Tremaine Dundas Secondary Plan







June 11, 2018

This page has been left blank intentionally



Table of Contents

1	Basis for the Plan	5
	1.1.Organization of the Plan	5
	1.2.Purpose and Intent of Plan	6
	1.3.Physical Context	
	1.4.Policy Context	
	1.4.1.Provincial Policy Statement 2014 (PPS)	
	1.4.2.Places to Grow-Growth Plan for Greater Golden Horseshoe	
	1.4.3.The Greenbelt Plan	11
	1.4.4.Parkway Belt West Plan	11
	1.4.5.Halton Region Official Plan	12
	1.4.6.City of Burlington Official Plan	13
	1.4.7.North Oakville West Secondary Plan	
	1.4.8.Conservation Halton	15
	1.4.9.Other Studies and Background	15
	1.4.10.Opportunities and Challenges	
2	Community Vision and Principles	17
2		
	2.1.Community Principles	20
	2.1.2 Sustainable Building and Community Design	
	2.1.3 Servicing and Infrastructure	
	2.1.5 Servicing and Innastructure	22
	2.1.4 Land Use 2.1.5 Connectivity	22
	2.1.6 Urban Design	23
	2.1.7 Financial Impact	
	2.1.8 Population and Employment Targets	
3	Community Structure	23
	3.1.Natural Heritage System (NHS)	
	3.2.Open Space	
	3.3.Residential Area	24
	3.4.Employment Area	24
	3.5.Mixed Use Activity Area	24
	3.6.Service Area	24
4	Community Land Use	
	4.1.General Land Use Built Form Policies	
	4.2.Residential - Medium Density Land Use	
	4.3.Mixed Use Corridor - General Land Use	
	4.4. Mixed Use Corridor - Employment Land Use	
	4.5.Business Corridor Land Use	
	4.6.Natural Heritage System Land Use	
	4.7.Open Space Land Use	35
	4.8.Infrastructure and Transportation Corridor Land Use	35

5	Community Environmental Strategy Policies	
	5.1.Natural Heritage System	
	5.2.Natural Heritage Securement	
	5.3.Hazardous Lands and Watercourses	41
	5.4. Stormwater Management	
	5.5.Tree Preservation and Planting	43
	5.6.Site Grading and Erosion Control	44
	5.7.De-Watering / Well Decommissioning Policies	45
	5.8.Review Process	45
6	Community Cultural Heritage Policies	45
Ŭ	6.1.Development Form	45
	6.2.Cultural Heritage Resources	46
	6.3.Archaeological Resources	46
7	Community Transportation and Utilities	
	7.1.Transportation Policies	
	7.1.1 Transportation Network	
	7.1.1 Transportation Network 7.1.2 Streets	
	7.1.3 Pedestrian Linkages	51
	7.1.4 Parking 7.1.5 Traffic Calming	51
	7.1.5 Traffic Calming	53
	7.1.6 Utilities	54
8	Community Water and Wastewater Servicing.	54
0		
9	Community Parks and Trails	55
	9.1.Parks	55
	9.2. Trails	55
10	Community Phasing	
	10.1.Phasing Strategy	57
	10.2.Phasing Implementation	57
		50
11	Urban Design	
12	Implementation	58
13	Plan Monitoring and Review	59
14	Secondary Dian Schedules	50
14	Secondary Plan Schedules	
	14.1.Schedule A - Community Structure Plan	
	14.2.Schedule B - Community Land Use Plan	
	14.3.Schedule C - Transportation Network Plan	
Annon	14.4.Schedule D - Community Phasing Areas Plan Idix A – Tremaine Dundas Community Urban Design Guidelines	
Thheir	A = A = A = A = A = A = A = A = A = A =	

1. Basis for the Plan

As one of Burlington's last undeveloped significant Greenfield areas, the Tremaine Dundas Secondary Plan area presents an important opportunity to create a distinct and special community in Burlington.

These lands are characterized by the presence of *significant natural heritage features and areas*, potential access to future *higher order transit* routes and important remnants of the area's built and cultural heritage. The Tremaine Dundas Secondary Plan recognizes this opportunity and provides the policy basis for an integrated and *sustainable* approach to community design that strikes an appropriate balance between protection, maintenance and enhancement of and access to the natural heritage system.

With increased interest in mixed-use development and *sustainability*, the City of Burlington has undertaken a secondary planning exercise for the Tremaine Dundas area that will guide future development within the area in a manner that supports and enhances the natural heritage system while integrating a mix of *employment*, mixed-use and residential in a way that supports community connectivity within and outside the area.

1.1 Organization of the Plan

This Secondary Plan is comprised of explanatory text as well as policies. The explanatory text, found in Sections 1, 2 and 3, sets the context for the Secondary Plan policies. The Secondary Plan is organized into four sections:

- Sections 1, 2 and 3 provides the basis and context for the Secondary Plan (Sections 1 and 2 are not considered to be a formal part of the plan and is provided for explanatory purposes only); Alteration of the content in Section 1, Section 2 and/or any graphics, images or footnotes are not subject to an Official Plan Amendment.
- Sections 4-13 contains the formal Secondary Plan;
- Section 14 contains the Schedules for the Plan; and,
- Section 15 provides descriptions of relevant definitions.

Included footnotes, graphics and images are for explanatory purposes only.

Note: Staff may make refinements and/or minor alterations to policies of Section 4-13 and the Schedules in Section 14 as part of the incorporation into the New Official Plan document.

1.2. Purpose and Intent of Plan

The purpose of this secondary plan is to provide a planning framework that will guide future development in the Tremaine Dundas area. The plan responds to the recommendations of previous studies completed by the *City* and Region. In particular, the plan develops the area with a mixed use option to accommodate residential, *employment* and mixed uses while ensuring that identified natural heritage features throughout the area are protected, connected/linked and, where possible, enhanced.

The secondary plan provides a long-term vision for growth and sets out official plan policies and urban *design guidelines* for the area. The Plan provides direction on future land uses, urban design, environmental/natural heritage features, transportation and *infrastructure*, parks and trails, land use compatibility and phasing. The secondary plan will provide guidance to landowners, developers and *City* staff with respect to future development proposals, natural heritage maintenance and enhancements and future municipal *infrastructure* projects.

1.3. Physical Context

The Tremaine Dundas Secondary Plan Area is bounded on the north-west by Highway 407, on the south-east by Dundas Street, on the south by Bronte Creek valley and on the easterly boundary by Tremaine Road which is the municipal boundary between the City of Burlington and Town of Oakville, as illustrated on Figure 1: Location Map.

The entire Tremaine Dundas Secondary Plan area is approximately 133 hectares although the Bronte Creek valleylands and Natural Heritage System encompass a significant

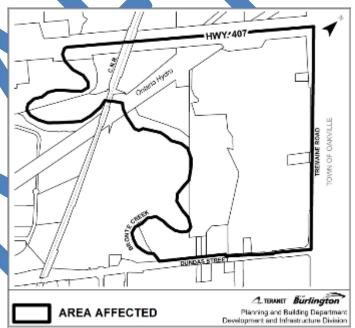


Figure 1 – Location Map

portion of the overall area. The future Tremaine Dundas Secondary Plan community is comprised of a developable area being approximately 50 hectares excluding the natural heritage system. The *existing uses* located within the area include a school bus terminal on Dundas Street and two single detached residences (the Crook-Norton House and a separate property fronting Tremaine Road), the existing Highway 407 right of way, a functional hydro corridor, CN railway line as well as the extensive Bronte Creek *valleylands* that set the natural environment character for the remainder of the secondary plan area.

The Bronte Creek *valleylands* fall within the limits of the Provincial Greenbelt Plan Area and are protected as part of the Greenbelt Natural Heritage System. The lands are rolling in nature and incorporate other *significant* natural heritage features such as *significant* woodlands located outside of the Provincial Greenbelt Area which are protected as part of the Regional and *City* Natural Heritage System.

The surrounding uses include a mix of *employment*, residential and open space areas. The open space areas associated with the Bronte Creek *valleylands* form a natural link and interconnection with Bronte Creek Provincial Park on the south side of Dundas Street and, at a larger scale, with the Niagara Escarpment to the north. The 682-hectare Bronte Creek Provincial Park is a significant natural heritage asset within the *City* and Region, extending from Dundas Street south to the Queen Elizabeth Way/Highway 403.

Beyond the Bronte Creek *valleylands* to the west is a large industrial site that supports the operations of Meridian Brick Canada (Forterra). Farther south and west are residential uses located within Orchard community (Dundas Street south to Upper Middle Road, between Appleby Line and the Bronte Creek). While the Orchard community is largely built-out with low-rise residential, a new mid-rise apartment complex is being developed along the south side of Dundas Street east of

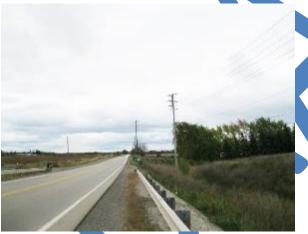


Figure 2 – South on Tremaine Road



Figure 3 – View across Highway 407

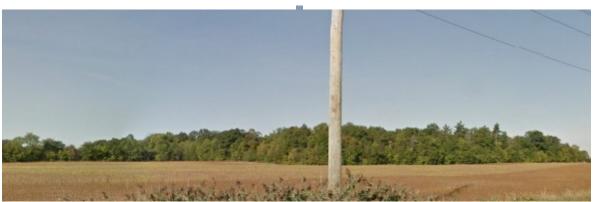


Figure 4 – View of Central Woodlands from Tremaine Road

Sutton Drive.

The area north of Highway 407 is protected countryside under the provincial Greenbelt Plan and is predominantly agricultural in nature. A shale quarry operation is located on the north side of the Highway 407 and the Hydro One corridor fronting on Tremaine Road.

Tremaine Road marks the shared municipal boundary with the Town of Oakville. The lands east of Tremaine Road are located within the Town of Oakville and are designated *employment* lands in the North Oakville West Secondary Plan. Currently, there is a single detached dwelling with the remainder of the lands being used for agricultural purposes.



Figure 5 – Bus Terminal on Dundas Street

1.4 Policy Context

The Tremaine Dundas area is located entirely within the boundary of the City of Burlington's Urban Planning Area. As such, the primary applicable Provincial policies are the Provincial Policy Statement 2014 and Growth Plan, with the Greenbelt Plan applicable to the area of the Bronte Creek valley lands. In addition, a portion of the secondary plan area is also subject to the Parkway Belt West Plan.

1.4.1 Provincial Policy Statement 2014 (PPS)

The Provincial Policy Statement 2014 provides policy direction on matters of provincial interest related to land use planning and development with respect

to building viable, healthy and strong communities. Municipal Official Plans and amendments must be consistent with the PPS.

The PPS policy promotes efficient use of land within Settlement Areas with a mix of residential, *employment*, recreational and open space, increased accessibility for all members of the community, protection of resources of provincial interest, public health and safety as well as the *natural environment* in order to support strong communities, a clean and healthy environment and economic growth for the long term. The PPS promotes the creation of healthy, active communities by planning public streets, spaces and facilities to be safe and meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity.

The PPS speaks to how long term *ecological function* and biodiversity of natural heritage systems *should* be maintained, restored and enhanced where possible with *linkages* between and among natural heritage features. It also speaks to the protection of quantity and quality of water. The Secondary Plan policies utilize a coordinated approach to ensuring the maintenance and enhancement of extensive natural heritage systems located within the area that include *significant woodlands*, valleylands and wetlands and the protection of water quantity and quality.

Additional policies speak to utilizing a coordinated, integrated and comprehensive approach for planning matters that cross municipal boundaries and with other agencies and boards. The Secondary Plan policies have been developed in consultation with Halton Region, Conservation Halton, Town of Oakville and the Ministry of Natural Resources and Forestry. The PPS stipulates that *sensitive land uses* should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants and minimize risk to public health and safety. The Secondary Plan policies are based on this coordinated approach and incorporate policies to manage and protect the natural heritage features and ensure sensitive uses are adequately buffered and/or separated to mitigate any adverse effects.

Additional PPS policies speak to the conserving of *significant built heritage resources* and *cultural heritage resources landscapes*. The Secondary Plan incorporates policies that allow for preservation of *heritage attributes* and features that provide links between the City's history and the future community.

The Tremaine Dundas Secondary Plan also incorporates policy direction that supports energy conservation and efficiency and opportunities for the use of renewable energy and/or alternative energy systems.

The Secondary Plan is consistent with the PPS by establishing policies that promote the development of a compact *complete community* with an appropriate mix and range of housing and *employment* opportunities within the urban boundary that help the *City* in meeting the current and long-term needs of the community. The Secondary Plan incorporates complete street policies that promote active transportation, community connectivity and an enhanced pedestrian realm. The Secondary Plan incorporates policies that maintain, buffer and enhance the extensive natural heritage systems located within the secondary plan area.

1.4.2 Places to Grow-Growth Plan for Greater Golden Horseshoe

The Growth Plan for the Greater Golden Horseshoe (GGH), prepared under the Places to Grow Act, 2017, provides a framework for implementing stronger communities and managing growth across the Greater Golden Horseshoe. The Growth Plan directs future growth in the province and *encourages* intensification and a full range of housing accommodation and jobs within existing urban areas. The Growth Plan states that "*new development taking place in "designated greenfield" areas will be planned, designated, zoned and designed in a manner that:*

- a) supports the achievement of complete communities;
- b) supports active transportation;
- c) encourages the integration and sustained viability of transit services."¹

The developable area within the secondary plan area is identified as "designated greenfield." The recent changes to the Growth Plan defines "designated greenfield" areas and stipulates that an upper tier or single tier municipality will be planned to achieve a minimum density target that is not less than 50 people and jobs combined per hectare² which is to be measured over the entire "designated greenfield" area of each upper tier. In Halton Region, the minimum density target identified in the approved Regional Official Plan will continue to apply until a municipal comprehensive review is approved and in affect at which time the minimum density target will not be less than 60 people and jobs combined per hectare. The Growth Plan methodology for calculating greenfield densities is the gross density excluding *natural heritage features and areas*, rights-of-way for electrical transmission lines and/or energy transmission pipelines, freeways and railways.

¹Section 2.2.7.1 Places to Grow-Growth Plan for the Greater Golden Horseshoe, July 1, 2017.

² Section 2.2.7.2 Places to Grow-Growth Plan for the Greater Golden Horseshoe, July 1, 2017

The Tremaine Dundas Secondary Plan will provide for efficient use of land and *infrastructure* with a mix of residential types (single detached, townhouse, apartment) and *employment* uses (business corridor, mixed-use *employment*, mixed-use commercial) to ensure the development of a *complete community*. In addition, recreational/open space is provided within parkland, connecting trail systems throughout the Plan area and through the protection, maintenance and enhancement of natural heritage systems and *linkages*. Overall, accessibility for all persons and impacts of climate change have been considered and will be further taken into account via engineering designs for stormwater management, street cross-sections, pedestrian trails and via site plan control applications for the future *development* and at building permit application.

1.4.3 The Greenbelt Plan

The Greenbelt Plan provides protection to the ecological and agricultural features and functions across the Greater Golden Horseshoe and restricts where urbanization can occur. The Greenbelt Plan designates the Bronte Creek *valleylands* within the Tremaine Dundas Secondary Plan as part of the Greenbelt Natural Heritage System.

The Greenbelt Natural Heritage System and Water Resource System policies protect natural heritage features that support biodiversity and overall ecological integrity and ground and surface water features and their associated functions. These areas are to be managed as a connected and integrated system given their interrelationships. The Tremaine Dundas Secondary Plan identifies the boundaries of the Natural Heritage System located within the secondary plan area and establishes policies that protect and enhance *Key Natural Features* and the connectivity and *linkages* between these *Key Natural Features* and broader Regional Natural Heritage System. *Key Natural Features* in the secondary plan area include significant habitat of endangered species and threatened species, fish habitat, wetlands, significant valleylands, significant woodlands, and significant wildlife habitat. Key hydrologic features include permanent and intermittent streams and *wetlands*.

1.4.4 Parkway Belt West Plan

The Parkway Belt West Plan was implemented in 1978 for the purposes of creating a multi-purpose *utility* corridor, urban separator and linked open space system and deemed a *development* plan under the Ontario Planning and Development Act, 1994. The Parkway Belt West Plan seeks to link urban areas by providing space for the movement of people, goods, energy and information via future linear facilities (such as highways, electric power transmission corridors, and pipelines) in addition to providing a system of open space and recreational facilities linked with other communities.

1.4.5 Halton Region Official Plan

The Region's Official Plan designates that Tremaine Dundas Secondary Plan area as "Urban Area" and "Natural Heritage System (Greenbelt Plan)" and is also identified as *Designated Greenfield* and Parkway Belt West Plan, The Regional Plan population forecasts for residential growth within the City of Burlington is from 171,000 in 2006 to 193,000 in 2031. For *employment* growth, the City is forecast to have 88,000 jobs in 2006 and 106,000 in 2031. To achieve these numbers, the Region's Plan sets out a target of 8,300 residential units between 2015 and 2031 within the built boundary and a minimum density target in *Designated Greenfield Areas* for the City of Burlington of 45 people and jobs per hectare. Given recent updates to Provincial policies and plans, the Region will be reviewing their current policies for conformity with the new policies and plans.

A full range of residential, commercial and *industrial* uses are generally permitted within the Urban Areas, subject to the availability of adequate municipal services and *infrastructure*. The Regional Official Plan promotes higher density *development* in Urban Areas and supports growth that contributes to the overall goal of providing a sufficient supply of housing that is affordable, accessible, and adequate and suited to the needs of a variety of households and income groups in Halton.

The Region's Official Plan also promotes the development of *complete communities* including a diverse mix of land uses, a range of local *employment* opportunities and housing types to support vibrant neighbourhoods, high quality public spaces with urban *design guidelines* and easy access to local stores and services via integrated transit and active transportation and automobile.

The Region's Official Plan requires that Area-Specific Plans (Section 77 (5)) and policies be incorporated by amendment into the Local Official Plan and *shall* demonstrate the protection of Regional Natural Heritage system and public health and safety within hazard lands, population, housing and *employment* targets, land use patterns, consideration of land use compatibility, how the density will contribute to achieving minimum greenfield density targets, phasing, stormwater management, provision of *infrastructure* and utilities among other things.

The Region's Plan states (Section 85(5)) that Local Municipalities and the building and development industry are *encouraged* to develop innovative housing designs that stress flexibility, mix of *compatible* land uses, good environmental practices, universal design, public safety, cost efficiency, affordability and energy and natural resource conservation while maintaining sound engineering and planning principles.

The Plan outlines the objectives of the Natural Heritage System (Section 114.1) which include: to protect and enhance the diversity of fauna and flora, *ecosystems*, plant communities and significant landforms in Halton, to contribute to a continuous natural open space system, provide continuous corridors and inter-connections between *Key Natural Features* and their *ecological functions*, *preserve* the aesthetic character of natural features and to provide opportunities, where appropriate, for passive outdoor recreational activities.

The Region's Official Plan (Section 116.1) stipulates that the boundaries of the Regional Natural Heritage System may be refined with additions, deletions and/or boundary adjustments through a subwatershed study undertaken in context of Area Specific Plan or an individual Environmental Impact Assessment or similar study all of which must be accepted by the Region. Once such refinements are approved through a process under the Planning Act, these refinements are in effect on the date of such approval.

1.4.6 City of Burlington Official Plan, (1994)

The City of Burlington Official Plan contains overarching principles, objectives and policies that guide and promote *sustainable development* in the City, such as the protection of Natural Heritage Systems, *watershed* planning and support for *Healthy Communities* that are efficient, safe, accessible, affordable and energy efficient.

The City's Official Plan designates the Tremaine Dundas Secondary Plan area as "Land Use Designation to be Determined" with the inclusion of specific policies for this area under Section 8.4. The policies stipulate that an overall development concept *shall* be established as part of a planning study to be completed by the City of Burlington, Town of Oakville and the Region of Halton. The land use policies *shall* be directed by the findings of the planning study which will form the basis of the Secondary Plan, the adoption of the Secondary Plan and amendment to this Plan.

The objective of undertaking Secondary Plan studies is to allow the orderly and planned development of areas, communities and neighbourhoods and the protection of Natural Heritage Systems. The Official Plan provides guidance for the development of Secondary Plans under Part VI, Section 5.2 that stipulates issues *shall* be addressed at a level of detail sufficient to guide development such as a statement of objectives for the physical development including environmental, social and economic matters; policies for the provision of housing, *employment, institutional* and commercial land uses; transportation network as it relates to the study area, the community's needs and transportation objectives; local leisure needs; unique environmental area and natural features; direction on heritage *conservation* and urban design; in addition to strategies for implementation and monitoring and assessment of phasing.

1.4.7 North Oakville West Secondary Plan

The north-easterly boundary of the Tremaine Dundas Secondary Plan is the Town of Oakville. The North Oakville West Secondary Plan (NOWSP) designates the lands east of the secondary plan area as an *Employment* District which envisions prestige *industrial* uses. The *Employment* District is meant to protect and establish *employment* generating opportunities that include a full range of *industrial*, *office* and *service commercial* uses. Service commercial and retail uses serving the *employment* area are to be clustered at intersections with arterial roads.

The NOWSP policies stipulate that light *industrial* uses east of Tremaine Road will provide a range and scale of uses designed to reflect a visible location on and exposure to highway corridors and major roads. As such, it is anticipated that these light *industrial* type *employment* uses will provide a minimum buffer of at least 80 to 120 metres between Tremaine Road and any potential heavier *industrial* uses located in Oakville. The range of permitted uses permitted on the east side of Tremaine Road includes:

- light industrial operations, warehousing, distribution;
- business and professional offices;
- service establishments such as restaurants, hotels, banquet halls and financial institutions;
- public uses, *institutional uses* including places of worship, vocational schools, recreational and sport facilities;
- amusement uses; automobile related uses including gas stations and ancillary retail sales of products produced, assembled and/or repaired on the premises;
- research and development; information processing, call centres and similar uses; and computer based services including design studios.

Heavier type *employment* uses are permitted within the central area of the NOWSP area not fronting on the Highway 407 or arterial roads. These uses may include: general *industrial* operations within enclosed buildings including manufacturing, assembling, processing, fabricating, repairing, warehousing, distribution, and wholesaling; outside storage, and outside operations incidental to industrial operations; transportation terminal, works yard and outside storage yard or a waste processing or transfer station subject to a zoning by-law amendment.

General industrial uses, transportation terminal and waste processing and transfer stations are permitted interior to the *employment* district and are not

permitted in areas abutting major arterial roads or Highway 407 and would require a site specific zoning by-law amendment and would have to meet the Town's By-law 2010-035 with respect to major emissions and air quality.

1.4.8 Conservation Halton

Conservation Halton regulates *wetlands*, *watercourses* and hazard lands and activities within and adjacent to these features. Ontario Regulation 162/06 specifies that permission is required from Conservation Halton to develop in *valleylands*, *wetlands*, hazardous lands and the required setbacks to these features. Permission is also required to alter a river, creek, stream or *watercourse* or interfere with a wetland. In addition to its regulatory responsibilities under the Conservation Authorities Act, Conservation Halton provides an advisory role to municipalities through the planning process. Conservation Halton also has a Memorandum of Understanding with the Region of Halton to provide technical input on a range of natural heritage and water resource-related matters that may be affected by planning and *development* proposals.

1.4.9 Other Studies and Background

Tremaine and Dundas Secondary Plan Background and Options Report

The *Tremaine and Dundas Secondary Plan Background and Options Report* was completed by Macaulay Shiomi Howson Ltd. in September 2009. The report was received by Burlington Council in September 2011 and again in November 2012, with City Council approving the recommendation to support a mixed use development within the area. The Secondary Plan that has been developed is generally based on the mixed use concept plan that Council had supported.

Halton Region Best Planning Estimates

The Region's Best Planning Estimates (BPE) were approved by Regional Council in July 2011 to provide population, household and *employment* projections to 2031 which then form the basis for Water, Wastewater and Transportation Master Plan updates and reviews, as well as the preparation of the Development Charge By-law. The BPE are a planning tool used to identify where and when *development* is expected to take place across the Region. This was done using specific "traffic zones" within each municipality to determine the approximate population and jobs in each zone. The draft Tremaine Dundas Secondary Plan area is identified as Zone 399 which was assigned 374 residential units and 814 jobs by 2031, reflecting a mixed use development of both residential and *employment* uses.

Tremaine and Dundas Secondary Plan Subwatershed Study

The Tremaine and Dundas Secondary Plan Subwatershed Study (TDSPSS) was completed by Aecom in 2009. The study was undertaken to provide a

land use and management strategy to assist in setting policy direction for future development within the Subwatershed area. The 2009 TDSPSS has been updated in 2018 to reflect changes to the applicable environmental legislation, policies and guidelines. This Secondary Plan has been developed concurrently with the Subwatershed study update which has informed the proposed land use concept. The May 2018 update to the TDSPSS requires approval by Conservation Halton and Halton Region prior to approval of the secondary plan official plan amendment.

Transportation Impact Study

An inter-municipal transportation study was completed in September 2009. The study was initiated to evaluate the land use scenarios developed in the *Tremaine and Dundas Secondary Plan Background and Options Report* from a transportation perspective. The 2009 study assessed the transportation outcomes of each scenario and identified *infrastructure* improvements to support the proposed land use scenarios. The Secondary Plan transportation study was updated in September 2017 and June 2018 in support of the preparation of this Secondary Plan. The final Transportation Study recommendations have been reflected in the Secondary Plan.

Environmental Noise Feasibility Report/Human Health Risk Assessment

An Environmental Noise Feasibility Report and Human Health Risk Assessment were completed in July 2015 and October 2016. These reports were to evaluate noise and air quality impacts and evaluate appropriate mitigation measures required with respect to the effect of transportation noise sources, existing stationary sources as well as future stationary sources within the Town of Oakville, such as setback distances, building orientation, requirements for submission of a detailed noise study as a condition of site plan control, etc. The recommendations of the report have been considered and reflected in the Secondary Plan which includes policies requiring detailed noise feasibility studies with future planning applications.

1.4.10 Opportunities and Challenges

The Tremaine Dundas Secondary Plan addresses a range of site-specific opportunities and challenges, including:

- Balancing new development with the need to *preserve*, maintain and enhance the Natural Heritage System and the creation of new parks and open spaces;
- Achieving an appropriate density and land use mix that can create an integrated, pedestrian-oriented and mixed-use community for people to live, work and play;

- Integrating elements of *sustainable development* and community design throughout the community, including opportunities to implement *sustainable infrastructure*, enhanced landscaping, and other *sustainability* measures;
- Establishing a safe and efficient transportation network that facilitates travel for all modes, with an emphasize on supporting active transportation and access to existing and planned transit services;
- Ensuring compatibility between residential and *employment* uses within an urban and mixed-use context;
- Protecting, conserving and encouraging the appropriate re-use of important cultural heritage assets within the Secondary Plan area;
- Aligning new development with required servicing capacity and *infrastructure*;
- Directing development to areas outside of hazardous lands and ensuring development does not create new or aggravate existing natural hazards.

2 Community Vision and Principles

The community vision and principles described below are responsive to the City of Burlington's September 2011 Council direction "to incorporate environmentally *sustainable* neighbourhood development and building policies into the Secondary Plan as criteria for the approval of residential subdivision, site plan and *employment* lands development within the area." The community vision also responds to Burlington City Council direction from November 2012 to prepare a secondary plan for the Tremaine Dundas Secondary Plan community that is based in principle on Concept A, Concept B or a hybrid of the two concepts, as described in staff report PB-82-12. These Council decisions have informed the approach of the Secondary Plan.

The community vision and principles represent expressions of general intent and are not to be interpreted as direct statements of planning policy. They form a basis for the policies contained in this Secondary Plan.

The overall vision for the Tremaine Dundas Secondary Plan is to incorporate significant energy saving and renewable energy initiatives to be a leading edge, environmentally responsible mixed-use community that promotes a healthy, sustainable, green lifestyle through an integrated approach. The secondary plan includes a mix of land uses providing a range of opportunities for residential and *employment* development in addition to parks and open space that maximize the *natural environment*.

The Tremaine Dundas Secondary Plan includes *medium density residential uses* in the range of 26 to 75 units per hectare and higher density residential uses in appropriate mixed-use locations. The Urban Design Guidelines found in Appendix A will be used to provide guidance regarding built form within the private and *public realm* including design, orientation, height, massing, landscaping, sustainable features and other design matters.

The policies provide for a variety of housing types within the future Tremaine Dundas Secondary Plan community including single detached, townhouse and apartment units. This provides residential unit options at a various levels of affordability and for a variety of different life stages creating a more socially cohesive community. The Secondary Plan *encourages* the development of affordable housing by means of permitting secondary dwelling units as of right and innovative housing designs and residential development that consider more modest amenities, materials and finishes and examination of innovative building design. The Secondary Plan encourages housing designs that facilitate subsequent conversion to provide additional housing units that support the Region in achieving their affordable housing targets. The Secondary Plan also includes policies that permit assisted and special needs housing and retirement homes and long-term care facilities that support residents moving within the community as housing and lifestyle preferences change.

Development of residential uses in the future Tremaine Dundas Secondary Plan community will be phased to ensure that residential growth is aligned with available servicing and *infrastructure*. The phasing provides for the area to the south and east of the Central Woodland to be developed first accommodating approximately 400 residential units and the business corridor and mixed-uses in accordance with the Halton Region Best Planning Estimates. The residential lands in subsequent phases would generally be located north and east of the Central Woodland and are planned to accommodate future medium-density residential development.

Employment opportunities are provided along Tremaine Road and Dundas Street and will include a mix of office, light industrial, institutional and a limited range of retail commercial, service commercial and recreational uses. Employment uses along Tremaine Road will be planned and designed to achieve land use compatibility with future *employment* uses east of Tremaine Road within the Town of Oakville, as well as internal compatibility with residential uses in the future Tremaine Dundas Secondary Plan community. The business corridor uses provide adequate distance separation between future *employment* uses within the Town of Oakville protecting future employment uses within the Town and buffering future residential uses. Compatibility will be achieved through appropriate building location, design and/or orientation and engineering for new development within the vicinity of Tremaine Road and as recommended in the Environmental Noise Study development will be subject to Site Plan Control. Further, as a condition of site plan approval, a detailed noise study and report shall be submitted addressing compliance with NPC-300 and land use compatibility relative to environmental noise. Any new sensitive land uses within 70 metres of the employment designation will be required to submit a land use

compatibility assessment to ensure mitigation measures are established prior to the development of the residential lands.

The mixed-use *employment* block situated along Tremaine Road in close proximity to Dundas Street is the preferred location for a prestige *office* site as it features good visibility and helps create an activity node along the Dundas Street corridor. However, it is recognized that the City wide focus for new *office* development will be within Intensification Areas and Mobility Hubs in other key areas of the City. Within this designation, commercial and retail uses will be *encouraged* as ground floor uses integrated with complimentary uses such as *office* activities on the site as part of mixed use developments. Overall, the *employment* uses within the business corridor and mixed-use *employment* designations will target between 816-900 jobs at full build-out³.

The mixed-use general block situated along Dundas Street is envisioned as a vibrant gathering and focal point within the community with a mix of retail and service commercial uses and high density residential uses. The mix of uses will serve the day to day needs of residents and employees within the community and surrounding area.

The Natural Heritage System is an integral part of the Tremaine Dundas Secondary Plan which provides a framework for protecting, maintaining and enhancing the system. The Natural Heritage System will be complemented with the well defined open space and parkland system within the future Tremaine Dundas Secondary Plan community. Connections to and/or between components of the Natural Heritage System, parklands, and the existing heritage house in the southern portion of the community will contribute to making the Tremaine Dundas Secondary Plan a community that is integrated with its local cultural and natural heritage.

The secondary plan identifies and outlines opportunities for incorporation of a *sustainable* and innovative approach to built form and *infrastructure*. The first phase of development is anticipated to include conventional stormwater management ponds with supplementary Low Impact Development measures within the business corridor and mixed use areas. Low Impact Development best practices may include minimizing site grading and preserving existing drainage paths by locating roads to avoid changes in topography, reduction of impervious surfaces, connection of green spaces and use of green roofs, permeable pavements and bio-retention areas as well as rainwater capture for re-use. The implementation of Low Impact Development techniques can:

 (a) provide enhanced stormwater management to improve water quality and erosion control in conjunction with conventional stormwater management *infrastructure*, and;

³ Based on space per employee assumptions in Watson+Associates 2014 Development Charges Background Study; 50% of the ground floor GFA within the Mixed Use buildings contains commercial/retail uses; buildings for the Business Corridor blocks assumed at 1 storey.

(b) complement the *ecological functions* of the Natural Heritage System by providing on-site infiltration and additional naturalized areas and help to set a high standard for stormwater management in the City of Burlington.

The Tremaine Dundas Secondary Plan area is also well-placed to take advantage of and support potential future transit improvements along Dundas Street. A higherdensity *employment* node will be located at the intersection of Tremaine Road and Dundas Street and along Tremaine Road given its high visibility location at the intersection. Furthermore, the north end of the secondary plan area preserves lands for a potential future Transitway along the Highway 407. These future public and private investments will build on the Tremaine Dundas Secondary Plan area as a complete and integrated community.

The secondary plan promotes an internal grid street network that supports a high degree of connectivity and allows accessible and convenient movement of people, cyclist and vehicles within the community as well as integrating them into the community's surrounding context. This network, in keeping with the objective of promoting connectivity, includes a "Special Street" proposed through the *linkage* between the central woodland and the Bronte Creek valleylands that will be designed in consultation with Conservation Halton and Halton Region to maintain the safe movement of wildlife between the Central Woodland and the Bronte Creek valley corridor.

The secondary plan policies will realize Council's direction to create an environmentally *sustainable*, mixed-use community.

2.1 Community Sustainability Principles

The Tremaine Dundas Secondary Plan incorporates the following planning principles as outlined:

- Natural Environment
- Built Environment
- Servicing and Infrastructure
- Land Use
- Connectivity
- Urban Design
- Financial Impact

2.1.1 Natural Environment

The *natural environment* will guide the design of the secondary plan and the future Tremaine Dundas Secondary Plan community. The Natural Heritage System is connected and buffered to protect and enhance its features, functions and biodiversity in an urban context. In addition, streets, open spaces, stormwater management and development blocks in addition to built form will be designed to minimize their impact on the Natural Heritage System, *linkages* and, where possible, contribute to its enhancement. The secondary plan provides accessible and integrated natural areas and components that will *preserve* the natural heritage system and open space thus improving the quality of the community's living environment.

2.1.2 Built Environment

The Secondary Plan promotes and supports healthy and active lifestyles through the development of complete neighbourhoods, active transportation *infrastructure*, recreational facilities and parks.

All development will be *required* to adopt a *compact urban form* that *encourages* active transportation, makes district energy more viable and provides a mix of uses to ensure the future needs of residents and employees are met. The City encourages partnerships with other communities, agencies, provincial and federal levels of government to achieve the City's goal of being net *carbon-neutral*.

All development *shall* reflect the human scale, promote a sense of community and connect and integrate urban development and the natural environment. Residents shall have the ability to easily access necessities and amenities such as housing, employment, locally produced food, retail, green space, education, recreation and arts and culture.

Sustainable design features are also included within the Tremaine Dundas Community Urban Design Guidelines.

Green infrastructure and design elements *shall* be incorporated into the design of the Tremaine Dundas community in order to promote carbon reduction and water conservation and cleanliness. The incorporation of *Green Infrastructure* and design into the Tremaine Dundas Secondary Plan community will reduce overall carbon footprint and long-term energy costs, decrease environmental impacts while increasing environmental character and the *public realm*.

Certain green design elements are more appropriate in specific uses and building forms than others, like LEED v4 for Neighbourhood Development, LEED Net Zero or other Green Building Standards that will reduce carbon, protect water resources and reduce waste, such as:

- Energy Star and R-2000 Certification for homes.
- Shared green space, in the form of green roof, rain garden, green wall, or other green element that is suitable to the built form of townhouses units.
- Green roofs and/or cool roofs utilized within the Mixed Use Corridor built form.

2.1.3 Servicing and Infrastructure

The future Tremaine Dundas Secondary Plan community will be *encouraged* to incorporate best practices in water, wastewater and stormwater management. The servicing *infrastructure* will be environmentally *sustainable* and functionally integrated with the community design. Development will follow the Region's Water and Wastewater Master Plan and have regard for neighbouring Area Servicing Plans that have been approved for development. Servicing and *Infrastructure* will be phased in accordance with development phasing policies, Section 10, and mapping.

2.1.4 Land Use

The Tremaine Dundas Secondary Plan supports an integrated land use approach that includes residential, *employment* and mixed-use development contributing to meeting the population and growth distribution and the *designated greenfield* area density target established in the Regional Official Plan. The Tremaine Dundas Community Urban Design Guidelines provide further guidance with respect to form and pattern of residential and employment development.

(a)

Rè

ential Du Convent

Residential development in the future Tremaine Dundas Secondary Plan community will incorporate a range of housing types such as single detached, townhouse and apartment units to provide housing suitable for different stages of life that contribute towards the achievement of Provincial growth targets, facilitates affordability and create additional housing options for future residents. The Secondary Plan provides for a variety of built form typologies including secondary dwelling units and *encourages* the preservation and reuse of heritage buildings where appropriate.

(b) Employment Development

The Secondary Plan provides *employment* opportunities that consist of *office*, retail/commercial and light industrial uses which *encourage* closer live work proximity and are compatible land uses with the residential and mixed-use areas of the community, with natural

heritage objectives, and with planned land uses in the neighbouring Town of Oakville lands.

2.1.5 Connectivity

The Secondary Plan identifies that the future Tremaine Dundas community will have a well-connected grid-like street network. This network optimizes efficient and safe pedestrian, transit and cycling connections to all parts of the community and surrounding networks ensuring all members of community have transportation options. The Secondary Plan also identifies a system of parks and trails that will be developed to complement the future Tremaine Dundas Secondary Plan community's street system and provide an appropriate level of access to the Natural Heritage System. Active *streetscapes* and trail networks will contribute to community interaction.

2.1.6 Urban Design

Design Guidelines have been developed for the Tremaine Dundas Secondary Plan area. All buildings, *streetscapes*, open spaces, pedestrian connections and *infrastructure* are *encouraged* to demonstrate excellence in architectural, landscape and open space design and *sustainability*. High quality design enhances both private and *public realm* that create attractive, functional spaces and a strong sense of place. The urban design *shall* enhance and draw on the natural features and character of the area to establish an identifiable neighbourhood identity.

2.1.7 Financial Impact

Innovative servicing initiatives *shall* be implemented that create associated benefits but minimize ongoing maintenance costs to the City thus minimizing impacts on the taxpayer.

1.8 Population and Employment Targets

Future development within the Tremaine Dundas Secondary Plan will contribute to meeting the Provincial growth targets for Halton Region (Burlington area) and will meet the current allocated 45 people and jobs per hectare. At full build out, the future Tremaine Dundas Secondary Plan community is expected to have a total population of between 1945 and 2030 people and provide approximately 816-900 employment opportunities.

3 Community Structure

A general Community Structure is established for the Tremaine Dundas Secondary Plan on Schedule A showing in broad terms the spatial orientation and relationship of various major land use activity areas. Each element of the Community Structure has a unique function within the Tremaine Dundas Secondary Plan, as described below.

3.1 Natural Heritage System (NHS)

The Natural Heritage System encompasses a significant portion of the secondary plan area which includes the Greenbelt Natural Heritage System (Greenbelt NHS) and the Regional/City Natural Heritage System (Regional/City NHS).

3.2 Open Space

The Open Space area is located adjacent to the Greenbelt Natural Heritage System and will only permit naturalized areas, and non-intensive recreational uses.

3.3 Residential Area

The Residential Areas include a diversity of housing choices and typologies within the medium-density range including an existing cultural heritage use.

3.4 Employment Area

The *Employment* Areas will provide for light industrial, retail/commercial and *office employment* uses along Tremaine Road. Jobs located in the *Employment* Lands *shall* contribute to the achievement of overall *employment* targets for the Tremaine Dundas Secondary Plan area.

3.5 Mixed Use Activity Area

The Mixed Use Activity Area will permit a mix of uses including a wide range of *office*, commercial and/or retail uses and residential uses provided at a high-density range within close proximity to Tremaine Road and Dundas Street. Jobs located in the Mixed Use Activity Area *shall* contribute to the achievement of overall *employment* targets for the Tremaine Dundas Secondary Plan area.

3.6 Service Area

The Service Area identifies lands for the provision of service and *utility* uses including hydro uses, transportation uses related to Highway 407 and uses related to the planned Highway 407 Transitway.

3.7 Park Area

The Park area will provide a valuable resource to the community that enhances the existing natural environment and open space within the community and provides for a range of active and passive recreational uses for both residents and employees of the community.

4 Community Land Use

This section identifies the land use policies to be implemented in the Tremaine Dundas Secondary Plan for land use designations illustrated in Schedule B and discussed in the sections below.

4.1

4.1 General Land Use Policies

- **4.1.1** These policies *shall* apply to all built forms and land uses, unless otherwise indicated in this plan.
- **4.1.2** Development within the Tremaine Dundas Secondary Plan community *shall* aim to create a *sustainable*, mixed-use community and will contribute towards the achievement of the *City*'s *Sustainability* principles and objectives.
- **4.1.3** Tremaine Dundas Community Urban Design Guidelines *shall* be utilized to review form and pattern of development within the public and private realm in areas such as low impact development, sustainable design, built form, cultural heritage, streetscape and active transportation.
- 4.1.4 The Natural Heritage System (NHS) *shall* be integrated with the future Tremaine Dundas Community through the development of appropriate access points and trails, connections between the NHS and community parks and open space, and integration of trees and naturalized areas (where appropriate) outside of the NHS.
- 4.1.5 Development of the future Tremaine Dundas Secondary Plan community *shall* create a walkable community where *active transportation* choices are *encouraged* through street designs that make walking, cycling and transit attractive and safe.
- 4.1.6 Stormwater management ponds *shall* be designed as key focal/visual features within the community in addition to functional objectives related to water quantity and water quality control and *shall* be designed as part of the overall pedestrian and trail system with view points and interpretive signage.
 - Buildings *shall* be located and massed to create a consistent community identity experience and be consistent with a *human scale*.
- **4.1.8** Buildings *shall* be located, where feasible and practical, to support existing or proposed linkages and natural connections to facilitate pedestrian use within the community.
- **4.1.9** The City *encourages* increased energy efficiency of buildings, reduced stormwater run-off, use of green roofs and/or low albedo roofing materials and strategically placed *trees* to provide shade for buildings and to minimize the *urban heat island effect*.
- **4.1.10** New development within the public and private realm *shall* incorporate generous landscaping and *tree* planting, with the intent

15

of increasing the extent of the canopy cover, promoting interception of rainfall and maximizing evapotranspiration.

- **4.1.11** New public service facilities *shall* be designed in accordance with Accessibility for Ontarians with Disabilities Act (AODA) requirements and other applicable Provincial legislation.
- **4.1.12** Buildings *shall* incorporate minimum <u>required</u> sustainable design measures in accordance with the City's Sustainable Building and Development Guidelines, Section 4.1 of the Secondary Plan and the Tremaine Dundas Community Urban Design Guidelines.

A target of 50% of all development *shall* incorporate <u>additional</u> innovative design features promoting carbon reduction, energy efficiency, water conservation and environmental sustainability. These include Low Impact Development, "green" building technologies such as green or cool roofs, rainwater harvesting for re-use, grey water recycling, renewable energy sources, bioswales, permeable pavement, LEED design, Net-Zero ready buildings, etc. as identified through the plan of subdivision process.

- **4.1.13** The Business Corridor and Mixed Use *Employment* area are *encouraged* to incorporate *Eco-Industrial* practices, through the incorporation of measures such as locally generated and shared energy sources, sharing waste heat, etc.
- **4.1.14** New residential development will be *encouraged* to incorporate *sustainable* building and design measures, such as renewable energy sources, front yard rain gardens, high reflectivity paving and roofing materials, permeable pavement, and on-site rainwater retention strategies.
 - New residential development energy demand *should* achieve an EnerGuide 85 energy efficiency rating for residential buildings.
- **4.1.16** To facilitate the establishment of a *sustainable* environment and discourage idling of vehicles, *accessory drive-throughs shall* not be permitted within the Tremaine Dundas Community. These uses are permitted and located in close proximity to the community.
- **4.1.17** *Urban agriculture* is *encouraged* throughout the secondary plan area as part of the community's character and open space system. Intense forms of *urban agriculture* may also be considered within the Business Corridor allowing for locally grown foods.
- **4.1.18** Sustainable building materials and design treatments are *encouraged* throughout the secondary plan area.

- **4.1.19** Adequate vehicular and bicycle parking and storage facilities for residents, employees and visitors *shall* be provided in each of the land use areas to *encourage active transportation* and effective use of transit. Other transportation measures, such as electric vehicle charging stations, dedicated priority parking spaces for carpool, ride sharing, and ultra low emission vehicles in parking areas of multi-storey residential, Mixed Use and Business Corridor, *shall* be considered and incorporated into future development where feasible.
- **4.1.20** An updated Noise and Vibration Study will be required as part of any proposed development application to assess all transportation and stationary noise sources in the vicinity of the application.
- **4.1.21** The development of any proposed employment use within 70 metres of *existing or proposed sensitive land uses* must submit a Land Use Compatibility Assessment to identify potential issues and prescribe appropriate mitigation measures such as building setbacks, orientation, landscaping, etc.
- 4.1.22 Any new *sensitive land uses* within 70 meters of an employment designation *shall* submit a Land Use Compatibility Assessment to identify potential issues and prescribe appropriate mitigation measures. Mitigation measures could include but are not limited to a range of site layout and building design strategies, including such as building setbacks, orientation, landscaping and materiality, as well as acoustic barriers intended to attenuate noise, such as fencing, landscaping or vegetation. If required, environmental warning clauses can be issued and included in Offers of Purchase and Sale, lease/rental agreements or condominium declarations. Specific mitigation measures that may be required will be finalized through the site plan stage.
 - *Trees* and shrubs *shall* be planted adjacent to buildings and in strategic areas to reduce energy consumption by providing shading, climate protection, and windbreaks.
- **4.1.24** The use of permeable surfaces is *encouraged* to improve ground water recharge and reduce storm water runoff.
- **4.1.25** The Tremaine Dundas Secondary Plan community is *encouraged* to optimize the efficient use of land by incorporating best practices and innovative stormwater management techniques throughout the design of the community to the greatest extent reasonably possible.

4.2 Residential - Medium Density Land Use

The Residential – Medium Density area is located, as shown on Schedule B.

- **4.2.1** The Residential Medium Density area *shall* occur by plan of subdivision with provisions to allow for phasing of the development.
- **4.2.2** In Residential Medium Density areas, permitted uses include single detached dwellings, semi-detached dwellings, townhouses, duplexes and stacked townhomes.
- **4.2.3** A maximum of one accessory/secondary dwelling unit is permitted within the following principle dwelling forms; single detached, semi-detached and townhouse dwelling units in accordance with the implementing zoning by-law.
- 4.2.4 In addition to 4.2.2, limited, small-scale retail uses that serve the day to day needs of residents within close proximity *may* be permitted at grade within a building containing residential uses in the storeys above, subject to being *compatible* with the main residential use and respectful of the *physical character* of the neighbourhood. Such uses will be guided by appropriate standards in the Zoning By-law including, but not limited to parking, access and amenity areas.
- 4.2.5

4.2.6

The *City encourages* the development of more affordable housing through permitting and encouraging secondary dwelling units as of right and the innovative housing designs and residential development that consider more modest amenities, materials and finishes and an examination of innovative building design. The City encourages housing designs that facilitate subsequent conversion to provide additional housing units that support the Region in achieving their affordable housing targets.

Development applications, greater than 100 residential units, shall be required to provide a Housing Impact Statement identifying a commitment to achieve the Region's housing targets of affordable, assisted and/or special needs housing units, identifying how estimated rents and/or initial sales prices of the development are at or below the affordable housing thresholds by type and information regarding the number of affordable housing units per phase of development.

4.2.7 Buildings in the Residential – Medium Density *shall* be a maximum of two storeys in height within 70 metres from an employment use to ensure adequate land use compatibility with the Business Corridor designation and lands located within the Town of Oakville.

Any increase in maximum height within the above noted 70 metres from an employment use *shall* require a site specific Zoning By-law amendment and an air quality assessment to assess potential future industrial source characteristics and all industrial and traffic impacts from the surrounding areas.

- **4.2.8** In Residential Medium Density areas, a density ranging between 26 and 75 units per net hectare *shall* be permitted.
- **4.2.9** Buildings in Residential Medium Density areas *shall* provide appropriate transitions to adjacent development through the use of setbacks, height and siting of buildings.
- **4.2.10** Parks *shall* be located within the Residential Medium Density area in accordance with Section 9 of this Secondary Plan.
- 4.2.11 The development of residential uses within the Residential Medium Density area will be encouraged to occur concurrently with employment areas within the Tremaine Dundas Secondary Plan. If residential uses within the 70 metres of an employment designation are developed prior to the employment uses within the Business Corridor and/or Mixed Use Corridor – Employment blocks, appropriate interim noise mitigation measures and buffering shall be implemented to ensure compatibility with potential employment uses on the Town of Oakville lands in accordance with the recommendations of a Land Use Compatibility Assessment noted in Section 2 of this Plan.

4.3 Mixed Use Corridor - General Land Use

The Mixed Use Corridor - General area is located along Dundas Street in proximity to Tremaine Road, as shown on Schedule B.

- **4.3.1** Permitted uses in Mixed Use Corridor General areas include retail, *service commercial* and personal service-uses which serve the day to day needs of employees and residents; financial institutions and services; *office* uses; *farmers market*; community facilities, including assisted and special needs housing; senior's housing and long-term care facilities; apartments, townhouses, stacked townhouses and back-to-back townhouses.
- **4.3.2** Residential uses *shall* not be permitted on the ground floor of buildings abutting a major arterial or abutting a local collector within 90 metres of Dundas Street.

- **4.3.3** The floor to ceiling height of the ground floor shall be a minimum of 4.5 metres in height to accommodate commercial uses within mixed use buildings.
- **4.3.4** Notwithstanding Section 4.3.1 and 4.3.2, townhouse dwelling units *may* only be permitted as a component of an overall mixed-use development provided the long term objectives of the Mixed Use Corridor General are not compromised in terms of function of the Mixed Use Corridor General as a vibrant gathering and focal point within the community, mix of retail and service commercial uses, overall site design, building form or intensity.
- **4.3.5** The *City encourages* the development of more affordable housing through innovative housing designs that consider such matters as more modest amenities, materials and finishes to facilitate affordability.
- **4.3.6** A maximum floor area ratio of development of **2.0.1** is regarded as appropriate built form in the Mixed Use Corridor General area. An increase to this floor area ratio may occur through a site-specific Zoning By-law amendment or minor variance application without the need for an amendment to this Plan provided that the objectives of the Mixed Use Corridor-General designation are maintained.
- 4.3.7 The Mixed Use Corridor General area *shall* be a minimum of two storeys and a maximum of six storey buildings; although buildings fronting onto a major arterial street *should* be a minimum of three storeys. Buildings greater than four storeys *shall* require appropriate site specific air quality assessments at site plan stage. All buildings located along Dundas Street that contain sensitive uses will require appropriate noise studies at the site plan stage.
 - Development in the Mixed Use Corridor General areas *shall* be in a *compact built form*, be of *human scale*, pedestrian-oriented and supportive of transit use to achieve a vibrant, active and walkable built environment.
- **4.3.9** Buildings in the Mixed Use Corridor General area *shall* provide appropriate transitions to adjacent development in Residential Medium Density areas through the use of setbacks, stepbacks and building siting.
- **4.3.10** Street-related and service retail uses *shall* be located in Mixed Use Corridor General areas to promote walkability and the provision of day to day services within the community.
- **4.3.11** Loading, servicing and delivery functions in Mixed Use Corridor General areas *shall* be consolidated to the extent practical and

shall generally be located to the rear of buildings and screened from public view.

4.3.12 Lands within the Mixed Use Corridor - General area may be used for stormwater management including Low Impact Development strategies and naturalization with emphasis on creating more open/green space between buildings.

4.4 Mixed Use Corridor - Employment Land Use

The Mixed Use Corridor - *Employment* area is located along Tremaine Road, in proximity to Dundas Street as shown on Schedule B.

- 4.4.1 Development in the Mixed Use Corridor *Employment* block along the west side of Tremaine Road *shall* achieve land use compatibility with future *employment* uses within the North Oakville West Secondary Plan area along the east side of Tremaine Road, as well as with residential uses located west of the Mixed Use Corridor *Employment* lands within the secondary plan area.
- **4.4.2** The Mixed Use Corridor *Employment* area permits the following uses: *industrial* uses and a broad range of *office* uses, with an emphasis on prestige *office* and *industrial* uses; a limited range of retail, *service commercial* and personal service uses which serve the day to day needs of employees; financial institutions and services; *farmers market*; entertainment, recreation and other community facilities, such as libraries.
 - Development in the Mixed Use Corridor *Employment* area *shall* be a minimum of two storeys and a maximum six storeys, although buildings located in close proximity to the intersection of Tremaine Road and Dundas Street *should* be a minimum of three storeys. Any increase in maximum height *shall* require a site specific Zoning By-law amendment and an air quality assessment to assess potential existing and future industrial and traffic impacts from the surrounding areas.
- **4.4.4** Outside storage *shall* not be permitted in the Mixed Use Corridor *Employment* area in the Tremaine Dundas Secondary Plan.
- **4.4.5** Loading, servicing and delivery functions in the Mixed Use Corridor *Employment* area areas *shall* be consolidated to the extent practical and *shall* generally be located to the rear of buildings and screened from public view.
- **4.4.6** Lands within the Mixed Use Corridor *Employment* area may be used for stormwater management including Low Impact

Development and naturalization with emphasis on creating more open/green space between buildings.

4.5 Business Corridor Land Use

The Business Corridor area located along Tremaine Road, as shown on Schedule B is to be a minimum of 70 - 90 m in depth to provide sufficient distance of sensitive uses within the interior of the community from future potential industrial uses located within the Town of Oakville.

- 4.5.1 Development in the Business Corridor blocks along the west side of Tremaine Road *shall* achieve land use compatibility with future *employment* uses within the North Oakville West Secondary Plan area along the east side of Tremaine Road, as well as with residential, mixed uses and Natural Heritage System areas located to the west within the secondary plan area.
- **4.5.2** The Business Corridor area will permit a broad range of light industrial, ancillary commercial, recreational and office uses. Potential permitted uses *shall* include, but not be limited to, light industrial uses involving assembling, fabricating, manufacturing, warehousing and distribution uses, service trades, a range of office uses, ancillary commercial uses, limited recreational type uses, *institutional uses*, places of worship and private educational facilities.
- 4.5.3

Development in the Business Corridor area promotes the use of alternate modes of transportation: walking, cycling or transit and *encourages* transportation demand techniques such as electric vehicle charging stations, car-pooling, other forms of ride-sharing with incentives such as dedicated priority parking spaces for carpool, ride sharing, and ultra low emission vehicles through a minimum percentage of total parking spaces.

- **4.5.4** Development in the Business Corridor area that abuts residential areas will include adequate landscaping, fencing, noise abatement or other measures to achieve compatibility between uses.
- **4.5.5** With the exception of the stormwater management ponds along Tremaine Road, development within the Business Corridor *shall* create a continuous street frontage that complements the anticipated Town of Oakville Tremaine Road frontage and helps address potential noise compatibility concerns with future *employment* uses in the Town of Oakville.
- **4.5.6** Development in the Business Corridor blocks *shall* be a minimum of two storeys in height, or the equivalent height of a two storey

building, to provide screening and buffering for residential development to the west.

- **4.5.7** Outside storage may be permitted in the Business Corridor area provided adequate screening and buffering is provided which will be ensured through the site plan control process.
- **4.5.8** Loading, servicing and delivery functions in Business Corridor areas *shall* be consolidated to the extent practical, be generally located at the rear/side of buildings and be screened from public view.
- **4.5.9** Lands within the Business Corridor area may be used for stormwater management, including Low Impact Development features and naturalization, and for *enhancements to Key Natural Features* as part of the NHS.
- **4.5.10** Developments in the Business Corridor are *encouraged* to incorporate visible *green infrastructure* technology into facades and signage, such as photovoltaic cells, recycled materials, and green roofs.
- **4.5.11** Screening of unattractive features is *encouraged* through landscaping measures.

4.6 Natural Heritage System Land Use

Lands that are part of the City's Natural Heritage System (NHS) focus on the interconnections between natural heritage features and its integration with the larger *ecosystem* while balancing its protection and enhancement with the need for sustainable community development. Additional policies for the Natural Heritage System are found in Section 5.1

- 4.6.1 The NHS consists of lands that are part of the Greenbelt NHS and the Region/City NHS.
- **4.6.2** The secondary plan, Subwatershed Study (2009) and the Subwatershed Study Update (May, 2018) acknowledge that a *watercourse* (14W-17Cb) located in the south-east corner of the secondary plan area may require future re-location that *shall* be subject to any necessary approvals required from the Federal government, Provincial government, Halton Region and/or Conservation Halton.
- **4.6.3** No development and *site alteration* is permitted within *significant* wetlands, significant habitat of endangered and threatened species and fish habitat except in accordance with Provincial and Federal legislation or regulations.

- **4.6.4** No development is permitted within components of the NHS unless it has been demonstrated through an Environmental Impact Assessment or equivalent study that there will be no *negative impacts* on the *Natural Heritage System or its ecological or* hydrologic *functions*. Permitted uses include:
 - (a) Existing uses;
 - (b) Non-intensive recreation uses such as nature viewing and pedestrian trails;
 - (c) Forest, wildlife and fisheries management;
 - (d) Archaeological activities;
 - (e) Essential transportation and *utility* facilities;
 - (f) Essential *watershed* management and flood and erosion control projects either carried out or supervised by a *public authority*.
- **4.6.5** No development is permitted within Hazard Lands and other areas regulated by Conservation Halton unless permission has been issued by Conservation Halton.
- **4.6.6** The following uses may be permitted within *linkages* and enhancements to Natural Heritage *key features linkages*:
 - 1. Trails, in accordance with Section 9.2, consistent with the *City*'s Community Trails Strategy as reviewed and approved by the *City*, which *shall*;
 - (a) not be located within hazardous lands;
 - (b) use native species to naturalize trail edges;
 - (c) be the minimum width required;
 - (d) be designed with suitable surfacing material compatible with their surroundings, as per the *City*'s Community Trails Strategy; and
 - (e) be designed and located to help to manage access to the NHS by minimizing impacts to *key features*.
 - 2. Compatible Low Impact Development *infrastructure* necessary to convey flows, as reviewed and approved by the *City*, the Region of Halton and Conservation Halton;
 - 3. A "Special Street", as shown on Schedule B, C and D, reviewed and designed in consultation with the *City*, Conservation Halton and Halton Region to provide necessary connectivity within the

community and to facilitate safe movement of wildlife through the *linkage* (as described in Section 7.1.2, o).

- **4.6.7** The following uses may be permitted within *buffers*:
 - a) Trails, as set out in 4.6.6.1, and reviewed and approved by the *City*, the Region of Halton and Conservation Halton;
 - b) Compatible Low Impact Development *infrastructure* necessary to convey flows, as reviewed and approved by the *City*, the Region of Halton and Conservation Halton.

4.7 Open Space Land Use

Open Space is located between a portion of the Greenbelt NHS and the Residential area, as shown on the Schedules as Major Parks and Open Space.

- 4.7.1 The following uses are permitted:
 - (a) naturalized areas;

(b) non-intensive recreational uses, such as trails.

4.7.2 Open space areas *shall* provide maintenance and emergency access in areas without frontage on a municipal right-of-way where required and/or requested by the *City*.

4.8 Infrastructure and Transportation Corridor Land Use

- **4.8.1** The *Infrastructure* and Transportation Corridor will allow for the provision of service and *utility* uses including the distribution of hydro uses, highway-related uses and uses related to the planned Highway 407 Transitway.
- **4.8.2** No development, aside from development related to transportation or hydro *infrastructure*, is permitted in the Service area.

5 Community Environmental Strategy Policies

The environmental strategy for the Tremaine Dundas Secondary Plan includes protection, maintenance and enhancement of natural heritage through an integrated systems based approach. Beyond setting aside areas for inclusion in the Natural Heritage System, the environmental strategy will also support design strategies and *encourage* management approaches that will help ensure protection, maintenance and enhancement of the Natural Heritage System in an urban context. These *may* include a carefully designed trail network; support for invasive species control and naturalization within components of the Natural Heritage System as well as open spaces not intended for active uses; integration of innovative low impact development stormwater management techniques; and the application of *green infrastructure* and building design principles.

An Environmental Implementation Report / Functional Servicing Study (EIR/FSS) *shall* be required prior to consideration of any applications proposing development or any *site alteration* to the satisfaction of the *City*, Halton Region, Conservation Halton and the Town of Oakville.

The Tremaine and Dundas Secondary Plan Subwatershed Study Update, May 2018 (TDSPSS Update, May 2018) includes Terms of Reference for an Environmental Implementation Report/Functional Servicing Study (EIR/FSS), Appendix D, that outlines the required components of the study that will be a requirement of a development application. The EIR/FSS *shall* meet the requirement for an Environmental Impact Assessment (EIA) with respect to other Official Plan policies. Recommendations regarding the Natural Heritage System identified in the EIR/FSS, where appropriate and not accommodated in this Secondary Plan, will be considered in the context of the review of the development application. Should there be any significant delay to the submission of development applications or *site alterations*, a further update to the TDSPSS Update and/or the EIR/FSS *may* be necessary.

The Tremaine Dundas Secondary Plan Natural Heritage System policies are meant to provide direction for natural heritage features and interconnections as part of an extended integrated system beyond the Secondary Plan area through protection and enhancement of the Natural Heritage System. Implementation of Management Strategy Recommendations contained in the TDSPSS Update, May 2018 *shall* be part of any future development or *site alteration* within the subwatershed study area.

The Tremaine Dundas Secondary Plan establishes policies to manage hazardous lands and water resources; *encourage* energy generation from renewable sources and community energy solutions such as micro grids, district energy, and energy storage by encouraging *sustainable* and energy efficient buildings; and addressing air quality impacts through land use compatibility policies.

5.1 Natural Heritage System

In support of this Secondary Plan, the 2009 Tremaine and Dundas Secondary Plan Subwatershed Study (TDSPSS) was updated to reflect changes to the applicable environmental legislation, policies and guidelines. The policies below have been developed in conjunction with the TDSPSS Update, May 2018.

- **5.1.1** The Natural Heritage System (NHS) in the Tremaine Dundas Secondary Plan will be comprised of the Greenbelt Natural Heritage System (Greenbelt NHS) and the Regional/City Natural Heritage System (Regional/City NHS).
 - (a) The NHS represents a systems approach to protecting and enhancing natural and ecological features and functions.
 - (b) The Greenbelt NHS in the secondary plan area is comprised of *Key Natural Features* and Vegetation Protection Zones that have been identified in accordance with the Greenbelt Plan policies and applicable Regional Official Plan policies.
 - (c) The Regional/City NHS within the secondary plan area is scientifically structured on the basis of the following components:
 - i. Key Natural Features, which include:
 - a. habitat of endangered and threatened species;
 - b. significant wetlands;
 - c. significant coastal wetlands:
 - d. significant woodlands;
 - e. significant valleylands;
 - f. significant wildlife habitat:
 - g. significant areas of natural and scientific interest; and
 h. fish habitat;

enhancements to the Key Natural Features;

linkages;

iii.

buffers;

watercourses that are within a Conservation Halton Regulation Limit or that provide a *linkage* to a *wetland* or a *significant woodland*; and

- vi. *wetlands* other than those considered *significant* under Subsection 5.1.1 (i) of this Plan.
- **5.1.2** *Key Natural Features*, as defined in the TDSPSS Update, 2018 are natural heritage and hydrological features described in the Region/City Official Plan and are shown in Schedule B of this Plan.
- **5.1.3** *Linkages* are intended to provide connectivity and functional interrelationships supporting a range of community and ecosystem

processes among *Key Natural Features* to enable plants and animals to move between these features over multiple generations and support surface and groundwater features and *hydrologic functions*.

- 5.1.4 The limits of the regionally significant *wetland and significant woodlands,* as shown in Schedule B are based on staking with the Region and Conservation Halton. The location and extent of the *linkages,* as shown in Schedule B, are based on field verification with the Region and refinements through the TDSPSS Update, May 2018 process.
- **5.1.5** Within the Greenbelt NHS, Vegetation Protection Zones (VPZ) are established at a minimum 30 metre in width within the Greenbelt boundary in accordance with the Greenbelt Plan, Halton Region Official Plan and:
 - (a) are identified and illustrated in the TDSPSS Update, May 2018;
 - (b) are to be of sufficient size to protect a Key Natural Feature and its functions from the impacts of a proposed change (i.e. development or site alteration);
 - (c) are to be comprised of self-sustaining naturalized vegetation;
 - (d) are able to accommodate trails; and
 - (e) naturalized stormwater management systems may be permitted within the VPZ of significant valleylands provided they are located a minimum of 30 metres from the river or stream and they are located outside of the VPZ of any other key natural heritage feature or key hydrologic feature.
- 5.1.6 In the Region/City NHS:
 - (a) buffers to Key Natural Features and watercourses identified in Schedule B shall be designed to protect the features and their ecological functions by mitigating impacts of the proposed development or site alteration; and

- (b) the extent of the *buffer* and activities that may be permitted within it *shall* be determined based on the sensitivity and significance of the *Key Natural Features* and *watercourses* and their contribution to the long term *ecological functions* of the Region/City NHS, and consideration for the nature and scope of the proposed adjacent land use or *site alteration*.
- 5.1.7 The boundaries of the NHS as identified in the TDSPSS Update, May 2018, *may* be refined with additions, deletions and/or boundary adjustments through a future Environmental Impact Assessment (EIA) or similar study based on terms of reference accepted by the City, Region and where appropriate Conservation Halton provided that the study or EIA has been accepted by the City, the Region and where appropriate Conservation Halton. Once such refinements have been approved through an approval process under <u>The Planning Act</u>, these refinements *shall* be in effect on the date of such approval. The Region and City will maintain mapping showing such refinements and incorporate them as part of the City's statutory review of the Official Plan.
- **5.1.8** Buffer refinements for the Tremaine Dundas Secondary Plan are to be implemented through the EIA or the equivalent being an EIR/FSS using a science-based approach by:
 - (a) recognizing the precautionary and required *buffers* applied to *Key Natural Features* through the TDSPSS Update, May 2018;
 - (b) following an approach that is consistent with the policies of the Regional Official Plan (s.116.1) and the findings of the Ontario Municipal Board in its decision dated April 6, 2016, PL111358 and with the risk-based approach and steps as described in the Region's Buffer Refinement Framework to be used as the foundation for the refinement process;
 - (c) recognizing *Key Natural Feature* and *watercourse* sensitivity and significance and their contribution to the long term *ecological functions* of the Regional/*City* Natural Heritage System;
 - (d) considering the nature and scope of the proposed adjacent land use, and any measures intended to improve and enhance *buffer* function.
- 5.1.9 Enhancements to Key Natural Features, as defined in Regional Official Plan, are either ecologically supporting areas adjacent to individual Key Natural Features or measures internal to individual

1.12

Key Natural Features that increase the ecological resilience and function of those *Key Natural Features*.

- (a) Potential opportunities for enhancements within Key Natural Features, buffers and *linkages* have been suggested in the TDSPSS Update, May2018.
- (b) Such opportunities are to be further explored through the EIR/FSS, including potential additional opportunities for enhancements, both within and adjacent to *Key Natural Features*.
- (c) The final enhancements, as identified through the EIR/FSS process, are to be identified and described in a Restoration and Enhancement Plan prepared in consultation with the *City*, Halton Region and Conservation Halton and implemented through the plan of subdivision.
- 5.1.10 Notwithstanding policy 5.1.5, where Key Natural Features within the Greenbelt NHS are less than 30 m from the Greenbelt boundary, a *Vegetative Protection Zone* has been applied within the Greenbelt boundary and an additional precautionary buffer has been added outside the Greenbelt boundary such that the total width is 30 m. The extent to which the additional precautionary buffer, if any, is required will be determined through the EIR/FSS process.
- **5.1.11** The Natural Heritage System *may* also support trails (in accordance with Regional Official Plan Policies 118(6) and 139.3.7(3)) provided it can be demonstrated that these elements do not result in a *negative impact* on the Natural Heritage System and is consistent with policies under Section 4.6.6 and 9.2.
 - The *watercourse* (14W-17Cb) located at the southeast corner of the Tremaine Dundas Secondary Plan area *may* be relocated provided its ecological and *hydrologic functions* are maintained within a natural channel design, an appropriate buffer is provided to the *watercourse* (as per the TDSPSS Update, May 2018), and the required permits and approvals are obtained from Federal government, Provincial government and Conservation Halton. Should the watercourse be relocated, the adjacent land use designation *shall* be deemed to apply.
- **5.1.13** A hedgerow located on the westerly side of the central woodland connecting to the Bronte Creek valleylands has been identified by the Ministry of Natural Resources and Forestry (MNRF) as potential species at risk habitat for endangered bats that will require further study through the EIR/FSS. The hedgerow has been identified on Schedule B as an "Area for Future Study".

5.1.14 The designation of land as part of the Natural Heritage System does not imply that those lands are available or open to public use.

5.2 Natural Heritage Securement

- **5.2.1** The *City* supports the *securement* of lands within the Natural Heritage System to protect them for present and future generations. These lands *may* also provide important passive recreational opportunities, where appropriate.
- 5.2.2 If a *development application* involves lands in or adjacent to the Natural Heritage System and/or hazardous lands, the *City shall* seek, through the development approval process, the dedication of those lands and associated *buffer* lands to the *City*, Conservation Halton, another *public authority* or a private conservation organization. These lands *shall* not be considered for the purpose of parkland dedication. If any such land remains in private ownership it *shall* be protected by zoning, agreement and/or easement to protect the ecologic and hazard functions of such land.
- **5.2.3** The *City shall* collaborate with the Region, Conservation Halton, other public authorities and private conservation organizations in the voluntary *securement* of lands within the Natural Heritage System. The *City* will consider all options for the voluntary *securement* of lands within the Natural Heritage System, outlined in the *City* Official Plan.

5.3 Hazardous Lands and Watercourses

- **5.3.1** The delineation and regulation of hazardous lands and hazardous sites is administered by the Conservation Authority. Conservation Halton regulates lands in or adjacent to river or stream valleys (including flooding and erosion hazards) and other hazardous lands. The approximate regulated limit of these lands and the location of watercourses are illustrated on Schedule B. The limits of the hazardous lands *may* be updated from time to time. Conservation Halton must be contacted to confirm regulation mapping and permit requirements.
 - **5.3.2** The Zoning By-law *shall* prohibit new construction and the expansion or replacement of existing non-conforming uses within *hazardous lands* and *hazardous sites,* except where specifically permitted by Conservation Halton.
 - **5.3.3** New development adjacent to *watercourses shall* be subject to a setback from *stable top of bank*, the flooding hazard and *meander belt allowance* associated with the *watercourse*. The location of the

stable top of bank, regulatory floodplain and meander belt width *shall* be determined by studies to the satisfaction of Conservation Halton in conjunction with the *City*.

5.3.4 The *City encourages* the protection and enhancement of *watercourses* and naturalization planting and reforestation of creek blocks, streams and *valleylands* and their buffer areas where appropriate.

5.4 Stormwater Management

- 5.4.1 The Tremaine Dundas Secondary Plan includes polices to allow both conventional and innovative stormwater management techniques, including Low Impact Development and best management practices and strategies. Stormwater management facilities shall provide enhanced stormwater management to improve water quality and provide erosion control.
- **5.4.2** The stormwater management facilities *shall* be located to facilitate maximum benefit and top performance of their essential functions and will be subject to approval by Conservation Halton and the *City*.
- 5.4.3 The locations of the stormwater management facilities are illustrated on Schedule B. The final locations, size and number of stormwater management facilities will be determined through a detailed analysis in the EIR/FSS, without amendment to the Secondary Plan.

The proportion of novel versus more traditional approaches in the final stormwater management strategy *shall* be subject to the approval of the *City* and Conservation Halton.

The use of a number of on-site best management practices is anticipated within the Business and Mixed-Use Corridors. This includes the use of on-site storage facilities to retain stormwater onsite via above and below ground techniques (ie. Parking lot storage, roof-top storage, cisterns and small storage ponds). Clean stormwater *may* be used for irrigation and process water purposes. Facilities that promote groundwater recharge such as permeable pavements, bio-retention areas and grassed swales are also anticipated to enhance the quality of stormwater discharges.

5.4.6 The range of low impact development strategies considered *may* include strategies at the lot level by incorporating source control measures through draft plan of subdivision. Where appropriate, these strategies *may* include a variety of practices such as: reduced lot grades, increased topsoil depths, roof drainage control

or storage, infiltration galleries, porous pavements, rain gardens and grassed swales, infiltration measures to improve groundwater recharge including infiltration basins and trenches, exfiltration pipes or porous pavement, and oil/grit separators as identified within the Tremaine Dundas Community Urban Design Guidelines.

- **5.4.7** Low impact development strategies are strongly *encouraged* to promote green living and as an environmentally friendly and a responsible development practice. Selection of final LID strategies *shall* consider minimizing ongoing maintenance costs to the City.
- **5.4.8** Built form in the Tremaine Dundas Secondary Plan area *shall* minimize impervious surfaces to the greatest extent possible.
- 5.4.9 Enhanced landscaping and grading of stormwater management facilities located along Tremaine Road should be incorporated into the detailed design, subject to review and approval by Conservation Halton and the City.
- 5.4.10 Headwater Drainage Features that originate from the Central Woodland, identified as 14W-17Ab and 14W-17Bc on Figure 3.1.1A of the TDSPSS Update, May 2018, are considered contributing Redside Dace habitat by the Ministry of Natural Resources and Forestry (MNRF). As directed by MNRF, contributing flows that originate from the Central Woodland under pre-development conditions are to be conveyed to occupied Redside Dace habitat downstream. Replicating the hydrologic function of 14W-17Ab and 14W-17Bc *may* be achieved through capture in a clean water pipe. Discharge location(s) are to be determined in consultation with Conservation Halton but must be separate from stormwater ponds.

5.5 Tree Preservation and Planting

Tree preservation provides benefits to the community including the reduction of air pollution, water attenuation, moderation of the *urban heat island effect*, shade, *wildlife habitat* and neighbourhood character as outlined in the Tremaine Dundas Community Urban Design Guidelines.

- **5.5.1** Management plans for wooded features within the Natural Heritage System *should* be developed to contribute to the long term health and function of the system.
- 5.5.2 Existing, healthy *trees* located outside of the Natural Heritage System *should* be retained, where feasible, in accordance with a Tree Preservation Plan, prepared to the satisfaction of the *City*. Special consideration *shall* be given to mature, healthy, native hedgerow *trees*.

- **5.5.3** The City *shall* require the incorporation of appropriate tree planting during design of streetscapes and park landscaping to provide tree-related *ecosystem* services to the community. Consideration *should* be for the use of diverse, non-invasive, drought tolerant, salt tolerant and low maintenance trees including the provision of adequate minimum soil volumes and soil composition.
- **5.5.4** Development proposals *should preserve* existing healthy *trees*, relocate healthy *trees*, where feasible, plant replacement *trees* using an aggregate-caliper formula to the satisfaction of the *City* and incorporating the planting of additional *trees* where appropriate.
- **5.5.5** *Trees shall* be planted as part of the *streetscape* and park landscaping to provide tree-related *ecosystem* services to the community. Consideration *should* be for use of diverse, native, drought and salt tolerant low maintenance *trees* to the satisfaction of the *City*.
- **5.5.6** *Trees shall* be integrated into parking lots and other impervious areas.
- 5.5.7 Where buffers are not already naturally vegetated, *trees shall* be planted in buffers (in conjunction with other naturalization plantings) to contribute to the protection of *Key Natural Features* and their functions from some of the impacts associated with adjacent land uses in accordance with landscape plans approved by the *City*, Halton Region and Conservation Halton.
 - *Trees may* also be planted (in conjunction with other naturalization plantings) in *linkages* and *enhancement areas* (in conjunction with other naturalization plantings) where opportunities are identified to improve *ecosystem* functions.
- **5.5.9** Naturalization plantings *shall* be comprised of a diversity of species that are **nat**ive and site-appropriate.
- 5.5.10 All plantings *shall* avoid the use of invasive species.
- 5.5.11 Preservation and / or replacement of Endangered Butternut trees *shall* be in accordance with applicable regulations under the <u>Endangered Species Act</u> as enforced by the MNRF.

5.6 Site Grading and Erosion Control

5.6.1 The future Tremaine Dundas Secondary Plan community *shall* be graded in a manner consistent with the grading and erosion and sediment control plans set out in the Functional Servicing Study (FSS) as approved by the *City* and Conservation Halton.

- **5.6.2** Erosion prevention and sediment control plans *shall* be prepared by a qualified professional to the satisfaction of the *City* and Conservation Halton prior to any grading being undertaken.
- **5.6.3** Protection of contributing Redside Dace habitat from potential impacts associated with site grading *shall* be in accordance with applicable regulations under the <u>Endangered Species Act</u> as enforced by the MNRF.

5.7 De-Watering / Well Decommissioning Policies

- 5.7.1 All existing monitoring wells or private wells *shall* be properly decommissioned by a licensed well technician once it is established that they are no longer to be used for ongoing monitoring of water levels or water quality.
- **5.7.2** The volume of de-watering and the necessity of submitting an application for a Permit To Take Water will be determined in accordance with the Functional Servicing Study.

5.8 Review Process

- **5.8.1** The *City shall encourage* development that is consistent with the Environmental Strategy policies of this Secondary Plan.
- 5.8.2 To evaluate the performance and effectiveness of the recommended and approved mitigation measures in protecting and enhancing the Natural Heritage System, an Environmental Monitoring Plan, based on the framework to be provided in the EIR/FSS, *shall* be prepared in consultation with the *City*, *Region of Halton* and Conservation Halton as a condition of draft plan of subdivision approval.

6 Community Cultural Heritage Policies

The protection of *cultural heritage resources* within the Tremaine Dundas Secondary Plan and the Tremaine Dundas Community Urban Design Guidelines allow for the preservation of *heritage attributes* and/or *heritage features* that provide links between the *City*'s past and the future Tremaine Dundas Secondary Plan community.

6.1 Development Form

6.1.1 The cultural heritage of the Tremaine Dundas Secondary Plan lands *shall* be *preserved* through the *conservation*, designation

under Part IV of the Ontario Heritage Act and appropriate adaptive re-use of the heritage building on site.

6.2 Cultural Heritage Resources

- 6.2.1 The Crooks/Norton Farm House at 5463 Dundas Street in the south western portion of the Tremaine Dundas Secondary Plan area *shall* be conserved and maintained consistent with a Conservation Plan prepared for the resource by the applicant and approved by the *City*.
- 6.2.2 A heritage easement agreement *shall* be secured to provide permanent protection of the Crooks/Norton Farm House. The easement agreement will be informed by the Conservation Plan described in (a) above.
- 6.2.3 The Crooks/Norton Farm House *shall* be designated under Part IV of the Ontario Heritage Act.
- 6.2.4 Potential adaptive re-uses for the Crooks/Norton Farm House include but are not limited to an interpretive center related to the Natural Heritage System, a restaurant, a place of culture or entertainment, or a residential use.
- 6.2.5 Pedestrian connections to the Crooks/Norton Farm House should be provided to allow access to the site from the future community road network and from Dundas Street.
 - Adequate parking and access *shall* be provided to support any future adaptive re-use of the Crooks/Norton Farm House, in accordance with the Zoning By-law. Any parking *shall* be sited and designed in a manner that does not detract from the heritage resource and provided it can be shown that there will be no *negative impact* on the adjacent Natural Heritage System.
- 6.2.7 The landscape around the Crooks/Norton Farm House *shall* emphasize plantings appropriate to the history of the farm, retain significant *trees* and retain portions of the farm lane where feasible. All plantings and *tree* retention are to be in accordance with Policy 5.5, Tree Preservation and Planting policy.
- **6.2.8** The Crooks/Norton Farm House *shall* be commemorated through interpretive plaques.

6.3 Archaeological Resources

6.3.1 Development and *site alteration shall* not be permitted on lands containing *archaeological resources* or areas of archaeological

potential unless *significant archaeological resources* have been conserved. In consultation with the Provincial and Regional governments, the need for the study and *conservation* of *significant* archaeological sites *shall* be determined during the review of development proposals. An archaeological survey and the *conservation* or rescue excavation of *significant archaeological resources*, that *may* be affected by the development *may* be required. Archaeological assessments and mitigation must be done by an archaeological consultant licensed by the appropriate Provincial Ministry.

- 6.3.2 The *City* recognizes the role of the Regional Municipality of Halton in maintaining and implementing the Archaeological Master Plan. The Archaeological Master Plan *shall* be a consideration as part of any planning process.
- 6.3.3 Any archaeological or other artifacts of heritage significance discovered on properties during future development of privately-owned land *shall* be deeded gratuitously to the appropriate *public authority*.
- 6.3.4 Removal of artifacts from an archaeological site *shall* be prohibited, except in accordance with the requirements of The Ontario Heritage Act, the Provincial Government or the *City*.

7 Community Transportation and Utilities

The Tremaine Dundas Secondary Plan transportation network will serve to connect residents and businesses of the future Tremaine Dundas Secondary Plan community through a comprehensive system of *complete streets* and blocks. Streets *shall* be designed to safely accommodate a range of users including pedestrians, cyclists, transit users and vehicles in accordance with the Tremaine Dundas Community Urban *Design Guidelines*. The internal road system will be optimized to maintain connections to Regional arterial roads being Dundas Street and Tremaine Road.

The transportation network within the Tremaine Dundas Secondary Plan area *should*, to the extent possible, be coordinated with the surrounding street network. The future street intersections along Tremaine Road *shall* be coordinated with the proposed intersections illustrated in the North Oakville West Secondary Plan on the east side of Tremaine Road. These intersections with future streets in Oakville are also anticipated to be the signalized access points into the future Tremaine Dundas Secondary Plan community.

Utilities that service the future Tremaine Dundas Secondary Plan community *should* be accommodated in a manner that optimizes the efficient use of land.

7.1 Transportation Policies

7.1.1 Transportation Network

- (a) The primary transportation network in the Tremaine Dundas Secondary Plan is illustrated conceptually on Schedule C. In order to support community health and improve air quality.
- (b) The transportation network *shall* connect residents and businesses of the future Tremaine Dundas Secondary Plan community through a comprehensive system of streets and blocks that promote walking, cycling and transit.
- (c) Street and pedestrian connections to the Minor Arterial (Tremaine Road) *shall* be designed to align with the North Oakville West Secondary Plan and approved by Halton Region in accordance with Halton's Access Management Guidelines (2015).
- (d) At least one street connection to the Major Arterial (Dundas Street) *shall* be provided to provide access to the community from the south as approved by Halton Region in accordance with Halton's Access Management Guidelines (2015).
- (e) Future Municipal transit service is to be accommodated within future *development applications* within the Tremaine Dundas Secondary Plan in order to provide mobility options for residents and employees and facilitate the achievement of Regional and *City* transit utilization targets.
- (f) Any lands identified as required for future widening and/or realignment of Dundas Street, as identified in the Dundas Street Class EA Study/Dundas Street Detailed Design Study, *shall* be dedicated to Halton Region for the purpose of road right-of-way widening, realignment and future road improvements.
- (g) Any lands within a 50m x 5m block from Tremaine road westerly (at the northwest corner of Tremaine Road and Dundas Street) are required for a transit station/transit stop and have been identified as required for the future widening and/or realignment of Dundas Street, as identified in the Dundas Street Class EA Study/Dundas Street Detailed Design Study, *shall* be dedicated to Halton Region for the purpose of road right-of-way widening, realignment and future road improvements.
- (h) A daylighting triangle measuring 15m along Dundas Street and 15m along Tremaine Road *shall* be dedicated to Halton Region for

the purpose of road right-of-way widening and future road improvements.

- (i) A daylighting triangle measuring 15m along Tremaine Road and all proposed intersections (full movement and right in/right out) *shall* be dedicated to Halton Region for the purpose of road right-of-way widening and future road improvements.
- (j) Minor modification to the location and alignment of the conceptual streets as shown on Schedule C are permitted without amendment to the Plan.

7.1.2 Streets

- (a) Streets *shall* be designed to safely accommodate a range of users including pedestrians, cyclists, transit and automobile users.
- (b) Streets located internally in the Tremaine Dundas Secondary Plan community include Local streets and Collector streets that provide a connected pedestrian and cycling network.
- (c) The final location and alignment of the local street network illustrated on Schedule C *shall* be developed at the draft plan of subdivision stage and *may* incorporate a *flex street* in proximity to the lands designated Mixed Use - General.
- (d) Rights of way for Local streets shall be 19 metres and Local collector streets shall be 22 metres. Conceptual cross sections shall incorporate pavement widths, pedestrian accommodation, utilities, future transit stop provision, as shown in the Tremaine Dundas Community Urban Design Guidelines. Modifications to these cross-sections may be permitted subject to the review and approval of the *City* without amendment to the Secondary Plan.
- (e) Rights-of-way widths *may* be re-evaluated during the draft plan of subdivision, subject to approval by the *City*, without amendment to this Secondary Plan.
- (f) Rear laneways *may* be included in the future Tremaine Dundas Secondary Plan community to service all land uses and *shall* not require amendment to this Secondary Plan.
- (g) Streets and intersections *shall* incorporate design standards and features intended to facilitate walking, cycling and street life.
- (h) Sidewalks along local and local collector roads *shall* be designed to a minimum width of 1.8 metres wide on both sides of the street to

Ι.

iii.

accommodate pedestrian movement (exception *may* be made for design of a "Special Street").

- (i) Sidewalks shall be 1.8 to 3.0 metres in width in high pedestrian generation areas particularly where retail is provided along the street in order to accommodate sidewalk cafes, kiosks and street vendors.
- (j) To accommodate the needs of persons with disabilities, visual impairments and the elderly, sidewalks *shall* be designed to applicable municipal accessibility standards.
- (k) Streets shall be designed to include space for transportation facilities and transportation amenities such as furniture, benches, bicycle locking and repair stations, bollards, shelters, banners and special decorative lighting throughout the community.
- Street furniture *shall* be coordinated and contribute positively to the character of the future Tremaine Dundas Secondary Plan community.
- (m) The "Special Street" shall be designed in accordance with the management strategy identified in the TDSPSS Update May, 2018, the Tremaine Dundas Community Urban Design Guidelines and recommendations of an EIR/FSS. The EIR/FSS is to include an assessment of the following factors to design appropriate mitigation measures to achieve the best possible conditions for ongoing wildlife movement:
 - Road conditions such as width of roadway, traffic volume, traffic speed, road grade, road side slopes, road barriers and road lighting;
 - ii. Known movement patterns of wildlife daily and seasonally and species most likely to cross;
 - Topography in the vicinity of the road crossing that *may* facilitate movement beneath the roadway via a constructed wildlife underpass or culvert or span bridge;
 - iv. Opportunities for traffic calming through road modifications such as reduced traffic speed, road narrowing at NHS crossing, signage, road lighting and improved sightlines;
 - Temporary road closure if there are well known short-term movement patterns (ie. Amphibian crossings from upland to wetland for breeding);

- vi. Provision of alternate basking sites away from road crossings for cold blooded reptiles, if required;
- vii. Provision of appropriate nesting habitat for reptiles and amphibians away from road crossings, if required;
- viii. Wildlife crossing structures that include the design and construction of funneling structures to lead animals into crossing structures to facilitate safe movement of amphibians and small mammals.

7.1.3 Pedestrian Linkages

- (a) Pedestrian linkages *may* be designed as laneways, pedestrian connections, private streets, or used for internal block circulation.
- (b) Pedestrian linkages may restrict vehicular movement, but shall always permit and support pedestrian connections from one end of the pedestrian linkages to the other.
- (c) Private pedestrian linkages *may* permit stormwater management *infrastructure* or underground parking to be incorporated below grade.
- (d) The location of pedestrian linkages is flexible and may be refined or shifted without amendment to the Official Plan.
- (e) Landscaping is *encouraged* along pedestrian linkages, to provide an increased *public realm*, shade, and protection from natural elements (i.e. wind, rain, sun, and snow).
- (f) Incorporation of street furniture, lighting, and signage *shall* be provided to create a safe and inviting realm.
- (g) Crime Prevention Through Environmental Design (CPTED) measures *shall* be implemented on all Pedestrian Linkages to create a safe and secure environment.
- (h) To provide connectivity the future Tremaine Dundas Secondary Plan community pedestrian linkages are *encouraged* to be located throughout sites or between adjacent lots and that link pedestrians to other off-site trail systems.

7.1.4 Parking

A parking study *shall* be completed to determine the area's travel demand, encouraging a reduction in the required parking, mitigated through the incorporation of shared parking lots between multiple uses

(a) <u>Residential – Medium Density Areas</u>

- *i.* In Residential-Medium Density areas, parking is *encouraged* to be provided in side or rear yards, within recessed garages or through rear lanes.
- *ii.* On-street parking is permitted in Residential-Medium Density areas subject to prevailing *City* parking bylaws.

(b) <u>Mixed Use Corridor – General Areas</u>

- i. In Mixed Use Corridor-General areas underground parking and shared use structured parking is *encouraged*.
- ii. On-street parking in Mixed Use Corridor-General areas *shall* be subject to prevailing *City* parking by-laws.
- iii. Extensive, single-use surface parking lots are discouraged in Mixed Use Corridor- General areas. Limited, short-term convenience parking in the Mixed Use Corridor – General area is permitted to support the retail uses and is *encouraged* to be shared use parking where permitted.

(c) <u>Business Corridor Areas</u>

ΪÌ

In the Business Corridor, parking *may* be provided in the form of surface parking lots, shared parking lots, structured parking lots or underground parking garages.

Where surface parking lots are present in Business Corridor Areas, parking is *encouraged* to be located at the rear of buildings, away from street frontages in order to improve the quality of the *public realm* and minimize visual impact.

- iii. On street parking in the Business Corridor area is discouraged.
- iv. Where permitted by use, underground parking garages or above ground parking garages located within the building envelope are *encouraged* for employee use. If required, limited, short-term

convenience parking is permitted in the form of surface parking.

- (d) <u>Mixed Use Corridor Employment</u>
 - i. In the Mixed Use Corridor-*Employment* area parking is *encouraged to* be provided in the form of structured parking lots or underground parking garages.
 - ii. Shared structured or underground parking is permitted in the Mixed Use Corridor-*Employment* area.
 - iii. On-street parking in the Mixed Use Corridor-*Employment* area *shall* be subject to prevailing *City* parking by-laws.

(e) <u>General</u>

ÌN.

iv.

- i. In all land use areas, loading and service areas *shall* be reasonably screened from public view.
- ii. Reduced parking ratios are *encouraged* subject to evaluation by the *City*.
 - Where permitted, privately owned surface parking lots should be encouraged to incorporate Low Impact Development techniques.
 - Where permitted, surface parking lots *should* incorporate *trees* and landscaping to mitigate *urban heat island effect*, provide shade and contribute to the quality of the *public realm*.

7.1.5 Traffic Calming

- (a) The Tremaine Dundas Secondary Plan includes the ability to incorporate various traffic calming measures. These measures *may* include but are not limited to: bump-outs at sidewalks, speed humps, textured pavement and pedestrian activated crosswalks;
- (b) Traffic calming measures *shall* be subject to review and approval by the *City*.
- (c) Roundabouts and/or traffic circles *shall* be discouraged.

(d) Dedicated right turn lanes at intersections *shall* be discouraged.

7.1.6 Utilities

- (a) All new electrical and telecommunication cabling within rightof-ways *shall* be located underground.
- (b) *Utility* boxes required within the right of way *shall* be well integrated with the design of the *streetscape*.
- (c) Incorporation of solar energy in the Business Corridor and Mixed Use – Employment uses is encouraged to be located on the roofs of buildings to reduce lot coverage and improve the public realm. Excess energy produced through solar panels may be transmitted throughout the Tremaine Dundas Secondary Plan community area to prevent the waste of energy and the reliance on other non-renewable energy sources.
- (d) *Encourage* the use of residual heat or energy from business operations to provide heating, cooling, and energy for other processes on the same lot, adjacent lots or to other areas within the Tremaine Dundas Secondary Plan community.

8 Community Water and Wastewater Servicing

Development in the Tremaine Dundas Secondary Plan area *shall* be on the basis of full urban water and wastewater facilities. These facilities will be *encouraged* to incorporate best practices in water, wastewater and stormwater management.

Preliminary design of water distribution and wastewater collections systems will be set out in the Functional Servicing Study, prepared to the satisfaction of the *City* and the Region of Halton as a condition of draft plan of subdivision approval.

Sustainable design features *should* be incorporated where possible, such as promotion of non-potable water uses, *Eco-Industrial* practices and retaining stormwater on-site, such as rain barrels, as much as possible to minimize the reliance on potable water.

An Area Servicing Plan *shall* be required to the satisfaction of Halton Region to identify new *infrastructure* required to service the Secondary Plan area and address any land and/or easement issues that *may* need to be reviewed. The Area Servicing Plan *shall* have regard for any external mains that *may* be required for this development. It will also have regard for properly designed water pressure zones, the timing of Regional *infrastructure* to correspond with the appropriate allocation

program and work through the fine details of possible phasing of the development of all required *infrastructure*.

9 Community Parks and Trails

The parks, trails and open space system consist of natural heritage and recreational open space features. The open space system *should* be linked to protect and maintain ecological features, functions, and linkages and to connect communities.

9.1 Parks

- **9.1.1** The Tremaine Dundas Secondary Plan incorporates a conceptual layout for parks as identified on Schedule B. Modifications *may* be made to the location and size of parks on Schedule B without amendment to this plan.
- **9.1.2** Parks *shall* be provided within the Tremaine Dundas Secondary Plan area to provide active and passive recreational opportunities and ensure residents are within 400 metres (5 minute walk) of parkland, open space or trails.
- **9.1.3** The parks *shall* be designed to accommodate the needs of residents of all ages and abilities and in accordance with the Tremaine Dundas Community Urban *Design Guidelines*.
- 9.1.4 The design of parks will support the Natural Heritage System by including native species in landscaping plantings, and incorporating naturalized areas where they will not displace other required park uses.

Parks shall connect to trails and the pedestrian network.

Parkland dedication, or money paid in lieu of land, *shall* be acquired by the *City* through the development approval process in accordance with the Official Plan.

9.2 Trails

1.5

9.10

9.2.1 Trails will be incorporated into the Tremaine Dundas Secondary Plan area in general accordance with the conceptual layout identified on Schedule C. The specific location of trails will be determined as a condition of draft plan of subdivision approval. Modifications *may* be made to the location of the trails on Schedule C without amendment to this plan.

- **9.2.2** Trails will support alternative modes of transportation, complement the transportation network, provide appropriate access to the Natural Heritage System, and provide for recreational opportunities.
- **9.2.3** Trails will be designed to meet current and best practice guidelines providing both active and passive recreation opportunities with alignments and designs modified where required to respond to the unique or environmentally sensitive characteristics of the location.
- 9.2.4 Trails will be designed to safely accommodate all trail users according to a hierarchy (ie. Primary Multi-use (within or outside of right-of-way paved or concrete), Secondary Multi-use (park or woodland paved or granular), Woodland Mulch Trail (mulch), Hiking / Foot Trail (natural earth, woodchip or granular) that is consistent with the *City*'s Community Trails Strategy.
- **9.2.5** Where trails are adjacent to *Key Natural Features*, trails will be located and designed to respect the natural function of those features.
- **9.2.6** Trails *may* be located within parks, buffers, and enhancements to key features or linkages in appropriate locations where it can be demonstrated that these elements do not result in a *negative impact* on the Natural Heritage System.
- 9.2.7 Trails may be permitted within Key Natural Features where:
 - (a) There is a current existing informal trail along the westerly side of the central woodland and use of this route is determined to result in fewer impacts on the *Key Natural Feature* than the creation of a new trail; or
 - (b) A trail connection is required to facilitate appropriate access and no alternative route is feasible.
- **9.2.8** Some trails will be designed to accommodate pedestrians and cyclists, while other trails (particularly within more ecologically sensitive areas) will be designed for pedestrian use only. In all cases, where trails are within or adjacent to *Key Natural Features*, trails will be located and designed to minimize impacts and *encourage* appropriate forms of access and use in accordance with Conservation Halton policies.
- **9.2.9** Trails *shall* not be permitted within hazardous lands in accordance with Conservation Halton policies.

10 Community Phasing

Development within the Tremaine Dundas Secondary Plan area *shall* be phased in a manner which achieves continuous and orderly extension of the community and provides for efficient and economical use of *infrastructure*.

10.1 Phasing Strategy

- **10.1.1** Development in the Tremaine Dundas Secondary Plan area *may* proceed in two phases, Phase 1 and Phase 2, as illustrated on Schedule D. Minor adjustments to the phasing boundaries are permitted without requiring an amendment to this Secondary Plan.
- **10.1.2** Phasing will proceed based on the following:
 - (a) Phase 1 will generally comprise the lands to the south and east of the Central Woodland, including the lands designated as Residential – Medium Density, Mixed Use Corridor - General, Mixed Use Corridor - *Employment*, and Business Corridor. Phase 1 shall include a maximum of 400 residential *dwelling units*.
 - (b) Phase 2 will generally comprise the lands to the north and west of the Central Woodland, including lands designated as Residential – Medium Density.
 - Progression of development is contingent on the availability of public *infrastructure* and services.
 - Approval of development *shall* be contingent on the submission of an Environmental Implementation Report/Functional Servicing Study submitted as part of a draft plan application, to the satisfaction of the *City*, Conservation Halton and the Region of Halton.
 - A holding zone *may* be utilized for subsequent phases until such time as Regional servicing approval is obtained for the additional phases.
 - A range and mix of housing types will be provided in each *development* phase.

10.2 Phasing Implementation

(C)

(d)

(e)

(f)

10.2.1 The development of *employment* areas within the Tremaine Dundas Secondary Plan will be *encouraged* to occur concurrently with the development of nearby residential lands. If residential uses within the 70 metres of an *employment* designation are developed prior to the *employment* uses within the Business Corridor blocks, appropriate interim noise mitigation measures and buffering *shall* be implemented to ensure compatibility with potential *employment* uses on the Town of Oakville lands in accordance with the recommendations of a Land Use Compatibility Assessment noted in Section 2 of this Plan.

10.2.2 Draft approved plans of subdivision *shall* not be registered prior to the availability of sanitary sewage and water system capacity, as determined by the *City* and the Region of Halton.

11 Urban Design

- 11.1 All *development applications* in the Tremaine Dundas Secondary Plan area will be subject to review in accordance with the policies of this Secondary Plan, the Official Plan. The Tremaine Dundas Urban *Design Guidelines,* attached as Appendix A to the Tremaine Dundas Secondary Plan, are in accordance with policies of the Burlington Official Plan and satisfy the requirements for *design guidelines* and urban design plans of the Burlington Official Plan.
- 11.2 The Tremaine Dundas Urban *Design Guidelines* provide additional guidance to the development process while maintaining a degree of flexibility for appropriate design solutions. Alternative design approaches to those found in the Urban *Design Guidelines may* be proposed with appropriate justification and after consultation and approval of the *City*, provided they meet the intent and purpose of the policies of the Secondary Plan and Official Plan.
- 11.3 Alternative design approaches to those found in the Urban *Design Guidelines shall* not decrease or limit the extent of the established environmental and *sustainable* principles and policies found in the Urban *Design Guidelines*.
- 11.4 The Tremaine Dundas Urban *Design Guidelines* are based on the Community Principles identified in Section 2.

12 Implementation

- 12.1 This Secondary Plan *shall* be adopted as an Official Plan amendment and the enactment of implementing by-laws under the <u>Planning Act</u>. Implementation *shall* be generally in accordance with the provision of Part VI of the Official Plan.
- 12.2 Legal Non-Conforming uses, buildings or structures throughout the Secondary Plan area *should* eventually cease, so that the land affected *shall* revert to a use, building or structure that conforms with the intent of the Secondary Plan and the zoning by-law. In special circumstances it *may* be

appropriate to consider the extension or enlargement of a non-conforming use, building or structure.

The Committee of Adjustment, in granting an application for the extension or enlargement of non-conforming land, buildings or structures *shall* be satisfied that the considerations of the *City* Official Plan are met. (Section 4.3 b)).

- 12.3 An Environmental Implementation Report / Functional Servicing Study (EIR/FSS) *shall* be required prior to consideration of any applications proposing development or any *site alteration* to the satisfaction of the City, Halton Region, Town of Oakville and Conservation Halton.
- 12.4 Plans of Subdivision or Plans of Condominium *shall* be recommended for approval which:
 - (a) Conform with the policies and designations of this Plan;
 - (b) Can be provided with adequate services and facilities as required by the policies of this Secondary Plan.

The review of subdivision applications will be subject to the Urban *Design Guidelines* for the Tremaine and Dundas Secondary Plan Area.

12.5 All lands within the *City* are subject to Site Plan Control, with the exception of detached and semi-detached dwellings in specific areas. The provisions of the <u>Planning Act</u> with respect to site plan control *shall* be used for all uses within the Secondary Plan with the exception of single detached and semi-detached dwellings. Site plans *shall* be reviewed in relation to the Tremaine Dundas Community Urban *Design Guidelines* which have been developed in support of the Secondary Plan and the City's Sustainable Building and Development Guidelines.

13 Plan Monitoring and Review

- 13.1 This Secondary Plan *shall* be interpreted in accordance with Part III (Land Use Policies Urban Planning Area) of the Burlington Official Plan.
- 13.2 Amendments to the Plan *may* be permitted and *shall* be processed as an Official Plan amendment, subject to the criteria required by the *City* for such applications. Minor variations from the Plan will not require an Official Plan amendment.

14 Secondary Plan Schedules

- 14.1 Schedule A Community Structure Plan
- 14.2 Schedule B Community Land Use Plan

- 14.3 Schedule C -Transportation Network Plan
- 14.4 Schedule D Community Phasing Plan

15 Definitions

Accessory Drive-Through– An amenity to a primary use whereby goods or services are provided, either wholly or in part, to customers located within a motor vehicle.

Active Transportation – Human-powered travel, including but not limited to, walking, cycling, inline skating and travel with the use of mobility aids, including motorized wheelchairs and other power-assisted devices moving at a comparable speed.

Affordable Housing – Housing with a market price or rent that is affordable to households of low and moderate income spending no more than 30 percent of their gross household income.

- 1. Affordable rental housing *should* meet the demand of households at the low end, as described in the Region of Halton's annual State of Housing Report. Such households would be able to afford at least three out of ten rental units on the market.
- 2. Affordable ownership housing *should* meet the demand of households at the high end, as identified in the Region of Halton's annual State of Housing Report. Such households would have sufficient income left, after housing expenses, to sustain the basic standard of living.

Amenity Area – An interior area within a residential building or an outdoor area exterior to the residential building which is designed and intended primarily for the leisure and recreation of the occupants of the building.

Archaeological Resource –includes artifacts, archaeological sites and marine archaeological sites, as defined under <u>The Ontario Heritage Act</u>. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with <u>The Ontario Heritage Act</u>.

Buffer – An area of land located adjacent to *Key Natural Features* or *watercourses* and usually bordering lands that are subject to *development* or *site alteration*. The purpose of the *buffer* is to protect the features and *ecological functions* of the Natural Heritage System by mitigating impacts of the proposed *development* or *site alteration*. The extent of the buffer and activities that *may* be permitted within it shall be based on the sensitivity and significance of the *Key Natural Features* and *watercourses* and their contribution to the long term *ecological functions* of the Natural Heritage System as

determined through a Sub-Watershed Study, and Environmental Impact Assessment or similar studies that examine a sufficiently large area.

Built Heritage Resource – A building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Aboriginal community. *Built heritage resources* are generally located on property that has been designated under Parts IV or V of <u>The Ontario Heritage Act</u>, or included on local, provincial and/or federal registers.

Carbon-neutral: Having a net-zero carbon footprint refers to achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount not used, or buying enough carbon credits to make up the difference.

City – The Council of the Corporation of the City of Burlington; or alternatively where an approval power has been delegated by the City of Burlington Council, the delegated approval authority or the administration of the Corporation of the City of Burlington.

Compact Built Form – A land–use pattern that *encourages* efficient use of land, walkable neighbourhoods, mixed land uses (residential, retail, workplace and institutional) all within one neighbourhood, proximity to transit and reduced need for *infrastructure. Compact built form* can include detached and semi–detached houses on small lots as well as townhouses and walk–up apartments, multi–storey commercial developments, and apartments or offices above retail.

Compatible or Compatibility – *Development* which *may* not necessarily be the same as or similar to existing or planned *development* in the vicinity, but nonetheless can co– exist without causing unacceptable impacts to the surrounding area.

Complete Communities –Places such as mixed-use neighbourhoods or other areas within cities, towns, and *settlement areas* that offer and support opportunities for people of all ages and abilities to conveniently access most of the necessities for daily living, including an appropriate mix of jobs, local stores, and services, a full range of housing, transportation options and *public service facilities*. *Complete communities* are age-friendly and *may* take different shapes and forms appropriate to their contexts.

Complete Street – A street planned to balance the needs of all street users, including pedestrians, cyclists, transit users and motorists. *Complete streets* improve mobility for all ages and abilities and foster livability while enhancing the *public realm* and encouraging *sustainable* growth patterns.

Conservation or Conserve – The identification, protection, management and use of *built heritage resources*, cultural heritage landscapes and *archaeological resources* in a manner that ensures their cultural heritage value or interest is retained under <u>The</u>

<u>Ontario Heritage Act</u>. This *may* be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/ or cultural heritage impact assessment or *cultural heritage landscape* impact assessment. Mitigative measures and/or alternative *development* approaches can be included in these plans and assessments.

Cultural Heritage Resources –*Built heritage resources*, cultural heritage landscapes and *archaeological resources*. that have been determined to have cultural heritage value or interest for the important contribution they make to our understanding of the history of a place, an event, or a people. While some *cultural heritage resources* may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation.

Design Guidelines – A set of design statements to guide land *development* to achieve a desired level of design quality for the elements of the physical environment.

Designated Greenfield area – The area within a settlement area that is not built-up *area.*

Development –The creation of a new *lot*, a change in land use, or the construction of buildings and structures, any of which requires approval under <u>The Planning Act</u>, or that are subject to <u>The Environmental Assessment Act</u>, but does not include activities that create or maintain *infrastructure* authorized under an environmental assessment process.

Development Application – Formal request to the City of Burlington and/or Region of Halton, for an Official Plan amendment, zoning by-law amendment, site plan approval, land conveyance, minor variance approval, plan of subdivision, plan of condominium, part-lot control application, Niagara Escarpment development permit application, or Parkway Belt regulation application.

Dwelling Unit - A self contained room or suite of rooms located in a building or structure that is operated as a housekeeping unit and is used or intended for use as residential premises by one household and which contains kitchen and bathroom facilities that are intended for the exclusive use of that household, except in the case of an *institutional* residential use, in which case a *dwelling unit shall* mean a room or suite of rooms used or intended for use as residential premises with or without exclusive kitchen and/or bathroom facilities. *Long term care facilities* are excluded from this definition.

Ecological Functions – The natural processes, products or services that living and non-living environments provide or perform within or between species, *ecosystems* and landscapes. These *may* include biological, physical and socio-economic interactions.

Eco-Industrial Development - Where a "green" approach has been taken towards *infrastructure* and development of the site that enhances environmental, economic, and social performance through collaborative strategies such as coordination of energy and water exchange between users, shared utilities (waste management, energy supply, water supply), shared logistics and shipping & receiving facilities, shared parking, use of innovative green technologies, green buildings and site design and district energy systems.

Ecosystem – Systems of plants, animals, and micro–organisms, together with the non– living components of their environment and related ecological processes, essential for the functioning of the biosphere in all its diversity.

Employment –The use of lands for business and economic activities, including, but not limited to, manufacturing, warehousing, *offices* and *ancillary employment uses*, but does not include retail and *service commercial* uses unless they are an *ancillary employment use*.

Encourage – Reasonable efforts are made to accommodate the desired result.

Enhancements to the Key Natural Features – Ecologically supporting areas adjacent to *Key Natural Features* and/or measures internal to the *Key Natural Features* that increase the ecological resilience and function of individual *Key Natural Features* or groups of *Key Natural Features* or of the Natural Heritage System.

Existing Use – The use of any land, building or structure legally existing, or approved under a Parkway Belt land use regulation, on the day of adoption of this Plan or the amendment to this Plan giving effect to the subject section by the *City*. An *existing use*, building or structure *may* expand or be replaced in the same location and of the same use in accordance with the Zoning By–law.

Farmers Market – A retail establishment consisting of multiple vendors engaged in the retailing of primarily food and plant products, a portion of which are locally grown and/or prepared.

Fish Habitat – As defined in <u>The Fisheries Act, c. F–14</u>, means spawning grounds and any other areas, including nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

Flex Street - Those portions of a public-right-of-way used primarily for vehicular activities which are designed so as to function either wholly or partially, as desired, for vehicular-centric activities and/or pedestrian, public gathering and/or public event functions through the use of design elements including, but not limited to, bollards,

flexible on-street parking configurations, pavement materials, enhanced streetscapes and/or modified curbs.

Green Infrastructure – Natural and human–made elements that provide ecological and hydrological functions and processes. Green *infrastructure* can include components such as natural heritage features and systems, parklands, storm water management systems, street *trees*, *urban forests*, natural channels, permeable surfaces and green roofs.

Habitat of Endangered Species and Threatened Species –

- With respect to a species listed on the Species at Risk in Ontario List as an endangered or threatened species for which a regulation made under clause 55 (1)(a) of <u>The Endangered Species Act</u>, 2007 is in force, the area prescribed by that regulation as the habitat of the species; or
- 2. With respect to any other species listed on the Species at Risk in Ontario List as an endangered or threatened species, an area on which the species depends, directly or indirectly, to carry on its life processes, including life processes such as reproduction, rearing, hibernation, migration or feeding, as approved by the Province; and

3. Places in the areas described in clause (1) or (2), whichever is applicable, that are used by members of the species as dens, nests, hibernacula or other residences. **Hazardous Land** means land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock.

Hazardous Sites means property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography).

Healthy Communities – Communities: (1) that foster among their residents a state of physical, mental, social and economic well–being; (2) where residents take part in, and have a sense of control over, decisions that affect them; (3) that are physically designed to minimize the stress of daily living and meet the life-long needs of their residents; and (4) where *employment*, social, health, educational, and *recreational* and cultural opportunities are accessible to all segments of the community.

Heritage Attributes –The principal features or elements that contribute to a *protected heritage property*'s cultural heritage value or interest, and *may* include the property's built or manufactured elements, as well as natural landforms, vegetation, water

features, and its visual setting (including significant views or vistas to or from a *protected heritage property*).

Higher Order Transit – Transit that generally operates in partially or completely dedicated right–of–way, outside of mixed traffic, and therefore can achieve levels of speed and reliability greater than mixed-traffic transit. *Higher order transit* can include heavy rail (such as subways and inter-city), light rail (such as streetcars) and buses in dedicated rights–of–way.

Human Scale – The proportional relationship of the physical environment to human dimensions, acceptable to public perception and comprehension in terms of the size, height, bulk, and/or *massing* of buildings or other features of the built environment.

Hydrologic function – The functions of the hydrological cycle that include the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment, including its relation to living things.

Industrial – Assembling, fabricating, manufacturing, processing, warehousing and distribution uses, repair activities, communications, *utilities*, transportation, storage, service trades and construction uses.

Infrastructure – Physical structures (facilities and corridors) that form the foundation for *development. Infrastructure* includes: sewage and water systems, septic treatment systems, stormwater management systems, waste management systems, electric power generation and transmission, communications/telecommunications, transit and transportation corridors and facilities, oil and gas pipelines and associated facilities.

Institutional Uses –Private services and/or facilities which provide a public health, education, recreation and/or social service related function to residents and which can be appropriately accommodated in most areas of the *City*. *Institutional uses may* include, but *shall* not be limited to, places of worship, *cemeteries*, private educational facilities, private day cares or long term care facilities, but *shall* not include *group homes*, private medical clinics or *public service facilities*.

Key Natural Feature – Features which are important for their environmental and social values as a legacy of the natural landscapes of an area, which include habitat of endangered and threatened species, *significant wetlands, significant woodlands,* significant *valleylands*, significant *wildlife habitat*, and fish habitat.

Linkage – An area providing connectivity or intended to provide connectivity within the Natural Heritage System, supporting a range of community and *ecosystem* processes

enabling plants and animals to move between *Key Natural Features* over multiple generations. *Linkages* are preferably associated with the presence of existing natural areas and functions and they are to be established where they will provide an important contribution to the long term *sustainability* of the Natural Heritage System. The extent and location of the *linkages* can be assessed in the context of both the *scale* of the proposed *development* or *site alteration*, and the *ecological functions* they contribute to the Natural Heritage System.

Low Impact Development – An approach to storm water management that seeks to manage rain and other precipitation as close as possible to where it falls, in order to mitigate the impacts of increased runoff and storm water pollution. It comprises a set of site design strategies and distributed, small scale, structural practices to mimic the natural hydrology to the greatest extent possible through infiltration, evapotranspiration, harvesting, filtration and detention of storm water. *Low impact development* can include: bio–swales, permeable pavement, rain gardens, green roofs and exfiltration systems. *Low impact development* often employs vegetation and soil in its design; however, that does not always have to be the case.

May – Implies there is discretion and flexibility or that criteria are to be satisfied in the application of this Official Plan policy.

Meander Belt Allowance – The setback that keeps *development* from being affected by river and stream meandering (this includes the allowance for the one hundred (100) year erosion rate.)

Natural Environment - The land, air or water or any combination or part thereof.

Natural Heritage Features and Areas – Features and areas, including significant *wetlands*, significant *coastal wetlands*, other coastal *wetlands*, *habitat of endangered species and threatened species*, significant *wildlife habitat*, and significant *areas of natural and scientific interest*, which are important for their environmental and social values as a legacy of the natural landscapes of an area.

Negative Impact – With regard to water resources, degradation to the *quality and quantity of water, sensitive surface water features* and *sensitive ground water features*, and their related *hydrologic functions*, due to single, multiple or successive *development* or *site alteration* activities; in regard to *fish habitat*, any permanent alteration to, or destruction of *fish habitat*, except where, in conjunction with the appropriate authorities, it has been authorized under *The Fisheries Act*; and in regard to other *natural heritage features and areas*, degradation that threatens the health and integrity of the natural features or *ecological functions* for which an area is identified due to single, multiple or successive *development* or *site alteration* activities.

Office – A building or part of a building where administrative and clerical functions are carried out in the management of a business, profession, organization or public administration.

Physical Character – The distinctive qualities within a physical area which are defined by elements such as: scale, massing, vegetation, topography, lotting pattern, colour, texture, material and the relation between structures, spaces and landforms.

Preserve – To maintain the quality or condition of a resource in its current form, and to retard the deterioration of the resource.

Protected Heritage Property – Property designated under Parts IV, V or VI of <u>The</u> <u>Ontario Heritage Act</u>; property subject to a heritage conservation easement under Parts II or IV of <u>The Ontario Heritage Act</u>; property identified by the Province and prescribed public bodies as provincial heritage property under the Standards and Guidelines for Conservation of Provincial Heritage Properties; property protected under federal legislation, and UNESCO World Heritage Sites.

Public Authority – Any federal, provincial, regional, county or municipal agency including any commission, board, authority or department established by such agency exercising any power or authority under a Statute of Canada or Ontario.

Public Realm – All spaces to which the public has unrestricted access, such as streets, parks and sidewalks.

Scale – The proportion of a building or building element created by the placement and size of the building or element in comparison with adjacent buildings or building elements and to human dimension.

Securement - The acquisition of an interest in land to secure the long term protection of *natural heritage features, ecological functions* and attributes. *Securement* may be achieved by means of fee simple ownership or conservation easements through purchases, donations, bequests, or land dedications.

Sensitive Land Uses – 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.

Service Commercial – Non–retail commercial uses, but excluding *automotive commercial* uses.

Shall –Implies that the policy is mandatory or it is required to comply with an Official Plan policy.

Should – Implies that the policy is a directive and a convincing planning reason is required in order not to fully comply with an Official Plan policy.

Significant -

- 1. In regard to *wetlands*, an area identified as provincially significant by the Ontario Ministry of Natural Resources using evaluation procedures established by the Province, as amended from time to time;
- 2. With regard to *woodlands*, an area as defined by the "*significant woodlands*" definition of this Plan;
- 3. With regard to other components of the Natural Heritage System, ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or Natural Heritage System; and

4. With regard to *cultural heritage resources* that have been determined to have cultural heritage value or interest for the important contribution they make to our understanding of the history of a place, an event, or a people.

Significant Woodland – A woodland 0.5 ha or larger, determined through a *watershed* management plan, a subwatershed study or a site specific Environmental Impact Assessment to meet one or more of the four following criteria:

- 1. The woodland contains forest patches over ninety-nine (99) years old;
- 2. The patch size of the woodland is two (2) ha or larger if it is located in the Urban Planning Area or four (4) ha or larger if it is located outside the Urban Area but below the Escarpment Brow; or ten (10) ha or larger if it is located outside the Urban Area but above the Escarpment Brow;
- 3. The woodland has an interior core area of four (4) ha or larger, measured one hundred (100) m from the edge; or
- 4. The woodland is wholly or partially within fifty (50) m of a *major creek* or *certain headwater creek* or within one hundred and fifty (150) m of the Escarpment brow.

Site Alteration – Activities such as grading, excavation and the placement of fill, that would change the landform and natural vegetative characteristics of a site, but does not

include *normal farm practices* unless such practices involve the removal of fill off the property or the introduction of fill from off-site locations.

Stable Top of Bank – As it pertains to *valleylands*: (a) the physical top of bank where the existing slope is stable and not impacted by toe erosion; or, (b) is defined by the toe erosion allowance plus the *stable slope* allowance where the existing slope is unstable and/or is impacted by toe erosion.

Streetscape – The visual appearance of a roadway formed by the location of physical features such as buildings, pedestrian, cycling, transit and vehicular facilities and landscaping.

Surface Water Feature – Water-related features on the earth's surface, including headwaters, rivers, stream channels, inland lakes, seepage areas, recharge/discharge areas, springs, *wetlands*, and associated riparian lands that can be defined by their soil moisture, soil type, vegetation or topographic characteristics.

Sustainable and Sustainability and/or Sustainable Development – A systems based approach to growth and *development* where economic, social and environmental factors are jointly considered and harmonized. *Development* must meet the needs of the present without compromising the ability of future generations to meet their own needs.

Threatened Species – A species that is listed or categorized as a "Threatened Species" on the Provincial official Species at Risk list, as updated and amended from time to time.

Transit–Supportive– Planning and *development* practices which make transit viable and improve the quality of the experience of using transit. When used in reference to *development*, it generally refers to compact, mixed use *development* that has a high level of *employment* and residential densities. Transit-supportive development will be consistent with Ontario's Transit Supportive Guidelines.

Transportation Amenities – Include transit facilities and shelters, benches, street *trees*, bicycle locking and repair stations and other *streetscape* elements.

Tree – Any species of woody perennial plant, including its root system, which has reached or can reach a height of at least four and a half (4.5) m above ground at physiological maturity.

Urban Agriculture - The growing of vegetables, fruits, flowers and/or native plants produced through *agricultural* activity, *community gardens* and/or rooftop gardens, excluding animal *agriculture within the Urban Area.*

Urban Heat Island Effect – Occurs when heat from solar radiation is absorbed by man made surfaces such as rooftops and pavement and then released into the air, increasing the temperature of the area.

Utility – A water supply, storm water or wastewater system, gas or oil pipeline, the generation, transmission and distribution of electric power including renewable energy systems and district energy systems for electricity, heating and/or cooling, the generation, transmission and distribution of steam or hot water, towers, communication or telecommunication facilities and other cabled services, a public transit or transportation system, licensed broadcasting receiving and transmitting facilities, or any other similar works or systems necessary to the public interest, but does not include a new sanitary landfill site, incineration facilities or large–scale packer and/or recycling plants or similar uses.

Valleyland – A natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of the year.

Vegetation Protection Zone – As it applies within the Greenbelt Plan Area, a vegetated buffer area surrounding a *Key Natural Feature*.

Watercourse – An identifiable depression in the ground in which a flow of water regularly or continuously occurs.

Watershed – An area that is drained by a river and its tributaries.

Wetlands – Lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of *wetlands* are swamps, marshes, bogs and fens. Periodically soaked or wet lands being used for *agricultural* purposes which no longer exhibit *wetland* characteristics are not considered to be *wetlands* for the purposes of this definition. Within the Greenbelt Plan Area, *wetlands* include only those that have been identified by the Province or by any other person, according to evaluation procedures established by the Province, as amended from time to time.

Wildlife Habitat – Areas where plants, animals and other organisms live, and find adequate amounts of food, water, shelter and space needed to sustain their populations. Specific *wildlife habitats* of concern *may* include areas where species concentrate at a vulnerable point in their annual or life cycle; and areas which are important to migratory or non–migratory species.



Appendix A

Tremaine Dundas Community Urban Design Guidelines, May, 2018



Tremaine Dundas Community Urban Design Guidelines, June 2018

These guidelines have been prepared in accordance with policies in Part II, Section 6 of the Burlington Official Plan and satisfy the requirements for design guidelines set out in Part II, Subsection 6.6 c) and urban design plans set out in Part VI, Subsection 5.3 b) of the Burlington Official Plan and have consideration of the sustainable development policies within Part II, Section 2. It is noted that the City is currently undertaking Mid-rise Urban Design Guidelines that will provide additional guidance with respect to midrise built form.

The objective of the urban design guidelines is to create an attractive, sustainable and livable community by developing well defined neighbourhoods, creating comfortable, pedestrian-scaled streets and public spaces, designing interfaces between compatible as well as differing land uses that are attractive and minimize any negative impact on residential areas and the streetscape, integrate and enhance natural features as components of the open space system based on an ecosystem approach to planning and design.

The following sections of the document describe the Urban Design Guidelines recommended for the Tremaine Dundas Community. The guidelines are organized into public realm guidelines, private realm and sustainable design guidelines.

Public realm guidelines include:

The Public realm guidelines include creating a strong sense of place through landscaping, enhanced streetscaping, public art, lighting and signage at gateway locations. The Public realm includes typical cross sections of each street type in the Community and describes the character of open spaces in the Community including parks, open spaces and pedestrian linkages.

Private realm guidelines include:

The private realm guidelines speak to the built form and landscaping of sites including preferred types of building materials, building and site orientation. The guidelines also speak to lighting, parking location and landscaping, landscape buffers and loading and outdoor storage. Description of each land use type: Residential Medium Density, Business Corridor, Mixed Use Corridor - General, and Mixed Use Corridor - Employment; and Guidelines for the features of each land use area including: guidelines for height, mass, scale and architectural elements as well as for parking, garages, servicing and landscaping, and sustainable building and community design.

The concept plan for the Community was based on a number of principles that

informed the basic street and block structure, and approach to built form and community design.

Sustainable Design guidelines include:

The sustainable design guidelines incorporate sustainable design features within the public and private realm. The guidelines apply carbon reducing and water conservation technologies such as renewable energy, green roofs, and community gardens.

1. Public Realm Guidelines

1.1 Public Realm - Streetscapes

The Tremaine Dundas Community includes three types of streets:

- 1. Collector Streets
- 2. Local Streets
- 3. A Special Treatment Zone to facilitate safe wildlife movement

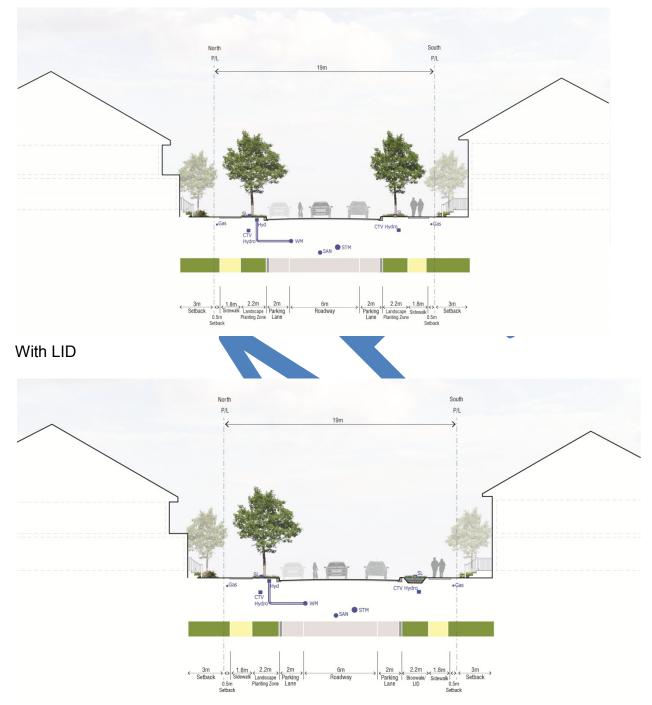
The Tremaine Dundas Community is bounded to the east by Tremaine Road, a Minor Arterial street and Dundas Street to the south, a Major Arterial.

The following section provides typical street sections for each of the street types, illustrating how the built form, public realm and transportation corridors relate to each other and create safe, pedestrian-friendly streetscapes. Street sections provided here are conceptual in nature and final detailed design will be subject to review and approval by the City of Burlington. The street elements shown in the street sections are a representation of how the street right-of-way is organized. Actual street rights of way within the Community may differ during final detailed design as approved by the City, but should maintain the intent of the guidelines. Gateways will be provided at key locations through a combination of site planning, building form and landscaping to provide landmarks within the community, reinforce the sense of arrival and place and promote the character and identity of the Employment precinct and the Residential Neighbourhood.

Gateways will be provided at key locations through a combination of site planning, built form and landscaping to provide landmarks within the community, reinforce the sense of arrival and place and promote the character and identity of the employment precinct and residential neighbourhood.

While not internal to the Tremaine Dundas Community, a section of Tremaine Road is provided to illustrate the relationship to future development in the Town of Oakville's North Oakville West Employment Area, east of the Tremaine Dundas Community. Similarly, a section of Dundas Street is provided to illustrate how the Community will relate to land uses south of Dundas Street.

1.1.1. Local Street:

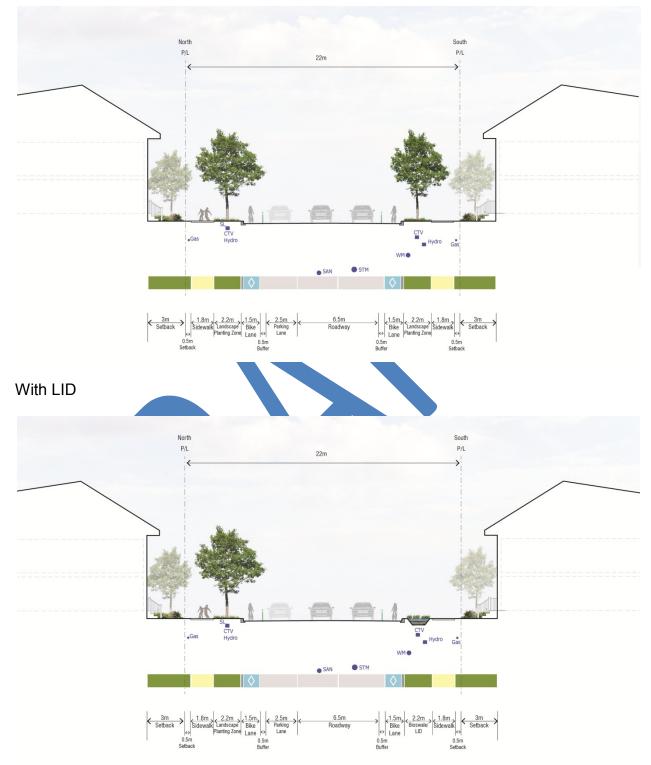


Local Streets are found throughout the interior of the Evergreen Community, servicing the Residential Medium Density area and connecting to the Collector Street network.

1. Local Streets should typically be designed with a 19 metre right-of-way.

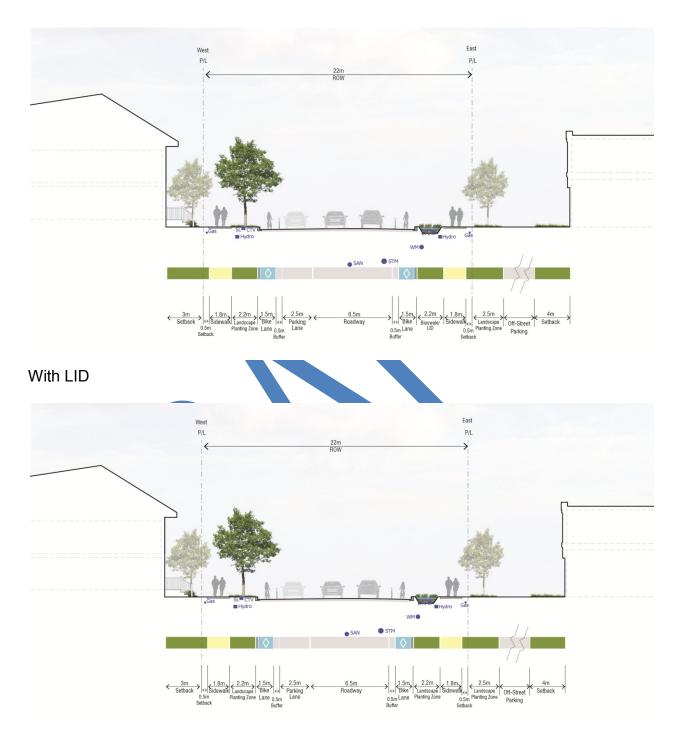
- 2. Local Streets should be designed to promote a pedestrian-scaled public realm.
- 3. As part of the Local Street right-of-way, landscape planting zones should be provided between the roadway and the sidewalk.
- 4. A 1.8 m sidewalk shall be constructed on both sides of the roadway.
- 5. A multi-use trail may be provided in lieu of a sidewalk, if approved by the City.
- 6. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.
- 7. The primary entrances to buildings along Local Streets, including on corner lots, should be sited at the front elevation towards the street to provide eyes on the street and promote community interaction.
- 8. Local Streets may include community mailboxes. Where required, community mailboxes should be located and integrated into adjacent to open space / park blocks or along side yard flankages of lots.
- 9. Curb ramp designs at intersections have raised tactile surfaces or materials with contrasting sound properties to help pedestrians with visual impairments.

1.1.2 Local Collector Street:



Local Collector Streets will provide the primary circulation system within the Tremaine Dundas Community. These streets connect to signalized intersections along Tremaine Road and to Dundas Street.

- 1. The right-of-way for Local Collector Streets may vary depending on its location and function; however, Local Collector Streets should typically be designed with a 22 metre right-of-way.
- 2. Local Collector Streets should be designed to promote a pedestrian-scaled public realm.
- 3. As part of the Collector Street right-of-way, landscape planting zones should be provided between the roadway and the sidewalk with gateway features located at the signalized intersections on Tremaine Road and Dundas Street to reinforce the character and identity of the employment and residential neighbourhoods.
- 4. A 1.8 m sidewalk shall be constructed on both sides of the roadway.
- 5. A multi-use trail may be provided in lieu of a sidewalk, if approved by the City.
- 6. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.
- 7. The primary entrances to buildings along Collector Streets, including on corner lots, should be sited at the front elevation towards the street to provide eyes on the street and promote community interaction.
- Collector Streets may include community mailboxes. Where required community mailboxes should be located adjacent to open space / park blocks or along side yard flankages of lots.
- 9. Curb ramp designs at intersections have raised tactile surfaces or materials with contrasting sound properties to help pedestrians with visual impairments.



1.1.3.Local Collector Street Between the Employment and Residential Blocks

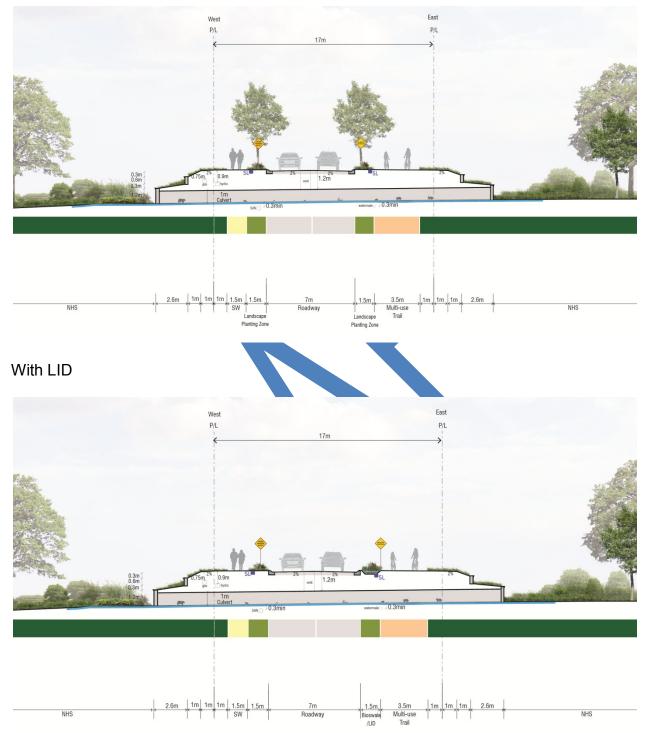
This portion of the Collector Street is planned along the west side of the employment blocks which front onto Tremaine Road. To the west of the street are predominantly residential uses. The design of this street will need to address the interface between employment uses to the east and residential uses located internally within the

Community.

The following guidelines are intended to guide the development of this street:

- 1. The right-of-way for Local Collector Streets may vary depending on its location and function; however, Local Collector Streets should typically be designed with a 22 metre right-of-way.
- 2. Local Collector Streets should be designed to promote a pedestrian-scaled public realm.
- 3. As part of the Collector Street right-of-way, landscape planting zones shall be provided between the roadway and the sidewalk.
- 4. A 1.8 m sidewalk shall be constructed on both sides of the roadway.
- 5. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.
- 6. Curb ramp designs at intersections have raised tactile surfaces or materials with contrasting sound properties to help pedestrians with visual impairments.

1.1.4 Special Treatment Zone

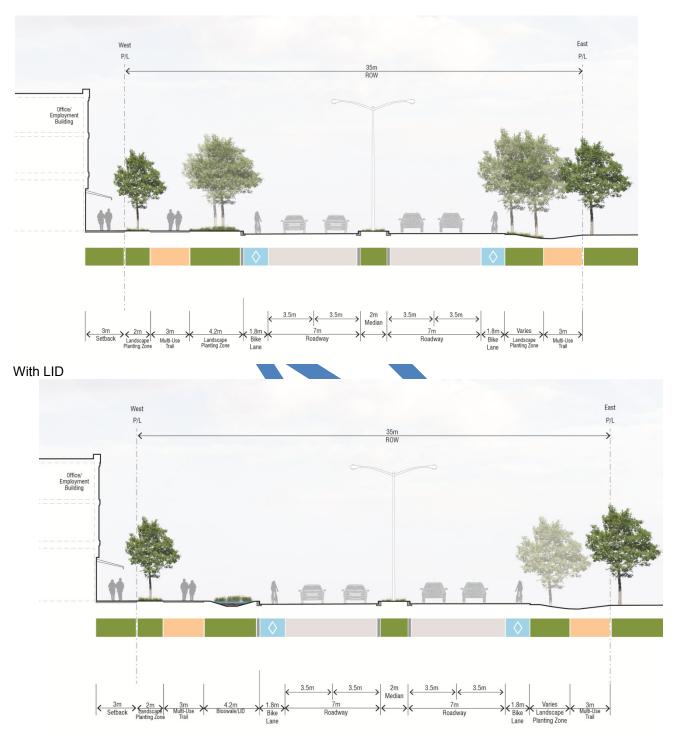


The "Special Street" and treatment zone is located in a local scale linkage between two features of the Natural Heritage System being the Central Woodland and Bronte Creek valleylands. This Zone will feature a range of measures to support safe movement of wildlife and minimize human-wildlife conflict. These measures include incorporation of an Eco-Passage in the "Special Street" design as well as other measures to facilitate safe wildlife movement within the Natural Heritage System.

This special zone is highlighted on Figure 2.

- i. An Eco-Passage should be installed in an appropriate location within the Special Treatment Zone.
- ii. An assessment shall be undertaken to design appropriate mitigation measures to achieve the best possible conditions for on-going wildlife movement. The following factors shall be included in the assessment:
 - potential roadway width, traffic volume, traffic speed, road grade, road side slopes, road barriers and road lighting;
 - known movement patterns of wildlife daily and seasonally and species most likely to cross;
 - topography in the vicinity of the road crossing that may facilitate movement beneath the roadway via a constructed wildlife underpass, culvert or span bridge that include daylighting and the design and construction of funneling structures to lead animals into crossing structures;
 - temporary road closure if there are known short-term movement patterns
 - traffic calming through potential road modifications such as reduced traffic speed, road narrowing, signage, road lighting and improved sightline;
 - provision for alternate basking sites and nesting habitat away from road crossings.
- iii. The right-of-way of the road, in the vicinity of the Special Treatment Zone, shall include an appropriate mix of design features to support safe wildlife movement including naturalized road right-of-way and detailed signage to inform motorists and cyclist. Detailed educational signage to inform pedestrians that this is a wildlife crossing zone.

- iv. The Eco-Passage shall be large enough to accommodate amphibians, reptiles and small mammals known to occur in the area; be filled with a substrate that retains moisture; and have some type of low fencing or retaining walls that direct small wildlife to the culvert.
- v. The detailed design of the "Special Street" shall be undertaken to the satisfaction of the City, Conservation Halton and Halton Region to ensure the design is appropriate to facilitate safe wildlife movement.
- vi. A sidewalk/multi-use trail *should* be provided on both sides of the street.
- vii. Tree planting and landscaping with native species is encouraged in the Special Treatment Zone.



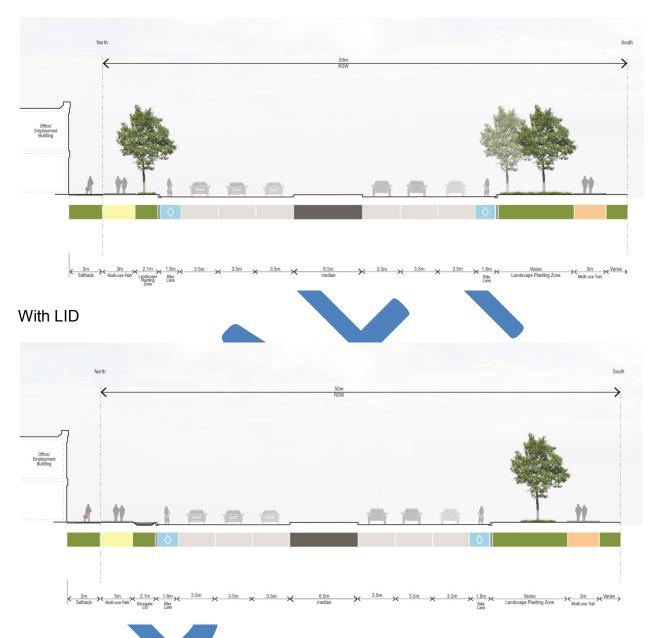
1.1.5 Minor Arterial Street - Tremaine Road:

While not part of the Tremaine Dundas Community, Tremaine Road plays an important role as a key corridor and boundary line between the City of Burlington and the Town of Oakville. The street is anticipated to accommodate a range of employment and business uses, and is planned to be widened to four lanes from

Dundas Street to Lower Base Line. The section above shows the proposed design of the Tremaine Road right-of-way.

- 1. Tremaine Road shall be designed with a 35 metre right-of-way.
- 2. Development within the Tremaine Dundas Community that fronts onto Tremaine Road shall include a minimum setback of 3 metres.
- 3. The right-of-way shall include roadway, dedicated bicycle lane, a landscape planting zone and construction of a minimum 2.0 m sidewalk.
- 4. The landscape planting zone should include street trees to enhance pedestrian comfort and safety
- 5. Buildings should front Tremaine Road and provide access to the street and sidewalk, encouraging an active street frontage.
- 6. Primary entrances of buildings should be provided along Tremaine Road or may be provided on the interior of the lot, reflecting the access provided by the street network.
- 7. New public street intersections along Tremaine Road shall be coordinated with the intersection locations planned on the lands to the east of Tremaine Road within the North Oakville West Secondary Plan Area.
- 8. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington and the Region of Halton.

1.1.6 Major Arterial - Dundas Street



While not part of the Evergreen Community, Dundas Street is an important street bordering the Evergreen Community.

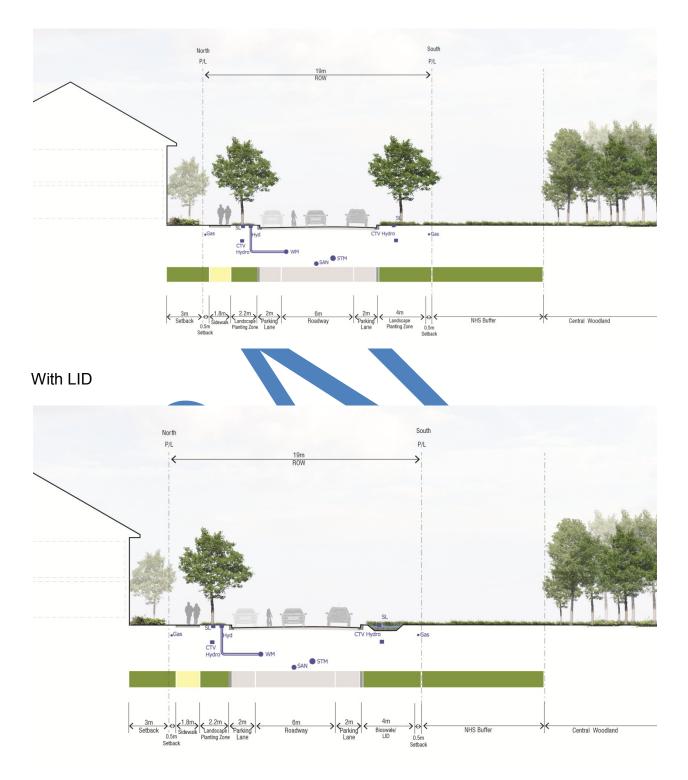
The conceptual cross-section above shows the proposed relationship between potential future land uses on the Evergreen Community and the Dundas Street right-of-way.

- 1. Dundas Street should be designed with a 50 metre right-of-way.
- 2. Development within the Evergreen Community that fronts onto Dundas

Street should incorporate a minimum 3 metre setback from the Dundas Street right-of-way.

- 3. The right-of-way should comprise a roadway, a median, a landscape planting zone, a bicycle lane and construction of a minimum 2.0 m sidewalk.
- 4. The landscape planting zone should include street trees to enhance pedestrian comfort and safety.
- 5. Built form should face Dundas Street and the public sidewalk, encouraging an active street frontage.
- 6. Primary entrances of buildings are encouraged to be provided along Dundas Street.
- 7. Pedestrian connectivity to future bus stations should be prioritized in the development of the Tremaine Dundas Community.
- 8. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington and Region of Halton.

1.1.7 Streets Abutting the Central Woodland:



Where Local Streets or Collector Streets are located adjacent to Key Features or watercourses of the Natural Heritage System, including the Central Woodland and

Southern Woodland, the rights-of way will need to be designed to balance appropriate access to and protection of the Natural Heritage System.

- 1. The design of rights-of-way that are adjacent to Key Natural Features of the Natural Heritage System should generally adhere to the typically right-of- way cross-sections illustrated above for Local Streets and Local Collector Streets.
- 2. Reductions in the width of the right-of-way may be considered based on detailed design and proposed land uses abutting the street.
- 3. Design options that should be considered where rights-of-way are adjacent to Key Features of the Natural Heritage System include integration of trails and fencing between the roadway and the Key Feature, as well as plantings of native trees and other naturalization plantings.
- 4. Where trails and/or fencing are proposed within buffer areas, these should be located as far from the Key Feature as possible.
- 5. Protection of existing healthy, native vegetation in the lands adjacent to Key Features should be encouraged.
- 6. Tree planting and naturalization plantings with shrubs and ground covers, should be encouraged in the lands adjacent to Key Features where they do not exist already.
- 7. Species selection should incorporate a diversity of site-appropriate native species.
- 8. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.

1.2 Public Realm - Open Spaces

The Evergreen Community will provide a range of open spaces within the Public Realm across the development.

Included in the open space network is a major community park that is centrally located and will serve residents, employees and visitors within the local area. Additional open spaces include lands intended for use for stormwater management, naturalized areas, trails and enhanced pedestrian linkages. Guidelines for each of these areas are discussed in this section. This section also includes guidelines which address the preservation of and access to the Crooks/Norton Farm House as a cultural resource.

Guidelines are not provided for the Natural Heritage System components including

Key Features, watercourses, buffers, linkages and enhancements to Key Features.

1.2.1 Parks

The Evergreen Community is planned to include a mid- sized community park that is centrally located and will serve residents, employees and visitors within the local neighbourhood.

The following general guidelines apply to the public park.

- 1. The park should be designed to provide amenity to local residents, employees and visitors within the immediate area.
- 2. The park should be designed to accommodate a range of recreational activities, with a focus on passive recreational opportunities, including benches, seating areas, a playground, landscaped zones, picnic areas, and other outdoor gathering areas.
- 3. Opportunities for active park uses may also be considered, including a skating rink, a half-sized basketball court or a splash pad.
- 4. The park should be designed to accommodate the needs of residents of all ages and abilities.
- 5. Pedestrian walkways should be provided to promote connectivity throughout the Community and follow anticipated desire lines.
- 6. Enhanced sidewalks should be provided around the edges of the park to enhance the park setting and support connectivity.
- 7. Tree planting and other vegetative planting should be provided within the park to enhance the natural character of the park.
- 8. Integration of trees that will provide wind breaks in the winter and cooling/shading in the summer, particularly around play structures to be used by children, is encouraged.
- 9. Entrances to the park should be located along the public right-of-way and made visible through decorative paving, plantings, signage and street furniture.
- 10. New development around the park should be designed and oriented to front onto and help frame the park, where possible.
- 11. To the extent possible, the design of the park should be coordinated with the design of the stormwater management facility located across the street.

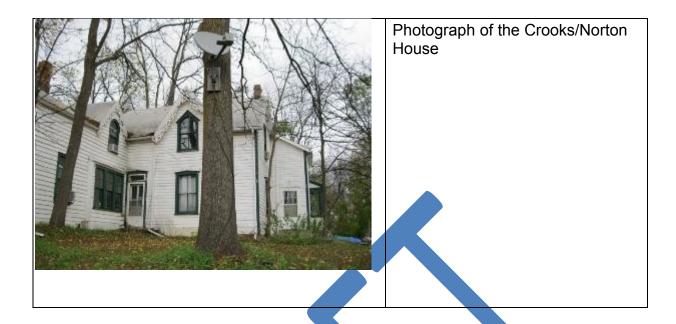
12. The City of Burlington will be responsible for undertaking a detailed park design and construction.

1.2.2 Crooks/Norton Farm House

The Crooks/Norton Farm House is a heritage asset that is located in the southwestern portion of the Evergreen Community. The Farm House is listed on the City's Inventory of Cultural Heritage Resources and is planned to be retained and designated under Part IV of the Ontario Heritage Act.

The following general guidelines apply to the Crooks/Norton Farm House and surrounding landscape.

- 1. The Crooks/Norton Farm House will be *preserved* and maintained in good condition.
- 2. The potential for adaptive reuse of the Farm House may be explored as part of the long-term heritage conservation strategy.
- Pedestrian connections to the Crooks/Norton Farm House will be provided to support access to the site from Dundas Street and from within the Evergreen Community.
- 4. The design and layout of parking areas should not detract from the character and quality of the Farm House or the Natural Heritage System.
- 5. Landscaping treatment around the Farm House should include plantings in keeping with the history of the house, and strategically incorporate native trees that will provide wind breaks in the winter and cooling/shading in the summer.
- 6. Opportunities for commemorative plaquing of the Crooks/Norton Farm House should be explored.



1.2.3 Pedestrian Linkages

Pedestrian Linkages in the Evergreen Community focus on enhancing pedestrian connectivity.

- 1. Pedestrian Linkages should be designed to optimize pedestrian circulation options and promote permeability throughout the community.
- 2. Pedestrian Linkages may be designed as sidewalks, laneways, pathways, trails, private streets, or connections used for internal block circulation.
- 3. Pedestrian Linkages may restrict vehicular movement but should always permit and support movement from one end of the Pedestrian Linkage to the other by way of a sidewalk or path.
- 4. Stormwater management *infrastructure* or underground parking may be incorporated below grade under Pedestrian Linkages.
- 5. Mid-block connections are encouraged to be provided through the Business Corridor and Mixed Use Corridor - General lots to support permeability between Dundas Street/Tremaine Road and the residential community. The exact location and design of the linkages will be determined through the draft plan approvals process.
- 6. A pedestrian trail should be provided within the top-of-bank setback area of the watercourse at the southeast corner of the Community to improve access to and from Dundas Street. This area should also be naturalized.

- 7. Pedestrian Linkages should promote clear connectivity from the Community to future transit stops along the adjacent arterial roads.
- 8. A network of enhanced sidewalks should be provided to connect to and from parks and open spaces and major roads, such as Tremaine Road and Dundas Street. Additional landscaping and public realm improvements are encouraged along the enhanced sidewalk network.

1.2.4 Stormwater Management and Naturalization

The Public Realm Open Space areas also include areas intended for stormwater management, including stormwater management ponds, naturalization areas, and the potential for Low Impact Development features, such as bio-retention areas and grassed swales.

- 1. Stormwater management and naturalization areas should provide enhanced stormwater management to improve water quality and provide erosion control.
- 2. Stormwater management and naturalization areas should enhance visual natural character of the Community and demonstrate environmentally progressive community design.
- 3. Where stormwater management and naturalization strategies are incorporated into the public realm, pedestrian movement and connectivity should be maintained and not compromised because of these strategies.

2. Private Realm Guidelines

The Evergreen Community includes a range of different types of built form, each with distinct design features.

The following section describes each land use type: Residential - Medium Density, Business Corridor, Mixed Use Corridor - General and Mixed Use Corridor -Employment; and provides guidelines related to built form, parking, garages, servicing, landscaping and sustainability initiatives.

2.1 Residential - Medium Density

The Residential - Medium Density area includes lands designated for residential uses. This area is located in the interior of the Community, taking advantage of the relationship with the robust Natural Heritage System. The following subsections set out guidelines that address built form and architectural treatment; as well as requirements related to garages, parking, servicing; fencing and landscaping; and sustainable design in Residential - Medium Density areas.

2.1.1 Built Form and Architectural Detailing

Detached Residential Houses

- 1. The front door of a detached house should be oriented towards the street.
- 2. Different detached house types may be distributed among the different lots to create a more interesting and varied streetscape.
- 3. Detached houses should be massed to contribute to the spacial character of the street and should frame adjacent open spaces.
- 4. Individual units should incorporate outdoor useable areas, such as porches or front patios and promote 'eyes on the street.'
- 5. Facades should contribute to street life and utilize elements such as porches, generously proportioned windows, window bays and doors.
- 6. Facades should have recesses to add articulation and interest to the development to reduce the visual mass of the block.
- 7. Single houses should vary in their architectural massing, materiality, colour and texture, in order to avoid the creation of monotonous streetscapes. Primary building materials should be of organic materials such as brick, stone and wood.
- 8. The design of detached houses should promote a high level of internal daylight exposure and maximize the usable internal space. Outdoor spaces, such as terraces or balconies should be provided where possible.
- 9. For lots which flank a Collector Road, decorative solid screen or acoustic fencing (if required by noise study) shall be provided along the side lot line, for the privacy area, accompanied by landscaping consisting of a combination of deciduous and coniferous plants. The architecture of the house should be consistent with that of corner lots.
- 10. For corner lots and units adjacent to open space, both the front and side elevations shall be of equal quality in terms of architectural components, number and proportions of openings, materials and attention to detail and include features such as corner bay windows, entrance porticoes and wrap-around porches.
- 11. For detached residential dwellings adjacent to parks and open space, housing forms should utilize design features such as upper floor balconies or french windows to promote 'eyes on the open space'.

12. Utility meters and air conditioning units should not be located along the front facing façade. If located along the front façade, they shall be integrated into the design so that they are not visible from the street

Townhouses

- 1. The front door of a Townhouse should be oriented towards the street.
- 2. Facades should contribute to street life and utilize elements such as generously proportioned windows, window bays and doors.
- 3. Facades should have recesses to add articulation and interest to the development to reduce the visual mass of the block.
- Townhouses should vary in their architectural massing, materiality, colour and texture, in order to avoid the creation of monotonous streetscapes. Primary building materials should be of organic materials such as brick, stone and wood.
- 5 Individual units should incorporate porches or front patios and promote 'eyes on the street and for units adjacent to parks and open space, units should utilize design features such as upper floor balconies or french windows to promote 'eyes on the open space'.
- 6 The design of townhouses should promote a high level of internal daylight exposure and maximize the usable internal space. Outdoor spaces, such as terraces or rooftop-decks should be provided where possible.
- 7 For lots which flank a Collector Road, decorative solid screen or acoustic fencing (if required by noise study) shall be provided along the side lot line, for the privacy area, accompanied by landscaping consisting of a combination of deciduous and coniferous plants. The architecture of the house should be consistent with that of corner lots.
- 8 For corner lots and units adjacent open space, both the front and side elevations shall be of equal quality in terms of architectural components, number and proportions of openings, materials and attention to detail and include features such as corner bay windows, entrance porticoes and wraparound porches.
- 9 Utility meters and air conditioning units should not be located along the front facing façade. If located along the front façade, they shall be integrated into the design so that they are not visible from the street.

2.1.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City's Sustainable Development and Building Guidelines.



2.1.3 Garages, Parking and Servicing

Detached Residential Houses

Where detached houses contain a garage in the front, the width of the garage

should not exceed 50% of the lot.

- 1. The garage should be recessed from the building facade a minimum of 1 metre and set back a minimum of 6.7 metres from the front property line to minimize impact on the streetscape.
- 2. Garages or parking pads should be accessible directly from the street.
- 3. Where driveways are provided, the use of permeable pavement is encouraged.

Townhouses

- 1. The garage should be recessed from the front building facade a minimum of 1 metre and set back a minimum of 6.0 metres from the front property line to minimize impact on the streetscape. Dwelling units within a plan of condominium shall have a minimum driveway length of 6.7 m measured from back of curb to front of garage.
- 2. Where driveways/parking pads are provided, the use of permeable pavement is encouraged.

2.1.4 Fencing and Landscaping

Detached Residential Houses

- 1. Where the lot associated with a detached residential house abuts the Natural Heritage System, park or other public open space, a 1.5m high black vinyl chain link fence (or equivalent) should be installed along the property line. No gates should be permitted in fences that are located along this interface.
- 2. Noise attenuation may be required along the rear yard and/or side yard of detached residential lots (if required by a detailed noise study). The decorative solid screen or acoustic fencing shall be provided for the privacy area and be accompanied by landscaping consisting of a combination of deciduous and coniferous plants.
- 3. With the objective of enhancing canopy cover throughout the community, consideration should be given to planting one full-crowned deciduous tree in the rear yard area for every 2 detached residential lots.

Townhouses

1. Where a lot associated with a townhouse abuts the Natural Heritage System, park or other public open space, a 1.5m high black vinyl chain link fence (or equivalent) should be installed along the property line. No gates should be permitted in fences that are located along this interface.

- 2. Noise attenuation may be required along the rear yard and/or side yard of townhouse lots (if required by a detailed noise study). The decorative solid screen or acoustic fencing shall be provided for the privacy area and be accompanied by landscaping consisting of a combination of deciduous and coniferous plants.
- 3. Privacy screens may be installed between the adjacent townhouse units in order to provide visual and physical separation between rear yard amenity areas. Privacy screens may be constructed using wood, metal, glass or composite materials and should be located along the joint property line between the two adjacent lots. Coniferous trees or shrubs may also be used as privacy screens. Privacy screens should be a maximum of 2.0 m high.

2.2 Business Corridor

2.2.1 Built Form and Architectural Detailing

- 1. Buildings should be massed to contribute to the spacial enclosure of the street. The buildings should include pedestrian-scaled elements and details.
- 2. Buildings located along Tremaine Road shall be at least two storeys in height, or if single storey, be of architectural design incorporating a ridge roof parallel to Tremaine Road with the elevation of the roof peak equivalent to a building of at least two storeys, to provide screening and noise mitigation for residential development to the west.
- 3. The visual scale and massing of the buildings should be designed in order to provide an appropriate transition to the adjacent open spaces and to respect the scale of the street and rest of the development.
- 4. Mid-block pedestrian connections should be provided to support access from Tremaine Road into the Evergreen Community.
- 5. The primary entrance to the buildings should face the street, be clearly identifiable and be reinforced by architectural detailing in the facade of the building.
- 6. Facades should contribute to active street life and should be designed with elements such as generously proportioned windows, doors and extensive use of transparent glazing on the ground floor to provide visual interest for pedestrians and passing motorists.

- 7. The use of techniques such as variation in massing, material, color and texture is encouraged.
- 8. Buildings located adjacent to the Natural Heritage System are encouraged to incorporate bird friendly design measures to discourage bird/glass collisions.
- 9. Buildings along the east side of the street will front onto Tremaine Road but are encouraged to create address along the internal Collector Street.
- 10. Where surface parking areas are located along the east side of the street, landscaping, trees and public realm treatments will be encouraged to facilitate a transition to the residential areas and create a more attractive streetscape environment for pedestrians and cyclists.
- 11. The incorporation of bio-swales within parking lots are encouraged to direct surface runoff to landscaping and trees so separate watering is not required.

2.2.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City's Sustainable Development and Building Guidelines.



Extensive use of window awnings and articulation in façade of a 3 storey office building.



2.2.3 Parking and Servicing

- 1. Service entrances should be located at the rear of the building and should be accessible from the parking lot.
- 2. Parking, access, loading and servicing elements should be designed to minimize their visual impact on the street.
- 3. Bicycle parking facilities should be located as close as possible to the entry points of buildings and should not obstruct pedestrian circulation. A variety of bicycle parking formats, such as sheltered racks and lockers, catering to both employees and visitors should be required, where appropriate.
- 4. No surface parking should be permitted between the front of the building and the primary street.
- 5. Trees should be integrated into parking lots and other impervious areas within bio-swales to utilize surface runoff, mitigate urban heat island effects and provide shade and cooling for users.

- 6. Service elements, such as garbage and utilities should be integrated within the building design.
- 7. Parking lots in the Business Corridor areas should be framed by vegetation and tree plantings to promote the creation of an extended tree canopy cover.
- 8. Where parking lots abut a park, natural heritage feature or Residential -Medium Density area, special attention should be made to screen the parking area using vegetation.
- 9. If outside storage is required, it should be adequately screened and buffered to mitigate potential visual impacts.
- 10. Use of planting and landscaping to provide safe and pleasant pedestrian linkages through a surface parking lot.
- 11. Use of landscaping elements and permeable pavement in a surface parking lot to contribute to sustainability goals.



2.2.4 Landscaping

- 1. Open spaces within the Business Corridor Area around employment buildings should be used as landscaped separation zones between the building and the street, or the building and the parking lot.
- 2. Throughout the site a diverse canopy of trees should be established. Species should be selected to be sustainable in consideration of micro-climate and context within the site.
- 3. Loading and service areas should be screened from view from the adjacent roads using a combination of plant material, landform and fencing.
- 4. Where a Business Corridor lot abuts the Natural Heritage System, park or other public open space, a 1.5m high black vinyl coated chainlink fence should be installed along the lot line. Gates / openings may be permitted only where private open space or a pedestrian linkage proposed within the lot connects to a proposed trail within adjacent the Natural Heritage System or public open space lands.
- 5. Entrance features should be provided to demarcate the main entry driveways into the Business Corridor lots. Entrance features should complement the architectural detailing of the buildings. Entrance features may be illuminated utilizing downlighting or backlighting. Upward aiming floodlighting should be avoided. Entrance features should be located within the limits of the private lot.

2.3 Mixed Use Corridor - General

2.3.1 Built Form and Architectural Detailing

Mid-Rise Buildings

- 1. Mid-rise buildings within the Mixed Use Corridor General area should be massed to contribute to the spacial character of the street and to frame adjacent open spaces.
- 2. Active at-grade uses such as restaurants and retail establishments are permitted in all the mid-rise buildings in the Mixed Use Corridor General.
- 3. To create a vibrant focal point within the community, pedestrian areas within the site should be pedestrian oriented to encourage gathering and include the provision of casual seating areas.
- 4. Entrances and active facade treatments should be promoted along Dundas Road and frontages along local and collector roads.

- 5. The floor to ceiling height of the ground floor shall be a minimum of 4.5 metres to accommodate commercial uses.
- 6. Secondary entrances to buildings should be provided facing the internal circulation network of the Mixed Use Corridor General area.
- 7. Blank walls or building "backs" are discouraged along Dundas Road, local or collector roads.
- 8. All facades of mid-rise buildings should contribute to street life and utilize elements such as generously proportioned windows, doors and extensive use of transparent glazing on the ground floor to provide visual interest for pedestrians.
- 9. Buildings should be a maximum of 75m in length, although longer buildings may be considered where it can be demonstrated that they appropriately address the street and provide sufficient articulation to reduce the visual impact of their length. Ensure that frontages longer then 35m are articulated to break up the building's massing.
- 10. When located in proximity of low-rise residential buildings, mid-rise buildings should be designed using techniques such as angular planes or step-backs to create a proportional relationship with the surrounding buildings and transition in height, avoiding blocking key views or projecting shadows to the adjacent development.
- 11. Mechanical penthouses should be incorporated within the structure of the building.
- 12. The use of techniques such as variation in massing, material, color and texture is encouraged in the design of mid-rise buildings.
- 13. Residential units should be designed to promote high levels of internal daylight exposure and maximize the usable internal space. Outdoor living spaces, such as terraces, balconies or rooftop decks should be provided where possible.

Townhouses

- 1. The front door of a Townhouse should be oriented towards the street.
- 2. Where a Townhouse is situated at a corner lot, both street-facing facades should be designed of equal quality and detail.
- 3. Facades should contribute to street life and elements such as generously proportioned windows, window bays and doors should be utilized.

- 4. Facades should have recesses to add articulation and interest to the development and to reduce the visual mass of the blocks.
- 5. Townhouses should vary in their massing, materiality and colour, in order to avoid the creation of monotonous streetscapes.
- 6. Individual units should incorporate front porches or patios to provide "eyes on the street" and rear laneways should be considered.
- 7. The design of townhouses should promote high levels of internal daylight exposure and maximize the usable internal space. Outdoor living spaces, such as terraces, balconies or rooftop-decks should be provided when possible pedestrian linkage.

2.3.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City's Sustainable Development and Building Guidelines.





2.3.3 Parking and Servicing

- 1. An internal circulation network should be provided to serve the mid-rise and townhouse buildings, and provide vehicular and pedestrian access.
- 2. Parking for mid-rise buildings and townhouses in the Mixed Use Corridor General area should be primarily provided underground.
- 3. Mid-rise buildings and townhouses may share common underground parking facilities.
- 4. Convenience parking to serve the at-grade commercial and retail uses within mid-rise buildings may be permitted on-street and within the internal circulation network.
- 5. Loading and servicing elements should be internal to mid-rise buildings, integrated as part of the building design.
- 6. Bicycle parking facilities should be located as close as possible to the entry points of buildings and should not obstruct pedestrian circulation. A variety of bicycle parking formats, such as sheltered racks and lockers, catering to both employees and visitors should be required, where appropriate.
- 7. Underground parking access should be provided off of the internal circulation network. No access to underground parking should be provided off of Dundas

Road.

- 8. No surface parking should be permitted between mid-rise buildings and Dundas Street.
- 9. No front garages should be permitted in Mixed Use Corridor General areas.

2.3.4 Landscaping

- Landscaping should be provided around buildings within the Mixed Use Corridor

 General block to enhance the quality of place and create an attractive
 pedestrian realm.
- 2. Throughout the site a diverse canopy of trees should be established. Species should be native and selected to be sustainable in consideration of micro-climate and context within the site.
- 3. Loading and service areas should be screened from view from the adjacent roads by a combination of plant material, landform, fencing of other screening elements.
- 4. Where parking lots abut a natural heritage feature, Residential Medium Density area, or public trail or walkway, special attention should be made to screen the parking area using vegetation.
- 5. Entrance features may be installed to annunciate the locations of major entry points into the Mixed Use Corridor General block. Entrance features should be located entirely within the private lot. Where entrance features are proposed to be illuminated, downlighting or backlighting should be utilized. Upward aiming floodlights should be avoided.

2.4 Mixed Use Corridor - Employment

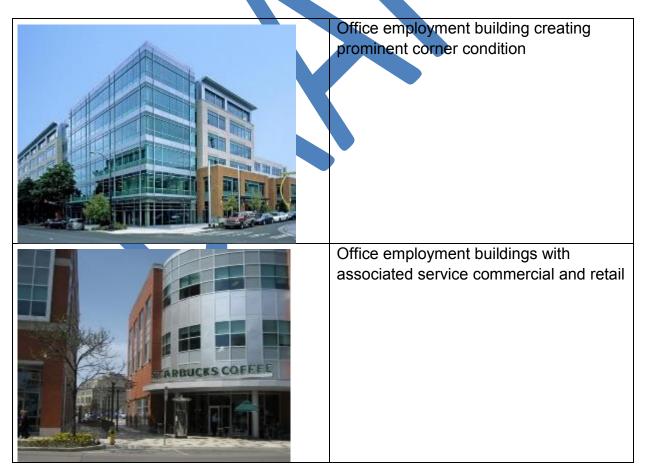
2.4.1 Built Form and Architectural Detailing

- 1. Mixed Use Corridor Employment buildings should be massed to contribute to the spatial enclosure of the street and to frame adjacent open spaces.
- 2. The primary entrance to the buildings should face the Dundas Street and/or Tremaine Road and be clearly identifiable.
- 3. Facades should contribute to street life and elements such as generously proportioned windows, doors and extensive use of transparent glazing should be utilized on the ground floor to provide visual interest for pedestrians.

- 4. The floor to ceiling height of the ground floor should be a minimum of 4.5 metres to accommodate commercial uses.
- 5. The visual scale and massing of the buildings should be designed in order to provide an appropriate transition to the adjacent open spaces and natural areas, and to respond to the scale of the street and rest of the development.
- 6. The use of techniques such as variation in massing, material, color and texture is encouraged.
- 7. Mechanical penthouses should be incorporated within the structure of the building.

2.4.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City's Sustainable Development and Building Guidelines.



2.4.3 Parking and Servicing

- 1. Service entrances should be located at the rear of the building, and be accessible through the driveways or off of the collector street bordering the Mixed Use Corridor Employment area.
- 2. Parking access, loading and servicing such as garbage and utilities elements shall be designed in a way that minimizes their visual impact from the street and when it is possible integrated into the building.
- 3. No surface parking should be permitted between the front of the building and Tremaine Road or Dundas Street
- 4. Bicycle parking facilities should be located as close as possible to the entry points of buildings and should not obstruct pedestrian circulation. A variety of bicycle parking formats, such as sheltered racks and lockers, catering to both employees and visitors should be required, where appropriate.
- 5. Underground parking is encouraged to service the Mixed Use Corridor Employment area.
- 6. Surface parking to provide visitors parking spots is permitted; however the majority of required parking should be underground to ensure adequate greenspace. Where surface parking does exist, it should be framed by vegetation, promoting the creation of an extended tree canopy cover.
- 7. Opportunities to implement transportation demand management (TDM) strategies at the development approvals stage are encouraged, including car sharing and priority parking, carpool users, and end-of-trip facilities for cyclists.



2.4.4 Landscaping

1. Fencing may be required along the interface of the Mixed Use Corridor -Employment lot and the adjacent watercourse corridor contingent on the design of landscape and pedestrian movement patterns within the lot. Where connectivity is desired, a fence will not be required but the property line should be demarcated by other means. Where connectivity is not required, a 1.5m high ornamental metal fence should be installed along the lot line.

- 2. Loading and servicing areas should be screened from view from the adjacent roads and public open spaces using fencing, plant material, landform or a combination of the three.
- 3. Entrance features may be installed at key entry points into the site. Entry features may comprise masonry, natural stone, plant material and other elements. Design and material selection should complement the architectural detailing of the building. Entrance features may be illuminated using downlighting and backlighting. Upward aiming floodlights should be avoided.
- 4. Light poles and luminaries should be selected to complement the architectural character of the buildings and should be sized to reflect their intended locations. In private open spaces and pedestrian areas, light poles should not exceed 5.5m in height. Taller poles and larger luminaries may be utilized to illuminate parking lots, driveways and loading / service areas.
- 5. Throughout the lot the installation of site furniture such as benches, trash/recycling receptacles, bicycle racks and pedestrian shelters is recommended. Site furnishings should be complementary to the architecture and should represent a consistent "family" or elements in terms of colour, style, materials and detailing.
- 6. The installation of public art may be considered to create a focal point at the intersection of Dundas Street and Tremaine Road or to punctuate the private landscaped area within the lot.
- 7. Throughout the site a diverse canopy of trees should be established. Species should be selected to be sustainable in consideration of micro-climate and context within the site.

3. Sustainable Design Guidelines

3.1 Public Realm Sustainable Design

Public Realm Open Space areas should be designed with the intent of contributing to the overall a long- term sustainability of the Tremaine Dundas Community. The following guidelines are proposed to achieve a range of sustainability objectives within the public realm.

3.1.1 Landscaping and Tree Planting

1. Trees shall be integrated into parking lots and other impervious areas through the implementation of Landscape Areas in the Zoning By-law.

- 2. High-reflective paving materials should be utilized in the construction of walkways and paved areas in order to mitigate urban heat island effect.
- The planting of large-crowned native trees is encouraged in all Public Realm Open Space areas with the intent of increasing the extent of canopy cover and achieving other associated benefits (such as cooling, shading and improved air quality) with a target of 20% canopy cover of non-building hard surfaces at twothirds mature size.
- 4. Trees should be planted with an adequate amount of suitable growing medium in order to sustain long-term growth and vitality via sufficient soil volume or soil cell product.
- 5. Trees integrated in areas outside of the Natural Heritage System should be diverse, native, drought tolerant, salt tolerant and low maintenance species.
- 6. Watercourse blocks and valleylands, and their buffer areas, should be naturalized where appropriate using native and non-invasive species.
- 7. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:
 - Maintain visual interest throughout the seasons
 - Use of selective species palate
 - Use of one or two species or elements to create an accent
 - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
 - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
 - Consider habitat attributes of plant material
 - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration

3.1.2 Community Infrastructure

- 1. Energy efficient Light Emitting Diode (LED) light fixtures should be utilized where illumination of public realm open space areas is required. Lighting systems should be "Dark Sky" compliant in accordance with the City's Guidelines.
- 2. Connections within the Community should be supportive of active transportation by providing pedestrian and cycling connections from public sidewalks, pedestrian paths, transit stops and adjacent buildings and sites.
- 3. Opportunities to introduce Low Impact Development strategies shall be considered, such as bioswales and bioretention areas.

- 4. Stormwater management and naturalization areas may include a range of low impact development technologies to achieve stormwater management objectives including but not limited to: permeable pavement, stormwater planters, attenuation areas, biofilters, porous pipe systems, bioretention cells constructed wetlands, rain gardens, grass swales, surface attenuation areas, rainwater recycling systems, and conventional stormwater management ponds.
- 5. New public facilities shall be designed in accordance with AODA requirements and other applicable Provincial legislation to promote accessibility by all age groups and abilities.
- 6. Community gardens are encouraged as they promote sustainable local food production, increase access to healthy food, provide opportunities for community building in addition to creating local green space.

3.2 Private Realm Sustainable Design

Private Realm areas should be designed with the intent of contributing to the overall sustainable vision of the Tremaine Dundas Community. The following guidelines are proposed to achieve a range of sustainability objectives.

3.2.1 Residential - Medium Density

Detached Residential Houses

- 1. Dwelling units should be constructed to the equivalent of one of the following standards; LEED, Energy Star, Net Zero ready or R-2000 Certification.
- 2. The incorporation of renewable energy resources is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:
 - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
 - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
 - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
 - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
 - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.

- 3. Windows of detached residential houses should be oriented to minimize passive solar gain during the summer months and optimize passive solar gain during the winter season, where possible.
- 4. Landscaped areas shall incorporate friable topsoil placed at a minimum depth of 150mm within all lawn and landscaped areas.
- 5. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:
 - Maintain visual interest throughout the seasons
 - Use of selective species palate
 - Use of one or two species or elements to create an accent
 - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
 - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
 - Consider habitat attributes of plant material
 - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration
- 6. Rain gardens should be encouraged in front yards to support attenuation and help filter run-off.
- 7. Paving and roofing materials that have a high reflectivity should be utilized where possible to reduce urban heat island effect.
- 8. The use of rain barrels to collect, store and reuse rainwater will be encouraged.
- 9. Where driveways/parking pads are provided, the use of permeable pavement is encouraged to minimize impervious surfaces and reduce stormwater run-off.

Townhouses

- 1. Dwelling units should be constructed to one of the following standards; LEED, Energy Star, Net Zero ready or R-2000 Certification.
- The incorporation of renewable energy resources is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:
 - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.

- Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
- Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
- Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure of renewable energy source features, such as wiring, conduits, pipes, etc., into the design of the building
- Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts
- 3. Landscaped areas shall incorporate friable topsoil placed at a minimum depth of 150mm within all lawn and landscaped areas.
- 4. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:
 - Maintain visual interest throughout the seasons
 - Use of selective species palate
 - Use of one or two species or elements to create an accent
 - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
 - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
 - Consider habitat attributes of plant material
 - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration
- 5. Rain gardens should be encouraged in front yards to support attenuation and help filter run-off.
- 6. Paving and roofing materials that have a high reflectivity should be utilized where possible to reduce urban heat island effect.
- 7. Where driveways/parking pads are provided, the use of permeable pavement is encouraged to minimize impervious surfaces and reduce stormwater runoff.

3.2.2 Business Corridor

 All building shall be designed to incorporate sustainable design features reducing carbon and utilizing water conservation technologies, examples include alternative energy sources such as district energy, wind turbines, solar and photovoltaic panels, and geothermal such as renewable energy resources and/or Low Impact Development such as bioswales, grey water recycling, permeable pavement, infiltration galleries.

- 2. Green roofs are encouraged to be installed over a minimum of 50% of the overall roof area. Green roofs should be designed to attenuate a certain volume of stormwater. Cool roofs may also be utilized provided over a minimum of 75% of the overall roof area, or a combination of green roof and cool roof material for a minimum of 75% of the roof area to reduce heat island effect and contribute to building energy efficiency..
- 3. The integration of alternative energy sources on-site is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:
 - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
 - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
 - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
 - Buildings fronting onto major arterial streets/roads should use black solar panels, framing and back sheets.
 - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
 - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.
- 4. High efficiency LED lights that are "Dark Sky" compliant should be utilized to illuminate exterior areas within Business Corridor blocks in accordance the City's Guidelines for Outdoor Lighting.
- 5. All lawns and landscaped areas should be covered with friable topsoil with a minimum depth of 150mm.
- 6. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:
 - Maintain visual interest throughout the seasons
 - Use of selective species palate
 - Use of one or two species or elements to create an accent
 - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
 - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
 - Consider habitat attributes of plant material
 - Enhanced LID function related to pollutant uptake, temperature mitigation,

filtration and evapotranspiration

- 7. Incorporate bird friendly design measures to discourage bird/glass collisions, such as "bird friendly" film.
- 8. High reflectivity paving materials should be used wherever possible to maximize albedo (reflectivity) and reduce urban heat island effect.
- 9. Large deciduous trees should be planted throughout the site to maximize canopy cover, promote interception of rainfall and maximize evapotranspiration.
- 10. Trees should be planted with the appropriate volume of suitable growing medium in order to ensure long term growth and vitality.

3.2.3 Mixed Use Corridor - General

- All building should be designed to incorporate sustainable design features reducing carbon and utilizing water conservation technologies, examples include alternative energy sources such as district energy, wind turbines, solar and photovoltaic panels and/or geothermal and/or Low Impact Development such as bioswales, grey water recycling, permeable pavement.
- 2. The integration of alternative energy sources on-site is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:
 - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
 - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
 - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
 - Buildings fronting onto major arterial streets/roads should use black solar panels, framing and back sheets.
 - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
 - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.
- 3. High efficiency LED lights that are "Dark Sky" compliant should be utilized to illuminate exterior areas within Mixed Use Corridor General blocks.

- 4. All lawns and landscaped areas shall be covered with friable topsoil with a minimum depth of 150mm.
- 5. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:
 - Maintain visual interest throughout the seasons
 - Use of selective species palate
 - Use of one or two species or elements to create an accent
 - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
 - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
 - Consider habitat attributes of plant material
 - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration
- 6. Green roofs are encouraged to be installed over a minimum of 50% of the overall roof area. Green roofs should be designed to attenuate a certain volume of stormwater. Cool roofs may also be provided over a minimum of 75% of the overall roof area, or a combination of green roof and cool roof material for a minimum of 75% of the roof area to reduce heat island effect and contribute to building energy efficiency.
- 7. Incorporate bird friendly design measures to discourage bird/glass collisions, such as "bird friendly" film.
- 8. High reflectivity paving materials should be used wherever possible to reduce urban heat island effect.
- Large crowned deciduous trees should be planted throughout the Mixed Use Corridor - General area to promote interception of rainfall and maximize evapotranspiration.
- 10. Trees should be planted with the appropriate volume of suitable growing medium in order to ensure long term growth and vitality.
- 11. All planting areas that are located over underground garages should be irrigated using an efficient automated irrigation system that utilizes recycled rainwater or grey water.
- 12. Mixed Use Corridor General sites shall include adequate sheltered parking for bicycles and the installation of charging stations for electric vehicles.
- 13. Parking lots should incorporate generous islands that include bioswales and are planted with trees and landscaping with the objective of enhancing shading

and reducing the heat island effect.

14. Business Corridor sites should include adequate sheltered parking for bicycles. The installation of charging stations for electric vehicles is encouraged.

3.2.4 Mixed Use Corridor - Employment

- All building should be designed to incorporate sustainable design features reducing carbon and utilizing water conservation technologies, examples include alternative energy sources such as district energy, wind turbines, solar and photovoltaic panels, and geothermal and/or Low Impact Development such as bioswales, grey water recycling, permeable pavement.
- 2. The integration of alternative energy sources on-site is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:
 - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
 - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
 - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
 - Buildings fronting onto major arterial streets/roads should use black solar panels, framing and back sheets.
 - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
 - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.
- 3. High efficiency LED lights that are "Dark Sky" compliant should be utilized to illuminate exterior areas within Mixed Use Corridor Employment blocks.
- 4. All lawns and landscaped areas shall be covered with friable topsoil with a minimum depth of 150mm.
- 5. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:
 - Maintain visual interest throughout the seasons
 - Use of selective species palate
 - Use of one or two species or elements to create an accent

- Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
- Avoid sparsely spaced greenery; bedding plants should be fully vegetated
- Consider habitat attributes of plant material
- Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration
- 6. Green roofs are encouraged to be installed over a minimum of 50% of the overall roof area. Green roofs should be designed to attenuate a certain volume of stormwater. Cool roofs may also be provided over a minimum of 75% of the overall roof area, or a combination of green roof and cool roof material for a minimum of 75% of the roof area to reduce heat island effect and contribute to building energy efficiency.
- 7. Incorporate bird friendly design measures to discourage bird/glass collisions, such as "bird friendly" film.
- 8. High reflectivity paving materials should be used wherever possible to reduce urban heat island effect.
- 9. Large crowned deciduous trees should be planted throughout the Mixed Use Corridor - Employment area to maximize canopy cover, promote interception of rainfall and maximize evapotranspiration.
- 10. Trees should be planted with the appropriate volume of suitable growing medium in order to ensure long term growth and vitality.
- 11. All planting areas that are located over underground garages should be irrigated utilizing an efficient automated irrigation system that does, where possible, utilize recycled rainwater or grey water.
- 12. Parking lots should incorporate generous islands that include bioswale and are planted with trees and bioswales with the objective of enhancing shading.
- 13. Mixed Use Corridor Employment sites should include adequate sheltered parking for bicycles. The installation of charging stations for electric vehicles is encouraged.

4 Implementation

The Urban Design Guidelines for the Evergreen Community have been prepared to fulfill policy 5.3 b) Part VI of the Burlington Official Plan.

The Urban Design Guidelines are intended to be read in conjunction with the City of Burlington Official Plan and the Tremaine Dundas Secondary Plan.

The guidelines are intended to complement the numerous reports and documents which were prepared as a product of the planning process for the Evergreen Community. This document provides illustrations and clarity around the design intent for development of the Evergreen Community.

These guidelines are intended to be an element of the design review process for future development proposals within the Evergreen Community and may be amended. They provide additional guidance to the development process while maintaining a degree of flexibility to accommodate appropriate design solutions.

The guidelines are not prescriptive but are intended to set out preferred approaches to how the Evergreen Community will be developed into an urban, sustainable community, thus setting a new standard for mixed use development in the City of Burlington.