecommunications networks may be provided without Amendment to this Plan.

9. IMPLEMENTATION and INTERPRETATION

9.1. Implementation

9.1.1. Plan Coordination

a) The Town shall work cooperatively with the Province, Niagara Region, relevant transit authorities and any other agency having jurisdiction, as well as with landowners, the public and developers, in order to facilitate and coordinate

implementation of public and private development in Glendale in accordance with this Plan.

b) The Town shall ensure that all construction shall adhere to the regulations of the Ontario Building Code, the Fire Code, the Accessibility for Ontarians with Disabilities Act and any other relevant legislation.

9.1.2. Plan Review

a) The Town will review the policies of this Plan to identify planning issues and trends affecting the ongoing evolution of Glendale, to analyze the effectiveness of the policies of this Plan and to allow for adjustments and updating. It is critical to review, update, and consolidate this Plan from time to time to ensure its continued relevance and usefulness.

b) The Town will review existing and future legislation contained in the Planning Act, the Municipal Act, the Ontario Heritage Act, the Development Charges Act and other relevant Provincial statutes that apply to areas of municipal jurisdiction. The Town will, where appropriate, amend existing policy and/or implementing Zoning By-laws or pass new implementing Zoning By-laws to ensure land uses are properly regulated in accordance with the policies of this Plan, relevant legislation and associated regulations.

9.1.3. Monitoring the Plan

a) In order to evaluate the effectiveness of this Plan in general, the Town will monitor development activity and changes in land use within Glendale and may develop key performance indicators for this Plan. Where it is deemed necessary due to changes in the physical, social or economic makeup of the municipality, or as a result of new Provincial and/or municipal planning policy priorities/directions, this Plan shall be appropriately updated. The monitoring and measuring the performance of this Plan is critical to determine if:

i. The assumptions inherent to this Plan remain valid;

ii. The implementation of the policies fulfills the overall vision, principles and intent of the policies of this Plan;

iii. That development is being carried out in conformity with the policies of this Plan and consistent with the associated plans, guidelines and manuals adopted by the Town; and

iv. The priorities identified in this Plan remain constant or require change.

b) In terms of monitoring this Plan from a growth management perspective, the Town will establish an annual program to monitor and report on the level of development in Glendale. The monitoring program, which may be established in collaboration with the Region, will address matters such as:

i. Population and employment generated by existing and approved development;

ii. Implementation and timing of required municipal service infrastructure enhancements; and

iii. Implementation of street and intersection enhancements and consideration of any changes in modal split, travel behavior and parking requirements.

9.1.4. Existing Uses

a) Land uses which legally existed as of the date of adoption of this Plan may be recognized by an appropriate zoning category in the implementing Zoning By-law and replacements, extensions and/or the construction of accessory buildings may be permitted in accordance with the relevant policies of this Plan and the Niagara-on-the-Lake Official Plan.

9.1.5. Other Provincial Planning Tools

Community Benefits Charges By-law

a) The Town may enact a Community Benefits Charge By-law that applies to the Town as a whole, and/or specifically to Glendale. The Town may prepare a Background Study and enact a By-law under the provisions of the Planning Act, to ensure that the capital cost of defined Community Benefits can be collected. The required Background Study will articulate those community benefits that may be considered for funding under the Community Benefits By-law, including consideration of:

i. Affordable housing;

ii. Streetscape improvements, including facilities that support transit;

iii. Improvements to the Pedestrian Realm and Active Transportation Network;

iv. Improvements to public parks; and

v. Other community and cultural facilities to be identified in the required Background Study.

b) In addition to the exemptions included within the Planning Act, the Town may exempt some or all of the Community Benefits Charge, or exempt certain development from the Community Benefits Charge as a means to promote specific development, redevelopment or revitalization objectives in accordance with this Plan.

Parkland Dedication By-law

c) Parkland Dedication will occur in accordance with the provisions of the Planning Act. All development within Glendale shall be required to make an appropriate contribution to the Public Parkland and/or Urban Park Space System, as follows:

i. For industrial and commercial developments, 2% of the gross land area;

ii. For all other forms of development, 5% of the gross land area; and

iii. For mixed-use forms of development, parkland dedication shall be calculated using a pro-rated formula that assigns the parkland dedication requirement on the basis of the percentage of gross floor area for each use.

d) Subject to the Town preparing a Parks Plan that can justify the use of the alternate rates, in the case of land proposed for development or redevelopment for residential purposes, the Town's Parkland Dedication Bylaw may require that:

i. Land be conveyed to the Town at a rate of 1 hectare for 600 net new dwelling units proposed, or at a lesser rate as may be specified in the By-law. The land conveyed shall be used by the Town for park or other public recreational purposes; or

ii. Where cash-in-lieu of land is to be collected, it shall be limited to a maximum equivalent value of 1 hectare for each 1000 dwelling units.

Notwithstanding that alternative rate, on sites of 5 hectares or less, the maximum parkland dedication shall be 10% and on sites greater than 5 hectares, the maximum parkland dedication shall be 15%.

e) In all circumstances, the Town may also accept cash-in-lieu of any required parkland dedication, or part thereof.

f) Encumbered or strata lands, as well as privately owned publicly accessible spaces may be eligible for parkland dedication. Landowners can identify the

land they intend to provide for parkland, with the Town able to appeal to the Ontario Land Tribunal if there is a disagreement.

g) This Secondary Plan is based on the requirement that development is to occur comprehensively, where Public Parks are expected to be established for the benefit of the broader community and that some land owners may be required to dedicate more land for Public Parks than others. The intent of the Town is to ensure, through the policies of this Secondary Plan, the development approval process and/or legal mechanisms available to the Town under the Planning Act, or any other legislative opportunity, that land owners asked to over contribute lands for Public Parks are appropriately compensated for their relative loss of development potential by the Town, through the Town's cash-in-lieu of parkland account, or more directly by benefitting land owners who are dedicating less land than they are required for Public Park purposes.

Community Planning Permit System

h) The Town may prepare a background study and enact a By-law under the provisions of the Planning Act, to establish a Community Planning Permit System within Glendale. Where a Community Planning Permit System has been ordered by the Province, the Town may utilize the Inclusionary Zoning tool.

Conditional Zoning (Holding)

i) A By-law may be passed under the provisions of the Planning Act and the policies of the Niagara-on-the-Lake Official Plan, to zone lands for their intended purpose, subject to conditions where the lands are designated in any designation which permits development. The conditions imposed may relate to any matter which implements the policies of this Plan including the provision of sewer and water services, streets, transit, parks, recreation and other community facilities, and commitments to specific design, tree planting, travel demand management, the Pedestrian Realm and Active Transportation Network, sustainability plans and the existing Airport Zoning Regulations.

Inclusionary Zoning

j) Pursuant to the Planning Act, Inclusionary Zoning may, when permitted by Provincial policy, be implemented by the Town within Glendale. Inclusionary Zoning would authorize the inclusion of affordable housing units within buildings or projects containing other residential units, and for ensuring that those affordable housing units are maintained as such over time. The Town

may utilize the Inclusionary Zoning tool in conjunction with the establishment of a Community Planning Permit System.

9.1.6. Conveyance/Acquisition of Lands

a) **Where lands have been identified as required for the construction of the street network or for parkland, and where such lands are the subject of a development application, the dedication of such lands shall be required as a condition of development approval, in accordance with the Planning Act.**

b) **It is the intent of the Town to work cooperatively with the Region, the Province, the Government of Canada, Land Trusts and private property owners to increase of supply of attainable/assisted housing in accordance with the policies of this Plan.**

c) **It is the intent of the Town to work cooperatively with the Region, the Conservation Authority, the Province, the Government of Canada, Land Trusts and private property owners to establish ongoing financial, policy and legislative support for the protection and enhancement of all significant natural heritage features and their associated ecological and hydrological functions, within the Environmental Protection Designation of the Natural Heritage System, or the increase of supply of affordable housing in accordance with the policies of this Plan.**

d) **Mechanisms to secure lands within Glendale for the purposes of implementing this Plan in accordance with the provisions of the Planning Act may include, but are not limited to, the following property acquisition tools:**

   i. **Land dedications/conveyance;**

   ii. **Voluntary sale and public purchase through funds allocated in the Town's budget;**

   iii. **Land swaps/exchanges;**

   iv. **Donations, gifts, bequests from individuals and/or corporations;**

   v. **Density transfers; and/or**

   vi. **Other appropriate land acquisition methods.**

e) **Where land is required for maintenance/utility easements or emergency access to serve any proposed development, such land will be obtained by and at the expense of the owner of such proposed development to the satisfaction of the**

appropriate agency, in the course of approving plans of subdivision, development or redevelopment applications and consents for land severance.

9.1.7. Municipal Finance

a) **The implementation of this Plan must be fiscally responsible, by ensuring that the required capital expenditures to provide required municipal service infrastructure enhancements and transportation system improvements are paid for in an equitable and appropriate manner.**

b) **Development will be monitored to ensure that a balance is maintained between demands for municipal service infrastructure enhancements and transportation system improvements and the overall fiscal capacity of the Town.**

c) **Where possible, the Town will use financial mechanisms available to it under any legislative authority, including the Municipal Act, Development Charges Act, Planning Act and any other applicable legislation, for the purposes of land use planning and the provision of municipal service infrastructure enhancements, transportation system improvements, the Public Realm/Active Transportation Network and any identified community benefits.**

d) **The Town may request a Municipal Financial Impact Assessment from the owner/applicant of any development application. The terms of reference of such a study will be determined by the Town. The Assessment will be prepared, and may be peer reviewed at the owner/applicant's expense. Development applications or proposals may be refused or deferred on the basis of financial impact and burden on the Town, if suitable mitigation measures are not available.**

e) **It is the intent of this Plan that, wherever possible, the Town, on the basis of the policies contained within this Plan and the NOTL OP, establish a staged program for the implementation of municipal service infrastructure enhancements, transportation system improvements, public works and/or any other municipally-assisted projects within Glendale. A five-year capital improvement program should be developed to systematically implement necessary capital improvements. This program should be reviewed annually as part of the capital budget procedure.**

9.1.8. Development Applications

Airport Height Assessment

a) **An Airport Height Assessment shall be required for any proposed development within Glendale that does not comply with the Airport Zoning Regulations identified on Schedule F2. The required Airport Height Assessment shall address the proposal's compliance with the Airport Zoning Regulations for the Niagara District Airport, and shall be supported by detailed building elevations, topographic survey and site grading plans. If the Airport Height Assessment identifies that an exemption to the Airport Zoning Regulations is required, the report shall also include an impact assessment, in accordance with the requirements of sub-section 5.9(2) of the Federal Aeronautics Act.**

Urban Design Brief

b) **An Urban Design Brief may be required to support a development proposal as part of a complete development application. This requirement will be identified by Planning Staff at the Pre-Consultation meeting. The scope and level of detail expected in the Urban Design Brief will depend on the scale, site, nature, and complexity of the development proposal.**

c) **An Urban Design Brief is intended to describe and illustrate the proposed design for a development proposal and demonstrate how the design meets the intent of Glendale's Urban Design Guidelines and other Town and Regional guidelines, standards, and policies. Planning Staff will use the Urban Design Brief to assess the urban design aspects of development applications to ensure high quality design is achieved in the public and private realms. The Town is committed to urban design excellence that results in a complete, functional, sustainable, and attractive built environments consistent with Niagara-on-the-Lake's character and vision for the future, as outlined in the Town's Official Plan.**

d) **Components of an Urban Design Brief**

   i. **Overview of existing site conditions and surrounding context;**

   ii. **Identification of relevant policies and applicable elements of the Urban design Guidelines attached to this Plan as Appendix B;**

   iii. **Analysis of the design rationale for the building, landscape, and site design elements of the proposed development;**

   iv. **Explanation of why the proposed development represents the optimum design solution; and**

v. **A written description, plans, elevations, diagrams, and/or photographs to illustrate the design choices of the proposed development and site design.**

Development Concept Plan

e) **A Development Concept Plan may be required to support a development proposal as part of a complete development application. This requirement will be identified by Planning Staff at the Pre-Consultation meeting.**

f) **Where a Development Concept Plan is required by the Town, the exercise shall promote comprehensive planning, and shall be required to:**

i. **Identify the detailed land use and density distribution, and to ensure that the required density target is achieved;**

ii. **Confirm the boundaries of the Environmental Protection designation;**

iii. **Identify the components of the Pedestrian Realm and Active Transportation Network;**

iv. **Identify the location for any required Public Service Facilities;**

v. **Identify the detailed street pattern, including Local Streets, although the Local Street network may be conceptual;**

vi. **Articulate the details for the provision of sewer, water and stormwater management systems;**

vii. **Identify phasing and order of development, including any uses in the public interest to be developed in the earlier phases (e.g., attainable/assisted housing, Public Service Facilities, parks); and**

viii. **Potentially form the basis for a Developer's Group Agreement, where the identified Conceptual Plan Area includes multiple landowners.**

g) **A Development Concept Plan is a non-statutory instrument that shall be adopted by Council. The preparation of a Development Concept Plan shall conform with all relevant policies of this Plan and shall be consistent with the Urban Design Guidelines attached to this Plan as Appendix B. The Terms of Reference for any Development Concept Plan shall be approved by the Town, and shall include all of the necessary supporting technical studies, to the satisfaction of the Town. Required Development Concept Plans shall form the basis for the subsequent approval of Draft Plans of Subdivision/Condominium and implementing Zoning By-laws.**

9.2. Interpretation

9.2.1. Land Use Boundaries and Streets

a) **The location of boundaries and symbols, including land use designations shown on the Schedules to this Plan are intended to indicate the general location, except where they coincide with highways, streets, watercourses, or other clearly recognizable or defined physical features.**

b) **Future street and active transportation networks shown on the Schedules to this Plan are illustrated in approximate locations only. As such, Amendments to this Plan will not be required in order to make minor adjustments provided that the general intent of this Plan is preserved. Such minor deviations will not necessarily be reflected on the attached Schedules to this Plan.**

c) **Where a parcel of land is subject to two or more land use designations, the policies of each designation shall apply to the portion of the lands so designated.**

9.2.2. Numeric Standards

a) **It is intended that all numeric standards be considered approximate and not absolute, with the exception of the limitations on building height, which are established by the Niagara District Airport, and are not subject to any increases. Amendments to this Plan shall not be required for minor variations from the criteria providing the general intent of this Plan is maintained.**

9.2.3. Subsequent Legislation

a) **Where a Provincial or Federal Act, regulation or guideline is referred in this Plan, it is intended that such reference be interpreted to include any subsequent legislation, regulation or guideline that may replace the specified Act. Similarly, where reference is made to the Region or Provincial Ministries or agencies, it is intended that such reference be intended to include any Ministry, agency or government branch who may assume responsibility for a particular policy/regulation currently administered by the referenced organization.**

b) **Where reference is made to any Town By-law, or any Appendix to this Plan, it is intended that such reference be interpreted to include any subsequently revised or updated version, that may replace the specified By-law or Appendix to this Plan.**

9.2.4. Technical Revisions

a) **Where an error is discovered in the text or a Schedule such as a typographical, grammatical, spelling, numbering or other similar type of mistake, the error may be corrected without obtaining an Amendment to this Plan provided that the general intent, purpose and substance of this Plan is maintained.**

9.2.5. Definitions

a) **This Plan includes a number of words or phrases that require a common understanding of their meaning:**

i. **The term "conform with" when used in this Plan means to comply with the policies or requirements of this Plan. Conformity is a mandatory requirement of this Plan, unless otherwise modified by specific wording to the contrary;**

ii. **The term "consistent with" when used in this Plan means to comply/conform with the policies or requirements of this Plan, unless there are compelling circumstances that do not permit compliance/conformity;**

iii. **The use of the words "shall", "will", or "must", when used in connection with an action by the Town are not to be interpreted as the Town's requirement to undertake actions immediately or as a commitment on the part of the Town to take action within a specified timeframe;**

iv. **The use of the words "shall", "will", or "must", when used in connection with a requirement for development applications, is a mandatory policy or requirement of this Plan;**

v. **The use of the words "should" or "may" when used in this Plan means something that ought to be done. It is however, a discretionary, not a mandatory policy or requirement of this Plan;**

vi. **The term "encourage" when used in this Plan means to give support to, or give favorable consideration to a matter or thing;**

vii. **The term "enhance" when used in this Plan means to complement and improve the physical, functional, aesthetic or intrinsic value of the natural environment, neighbourhood, place, area, building, structure or facility; and**

viii. **The term "target" when used in this Plan means a goal to be achieved, or a specific desired outcome that supports the achievement of an objective.**

ix. **The term 'low impact employment generating uses' when used in this Plan means modestly scaled research and development facilities, light manufacturing uses and warehousing facilities and other employment uses where the operations are not noxious or offensive by reason of dust, odour, fumes, particulate matter, noise and/or excessive vibrations (i.e. those uses defined as Class I Industrial Facilities in the Ministry of Environment, Conservation and Parks Land Use and Compatibility Guidelines).**

b) For the purpose of interpreting this Plan, the definitions in the Planning Act, the Ontario Heritage Act, the Provincial Policy Statement, or any other applicable Provincial legislation, plans and guidelines shall apply. In all other instances, terms shall be defined in accordance with their common usage and, if necessary, reference to the Canadian Oxford Dictionary.

4. That Schedules ‘F’, ‘F1’, ‘F2’, ‘F3’, and ‘F4’ are repealed and replaced as follows:

    a. Add Schedule ‘F’ as shown in Schedule 1 of this amendment.

    b. Add Schedule ‘F2’ as shown in Schedule 2 of this amendment.

    c. Add Schedule ‘F2B’ as shown in Schedule 3 of this amendment.

    d. Add Schedule ‘F3’ as shown in Schedule 4 of this amendment.

    e. Add Schedule ‘F4’ as shown in Schedule 5 of this amendment.

    f. Add Schedule ‘F5’ as shown in Schedule 6 of this amendment.

5. That ‘Appendix A’ is added, as shown in Schedule 7 of this amendment.

6. That ‘Appendix B’ is added, as shown in Schedule 8 of this amendment.

PART C – ADDITIONAL INFORMATION

The following additional information is available upon request:

Council Reports/Meetings

1. Information Report to Council – Glendale Secondary Plan Update (CDS-22-073)

2. Glendale Secondary Plan Update and Project Charter (CDS-23-007)

3. Council Workshop Meeting – Glendale Secondary Plan Presentation, September 25, 2023

4. Urban Design Committee Meeting – Glendale Secondary Plan Draft Urban Design Guidelines (CDS-23-254), November 22, 2023

5. Public Meeting - Glendale Secondary Plan - Official Plan Amendment (CDS-24-168), October 15, 2024

6. Recommendation Report – Glendale Secondary Plan – Official Plan Amendment (CDS-24-182), December 3, 2024

7. Glendale Secondary Plan – Official Plan Amendment Revisions (CDS-25-013), January 14, 2025

Supporting Studies

1. Glendale Scoped Subwatershed Study Final Phase 1 Report – Subwatershed Characterization, prepared by WSP, August 2024.

2. Glendale Scoped Subwatershed Study Final Phase 2 Report – Impact Assessment, prepared by WSP, August 2024.

3. Glendale Scoped Subwatershed Study Phase 3 Report – Implementation and Management Plan, prepared by WSP, August 2024.

4. Glendale Secondary Plan Update Area Servicing Plan (Water, Wastewater, and Stormwater Servicing), prepared by GM Blue Plan, October 30, 2024.

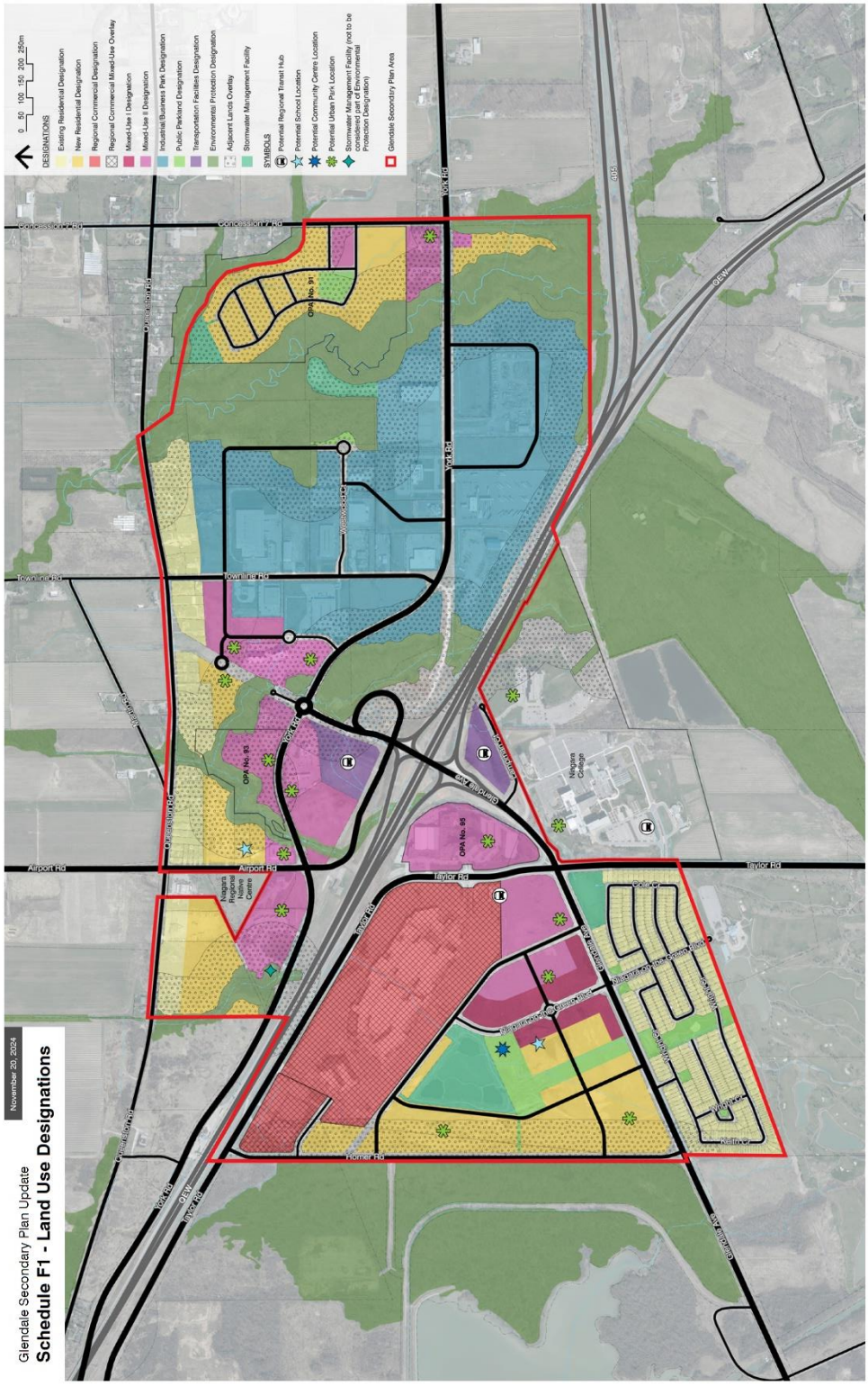
5. Glendale Secondary Plan Fiscal Impact Assessment, prepared by Urban Metrics, March 28, 2024 (updated October 30, 2024).

6. Glendale Secondary Plan Update Transportation Assessment – Future Conditions, prepared by LEA Consulting, November 2024

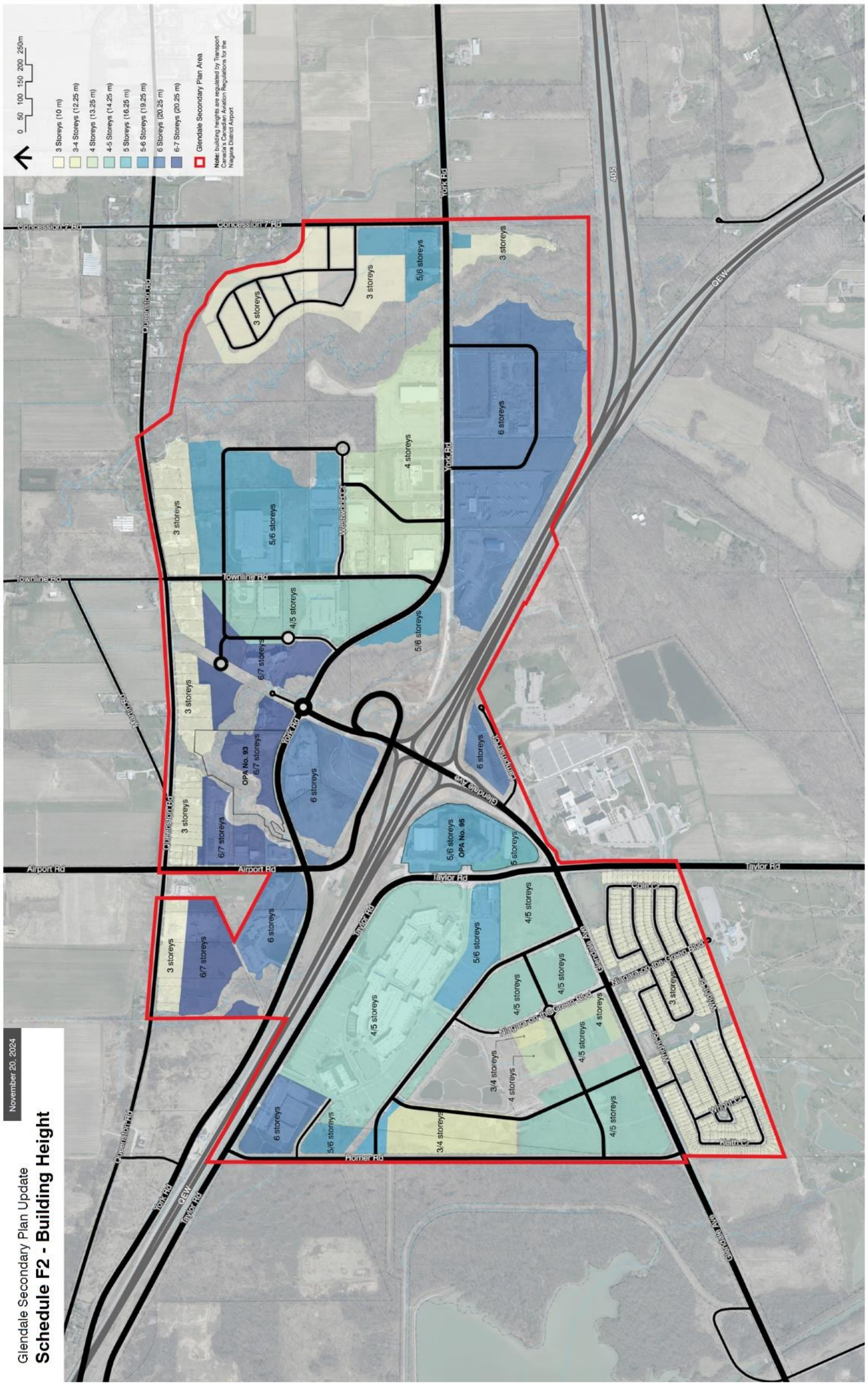
7. Glendale Secondary Plan Population, Commercial and Employment Analysis, prepared by Urban Metrics, February 28, 2024.

SCHEDULES OF THE AMENDMENT

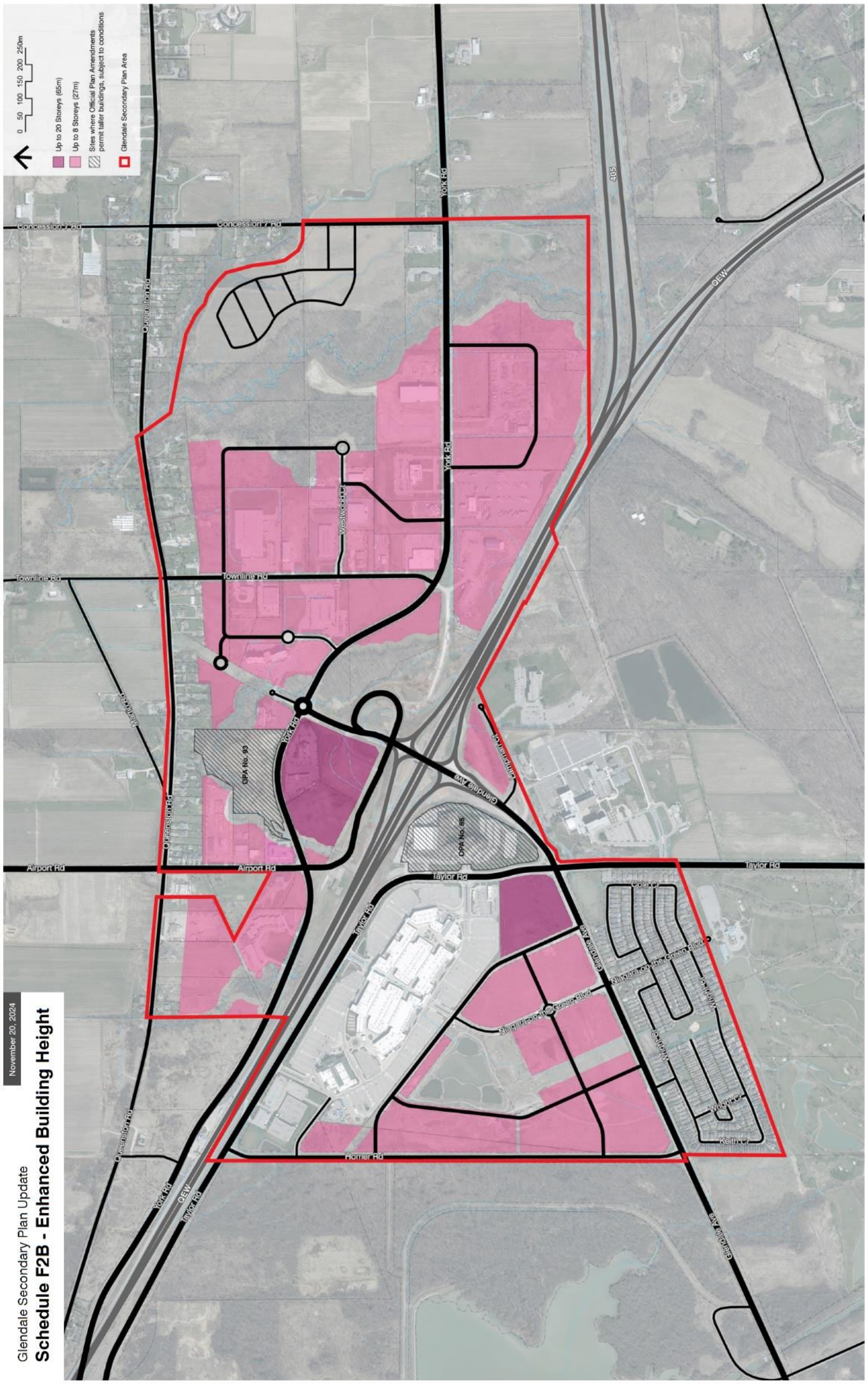
SCHEDULE 1



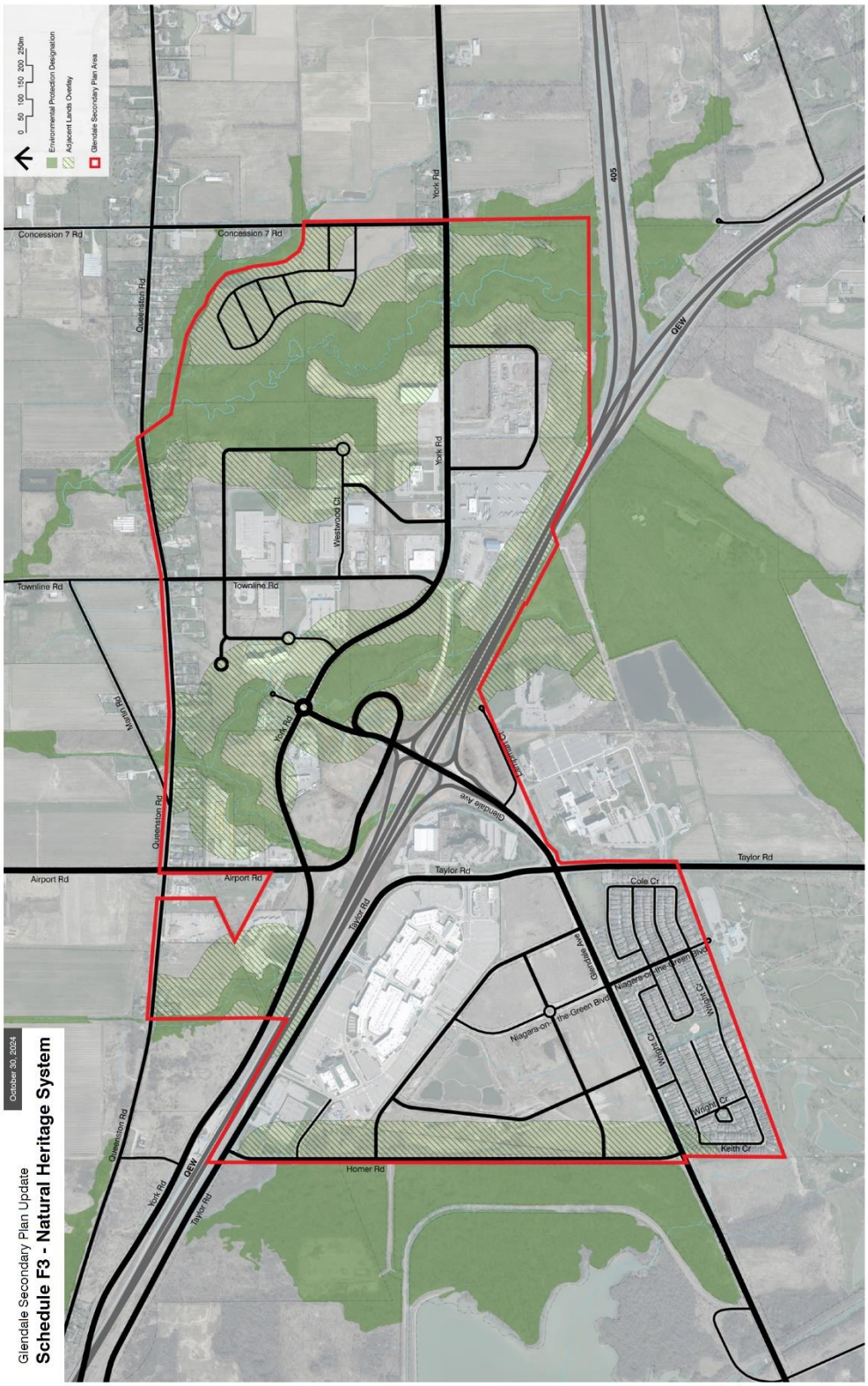
SCHEDULE 2


Glendale Secondary Plan Update
Schedule F2 - Building Height
November 20, 2024
0 50 100 150 200 250m
3 Storeys (10 m)
3-4 Storeys (12.25 m)
4 Storeys (13.25 m)
4-5 Storeys (14.25 m)
5 Storeys (16.25 m)
5-6 Storeys (19.25 m)
6 Storeys (20.25 m)
6-7 Storeys (20.25 m)
Glendale Secondary Plan Area
Note: building heights are regulated by Transport Canada's Canadian Aviation Regulations for the Niagara District Airport
Concession 7 Rd
York Rd
Townline Rd
Airport Rd
Taylor Rd
Homer Rd
Glendale Ave
QEW
405
OPA No. 93
OPA No. 95
3 storeys
4 storeys
4/5 storeys
5/6 storeys
6 storeys
6/7 storeys
3/4 storeys
5 storeys

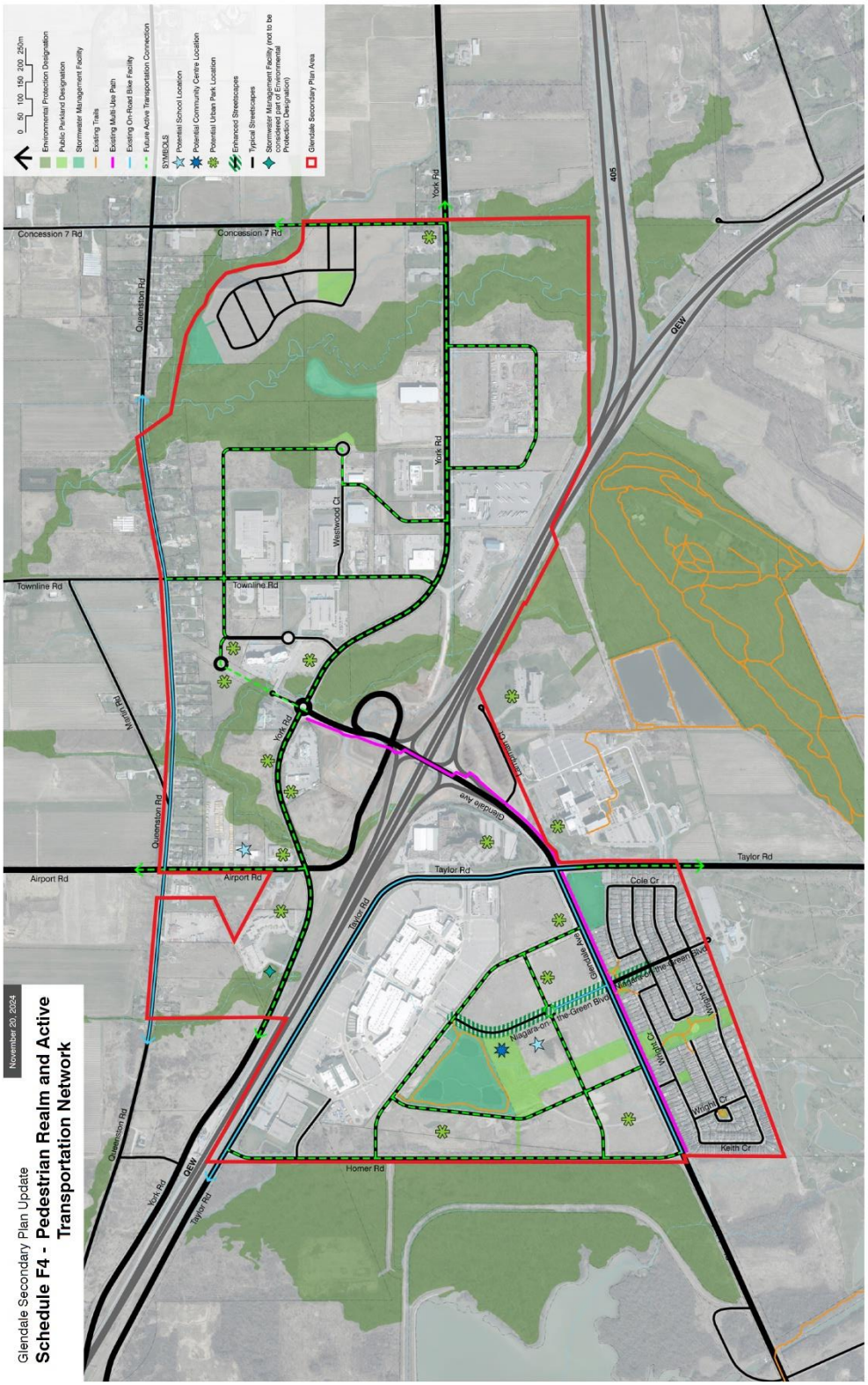
SCHEDULE 3


Glendale Secondary Plan Update
Schedule F2B - Enhanced Building Height
November 20, 2024
0 50 100 150 200 250m
Up to 20 Storeys (65m)
Up to 8 Storeys (27m)
Sites where Official Plan Amendments permit taller buildings, subject to conditions
Glendale Secondary Plan Area
Concession 7 Rd
Townline Rd
Airport Rd
Taylor Rd
Homer Rd
York Rd
Glendale Ave
QEW
405
OPA No. 93
OPA No. 95

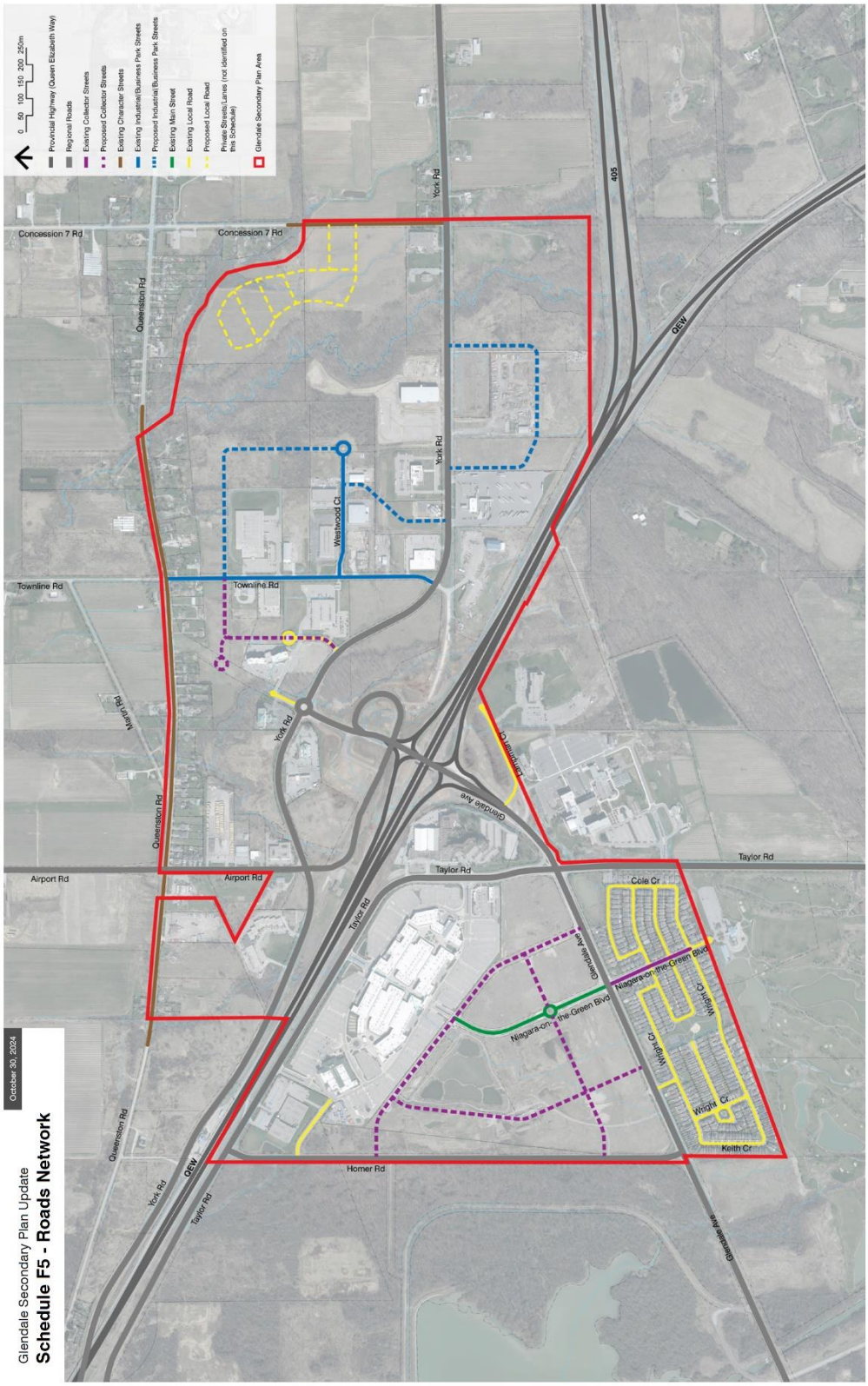
SCHEDULE 4


0 50 100 150 200 250m
Environmental Protection Designation
Adjacent Lands Overlay
Glendale Secondary Plan Area
Concession 7 Rd
Queenston Rd
York Rd
405
QEW
Westwood Ct
Townline Rd
Merritt Rd
Glendale Ave
Taylor Rd
Airport Rd
Cole Cr
Niagara-on-the-Green Blvd
Wright Cr
Keith Cr
Homer Rd
Taylor-Kiser Rd
October 30, 2024
Glendale Secondary Plan Update
Schedule F3 - Natural Heritage System

SCHEDULE 5


Glendale Secondary Plan Update
Schedule F4 - Pedestrian Realm and Active Transportation Network
November 20, 2024
0 50 100 150 200 250m
Environmental Protection Designation
Public Parkland Designation
Stormwater Management Facility
Existing Trails
Existing Multi-Use Path
Existing On-Road Bike Facility
Future Active Transportation Connection
SYMBOLS
Potential School Location
Potential Community Centre Location
Potential Urban Park Location
Enhanced Streetscapes
Typical Streetscapes
Stormwater Management Facility (not to be considered part of Environmental Protection Designation)
Glendale Secondary Plan Area
Concession 7 Rd
Queenston Rd
York Rd
Townline Rd
Westwood Cr
Main St
Airport Rd
Glendale Ave
Taylor Rd
Homer Rd
QEW
405
Cole Cr
Niagara-on-the-Green Blvd
Wright Cr
Keith Cr

SCHEDULE 6


0 50 100 150 200 250m
Provincial Highway (Queen Elizabeth Way)
Regional Roads
Existing Collector Streets
Proposed Collector Streets
Existing Character Streets
Existing Industrial/Business Park Streets
Proposed Industrial/Business Park Streets
Existing Main Street
Existing Local Road
Proposed Local Road
Private Streets/Lanes (not identified on this Schedule)
Glendale Secondary Plan Area
Concession 7 Rd
Queenston Rd
York Rd
Townline Rd
Westwood Cr
Main St
Airport Rd
Taylor Rd
Glendale Ave
Niagara-on-the-Green Blvd
Cole Cr
Wright Cr
Keith Cr
Homer Rd
QEW
405
October 30, 2024
Glendale Secondary Plan Update
Schedule F5 - Roads Network

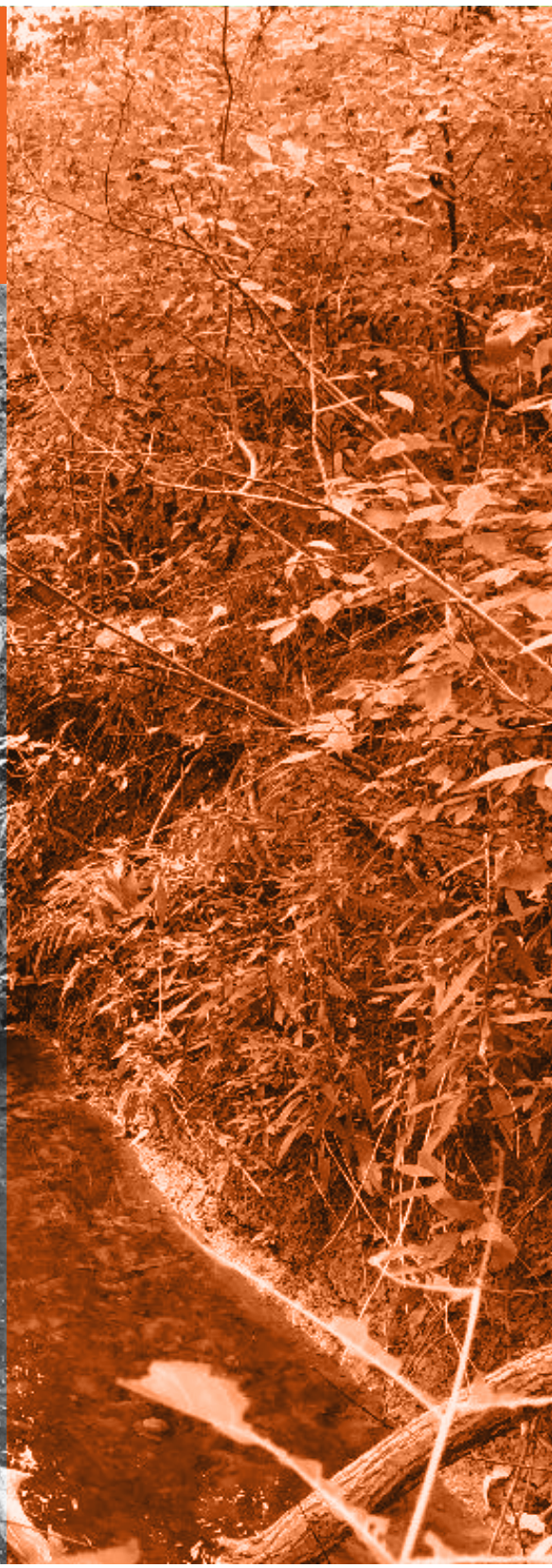
SCHEDULE 7

Begins on following page.

Glendale Secondary Plan

Appendix A
Natural Heritage System

October 30, 2024



The recommended Natural Heritage System (NHS) for the Glendale Secondary Plan area has been developed following a comprehensive review of background information, and completion of original field surveys, as part of the Glendale Scoped Subwatershed Study (SWS). The SWS development followed a phased approach, allowing for review and comments of the SWS findings and recommendations at specified milestones by key stakeholders including members of the SWS Technical Advisory Committee and Secondary Plan area landowners.

Phase 1 of the SWS involved the collection and compilation of existing natural heritage information resources with the results of field surveys to accurately characterize and map natural feature coverage within the Glendale SWS study area. Phase 2 incorporated an impact assessment and recommendation of a NHS for the Glendale SWS study area. Phase 3 provided further detail and recommendations on the management and implementation of the Glendale NHS in conjunction with future land development applications and site-specific studies.

Development of the NHS was based around an assessment of the most significant and sensitive natural features and habitats present within the Glendale SWS, based on background information review and field survey results. This assessment also had close regard for existing policies, and natural heritage designations and mapping, associated with the Niagara Region Official Plan (2022), Town of Niagara-on-the-Lake Official Plan (2017), the Growth Plan for the Greater Golden Horseshoe (OMMAH 2020), the Greenbelt Plan (OMMA 2017), and the Niagara Escarpment Plan (MNRF 2021).

As a result of this assessment, as summarized in the Phase 2 SWS report, the following significant and sensitive natural feature and area types were categorized and recommended to represent “Core Areas” of the Glendale NHS:

- Significant Woodlands;
- Wetlands, including the following:
    - Provincially Significant Wetlands (PSW);
    - Evaluated, non-PSW wetlands;
    - Unevaluated wetlands;
- Significant Valleylands;
- Fish Habitat;
- Habitat for Endangered and Threatened Species;
- Significant Wildlife Habitat, and
- Other woodlands (i.e., non-significant woodlands).

The individual components of the Glendale NHS were mapped in the Phase 2 SWS report, and are attached in Appendix I (Maps 3-5). Where property access was permitted to the SWS Study Team, the boundaries of woodland and wetland features were accurately delineated and mapped. Woodland boundaries were delineated according to their driplines as determined by experienced biologists. Wetland boundaries were delineated according to the Ontario Wetland Evaluation System (OWES) guidelines, as applied by biologists experienced with OWES. See

Appendix II for mapping showing the locations of properties that were directly accessed. Where site access was not possible, feature boundaries were determined based on air photo interpretation and, where applicable, existing property-specific environmental studies/data.

In conformance with the natural heritage policies of the 2022 Regional Official Plan, the Glendale NHS was also recommended to including supporting environmental features that would enhance the ecological form and function of the NHS Core Areas. Thus, the NHS also includes the following elements:

- Buffers;
- Linkages, and
- Supporting Features and Areas, which include Enhancement Areas.

See Appendix III for mapping of the recommended Glendale NHS, which represents a composite of the Core Areas and their associated buffers, linkages, and Supporting Features and Areas.

Buffers

Buffers have been recommended and identified as components of the Glendale NHS to set-back and mitigate the effects of future adjacent land uses on the protected Core Areas. Two classes of buffer have been identified for the SWS study area, with regard for existing Provincial and Regional policies and guidelines:

- Within the provincial NHS (i.e., NHS for the Growth Plan for the Greater Golden Horseshoe (OMMAH 2020) and the Greenbelt Plan (OMMA 2017)), prescribed 30m minimum buffers from the following Key Natural Heritage and Key Hydrologic Features:
    - Wetlands;
    - Seepage areas and springs;
    - Fish habitat;
    - Permanent and intermittent streams; and
    - Significant Woodlands.
- Outside of the provincial NHS and within the Glendale settlement area, preliminary buffer widths have been identified and recommended as the following:
    - 30m buffers from PSW;
    - 30m buffers from significant Areas of Natural and Scientific Interest (ANSI);
    - 20m buffers from Significant Woodlands;
    - 15m buffers from non-PSW and unevaluated wetlands;
    - 15m buffers (on each side) from Type 2 and 3 Fish Habitat/intermittent flow watercourses; and
    - 10m buffers from other woodlands.
    - In addition to the above, a special 20m wide buffer from the limits of a Gray Dogwood Cultural Thicket (CUT1-4; a form of NHS Supporting Feature/Area) south of the Niagara Corporate Business Centre has been recommended to preserve SWH (see below).

Preliminary buffer widths have been recommended with consideration for the ecological sensitivity of the protected feature, potential buffer functions and management strategies (e.g., water runoff attenuation toward adjacent wetland), and based on current industry standards and practices. It is intended that the width of the buffers identified in the SWS may be further refined through completion of site-specific EISs.

Buffers to Provincial NHS features are limited to a small portion of the Glendale Secondary Plan area, specifically within the northeastern extent where shown on Appendix I Map 1.

A small portion of the southeast study area (specifically within the Niagara College property) is located immediately adjacent to Escarpment Natural Area and Escarpment Protection Area as mapped in the Niagara Escarpment Plan (MNRF 2021) (Appendix I, Map 1b). Lands within the southeast study area may therefore be subject to the requirements of the Niagara Escarpment Plan, whereby a natural heritage evaluation may be required if proposed development or site alteration is within 120m of a Key Natural Heritage Feature or Key Hydrologic Feature as defined in the Plan. As part of these evaluations, an appropriate Vegetation Protection Zone (VPZ; i.e., buffer) must be determined to protect, and where possible, enhance the adjacent natural feature. Minimum buffers widths established within this portion of the study area must conform with Niagara Escarpment Plan requirements for VPZs, and must comprise naturally vegetated areas where no construction or site alteration is permitted.

The buffers illustrated in Appendix III have been measured from the mapped Core Area natural feature boundaries in accordance with the buffer width recommendations listed above. The buffer widths depicted in Appendix III therefore vary according to the category of underlying Core Area type (e.g., Significant Woodland vs non-significant woodland; PSW vs unevaluated wetland). With the exception of the prescribed minimum buffers from Provincial NHS features as listed above, the recommended NHS buffers are to be considered as a default or starting point in the determination of suitable buffers as part of EISs to be completed for individual development applications. The EIS will consider site-specific characteristics of the natural features and the degree of impact potential from the proposed development to determine the refined buffer width at a given site. However, ecological rationale should be provided in the EIS if buffer widths of less than the recommended widths listed above are proposed.

Three Special Buffer Management Zones have been identified and are discussed in the SWS Phase 3 report. Special buffer management measures are required for these to maintain suitable habitat conditions for provincially rare vegetation species that they contain. Two of the Special Buffer Management Zones coincide with recommended 10m Significant Woodland buffers (see Appendix III Maps 1e and 1k). The other Special Buffer Management Zone, shown on Appendix III Map 1j, is a dedicated buffer specific to the need to preserve significant vegetation habitat. It is a recommended 20m wide buffer from the western boundary of a Gray Dogwood Cultural Thicket community (which itself is mapped as a Supporting Feature/Area). Unlike other recommended buffers in the Glendale NHS, it does not buffer a Core Area natural feature. The specific location and configuration of this buffer may be refined subject to the recommendations of an EIS, provided it can be demonstrated that the management actions to

preserve habitat for the rare vegetation species at this location (Rigid Sedge (*Carex tetanica*)) can be effectively implemented.

Supporting Features and Areas

The Regional Official Plan identifies that "Supporting Features and Areas" represents a component of the Regional NHS. Supporting Features and Areas are defined as "*lands that have been restored or have the potential to be restored*" and include the following (Region of Niagara 2022):

- Grasslands, thickets, and meadows that support the ecological functions of the adjacent Key Natural Heritage Features, Key Hydrologic Features and/or Natural Heritage Features and Areas;
- Valleylands, which includes lands that may have ecological and/or hydrological functions, that are not Significant Valleylands, and are not the site of a permanent or intermittent stream that is regulated by the Conservation Authority;
- Wildlife habitat that is not considered to be Significant Wildlife Habitat; and
- Enhancement Areas, which are the subject of Section 3.1.16 of the OP.

These early successional lands comprise cultural thicket (CUT) and cultural meadow (CUM) communities that have established within previously cleared lands that have been left fallow or undeveloped as mapped in Appendix III. These adjacent lands are anticipated to provide supporting ecological functions that benefit the adjacent Core Area.

These areas have been delineated with consideration for the significance and sensitivity of the adjacent Core Area based on the results of background information review and field surveys, and where the adjacent lands can enhance the ecological value or function of the Core Area. In many cases, the Supporting Features and Areas are limited to the recommended ecological buffers from Core Areas. In several locations these extend beyond the buffers to coincide with floodplain hazards that must be maintained outside of development envelopes, and thus represent restoration opportunities. In certain locations, additional adjacent lands beyond recommended buffers or floodplain limits have been identified as Supporting Features/Areas due to the benefit that they can provide to the adjacent Core Area. For example, this includes areas of adjacent land that fill "embayments" within Core Area natural features. Incorporating these additional areas into the NHS results in a more robust natural feature configuration that is more resilient to adjacent land use disturbances (e.g., "edge effects"), increases interior habitat and lessens the negative effects caused by ecological fragmentation. Certain Supporting Features and Areas have been recommended to enhance ecological connectivity, or potential future connectivity, on the landscape (e.g., on either side of the QEW), or where good ecological restoration potential exists within adjacent lands.

It is intended that the specific extent and boundaries of the Supporting Features and Areas identified in the SWS may be refined through completion of site-specific EISs. Schedule F3 of the Secondary Plan does not incorporate Supporting Features and Areas as part of the mapped Environmental Protection designation. However, future EISs must have regard for the recommendations of the SWS and the mapped Glendale NHS, which includes preliminary mapping of Supporting Features and Areas.

Linkages

Linkages are connections between natural heritage features that provide movement opportunities for species between habitat patches that would otherwise be isolated. They enhance and maintain the viability of specific species populations by providing habitats for various life processes (e.g. breeding habitat vs summer foraging habitat), preserving genetic variability, and allowing populations to recolonize areas where they are no longer found. Linkages also provide some foraging and breeding habitat, as well as provide a buffer function along watercourses and other features.

Linkages are identified as a component of the Regional NHS as defined in Section 3.1 of the ROP (2022). Linkages were identified for the Glendale study area as shown on Appendix III Maps 1a and 1b. These comprise existing functional linkages within natural feature corridors as well as potential linkages that cross existing barriers (e.g. roads), but may be realized through future implementation of measures that enhance connectivity (e.g., ecopassages). The mapped linkages include connections to natural features and corridors that are external to the Glendale study area, such as the Homer Escarpment Life Science ANSI to the south and narrow riparian corridors to the north.

Three primary linkages are identified for the study area. These are associated with the riparian corridors of the Six Mile Creek main branch, the Six Mile Creek West Branch, and Eight Mile Creek. The significance and function of these linkages varies at the study area scale, ranging from the ecologically significant and robust Six Mile Creek main branch corridor to the very localized linkage function provided by the Eight Mile Creek corridor. The functional value of these linkages, when considering the broader landscape context, will require ecological enhancements and enlargements of the riparian linkages where they extend north of the study area; this is particularly relevant to the narrow riparian corridors associated with the Six Mile Creek West Branch and Eight Mile Creek.

Special Considerations and Exclusions to Natural Heritage System Mapping

Modero Estate Subdivision Lands

The approved Modero Estates Plan of Subdivision underwent a planning approval process that was subject to the previous (2014) Niagara Region Official Plan policies. Since Draft Plan Approval was issued for the Plan of Subdivision prior to the Region's adoption of the 2022 Official Plan, the 2014 Official Plan natural heritage policies apply with respect to those lands. Natural features within the Modero Estate lands were therefore mapped in the SWS Phase 1 report with an overlay of the relevant 2014 Official Plan Core NHS. This included mapping of Environmental Protection Area, corresponding to Significant Woodland within the Greenbelt Plan area, and Environmental Conservation Area, corresponding to other significant natural features within the Settlement Area portion of the Modero Lands properties (E&E Solutions and LCA Environmental 2022). The Environmental Protection Areas and Environmental Conservation Areas as mapped by Modero (E&E Solutions and LCA Environmental 2022), have been incorporated into the Core Areas of the Glendale NHS. The Glendale NHS mapping (Appendix III, Map 1f) incorporates updated boundaries of the Modero Estates Core Areas based on the approved Draft Plan of Subdivision (The Larocque Group 2024).

Properties with Approved or Substantially Complete Development Plans

Special considerations were made for properties or lands for which development plans have already been approved (e.g., Niagara-on-the-Green subdivision) or for which development applications had been submitted but not yet approved at the time of the SWS reporting. NHS Core Area features depicted within these properties are consistent with existing background mapping prepared for these properties/developments, such as described above for the Modero Estate lands. Since these properties have undergone their own approvals processes, recommended buffers and Supporting Features and Areas have not been illustrated for these properties.

Currently Developed Properties

NHS Core Area natural features are located outside of currently built-out land cover areas (e.g., buildings, roads, associated impervious surfaces and manicured lawns). Although stormwater management infrastructure may contain natural vegetated cover (e.g., adjacent to ponds), the NHS Core Areas are also intended to be maintained outside of stormwater management infrastructure. The delineation of buffers as shown on NHS mapping (Appendix III) is not intended to extend into currently developed properties, recognizing the existing land use of these sites. Supporting Features and Areas are not intended to be shown within currently built-out land cover areas that have an existing land use and cannot feasibly be ecologically restored or enhanced.

However, should an application be submitted for the redevelopment of a currently developed property, an EIS will be required that will establish the limits of an ecological buffer. It is recommended that buffer widths be established on redevelopment sites to be consistent with, or exceed, the buffer recommendations made for the Glendale NHS. EISs should also consider inclusion of Supporting Features and Areas (i.e., enhancement areas) within the land use plan to provide supporting ecological functions to the adjacent NHS Core Area natural features.

Glendale Secondary Plan – Environmental Protection Designation

The Environmental Protection designation illustrated on Schedule F3 is based on the recommended Glendale NHS as presented in the SWS, and comprises the following components:

- NHS Core Areas, including the following mapped sub-components:
    - Significant Woodlands;
    - Wetlands
    - Significant Valleylands;
    - Fish Habitat;
    - Significant Wildlife Habitat, and
    - Other woodlands (i.e., non-significant woodlands).
    - Specific to the Modero Lands – lands designated as Environmental Protection Area and Environmental Conservation Area as per the 2014 Regional Official Plan.

- Preliminary ecological buffers
- Floodplain hazard lands

Note that no PSWs or evaluated non-PSWs are located within the Glendale Secondary Plan area; all wetlands within this area are unevaluated wetlands. Also note that no confirmed habitat for Endangered or Threatened species was mapped as part of the SWS that forms a part of the mapped NHS. Although Significant Valleyland forms a part of the mapped NHS, along the Six Mile Creek main branch corridor, it is entirely contained within a larger block of Significant Woodland.

As described above, Supporting Features and Areas have been omitted from the Environmental Protection designation mapping. However, these areas, as mapped in the SWS, must be considered for inclusion as part of future land use planning, subject to the recommendations of an EIS. Linkages do not form a separate mapped component of the NHS in and of themselves, but rather co-occur with other mapped NHS Core Areas and Supporting Feature/Areas. They are therefore represented within the mapped Environmental Protection designations.

Schedule F3 includes an “Adjacent Lands Overlay” which is not a part of the Glendale NHS. Rather, it illustrates areas that are within 120m of the Environmental Protection designated lands that may be subject to requirement of an EIS as part of land development applications. For example, “adjacent lands” are recommended as lands up to 120m from certain natural feature types (e.g., Significant Woodland) in the provincial Natural Heritage Reference Manual (OMNR 2010). The requirement for an EIS will be determined by Regional and Town staff in completion of pre-consultation for individual development applications.

References

Ecological and Environmental Solutions (E&E) and LCA Environmental. 2022. Modero Estates, Glendale Village Secondary Plan Area. Environmental Impact Study. Prepared for Hummel Properties Inc. March 2022.

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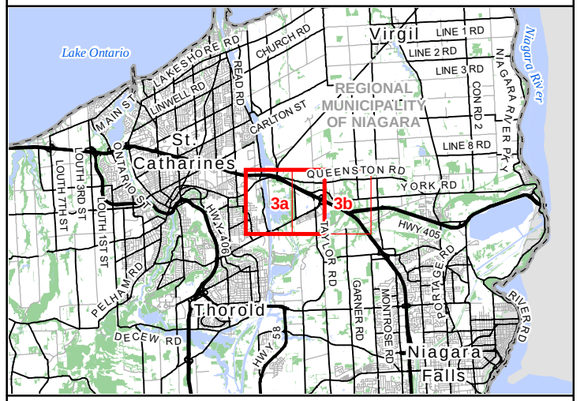
Town of Niagara-on-the-Lake. 2017. Town of Niagara-on-the-Lake Official Plan. As amended to July 17, 2017.

Appendix I
Glendale Subwatershed Study Phase 2 Report Maps 3-5

Map 3a

Glendale Secondary Plan Update and SWS

Significant Natural Features



Legend

- Study Area
- Highway
- Primary Road
- Secondary Road
- Provincially Significant Wetland (PSW)
- Other Wetland
- Terrestrial Woodland
- Significant Woodland (2022 ROP; approximated)
- ANSI, Life Science
- Ecological Land Classification
- Important Fish Habitat (NPCA)

Watercourse & Headwaters (Matrix Solutions)

- Watercourse - High Constraint
- Watercourse - Medium Constraint
- Headwater Drainage Feature (HDF)
- Watercourse - Other
- Watercourse - Conduit

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: August 14, 2024

NAD83 - UTM Zone 17
Size: 11x17"
1:11,000

0 100 200 300 400 500 600 700 Metres

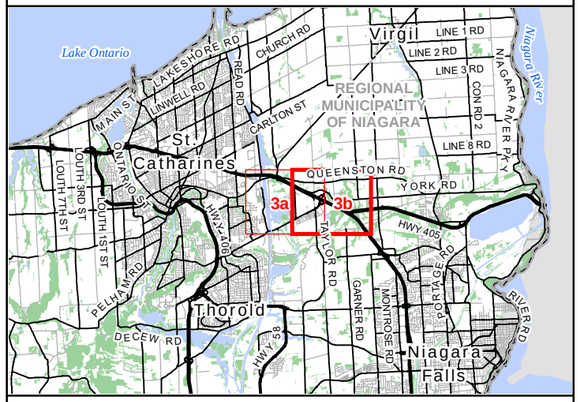
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map3_SigNaturalFeatures_11K_2024_08_14_KB.mxd

Map 3b

Glendale Secondary Plan Update and SWS

Significant Natural Features



Legend

- Study Area
- Modero Estates Lands
- Highway
- Primary Road
- Secondary Road
- Other Wetland
- Terrestrial Woodland
- Significant Woodland (2022 ROP; approximated)
- ANSI, Life Science
- Ecological Land Classification

Regional Core Natural Heritage Overlay (2014 OP)

- Environmental Protection Area (EPA)
- Environmental Conservation Area (ECA)
- Important Fish Habitat (NPCA)

Watercourse & Headwaters (Matrix Solutions)

- Watercourse - High Constraint
- Watercourse - Medium Constraint
- Headwater Drainage Feature (HDF)
- Watercourse - Other
- Watercourse - Conduit

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Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: August 14, 2024

NAD83 - UTM Zone 17
Size: 11x17"
1:11,000

0 100 200 300 400 500 600 700 Metres

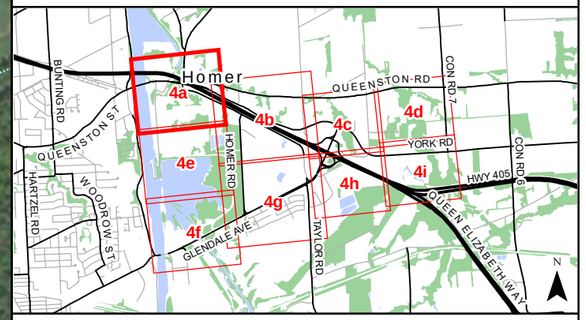
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map3_SigNaturalFeatures_11K_2024_08_14_KB.mxd

Map 4a

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Watercourse (Unclassified)

Watercourse Classification (MNRF)

- Type 3: Marginal Fish Habitat

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Aquatic, Terrestrial and Wetland Biologists

Project: 2884 Date: August 11, 2023	NAD83 - UTM Zone 17 Size: 11x17" **1:3,500**

0 40 80 120 160 200 Metres

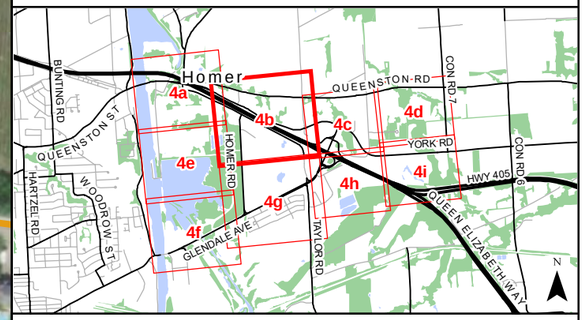
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4b

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Conduit

Watercourse Classification (MNRF)

- Type 1: Critical Fish Habitat
- Type 2: Important Fish Habitat
- Type 3: Marginal Fish Habitat

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Project: 2884
Date: August 11, 2023

NAD83 - UTM Zone 17
Size: 11x17"
1:4,000

0 40 80 120 160 200 240 Metres

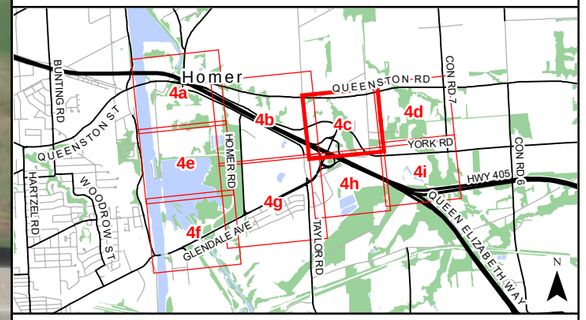
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4c

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Headwater Drainage Feature
- Conduit

Watercourse Classification (MNRF)

- Type 1: Critical Fish Habitat
- Type 2: Important Fish Habitat

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Project: 2884 Date: August 11, 2023	NAD83 - UTM Zone 17 Size: 11x17" **1:3,000**

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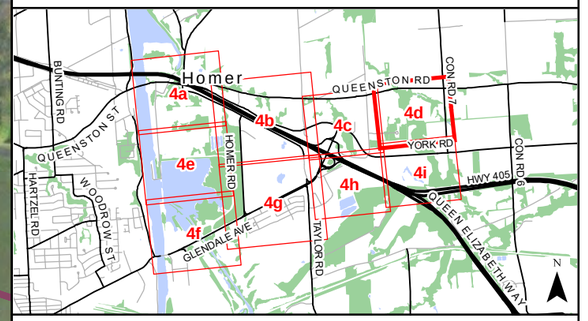
N

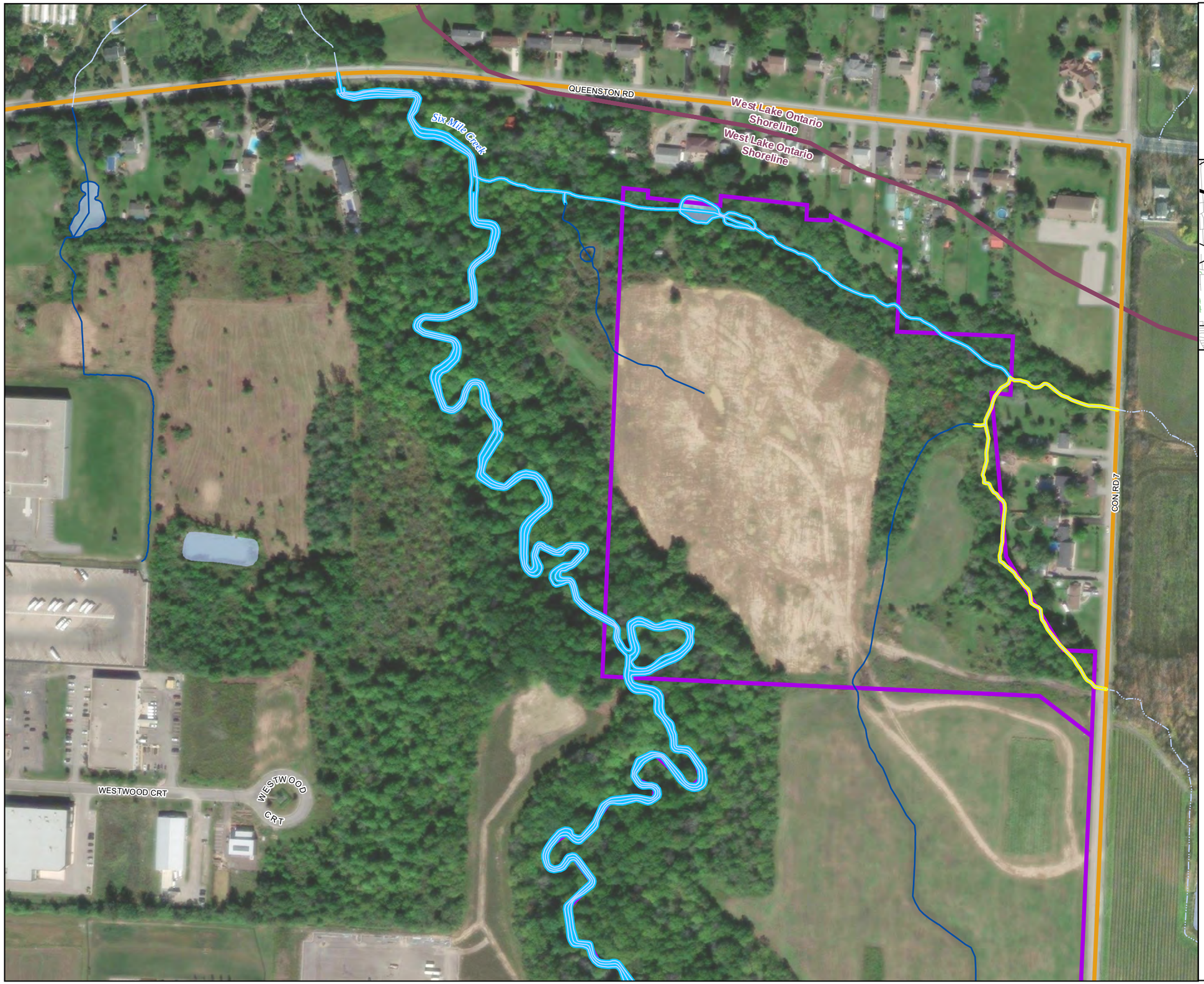
Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4d

Glendale Secondary Plan Update and SWS

Fish Habitat





Legend

- Study Area
- Modero Estates Lands
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature

Watercourse Classification (MNRF)

- Type 2: Important Fish Habitat
- Type 3: Marginal Fish Habitat

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Aquatic, Terrestrial and Wetland Biologists

Project: 2884 Date: August 11, 2023	NAD83 - UTM Zone 17 Size: 11x17" **1:3,000**

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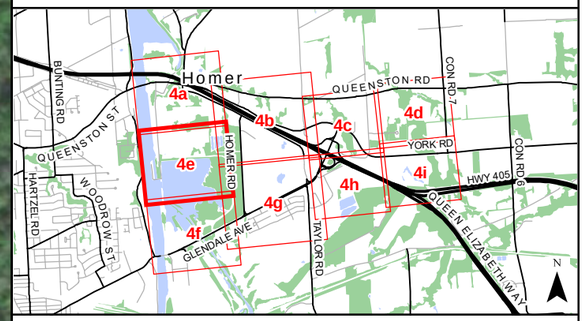
Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4e

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Watershed Boundary (MNRF)

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Aquatic, Terrestrial and Wetland Biologists

Project: 2884 Date: August 11, 2023	NAD83 - UTM Zone 17 Size: 11x17" **1:3,500**

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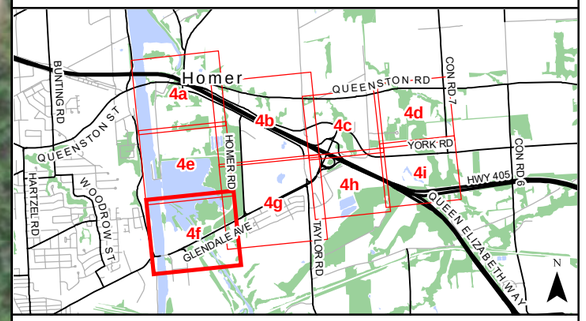
Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4f

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Headwater Drainage Feature

Watercourse Classification (MNRF)

- Type 2: Important Fish Habitat
- Unclassified

Welland Canal

GLENDALE AVE

SEAWAY HAULAGE RD

Welland Canal Tributary

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Project: 2884 Date: August 11, 2023	NAD83 - UTM Zone 17 Size: 11x17" **1:3,500**

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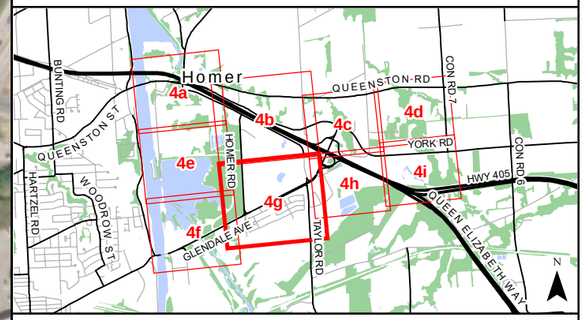
Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4g

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Headwater Drainage Feature
- Conduit

Watercourse Classification (MNRF)

- Type 2: Important Fish Habitat

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Project: 2884 Date: August 11, 2023	NAD83 - UTM Zone 17 Size: 11x17" **1:4,000**

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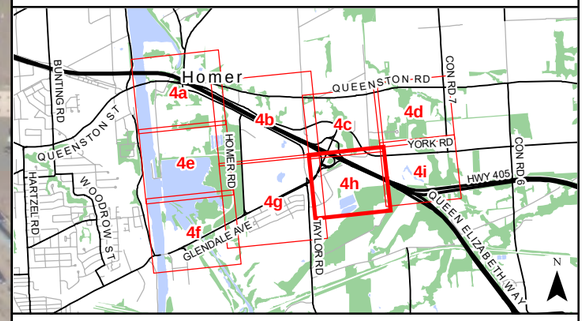
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4h

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Conduit

Watercourse Classification (MNRF)

- Type 2: Important Fish Habitat

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Project: 2884
Date: August 11, 2023

NAD83 - UTM Zone 17
Size: 11x17"
1:3,000

0 40 80 120 160 Metres

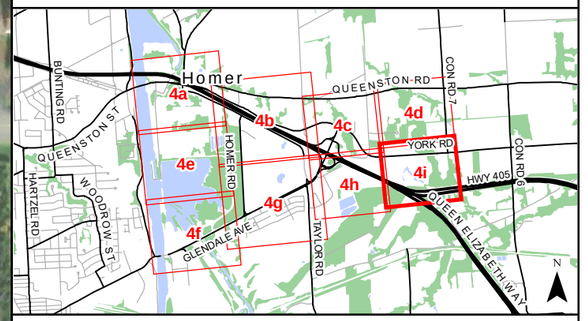
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 4i

Glendale Secondary Plan Update and SWS

Fish Habitat



Legend

- Study Area
- Modero Estates Lands
- Water Body (MNRF)
- Watershed Boundary (MNRF)

Watercourse & HDF (Matrix Solutions)

- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature

Watercourse Classification (MNRF)

- Type 2: Important Fish Habitat

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Project: 2884 Date: August 11, 2023	NAD83 - UTM Zone 17 Size: 11x17" **1:3,000**

0 40 80 120 160 Metres

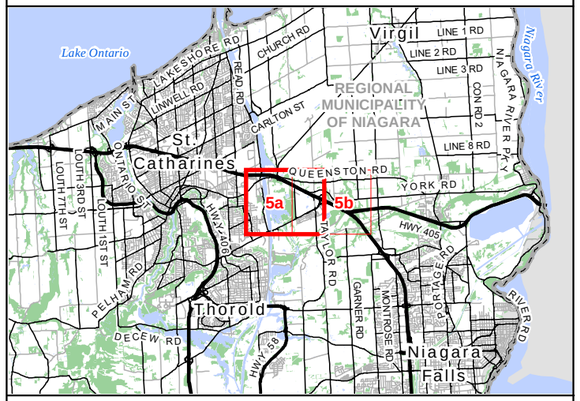
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map4_FishHabitat_4K_2023_08_11_MV.mxd

Map 5a

Glendale Secondary Plan Update and SWS

Significant Wildlife Habitat



Legend

- Study Area
- Highway
- Primary Road
- Secondary Road
- Ephemeral or Intermittent Watercourse
- Deer Wintering Congregation Area SWH (MNRF-mapped)

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Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: August 11, 2023

NAD83 - UTM Zone 17
Size: 11x17"
1:11,000

0 100 200 300 400 500 600 700 Metres

N

646000 647000 648000 649000

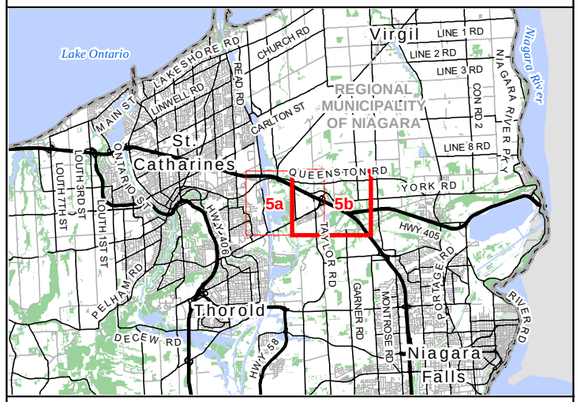
4781000 4780000 4779000

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map5_SigHabitatFeatures_11K_2023_08_11_DNH.mxd

Map 5b

Glendale Secondary Plan Update and SWS

Significant Wildlife Habitat



Legend

- Study Area
- Highway
- Primary Road
- Secondary Road
- Permanent or Intermittent Watercourse
- Ephemeral or Intermittent Watercourse
- Seeps and Springs
- Rare Vegetation Community
- Special Concern/Rare Species Habitat - Willdenow's Sedge
- Special Concern/Rare Species Habitat - Hairy Green Sedge
- Special Concern/Rare Species Habitat - Rigid Sedge
- Special Concern/Rare Species Habitat - Pawpaw
- Deer Wintering Congregation Area SWH (MNRF-mapped)

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Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: August 11, 2023

NAD83 - UTM Zone 17
Size: 11x17"
1:11,000

0 100 200 300 400 500 600 700 Metres

N

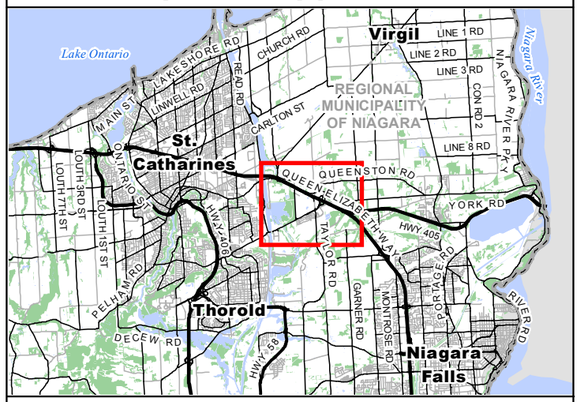
Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map5_SigHabitatFeatures_11K_2023_08_11_DNH.mxd

Appendix II
Glendale Subwatershed Study Phase 1 Report – Map 1 (Participating Properties and Development Approval Status)

Map 1

Glendale Secondary Plan Update and SWS

Participating Properties and Development Approval Status



Legend

- Study Area
- Application Submitted but Not Approved
- Development Application Approved
- Development Application in Progress
- EIS Study Scoped / In Progress
- Property Boundary
- Participating Property
- Utility Line
- Railway
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Water Body

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884 Date: October 25, 2024	NAD83 - UTM Zone 17 Size: 11x17" **1:14,000**

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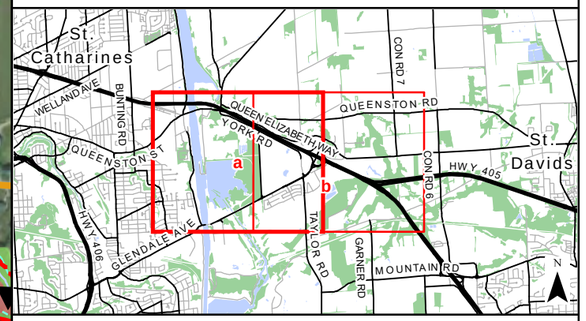
Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map1_ParticipatingProperties_14K_2024_08_13_DNH.mxd

Appendix III
Glendale Subwatershed Study Phase 3 - Map 1 (Natural Heritage System)

Map 1a

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Privately-Owned SWM Facility**
- Subject to Review
- Regulated Floodplain
- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Conduit
- Preliminary Ecological Buffer
- Development Application Approved

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area
- Linkage

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
1:11,000

0 100 200 300 400 500 600 700 Metres

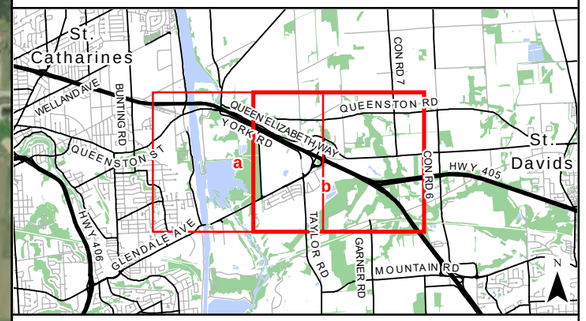
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map1a-b_GlendaleNHS_11K_2024_10_25_LRC.mxd

Map 1b

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Privately-Owned SWM Facility**
- Modero Estates Lands
- Subject to Review
- Regulated Floodplain
- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Conduit
- Preliminary Ecological Buffer
- Development Application Approved
- Application Submitted But Not Yet Approved

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area
- Linkage

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884 Date: October 25, 2024	NAD83 - UTM Zone 17 Size: 11x17" **1:11,000**

0 100 200 300 400 500 600 700 Metres

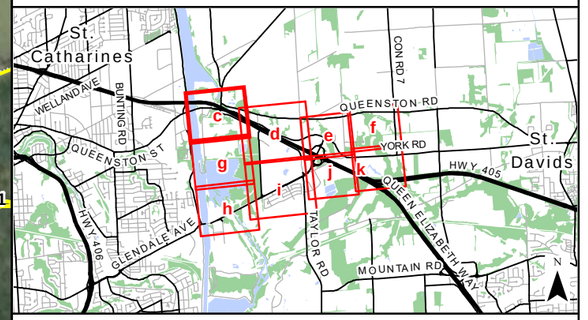
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map1a-b_GlendaleNHS_11K_2024_10_25_LRC.mxd

Map 1c

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Watercourse
- Watercourse (Unclassified)
- Type 3: Marginal Fish Habitat
- Preliminary Ecological Buffer

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area

Ecological Land Classification

- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT1) Mineral Cultural Thicket Ecosite
- (CUW1) Mineral Cultural Woodland Ecosite
- (SWD) Deciduous Swamp

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884 Date: October 25, 2024	NAD83 - UTM Zone 17 Size: 11x17" **1:3,500**

0 50 100 150 200 Metres

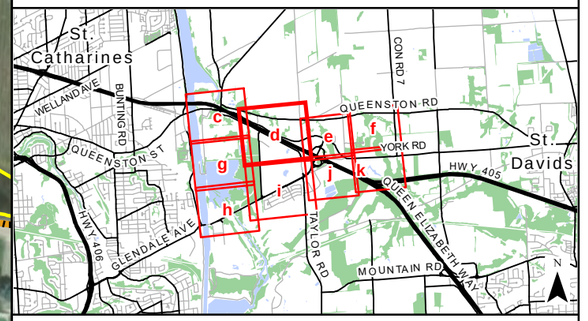
N

Path: X:\2884_GlendaleSPU&SWS\NRSI_2884_Map1c-k_GlendaleNHS_4K_2024_10_25_LRC.mxd

Map 1d

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Privately-Owned SWM Facility**
- Glendale Secondary Plan Area
- Development Application
- Flood Plain (100 year)
- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Conduit
- Type 2: Important Fish Habitat
- Type 3: Marginal Fish Habitat
- Preliminary Ecological Buffer

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area

- Ecological Land Classification
- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT1) Mineral Cultural Thicket Ecosite
- (CUW1) Mineral Cultural Woodland Ecosite
- (FOD) Deciduous Forest
- (FOD9) Fresh - Moist Oak-Maple - Hickory Deciduous Forest Ecosite
- (MAM) Meadow Marsh
- (MAM2) Mineral Meadow Marsh Ecosite
- (SWD) Deciduous Swamp
- (SWD2-2) Green Ash Mineral Deciduous Swamp Type

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
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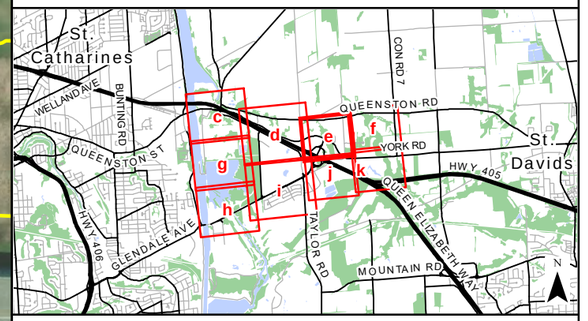
Map 1e

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Glendale Secondary Plan Area
- Development Application
- Application Submitted But Not Yet Approved
- Flood Plain (100 year)
- Watercourse
- Headwater Drainage Feature
- Conduit
- Type 2: Important Fish Habitat
- Preliminary Ecological Buffer

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area
- Special Buffer Management Zone

- Ecological Land Classification
- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT1) Mineral Cultural Thicket Ecosite
- (CUW1-2) Dry Red Oak Cultural Woodland Type
- (FOD) Deciduous Forest
- (FOD2-2) Dry - Fresh Oak - Hickory Deciduous Forest Type
- (FOD7) Fresh - Moist Lowland Deciduous Forest Ecosite
- (FOD9) Fresh - Moist Oak-Maple - Hickory Deciduous Forest Ecosite
- (MAM2) Mineral Meadow Marsh Ecosite

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
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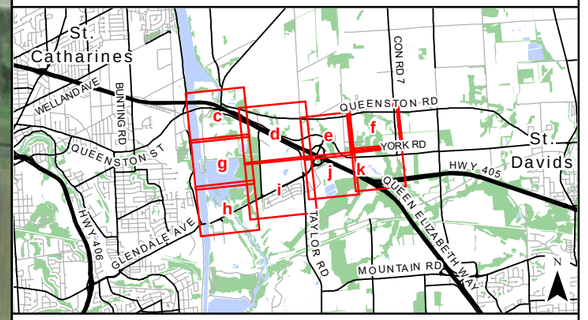
Map 1f

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Glendale Secondary Plan Area
- Modero Estates Lands
- Development Application
- Flood Plain (100 year)
- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Type 2: Important Fish Habitat
- Type 3: Marginal Fish Habitat
- Preliminary Ecological Buffer

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area

Ecological Land Classification

- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT) Cultural Thicket
- (CUT1) Mineral Cultural Thicket Ecosite
- (CUT1-4) Gray Dogwood Cultural Thicket Type
- (CUW1) Mineral Cultural Woodland Ecosite
- (FOD) Deciduous Forest
- (FOD2) Dry - Fresh Oak - Maple - Deciduous Forest Ecosite
- (FOD4) Dry - Fresh Deciduous Forest Ecosite
- (FOM) Mixed Forest
- (H) Deciduous Hedgerow
- (OA) Open Aquatic

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
1:3,000

0 50 100 150 200 Metres

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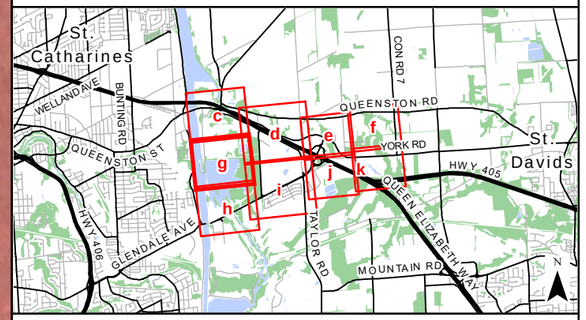
Map 1g

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Preliminary Ecological Buffer
- Ecological Land Classification
- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT1) Mineral Cultural Thicket Ecosite
- (MAM2) Mineral Meadow Marsh Ecosite
- (SWD) Deciduous Swamp

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
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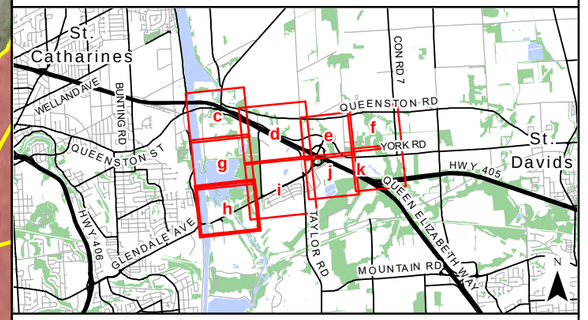
Map 1h

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Subject to Review
- Watercourse
- Headwater Drainage Feature
- Type 2: Important Fish Habitat
- Unclassified
- Preliminary Ecological Buffer

Ecological Land Classification

(MAM) Meadow Marsh

(SWD) Deciduous Swamp

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
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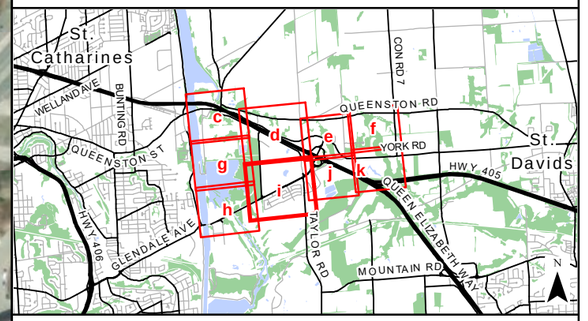
Map 1i

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Glendale Secondary Plan Area
- Development Application
- Subject to Review
- Watercourse
- Headwater Drainage Feature
- Conduit
- Type 2: Important Fish Habitat

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area

- Ecological Land Classification
- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT1) Mineral Cultural Thicket Ecosite
- (MAM) Meadow Marsh
- (MAS) Shallow Marsh
- (SWD) Deciduous Swamp

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
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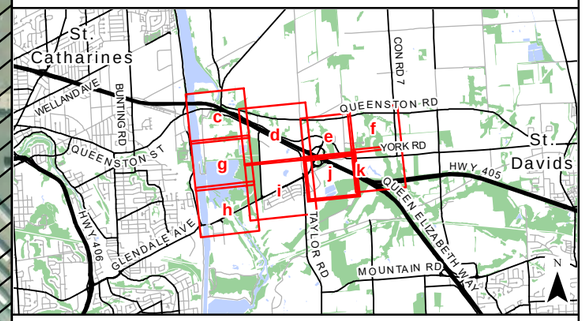
Map 1j

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Glendale Secondary Plan Area
- Development Application
- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Conduit
- Type 2: Important Fish Habitat
- Preliminary Ecological Buffer

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area
- Special Buffer Management Zone

- Ecological Land Classification
- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT1) Mineral Cultural Thicket Ecosite
- (CUT1-4) Gray Dogwood Cultural Thicket Type
- (CUW1) Mineral Cultural Woodland Ecosite
- (FOD) Deciduous Forest
- (FOD2) Dry - Fresh Oak - Maple - Deciduous Forest Ecosite
- (FOD2-2) Dry - Fresh Oak - Hickory Deciduous Forest Type
- (FOD9) Fresh - Moist Oak-Maple - Hickory Deciduous Forest Ecosite
- (FOD9-3) Fresh - Moist Bur Oak Deciduous Forest Type
- (H) Deciduous Hedgerow
- (MAM) Meadow Marsh
- (MAM2) Mineral Meadow Marsh Ecosite
- (MAS2-1) Cattail Mineral Shallow Marsh Type

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
Size: 11x17"
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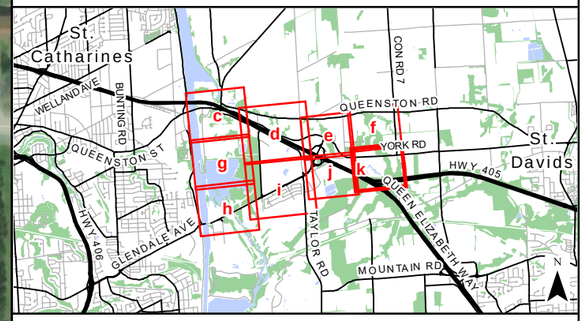
Map 1k

Glendale Secondary Plan Update and SWS

Glendale Natural Heritage System



Legend

- Study Area
- Glendale Secondary Plan Area
- Modero Estates Lands
- Development Application
- Flood Plain (100 year)
- Watercourse
- Watercourse (Unclassified)
- Headwater Drainage Feature
- Type 2: Important Fish Habitat
- Preliminary Ecological Buffer

Preliminary Natural Heritage System

- Core Area
- Supporting Feature/Area
- Special Buffer Management Zone

- Ecological Land Classification
- (CUM1-1) Dry - Moist Old Field Meadow Type
- (CUT1) Mineral Cultural Thicket Ecosite
- (CUT1-4) Gray Dogwood Cultural Thicket Type
- (CUW1) Mineral Cultural Woodland Ecosite
- (FOD) Deciduous Forest
- (FOD2) Dry - Fresh Oak - Maple - Deciduous Forest Ecosite
- (FOD4) Dry - Fresh Deciduous Forest Ecosite
- (FOD5-2) Dry - Fresh Sugar Maple - Beech Deciduous Forest Type
- (FOD7-4) Fresh - Moist Black Walnut Lowland Deciduous Forest Type
- (FOD9-3) Fresh - Moist Bur Oak Deciduous Forest Type
- (MAM2) Mineral Meadow Marsh Ecosite
- (SWD) Deciduous Swamp

*Natural Heritage System illustrated outside of Study Area shown for context only.
**To be located outside of the Natural Heritage System.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 2884
Date: October 25, 2024

NAD83 - UTM Zone 17
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SCHEDULE 8

Begins on following page.

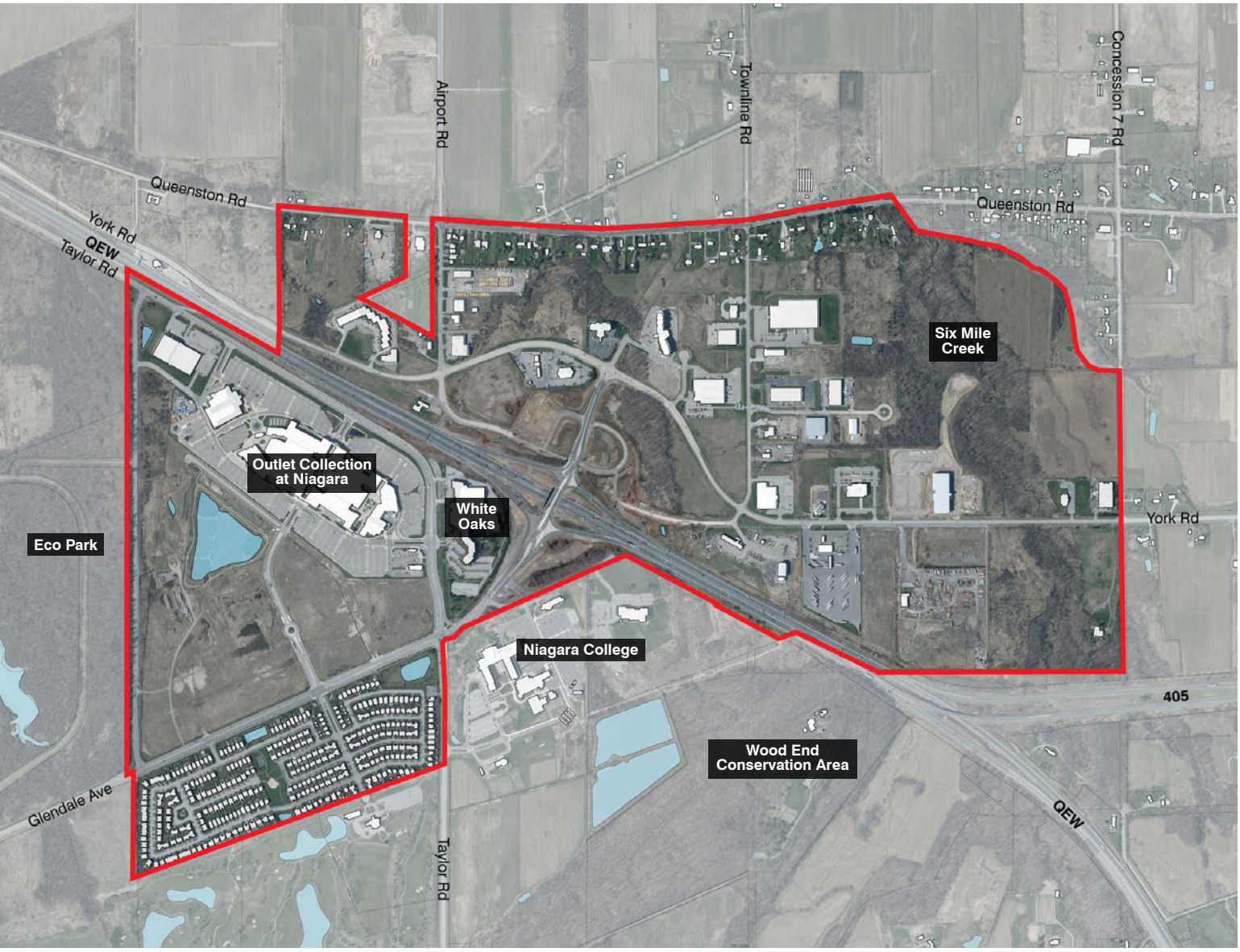
Glendale Secondary Plan

Appendix B
Urban Design Guidelines

November 20, 2024

Cover image: Belmar Shopping District, Lakewood, CO (Source: Continuum Partners)

Contents



Map of the Glendale Secondary Plan area

1 Introduction

Context & Purpose of the Urban Design Guidelines

Context

The planning and design intent for the Glendale District is to provide a well connected beautiful and diverse urban community with residential neighbourhoods, mixed-use areas distributed across the District and industrial/business park lands on the north side of the QEW. The campus of Niagara College anchors the south east precinct of Glendale. Green space along the Six Mile Creek valleys together with the Wood End Conservation Area, Welland Canal Heritage Park and Eco Park frames the area and provides edges for some of the uses. Development in the Glendale District is envisioned to contribute to protecting, integrating and celebrating the natural and rural surroundings reflecting the distinct character of the area. Development in Glendale will put mobility first with a robust transit system, cycling trails and pedestrian routes seamlessly connecting areas north and south of the QEW.

The QEW and Glendale Avenue divide the area into four quadrants. The southwest quadrant is the location of the Outlet Collection at Niagara. The Regional Commercial land use designation in the Secondary Plan enables infilling and intensification of the existing land uses. The Regional Commercial Mixed-Use Overlay recognizes the long-term potential of these lands to intensify with new buildings, streets, parkland, public service facilities and parking. Lands south of the current Outlet Collection will be an extension of the residential neighbourhood that exists south of Glendale Avenue. A newly created street and block network will enable mixed use development along Niagara-on-the Green Boulevard conceived as a main street providing a link to the Outlet Collection. Commercial and retail uses are planned for the ground floor with residential uses above. Niagara-on-the Green Boulevard is envisioned as tree lined street, with seating, decorative lighting and other streetscape elements to create an appealing urban place. A range of housing up to 5 storeys in the form of single detached, semi detached, duplex, townhouses, stacked or back to back townhouses or small apartment buildings are planned in the area west of Taylor Road. Higher density mixed uses are planned around the existing White Oaks Conference Resort and Spa and on the lands adjacent to Glendale Avenue on both sides of Taylor Road. Parks and open spaces around storm water management facilities provide a link to the Eco Park that forms the west boundary of the District. The streetscape design of Homer Road will provide a transition to the Eco Park.

Niagara College's Glendale campus is an important part of Glendale, but has been removed from the study area for the purposes of the Glendale Secondary Plan. The College recently completed a Master Plan that is expected to guide its evolution. The Master Plan identifies four new buildings, trail connections, vehicle routes and surface parking, and key outdoor nodes and green corridors.

The northwest quadrant includes existing highway oriented commercial uses and hotels close to the York Road/Glendale Avenue intersection. Mixed-use is planned along York Road with a transition to residential on Airport Road. The Niagara Regional Native Centre is located on the west side of Airport Road. The new residential uses transition to existing residential uses on Queenston Road.

The northeast quadrant extends a mixed use node north of York Road with a transition to industrial and business park uses that extend along the south side of York Road. This area recognizes the existing cluster of industrial businesses. This area is well positioned with easy access to the QEW and to the Niagara District Airport. The east edge of the District is a new residential neighbourhood with mixed use focused at the corner of York Road and Concession 7 where it abuts agricultural lands.

Purpose

The purpose of the Glendale Secondary Plan Urban Design Guidelines is to support the principles and policies of the Official Plan and the Glendale Secondary Plan to guide development within the Glendale area, as it is implemented through subdivision, zoning, and site plan control. The guidelines encourage the design of a complete, effective, and sustainable built environment consistent with the Town of Niagara-on-the-Lake's character and vision for the future. The guidelines provide guidance on design matters that are directly related to ensuring that development projects are of high quality, pedestrian-oriented, interconnected, sensitive to the natural and built environment, and provide adequate public facilities and infrastructure.

The guidelines will provide predictability for applicants, the Town, Region, and stakeholders by offering design direction in Glendale.

The provisions and examples in the guidelines should be used as a starting point of design for all development projects in Glendale and will be used in the assessment of development proposals. While some developments may not be able to meet some of the guidelines, the design should still reflect the intent of the guidelines and demonstrate why the alternative solution is an optimal one.

Interpretation & Implementation of the Guidelines

What Are Urban Design Guidelines?

Urban design is the process of giving form, shape, and character to the physical elements that comprise an urban community or district. Good urban design promotes the vitality and health of a community by applying a higher standard of aesthetics, architecture, and compatibility, and by promoting vibrant and successful public spaces. Good urban design also plays a valuable role in improving the function of development sites, and by extension, to the community at large by emphasizing safety, comfort, and livability. Urban design guidelines are intended to guide site development to achieve a desired level of prescribed quality in both the public and private realms.

Urban design guidelines provide a starting point by translating design policies and standards that demonstrates the planning intent and configuration of communities, streets, sites, and buildings. Guidelines typically address the design of sites and buildings and their organization within a defined area, as well as their relationship to their surroundings - built and natural.

How Will the Guidelines be Used?

The Glendale Secondary Plan Urban Design Guidelines are to be read in conjunction with, and complement the objectives and policies of the Secondary Plan, Official Plan, the Town of Niagara-on-the-Lake Zoning By-law, and other guidelines or standards, such as the Engineering Design Criteria.

The guidelines, in concert with the Secondary Plan policies, will be used to evaluate development applications in order to ensure that the vision and design principles are achieved throughout the urban design elements of the Glendale community. The development and transformation of the private and public realms will be evaluated to ensure that a high quality of urban design achieves the intended level of sustainability and resiliency.

The guidelines is to be applied as an evaluation tool for development applications and used by:

- Town Council and Committees when evaluating whether an application meets the Town's vision for development in Glendale;
- Town staff and external agencies when reviewing development applications and as a reference for design decisions for proposed studies and projects;
- The development industry including but not limited to developers, consultants, and property owners to demonstrate how their proposals align with the Town vision; and,
- The public for use of greater awareness of the benefits of urban design in their community.

Structure of the Urban Design Guidelines

Development in Glendale will reference all sections of the guidelines to ensure that the design of the public realm, buildings, and sites are informed by the comprehensive vision and design goals of the Secondary Plan. The guidelines are organized under three main sections:

Public Realm

Public Realm guidelines are related to the design of elements within the public realm, including the design of streets, parks, trails, gateways, streetscape design elements, street trees and landscaping, and stormwater management facilities. Guidance is also provided for the interface with natural heritage features and their role as defining character elements in Glendale.

Private Realm

Private Realm guidelines are related to built form, building design and site organization and design within the private realm. They provide guidance on the design of specific residential, commercial and mixed use, employment, and institutional building types.

Sustainable Buildings & Infrastructure

Sustainable Buildings and Infrastructure guidelines apply to both the private and public realm and are related to energy and water conservation, waste management, green infrastructure and building practices, and urban agriculture.

Implementation Tools

Zoning by-laws address matters such as lot coverage, parking, setbacks, and height - many quantitative aspects of development's physical form. While zoning regulates how buildings sit within a lot or block, it represents only one of the planning tools that may be used to guide and shape development. Zoning is best used in conjunction with draft plan of subdivision or condominium design, or site plan control, all of which would consider the guidelines to create development that promotes design excellence, and is compatible with, and fits within, its surrounding context.

The guidelines describe the relative height, massing, and articulation of buildings and landscapes, and their relationship to one another and to their surroundings. These qualitative aspects of physical form work in combination with zoning parameters to lend shape and character to a community

The Town will utilize the guidelines to guide development and redevelopment to be more sustainable and resilient to climate change. The Town may consider the use of other tools such as the Community Benefits By-law, Community Improvement Plans, and associated incentive programs to assist with the implementation of sustainable development design standards.

Applicability

These Urban Design Guidelines apply to all projects in the Glendale Secondary Plan area subject to review and Planning approval by the Town through subdivisions, condominiums, and site plan control applications as permitted under the Planning Act and By-law No. XX-2023

Following the provisions of the guidelines does not preclude compliance with other development regulations associated with an application as required by the Town, Region of Niagara or other applicable jurisdiction. Where provisions of the guidelines may conflict due to the characteristics of a proposal, the more restrictive would apply and/or an alternative design solution(s) may be required that meets the intent of the guidelines.

Submissions

To assist decision makers, stakeholders, and community members in understanding proposals for new development or redevelopment, the Town may request that applicants prepare an Urban Design Brief to describe the project and demonstrate to the Town how their proposal meets the guidelines, including any additional written materials, graphic illustrations, and diagrams necessary to demonstrate compliance with the guidelines. A Terms of Reference is for the Urban Design Brief is provided in Appendix A.

2 Public Realm

The design and organization of the public realm will contribute to the place-making of Glendale and to the framework and setting for development.

Guidelines for the public realm will address matters such as the arrangement of streets and blocks, circulation, streetscapes, parks and open spaces, views, natural heritage features, and stormwater management facilities. The successful design of the public realm includes creating diverse, comfortable, welcoming, safe, and accessible spaces.

The guidelines will be considered when municipal initiatives or private development applications impact elements of the public realm.

This chapter includes the following topics:

- Universal Design
- Community Design
- Streetscape Elements
- Streets
- Natural Heritage System, Parks & Open Spaces
- Active transportation
- Stormwater Management Facilities

The Region's *Complete Streets Design Manual (January 2023)* was used as reference for these guidelines.

Universal Design

Universal Design seeks to ensure that urban environments and spaces open to the public are accessible and usable by people regardless of age or ability.

Guidelines

a) Design of public spaces and elements should incorporate the key principles of Universal Design, including:

- Equitable use (does not disadvantage, stigmatize or privilege any group of user);
- Flexibility in use (accommodates a wide range of individual preferences and abilities);
- Simple and intuitive (easy to understand regardless of user's experience, knowledge, or language skills);
- Low physical effort (can be used efficiently, comfortably and with minimal fatigue);
- Perceptible information (communicates all necessary information to all users regardless of ambient conditions or the users' abilities);
- Tolerance for error (minimizes hazards and adverse consequences of accidental or unintended actions);
- Size and space for approach and use (provides appropriate size and space for approach and use regardless of body size, posture or functional ability).

b) Streets, parks and other spaces open to the public must meet the accessibility requirements of the *Accessibility for Ontarians with Disabilities Act* (AODA), the *Planning Act*, the *Integrated Accessibility Standards Regulation*, any applicable *Zoning By-law(s)* and the *Ontario Building Code* (OBC).

Ensure public spaces are accessible

Provide appropriate infrastructure to support accessibility

Community Design

Community design is defined by the structuring framework of the natural heritage and open space systems, the road network, and the various permitted land uses. Community design plays an important role in the overall quality and function of Glendale.

Guidelines

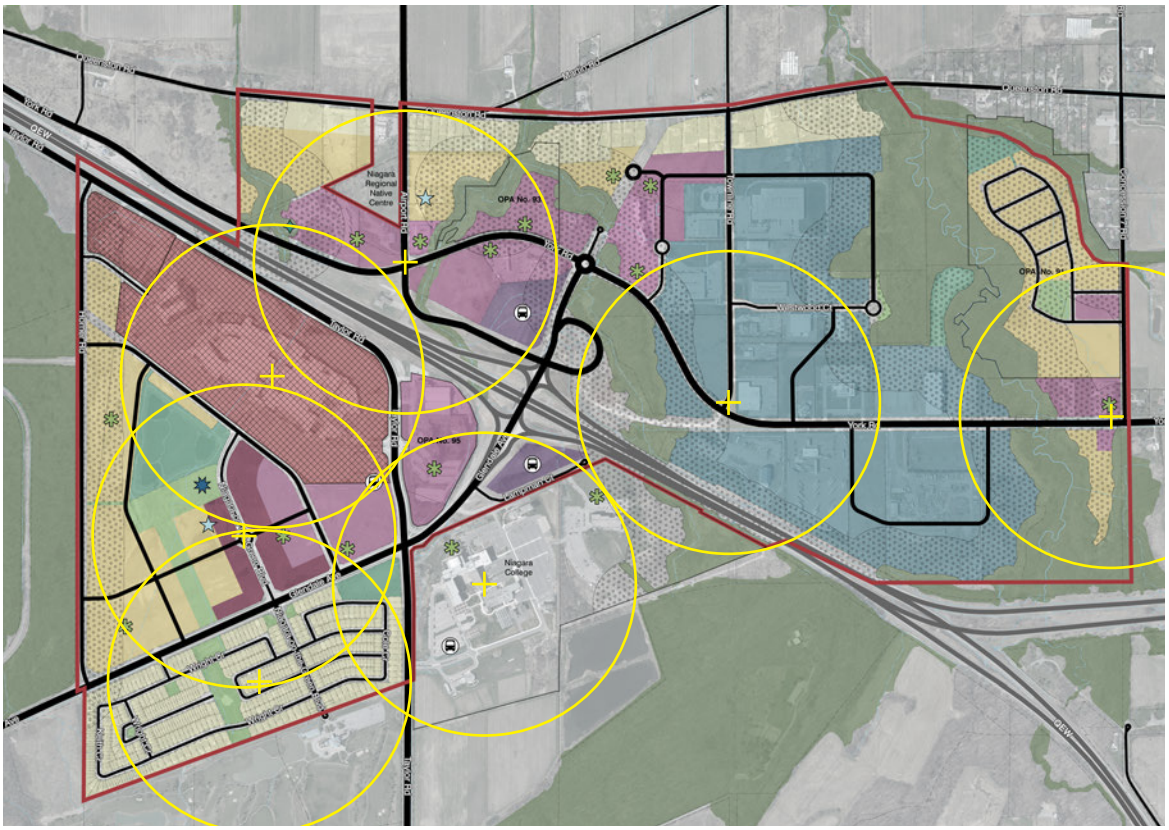
a) The street network should provide a high level of connectivity, taking into account the existing and proposed urban structure of adjacent and adjoining areas, such as by extending adjoining streets into or through new developments and subdivisions.

b) Design the street and block pattern to emphasize connections, both internally and with surrounding neighbourhoods, through a grid or modified grid pattern.

c) Gaps in the existing street grid should be completed by providing connecting streets through developments to ensure the effective continuity of the street pattern.

d) Avoid use of cul-de-sacs, p-loops, and crescents, except where necessary due to grading, topography, environmental features, or existing development that prohibits a connection.

e) Avoid back-lotting or reverse lot frontages.



Schedule F1 - Land Use Designations of the Glendale Secondary Plan with 400m walking radii overlaid

f) Terminate streets at public facilities or landmark buildings, parks, open spaces, or views or vistas of rural or natural areas.

g) Encourage the layout of streets to relate to and maintain views of natural areas, water courses, parks, and rural edges, such as by using single-loaded window streets along such features.

h) Daily activities, such as transit (local bus routes), elementary schools, parks, and modest services should generally be within a typical walking distance of 400 metres (5 minute walk) of residential units.

i) Blocks should generally be no more than 200 metres in length to provide neighbourhood permeability, promote active transportation, discourage excessive driver speed, and disperse traffic movements.

j) An interconnected network of sidewalks, bicycle routes, transit, and multi-use trails should provide for continuous movement throughout the community, ensuring integration with surrounding neighbourhoods and a variety of destinations.

k) Create a network of green spaces open to the public that provides a variety of amenities and activities that complement those of the existing parks and open spaces in Glendale.

l) Implement traffic calming measures such as on-street parking, reduced lane widths, public laneways, raised intersections, curb bulb-outs, and/or traffic circles to reduce vehicular traffic speeds and to ensure safe walking and cycling environments.

Community structure of a new development in Markham

Streetscape Elements

Sidewalk Clearway

Sidewalks are an essential element of the street allowing for the safe, accessible, and efficient movement of pedestrians. The sidewalk clearway should remain free and clear of obstacles at all times so that pedestrians can travel in a direct, continuous path.

Guidelines

a) Ensure sidewalks are continuous throughout the community and constitute an integral part of the pedestrian system to promote active transportation. Sidewalk clearway widths are context-specific and depend upon expected pedestrian volumes:

   – Minimum of 1.8 metres on Local Streets;

   – 1.8 to 2.1 metres on Collector and Arterial Streets; and,

   – 2.1 to 3.0 metres or higher in high pedestrian areas along commercial or mixed-use frontages, particularly where retail is provided along the street.

b) Sufficient space for street furnishings, public utilities, lighting, tree plantings, and transit shelters should be provided in addition to the sidewalk clearway in an adjacent furnishing zone.

c) On Arterials and some Collector types multi-use trails may be substituted for sidewalks on one side of the street based on location and as approved by the Town.

An enhanced public realm with wider sidewalks and plantings

Special paving and wider sidewalk in high pedestrian area

Street Trees and Planting

Street trees contribute to the urban tree canopy, act as a buffer to separate the pedestrian from moving vehicles, and create a canopy and shade over sidewalks to enhance pedestrian comfort. For more detailed guidelines on tree planting, see **Section 5 Green Buildings & Infrastructure**.

Guidelines

a) Plant street trees along all streets and consider a diversity of native tree species to avoid a mono-culture.

b) Tree spacing is recommended at 8 to 10 metres on centre, depending on species growth rate expectations.

c) Encourage the delivery of alternative planting strategies along high-pedestrian areas such as soil cells, sufficient soil medium, continuous planting trenches, etc., to sustain long-term growth and healthier tree life.

d) Utilize a comprehensive planting and soils strategy based upon species diversity, resiliency, and urban tolerance.

e) Where appropriate, use low maintenance, drought resistant, and salt tolerant landscaping within medians and roundabouts.

f) Plant a double row of trees in key areas, such as adjacent to parks and where a wider boulevard exists.

Tree-lined commercial street in Kansas City

Trees in open planting beds that also function for stormwater management

Sidewalks with street trees to provide shade and increase tree canopy

Street Furniture

Street furniture is an essential component of comfortable, pedestrian supportive streetscapes. Street furniture includes seating, benches, bicycle racks, bollards, and raised planters, among others.

Guidelines

a) Concentrate street furniture in areas with the highest pedestrian traffic, such as along retail and commercial areas, at transit stops, gateways and at key intersections (such as signalized intersections).

b) Provide a coordinated and consistent family of street furnishings, with standardized types and styles.

c) Locate the majority of seating in shaded areas.

d) Ensure that street furniture does not obstruct pedestrian, cyclist, or vehicular circulation.

e) Where raised planters are used in the boulevard, they should be designed to function as alternative seating along the sidewalk edge.

f) Ensure the placement of bicycle racks within the pedestrian realm does not impede pedestrian movement.

Coordinated streetscape elements, West Don Lands, Toronto

Coordinated and grouped streetscape elements

Bicycle racks designed as an interesting design feature along the street

Street Lighting

Street lighting is important for the safety and comfort of pedestrians and the safe operation of traffic on Town streets.

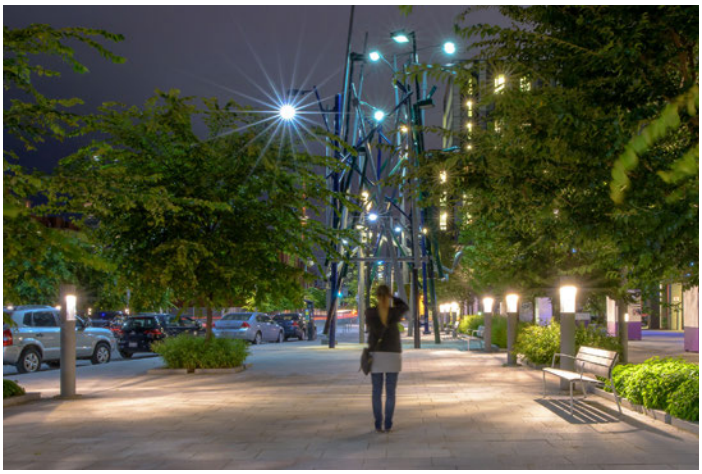
Guidelines

a) On streets with higher pedestrian traffic (eg. on Main Streets) provide pedestrian-scaled street lighting to enhance safety and visibility.

b) Consider sustainability and the impacts of light pollution in the design and location of lighting.

c) Group street lighting with street furniture, waste receptacles, and landscaping elements to minimize disruptions to pedestrian circulation.

d) Create a standardized palette of types, styles and varieties of decorative lighting that coordinates with the streetscape furnishings palette, takes into account maintenance requirements, and minimizes the total number of types used.



Pedestrian scale lighting adds character to street

Dark sky compliant light fixtures

Pedestrian Crossings

Strongly identified pedestrian crossings are an essential part of providing a safe and comfortable pedestrian experience. When clearly defined, pedestrian crosswalks will help to minimize conflicts between vehicles and pedestrians.

Guidelines

a) Provide formal pedestrian crossings at every four-way intersection in high pedestrian areas in order to promote walkability and a pedestrian-focused environment.

b) Provide signalized pedestrian crosswalks at locations where important destinations or significant walking traffic is anticipated, such as near retail shops and schools.

c) Ensure pedestrian crossings have a minimum width of 3.0 metres, are continuous, and connect to adjacent sidewalks.

d) In key areas, such as on Main Streets and at gateways, use feature paving such as alternative paving markings or materials, or distinctive painted lines to minimize the conflict between vehicles and pedestrians and to enhance the visibility and quality of pedestrian crossings.

e) Define and enhance safe routes to schools to create a link along a route to a school. Provide pedestrian crossings, signage, and other pedestrian safety features and amenities as determined appropriate and effective by the Town.

f) Minimize the height of curb cuts to facilitate wheel-chair and stroller usage in high pedestrian areas.

g) Consider providing additional protections for pedestrians crossings such as refuges at very high volume intersections such as at Glendale Avenue and Taylor Road.

Decorative paving, wider sidewalk and clearly demarcated pedestrian crosswalks

Pedestrian crosswalk defined by special paving and a refuge

Community Mailboxes

Community mailboxes consist of a piece of street furniture containing multiple mailboxes and parcel compartments that can be locked individually, providing secure, convenient, 24/7 access to mail and parcels.

Guidelines

a) Mailboxes should be located either at parks or stormwater management facilities along the street edge, or along side yards between the sidewalk and the corner lot line.

b) Ensure community mailbox locations preserve the privacy of adjacent residences or provide appropriate screening.

c) Where appropriate, coordinate the location of community mailboxes, newspaper boxes, seating, and waste receptacles.

Utilities

Utilities such as electricity, telecommunications, water and gas supply, sewage and stormwater, are essential to the functioning and servicing of an urban area, but care must be taken to minimize the impacts of utilities on the use and appearance of the right-of-way.

Guidelines

a) Wherever possible, utilities should be buried below grade. The use of a joint utility trench is encouraged for access and maintenance benefits to maximize available space for street trees.

b) Where below-grade utility design is not feasible, group at grade utilities in single locations to minimize their aesthetic and access impacts on the public realm.

c) Encourage utility design that minimizes street clutter. Utilize products that incorporate street lighting and telecommunications facilities within the same utility pole.

d) Locate above-grade utility poles to allow street trees to be included in the right-of-way. Consider rearranging sidewalk location and boulevard widths to provide separation between utility poles and tree planting locations.

Traffic Calming

Traffic calming measures reduce vehicular traffic speeds and contribute to a safer walking and cycling environment.

Guidelines

a) Traffic calming designs should correspond to the appropriate engineering standards and must be approved by the Town. Additional traffic calming designs to reduce vehicular traffic speeds and to ensure safe walking and cycling environments may include:

   – Pedestrian-priority streets, woonerfs or home-zones (i.e., the speed limit is under 15km/hr. and vehicles must yield to pedestrians and cyclists);

   – Street design that discourages vehicle speeding through right-of-way curvature, raised intersections, curb bump-outs, minimizing curb radii, medians and/or roundabouts, building proximity to the street, and boulevard street tree planting; and/or,

   – Minimize the number of traffic lanes in the roadway.

b) Consider curb extensions (bump-outs) on streets to provide improved pedestrian safety. These should be designed to:

   – Reduce crossing distances and provide safe refuge for pedestrians waiting to cross the street;

   – Reduce vehicle speeds; and,

   – Include a combination of landscape and hard surface elements to improve aesthetics.

c) Consider providing traffic calming measures on all Town-owned streets, including Collector Streets.

Planting at bump outs help to calm traffic

Flat mountable curb for bump out on a truck route (image: NACTO, CC BY-NC 2.0, Flickr)

Curb extensions provide improved public safety

Gateways

Gateways play an important role in a community's structure and design by providing visual landmarks that enhance the sense of arrival and place, promote community character and assist with wayfinding. Community Gateways occur at major entry points to neighbourhoods.

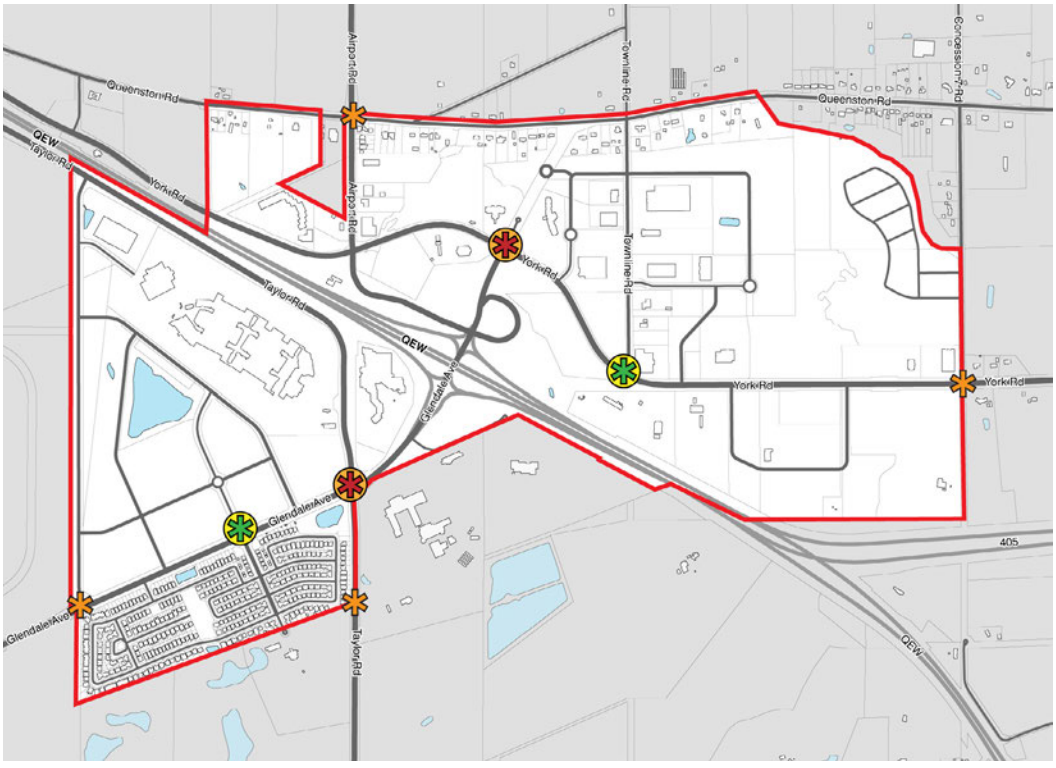
Guidelines

a) Minor gateways are located at main road entrances into Glendale and should include welcome signage in a landscaped feature area that may include low walls, fencing or enhanced landscape treatment.

b) Major gateways are located at key intersections in the heart of Glendale and should include elements such as public art, signage, a pedestrian-oriented landscaped feature area, shade structures, and distinctive surface treatment for pedestrian crossings. Where there is a median, consider enhanced median plantings or banners or hanging baskets leading towards the gateway.

A gateway feature in the Village of Maple (image: York Region, CC BY-NC-ND 2.0, Flickr)

A gateway feature in King City (image: York Region, CC BY-NC-ND 2.0, Flickr)



Legend

- Minor Gateway
- Major Gateway
- Character Gateway

Map of gateway types and locations in Glendale

c) Character gateways are located at key entrances to important areas such as the Main Street area along Niagara-on-the-Green Boulevard. Character gateways should include elements such as signage, a pedestrian-oriented landscaped feature area, shade structures, and distinctive surface treatment for pedestrian crossings.

A gateway feature in King City (image: York Region, CC BY-NC-ND 2.0, Flickr)

Transit-Supportive Systems

Transit-supportive systems require densities and development patterns that connect people of all ages to homes, jobs, school, and other places linked to their lifestyles.

Guidelines

a) Complement and support the transit system through a network of on-street and off-street active transportation facilities, such as bicycle lanes, multi-use trails, and sidewalks to further promote inter-modal and first-mile and last mile connections (walking, cycling, transit).

b) Support bike use through the provision of bike racks and bike storage at transit stops and stations.

Bicycle racks at a transit stop supports active transportation (image: Tom Flemming, CC BY-NC 2.0, Flickr)

Signage and Wayfinding

Wayfinding helps to orient people to key destinations, such as parks, and the location of parking and amenities, such as washrooms. Maps, directional signs, identifier signs and interpretive panels are all components of wayfinding and signage that contribute to enjoyable visitor experiences in which people are comfortable to explore all that Glendale has to offer whether walking, driving, or cycling.

Guidelines

a) Enhance wayfinding by using buildings as gateways and landmarks, public spaces as focal points, and streetscapes to frame significant views.

b) Wayfinding signage should identify local attractions, enhance awareness of key destinations and facilitate clarity and ease of movement between key destinations.

c) Signage and wayfinding should be designed and positioned for clarity and visibility (not blocked by vegetation) and where possible, information should be consolidated on one panel or post.

d) Signage should be simple, coordinated across the site, and be designed and located to reduce visual clutter. Image-based/graphical signage should be used wherever possible to improve universal understanding.

e) A hierarchy of coordinated directional signage should be provided to improve wayfinding for residents and visitors:

- Consolidate the direction to multiple destinations in directional signs for motorists and pedestrians.
- Provide a collection of information such as a map showing parking, key destinations and walking radius in an information kiosk or on a pedestal.
- Provide information on historic, cultural or environmental features on interpretive signs at key destinations.
- Identify key destinations such as parks, public docks, municipal buildings in a destination sign.

Wayfinding signage points out key destinations (image: City of Sydney)

Wayfinding map and directional sign pedestal

Directional signage to assist in pedestrian wayfinding

Interpretive sign, Tasmania, Australia

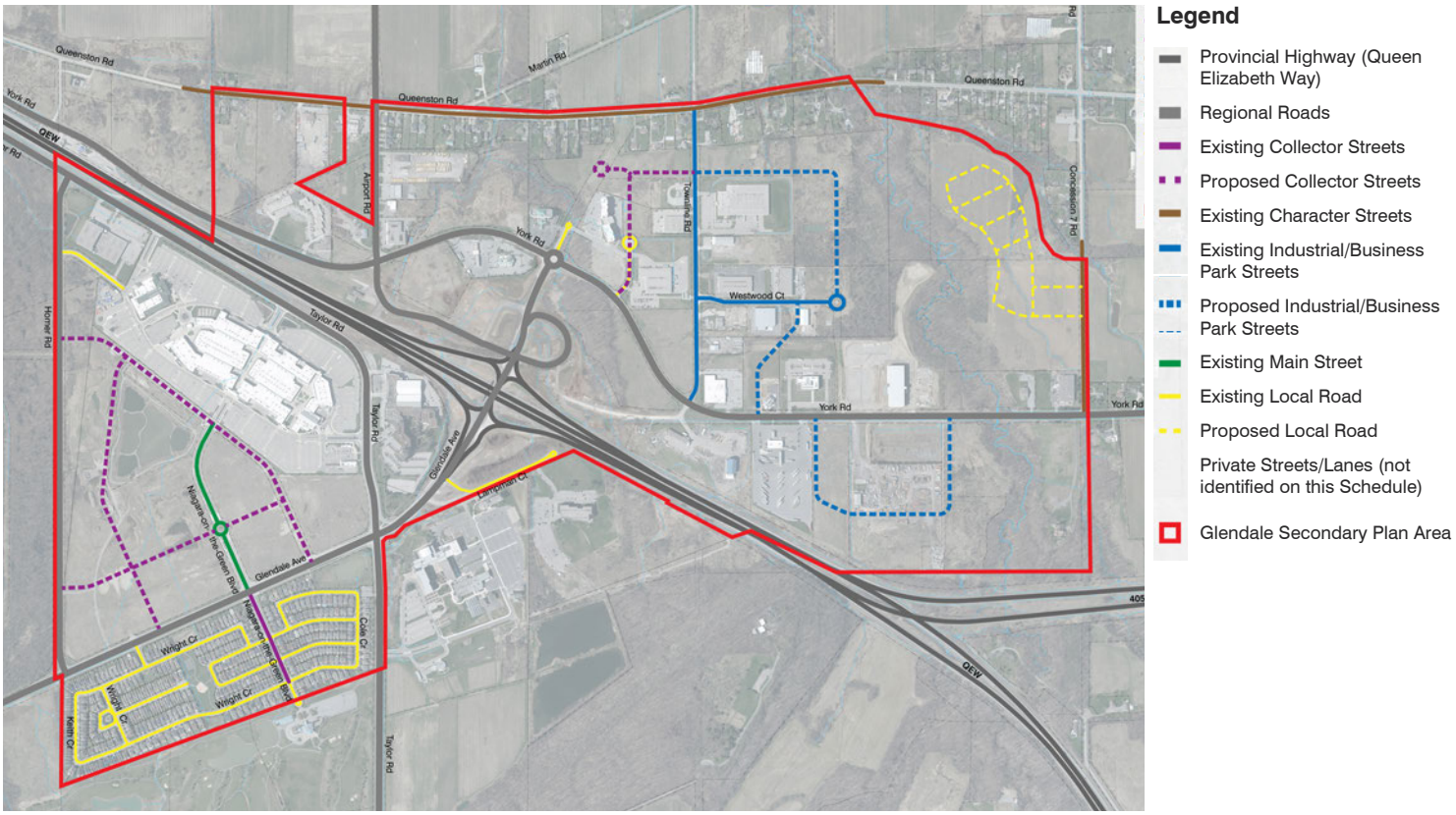
Streets

The street should be understood as the physical configuration and visual appearance of everything within the public right-of-way. The street can be broken down into two primary parts:

Boulevard: the part of the streetscape dedicated primarily to pedestrian use. The boulevard includes the sidewalks, planting, furnishing and market zones (where applicable), as well as multi-use paths and off-street bicycle facilities. The boulevard is also where the street interfaces and connects with adjoining buildings and uses.

Roadway: the part of the streetscape dedicated to the movement of vehicles. The roadway includes vehicular travel lanes, dedicated or shared bicycle lanes and lanes for on-street parking, loading, drop-off and bus lay-bys.

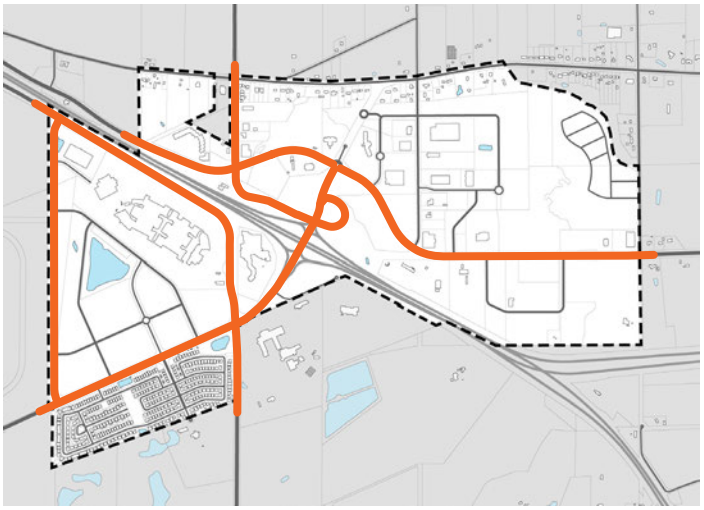
The specific technical details of the street cross-sections that follow (i.e., engineering standards) will be determined through the appropriate design review process. Refer to the Town of Niagara-on-the-Lake *Engineering Design Criteria* for typical street cross sections and the draft *Transportation Master Plan.*



Schedule F5 - Roads Network of the Glendale Secondary Plan

Regional Roads

Regional Roads are under the jurisdiction of Niagara Region and therefore and not included in these guidelines. Regional Roads in Glendale include Glendale Avenue, Taylor Road, Airport Road, York Road and Homer Road. Regional Roads will be designed according to the Region's *Official Plan*, their engineering standards and their *Complete Streets Design Manual (January 2023).*



Collector Streets

Collector Streets connect to Arterial Streets and provide primary connections to Local Streets.

Guidelines

General

a) Collector Streets generally have a right-of-way width of 26 metres.

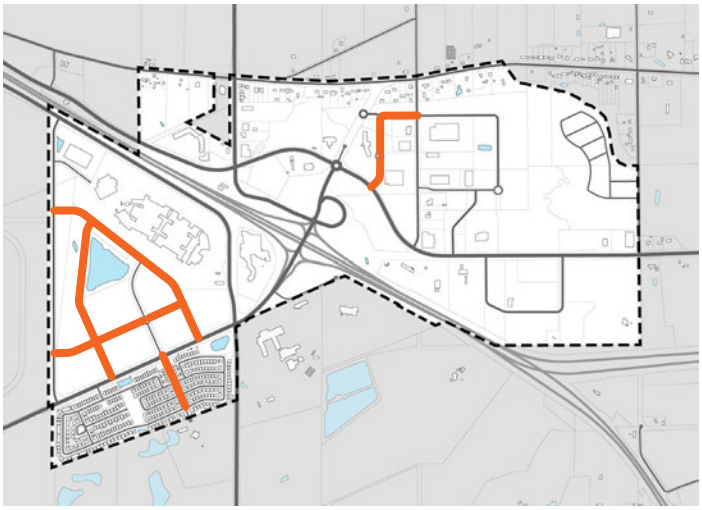
Roadway

b) The street surface includes a single 3.3 metre wide travel lane in each direction. Higher volume streets may have 2 travel lanes in each direction.

c) Collector Streets may include 2.2 to 2.4 metre on-street parking on one side of the street in appropriate locations that do not interfere with transit operations.

d) Transit facilities may be accommodated on all Collector Streets.

e) Provide protected bike lanes or cycle tracks on both sides of the street.



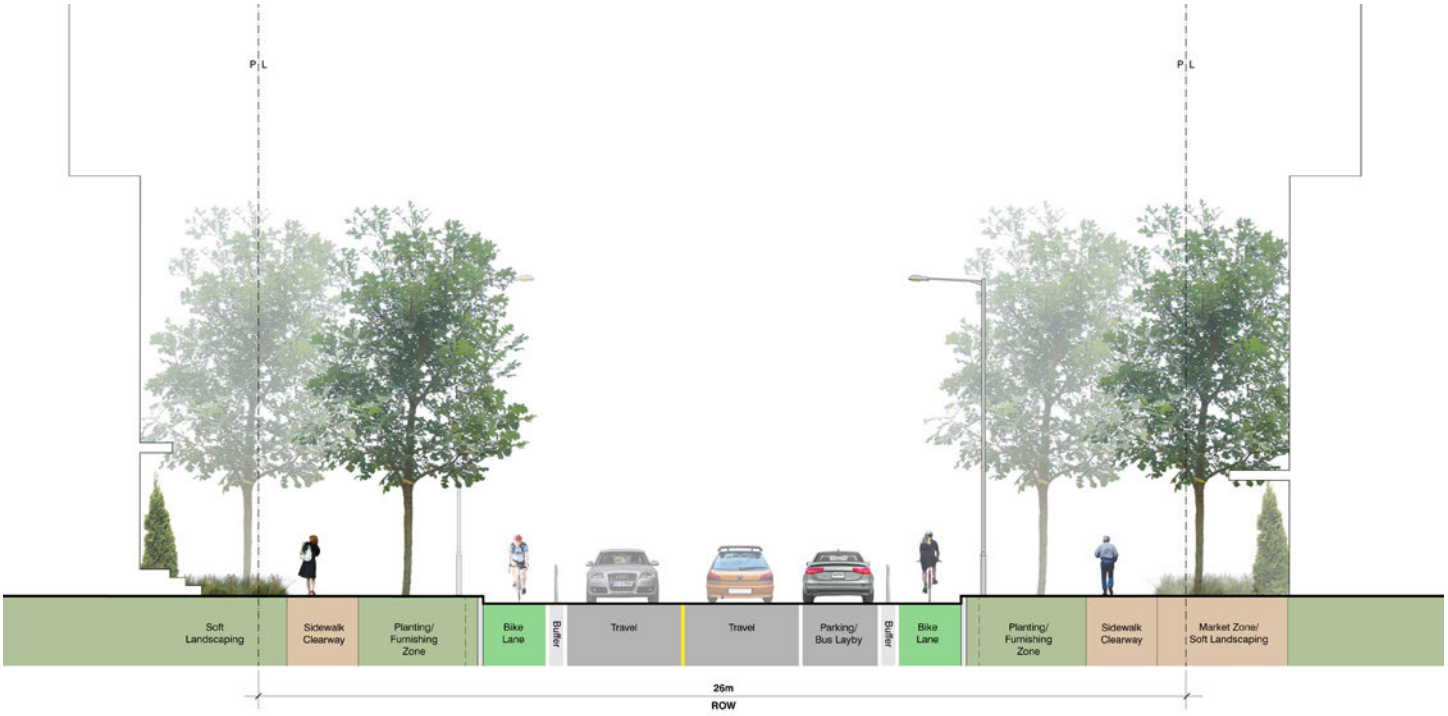
Boulevard

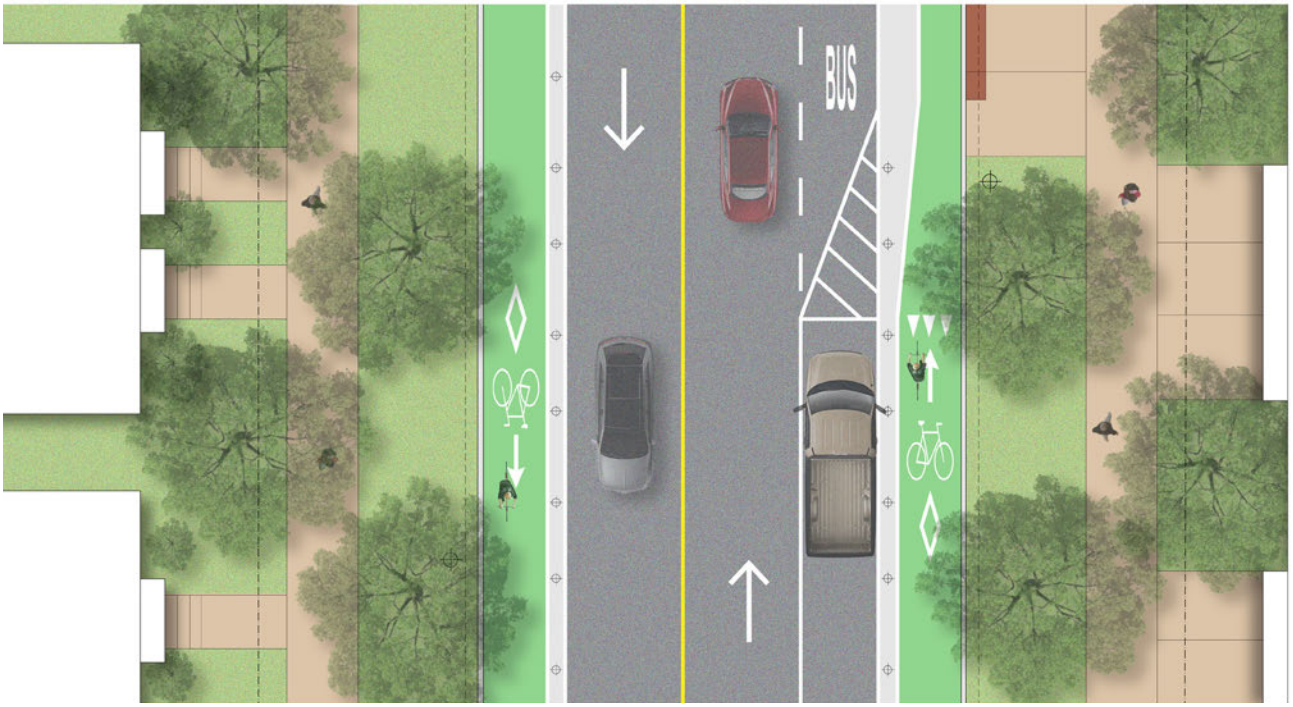
f) Collector Streets have boulevards on both sides of the pavement and accommodate a grass verge with street trees and minimum 2.0 metre sidewalks on both sides.

g) Street trees and landscaping should be located continuously along Collector Streets. Include a second row of trees where space allows.

h) Direct driveway access to development should be discouraged.

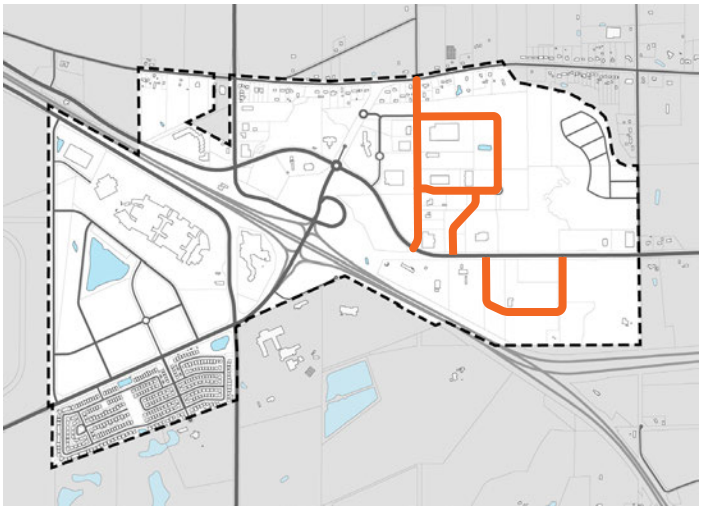
Typical Collector Street Cross Section





Industrial/Business Park Streets

Industrial/Business Park Streets are a type of Collector Street that provide direct access to industrial and commercial/employment areas. Examples of existing Industrial/Business Park Streets in Glendale include Townline Road and Westwood Court.



Guidelines

General

a) Industrial/Business Park Streets generally have a right-of-way width of 26 or 26.2 metres.

Roadway

b) The street surface includes a single 3.5 metre wide travel lane in each direction.

c) Transit facilities may be accommodated on all Industrial/Business Park Streets.

d) Provide cycle tracks on both sides of the street, or a 4.0 metre multi-use path on one or both sides of the street.

Boulevard

e) Industrial/Business Park Streets have boulevards on both sides of the pavement that accommodate a bioswale for drainage.

f) Street trees and minimum 1.8 metre sidewalks on both sides, or a 4.0 metre multi-use path.

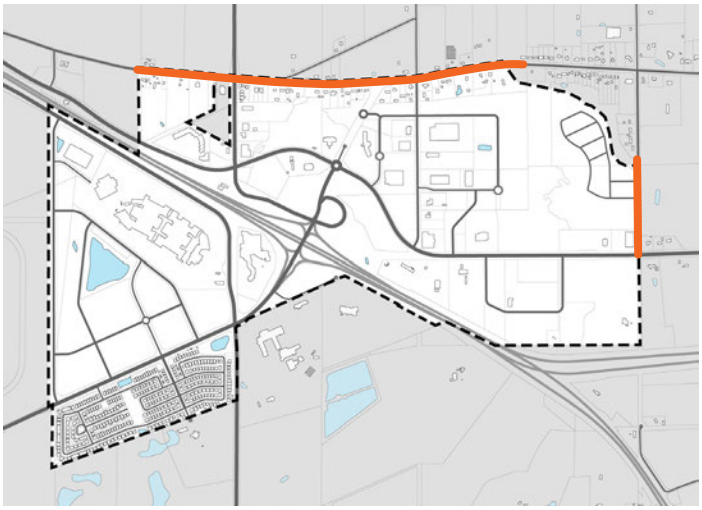
g) Street trees and landscaping should be located continuously along Industrial/Employment Streets.

h) Direct driveway access to any development site is permitted.

Typical Industrial/Business Park Street Cross Section

Character Streets

Character Streets are a type of Collector Street that perform a transition between urban and rural land uses through a modified rural cross section. They are primarily located along the edges of Glendale. Character Streets in Glendale include Queenston Road and Concession 7 Road. Queenston Road currently has a rural cross-section that includes paved shoulders designated as bike lanes. Homer Road (a Regional Road) should be considered by the Region for treatment as a Character Street.



Guidelines

General

a) Character Streets generally have a right-of-way width of 26 or 26.2 metres.

Roadway

b) The street surface includes a single 3.5 metre wide travel lane in each direction.

Boulevard

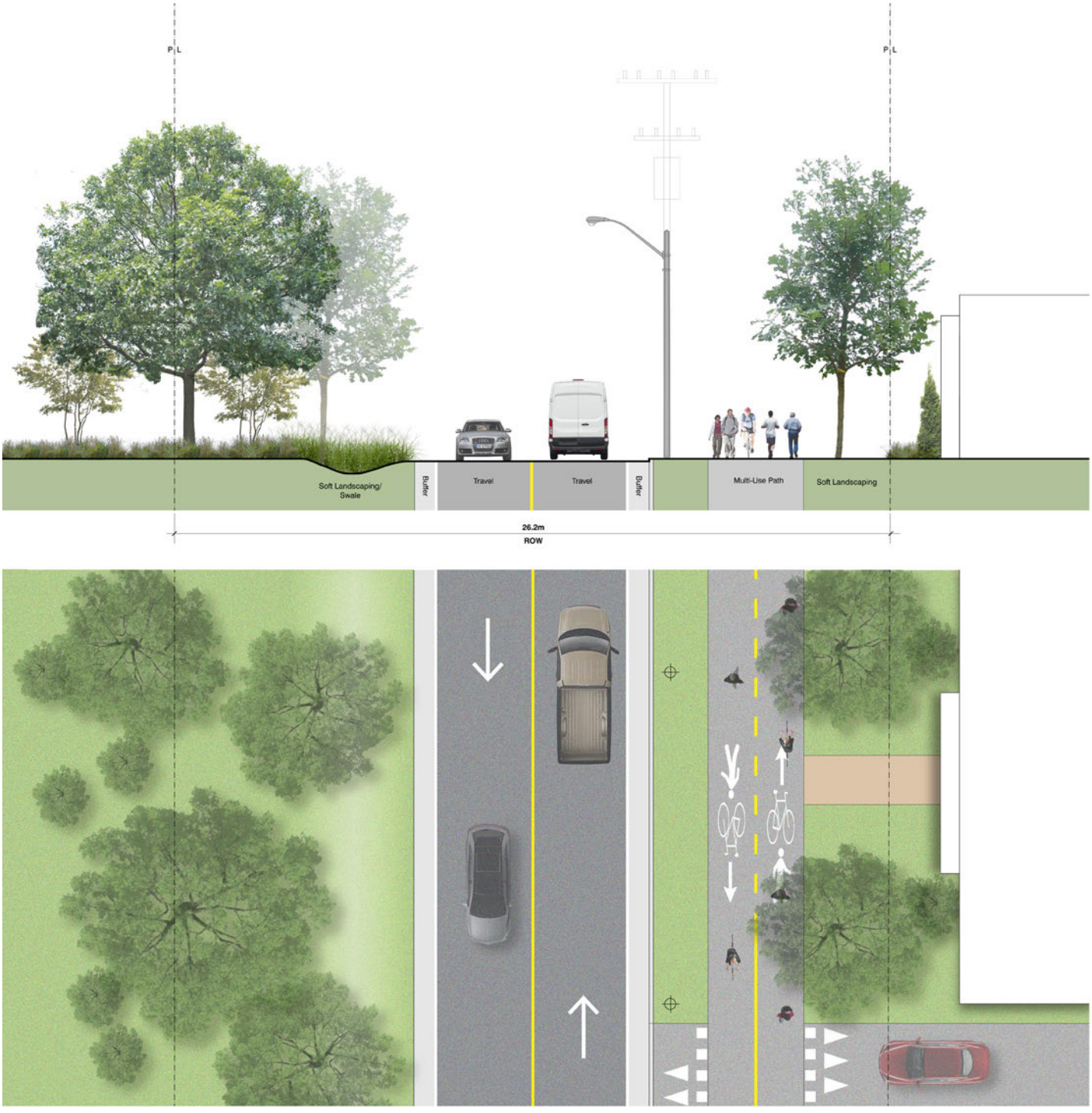
c) Character Streets have boulevards on one side of the pavement that accommodate a bioswale for drainage, with an urban curb and gutter on the other side.

d) Character Streets should have street trees and a 3.5 metre multi-use path on the urban/developed side, and more naturalized planting on the rural/natural/undeveloped side.

e) Street trees and landscaping should be located continuously along Character Streets.

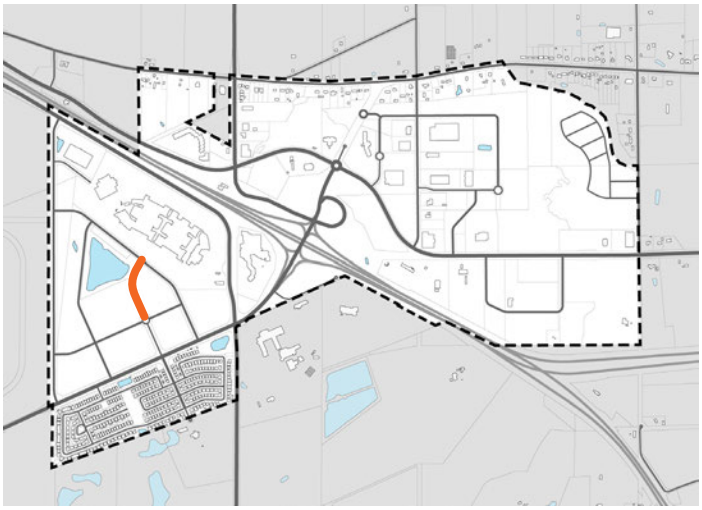
f) Direct driveway access to any development site is permitted.

Typical Character Street Cross Section



Main Street (Shared Street)

Main Streets are designed to support street-related retail development, high levels of pedestrian activity, and accommodate temporary closures for community events, activities and festivals. They should have a special character and be built to a higher design standard than other streets, while utilizing traffic calming techniques to slow vehicular traffic. The sole Main Street in Glendale is Niagara-on-the Green Boulevard, which is identified as an Enhanced Streetscape in the Glendale Secondary Plan.



Guidelines

General

a) Niagara-on-the Green Boulevard has a right-of-way width of 26.0 metres.

b) Locate the main front wall of buildings close to the property line to enclose the street space and promote the visibility of retail to pedestrian and vehicular traffic.

Roadway

c) The roadway includes a single travel lane in each direction to be shared with bike traffic.

d) Use decorative paving and rolled curbs to define the street as a special place and allow for seamless closures to traffic for events.

e) Include 2.2 to 2.4 metre wide flex spaces on both sides of the street that can be used as on-street parking or for patios or events.

f) Use curb bump-outs to narrow intersections and facilitate safer and shorter pedestrian crossings.

g) Use contrasting and clearly visible decorative paving or surface treatments to demarcate pedestrian crossings and/or crosswalks.

Boulevard

h) Use decorative paving for pedestrian surfaces complementary to the roadway paving.

i) Street trees and landscaping should be located continuously along Niagara-on-the Green Boulevard.

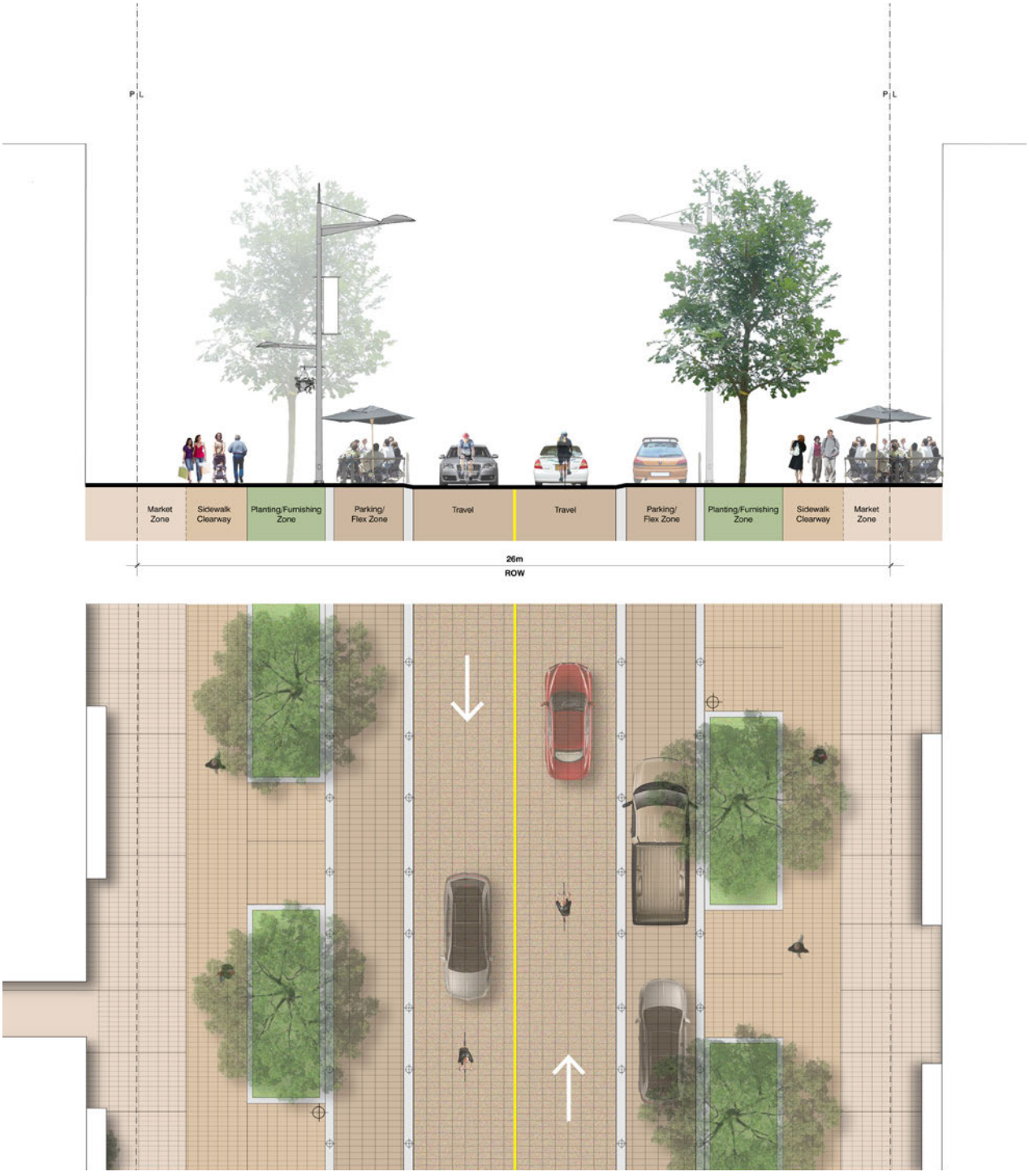
j) Provide a minimum 2.1 metre sidewalk clearway on both sides of the street.

k) Provide paved market zones adjacent to retail frontages.

l) Ensure tree planting areas are protected from foot traffic by raised edges or decorative low barriers and provide the required uncompacted soil volumes. Use soil cells to achieve the required soil volumes wherever necessary.

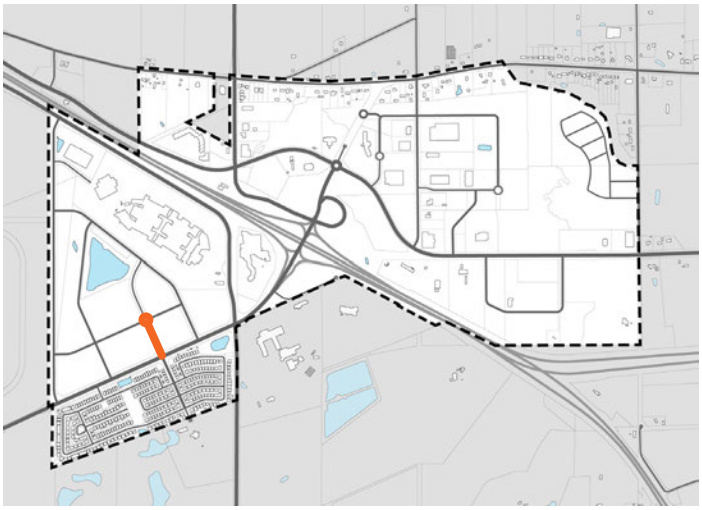
m) Decorative light standards with a pedestrian lighting fixture attachment should be used.

Main Street (Shared Street) Cross Section



Main Street (with Bike Lanes)

Using the same streetscape design language as on the Shared Street Main Streets, integrate bike lanes in both directions to provide a safe cycling connection northwards from the multi-use path along Glendale Avenue. The Main Street (with Bike Lanes) is located on Niagara-on-the Green Boulevard, which is identified as an Enhanced Streetscape in the Glendale Secondary Plan, south from the roundabout to Glendale Avenue.



Guidelines

General

a) Niagara-on-the Green Boulevard has a right-of-way width of 26.0 metres.

b) Locate the main front wall of buildings close to the property line to enclose the street space and promote the visibility of retail to pedestrian and vehicular traffic.

Roadway

c) The roadway includes a single travel lane in each direction.

d) Provide buffered bike lanes in each direction with a minimum width of 1.8 metres.

e) At the Glendale Avenue intersection, provide crossrides to connect to the multi-use path on the south side of Glendale.

f) Use decorative paving to define the street as a special place.

g) Use curb bump-outs to narrow intersections and facilitate safer and shorter pedestrian crossings.

h) Use contrasting and clearly visible decorative paving or surface treatments to demarcate pedestrian crossings and/or crosswalks.

Boulevard

i) Use decorative paving for pedestrian surfaces complementary to the roadway paving.

j) Street trees and landscaping should be located continuously along Niagara-on-the Green Boulevard.

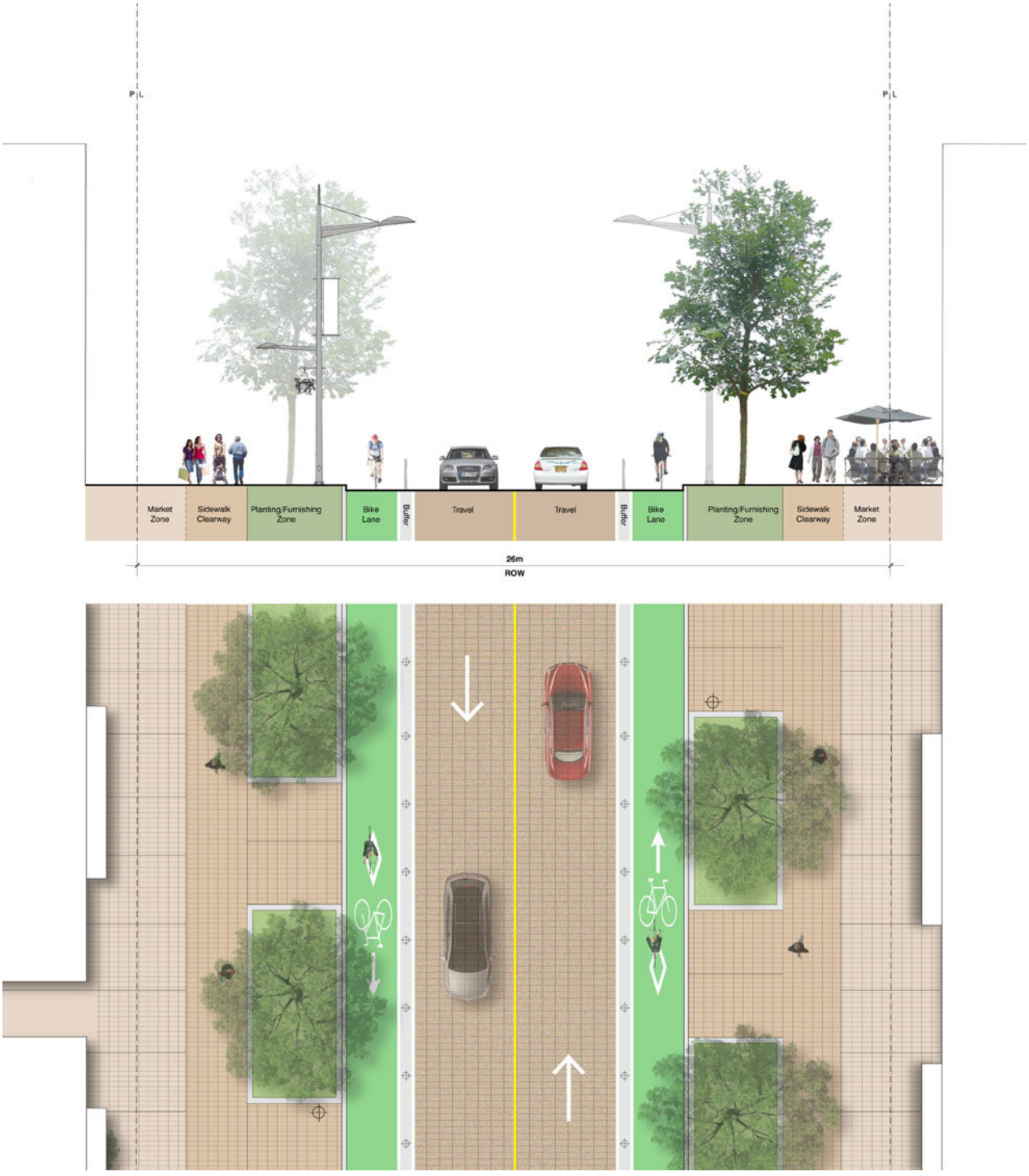
k) Provide a minimum 2.1 metre sidewalk clearway on both sides of the street.

l) Provide paved market zones adjacent to retail frontages.

m) Ensure tree planting areas are protected from foot traffic by raised edges or decorative low barriers and provide the required uncompacted soil volumes. Use soil cells to achieve the required soil volumes wherever necessary.

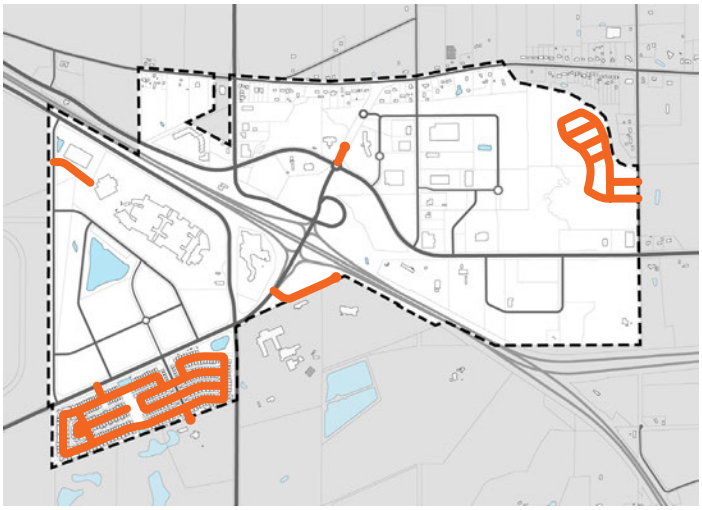
n) Decorative light standards with a pedestrian lighting fixture attachment should be used.

Main Street (with Bike Lanes) Cross Section



Local Streets

Local Streets serve critical social functions as places where kids play, neighbours interact, and where vehicles have the lowest level of priority. Local Streets also provide the fine-grain transportation network for the community, connecting to Collector Streets and linking with public spaces.



Guidelines

General

a) Local Streets have a typical right-of-way width of 18.0 metres, with a maximum of 20.0 metres. A reduced right-of-way width may be permitted where alternative development standards are deemed appropriate by the Town, for example where the development utilizes rear laneways.

Roadway

b) The street surface includes a travel lane in each direction, and may include on-street parking on one side of the street, that could alternate to either side of the street.

c) Consider bicycle movement a normal part of Local Street traffic movement; no dedicated bicycle infrastructure is required unless the street forms part of a key connection of the active transportation network.

d) Consider traffic calming measures such as curb bumpouts at intersections to encourage reduced vehicle speeds.

Boulevard

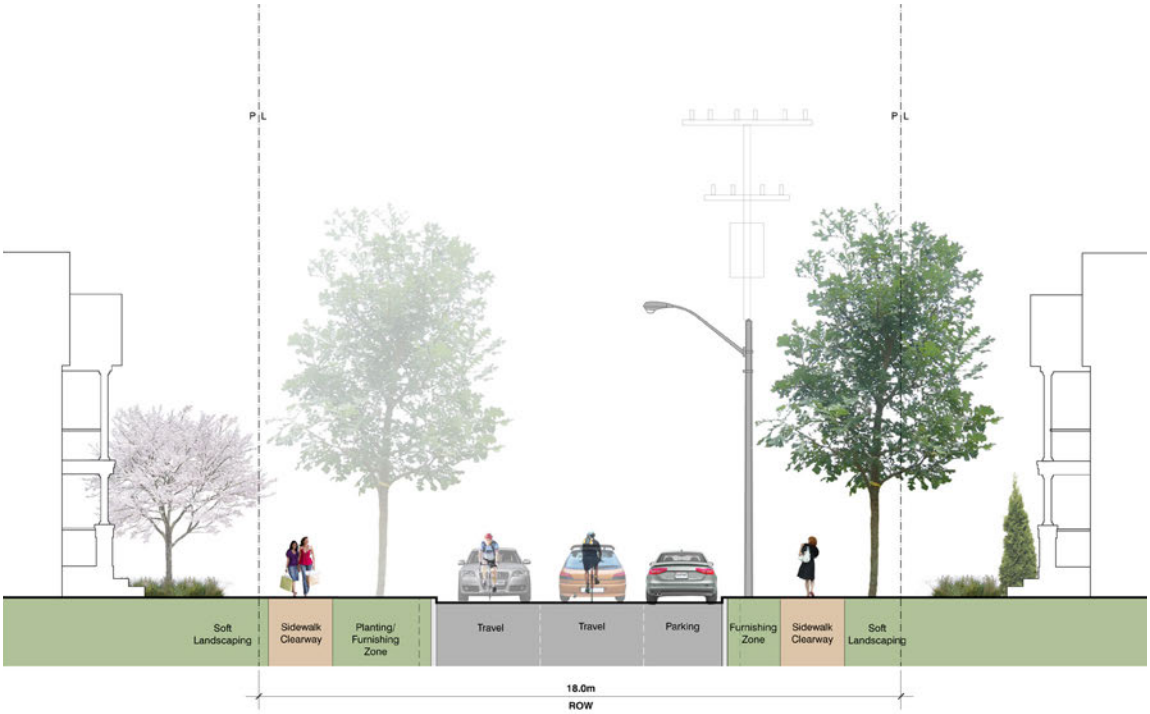
e) Street trees and landscaping should be located continuously along Local Streets.

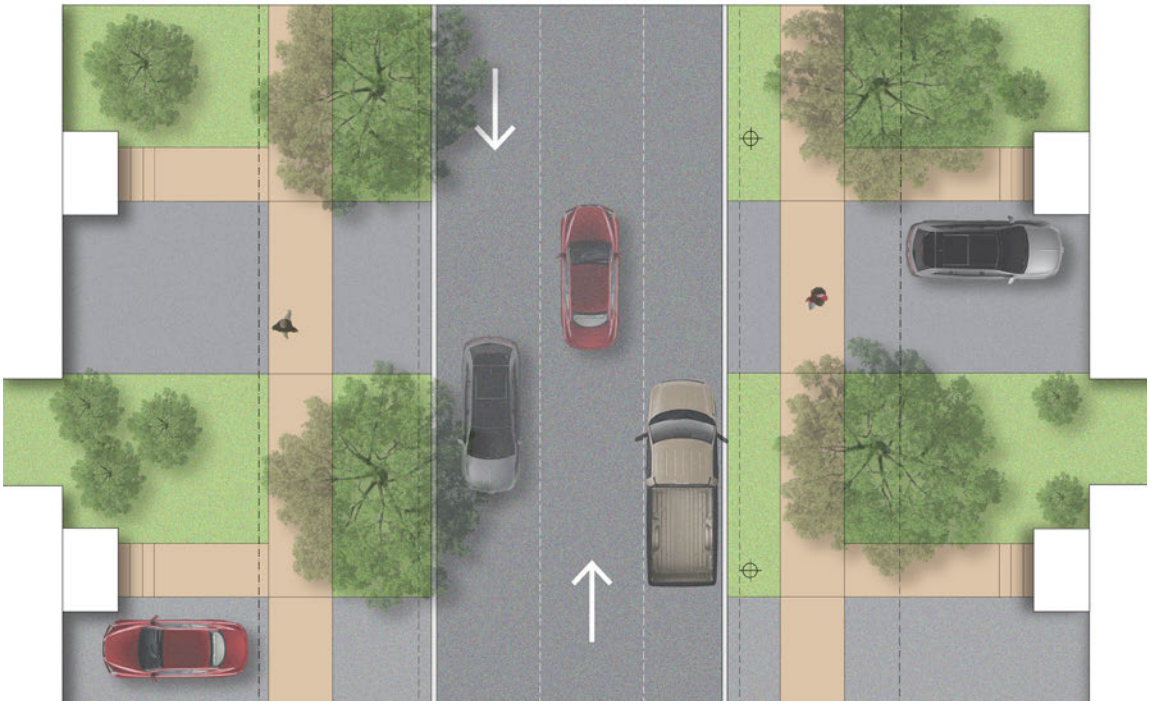
f) Consider additional rows of trees where space allows, including by negotiating locations on the adjacent private property (front yards).

g) Minimum 1.8 metre wide sidewalks on both sides of the street are recommended, particularly near schools and parks to facilitate continuous pedestrian connections.

h) Where the street includes above grade utility lines, consider an asymmetrical alternate boulevard (illustrated) with a narrow edge/ furnishing zone to avoid planting trees directly under the utility lines.

Typical Local Street Cross Section





Rear Laneways

The use of rear laneways provides significant benefits such as enabling continuous street tree planting, improving the visual appearance and social function of residential street facades, creating safer pedestrian environments through the removal of driveways crossing the sidewalks, and simplifying waste storage and collection, while offering the potential for narrower local and collector street rights-of-way. Laneways may be used in key locations to improve the visual quality of a streetscape, allow buildings to front onto open spaces, natural areas, and parks, and to provide access to residential uses and loading and service areas for commercial uses along Arterial Streets.

Guidelines

General

a) Laneways for residential uses should preferably be publicly owned as this guarantees a baseline level of maintenance and service provision.

b) Laneway rights-of-way should be a maximum of 8.5 metres with a paved surface of 6.0 metres.

c) The desirable laneway length is a maximum of 150 metres to be consistent with fire hydrant spacing on street connections.

d) Where laneways include a turn, provide minimum 9.0 metre radius elbows at the turn.

e) Consider the use of porous or permeable materials for the laneway surface and/or utility corridor.

f) Provide a 1.25 metre utility corridor on either side of the laneway.

g) Laneways should be used for waste collection.

h) Identify and set aside snow storage locations when designing new laneways.

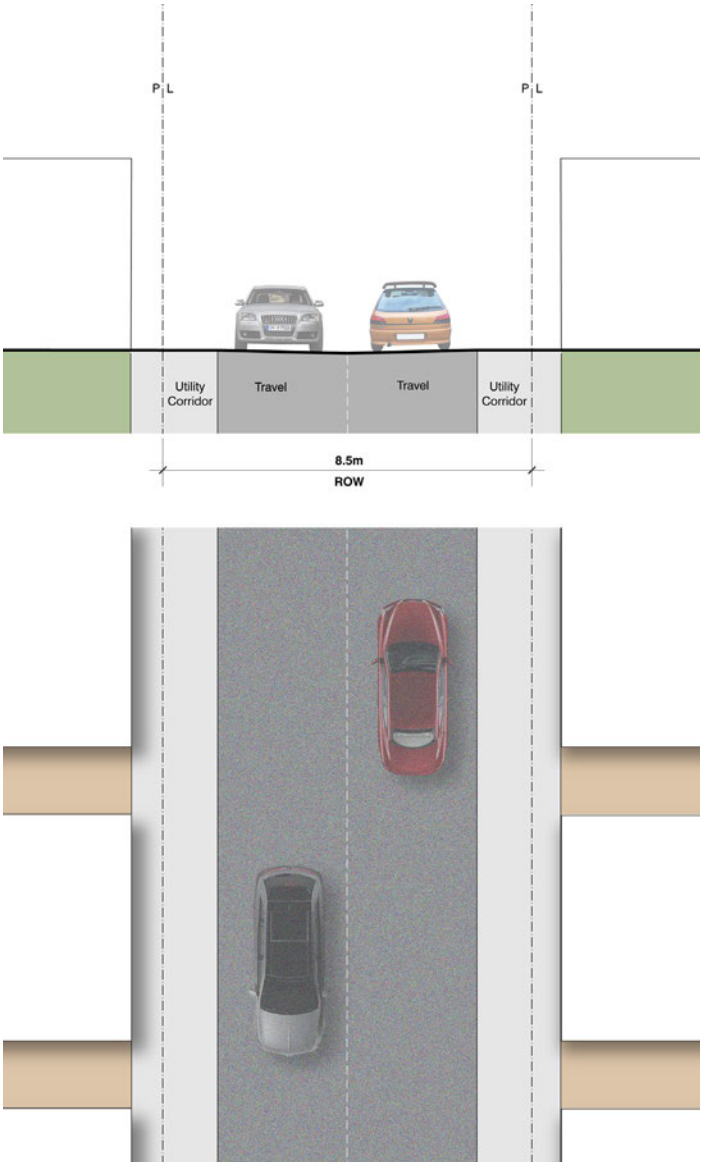
i) Provide a pedestrian connection to the building's front entrance where laneways provide vehicular access for housing fronting Arterial Streets, open spaces, and parks.

Lane with landscaping to enhance the visual appeal

j) Provide landscape areas in laneways where possible to enhance the laneway's aesthetic appeal and promote their use as gathering and playing areas.

k) Provide lighting at laneway entrances to promote vehicular and pedestrian safety.

Laneway Cross Section



Private Streets

The following guidelines apply to new streets which will not be owned or maintained by the Town and which facilitate access to new multi-unit residential, commercial or mixed-use developments on private properties.

Guidelines

General

a) Private Streets have a minimum right-of way width of 10.0 metres.

b) Identify and set aside snow storage locations when designing new Private Streets.

Roadway

c) Private Streets have a minimum paved surface width of 6.0 metres.

Boulevard

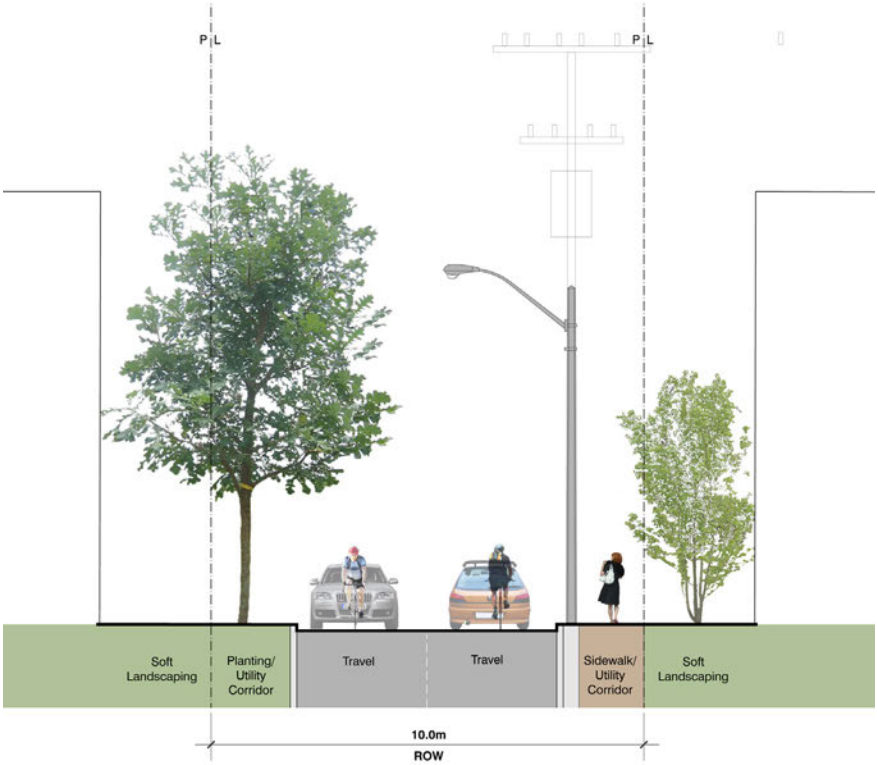
d) Provide a minimum 2.0 metre landscaped utility corridor on either side of the Private Street.

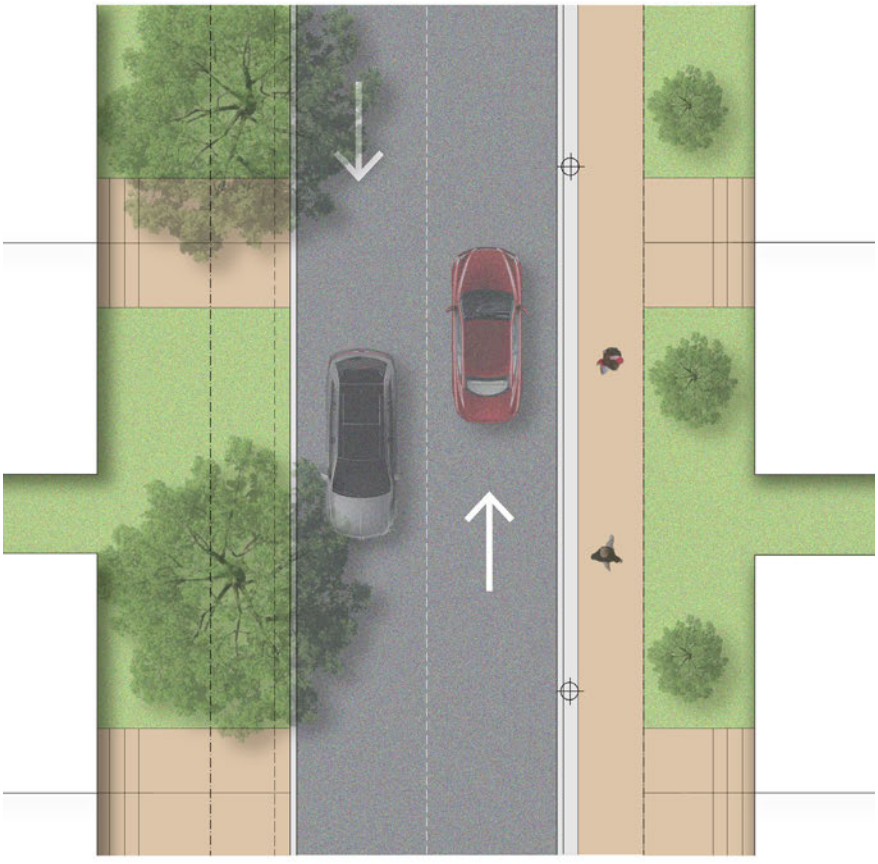
e) Sidewalks are required on at least one side of a Private Street, and may be located within the utility corridor.

f) Consider the use of porous or permeable materials for the roadway surface and/or utility corridor.

Walter Hardwick Avenue, Olympic Village, Vancouver (image: Maysa Phares, CC BY 2.0, Flickr)

Private Street Cross Section





Natural Heritage System, Parks & Open Spaces

The Natural Heritage System, Parks and Open Spaces are a functional, structural, and aesthetic component of Glendale. The natural environment, urban forest, parks, open spaces, and trail systems are essential components of a healthy, sustainable community ensuring residents have convenient access to a connected and diverse range of recreational opportunities.

Natural Heritage System

The Natural Heritage System contributes to the community's character and is a key structural element of Glendale. The following guidelines aim to protect, restore and enhance the Natural Heritage System, while mitigating any existing or potential negative impacts due to development.

General Guidelines

Guidelines

a) As opportunities arise, connect and integrate the Natural Heritage System with Parks and Open Spaces and the local and regional trail systems to buffer and expand natural heritage features and functions, ensuring ecological systems are not interrupted.

b) Integrate the Natural Heritage System as a key structural element in the neighbourhood's design by providing for a range of development interfaces that create opportunities for public vistas and connections to the Natural Heritage System (e.g. terminal views at the end of prominent streets).

c) Incorporate recreational opportunities such as trails within the Natural Heritage System to encourage physical activity, where negative impacts will not occur.

d) Provide frequent access points and significant street frontage along the Natural Heritage System to promote interconnection with the urban canopy and to create or preserve views of natural areas.

e) Provide naturalization planting and restoration to enhance the urban ecology and function of natural heritage features and their adjacent lands.

Integrate the natural heritage system with the community, creating opportunities for access, where appropriate

Woodlands

Woodlands provide benefits such as carbon storage, wildlife habitat, and regulating air, soil, and water quality, while also providing opportunities for residents to be able to directly experience naturalized environments.

Guidelines

a) Preserve and expand existing tree cover to connect and buffer protected woodlands and other natural areas and to mitigate heat island impacts.

b) Provide opportunities for naturalized plantings and landscape restoration to enhance and help to establish local ecological features.

c) Prevent direct access from private properties backing onto woodlands.

d) Ensure the location of trail heads will have no long term impact to the existing vegetation and wildlife communities.

Urban Forest

Trees provide ecological services that benefit human and environmental health, such as reducing heat island effect, sequestering greenhouse gases, providing shade in the summer, separating pedestrians from vehicular traffic, and contributing to more appealing sidewalks and streets.

Guidelines

a) Provide robust species selection to anticipate climate change conditions and operational constraints.

b) Provide street trees on both sides of the street in the public right-of-way.

c) Encourage a diversity of tree species along each street, native to the Town and Region, non-invasive, drought and salt tolerant, and low maintenance.

d) Plant a double row of trees in key areas, such as adjacent to parks and where a wider boulevard exists.

e) Encourage the delivery of alternative planting strategies along high-pedestrian areas such as soil cells, sufficient soil medium, continuous planting trenches, etc., to sustain long-term growth and healthier tree life.

Watercourses

Preserving and enhancing watercourses is important for providing wildlife and aquatic habitats and helping to preserve water quality and providing groundwater recharge.

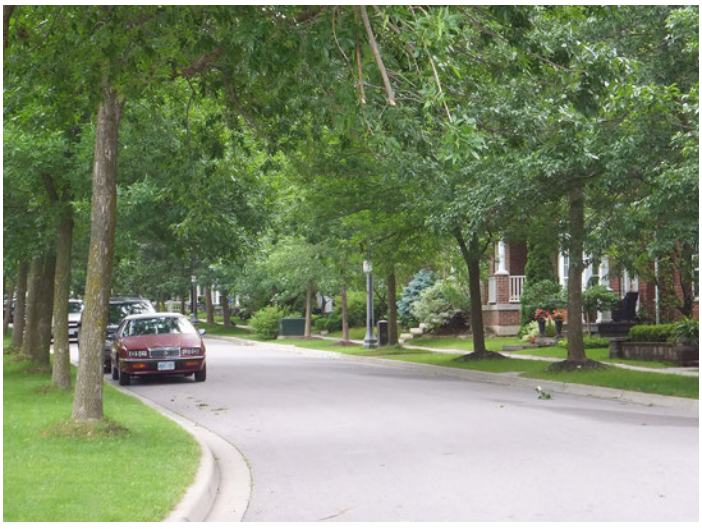
Guidelines

a) Preserve and enhance watercourses and maintain the habitat value and charm that the natural environment brings to residents and visitors by ensuring that all streams, creeks and rivers remain open and uncovered.

b) Covered or buried natural water courses should be daylighted as part of new developments or redevelopments where practical. This involves uncovering and appropriately rehabilitating the watercourses.

c) Introduce and maintain natural vegetation and other suitable erosion control methods on the banks of watercourses.

d) Plant trees or install other buffer measures where appropriate to protect watercourse banks and enhance the ecological corridor role of watercourses.



Street tree canopy contributes to the urban forest

Trail crossing a watercourse

Views

Enhancing the views of important natural heritage elements can play an important role in the creation of a sense of place. The best way to preserve or achieve those views is through the orientation of streets and buildings.

Guidelines

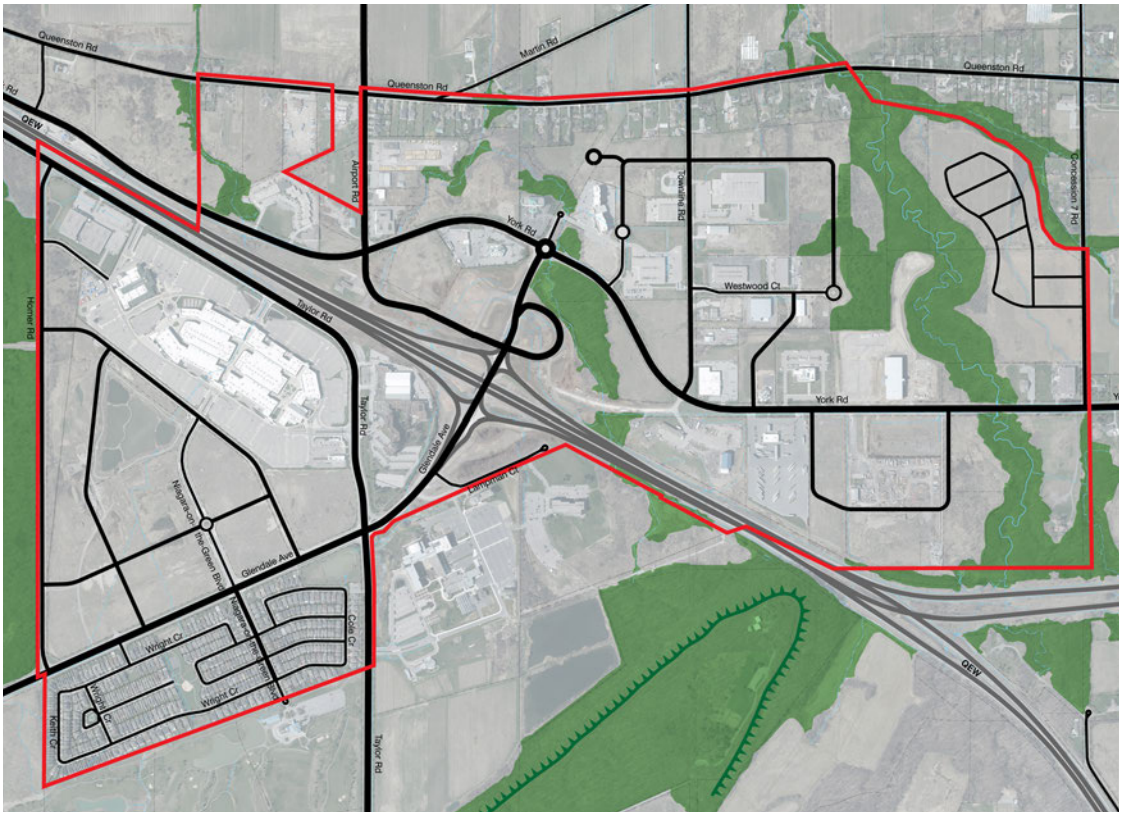
a) Orient streets and buildings to maximize views to the natural heritage system and Niagara Escarpment. These views are an opportunity to reinforce these natural elements as landmark features.

b) Existing natural features such as the Niagara Escarpment should form the basis for directing views.

c) Protect significant views through the location and configuration of open space opportunities.

d) Consider retaining and utilizing views from public areas of development sites as potential assets.

An old farm lane lined with trees integrated into Bonnie Braes Park, Brampton



Legend

- Natural Heritage System Core Areas
- Niagara Escarpment Edge of Slope
- Glendale Secondary Plan Area

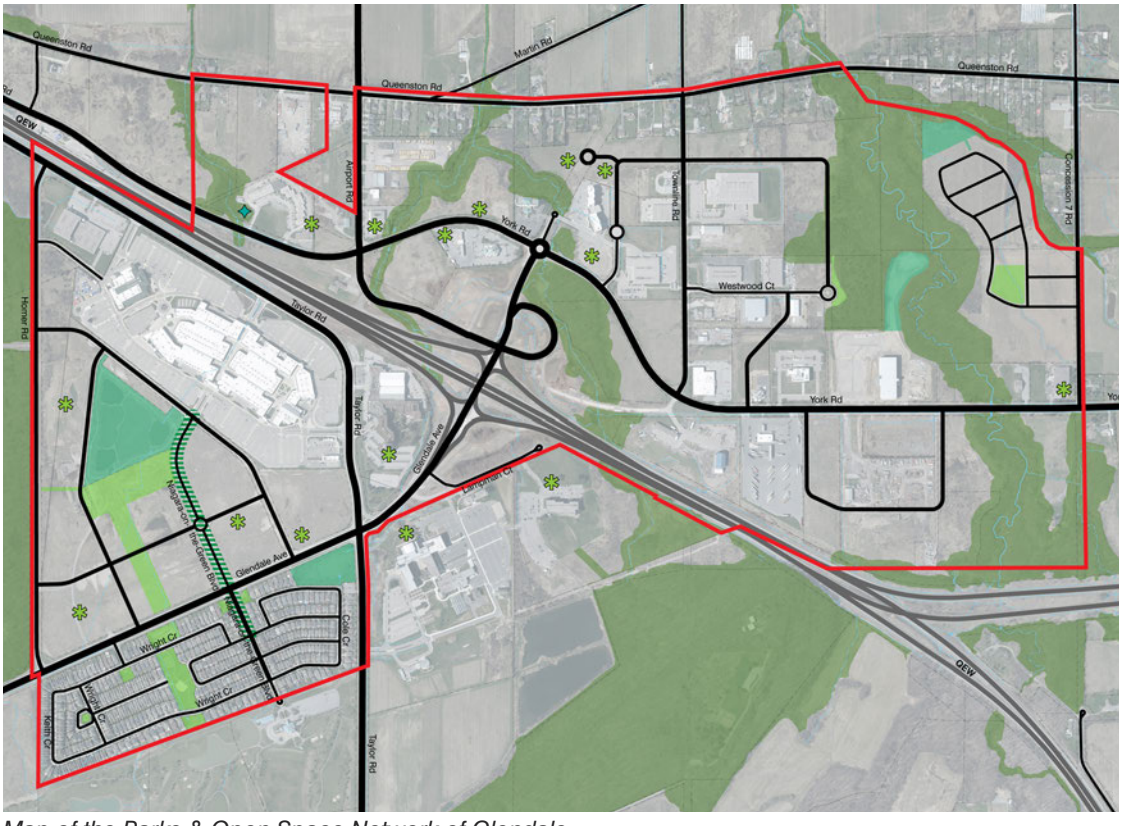
Map of the Natural Heritage System Core Areas in Glendale and the Niagara Escarpment edge of slope

Parkland Network

A Parkland Network provides for a variety of open spaces, parks, and recreation facilities to support opportunities for improved public health. Convenient access to these amenities encourages residents to walk and cycle, in addition to providing places for gathering, socializing, and active and passive recreation.

The Parkland Network consists of Public Parkland, larger neighbourhood parks, and Urban Park Spaces, which include smaller open spaces such as Urban Squares, Pocket Parks and Connecting Links.

Active transportation link through a park



Map of the Parks & Open Space Network of Glendale

Public Parkland

Public Parkland primarily benefits local communities, and can serve as an organizing element in a neighbourhood. These parks support a balance of active and passive recreation, such as playgrounds, skate zones, play courts, unlit sports fields and social gathering spaces, where space permits.

Lee Lifeson Art Park, Toronto

Guidelines

a) Public Parkland is intended to primarily serve local residents within a 10 minute walk (approximately 800 metres) and is typically between 0.75 hectares to 2 hectares in size.

b) Plan Public Parkland as focal points of neighbourhoods, preferably centrally located at the terminus of a major street or at the corner of a main intersection, and within walking distance of schools and other community amenities and destinations.

c) Ensure Public Parkland has significant frontage on adjacent streets to promote views and reinforce its focal nature. Street frontage should not be less than 30% of the park perimeter and should include frontage on at least 2 public streets.

d) Avoid backing residential lots onto Public Parkland, where possible.

e) Coordinate the design of park structures, such as gazebos, with other neighbourhood elements such as transit stops and community mail boxes.

f) Include a range of active and passive recreation opportunities in Public Parkland, such as playgrounds, waterplay, courts, walkways, seating, planting areas, and/or natural or cultural features.

g) Implement linkages between neighbourhood parks and other parks or natural heritage features.

h) Public Parkland is primarily comprised of softscape, but can have some hardscape elements.

i) Public Parkland may be co-located with school sites.

Neighbourhood park structure, with areas for seating and shade

Active recreation through the use of playgrounds

Urban Park Spaces

Urban Squares

Urban Squares are a moderately-scaled typology of the urban public park hierarchy commonly associated with higher intensity mixed use and residential areas. Urban Squares support neighbourhood-oriented social opportunities, as well as Town-wide entertainment and cultural events depending on their size and location. Urban Squares may include public art, small outdoor game areas, seating areas and places to eat, as well as street- related activities such as vendor and exhibit space.

Guidelines

a) Locate Urban Squares to achieve significant public exposure and access with frontage on at least 2 public streets.

b) Urban Squares should be between 0.25 to 1 hectare in size and shall generally follow a 1:1 proportion of length to width.

c) Adjacent built form should have primary and active frontages facing the Square.

d) Design Urban Squares to enhance the character of the surrounding public realm through public art, site furniture, seating areas and places to eat, landscape treatments, as well as street-related activities such as vendor and exhibit space.

Larger Urban Squares with distinctive paving can be used to hold large-scale, occasional events, such as a farmers market

Pentagon Row, Arlington, VA
(image: Solomon Abrams, CC BY 2.0, Flickr)

e) Design Urban Squares such that they provide between 25 and 40% of the area of the open space in tree canopy cover by the end of the 10th year after its opening.

f) Urban Squares should be primarily hard surfaced, but may include soft surface elements.

g) Use distinctive, high quality paving treatments for the Urban Square with consideration given to extending the paving treatment onto the street to give the space further prominence. This additional area would delineate an extended space that could be occasionally utilized for large-scale events such as a farmers market or festival.

h) Include community and civic event spaces as well as performance venues and playful elements for children.

i) Include ample seating, including accessible seating options, and a full furniture program, such as lighting, opportunities for outdoor cafés and restaurants, facilities for seniors, children and youth, water features and public art.

Pocket Parks

Pocket Parks are small, pedestrian friendly spaces that accommodate socializing in dense urban areas that are designed to a very high standard to support more intensified use. Pocket Parks are destinations unto themselves that are animated with outdoor seating, restaurant and retail frontages. They include primarily hard surface elements, but can also accommodate softer elements.

Guidelines

a) Pocket Parks should be a minimum of 75 square metres in size, and are intended to serve a local community that is generally within a 2.5 to 5-minute walk of residents, visitors and businesses.

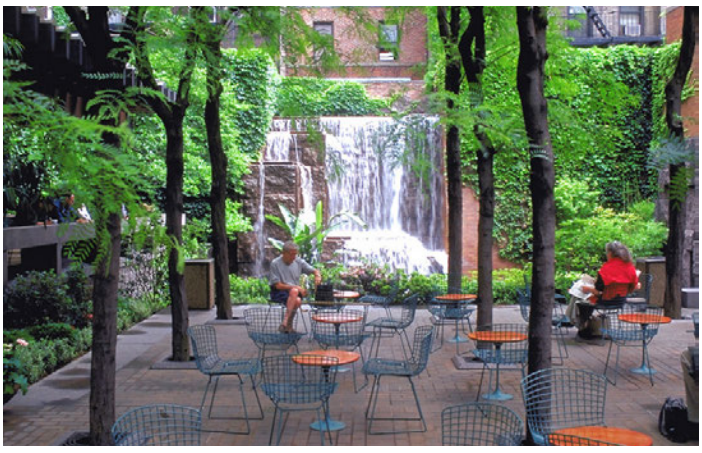
b) Pocket Parks should be connected to, and have at least 7.5 metres of direct frontage along the public sidewalk system.

c) Adjacent built form have primary and active frontages facing the Pocket Park.

d) Design Pocket Parks such that they provide up to 50% of the area of the park in tree canopy cover by the end of the 10th year after its opening.

e) Pocket Parks should be primarily hard surfaced, with limited soft surface elements.

f) Include seating, including accessible seating options, and a full furniture program, such as lighting, opportunities for outdoor cafés and restaurants, facilities that promote a passive, relaxing atmosphere, water features and public art.



Greenacres Park, a Pocket Park in New York City

Connecting Links

Connecting Links enable pedestrians in high pedestrian volume areas to travel through the community quickly and easily. Connecting Links are outdoor or indoor walkways through a development site, connecting two streets together. Many are destinations unto themselves with seating, restaurant and retail frontages. Connecting Links should contribute to the logical wayfinding system and help to establish a well-connected parkland network within a highly urban environment.

Guidelines

a) Connecting Links should be a minimum of 4 metres in width, and may be substantially wider, taking into account scale of adjacent buildings.

b) When enclosed, the floor to ceiling height of Connecting Links should be a minimum of 7 metres.

c) Connecting Links should be primarily hardscaped, with softscape and seating elements to provide amenity and visual interest.

d) Connecting Links should be well lit, promoting pedestrian comfort and safety.

e) Include signage to identify adjacent buildings.

f) Elements of the active transportation network such as sidewalks, mid-block connections, multi-use paths and trails may be considered as Connecting Links. Guidelines for Active Transportation are in the following section.

Connecting link lined with overlooking residential buildings

General Guidelines for Parks

Context, Heritage & Placemaking

The detailed design of parks contributes to the character and attractiveness of the neighbourhood in which they are situated. Attractiveness refers to how inviting and interesting the surroundings are for pedestrians. In particular, well-maintained and well-lit parks are most attractive, as are those that are animated with street-level activity, such as from commercial, civic, or recreational uses. Placemaking refers to community-based efforts and activities to physically reflect an area's unique character, assets, and history, and to make it livelier and more of a destination. Placemaking should be considered as a site-specific and context-specific pursuit.

Village of Yorkville Park, Toronto

Awen Gathering Place, Collingwood

Guidelines

a) Each park should have an identity of its own, while also respecting, or enhancing, the neighbourhood character, including patterns, materials, and architectural style.

b) Encourage the reflection, protection or enhancement of Indigenous and non-indigenous cultural heritage and historical values in parks.

c) Work with Indigenous communities to celebrate and commemorate Indigenous history and/or culture by providing opportunities for Indigenous placemaking in public spaces.

d) Where possible, incorporate public art and local artifacts into the space, including opportunities for education and interpretation.

e) Effort should be made to understand and communicate the unique culture, history, or qualities of the community in the design of parks and public spaces.

Accessibility

Accessibility refers to the usability of parks for all people, regardless of their age, ability, status in life, or mode of travel. In terms of age and ability, accessibility means planning parks for the young and old, and people with mobility impairments, in recognition that sight lines, walking speed, clearing space, endurance, and agility may vary.

Accessibility also means ensuring that the urban park network can be used by people of all incomes, and all abilities by keeping park spaces free of charge and by ensuring they are distributed throughout Glendale. Parks should avoid designs that appear to privatize the space, or elements within it.

Parks must meet the requirements of the Accessibilities for Ontarians with Disabilities Act (AODA).

Neshama Playground, Toronto, PMA Landscape Architects

Playground with pathway and seating area and overlooking houses

Guidelines

a) Accommodate a variety of activities within the park space.

b) Minimize changes in grade between the open space and surrounding public space, including public sidewalks.

c) Where changes in grade are not avoidable, provide an accessible route that complies with AODA standards.

d) Strive to locate utilities such as manhole, handwell and water valves covers outside of walkway zones. Where grates are required in a walkway zone, orient them perpendicular to the direction of travel.

e) Provide a detectable edge and contrasting change in surface at the edge of the vehicular zone, or other conflicts or hazards, through pavement treatments, tactile warning indicators, and signage.

f) Ensure surface under play structures is accessible and has impact attenuating properties for injury prevention. Wood chips, sand and gravel are not acceptable ground surfaces.

Safety

The primary risks for pedestrians in parks are associated with vehicle traffic and crime. Key considerations include separation from vehicle traffic - taking into consideration the speed and volume of traffic, and the treatment of intersections where pedestrian and vehicle traffic must cross. With regard to the design of parks, *Crime Prevention Through Environmental Design* (CPTED), provides direction for improving the safety of a space through thoughtful design.

Guidelines

a) Parks should be generally be located abutting and visible from public streets, pedestrian or multi-use pathways.

b) Provide clear sightlines through the park space to adjacent streets and buildings to promote informal neighbourhood surveillance.

c) Include adequate, consistent, pedestrian-scaled lighting.

d) Avoid the creation of entrapment spots, blind corners, dense planting designs or areas that are not easily visible.

e) Parks should be located where they can be lined with buildings that have active frontages, with windows and doors that open onto the park.

f) Parks should be designed with quality materials and furnishings and be regularly maintained to a high standard.

Park is adjacent and visible from the street, Saskatoon

Adequate and consistent pedestrian-scale lighting

Comfort

Pedestrian comfort is critical for the success of parks, and should be considered early in the design of the site. The location of the park in relation to surrounding buildings will have implications relating to wind, solar exposure, and visual access.

Comfort refers to how pleasant, easy, and free from challenges a pedestrian visit can be. Pedestrian comfort depends on the convenience, coherence, safety, and accessibility of the entire park, and it can be enhanced through construction materials and the provision of pedestrian amenities that serve the needs of pedestrians. Perceptions of space should also be considered, including providing more intimately scaled "rooms" in larger open spaces. The following practices will contribute to the comfort of the open space:

Guidelines

a) Locate open space such that it maximizes sunlight and views to the sky.

b) Provide ample seating throughout the site.

c) Provide a range of exposures, including areas with shading, through the use of canopy trees or other structures.

d) Consider wind and noise levels throughout the site. Where necessary, use plantings and structures to lower wind and noise levels and create comfortable microclimates, without compromising safety or visibility through the space.

e) Consider four-season use when selecting materials and finishes (e.g. – consider materials that retain heat, such as wood, in seating intended for use in cooler seasons).

f) Provide site amenities including drinking fountains, bottle fill stations, washrooms, and waste receptacles.

Provide ample seating and site amenities

Attractive and welcoming public washrooms in parks

Sustainability & Resilience

Sustainability in park design refers to a space's impact on the environment. This includes minimizing negative influences which may compromise the future health of the environment and putting in place measures which help improve the health of the local ecosystem. Resilience goes further to consider the constantly changing effects of climate change, and the ability of a space to persist in good health and quality over time, while also mitigating factors contributing to climate change. Resiliency also includes designing new parks, to meet the societal needs and challenges facing the whole community, neighbourhood and Town-wide.

Guidelines

a) Encourage active transportation through circulation design and the provision of supportive facilities (e.g. – provide ample bike racks, connect with public sidewalks).

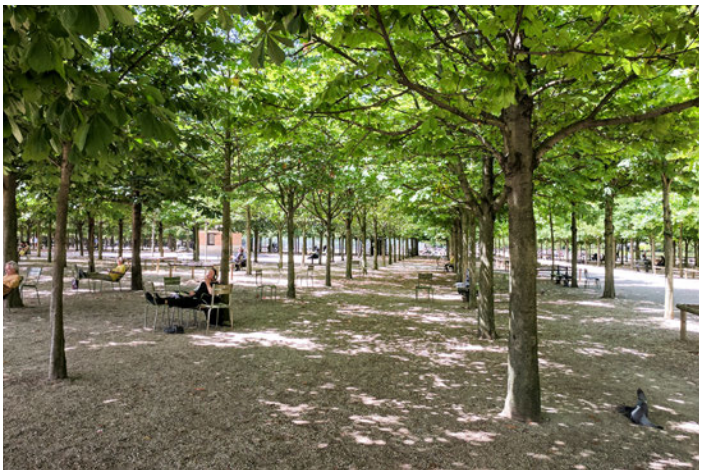
b) Encourage mature tree growth to increase canopy cover, which combats urban heat island effect, improves air quality, and increases stormwater uptake.

c) Increase species diversity in planting, and support local pollinator and faunal species.

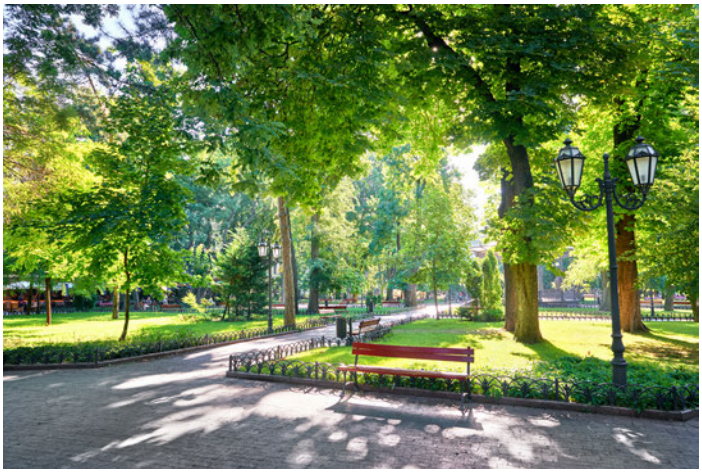
d) Use native and drought-tolerant plant species, that are also tolerant to salt and other pollutants.

e) Use permeable paving and below-grade infrastructure to harvest stormwater for reuse.

f) Use recycled materials, or materials with sustainable lifecycles.



Closely spaced trees creates a shaded area



Park with a diversity of ages and species of trees

Site Design

The introduction of new urban parks should be considered in relation to the adjacent land uses and architecture. Where a development is proposed, the relationship between the building massing and articulation, particularly at-grade, should be designed concurrently with the preliminary design of the adjacent park, to the mutual benefit of both. It is crucial that all of the urban park typologies exist and work together to create a robust and comprehensive urban park network.

Guidelines

a) Urban parks should be designed to be flush with the building facades and at-grade uses.

b) Active building frontages, with accessible at-grade uses, such as cafes and shops, are the ideal companion to an urban park. Active building frontages are transparent and incorporate windows, balconies, and entrances adjacent to parks to provide more opportunity for interaction between inside and outside uses. Active edges help to animate the park, improve safety, and encourage use.

c) Urban parks should have physical and visual access to the larger pedestrian circulation system, and have significant frontage onto the public sidewalk system.

Urban square lined with active building frontages

Significant frontage on public sidewalk, Victoria Square, Toronto

Programming

Great urban open spaces have strong functional assets. With respect to programming urban space, the key is flexibility in meeting the needs of residential users, office users and retail/ commercial users. Flexibility and variety is also required to allow the open space to adapt to changing needs over time. Programming opportunities are directly related to the scale, purpose and design of the space. Urban Squares provide opportunities to accommodate green space, tree cover and softscape areas that may include unprogrammed recreational space and other larger scale park features. In some instances, these spaces may also accommodate small sports fields, courts, and performance venues, as well as play elements for children. Smaller open space typologies will not accommodate the same diversity in programming, but still may include children's play areas, seating areas, public art, and planting elements.

Market event being held in a park

Temporary outdoor cinema set up in a park

Guidelines

a) Support active transportation use for participants in programming by ensuring there are multiple public access points and connections, creating trail connections, and providing bike parking facilities.

b) Support adjacent interior uses (e.g. – retail, office, residential, dining).

c) Promote passive recreation, including sitting, walking, and socializing.

d) Provide opportunities for individual and modestly scaled group recreational activities.

e) Be flexible in its design to support four-season use and temporary programming, including events, festivals and markets.

Hardscaping

Hardscaping plays a significant role in the design of urban parks. Given the space constraints that many urban park typologies are subject to, hardscape may make up the majority, if not all, of the ground level surface. The selection and design of the paving material will affect the usability and comfort of the space, as well as its aesthetics and character. Furthermore, the selection of hardscape materials should take into consideration issues of climate change, in particular urban heat island mitigation and stormwater management.

Guidelines

a) Provide a safe walking surface for all users, with special implementation of universal accessibility. Walking surfaces should be non-skid material.

b) Design hardscaping for passive cooling. Light coloured or high albedo materials, and open grid or porous surfaces help to mitigate urban heat island effect.

c) Select high quality materials that contribute to the character of the space and the surrounding area.

d) Where unit paving is used, ensure that differential settlement and heaving in the long term is mitigated. Consider incorporating a concrete base below the unit pavers.

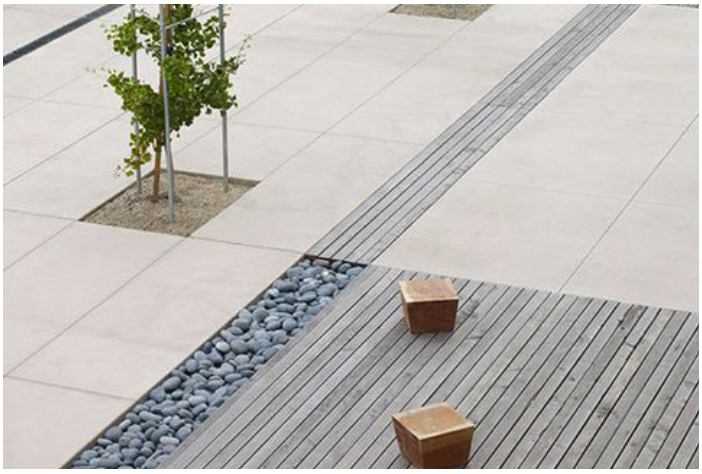
e) Select paving materials that have a long lifespan. Prepare a maintenance and repair manual as part of the design deliverables.

f) Where built over structure, ensure high quality membrane materials that have a long lifespan. Prepare a maintenance and repair manual as part of the design deliverables.

g) Provide unobstructed circulation routes through or around the space. Provide a minimum 2.1 metres wide pedestrian clearway.

h) Incorporate guiding edges and contrasting materials along the edges of main circulation routes, especially where located adjacent to open hard surface areas.

Distinctive paving in Place Bourge, Montreal, Quebec



Variety of high quality paving material

Unobstructed paving surface for pedestrians, Bellevue Park, Toronto

Softscaping

Softscaping, including planting beds and areas of sod, helps to establish the identity of the park, supports passive and active recreation, and provides a range of ecological benefits. Plant material helps to lower the ambient air temperature, absorb excess stormwater, improve air quality, and support local fauna and pollinators. Perennials and shrubs provide an excellent opportunity to inject vibrant colour and texture into a space, a quality typically lacking in urbanized areas.

Guidelines

a) Use planting to provide visual interest across all seasons. Consider incorporating a variety of colours, textures, heights, and forms throughout the open space.

b) Ensure that planting material does not obstruct visibility through the site. Use CPTED principles while developing the planting strategy.

c) Use planting material to establish a comfortable microclimate (e.g. – provide wind and noise reduction).

d) Plantings, should be low maintenance, drought tolerant, pest and disease resistant and tolerant of salt and other pollutants.

e) Provide planting beds that are a minimum of 600mm in width to ensure the beds have some significance.

f) Where non-drought tolerant species are used, provide automatic irrigation.

g) Encourage the design of irrigation systems to both conserve potable water and utilize rainwater.

h) Softscaping can be used to form guiding edges and contrast along the edges of main circulation routes, especially where walkways are located adjacent to open hard surface areas.

Planting beds do not obstruct views into the park

Planting provides visual interest.

Seating

Seating is a key amenity in all types of urban parks. Seating should be designed to be accessible, inviting, durable and comfortable and chosen based on the site conditions, park design and operations and management framework. A variety of seating types should be considered, such as benches and chairs, seat walls, fixed chairs with a table, movable chairs, including with tables, and informal seating (e.g. – lawn, platforms, steps, ledges).

Guidelines

a) Provide a variety of seating types. In Urban Squares provide at least two seating types. In Connecting Links and Pocket Parks and Sliver Parks provide at least one type of seating.

b) Provide seating in both the sun and the shade.

c) Provide a variety of configurations to accommodate individuals and groups.

d) Consider movable chairs and tables (tethered if required) to accommodate flexibility in use, depending on specific maintenance and operations for the Urban Park.

e) Optimize four-season comfort when selecting seating materials and finishes (e.g. – wood is more comfortable during cooler seasons).

f) Orient seating to provide engaging views, encourage informal surveillance, and increase comfort.

g) Provide a range of backed and backless seating, and benches with and without arms, to accommodate a variety of users. Backed benches should be considered as a preferred accessible option.

h) Provide spaces in seating areas to accommodate mobility devices.

i) Set a metric for providing seating at regular intervals on busy pedestrian streets. The Global Alliance on Accessible Technologies and Environment (GAATES) cites a best practice of the provision of seating every 30 metres in their *Illustrated Technical Guide to the Accessibility Standard for the Design of Public Spaces*.

Moveable seating

Seating and tables near Jean Talon Market, Montreal

Long backed and unbacked benches, New York City

Lighting

Lighting plays a key role in the design, comfort, usability, and safety of an urban park. Lighting can be used to enhance design elements, articulate adjacent facades, facilitate wayfinding, and animate the site. Light also extends the usable hours of the park into the evening and at night.

Guidelines

a) Provide adequate lighting to improve safety in the space. Consult Crime Prevention Through Environmental Design (CPTED) for additional direction.

b) Use fixtures that are dark sky compliant, which reduce glare, light trespass, and light pollution, including use of full cut-off lighting.

c) Use fixtures that are energy efficient, with automated timers.

d) Create a standardized palette of types, styles and varieties of decorative lighting for parks that takes into account maintenance requirements, and minimizes the total number of types used.

e) Use a variety of lighting scales and types, including lighting bollard, pedestrian lights, and catenary lighting.

f) Where events are anticipated, incorporate electrical hookups and event signage into the light posts.

g) Use lighting to clearly identify the path of travel through the site.

Creative and dynamic use of lighting in a park

Lighting identifies the path in a park

Public Art

Public art can be used as a placemaking and programming element within an urban park. It can integrate cultural heritage into the fabric of the park, or establish a new narrative for the community. Well designed, engaging, and thought provoking public art has the potential to draw visitors, and can contribute to the success and vitality of the space. A single public art piece can serve as an organizing element for the urban park or identify significant gateways or points of arrival. A series of art pieces can also act as wayfinding elements.

Guidelines

a) Allocate a percentage of capital cost of new park projects for public art.

b) Create a fund for public art maintenance and an account to pool public art funds.

c) Public art should be considered throughout the planning and detail design for urban park projects with a public artist included as a core member of the team.

d) Public art should enhance the public realm through artistic excellence and originality, and be appropriate to the site or location's physical and cultural context.

e) Consider the full range of possibilities for public art in urban parks including freestanding work and site specific work that is integrated into paving, lighting, furnishings, retaining walls, etc.

f) Public art should not obstruct pedestrian, cyclist or vehicular circulation, entrances, windows, or sight lines to important natural and built features.

g) Public art should not impact, or be diminished by existing or planned utility locations.

h) Public art should exhibit high quality construction, installation and materials, as appropriate for its intent.

i) Appropriate maintenance procedures should be secured with the installation of public art.

Watermark by Gerald Beaulieu, Fredericton, New Brunswick

Water Guardians by Jennifer Marman, Daniel Borins and James Khamsi, West Don Lands, Toronto

Public art installation in a park

Other Features

Urban parks should also consider including a number of other facilities that support a variety of active and passive programming amenities.

Guidelines

a) Playgrounds, play equipment, outdoor workout equipment will be approved by the Town. Play areas are to be set back from the street. Grading around playground areas is to be designed to allow clear views into the play area from the road and surroundings.

b) Drinking fountains and bottle stations may be appropriate for certain locations.

c) Dog runs may be considered only where the park can accommodate a fenced area with a preferred minimum enclosure of 8,040 square metres (2.0 acres) with segregated areas for large and small dogs. Off Leash Dog areas should be well buffered from playgrounds, splash pads, wading pools, pedestrian activity areas and horticultural displays.

d) Waste and recycling receptacles should be selected in coordination with the design of other park furnishings.

e) Spray pads or similar water play features may be provided depending on the park size. Water supply, plumbing and drainage will conform to requirements of the Town.

f) An amphitheatre/performance stage may be appropriate depending on the urban park type, the park location and programming anticipated.

Overhead shade structure

Games tables, New York

Maintenance

Urban parks have more stringent maintenance requirements and require a specific approach to ensure they can meet their potential.

Guidelines

a) Urban parks should be managed by a Comprehensive Maintenance Protocol to ensure safe, accessible and healthy landscapes. The protocol may include defined roles for community groups or other entities to be involved in park maintenance projects.

Active Transportation

Pedestrian & Cycling Network

Encouraging active transportation and supporting physical activity through the provision of a linked network of pedestrian and bicycle routes and trails helps ensure that residents have increased access and mobility options to local destinations for work and play.

Guidelines

a) Create a continuous and diverse active transportation network of inter-connected pedestrian and cycling routes, walkways, sidewalks, bicycle lanes and multi-use trails that link the community with surrounding neighbourhoods, integrate with existing and future public transit infrastructure, and connect to the open space system.

b) Design the active transportation network to link residents to transit stops, trails, community mailboxes, schools, recreational and healthcare facilities, parks and open spaces, and retail, restaurants and businesses.

c) Design pedestrian routes to be convenient, comfortable, safe and easily navigable, continuous, and barrier-free.

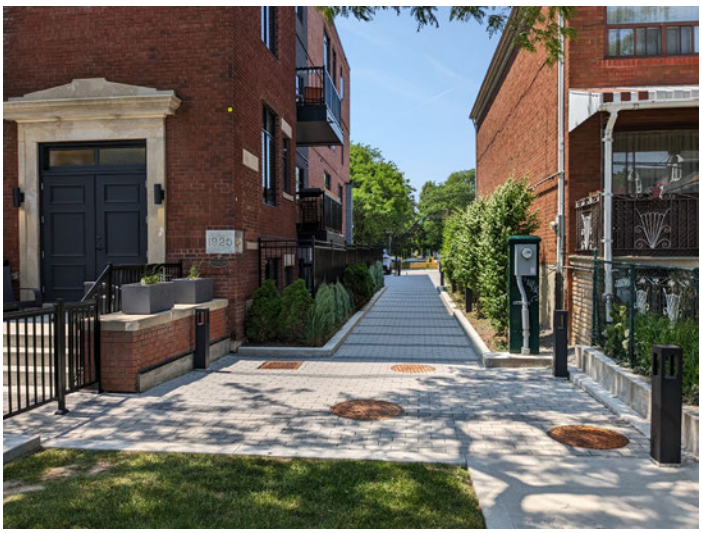
d) Develop a cycling network that includes bike lanes and off-street cycling or multi-use trails that connect to existing bike lanes and trails.

e) Encourage safe routes to schools by providing a network of connected local streets with traffic calming measures to ensure safe use by young pedestrians and cyclists, such as reduced lane widths, raised intersections, slower vehicle speeds, and crosswalks.

f) Provide active transportation connections across water courses and open spaces for pedestrians and cyclists, where required. Design as functional multi-season connections

g) Provide signage and wayfinding at key intersections and locations indicating destinations, distances and potential route connections.

Beautiful and continuous pedestrian realm

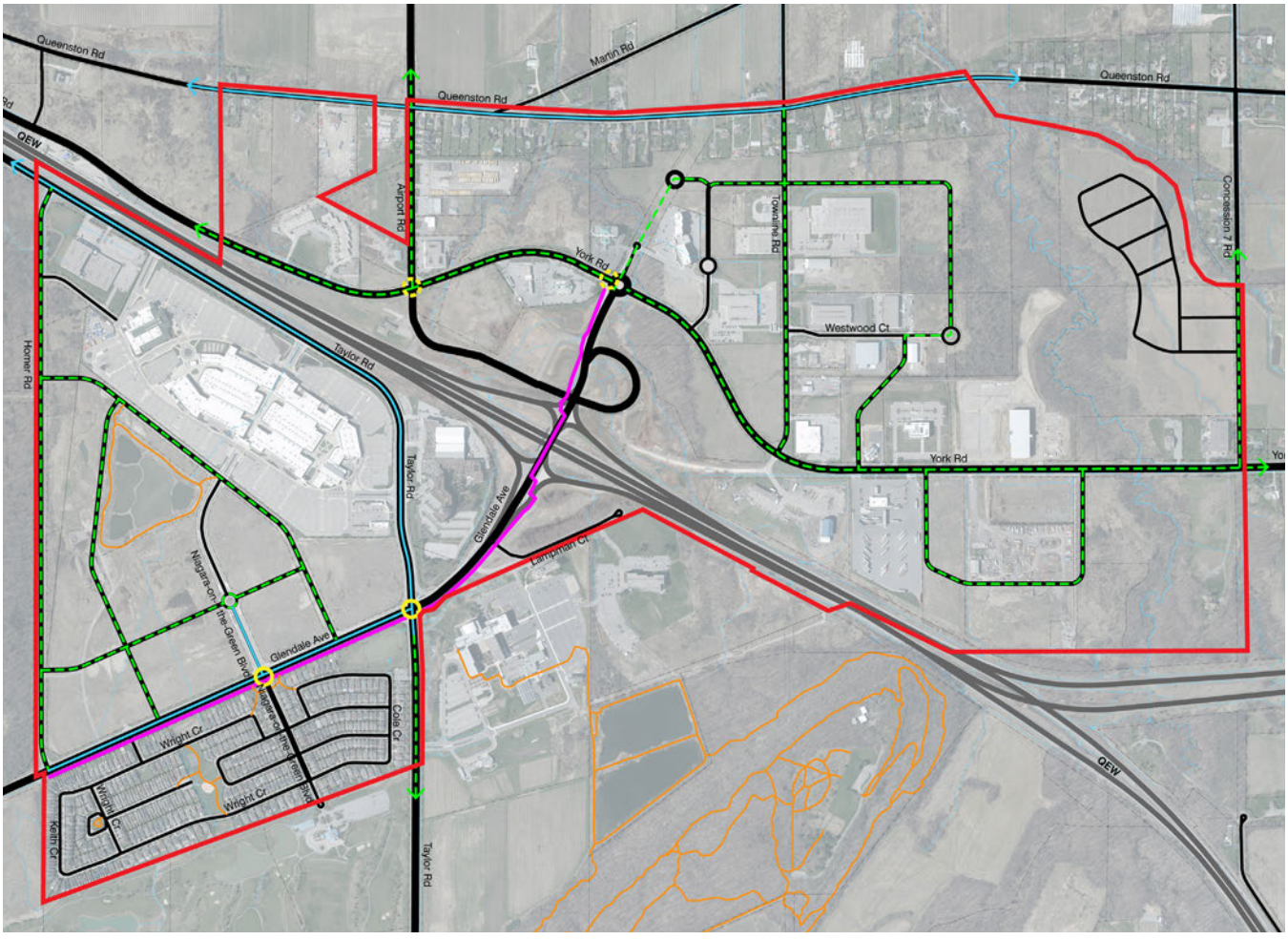


Mid-block connection

Clearly marked bike lanes through an intersection

Legend

- Existing Trails
- Existing Multi-Use Path
- Existing On-Road Bike Facility
- Future Active Transportation Connection
- Potential Crossride
- Future Potential Crossride
- Glendale Secondary Plan Area



Map of the Active Transportation Network of Glendale

Multi-Use Paths

Multi-use paths are shared off-street pedestrian and bicycle routes. When implemented along one side of a street, they usually replace the need for a sidewalk on that side.

Guidelines

a) Design multi-use paths to be a minimum 3.0 metres wide to facilitate two-way cyclist or pedestrian movement. 3.5 metre width is preferred where space allows.

b) Pedestrian and cycling lanes should be painted on multi-use paths or clearly identified by other means to minimize pedestrian and cycling conflicts.

c) Ensure multi-use paths include adequate amenities including seating, waste receptacles, and signage that are designed to reflect site-specific conditions.

d) Provide frequent access points along multi-use paths from adjacent streets, trails, open spaces, and nodes of activity.

e) Generally, multi-use paths should have asphalt surfaces for the comfort and convenience of both cyclists and pedestrians.

f) Implement crossrides where multi-use paths cross arterial or collector streets or where connections to other multi-use paths or on-street cycling facilities require crossing a busy street.

Multi-use path designed to accommodate a range of users

A crossride safely allows a bike route or multi-use path to cross a busy street

Walking Trails

Walking trails are off-street pedestrian routes that generally allow connections across or between natural areas and open spaces and have a recreational orientation.

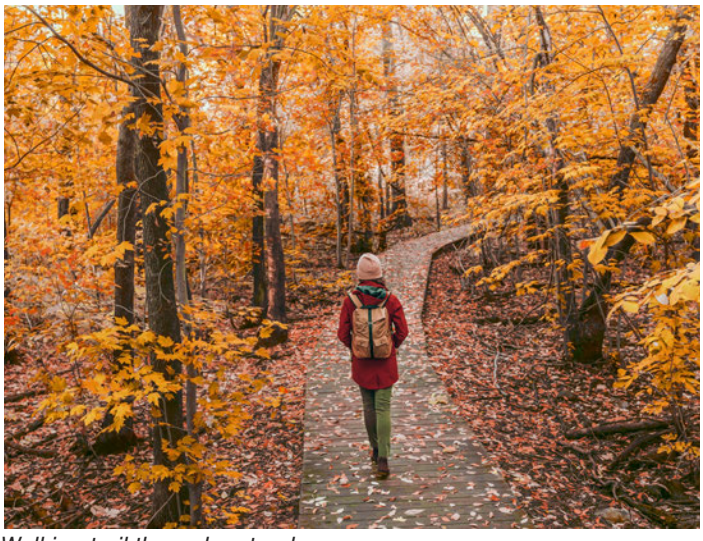
Guidelines

a) Provide for a continuous, linked, legible, and clearly marked system of trails throughout the community as part of the open space network.

b) For new developments link or maintain additional trails, connections, and public accesses between streets and trails to ensure connectivity through developments for pedestrians.

c) Design trails to be barrier-free and to accommodate a range of users and abilities. Where possible, slopes should be under 5% with curb-cuts and other safety measures provided to improve access at street crossings.

d) Trails should be clearly signed identifying trail entry and access points, permitted uses, and speed limits if cycling or off-road vehicle users are permitted. Provide wayfinding signage and trail markers throughout the trail network.



Walking trail through natural area

e) Incorporate interpretive signage on trails located in proximity to significant natural heritage features or adjacent to stormwater management facilities to educate and promote stewardship initiatives that will protect and enhance the features and functions of the natural landscape.

f) Consider special treatments at trail head entrances including features such as landscaping, benches, natural or built shade structures, decorative paving pattern, interpretive or directional signage, or wider pathway widths.

g) Design trails to minimize and mitigate impacts on natural heritage features. Consider the use of low impact materials such as wood chips, limestone screenings, or porous or permeable materials for trail construction in areas where sufficient drainage exists.

h) Provide lighting for pedestrian safety along primary connecting trails. Lighting is not acceptable in natural heritage features.

i) Along trails abutting natural features, use native species, suitable for the area and purpose, and plant trees to contribute to the urban tree canopy and provide shade for trail users.

Stormwater Management Facilities

Stormwater management facilities should be developed in a manner that will yield the greatest environmental and amenity benefit to the neighbourhood, which can be achieved first through reducing stormwater run-off and flow to the ponds, and secondly, through the design and landscaping of the pond. These facilities promote sustainability by providing habitat, enhancing ecosystem structure and resilience, and managing stormwater on site.

Guidelines

a) Design stormwater management facilities as major open space features that provide passive recreational and educational opportunities, while augmenting the extent of the community's open spaces and associated microclimatic benefits.

b) Enhance views and access to ponds by designing a portion of the pond to be bounded by either streets and/or open space.

c) Pond Design and Landscaping:

- Locate ponds off line and as buffering to environmental features;
- Landscape ponds to contribute to the urban tree canopy, add to the natural features of the community, and support wildlife habitat;
- In addition to functional objectives related to flow moderation and water quality, design ponds as key focal/visual features within the community; and,
- Design ponds as part of the overall pedestrian and trail system with view points and interpretive signage. Surround ponds with public walking or cycling trails and extend along stormwater channels.

d) Fencing of the entire perimeter of stormwater management ponds is discouraged, except where necessary along steep slopes, or the rear or flankage of residential property lines. Install 1.8 metre high black-vinyl-coated chainlink fencing along the property line where the stormwater management facility block abuts private property. It should be continuous with no gates permitted.

Ponds should blend with the natural landscape

Stormwater pond integrated with school and recreational park uses

e) Fencing is not required along the property line where a stormwater management facility abuts a public park, open space, natural area, or street right-of-way.

f) Consider on-site treatment of stormwater through the use of green infrastructure such as bioswales, green roofs, at source infiltration, and permeable pavement.

g) Consider using below grade stormwater retention storage tanks or beds to retain stormwater and allow for infiltration and/or delayed release during high rainfall events.

h) Design stormwater management facilities to blend with the natural landscape. Where feasible, conceal inlet and outlet structures using a combination of planting, grading, and natural stone.

i) Ensure the edges of ponds abutting natural heritage features remain naturalized.

j) Install signage at prominent locations along the street frontage or in an appropriate location along the interface between the pond block and the adjacent open space to ensure it is highly visible to the public The purpose of signage is to identify the site as a stormwater management facility and raise public awareness of the functional aspects and related potential hazards of the facility.

k) Coordinate landscape components such as look-outs, seating areas, fountains and gazebos to complement the overall character of the pond.

Stormwater pond at Downtown Cary Park, North Carolina
Image: CC BY 2.0: Payton Chung

3 Private Realm

The private realm within the Glendale Secondary Plan area comprises the built form and site design within development blocks and their relationship to adjacent open spaces and streets. The residential, institutional, commercial, mixed-use, employment, and employment buildings within a community contribute to its character and can assist in further defining and complementing the public realm.

These Urban Design Guidelines promote high quality urban design within the private realm that is based upon the quality, scale, and character of the surrounding existing and emerging contexts to reinforce 'human scaled' environments and promote a sense of place.

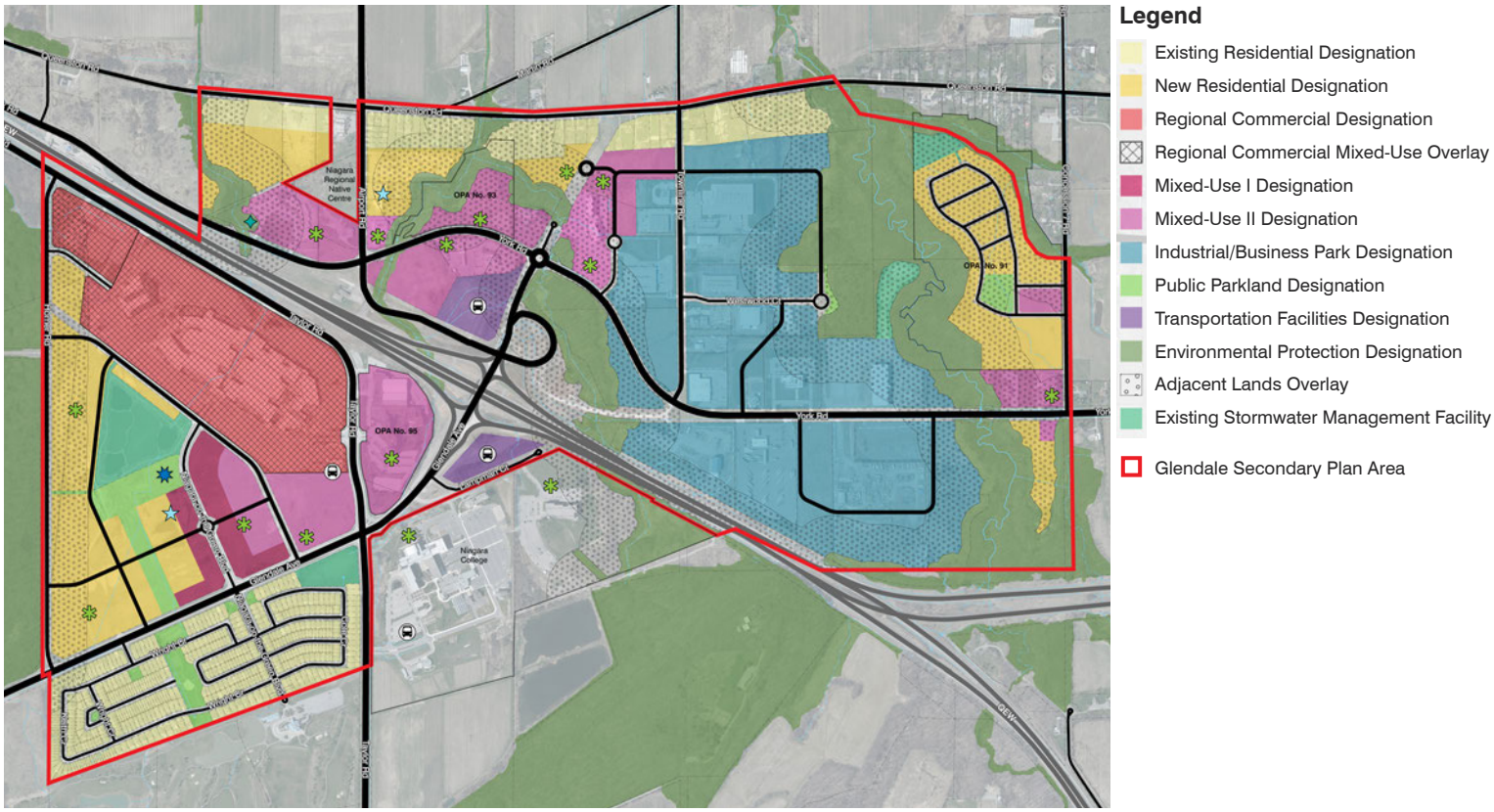
Good urban design practices will promote excellence in the design of the private realm. While the specifics of each development proposal may vary, the overall objectives will remain the same throughout Glendale. These objectives include:

- Creating distinctive, appealing, and pedestrian friendly streetscapes through attention to building design and detailing;
- Ensuring appropriate massing, materials, building siting, and design compatibility; and
- Identifying enhanced design requirements for priority lots having highly visible elevations.

The guidelines will be considered and implemented through the review of development applications within the private realm which are visible from the public realm.

The Private Realm chapter of the Glendale Secondary Plan Urban Design Guidelines is divided by the following land use types that follow the designations in the Secondary Plan as illustrated below on Schedule F1.

- Residential Areas (applies to both Existing Residential Designation and New Residential Designation)
- Mixed-Use Areas (applies to both Mixed-Use I and Mixed-Used II Designations)
- Regional Commercial
- Industrial/Business Park
- Uses that May be Located in Other Designations (including Public Service Facilities, Emergency Services Facilities and Places of Worship)



Schedule F1 - Land Use Designations of the Glendale Secondary Plan

Residential Areas

The following guidelines apply to residential areas.

Residential Neighbourhoods

Residential neighbourhoods will include a range and mix of housing types and centrally located parks and community facilities. Development will include low-rise and mid-rise buildings.

Guidelines

a) Arrange all new development to address the street by lining streets with building front facades, active uses, and public spaces.

a) Design residential neighbourhoods to ensure residents are in proximity to amenities that will meet their daily needs including convenience commercial, office and personal services, institutional, and recreational uses.

b) Provide a mix of housing types, densities, sizes and tenures in new residential development.

c) Ensure new residential blocks contain a mix of dwelling types with a variety of elevations to provide a diverse housing stock and to avoid a homogeneous streetscape.

d) Ensure appropriate transitions in terms of height and massing between buildings of different densities, particularly if they belong in the same block.

e) Locate denser residential uses at the ends of blocks or adjacent to parks, community amenities, or civic uses and buildings, and along Collector or Arterial streets.

f) Design blocks with a regular shape measuring a maximum of 100 metres in width and 200 metres in length.

g) Provide mid-block pedestrian connections for development blocks over 200 metres in length to support pedestrian movement.

h) Enhance wayfinding by using buildings as gateways and landmarks, public spaces as focal points, and streetscapes to frame significant views.

Pedestrian mid-block connection with paving and landscaping

Low-Rise Residential Buildings

The following guidelines apply to low-rise residential buildings up to 3 storeys in height.

Siting & Setbacks

Guidelines

a) Integrate existing topography and natural features into the development, and minimize alteration to the existing grading of the site, if feasible.

b) Orient buildings to face the street with setbacks that are compatible with the immediate neighbours.

c) Locate dwelling units and townhouse blocks close to the street edge to create a pedestrian-oriented streetscape.

d) Orient dwelling units and townhouse blocks to face the public realm, and particularly any adjacent streetscape, pedestrian connection or open space, to promote a high level of comfort and create a safe environment.

e) Where the first floor of the dwelling or townhouse unit is within 3 metres of a sidewalk, raise the entry of the unit a minimum of 0.9 metres to a maximum of 1.2 metres above the sidewalk grade. The change of grade should be reinforced through landscaping features.

f) Increase side yard setbacks at pedestrian mid-block connections and public open spaces.

g) Low-rise developments should have front-to-front or back-to-back dwelling configurations along streets, lanes, or around open spaces.

h) Avoid front-to-back dwelling configurations where possible. If necessary, the 'rear' facing units of front-to-back dwelling configurations should include recessed garages, enhanced landscaping, and upgraded façades.

i) Locate built form to minimize the need for noise attenuation walls.

Triplex dwelling

Townhouses

Building Design

Massing & Elevation Articulation

Guidelines

a) Ensure generally consistent height and massing along a street. Individual building mass should be compatible with buildings in the immediate vicinity.

b) Provide appropriate transitions between all unit types to avoid drastic changes in height and/or massing.

c) Ensure appropriate design compatibility where different unit types are located adjacent to each other.

d) Articulate elevations exposed to streets and open spaces by using strategies such as changes in plane, projections, enhanced fenestration, highlighted entrances, contrasting materials, and building elements such as bay windows, balconies or decks and porches.

e) Upgrade the façade treatment for side and rear elevations visible from public areas.

A block of townhouse units with a variety of elevations and colours

Porches and Entry Features

Guidelines

a) Ensure the main entrance faces the street, with the door in a prominent position. The front door should be clearly visible and approachable from the street.

b) Articulate front elevations by highlighting the prominence of front entries with features like porches, verandahs, arches, generous overhangs and massing elements such as a cantilevered or recessed upper storeys.

c) Ensure steps to a front porch or entrance are not located closer than 1.0 metre from a property line.

d) To ensure porches and verandahs are useable they should be a minimum of 1.5 metres in depth.

Front porch highlights the dwelling entrance and addresses the street

Materials

Guidelines

e) Ensure building materials are high quality, durable, and easily maintained.

f) Ensure the materials selected are consistent for a building's facade and any side or rear walls exposed to public view.

g) Recommended building materials include brick masonry, stone masonry, wood, or stucco; one or two of these materials should be selected as base materials and may be complemented by a wider range of accent materials.

Example of a mix of building materials on the facade of a dwelling

Utility Meters & Mechanical Equipment

Guidelines

a) Where possible, locate utilities and meters in interior side yards, away from public view.

b) Locate utility and service meters discreetly by:

- Integrating into the design of the building;
- Screening through landscaping;
- Recessing or enclosing in the porch entry or landing;
- Installing below porch slabs and porch steps;
- Grouping in one location in a wall recess, enclosure or, where appropriate, a small roof overhang; and
- Screening meters on exposed elevations by integrating them into a wall or below porches and steps, providing complementary landscaping, or placing them behind a change in plane towards the rear of the elevation.

c) Locate dryer vents, exhaust fans, furnaces and hot water tanks on rear elevations.

d) Locate air conditioning units in the rear yard or interior side yard or provide an architectural screen if they must be visible from the street.

e) For flat roofs locate air conditioning units on the roof, setback from the edge so they are out of sight from public view, where possible.

Private Outdoor Amenity Space

The design of private outdoor amenity areas, such as balconies, terraces, back yards, or gardens provide an important extension to the livable space of a dwelling unit.

Guidelines

a) Provide outdoor amenity space for dwelling units either individually or in a shared space.

b) Design private outdoor amenity spaces to have direct access to sunlight and sky view.

c) Avoid a 'rear yard' condition along streets and parks/open spaces.

d) Locate private outdoor amenity spaces for family-sized units so that they have views and access to outdoor play areas, where possible.

e) Provide outdoor private amenity areas for townhouse units. Consider outdoor amenity areas in the form of second floor decks or rooftop patios for townhouses with an attached garage in the rear over traditional rear yard amenity areas.

f) Inset or partially inset balconies to offer greater privacy and shelter from wind, reduce the building bulk and minimize the impact of shadow on other amenity spaces below.

Parking pad and private outdoor amenity space over the garage

Multiple Unit Parking

Guidelines

a) Locate parking areas away from the street frontage, at the rear or sides of the principal building.

b) For multiple unit development locate visitor parking spaces within a 200 metre walking distance or one block, whichever is less, of the residential units served.

c) Design surface parking areas for multiple unit residential buildings with the following:

- continuous brick, pavers, or other distinct and decorative pavement treatment;
- markings for stalls;
- pedestrian scaled lighting; and
- low fencing, architectural features, or landscaping to screen from public view.

d) Walkways should be distinguished from vehicular areas through a change in material or by using a planted or sodded edge.

Parking lot for apartments broken up with landscaping

Garages & Driveways

Front Garages

In order to minimize the presence of the garage, the following guidelines should be applied for attached and detached garages accessed from the front yard.

Guidelines

a) Driveways and/or garage doors should not dominate the front façade of the primary building or the view from the street.

b) Ensure garages are a natural extension of the design, massing, and materials of the main dwelling.

c) Recess garages 0.5 to 1.5 metres from the main wall of the building to de-emphasize the presence of garage doors on the streetscape.

d) Dwellings should have a maximum of 2 garage doors for garages fronting the street, with a maximum width of 50% of the dwelling's width.

e) For double garages use two single garage doors separated by a masonry pier.

f) Set back a second storey built over the garage a maximum of 2.0 metres.

g) Consider glazed top panels or transom lights for all garage doors.

h) Utilize a consistent garage door throughout a townhouse block.

i) Detached garages should only be permitted in the rear yard and interior side yard.

Houses with recessed front garages

Townhouses with recessed front garages

Lane-Based Garages

Garages that are accessed from a laneway can either be detached or attached to the main dwelling at the rear. Attached garages can be set into the house with access at the rear, or they can be attached to the main dwelling through a breezeway which forms a side courtyard for amenity space.

Guidelines

a) The minimum setback for garages accessed by a lane should be 0.6 metres from the lane right-of-way.

b) Side yard setbacks may be a minimum of 1.2 metres if the garage has doors or windows facing the side yard.

c) Side yard setbacks may be a minimum of 0.3 metres if the garage has no doors or windows facing the side yard. No setback is allowed where the garages on abutting lots are attached.

d) Where possible, pair garages to allow for increased rear yards or an outdoor parking pad.

e) The maximum number of attached garages on adjacent lots is three.

Materials and details of garages match the dwelling

Driveways

Guidelines

a) Ensure driveway widths are no larger than the interior width of the garage. Driveways should have a maximum width of 3.0 metres for single car garages and 6.0 metres for double car garages.

b) Use light-coloured paving material for driveways to reduce heat island effect.

c) Consider using porous or permeable pavement for surfacing driveways and parking areas instead of asphalt and concrete to reduce stormwater run-off.

d) Locate driveways as far as possible from parks, open space features, public walkways, schools, and intersections.

Driveways not wider than the width of the garage

Light coloured materials reduce heat island effect

Guidance for Specific Building Types

The following guidelines apply to specific low-rise residential building types in addition to the preceding guidelines.

Single Detached, Semi Detached, & Duplex Dwellings

Guidelines

a) Design dwellings to frame the street edge with a consistent setback, and front doors, windows, and entry features facing the street to create a consistent street wall.

b) Design the front elevation of the dwelling so that its front entrance and architectural elements reduce the visual dominance of the garage and driveway.

c) Porches, stairs, canopies, and other entrance features may encroach into the required setbacks from the right-of-way.

d) Garage doors facing a public street should be set back a distance of 6.0 metres from the right-of-way to allow a car to sit in front of the garage on private property.

e) Pair the garages of semi-detached and duplex dwellings with a front facing garage and driveway to maximize the extent of continuous green planting area in the front yards.

f) Ensure semi-detached and duplex dwellings have a single unified roof form and continuous and consistent architectural details and materials for both dwelling units.

g) Design duplex buildings with separate entrances for each unit.

An upgraded elevation with variety in roof lines, materials, and a front porch

Triplex & Fourplex Dwellings

Guidelines

a) Up-down triplexes and fourplexes are intended to be designed as a large single detached dwelling.

b) Side-by-side triplexes and fourplexes are intended to be designed as a small townhouse grouping.

c) Each unit should have an easily identifiable access to the fronting street.

d) Exterior stairs should be avoided; where necessary they should be limited to rear or interior side yards.

e) Use porches or other architectural feature to complement additional front facing doors and to reduce the visual impact of these entrances.

f) Each unit should have access to private on-site, outdoor amenity space via balconies, porches, or yard.

Triplex dwelling

Detached Additional Residential Unit

Guidelines

a) An additional residential unit is permitted in a detached accessory building or structure on a lot that includes a primary single detached, semi-detached and/or townhouse building. Ensure the detached building:

- Is created and used in accordance with the Implementing Zoning By-law;
- Has a maximum gross floor area of no more than 75 square metres and a maximum height of 2 storeys; and,
- Is designed to complement the architecture of the main building.

b) Consider providing an additional parking space as a tandem parking space on the lot.

Detached garage with second storey dwelling unit

Townhouses

Guidelines

a) Coordinate the siting, massing, and facade design of townhouse units on a block-by-block basis.

b) Articulate the elevation of the townhouse block to provide variation between units with common characteristics.

c) Utilize variety in the design of roofs through the use of traditional gables and dormers, or more contemporary designs that include cantilevers and parapet details to break up the massing of units within a block. The main roof should appear as one roof where possible.

d) The length of townhouse blocks should be minimized.

e) Orient the main front entry of interior units to the front lot line or higher order street. Orient the entry of the end unit to the exterior lot line when on a corner lot. Where a dwelling unit flanks a private street or laneway, the main entrance should face the front lot line.

f) Orient blocks of attached townhouse units to the street with integrated front garages accessed from the street. For rear lane townhouses an attached or detached garage will be located at the rear of the block and accessed from a lane.

g) Pair front driveways to allow for more substantial front yard green space.

h) Ensure rear lane accessed garages are complementary in design and building material with the principal dwelling.

i) Townhouse units with driveways should not be located on Collector or Arterial streets. Lane based options are more appropriate for such street typologies.

Example of variation between the units of a townhouse block

Use of massing and materials for variation between units

Townhouses fronting directly onto an open space

Live-Work Units

Guidelines

a) Live-work units should have a minimum work area of or 41 sq. metres or 450 sq. feet.

b) Design live-work buildings to support pedestrian activity through minimal front yard setbacks, pedestrian weather protection such as canopies, and enlarged clear glazed windows.

c) Provide on-street parking by using lay-by parking with resident parking provided at the rear of the building and accessed from a lane or a private street.

d) Ensure live-work units have continuous and consistent architectural details and materials for the entirety of the block.

e) Screen mechanical equipment including air conditioning units and utility meters or locate away from public view.

f) Commercial signage for live-work uses should be discreet and of a small scale, and should be integrated into the building design.

Live-work units with lay-by parking

Low-Rise Apartment Buildings

Guidelines

a) Design the building and the site layout to integrate into the scale of the built form of the street and to create a streetscape that supports a pedestrian scale.

b) The main building facade should front on the abutting street.

c) Locate and orient primary building entrances to public streets and design them to be visible and accessible to the public.

d) Locate visitor parking, loading, and service areas in areas of low public visibility in side or rear yards and set back from the building.

e) Screen parking from street view through the use of landscaping or fencing, or a combination of both.

f) Locate and orient windows, decks, and balconies to limit overlook into nearby windows and amenity spaces of adjacent properties while enabling “eyes on the street” for common public areas.

g) Provide landscape screening, fencing or setbacks appropriate to maintain the privacy of both building residents and adjacent residential uses.

h) Provide additional landscaping, patios, decks or walkouts for at-grade residential units to increase their level or privacy.

Low-rise building with balconies and entrances along the street

Priority Lots

Priority lots are those which are situated in prominent locations and are highly visible from the public realm. Priority lots include:

- Gateway lots;
- Corner lots;
- Lots which terminate at "T" intersections; and,
- Lots facing, adjacent to, or backing onto parks, open spaces, and pedestrian links.

Architectural and siting treatments for priority lots are recommended in order to promote a defined and attractive streetscape with visual focal points. Where a townhouse is sited on a corner lot, the end unit flanking a street is defined as a priority lot. In cases where a semi-detached dwelling is sited on a corner lot, both units are defined as a priority lot.

Gateway Lots

Guidelines

a) Ensure dwellings on gateway lots are given special consideration in architectural design, massing, orientation, siting, and materials, and should be of high architectural quality.

b) Utilize upgraded entry elements and porches to create a more interesting facade, as well as to help define the entrance to the neighbourhood.

c) Pair similar model units on lots directly opposite to each other to establish and enhance a gateway condition. Use stone or other quality materials as the main massing material for gateway units where possible.

d) Provide upgraded landscape features on gateway lots including decorative fencing, where appropriate.

e) Coordinate the materials of dwellings on gateway lots with those used on gateway features.

A porch flanking a park creates "eyes on the park"

Gateway dwelling with expanded porch and front entry detailing

Corner Lots

Guidelines

a) Consider wrap around windows, porches, and other architectural treatments for corner lot dwelling units.

b) Ensure active living spaces are designed for the rooms adjacent to the corner.

c) Locate main entry features on the flankage elevation where possible.

d) Coordinate privacy fencing design for all corner lots to prevent views into the private rear yard amenity area.

Dwellings located at the intersection of two streets should address both streets

"T" Intersections

"T" intersections occur when one street terminates at a right angle to another.

Guidelines

a) Ensure the architecture on lots at the end of "T" intersections is of a highly articulated facade design such as coordinated fenestration, masonry detailing, and entry elements.

b) Incorporate special built form such as added height, turrets, or bay windows for "T" intersection lots.

c) Pair side yards to form a landscaped area at the terminus of the "T" intersection.

d) Locate garages away from the "T" intersection of the streets.

e) Provide larger front yard setbacks at the view terminus for "T" intersections.

Dwelling unit at the end of a "T" intersection

Lots Adjacent to Parks & Open Spaces

Guidelines

a) Ensure front, side, and rear elevations exposed to public spaces such as neighbourhood parks and urban greens are highly articulated. Utilize a combination of fenestration, bay windows, material changes, and dormers in addition to other design elements to achieve the objective.

b) Ensure side and rear elevations adopt a similar design and use materials that are consistent with those used on front elevations. Architectural detailing such as corbelling should continue from front to side elevations, where visible to the public.

c) Ensure the location of porches, windows, and entry doors for units surrounding parks and urban greens maximizes opportunities for overview.

d) Locate driveways of adjacent dwellings as far away as possible from the public space.

An example of front porches overlooking amenity areas

Mid-Rise Residential Buildings

The following guidelines apply to residential mid-rise buildings from 4 to 7 storeys in height. Mid-rise buildings provide opportunities for framing and defining the public realm, while allowing for increased densities that more efficiently use land and infrastructure, supporting retail activity, promoting active transportation, and if done properly, generating livable pedestrian experiences.

Building Placement & Orientation

Guidelines

a) Mid-rise buildings should be located on a site of suitable size, and provide adequate landscaping, amenity features, buffering, on-site parking and garbage pickup and recycling services.

b) Mid-rise buildings should have frontage onto a Collector or Arterial Street, or Regional Road.

c) Concentrate the greatest heights and massing of the site along the frontage of an Arterial or Collector Street, or Regional Road, with the buildings sited to frame streets and open spaces.

d) Locate buildings close to the street edge to frame and animate the public realm.

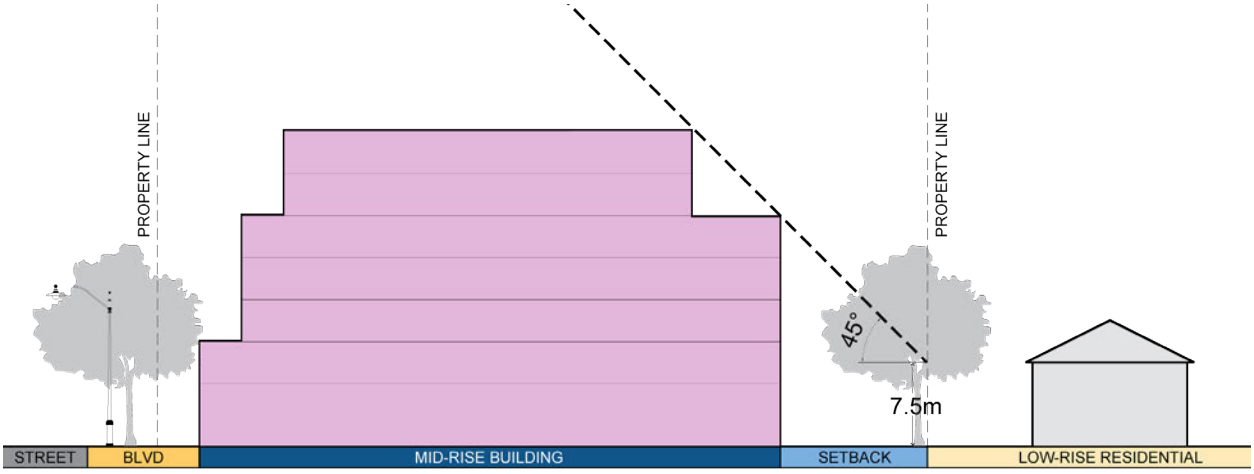
e) Maintain a floor plate size and massing configuration that permits adequate sky view and minimizes shadow impacts.

f) Locate and orient primary building entrances to public streets, and design them to be visible and accessible to the public.

g) Locate mid-rise building in proximity to the pedestrian realm network, public service facilities and other amenities.

Four storey apartment building with an articulated facade

Demonstration plan illustrating a concept tor the Mid-Rise Residential Area north of Glendale Avenue



Angular plane diagram - 45 degree angular plane measured from 7.5m above the property line

Compatibility & Transitions

Guidelines

a) Ensure the scale of mid--rise buildings is compatible and sensitively integrated with surrounding residential uses in terms of building mass, height, setbacks, orientation, privacy, landscaping, shadow casting, accessibility, and visual impact.

b) To demonstrate mitigation of potential shadow or wind impacts on existing or proposed pedestrian routes, public spaces, and adjacent development technical studies may be required including a wind study and/or sun/ shadow study.

c) Development transition requirements may be met using a combination of the following:

- Separate mid-rise buildings from low-rise buildings with a Local Street;
- Locate less dense and lower scale buildings in locations adjacent to existing low-rise neighbourhoods;
- Require a minimum 7.5 metre rear yard setback where mid-rise development abuts low-rise properties;
- Mitigate the actual and perceived massing impacts of a mid-rise building by breaking up the mass horizontally and vertically, through the creative incorporation of changes in materials, balcony and floor plate design, architectural features, and unit/amenity locations;

Use of stepbacks to provide appropriate transition to adjacent uses

- Provide rear and side step-backs for upper storeys to provide contextually appropriate transitions from the mid-rise buildings to the surrounding low-rise neighbourhoods; and
- Provide high quality landscape treatment such as decorative fencing, trees, shrubs, grassed areas, and berming.

d) Development in mid-rise areas should apply a 45 degree rear yard angular plane measured from 7.5 metres above the abutting property line where a building transitions to an adjacent low-rise residential area to ensure appropriate skyview, light, and separation.

Building Design

Height & Massing

Mid-rise buildings are generally comprised of a base, middle, and top.

Guidelines

a) The height of the building base should be between 2 and 4 storeys to frame and reinforce the pedestrian scale of the streetscape.

b) The height of the building base should generally be within 1 storey of any adjacent mid-rise development to create a consistent street wall.

c) Above the building base there should be a minimum 3.0 metre stepback to define the street wall. Exceptions to the minimum depth of the stepback may be permitted but in no case should it be less than 1.0 metre.

d) Provide a height transition towards adjacent existing or planned built form.

e) The top of the building should define a unique and interesting skyline. Design the top of buildings to include a variety of elements, such as step backs, material variations, lighting, and other architectural elements to reinforce a strong presence at the top of the building.

f) For mid-rise buildings with permitted retail or other active uses at grade, provide a minimum ground floor height of 4.5 metres. Residential-only ground floors should be a minimum of 4.0 metres in height.

g) Where possible, include outdoor amenity space at various levels above grade, including balconies, patios, terraces, and rooftop gardens.

h) Mechanical penthouses should be designed and clad with materials that complement the main building façades.

i) Locate mechanical rooms to the centre of the building rooftop and integrate into the rooftop design so they are not visible from the public realm.

Four storey stacked townhouse located close to street edge

j) For developments with more than one building, provide a range of heights and establish a height hierarchy related to site conditions and context.

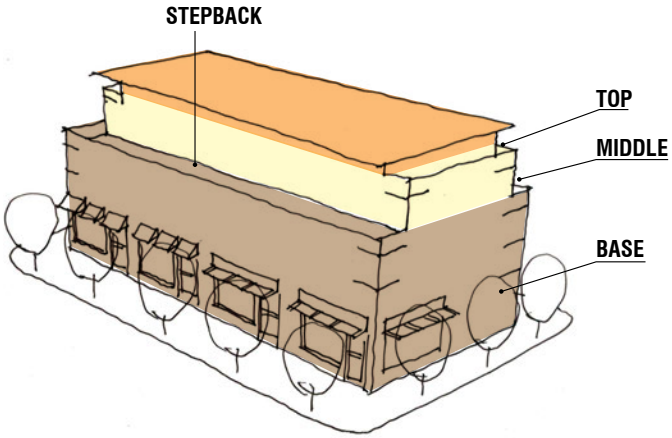


Diagram illustrating the building components of base, middle and top

Clearly defined building base with a stepback

Articulation & Architectural Features

Articulation considers the three dimensional qualities of the façade, including windows, doors, and architectural elements such as decoration, organization, the expression of interior spaces, and structural expression.

Guidelines

a) To animate the public realm and promote safe environments encourage active uses at grade or ground-related residential units.

b) Mitigate the actual and perceived impacts of mid-rise buildings by breaking up the mass both vertically and horizontally through the creative incorporation of changes in materials, balcony and floor plate design, architectural features, and amenity locations.

c) Incorporate windows and balconies on all elevations, especially if exposed to public view.

d) Locate entrances strategically so they are highly visible and well connected to the public realm.

e) Provide a high level of glazing at ground level, especially for those areas related to lobbies, common/amenity areas, and non-residential uses (i.e. commercial uses).

f) Encourage weather protective design at grade through the use of canopies, arcades, and cantilevers. Canopies located on the ground floor should be at least 1.5 metres deep.

Exterior Materials

The variety and selection of building materials contributes to visual interest along the street and to the varied architectural character of the Glendale area.

Guidelines

a) Ensure high quality and durable materials are used on all elements and elevations of the development.

b) Select materials to complement the architecture, character, size, and style of the building, as well as the streetscape.

c) Maintain consistent materials between elevations.

d) Incorporate changes in materials to visually break-up the building massing.

e) Use reflective, low intensity colours on rooftops to reduce heat island effect and HVAC loads. Refer to Chapter 4 for cool roofing material and solar reflectance guidelines.

f) Minimize danger to migratory birds by adhering to the Bird-Friendly Design guidelines in Chapter 4.

Windows and balconies on included on all elevations of the building

Contrasting but complementary materials in the Plateau, Montreal

Gateways

To contribute to the creation of a sense of place and local identity, buildings at visually prominent, landmark and gateway locations should express a higher design standard.

Guidelines

a) Use prominent built form to address gateways and other key locations within the community.

b) Express prominence through building articulation, massing, materiality, etc.

c) Taller building elements at gateways and landmark sites/frontages are encouraged, such as towers, rotundas, porticos, change in building plane, overhangs, special rooflines, public art, and street wall height exceptions, where those elements exhibit:

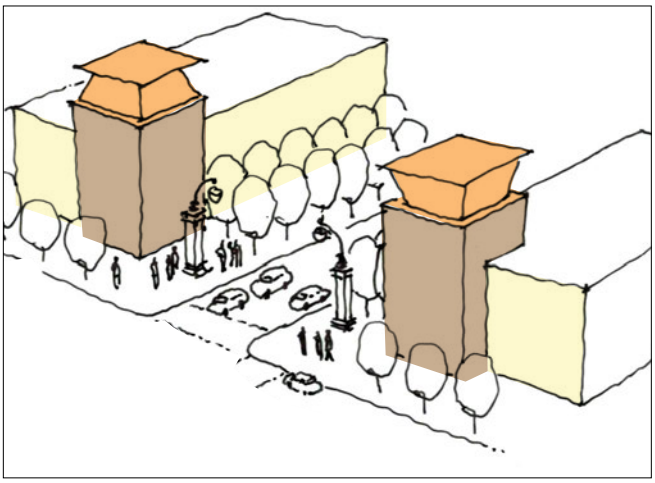
- Compatibility with adjacent context, including appropriate scale;
- Compatibility with the principal building expression; and,
- Design excellence.

d) On larger sites, create 'paired' corner buildings on either side of a street to emphasize a sense of entry or to distinguish one street district from another.

e) New development and landscaping should frame rather than block public views of prominent natural features, landmark sites and buildings, public art and other prominent features.

f) Buildings at the end of long view corridors should be designed to terminate the view with a landmark building element such as a tower or massing element.

Corner buildings articulated as a gateway features



Paired corner buildings to emphasize a sense of entry

Site Landscaping

Landscaping design should reinforce the structure of the site with a focus on creating a safe, comfortable, and animated pedestrian environment.

Guidelines

a) Provide a safe, clear, and accessible site circulation system for pedestrians, cyclists, and vehicles, including connections to the surrounding street network, public sidewalks, transit stops, and parking areas.

b) Create a pedestrian-scaled environment by arranging buildings to create comfortable and protected pedestrian spaces that provide a sense of enclosure.

c) Provide mid-block pedestrian connections for development blocks over 200 metres in length to support pedestrian movement.

d) Develop a comprehensive strategy for planting, built features, fencing, walls, paving, lighting, signage, and site furnishings.

e) Base planting strategies on year-round interest, hardiness, drought, salt and disease tolerance, and biodiversity.

f) Preserve, protect, and incorporate existing healthy and mature trees into the site and landscape designs.

g) Minimize the use of hard, paved areas to reduce surface run-off and heat island effect. Use permeable or porous paving wherever possible.

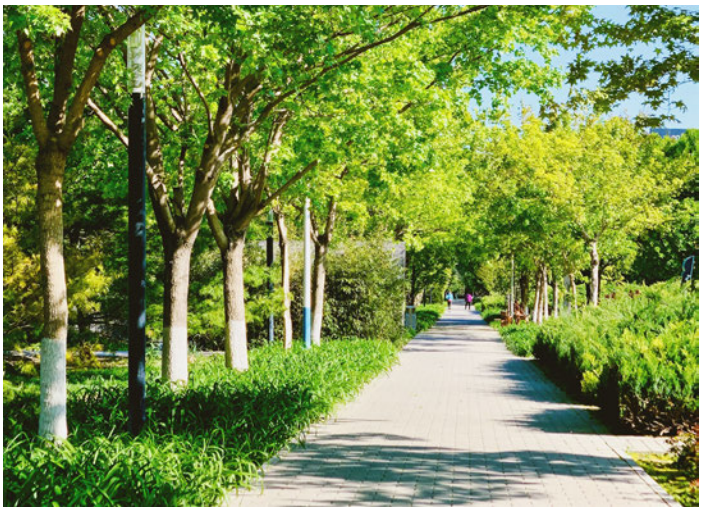
h) Use high-quality, durable materials for all landscape features such as paving, fences, walls, planters, site furniture, and shade structures.

i) Consider green roofs for buildings with flat roofs. This will assist with reducing heat island effects and improving air quality and noise insulation.

j) Appropriate planting conditions such as soil depth, volume, and growing mediums should be provided for successful landscapes.

k) Utilize landscaped buffers to provide an appealing and 'soft' transitional interface between new development areas and the backyards of existing established areas or between low-rise and high-rise developments.

l) Ensure the design of lighting avoids light spill onto abutting properties and adjacent residential neighbourhoods.



Landscape buffers integrated with a mid-block connection

Green shared amenity area with playground

Access, Parking & Servicing

Guidelines

a) Provide access to parking, servicing and loading from the rear of the building, or a laneway where possible. On corner sites, provide access from secondary streets.

b) Encourage underground parking. Where not feasible, at grade and structured parking above grade should be located at the back of the building or site.

c) Locate and screen parking, loading, utilities, and servicing areas away from the public view through a combination of soft and hard landscaping, as well as other integrated architectural elements such as walls and pergolas.

d) Facilities for handling, storing, and separating waste and recycling should be integrated into the building design and screened from public view through landscaping and architectural elements.

e) Where it is only possible to provide parking at grade, split the surface parking into small courtyards by using walkways, public art, or landscaped strips.

f) Avoid vehicular site access from higher order streets. Provide access from local streets or rear lanes where possible.

g) Consolidate vehicular entrances to serve multiple buildings in order to minimize the number of interruptions to the street wall and sidewalk network. Limit the number of accesses from the same street to two.

h) Design underground/above ground parking ramps and service entrances as part of the building façade.

i) Provide long-term bicycle storage inside the building and short-term bicycle parking areas and racks close to entrances and external to the building.

j) For multiple unit development locate visitor parking spaces within a 200 metre walking distance or one block, whichever is less, of the residential units served.

k) Walkways should be distinguished from vehicular areas through a change in material or by using a planted or sodded edge.

Parking for apartments with walkways and landscaping

Underground parking garage access screened by decorative door

Private Outdoor Amenity Space

Private outdoor amenity spaces should have access to sunlight, be comfortable, and designed to afford a level of privacy.

Guidelines

a) Provide shared space for both indoor and outdoor amenities in new multi-unit residential development.

b) Design private outdoor amenity spaces to:

- Have direct access to sunlight and sky view;
- Mitigate impacts on the public realm and neighbours - increased facing distances between buildings may be required to reduce impacts;
- Provide generous and well-designed landscaped areas to offer privacy, screening, and attractive interface with the public realm; and,
- Include railing designs to help increase privacy, screen items from view, and reduce risk of bird strikes.

c) Private outdoor amenity spaces can be provided in a variety of forms including front verandas on buildings where the building base is designed to incorporate townhouse units, roof-top decks, or balconies.

d) Raised terraces should be raised a minimum of 0.6 metres and a maximum of 1.2 metres.

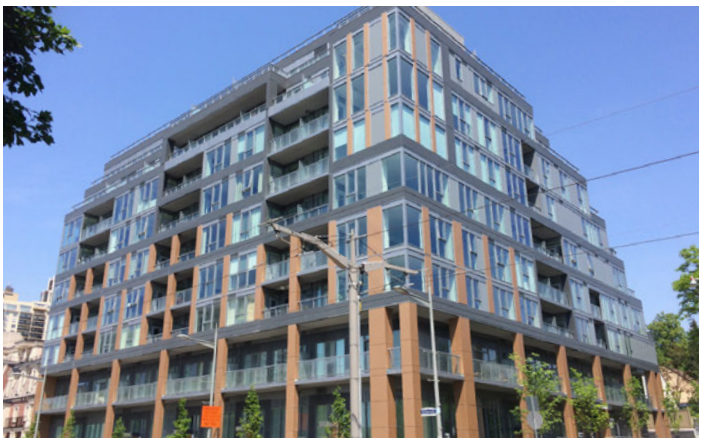
e) Raised terraces should provide an entrance to only one unit. Provide privacy with planting and architectural elements and translucent or solid railings.

f) Design roof top private amenity spaces to limit overlook into the adjacent neighbourhood:

g) Design roof top terraces with parapets, and solid or translucent railings.

h) Inset balconies or partially inset to offer greater privacy and shelter from wind, reduce the building bulk, and minimize the impact of shadow on other amenity spaces below.

i) Limit the size and avoid continuous projecting balconies, especially on residential streets, or when a private outdoor amenity space, pedestrian mews, and/or landscaped walk



Example of a building with inset balconies to minimize shadowing on uses below

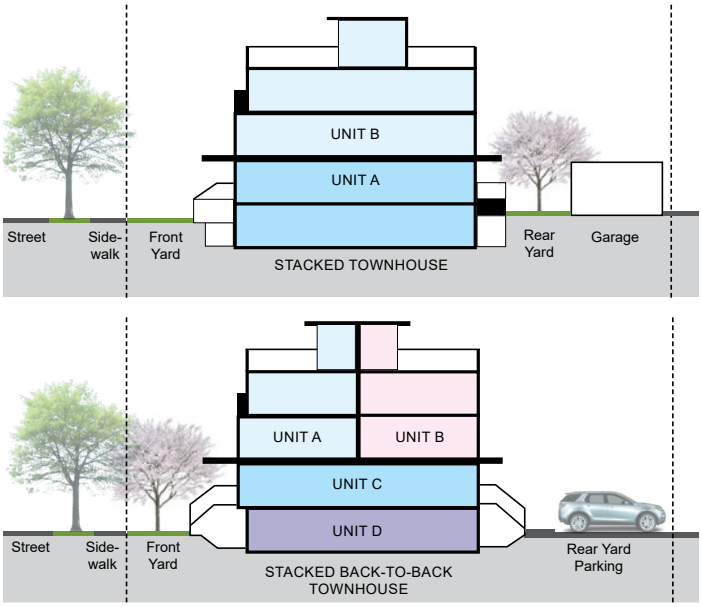
Raised terrace providing a transition zone between sidewalk and individual residential units

Guidance for Specific Building Types

In addition to the other mid-rise residential building guidelines, the following guidelines apply to specific mid-rise building types.

Stacked & Back-to-Back Stacked Townhouses

Stacked townhouses are typically a 3 to 4 storey building of attached units which are stacked one above the other and oriented to the street. Stacked townhouses have units stacked vertically. This can include three units located on top of each other, a two storey unit stacked on top of a one storey unit, or a two storey unit stacked on top of two storey unit. Each unit has its own entrance at grade. Back-to-back stacked townhouses share a rear and side wall and are two stacked townhouses placed back-to-back.



Sections illustrating stacked and back-to-back stacked townhouses

Guidelines

a) Articulate the elevation of the townhouse block in a manner that provides variation between units and reinforces common characteristics that visually unite the block.

b) Use continuous and consistent architectural details and materials for the entirety of the building.

c) Limit the number of units in a townhouse block and limit the length of the townhouse block.

d) Locate and orient windows, decks, and balconies to limit overlook into nearby windows and amenity spaces of adjacent properties while enabling “eyes on the street” for common public areas.

e) Locate attached garages at the rear of the building to be accessed from a lane or private drive.

f) Consider providing underground parking for stacked back-to-back townhouses.

g) Provide prominent, well-designed and integrated building entrances such as porches, porticos, or canopies along the building frontage.

h) On corner or double-fronting sites, locate building fronts and entrances facing both streets. Buildings on corner sites require additional attention to detail to enhance the corner.

Example of stacked townhouses with prominent entrances

Apartment Buildings

These buildings are multi-storey structures that contribute to complete communities, provide a mix of housing and activity, and are built at densities that improve the viability of transit.

Guidelines

a) Design the building and the site layout to integrate into the scale of the built form of the street and to create a streetscape that supports a pedestrian scale.

b) The main building facade should front on the abutting street.

c) Locate and orient primary building entrances to public streets and design them to be visible and accessible to the public.

d) Design ground floors to be appealing to pedestrians and include uses that are more active, such as lobbies, amenity rooms, gyms, or active accessory uses (where permitted).

e) Locate visitor parking, loading, and service areas in areas of low public visibility in side or rear yards and set back from the building.

f) Screen parking from street view through the use of landscaping or fencing, or a combination of both.

g) Locate and orient windows, decks, and balconies to limit overlook into nearby windows and amenity spaces of adjacent properties while enabling “eyes on the street” for common public areas.

h) Provide landscape screening, fencing or setbacks appropriate to maintain the privacy of both building residents and adjacent residential uses.

i) Provide additional landscaping, patios, decks or walkouts for at-grade residential units to increase their level or privacy.

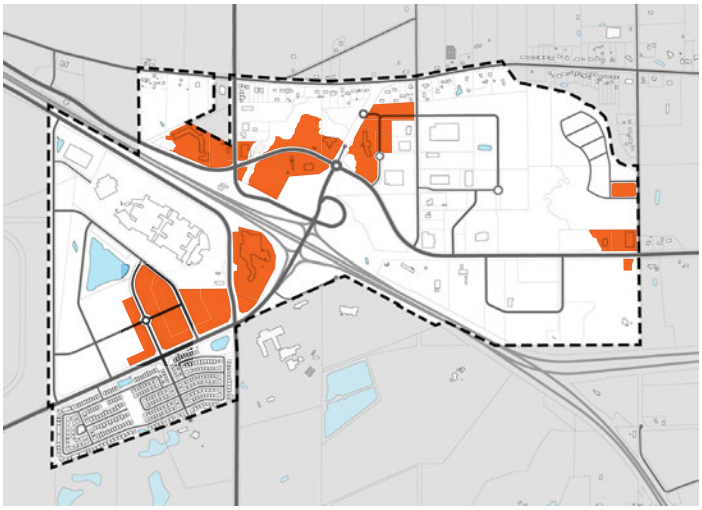
j) Design interior courtyards to maximize sun exposure through the massing and location of taller building elements.

5 storey residential building with material palette matching adjacent low-rise residential uses

6 storey residential building with a prominent entrance

Mixed-Use Areas

Mixed-use areas contain buildings with retail, office or other active uses at ground level and residential and/or office above. These buildings contribute to a vibrant, pedestrian friendly streetscape.



Building Placement & Orientation

Guidelines

a) Mixed-use buildings should be located on a site of suitable size, and provide adequate landscaping, amenity features, buffering, on-site parking and garbage pickup and recycling services.

b) Mixed-use buildings should have frontage onto a Collector or Arterial Street.

c) Concentrate the greatest heights and massing of the site along the frontage of an Arterial or Collector Street, with the buildings sited to frame streets and open spaces.

d) Locate buildings close to the street edge to frame and animate the public realm.

e) Ensure the siting and massing of buildings provides a consistent relationship, continuity, and enclosure to adjacent public streets.

f) Maintain a floor plate size and massing configuration that permits adequate sky view and minimizes shadow impacts.

g) Locate and orient primary building entrances to public streets, and design them to be visible and accessible to the public.

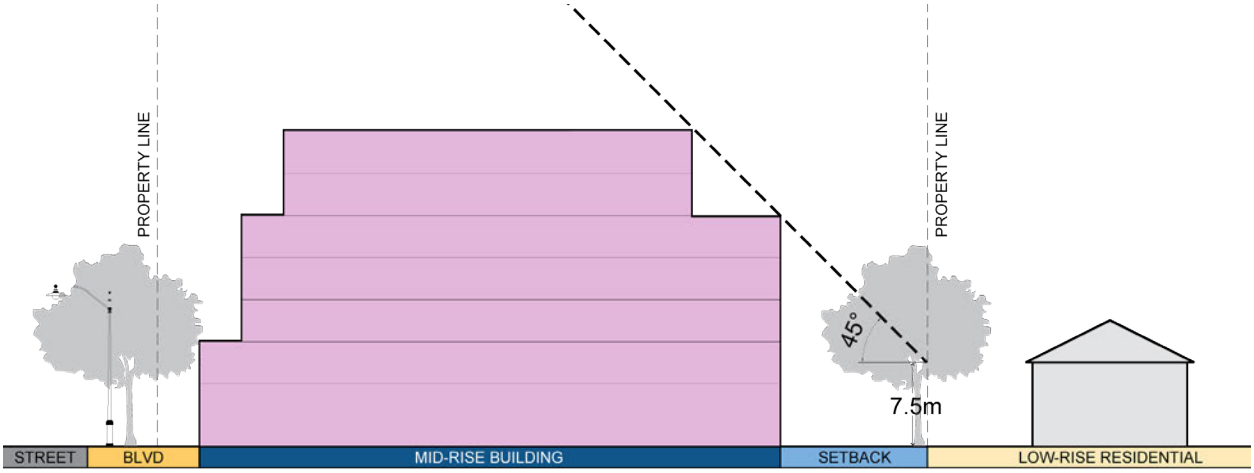
h) Ensure buildings located adjacent to, or at the edge of parks or urban greens provide opportunities for overlook into the public space with windows and doors. The massing, siting and scale of these buildings should create a degree of enclosure or definition appropriate to the type of open space they enclose.

i) A pedestrian-scaled, permeable and connected internal layout (block and street pattern) creates comfortable and protected pedestrian spaces that have a sense of enclosure.

Multi-storey mixed-use buildings with activity at the ground level

Mixed-Use area of Westbrook Village, Vancouver
(image: UBC Public Affairs, photo by Don Erhardt, CC BY-NC 2.0, Flickr)

Demonstration plan illustrating a concept tor the Mixed -Use Areas along York Road west of Glendale Avenue



Angular plane diagram - 45 degree angular plane measured from 7.5m above the property line

Compatibility & Transitions

Guidelines

a) Ensure the scale of mixed-use buildings is compatible and sensitively integrated with surrounding residential uses in terms of building mass, height, setbacks, orientation, privacy, landscaping, shadow casting, accessibility, and visual impact.

b) To demonstrate mitigation of potential shadow or wind impacts on existing or proposed pedestrian routes, public spaces, and adjacent development technical studies may be required including a wind study and/or sun/shadow study.

c) Development transition requirements may be met using a combination of the following:

- Separate mid-rise buildings from low-rise buildings with a Local Street;
- Locate less dense and lower scale buildings in locations adjacent to existing low-rise neighbourhoods;
- Require a minimum 7.5 metre rear yard setback where mixed-use development abuts low-rise residential properties;
- Mitigate the actual and perceived massing impacts of a mid-rise mixed-use building by breaking up the mass horizontally and vertically, through the creative incorporation of changes in materials, balcony and floor plate design, architectural features, and unit/amenity locations;

Use of stepbacks to provide appropriate transition to adjacent uses

- Provide rear and side step-backs for upper storeys to provide contextually appropriate transitions from the mid-rise mixed-use buildings to surrounding residential low-rise neighbourhoods; and
- Provide high quality landscape treatment such as decorative fencing, trees, shrubs, grassed areas, and berming.

d) Development in mixed-use areas should apply a 45 degree rear yard angular plane measured from 7.5 metres above the abutting property line where a building transitions to an adjacent low-rise residential area to ensure appropriate skyview, light, and separation.

Building Design

Height & Massing

Mixed-use buildings are generally comprised of a base, middle, and top.

Guidelines

a) The height of the building base should be between 2 and 4 storeys to frame and reinforce the pedestrian scale of the streetscape.

b) The height of the building base should generally be within 1 storey of any adjacent mid-rise development to create a consistent street wall.

c) Above the building base there should be a minimum 3.0 metre stepback to define the street wall. Exceptions to the minimum depth of the stepback may be permitted but in no case should it be less than 1.0 metre.

d) Provide a height transition towards adjacent existing or planned built form.

e) The top of the building should define a unique and interesting skyline. Design the top of buildings to include a variety of elements, such as step backs, material variations, lighting, and other architectural elements to reinforce a strong presence at the top of the building.

f) Provide a minimum ground floor height of 4.5 metres in mixed-use areas.

g) Where possible, include outdoor amenity space for residential uses at various levels above grade, including balconies, patios, terraces, and rooftop gardens.

h) Mechanical penthouses should be designed and clad with materials that complement the main building façades.

i) Locate mechanical rooms to the centre of the building rooftop and integrate into the rooftop design so they are not visible from the public realm.

j) For developments with more than one building, provide a range of heights and establish a height hierarchy related to site conditions and context.

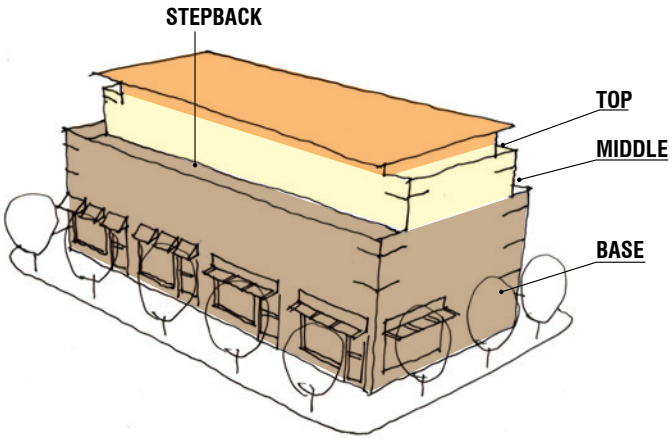


Diagram illustrating the building components of base, middle and top

Mixed-use building with stepback above the building base

Articulation & Architectural Features

Articulation considers the three dimensional qualities of the façade, including windows, doors, and architectural elements such as decoration, organization, the expression of interior spaces, and structural expression.

Guidelines

k) Mitigate the actual and perceived impacts of mid-rise mixed-use buildings by breaking up the mass both vertically and horizontally through the creative incorporation of changes in materials, balcony and floor plate design, architectural features, and amenity locations.

l) Incorporate windows and balconies on all elevations, especially if exposed to public view.

m) Locate entrances strategically so they are highly visible and well connected to the public realm.

n) Provide a high level of glazing at ground level, especially for those areas related to lobbies, common/amenity areas, and non-residential uses (i.e. commercial uses).

o) Encourage weather protective design at grade through the use of canopies, arcades, and cantilevers. Canopies located on the ground floor should be at least 1.5 metres deep.

Exterior Materials

The variety and selection of building materials contributes to visual interest along the street and to the varied architectural character of the Glendale area.

Guidelines

a) Ensure high quality and durable materials are used on all elements and elevations of the development.

b) Select materials to complement the architecture, character, size, and style of the building, as well as the streetscape.

c) Maintain consistent materials between elevations.

d) Incorporate changes in materials to visually break-up the building massing.

e) Use reflective, low intensity colours on rooftops to reduce heat island effect and HVAC loads. Refer to Chapter 4 for cool roofing material and solar reflectance guidelines.

f) Minimize danger to migratory birds by adhering to the Bird-Friendly Design guidelines in Chapter 4.

Articulation of the facade with various materials and offsets

Corner articulation in a mixed use building

Gateways

To contribute to the creation of a sense of place and local identity, buildings at visually prominent, landmark and gateway locations should express a higher design standard.

Guidelines

a) Use prominent built form to address gateways and other key locations within the community.

b) Express prominence through building articulation, massing, materiality, etc.

c) Taller building elements at gateways and landmark sites/frontages are encouraged, such as towers, rotundas, porticos, change in building plane, overhangs, special rooflines, public art, and street wall height exceptions, where those elements exhibit:

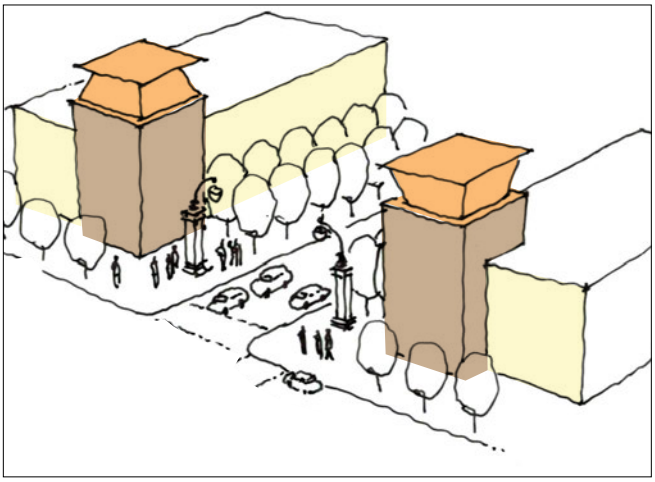
- Compatibility with adjacent context, including appropriate scale;
- Compatibility with the principal building expression; and,
- Design excellence.

d) On larger sites, create 'paired' corner buildings on either side of a street to emphasize a sense of entry or to distinguish one street district from another.

e) New development and landscaping should frame rather than block public views of prominent natural features, landmark sites and buildings, public art and other prominent features.

f) Buildings at the end of long view corridors should be designed to terminate the view with a landmark building element such as a tower or massing element.

Corner building as a gateway feature



Paired corner buildings to emphasize a sense of entry

Storefronts

Guidelines

a) Provide retail and commercial uses on the ground floors of buildings to bring animation to the street and encourage pedestrian activity.

b) Locate entrances to stores and the ground floor of live-work units at grade and design to be universally accessible, highly visible, and clearly articulated.

c) Provide spill-out space around the base of buildings for uses such as patios, street furniture, and special events.

d) Ensure a significant amount of the building frontage on the ground floor and at building base levels is glass to allow views of the indoor uses and create visual interest for pedestrians. Clear glass should be used to promote the highest level of visibility and should not be covered with advertising, opaque or semi-opaque stickers or other treatments that limit the visibility of the interior.

e) Provide awnings or canopies above windows and doors for weather protection.

Frequent doors, windows and pedestrian generating uses

Signage

Guidelines

a) Integrate signage in the building design and ensure it complements the building's elevation, animates the ground level, and enhances the streetscape.

b) Design signage to be consistent with respect to materials, size, location (on a building), lettering and lighting, while also allowing some flexibility for tenant branding.

c) Ensure signage lighting design complements the design of the building.

d) Direct signage lighting to limit light trespass to surrounding properties and to prevent light pollution.

e) Signage should add diversity and interest to the street and not overwhelm either the storefront or streetscape. Design building signage to be compatible and complement the architecture of the building in its scale, material, consistency and design.

f) Projecting or hanging signs should be permitted to encroach over the streetline provided that they do not project more than 1.0 metre from the building. There should be a minimum 2.4 metre clearance between the bottom of the sign and grade.

Signage integrated into a sign band as part of the facade design

Site Landscaping

Landscaping design should reinforce the structure of the site with a focus on creating a safe, comfortable, and animated pedestrian environment.

Guidelines

a) Provide a safe, clear, and accessible site circulation system for pedestrians, cyclists, and vehicles, including connections to the surrounding street network, public sidewalks, transit stops, and parking areas.

b) Create a pedestrian-scaled environment by arranging buildings to create comfortable and protected pedestrian spaces that provide a sense of enclosure.

c) Provide mid-block pedestrian connections for development blocks over 200 metres in length to support pedestrian movement.

d) Develop a comprehensive strategy for planting, built features, fencing, walls, paving, lighting, signage, and site furnishings.

e) Base planting strategies on year-round interest, hardiness, drought, salt and disease tolerance, and biodiversity.

f) Preserve, protect, and incorporate existing healthy and mature trees into the site and landscape designs wherever possible.

g) Minimize the use of hard, paved areas to reduce surface run-off and heat island effect. Use permeable or porous paving wherever possible.

h) Use high-quality, durable materials for all landscape features such as paving, fences, walls, planters, site furniture, and shade structures.

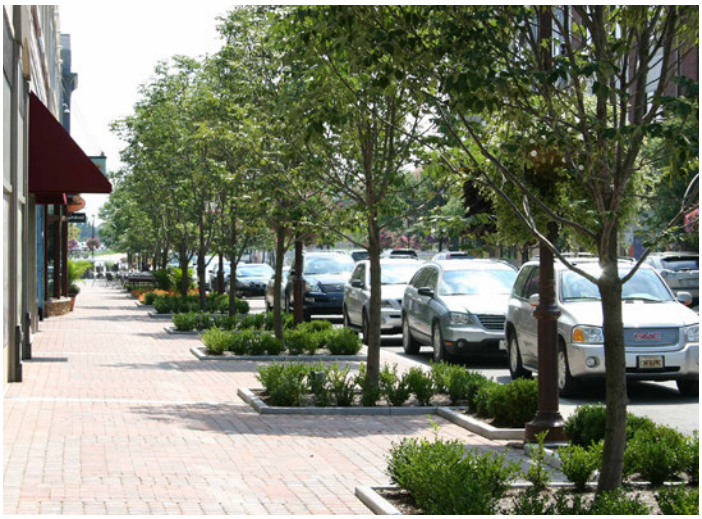
i) Consider green roofs for buildings with flat roofs. This will assist with reducing heat island effects and improving air quality and noise insulation.

j) Appropriate planting conditions such as soil depth, volume, and growing mediums must be provided for successful landscapes.

k) Utilize landscaped buffers to provide an appealing and 'soft' transitional interface between new development areas and the backyards of existing established areas. Landscaped buffers should provide a visual barrier, as well as some sound attenuation

l) Ensure the design of lighting avoids light spill onto abutting properties and adjacent residential neighbourhoods.

Patio defined behind a planting bed



Street tree planting to buffer the sidewalk from the street

Parking

Guidelines

a) On-site surface parking should be avoided wherever possible.

b) Encourage underground or structured parking. Where not feasible, at-grade parking should be located at the back of the building.

a) Provide access to parking, servicing and loading from the rear of the building, or a laneway where possible.

b) Access to parking and servicing areas should clearly prioritize pedestrian movement and the continuity of the public sidewalks.

c) Integrate vehicular entrances to a building into the building's architectural design.

d) Incorporate active uses at-grade for above-grade parking structures facing onto any Arterial or Collector Street.

e) Where above-grade parking structures face a street, minimize the visual impact of the building through screening or by treating the building face like an occupied building through expressing an architectural vocabulary and material compatible with adjacent façades.

f) Provide accessible and secure bicycle racks and parking at key locations to promote active transportation.

Parking entrance integrated into building design

Pedestrian priority established across vehicular access

Parking structure with rhythmic facade design (image: La Citta Vita, CC BY-SA 2.0, Flickr)

Servicing, Storage & Loading

Servicing, utility, storage, and loading are necessary components of all building sites. These areas need to be functional and easily accessible and their visual impact minimized through location and screening.

Guidelines

a) Coordinate, consolidate, and integrate loading docks, service areas, and storage within the building envelope, where possible.

b) Locate loading, service, storage, and utility areas away from public streets and screened from public view.

c) Ensure that waste collection vehicles have ample room to manoeuvre at the site planning stage to ensure that these functions do not spill over into either the public right-of-way or public spaces.

d) Provide access to servicing and loading areas from secondary streets or rear laneways. Include design treatments to minimize impact and improve safety for pedestrians and cyclists crossing these areas.

e) Locate all utilities underground. Where components of utilities must be located above ground, utility providers are encouraged to consider innovative methods of containing utility services on or within streetscape features.

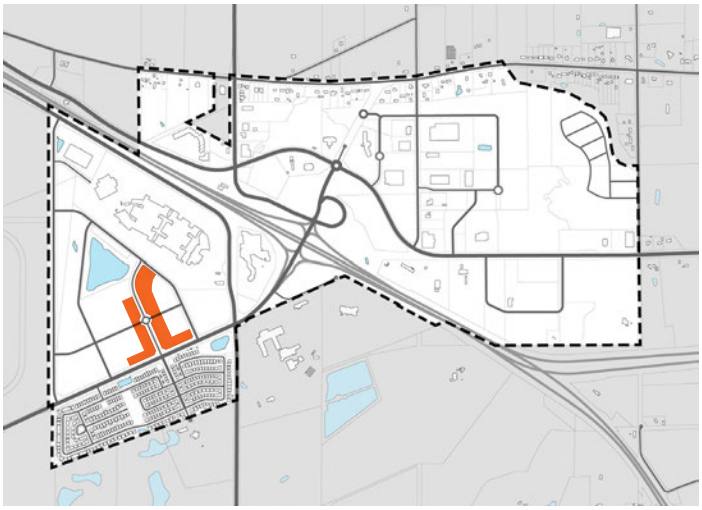
f) For all restaurant uses, cooking ventilation systems, incorporate ecologizer, water wash, ultraviolet, or other equivalent odour extraction mechanisms that are sufficient to ensure that the resulting exhaust is substantially odour free and will not affect surrounding residents.

g) Fully screen and locate garbage, recycling, loading, and service areas away from public view. These facilities should be located in the rear or side yards away from residential uses, major streets, and open space areas. Integrate these functions within the building envelope.

Integrated service area with high standard of design

Main Street Mixed-Use Areas

In addition to the preceding Mixed-Use Area guidelines, additional guidelines apply to the Main Street Mixed-Use Areas (identified as the *Mixed-Use I Designation* in the Glendale Secondary Plan) where the intent is to create a community "main street" along Niagara-on-the-Green Boulevard, that provides a focal point for commercial and social activities for residents, workers, students and visitors in Glendale.



Guidelines

a) Along the frontage of Niagara-on-the-Green Boulevard, the height of the building base of a mid-rise building should be between 2 and 3 storeys to frame and reinforce the pedestrian scale of the streetscape.

b) Along the frontage of Niagara-on-the-Green Boulevard, portions of buildings above the building base's street wall should have additional stepbacks as necessary to preserve sky view and solar access to the street.

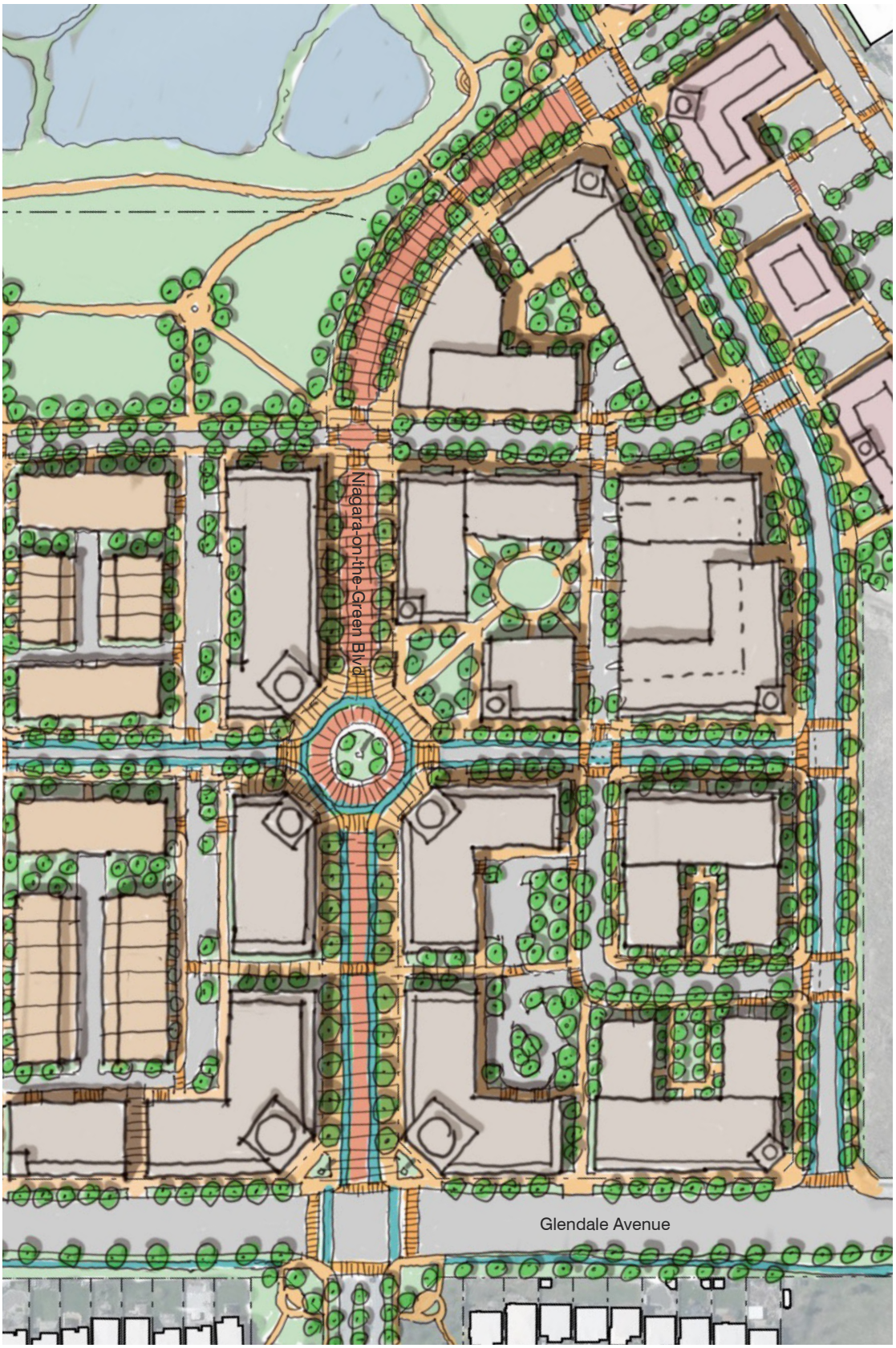
c) Locate buildings at or near the front property line to create good street definition and a sense of enclosure. Buildings should not be set back more than 5 metres from the front property line.

d) Buildings may be set back from the street edge where they frame and define the edges of public spaces, such as plazas, courtyards, and seating areas.

a) Buildings should occupy a minimum of 90% the frontage along public streets, with exceptions for public spaces, such as plazas, courtyards, and seating areas.

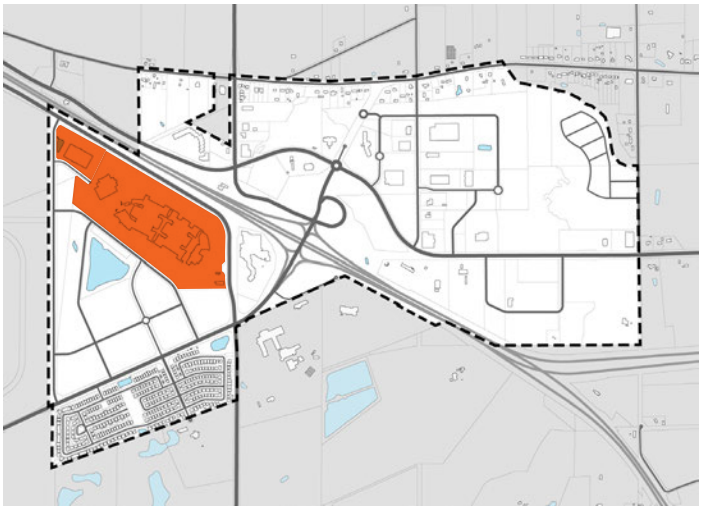
Larger set back when defining a public space

Mid-rise mixed-use development incorporating a grocery store



Demonstration plan illustrating a concept tor the Main Street Mixed-Use area along Niagara-on-the-Green Boulevard

Regional Commercial Areas



New and redeveloped buildings in Regional Commercial areas should be designed to frame the street edge, provide clear pedestrian access, and create gathering spaces such as patios, in order to foster a greater sense of place.

Building Placement & Orientation

Building placement refers to the location of the building in relation to the street. The orientation and placement of buildings along the street can help to reinforce the public realm by enhancing the pedestrian environment and creating a sense of enclosure.

Guidelines

a) Use buildings and smaller scale retail and commercial stores to frame and provide enclosure to the surrounding public streets by locating them close to the street edge.

b) Create a pedestrian-scaled, permeable and connected internal layout (block and street pattern) with comfortable and protected pedestrian spaces that have a sense of enclosure.

c) At key corner sites, sidewalk cafes, kiosks, and street vendors are encouraged, and larger setbacks may be permitted. The area within the front yard setback should be hardscaped with paving to provide an extension of the sidewalk.

Primary entrances located along the street frontage

d) Ensure buildings located adjacent to, or at the edge of parks or urban greens provide opportunities for overlook into the public space with windows and doors. The massing, siting and scale of these buildings should create a degree of enclosure or definition appropriate to the type of open space they enclose.

e) Ensure primary entrances to buildings are clearly visible and located on a public street, onto a public open space, or on a primary internal route for reasons of public safety and convenience.

f) Ensure access to primary building entrances from sidewalks and public open space areas are illuminated, convenient, and direct with minimum changes in grade.

g) Parking, driveways, or lanes should not be located between the buildings and the street except for large buildings on large sites with multiple buildings where the larger buildings are situated to the interior of the block with smaller buildings facing the street.

h) Provide accessible and secure bicycle racks and parking at key locations to promote active transportation.

Demonstration plan illustrating a concept tor the Regional Commercial Area south of Taylor Road

Building Design

Guidelines

a) Articulate large walls visible from the street through various treatments such as offsets in massing, façade, and fenestration treatments.

b) For stand-alone commercial uses, minimize the building footprint by providing a multi-storey building in order to deliver compact form, conserve land and make the development more walkable.

c) Buildings located at corner sites along Arterial and Collector Streets should have a high level of architectural quality for the façade.

d) Design sites with multiple buildings to reflect a consistent architectural theme. Similar building elements could include colours, materials, signage, and the base and top of buildings. Design individual buildings to offer visual interest and variety in design through architectural features.

e) Ensure consistent high quality building design and architectural elements on all building elevations, particularly on facades in public view or backing onto residential properties.

f) Establish a rhythm of minor breaks or articulation along the façade, distinguishing one unit (retail or residential) or building component from the next.

g) Incorporate architectural elements to enhance the pedestrian environment such as canopies, overhangs, awnings, projecting display windows, architectural arcades, and colonnades. These elements should be designed as integral parts of the building in terms of form, style, material, and colour.

h) Steps and ramps should be architecturally incorporated into the building entrance.

Corner buildings address both sides of the street with windows, signage, lighting, and a continuation of public walkways

Combination of elements that enhance the pedestrian environment

Storefronts

Storefronts represent the primary interface of commercial areas with the public realm.

Guidelines

a) The floor-to-ceiling height of ground floors for commercial buildings should be at least 4.25 metres.

b) Locate entrances to stores at grade and design them to be universally accessible, highly visible, and clearly articulated.

c) Provide spill-out space around the base of buildings for uses such as patios, street furniture, and special events.

d) Ground floors facing public streets should have a significant amount of glazing to allow views of the indoor uses and create visual interest for pedestrians. Glazing should be clear and should not be covered with advertising or stickers that block views into the building.

e) Provide awnings or canopies above store windows and doors for weather protection.

f) Patio spaces should be defined by low screening fences, planters or hedges and be located adjacent to building entrances.

Awnings, canopies, and signage provide shade and weather protection for pedestrians

Signage

Signs play a significant role in the character and animation of commercial areas.

Guidelines

a) Integrate signage in the building design and ensure it complements the building's elevation, animates the ground level and is compatible in its scale, material, consistency and design.

b) In a site with multiple buildings, design signage to be consistent with respect to materials, size, location (on a building), lettering and lighting, while also allowing some flexibility for tenant branding.

c) Ensure signage lighting design complements the design of the building.

d) Direct signage lighting to limit light trespass to surrounding properties and to prevent light pollution.

e) For multi-tenant sites, provide an overall signage strategy that coordinates the site and building signage, and limits the number of monument/pylon signs on a single site and provide combined signage listing the businesses within the site.

f) Signage should not obscure windows, cornices or other architectural elements.

Retail signage integrated into building design (Copyright Queen's Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs)

Drive-Throughs

Where permitted, drive-through facilities must demonstrate that they do not adversely affect the character of the existing and planned streetscape.

Guidelines

a) Locate buildings close to or at the streetline to define and support the street edge and facilitate pedestrian activity and access.

b) Align new buildings with the front facades of existing buildings.

c) Ensure an appropriate transition in setback from existing and adjacent buildings along the street.

d) Locate the main entrance directly off the public sidewalk.

e) Ensure walls visible from the street are transparent with windows, doors, and other forms of transparent building materials to maximize views in and out of the building enhancing the relationship between interior and exterior to support and animate the public street and sidewalk.

f) Provide vehicular access and stacking lanes along the side or the rear of the building away from adjacent residential uses, streetscapes, and open spaces. Do not locate stacking lanes or driveways between the building and the street.

g) Provide parking adjacent to the secondary entrance to the facility so it is not necessary for pedestrians who arrive by car to cross driveways or stacking lanes to enter the building.

h) Locate utilities and service components such as transformers, loading, and garbage pick up at the rear or flank of the building out of view from the street and other public areas.

i) Provide sufficient signage where necessary to indicate direction of vehicular travel, stop signs, or no entrance areas.

Drive-through bank (Image: Oksana - stock.adobe.com)

Drive-through queue lanes (Image: Oksana - stock.adobe.com)

Site Landscaping

Landscaping design should reinforce the structure of the site with a focus on creating a safe, comfortable, and animated pedestrian environment.

Guidelines

a) Develop a comprehensive strategy for planting, built features, fencing, walls, paving, lighting, signage, and site furnishings.

b) Base planting strategies on year-round interest, hardiness, drought, salt and disease tolerance, and biodiversity.

c) Preserve, protect, and incorporate existing healthy and mature trees into the site and landscape designs wherever possible.

d) Minimize the use of hard, paved areas to reduce surface run-off and heat island effect. Use permeable or porous paving wherever possible.

e) Use high-quality, durable materials for all landscape features such as paving, fences, walls, planters, site furniture, and shade structures.

f) Consider green roofs for buildings with flat roofs. This will assist with reducing heat island effects and improving air quality and noise insulation.

g) Appropriate planting conditions such as soil depth, volume, and growing mediums must be provided for successful landscapes.

h) Where a commercial area abuts a residential area use landscaped buffers to provide an appealing and 'soft' transitional interface. Landscaped buffers should provide e a visual barrier, as well as some sound attenuation.

i) Ensure the design of lighting avoids light spill onto abutting properties and adjacent residential neighbourhoods.

Incorporate substantial landscaping in surface parking lots and include internal walkways that directly link sidewalks on public streets to store entrances

Parking

Vehicular access and parking are necessary for commercial areas to function properly, but care must be taken to minimize their physical and visual impacts on the public realm.

Guidelines

a) Provide a variety of parking options, including on-street parking, underground parking, structured, and screened at-rear parking courtyards. Avoid the use of large surface parking areas, where possible.

b) Locate parking areas away from the street frontage, at the rear or sides of the principal building.

c) Screen surface parking lots from streets, open spaces, and adjacent residential areas with the use of buildings, low fencing, architectural features, landscaping, berms, or other mitigating design measures, such as lowered parking surfaces with landscaped buffers.

d) Design surface parking to minimize environmental impacts by reducing the parking area size, considering shared parking facilities with adjacent buildings, and providing preferential parking for fuel efficient vehicles.

e) Break large parking areas into smaller courts by providing walkways at a minimum interval of 8 rows of parking. Locate walkways flanking a lane or between 2 parking rows.

f) Incorporate pedestrian walkways and landscaping into surface parking areas along primary vehicular routes to enable safe, barrier-free, and direct movement to principal building entrances and the sidewalk. Design walkways with a minimum width of 1.8 metres.

g) Where walkways cross drive aisles, they should be differentiated from the driving surface through the use of surface materials, colour and/or grade change.

h) Use landscaping to break up parking areas to assist with reducing the heat island effect. Trees create a more comfortable walk to and from parking areas, avoiding overheating of parked vehicles. Landscaping islands should have a minimum width of 2.5 metres.

i) Consider above or below grade parking structures where possible and feasible in efforts to conserve land, promote compact development, and reduce heat island effect.

j) Incorporate active uses at-grade for above grade parking structures facing onto any Arterial or Collector Street, where possible.

k) Where above grade parking structures abut a street, minimize the visual impact of the building through screening or by treating the building face like an occupied building through expressing an architectural vocabulary and material compatible with adjacent façades.

Lowered parking surfaces and landscaped buffers help screen parking areas from street view

Parking structure with retail uses facing street at ground level

Servicing, Storage & Loading

Servicing, utility, storage, and loading are necessary components of commercial uses. These areas need to be functional and easily accessible and their visual impact minimized through location and screening.

Guidelines

a) Coordinate, consolidate, and integrate loading docks, service areas, and storage within the building envelope, where possible.

b) Locate loading, service, storage, and utility areas away from public streets and screened from public view.

c) Ensure that waste collection vehicles have ample room to manoeuvre at the site planning stage to ensure that these functions do not spill over into either the public right-of-way or public spaces.

d) Provide access to servicing and loading areas from secondary streets or rear laneways. Include design treatments to minimize impact and improve safety for pedestrians and cyclists crossing these areas.

e) Locate all utilities underground. Where components of utilities must be located above ground, utility providers are encouraged to consider innovative methods of containing utility services on or within streetscape features.

f) For all restaurant uses, cooking ventilation systems, incorporate ecologizer, water wash, ultraviolet, or other equivalent odour extraction mechanisms that are sufficient to ensure that the resulting exhaust is substantially odour free and will not affect surrounding residents.

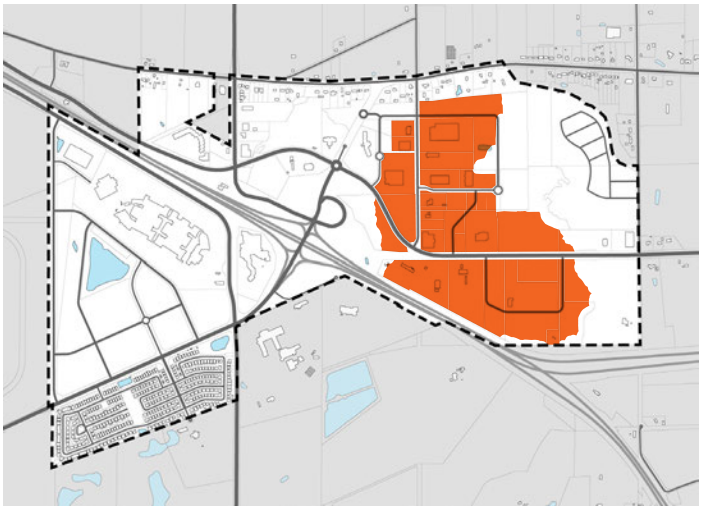
g) Integrate facilities for handling, storing, and separating waste and recycling into the building design.

h) Ensure waste facilities within an external structure are consistent in design, colour, and materials to the main building and are not in a prominent location.

Fully enclosed garbage enclosure

Industrial/Business Park Areas

Industrial/Business Park Areas may include a wide variety of uses, including offices, research and development, warehouses, and light industrial and manufacturing uses.



Building Placement & Orientation

Guidelines

a) Arrange and design industrial and business parks to incorporate a campus design to ensure that all development components are recognizable as part of an integrated complex. A campus design format consists of one or more individual buildings or multiple tenancy buildings having shared parking, loading, and access facilities.

b) Design buildings to have high-quality design features including built form, architectural detail, landscaping, and signage.

c) Orient buildings adjacent to an arterial or collector street to face the street to provide good visibility and contribute to the framing of the streetscape.

d) If there are multiple buildings on one site, provide a coordinated architectural treatment to develop overall site harmony. Provide differentiating characteristics, particularly at building entrances.

e) Vehicular access and parking should be shared between adjacent properties wherever feasible to reduce the extent of interruption along the sidewalk and the streetscape and minimize turning locations.

Colour, material and massing create a dynamic façade

Colour, material and massing create a dynamic façade

Demonstration plan illustrating a concept tor the Industrial/Business Park Area at York Road and Townline Road

Building Design

Guidelines

f) Avoid long stretches of monotonous building façades or 'blank walls'. Building articulation and material and colour changes should be the primary means to create interest on long expanses of walls.

g) Industrial uses may provide less decorative facade materials for non-street frontages, such as concrete and metal siding; provided the front facade material does not transition at the corner, and is wrapped around to the sides.

h) Design highly visible sites (such as those visible from the QEW or at main intersections such as York Road and Townline Road) with entry features and identifiable architectural features, such as towers, enhanced elevation treatments, unique massing or roofing lines, a multi-storey presence, or other prominent architectural forms to provide an identity to the area.

i) For accessory buildings, provide compatible and complimentary design, colour, and materials to the main building.

A special architectural feature breaks up a long façade

Signage

Guidelines

a) Design building signage to be compatible and complement the architecture of the building in its scale, material, consistency and design.

b) For buildings or sites with multiple tenants, provide combined signage listing the businesses within the site.

c) Ensure signage lighting design complements the design of the building.

d) Direct signage lighting to limit light trespass to surrounding properties and to prevent light pollution.

Site Landscaping

Guidelines

a) Provide outdoor amenity areas, such as courtyards, patios, and seating areas in desirable areas, such as facing public streets or natural heritage features and define with building façades, architectural features, fencing, and/or landscaping.

b) Develop a comprehensive strategy for planting, built features, fencing, walls, paving, lighting, signage, and site furnishings.

c) Base planting strategies on year-round interest, hardiness, drought, salt and disease tolerance, and biodiversity.

d) Preserve, protect, and incorporate existing healthy and mature trees into the site and landscape designs wherever possible.

e) Minimize the use of hard, paved areas to reduce surface run-off and heat island effect. Use permeable or porous paving wherever possible.

f) Use high-quality, durable materials for all landscape features such as paving, fences, walls, planters, site furniture, and shade structures.

g) Consider green roofs for buildings with flat roofs. This will assist with reducing heat island effects and improving air quality and noise insulation.

h) Appropriate planting conditions such as soil depth, volume, and growing mediums must be provided for successful landscapes.

i) Where a commercial area abuts a residential area use landscaped buffers to provide an appealing and 'soft' transitional interface. Landscaped buffers should provide a visual barrier, as well as some sound attenuation.

j) Ensure the design of lighting avoids light spill onto abutting properties and adjacent residential neighbourhoods.

Use of vegetated screening as a visual buffer

Parking

Guidelines

a) Locate parking areas away from the street frontage, at the rear or sides of the principal building.

b) Screen surface parking lots from streets, open spaces, and adjacent residential areas with the use of buildings, low fencing, architectural features, landscaping, berms, or other mitigating design measures, such as lowered parking surfaces with landscaped buffers.

c) Design surface parking to minimize environmental impacts by reducing the parking area size, considering shared parking facilities with adjacent buildings, and providing preferential parking for fuel efficient vehicles.

d) Break large parking areas into smaller courts by providing walkways at a minimum interval of 8 rows of parking. Locate walkways flanking a lane or between 2 parking rows.

e) Incorporate pedestrian walkways and landscaping into surface parking areas along primary vehicular routes to enable safe, barrier free, and direct movement to principal building entrances and the sidewalk. Design walkways with a minimum width of 1.8 metres.

f) Where walkways cross drive aisles, they should be differentiated from the driving surface through the use of surface materials, colour and/or grade change.

g) Use landscaping to break up parking areas to assist with reducing the heat island effect. Trees create a more comfortable walk to and from parking areas, avoiding overheating of parked vehicles. Landscaping islands should have a minimum width of 2.5 metres.

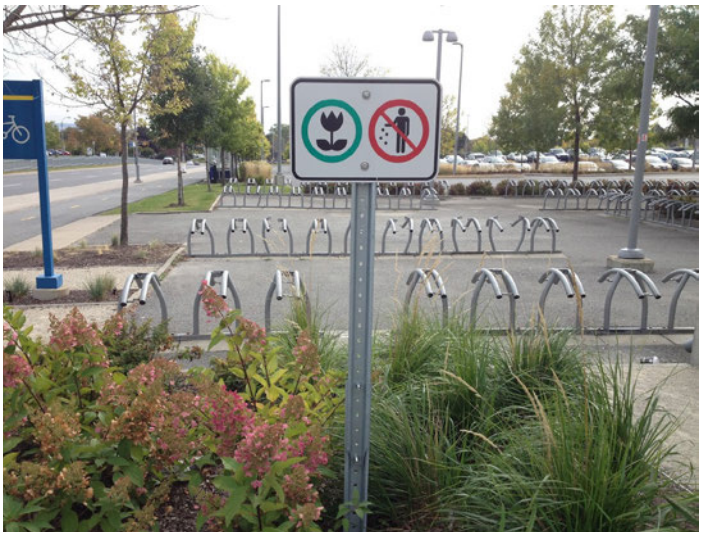
h) Integrate stormwater facilities for large parking lots into the parking area using for example permeable pavers and bioswales. Design the facilities as aesthetic landscape features such as planting strips between parking rows.

i) Consider above or below grade parking structures where possible and feasible in efforts to conserve land, promote compact development, and reduce heat island effect.

j) Incorporate active uses at-grade for above grade parking structures facing onto any Arterial or Collector Street, where possible.

k) Where above grade parking structures abut a street, minimize the visual impact of the building through screening or by treating the building face like an occupied building through expressing an architectural vocabulary and material compatible with adjacent façades.

Example of a parking lot that incorporates planting strips for as a stormwater management strategy



Bicycle parking in employment areas to support active transportation

Servicing, Storage & Loading

Guidelines

a) Provide specifically designated areas for uses such as service entrances, loading docks, delivery and sorting, temporary storage, garbage and recycling, outdoor storage, outdoor work areas, and other similar uses. These should be:

- Located behind buildings or away from public streets;
- Appropriately sized for the intended use; and,
- Screened from public streets and residential uses to reduce visual and sound impacts on adjacent uses.

b) Ensure that service areas have adequate space for manoeuvring and allow for efficient operation. Vehicle movements in and around service areas should not conflict with adjacent parking areas.

c) Ensure truck manoeuvring, circulation, and queueing lanes are signed, and marked accordingly on the pavement.

d) Provide sufficient on site truck queueing areas as necessary for the expected numbers of trucks. Locate behind buildings and screen, as practical.

e) Ensure loading and delivery areas are not located in a required setback area.

f) Include design treatments to minimize impact and improve safety for pedestrians and cyclists crossing servicing and loading areas.

g) Construct trash and recycling enclosures to be compatible with the project architecture and materials, built to house sufficiently sized bins for the intended use, and designed with a wall height that is sufficient to completely conceal bins.

h) Use berms in landscape strips to minimize views/noise from adjacent uses, parking, loading, and service areas.

i) Where permitted, ensure that outdoor storage only occurs within physically-defined areas, is screened with appropriate fencing, walls, or landscaping, and that all materials in an outside storage area are stored on an impermeable surface to prevent adverse impact on site drainage and stormwater management facilities.

Uses that May be Located in Other Designations

Public Service Facilities

Public Service Facilities include elementary and secondary schools, public libraries, museums, community centres, or other similar uses that meet the recreational, health, social, educational and cultural needs of residents.

Overall Guidelines

Guidelines

a) Site public service facility buildings prominently and where possible, to terminate views. Ensure buildings are sited to specifically differ from the surrounding urban fabric in order to emphasize their importance as landmarks.

b) Locate buildings in community hubs to promote cost-effectiveness and facilitate service integration and access to transit.

c) Locate buildings close to the street to reinforce the street wall and define intersections.

d) Ensure buildings have direct access from the surrounding community through a comprehensive and connected active transportation network.

e) Locate vehicular parking at the side or rear of the building. Parking for cyclists should be located near building entrances and where visual surveillance can be maximized.

f) Provide drop-off areas for buses and cars in the public right-of-way where possible, but when located on site they should be at the side, and not the front of the building.

g) Consider integrating public service facilities into mixed-use, residential or multi-storey buildings in order to maximize the use of the site and services, minimize the building footprint, contribute to the creation of compact neighbourhoods, as well as contribute to an urban street condition.

h) Consider co-locating or sharing facilities with other public service facilities or other compatible uses.

i) Respond to the local context and site conditions when siting buildings. Where applicable, design buildings to respond to the site's topography

j) Locate the most active portions of the buildings facing higher order streets. Locate large portions of buildings such as gymnasiums or auditoriums to the sides, rear, or interior of buildings.

k) Public service facilities should include public art, either integrated into the building or in a prominent and publicly-visible location on the site.

l) Public service facilities should demonstrate a commitment to sustainability by aiming to attain certification by an appropriate green building programs. See Green Buildings & Sites Section in Chapter 4.

The building is located close to the road to frame the street edge

Building Design

Guidelines

a) Design public service facilities as special landmark buildings with high quality architectural design, materials, and finishes.

b) Incorporate architectural elements such as massing and special features to terminate important views and vistas.

c) Ensure highly articulated façade design for all elevations exposed to public view. This includes changes in plane and materials, fenestration, projections, relief, and horizontal and vertical elements. Blank, uninterrupted walls should be avoided.

d) For buildings located at corners, design elevations to equally address the two street frontages. Additionally, use prominent massing, height, architectural elements and detailing to emphasize these locations.

e) Coordinate building materials and ensure they reflect, complement, and enhance the building's architectural style and detailing.

f) Ensure the design of ancillary buildings and structures is coordinated with that of the principal building in terms of height, massing, architectural details, signage, materials, and colours.

g) Provide a high level of visual transparency and permeability at eye level for lobbies by using windows and prominent entrances.

h) Utilize daylighting strategies, such as building orientation, uniform windows across the facade, or skylights to capture natural light and reduce the need for electric lights during the day.

i) Provide integrated weather protection elements at main entrances and ensure they complement the building's design.

j) Ensure the front door of all community service facilities are connected by a walkway to the sidewalk and have direct access to transit stops.

k) Consider roof forms other than flat roofs to respond to the context and character of the neighbourhood, particularly where there is a heritage context, and to highlight the nature of the public or institutional building.

l) Where flat roofs are used, incorporate cool roofs and/or green roofs in the design of the building to minimize surface runoff, reduce heat island effect, provide noise insulation, and improve local air quality. See Energy Conservation Section in Chapter 4.

m) Screen rooftop mechanical equipment with materials that are complementary to the building.

n) Integrate signage within the building design and ensure it complements the building's elevation, animates the ground level, and enhances the streetscape.

o) Direct signage lighting to limit light trespass to surrounding properties and downcast to prevent light pollution.

p) Ensure signage provides a high level of clarity, visibility, and visual interest, and should aid pedestrians and drivers in navigating the area, especially at night.

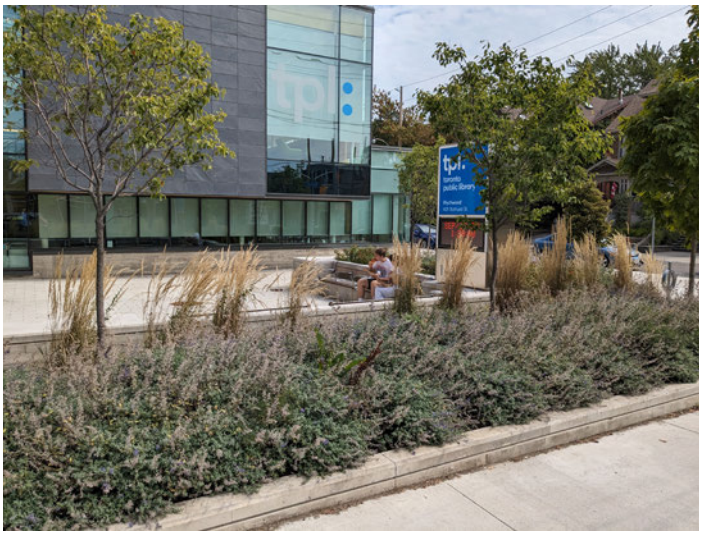
Example of the use of architectural features to denote landmark community facilities

Site Landscaping

Guidelines

a) The site should be well landscaped and visible at the pedestrian level.

b) Provide a sufficiently sized gathering space designed as an outdoor amenity space for public service facilities where significant numbers of people are expected to gather or wait outside the main entrance.



Plantings and consistent materials along the building facade

School Sites

In addition to the preceding Public Service Facilities guidelines, the following guidelines apply to school sites.

Guidelines

a) Minimize the land area required for school sites in order to promote compact development and conserve land. School Boards are encouraged to build more compact facilities including three storey elementary schools and buildings located close to the street.

b) Where possible, locate elementary school sites adjacent to a neighbourhood park to allow for the sharing of playfields to promote compact development and minimize land area requirements. Explore the use of appropriate and innovative engineered turf material to increase the durability of the playfields and minimize maintenance requirements.

c) Consider opportunities for shared parking lots in order to reduce the on-site parking requirements. Locate and site the shared parking lot to facilitate easy and safe access by students.

d) Consider maximizing the opportunity for using the natural heritage system for passive open space uses such as trails and trail heads for school sites located adjacent to the natural heritage system.

e) Provide direct pedestrian and cycling routes to secondary schools from all parts of the surrounding community that are linked with the active transportation network.

f) Design schools to ensure safe pedestrian crossing and cycling practices. Whenever possible, ensure students are able to easily reach building entrances without crossing bus zones, parking entrances, and student drop-off areas.

g) Design school sites to provide for visitor parking and bus pick-up and drop-off for automobiles and buses on site. For smaller sites, consider demarcated bays in the adjacent street right of way.

h) Locate parking at the rear or to the side of the principal building. Circulation in front yards should be limited to drop-off zones, and clear sight lines should be preserved to the street.

Parking is located to the rear of the building off the main street and the front entrance to the building is directly connected to the public sidewalk

Emergency Services Facilities

Guidelines

a) Locate emergency services facilities such as fire stations and emergency medical service stations in a prominent and visible location with convenient access to an Arterial or Collector Street.

b) Integrate the design of emergency services facilities with the surrounding development, through appropriate architectural design and landscaping.

c) Provide buffering, including visual screening, planting and/or fencing, between the emergency services facilities and any adjacent residential uses to mitigate noise and light impacts.

Fire station designed to integrate with and provide buffers to its surroundings

Places of Worship

Guidelines

a) Locate Places of Worship on Arterial or Collector Streets along public transit routes in order to maximize transit ridership.

b) Consider the joint use of parking areas with adjacent uses in order to reduce land requirements and promote compact development, especially in mixed use areas.

c) Ensure the massing and scale of the building is compatible with the character of adjacent development, especially within low-rise areas through the use of similar setbacks, material selection, and the use of architectural elements.

d) Provide buffering, including visual screening, planting and/or fencing, between the place of worship use and any adjacent residential uses.

Place of worship with unique architectural elements that break up massing and provide compatibility with adjacent uses

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4 Green Infrastructure & Buildings

While sustainability is an overarching objective throughout the Guidelines, this section provides guidance on green infrastructure and building practices and helps achieve the broad sustainability principles of the Official Plan.

Development in Glendale should incorporate sustainable buildings and infrastructure to:

- Encourage the preservation, reuse and incorporation of existing buildings in new development to make use of their embedded carbon and zero carbon debt to minimize the carbon debt of new development.
- Protect and enhance local and regional ecosystems and biological diversity.
- Promote the responsible use of resources to ensure long-term sustainability, reduce greenhouse gas emissions, and reduce demands for energy, water, and waste systems.
- Demonstrate leadership in sustainable forms of green building design and technology, including the incorporation of renewable and alternative energy sources.
- Promote innovative residential and public building designs that contribute to energy reduction and natural resource conservation, green roofs, synergies between buildings, and site management practices.
- Protect the urban forest and the tree canopy and identify objectives for how it can be maintained, enhanced and expanded.
- Support opportunities for best management practices for stormwater to protect against flooding and erosion while improving water quality.

The Green Infrastructure and Building Guidelines apply to development by both the private and public sectors.

BedZED Eco Village, London, UK
(Image: Tom Chance, CC BY 2.0, Flickr)

Green Buildings & Sites

Promote innovative programs to encourage the design and construction of green buildings and sites that meet the Town's goals.

Guidelines

a) Encourage innovative building designs which contribute to affordability and energy and natural resource conservation.

b) Encourage the use of third-party certification and rating programs, such as Energy Star, LEED® (Leadership in Energy and Environmental Design), BREEAM (Building Research Establishment Environmental Assessment Method), Zero Carbon Building (ZCB) Standards, Green Globes, Climate Positive Design's Pathfinder, or Passive House (Passivhaus) Certification.

c) Encourage the use of the full spectrum of LEED certification options by developers, current property owners and the Town, including LEED for Cities, LEED for Neighbourhood Development (ND), LEED for Homes (H), LEED for Building Design and Construction (BD+C), LEED for Interior Design and Construction (ID+C) and LEED for Building Operations and Maintenance (O+M).

d) Redevelopment of sites in which there will be demolition should include a Life Cycle Assessment (LCA) that includes loss of embedded carbon. In addition to any third-party certification, all new construction should include whole life carbon costing.

Building with living walls on facade

LEED certification sign (Image: Tada Images - stock.adobe.com)

Energy Conservation

Minimizing energy consumption and clean, renewable electricity generation are key components of sustainability. On-site generation in new developments helps reduce GHG emissions from non-renewable power generation.

Guidelines

a) Where feasible, consider alternative community energy systems such as district energy, geo-exchange, sewer heat recovery, energy storage, air source heat pumps and/or inter-seasonal thermal energy.

b) Consider reducing demand for energy from the grid and encourage renewable energy production. Renewable energy sources that could be employed may include the use of solar thermal and photovoltaic equipment or wind power. Proposed alternative energy sources could be used in combination with energy from the grid.

c) Encourage passive solar building orientation to permit enhanced energy efficiencies by creating optimum conditions for the use of passive and active solar strategies. The integration of passive building systems is enhanced with buildings oriented to maximize the potential for sunlight and natural ventilation.

d) Consider constructing all low- and mid-rise residential buildings to be Solar Ready. Being Solar Ready means built with all the necessary piping and equipment that would be needed to install a rooftop solar power system.

Solar panels on the roof of low-rise residential development.

e) Reduce heat absorption through the use of cool roofs that are designed to reflect more sunlight and absorb less heat than a standard roof. Cool roofs can be made of a highly reflective type of paint, a sheet covering, or highly reflective tiles or shingles.

f) Cool roofing materials should have a minimum initial solar reflectance of 0.65 and minimum thermal emittance of 0.90, or for a low sloped roof (less than 1:6 slope), typical of commercial and institutional buildings, the 3-year aged Solar Reflectance Index (SRI) value should be a minimum of 15, and for steep sloped roofs (greater than 1:6 slope), typical of residential, the minimum SRI value should be 64.

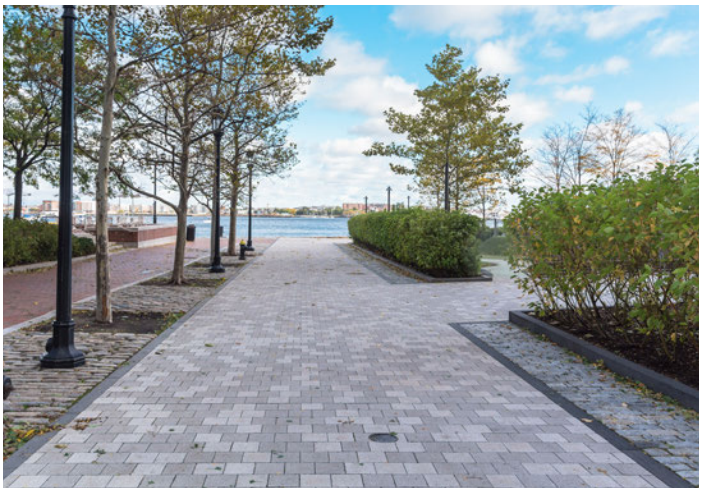
Cool roofing material

g) Green roofs are encouraged for larger multiple-unit residential buildings, office buildings, as well as, public institutional buildings to minimize surface runoff, reduce urban heat island effects, provide noise insulation, improve local air quality and opportunities for pollinator habitat.

Green roof on a commercial building (Image: Sookie, CC BY 2.0, Flickr)

h) In mid-rise residential buildings, design roofs as barrier-free amenity areas.

i) Mitigate urban heat island effects through the use of light-coloured paving materials including white concrete, grey concrete, open pavers and any material with an SRI of at least 28. Consider light-coloured paving materials (without compromising contrast requirements) for parking areas, pedestrian walkways and urban squares.



Use of light coloured pavers to reduce urban heat island effects while maintaining contrast between walkway and furnishing zones

j) Consider paving driveways with light-coloured material to reduce urban heat island effects.

k) Prioritize the preservation of existing trees and provide deciduous trees to help with evapotranspiration and the shading of sidewalks and hard surface areas in the summer and solar access in the winter.

l) Use awnings to lower summer indoor cooling needs and energy use as well as providing shade to pedestrians during warm weather.

m) For residential buildings four storeys or more and non-residential buildings, at least 10% of parking spaces (including a minimum of one accessible parking space) should be equipped with electric vehicle charging stations. Consider designing all remaining spaces to enable future charging station installation (EV ready).

n) Provide electric vehicle charging stations in parking areas of mixed-use, office, institutional, or employment uses, or within underground garages for multi-unit residential buildings, where feasible.

Charging stations for electric vehicles in mixed use areas

o) Provide long-term, secure bicycle parking options in multi-storey residential and employment buildings. Indoor bicycle parking is preferred. Where appropriate, include e-bike charging stations.

p) Development of a Transportation Demand Management Plan may be required, with consideration given to share programs, carpooling, transit, remote/flexible work, end-of-trip facilities and active transportation options.

Water Use & Management

Reducing household water consumption reduces water utility costs and helps protect the natural water supply. Reducing impervious surfaces improves stormwater absorption, and retaining and treating stormwater runoff helps protect natural watercourses.

Guidelines

a) Consider using the following Low Impact Development strategies:

- Soakways, infiltration trenches and chambers;
- Permeable pavement/pavers;
- Perforated pipe systems; and,
- Rain gardens in the right-of-way.

Example of an innovative stormwater management facility.

b) Consider the following strategies for stormwater retention and run-off:

- Retain stormwater on-site through rainwater harvesting and on-site infiltration;
- Direct flow to landscaped areas and rain gardens and minimize the use of hard surfaces in order to reduce the volume of run-off into the storm drainage system;
- Store snow piles away from drainage courses, storm drain inlets, and planted areas; and,
- Use infiltration trenches, dry swales, and naturalized bioswales adjacent to parking areas to improve on-site infiltration.

c) Introduce green infrastructure, such as bioswales or bioretention planters, within the public right-of-way to enhance ground water infiltration and improve water quality as part of a comprehensive water management plan.

Bioretention planters for stormwater management, Portland OR

d) Use perennial plants in bioswales and other planting areas to bind soil together, prevent washing out of soils, and improve absorption.

e) Consider the inclusion of third pipe greywater systems and rain water harvesting, for watering lawns and gardening, to reduce demand on potable water use.

f) Implement a rainwater harvesting program to provide the passive irrigation of public and private greenspace, including absorbent landscaping, cisterns, rain barrels, underground storage tanks, infiltration trenches, etc.

g) Consider the use of permeable or porous pavement instead of standard asphalt and concrete as a stormwater run-off management strategy that reduces the impact of urban development on the natural hydrological cycle.

Permeable paving used on a street

h) Consider the installation of subsurface basins below parking lots to enable stormwater to be stored and absorbed slowly into surrounding soils.

i) Where feasible, implement curb cuts along sidewalks and driveways to allow water to flow into planted zones or infiltration basins, while ensuring a guiding edge is maintained for people with disabilities. Tactile attention indicators may be required in some circumstances.

Curb cut allowing rainwater runoff into planting area, Portland OR

j) Encourage water conservation measures in new development, including:

- Targeting 10% greater water efficiency than the Ontario Building Code and encouraging through appropriate incentive programs, 20% greater water efficiency than the Ontario Building Code;
- Restricting the use of potable water for outdoor watering;
- Promoting the use of native, water efficient and drought resistant plant materials (xeriscaping) in parks, along streetscapes, and in public and private landscaping;
- Avoiding use of turf grass areas, and when required, installing drought resistant sod; and,
- Increasing topsoil depths and providing soil scarification.

Air Quality

To minimize the air quality and climate change impacts associated with development, the following measures are encouraged.

Guidelines

a) Reduce the impact of air pollution by encouraging the creation of a 'complete' community that is characterized by greater densities placed at mixed use nodes, and near transit facilities; mixed land uses; a mix and diversity of housing types; and a connected and walkable street network that is designed to encourage active transportation.

b) Encourage and promote alternative modes of transportation such as public transit, walking, rolling and cycling by providing infrastructure and amenities in key areas, and by securing a transit hub in Glendale.

c) Ensure there are transit options within a 400 metre (5 minute) walking distance of all parts of the Glendale.

d) To promote transit ridership, programs such as developer-sponsored transit passes at reduced-costs for each residential unit or employee are encouraged.

e) Ensure the separation of sensitive land uses from air pollutant sources through land use planning and zoning. Refer to the Ministry of the Environment guidelines.

f) Minimize the number of parking spaces and overall impact of car parking:

- Mixed use developments should include shared use of parking among uses that have different peak use characteristics;
- Design parking areas so they are not the primary visual component of a neighbourhood;
- Reduce the parking ratio required in areas that are served by transit; and,
- Dedicate priority 5% of the total parking spaces for carpool, ride sharing, and ultra low emission vehicles
- Adhere to bicycle parking requirements for developments and public spaces.

Niagara Region Transit bus (image: City of St Catharines)

Canopy protecting bicycle parking area

Signs marking parking for EVs and carpool users

Bird-Friendly Design

Many birds die or are severely injured trying to fly through glass or glass-like structures that reflect vegetation or open sky. Light pollution can have a negative impact on migratory birds, confusing their sense of direction and disrupting breeding and reproduction. Mitigations should be implemented that minimize the danger to birds.

Guidelines

a) Avoid untreated reflective glass or clear glass that reflects trees and the sky.

b) Use etched glass, fritted glass, screening or shutters to reduce reflections.

c) On existing glass or where etched or fritted glass, screening or shutters are undesirable or impractical, use visual markers on the exterior surface of glass in a dense pattern (ideally with a maximum gap of 5 centimetres).

d) Glass should not be reflective within the first 12 metres of building height, or to the height of adjacent vegetation.

e) Follow dark-sky-compliant lighting practices, including full cut-off fixtures to limit light spillage.

f) Locate and manage lighting to reduce reflections that might confuse migratory birds.

g) Turn off unnecessary indoor lighting during bird migration seasons (spring and fall). Also consider reducing outdoor lighting levels to minimum safety requirements during bird migration seasons.

Bird-friendly glass on a new building in Ottawa

Visual markers applied to a large window (image: Kawartha Wildlife Centre)

Material Resources & Solid Waste

Reduction of waste, diversion of waste from landfills and increasing recycling and reuse can help reduce the impacts of solid waste on the environment by conserving energy, reducing disposal costs, and reducing the burden on landfills and other waste disposal pathways.

Guidelines

a) Consider the use of recycled or reclaimed materials for new infrastructure including roadways, parking lots, sidewalks, unit pavings, curbs, water retention tanks and vaults, stormwater management facilities, sanitary sewers, and/or water pipes.

b) Reduce waste volumes through the provision of recycling/reuse stations, drop-off points for potentially hazardous waste, and centralized composting stations.

Provide on-site sorting facilities in multi-unit residential buildings

Comprehensive recycling station

c) In large buildings, such as multi-unit residential buildings and institutional or public buildings, provide on-site recycling facilities for the handling, storing, and separating of recyclables.

d) Recycle and/or salvage at least 50% of nonhazardous construction and demolition debris and locate a designated area on site during construction for recyclable materials.

Urban Agriculture

Urban agriculture such as community gardens provides the opportunity for an alternative use of green space and as a transition in land uses.

Guidelines

a) Promote initiatives such as sustainable food production practices as a component of a new development. Development plans and building designs are encouraged to incorporate opportunities for local food production through:

- Community gardens;
- Edible landscapes;
- Small scale food processing, such as community kitchens, food co-ops, and community food centres;
- Food-related home occupations/industries;
- Small and medium scaled food retailers; and,
- Local market space (i.e., a farmer's market).

b) Incorporate urban agriculture as part of a neighbourhood's character and open space system, while also providing a transitional use between the natural and built environments.

Farmer's markets support access to fresh produce.

Urban agriculture supports sustainable local food production

Community gardens support local food production

Tree Planting

A central challenge in the urban environment is the incorporation of trees. Trees are an invaluable piece of green infrastructure, acting as urban lungs. The proper selection and detailing of tree plantings will contribute to their long term health and success. Providing for increased soil areas, native and drought tolerant species, and giving trees ample space to grow will increase their chances of reaching maturity, and increase their lifespan. Trees provide a range of benefits, including providing shade, reducing ambient temperatures, mitigating the urban heat island effect, and contributing to the character of the space and surrounding neighbourhood. A variety of strategies will increase the likelihood of success of planting canopy trees.

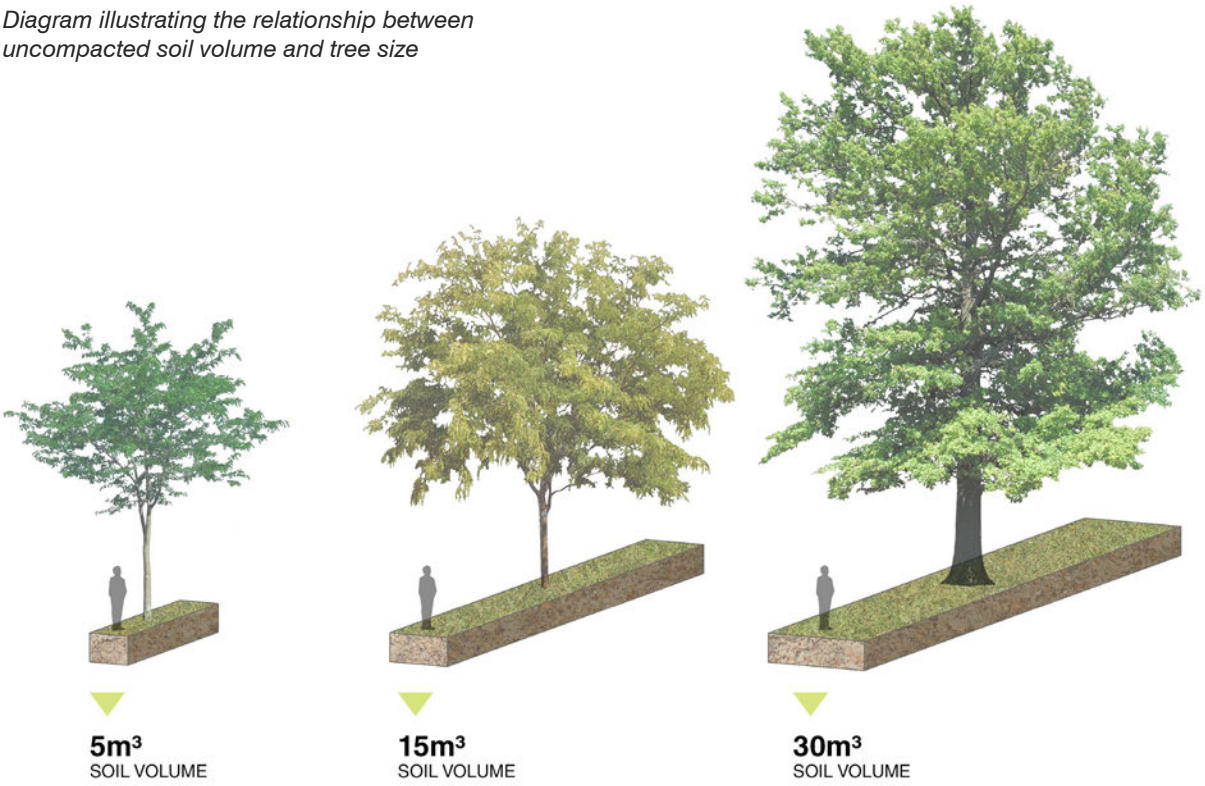
Tree planting along Front Street in the West Don Lands, Toronto

Guidelines

a) Preserve and incorporate existing trees wherever possible and ensure existing trees are healthy and protected from impacts during construction and development.

b) Street trees require a minimum 20 m^3 uncompacted soil volume per tree, within a maximum of 1.4 m from the surface. For trees to reach their full potential, a minimum 30 m^3 soil per tree should be targeted. Measures must also be taken to mitigate soil compaction and to ensure healthy soils for the trees.

Diagram illustrating the relationship between uncompacted soil volume and tree size



c) Where minimum uncompacted soil volumes cannot be achieved, use structural soil cells (a system of structural plastic units). Structural soils and structural sands can be used to connect adjacent soil volumes.

Soil cell installation at Lincoln Center New York (Source: DeepRoot on Flickr.com)

d) Where space is limited and trees must be placed in a hardscape condition to maximize at grade pedestrian space, use of open planters with curbs is preferred. When using tree grates, size the openings to allow tree trunks to grow.

Trees in hard paving with connected soil volumes

e) Plant a diverse selection of resilient canopy tree species, with preference given to native species.

f) Provide species diversity across Glendale to promote resilience in the ecosystem.

g) Use trees to establish a comfortable microclimate (e.g. – provide wind ad noise reduction and cooling effects).

Trees contribute to comfortable microclimates

h) Ensure tree planting areas have adequate drainage, such as through the provision of sub-drains.

i) Implement a watering program during the establishment period of the tree (approximately 5 years). Provide watering in times of drought.

j) Avoid conflicts with underground and above grade infrastructure and utilities by arranging reviews with Town stakeholder agencies early in the development process, recognizing that there are capital costs and time involved in locating utilities.

k) Understand and identify capital costs to provide appropriate growing conditions.

l) Understand and identify operating/ maintenance costs, including a tree placement program.

Stewardship and Education

For new development in Glendale actions should be taken to support homeowner environmental education and stewardship through development agreements with developers.

Guidelines

a) Create a Homebuyer's Environmental Instruction Guide that explains the unique environmental aspects of the development and special maintenance considerations.

b) Include an owner/tenant education package at the time of purchase or rental regarding activities to improve energy and water efficiency, access to transit, location of recycling station, etc. Coordinate with existing Town and Region information.

c) Include environmental builder specifications in all subcontracts.

d) Produce detailed sales and promotion materials that feature conservation aspects of the development.

e) Develop subdivision covenants that establish ground rules for the maintenance of shared open lands and individual lots.

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