



Wilmot Creek Secondary Plan SUMMARY REPORT



Municipality of Clarington
October 2019

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INTRODUCTION

1.0 PURPOSE AND DOCUMENT STRUCTURE

1.1 Purpose of the Wilmot Creek Secondary Plan

The Wilmot Creek Secondary Plan will be an integral component of the Municipality’s planning framework setting forth the land use planning directives for the development of the final phases of the Wilmot Creek Community.

The Planning Study will apply to Wilmot Creek, north of the existing Wilmot Creek Adult Lifestyle Community. The Secondary Plan will provide specific local policies for land use, urban design, natural heritage, transportation, parks, and sustainability where more detailed direction is needed for matters beyond the general framework provided by the Official Plan.

The Municipality of Clarington has initiated the Wilmot Creek Secondary Plan to:

- Review key planning issues and emerging trends that will influence future growth in the community.
- To guide growth and sustainable development of the lands addressing Priority Green Development Framework.
- Refine/prepare a development concept and demonstration plan for the lands.
- Update of the technical studies submitted as part of the original application COPA 2003-0012.
- Complete additional studies in support of the Secondary Plan.
- Establish planning policies, schedules, green development guidelines, and a zoning by-law to conform with the updated Municipality of Clarington Official Plan, Region of Durham Official Plan, and provincial policy frameworks.



Figure 1 - Wilmot Creek Secondary Plan Study Area

1.2 Previous Application

An application and supporting studies for an Official Plan Amendment (OPA) for the lands was submitted by Rice Development Group in 2015. The Wilmot Creek Homeowners Association made a submission to the Official Plan Amendment application outlining their concerns with the development proposal. In June 2016, Rice Development Group appealed the Official Plan Amendment application to the Ontario Municipal Board in response to Clarington Council's failure to make a decision on the application. A settlement was reached and approved by the Ontario Municipal Board in 2017. The landowners and the Municipality agreed to advance the Secondary Planning process as set out in OPA 107 once approved by the Region of Durham.

1.3 Wilmot Creek Secondary Plan Process

The Secondary Plan process consists of three phases, each of which include distinct objectives and deliverables. Public engagement through Public Information Centres will provide opportunity to receive and integrate feedback on the process. An overview of each phase is provided below.

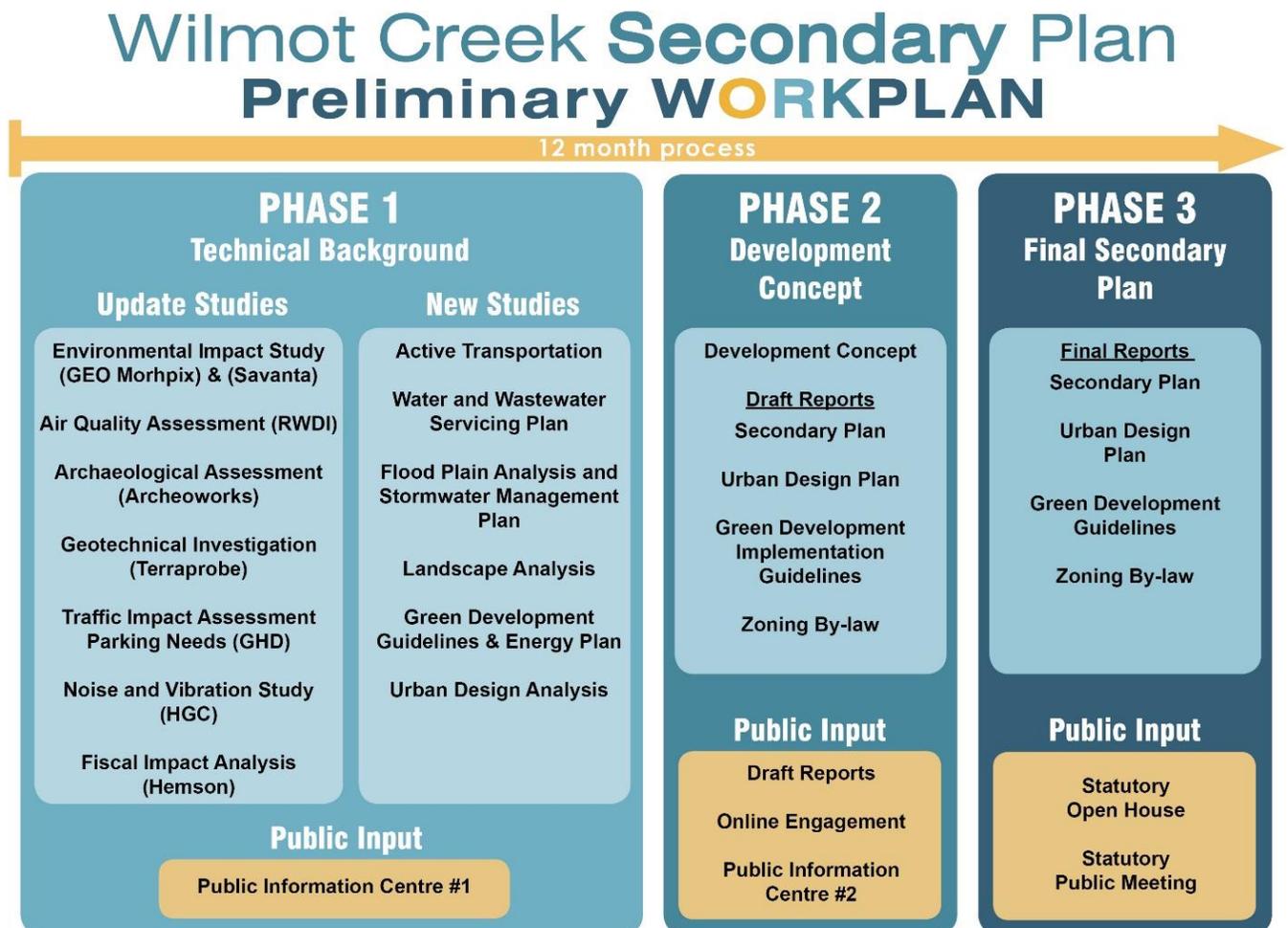


Figure 2 - Wilmot Creek Secondary Plan Study Timeline

Phase 1: Project Initiation & Technical Background Review

During Phase 1, the work program was confirmed and a background review of existing conditions was undertaken to gain an understanding and overview of the Wilmot Creek Secondary Plan Area. Phase 1 involved a comprehensive review of existing documents and available data relevant to articulating and formulating a vision for Wilmot Creek. Past and current plans, policies, studies, and research that pertain to Wilmot Creek were reviewed, analyzed, and synthesized. The objective is to gain an understanding of the planning and regulatory context, the environmental, transportation, and servicing context; the potential of the study area; and how it fits into, and is defined by the larger community.

The technical studies completed in support of the previous application COPA 2003-0012 were reinitiated to allow for an update/addendum to the reports since their original submission and to accommodate an expanded study area which includes an approximate 2.6 hectare parcel of land known as the Humphrey Lands. The original studies include the following:

- Air Quality Feasibility Assessment
- Archaeological Assessment
- Hydrological Assessment / Geotechnical Investigation
- Traffic Impact Study – Existing Conditions Assessment
- Noise and Vibration Study
- Existing Environmental and Geomorphological Conditions Report

Several of the studies require a preferred plan and accompanying statistics to complete the update. The Preferred Plan will be prepared in Phase 2 and at that time the technical reports will be finalized. For Phase 1, a summary of work completed to date was prepared for the reports that will not be finalized until after the development of a Preferred Plan.

New technical studies were also initiated to support the Secondary Plan and, along with the original studies, provide the required background information needed to proceed with the development of a land use plan in Phase 2. The new studies include the following:

- Water and Wastewater Servicing, Floodplain and Stormwater Management
- Active Transportation
- Sustainability Background
- Urban Design Analysis
- Landscape Analysis

A meeting with the Steering Committee (SC) was held in July 2018 to introduce the project. That same day, following the Steering Committee meeting, Community Engagement was initiated with the first Public Information Centre (PIC #1). The intent of the PIC#1 was to introduce the project, the consulting team, and the study process being undertaken to develop a Secondary Plan for the study area. The event was attended by approximately 400 people and participants shared feedback during the open house, plenary discussion, and via email following the event.

The feedback was guided by the following three questions:

1. What features should be included in the design of the new community?
2. What potential issues could arise related to the new community? What suggestions do you have, if any, on how the Municipality and their consultant team could best address those issues?

3. How can the Project Team (the Municipality and their consultants) best stay connected with the community going forward)?

A Facilitation Summary Report has been prepared by Swerhun Facilitation, a facilitation firm retained to provide independent consultation and engagement support for the Secondary Plan process. A number of the comments and feedback received from the three questions were consolidated by Swerhun in the Facilitation Summary and have been incorporated into this Report, under Section 2.0.

Change in Ownership

During Phase One of the Secondary Plan Process Rive Development acquired the Wilmot Creek Phase 8 lands from CAPRIET with the intention of proceeding with a stand-alone, ungated community, separate from the exiting Wilmot Creek Community. As a result of this change in ownership Phase Two is proceeding with the direction to prepare a community that will offer a mix of low, medium, and high density residential that includes seniors housing and market housing and neighbourhood retail. The community plan will ensure appropriate transitions between the two communities, retain the gate to the existing community, and offer a variety of housing types.

Phase 2: Development Concept

During this phase of the study the findings, strategies, and information gained from the original and new technical studies will provide direction for the refinement of the Wilmot Creek development plan. A series of concept plans will be prepared resulting in a final Preferred Plan. The technical studies that required additional information and development statistics from the Preferred Plan will be finalized.

Public Information Centre #2 (PIC #2) will occur in this phase and will focus on providing information on the proposed Development Concept, final Technical Reports, and Secondary Plan vision and principles.

The second objective of this phase is the preparation and development of the Draft #1 Secondary Plan policies, as well as the draft zoning by-law to direct development in the Wilmot Creek Secondary Plan area. Green Development Guidelines will also be prepared in this phase building on the Municipality of Clarington's Priority Green Development Framework.

The Team will meet with the Steering Committee to discuss the Development Plan and technical reports. Both the Public Information Centre and meetings with the Steering Committee will provide essential feedback, which will be incorporated into the Draft #2 Secondary Plan and Zoning By-law in Phase 3.

Phase 3: Secondary Plan Development

The objective of Phase 3 is to revise the Draft Wilmot Creek Secondary Plan and Zoning By-law based on feedback received from the municipality and the consultant team review and prepare a Circulation Draft. A Statutory Open House will take place providing an opportunity for the public to review and comment on the secondary plan and zoning by-law. A Statutory Public Meeting will be held to present the Final Wilmot Creek Secondary Plan and Zoning By-law to the Planning and Development Committee.

1.4 Report Outline

This Summary Report outlines the issues, opportunities, and key findings identified in the policy review and technical background analysis. The Report consolidates the information under three sections Policy Review, Original Technical Studies, and New Technical Studies. The final Section of the report includes an assessment of constraints and preliminary criteria for development that have been coalesced from the findings of Phase 1.

The Report is divided into the following sections with the key objectives:

Section 1 - Policy Review

The Policy Review section is organized under the four themes of the Municipality of Clarington's Priority Green Development Framework: Built Environment, Mobility, Natural Environment and Open Space, and Infrastructure and Buildings. This section includes the identification of key issues and approaches for consideration in the preparation of the Secondary Plan, a review of the existing provincial and regional policy directions and requirements and existing policies under the Municipality of Clarington's current Official applicable to Wilmot Creek, public comments from PIC#1 that are related to each issue, and preliminary observations for addressing the key issues and achieving conformity with provincial and regional policies.

Section 2 - Technical Studies

The Technical Studies section presents the key findings from a number of technical reports that will support and inform the Wilmot Creek Secondary Plan. The technical studies section is divided into two subsections: The first is the Technical Studies Update Overview that includes the studies completed as required for the COPA 2003-0012 application which are being amended or updated to accommodate an expanded study area and, if necessary, revise previous data, modelling, or information. The second is New Technical Studies Overview which includes the additional studies required to support the development of the Secondary Plan not previously undertaken.

Section 3 - Analysis

Opportunities are discussed based on a number of directives set forth through the review of the provincial, regional, and local policy frameworks and priorities. Further, constraints and opportunities are identified to establish the parameters for the design and development of the study area.

Collectively, this Report explores the existing conditions of the Wilmot Creek Secondary Plan Area and the ways in which the area can develop through a series of land use options and a Secondary Plan that will innovatively and appropriately implement and reflect priorities of the Municipality.

SECTION 2 – POLICY REVIEW

2.0 POLICY REVIEW

The Wilmot Creek Secondary Plan is an opportunity to establish a forward-thinking policy framework for a dynamic mixed-use community complimenting the existing Wilmot Creek Adult Lifestyle Community. The Secondary Plan will provide the land use planning framework for the development of the final phases of the Wilmot Creek Community, establishing detailed local development policies to guide growth in the defined community area. The Plan will establish the appropriate mix of land uses; the height and density of development; the road network, as well as trails and transit routes; the parkland system; and protection for the natural heritage system.

Sustainable growth and development are supported throughout Provincial, Regional, and Municipal policies and strategies. The tools and strategies that have been utilized by municipalities to enable a more compact, complete form of development, must encompass a diversity of conditions and needs. While various planning, urban design, and sustainable policies and principles share a common intent and are applicable in a broad range of conditions, the means by which they are applied can vary significantly with the local context. Municipalities are well placed to be the leaders in actually delivering meaningful programs in the provision of sustainable growth and development.

The Municipality of Clarington’s Priority Green Initiative was introduced in 2013 by Council in response to growth pressures and related development anticipated over the next 20 years. An analysis of Provincial, regional, and local planning and policy frameworks, as well as additional studies, were key drivers in the development of the Priority Green Initiative that seeks to further integrate sustainability into the residential land development process, developing “*a new standard for residential development that prioritizes sustainability, promotes innovation, and continues to improve the community’s quality of life*”.

The Municipality of Clarington has committed to a sustainable future for its communities, establishing a green lens approach to development, as set forth in both the Official Plan and the Priority Green Development Framework. These documents are used by the Municipality to guide the development of vibrant and complete communities. Under the Clarington Green Development Framework and Implementation Plan (2015) Secondary Plans are a key tool through which to implement the evaluation criteria for new communities. The Priority Green Development Framework organizes the criteria around 4 broad themes of **Built Environment, Mobility, Natural Environment and Open Space**, and **Infrastructure and Buildings**.

These four themes are the core elements of a sustainable community and are utilized as the organizing elements for the policy review component of this Report. A comprehensive review of Provincial, Regional, and Municipal policies and reports was undertaken for the Wilmot Creek Secondary Plan study and number of key issues and opportunities have been identified.

<p>BUILT ENVIRONMENT</p> <ul style="list-style-type: none">#1 New Development#2 Housing#3 Urban Design#4 Healthy Communities#5 Residential and Commercial Activity	<p>NATURAL ENVIRONEMNT AND OPEN SPACE</p> <ul style="list-style-type: none">#7 Natural Heritage#8 Parks & Community Facilities
<p>MOBILITY</p> <ul style="list-style-type: none">#6 Roads, Transit & Active Transportation	<p>INFRASTRUCTURE AND BUILDINGS</p> <ul style="list-style-type: none">#9 Servicing & Low Impact Development#10 Climate Change & Resiliency

The **Policy Review** section is organized as follows:

1. Theme Area, i.e. **Built Environment**.
2. Identification of a key **Issue and Opportunity**, i.e. Housing.
3. Review of the applicable Provincial policies of the **Provincial Policy Statement (PPS)** and **A Place to Grow: Growth Plan for the Greater Golden Horseshoe (Growth Plan)** that apply to the identified issue and opportunity to identify provincial policy direction and ensure conformity in the development of the Secondary Plan.
 - The PPS provides high level policy direction on matters of provincial interest related to land use planning and development. It is a Province-wide policy and recognizes that local context is important.
 - The Growth Plan builds upon the general policy direction established by the PPS and seeks to manage and direct growth and development within the Greater Golden Horseshoe (GGH) area in order to facilitate the building of stronger, prosperous communities.
4. Review of the **Region of Durham Official Plan (2017)**, as well as Regional studies and reports that apply to the identified issue and opportunity. The Official Plan was consolidated in 2017 and provides policies to guide economic, environmental, and community building decisions to manage growth within the Region.
5. Review of the new **Municipality of Clarington Official Plan (2018)** policies in relation to the issue and opportunity to ensure the Secondary Plan proceeds in conformity with the Official Plan. The Official Plan is intended to guide and manage growth in the Municipality to 2031.
6. **Public Comments** - During PIC #1 participants provided feedback on the future direction for Wilmot Creek. The comments received from the participants are organized under each theme and key issue. The input received by the public will be an important component in the formation of the Secondary Plan policies.
7. **Issue and Opportunity Summary** – Summary of key directions under each issue and opportunity, based on the review of the Provincial, Regional, and Municipal policy frameworks, to guide the development of the Wilmot Creek Secondary Plan and to ensure conformity with policy direction.

2.1 Built Environment

Issue and Opportunity #1: New Development

How can the municipality best accommodate growth within the study area in a fiscally and environmentally sustainable manner?

Wilmot Creek is identified as an “Urban Area” in the Regional Official Plan and the Municipality of Clarington Official Plan identifies the area as “Urban Residential” and “Neighbourhood Centre”. The Region of Durham Official Plan indicates that the Municipality of Clarington is to accommodate 140,340 people and provide 35,400 jobs by 2031. However, these population and employment forecasts are based on the 2006 Growth Plan for the Greater Golden Horseshoe, which was significantly amended in 2017, and most recently in A Place to Grow, 2019 (Growth Plan).

Considering the focus on growth within the Municipality, there is an opportunity to explore a variety of residential density options to utilize land more efficiently and reduce the cost of municipal services. New greenfield development should be well connected, provide a range of housing options, and include densities which create compact, efficient, and liveable communities. These principles will also play an important role in making efficient and cost-effective infrastructure investments and in laying the groundwork for the success of future transit service.

Policy Framework Changes

The Province released A Place to Grow: Growth Plan for the Greater Golden Horseshoe on May 2, 2019, effective May 16, 2019. A Place to Grow, 2019, includes policy changes that will affect the Wilmot Creek Secondary Plan. Significant changes between the 2006 and 2017 versions of the Growth Plan included increasing the intensification target from 40% to 60%, increasing the greenfield density target from 50 people and jobs/hectare to 80 people and jobs/hectare, and introducing the 2041 growth forecasts for population and employment. However, A Place to Grow has reversed the increase in greenfield development targets, returning this goal to 50 persons and jobs per hectare. In addition, the Region is currently undertaking a Municipal Comprehensive Review, entitled “Envision Durham” to ensure its policies conform to these changes.

A Place to Grow: Growth Plan for the Greater Golden Horseshoe 2019

– Intensification and Density Targets – Durham Specific

Gradient Intensification Targets: Previous targets of 60 per cent of all residential development have been reallocated as follows:

- 50 percent for the Cities of Barrie, Brantford, Guelph, Orillia and Peterborough, and the Regions of Durham, Halton, Niagara, Peel, Waterloo and York;

Gradient Greenfield Area Density Targets: Previous targets of 80 residents and jobs per hectare reduced to:

- 50 residents and jobs combined per hectare for the Cities of Barrie, Brantford, Guelph, Orillia and Peterborough and the Regions of Durham, Halton, Niagara, Peel, Waterloo and York;

Bill 108 – More Homes, More Choice Act, 2019

Bill 108 received Royal Assent on June 6, 2019 and amends 13 different statutes that impact municipalities and the land use planning process. A few of the legislative changes that may impact the Secondary Plan include:

- Changes to the *Planning Act*, *Local Planning Appeal Tribunal Act*, *Ontario Heritage Act*, the *Development Charges Act*, and the *Education Act*.

- Proposed legislative changes to increase the supply of housing and provide more affordable housing options by, among other things, changing how funds are collected from developers and eliminating the basis for appeal and the two stage LPAT hearing process implemented under Bill 139.
- Bill 108 proposes to repeal many of the amendments introduced through Bill 139 (the *Building Better Communities and Conserving Watersheds Act*, 2017) in 2017. Bill 139 renamed and reconstituted the Ontario Municipal Board as the Local Planning Appeal Tribunal (the “LPAT”), and made significant changes to the Planning Act and land use planning approval process. Bill 108 retains the LPAT name, but proposes to repeal the “two-stage” appeal process, returning to a single hearing.
- **Community Benefits Charge:** Soft services (recreation, library, housing) would be removed from the Development Charges Act and considered as part of a new Community Benefits Charge. Proposes to replace the Section 37 density bonusing provisions with a new community benefits charge. Where a municipality has passed a community benefits charge by-law, the community benefits charge may replace the parkland dedication provisions in some cases.
- **Section 37 - Height and Density Bonusing,** is replaced with a new Section 37 that introduces a **Community Benefits Charge System** which will allow municipalities to charge for community benefits (excluding those included under the amended Development Charges Act), based on the value of land the day before building permit, subject to a percentage cap, and which can also include in-kind contributions. Prior to passing a Community Benefits Charge By-law, the municipality must carry out a Community Benefit Strategy.
- **Section 42 - Parkland Dedication.** The intention is that parkland acquisition land and/or cash-in-lieu funds would no longer be eligible under Section 42, but are **to be captured within the new Section 37 Community Benefits Charge System**. The changes to the Planning Act:
 - Upon proclamation of Bill 108 - Remove the ability for municipalities to charge developments alternative rates for parkland dedication (1 hectare/300 units for land and 1 hectare/500 units for payment-in-lieu). The maximum parkland dedication charges will be the standard maximum rates of 5% of the land area for residential development and 2% of the land area for commercial, industrial and institutional development; and,
 - Ensure that the ability of municipalities to implement a Parkland Dedication By-law that is directly tied to a municipality’s decision of whether or not to enact a Community Benefits By-law.

Provincial Policies

Provincial Policy Statement (2014): Section 1.1.1 (Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use Patterns), Section 1.1.3 (Settlement Areas)

- The Provincial Policy Statement (PPS) under Section 1.1.1 requires municipalities to plan for efficient and resilient development and land use patterns.
- Under the PPS, settlement areas shall be the focus of growth and development, occurring as:
 - Intensification and redevelopment within previously developed areas; and,
 - New development in designated growth areas, which have not yet been fully developed.
- The PPS requires planning authorities to:
 - Identify targets for intensification and redevelopment; and,
 - Ensure the orderly progression of development within designated growth areas.

A Place to Grow (2019): Section 2.1 (Policies for Where and How to Grow); Section 2.2 (Delineated Built-Up Areas); Section 2.2.7 (Designated Greenfield Areas); Schedule 3 (Distribution of Population and Employment for the Greater Golden Horseshoe to 2041)

- A Place to Grow (Growth Plan) requires that by the time of the next municipal comprehensive review is approved and in effect, and for each year thereafter, a minimum of 50% of all residential development occurring annually within the Region of Durham will be within the delineated built-up area.
- The Growth Plan requires that the minimum density target applicable to the designated greenfield area of each upper-tier municipality is 50 residents and jobs per hectare. This density target is to be measured over the entire designated greenfield area of each upper tier municipality, but excluding natural heritage features and areas and natural heritage systems, provided development is not permitted in these areas, as well as rights of ways for electricity lines, energy transmission pipelines, freeways, railways, employment areas, and cemeteries.
- An alternative target may be requested by upper-tier municipalities where it is demonstrated that the target cannot be achieved and if the alternative target will support the diversification of housing choices and the development of a more compact built form in designated greenfield areas, in an appropriate manner.
- Schedule 3 of the Growth Plan illustrates that by 2041, the Region of Durham is forecasted to accommodate a population of 1,190,000 residents and 430,000 jobs.

Regional Policies

Region of Durham Strategic Plan 2015-2019 (A New Strategic Plan for Durham Region: 2015-2019): Section C (Healthy Communities and Sustainable Environments); Section D (Organizational Health & Service Excellence)

- The 2015-2019 Durham Region Strategic Plan establishes the long-term vision for communities in Durham Region, and critically, the Region's role in achieving that vision, which includes protection of agricultural land and key environmental features, promotion of smart growth, and enabling communities to become even more walkable and livable.
- Under Section C, the Region will work more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning. As indicated in Section D, by 2019 Durham Region will continue to be financially healthy and well managed, providing exceptional Regional service to address the needs of its growing community.

Region of Durham Official Plan (2017): Section 1.1 (Basis); Section 7 (Regional Structure); Sub-Section 8B (Living Areas); Section 4 (Housing)

- The Regional OP is intended to manage and facilitate orderly growth, providing population and employment projections consistent with the former 2006 Growth Plan, which anticipated a 2031 regional population of 960,000 people and a total of 350,000 jobs. Of these projections, the Municipality of Clarington was to accommodate 140,340 people and provide 38,420 jobs by 2031, pursuant to Section 7.3.
- The Region of Durham initiated "Envision Durham", a Municipal Comprehensive Review of the Durham Regional Official Plan to develop a planning vision to 2041 to ensure consistency with the revised 2017 Growth Plan projections, as well as other relevant changes including increasing the intensification target from 40% to 60%, increasing the greenfield density target from 50 persons+jobs/hectare to 80 persons+jobs/hectare, and introducing new growth forecasts for population and employment to 2041. Due to recent changes to the Growth Plan resulting from Amendment #1, such as reversing the increase in

greenfield development targets, and returning to the goal to 50 persons and jobs per hectare, it is likely the MCR will incorporate the recent changes.

- On Schedule A – Map A5 – Regional Structure of the Regional OP, Wilmot Creek is located within the “Living Areas” designation.
- The Durham Region Official Plan, under Sub-Section 8B, indicates that “Living Areas” should accommodate the widest possible variety of housing types, sizes, and tenure to provide living accommodations that address various socio-economic factors. Living Areas shall be developed in a compact form though higher densities and with consideration for supporting access to public transit and shall be used predominantly for housing purposes with limited office and retail in appropriate locations.
- Section 7.3.9 notes that greenfield areas are to develop to achieve an overall gross density of 50 residents and jobs per hectare. Specific targets for Living Areas will be developed in coordination with area municipalities.
- Section 7.3.10 states that the *“Region in conjunction with area municipalities shall investigate ways and means of increasing the densities of new residential development...to reduce the per capita cost of municipal services and to utilize land more efficiently”*.
- Section 7.3.13 states that the development of greenfield Living Areas that are greater than 20 hectares shall proceed in accordance with an approved secondary plan.
- The preparation of a secondary plan shall include the considerations under Policy 7.3.14 to ensure sequential and orderly development, that the servicing of the area is on full municipal water and sanitary sewerage systems and whether they are within the financial capability of the area municipality, transportation for all modes, provision of a range of housing, and a diverse mix of land uses, amongst others.
- Sub-Section 8B of the Regional OP indicates that Living Areas should accommodate the widest possible variety of housing types, sizes, and tenure to provide living accommodations that address various socio-economic factors. Living Areas should be developed with compact built forms through higher density development and consider support and access for public transit, but be predominantly used for housing purposes, with limited office and retail in appropriate locations.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 1.2 (Purpose); Section 2 (Vision and Principles); Section 4 (Managing Our Growth); Section 4.5 (Greenfield Areas); Section 4.6 (Secondary Plans); Section 16 (Special Policy Areas)

- The purpose of the OP is to guide and manage development in the Municipality of Clarington to the year 2031. In so doing, it will foster economic, environmental, physical, cultural, and social well-being of residents, guide future physical development, assist in resolution of land use conflicts, and provide a framework for identifying and evaluating land use opportunities, among other goals.
- The OP identifies a forecast of approximately 140,340 residents and 38,420 jobs for the Municipality by the year 2031.
- The OP adheres to “Smart Growth” Principles, which recognize the importance of sustainable development and healthy communities through the land development process.
- Under Section 16 Special Policy Areas, the Wilmot Creek Neighbourhood has been identified as Special Policy Area B2 and is subject to the preparation of a Secondary Plan. The Area will include a Neighbourhood

Centre and consideration shall be given to locate high rise residential uses and commercial uses on a public road system within a plan of subdivision. It is further noted that a portion of the lands may be developed with private leasehold arrangements and private streets similar to the existing Wilmot Creek Community.

- Wilmot Creek is identified as a Secondary Plan Area in the Official Plan, on Map C – Newcastle Village Urban Area.
- The Subject Lands are identified as a “Greenfield Area”, within the Urban Boundary but outside of the Built Boundary. Under Section 4.5.1, Greenfield Areas will achieve a density of 50 residents and jobs combined per gross hectare.
- Section 4.6 notes that Secondary Plans will be prepared to provide for a detailed planning framework for these lands and will implement the growth management objectives and policies of the OP, the Regional Official Plan, and the Provincial Growth Plan.
- Under Section 4.6.6 Secondary Plans will include phasing policies that address sequential phasing of development; efficient use and extension of all infrastructure and services; optimizing the use of existing infrastructure and services; attainment of Greenfield density targets; and minimizing the financial implications for municipal services.
- Under Section 4.6.7 the Official Plan states that new “*secondary plan areas will be planned to address the criteria for Secondary Plans established through Clarington’s Green Development Program, and are encouraged to plan for more resilient infrastructure and to move towards net zero communities by incorporating techniques to reduce greenhouse gas emissions.*”
- Sections 16.3.2 and 16.3.7 under Special Policy Area B2 note that the Wilmot Creek development area, north of the CN railway, is subject to the preparation of a Secondary Plan, and will include a Neighbourhood Centre and a variety of housing forms, with consideration for high rise residential uses.

Public Comments

- Comment on the size of land for the secondary plan and its limited development potential and effect of livability due to noise levels from Highway 401 and the railway, adjacency of Hydro corridor, and lack of roads and bridges into the property.
- Comments on integration of the new neighbourhood with the existing community. Many respondents are opposed to integration noting that integration would place an even greater stress on already strained programs, facilities, and infrastructure within the existing Wilmot Creek community.
- If the new development is wholly or partially integrated with Wilmot Creek Community, this will ensure the new residents are paying their portion of the maintenance of the common elements. If not integrated the new residents will not be eligible to use the Golf Course, Swimming pools, Wheelhouse, Tennis Court etc.
- Additional entrances/exits required as there are currently only two exits from the existing community. The addition of a new community would increase traffic and there were concerns with the provision of adequate emergency exit routes.
- Comment on impacts of construction on the ability of existing residents to enter and exit the community.

New Development Summary

1. Secondary Plans will be prepared to provide for a detailed planning framework for these lands and will implement the growth management objectives and policies of the OP, the Regional Official Plan, and the Provincial Growth Plan.
2. Providing residential development within Wilmot Creek accomplishes several goals, including:
 - Accommodating residential growth without needing to expand the settlement areas;
 - Ensuring that new development does not negatively impact the character and appearance of the existing stable residential community;
 - Providing for a mix of residential dwelling types, tenure, and affordability; and,
 - Achieving mixed-use development where residents are closer to commercial areas and are more able to use alternative modes of transportation.
3. This study will review the existing Clarington Official Plan policies for the Study Area and will recommend amendments as appropriate and identify the scale and density appropriate for the area in the context of growth to the 2041 planning horizon, and the targets of the Growth Plan. The feasibility for an increased density target will be discussed with the Municipality and the Region of Durham and reviewed in correlation with a more compact built form.
4. The preparation of the Secondary Plan must address the criteria for development under the Priority Green Framework.
5. It will be important to identify strategies for facilitating growth through this secondary plan process. The following should be considered:
 - *Support the environment for change*: The Official Plan policies provide the foundation for establishing the right environment for change, by developing a strong vision and supportive policies which prioritize and support residential projects. By furthering these objectives in the Secondary Plan, this will announce the Municipality's position and interest in realizing denser forms of development, as well as providing a guiding framework for how development can fit in the Study Area.
 - *Promote Compact Form* – The Secondary Plan should plan for new greenfield development which is well connected, provides a range of housing options, and includes densities which create compact, efficient, and liveable communities
6. The Municipality will need to address the amendments from Bill 108, in particular parkland dedication and community benefits, and the impact to Wilmot Creek and the policies of the Secondary Plan. As Bill 108 is not yet fully in effect, these issues must be considered.

Issue and Opportunity #2: Housing

What policies are needed to further a diversity of housing options in Wilmot Creek that will not only meet the needs of the current population but the future requirements of an ageing population?

Ensuring the availability of a full range of housing options is critical in meeting the needs of current and future residents of all incomes, ages, lifestyles, and abilities. Providing for a sufficient supply of affordable housing is an important goal, and recognized by the Municipality with 30% of all new housing to be affordable, above the Regional Official Plan requirement of 25% of new development.

With the introduction of new housing development and intensified housing forms, it will also be increasingly important to support measures which ensure that new development builds on and supports the existing community character, provides public benefits, and contributes to a higher quality public realm.

The Region will be releasing a Housing Discussion Paper in the Fall of 2019 as part of the Envision Durham process. The paper will be reviewed in Phase 2 of this project and incorporated into the development of the Secondary Plan.

Definition:

Affordable: means

- a) In the case of ownership housing, the least expensive of:
 1. Housing for which the purchase price results in annual accommodation costs which do not exceed 30 percent of gross annual household income for *low and moderate income households*; or
 2. Housing for which the purchase price is at least 10 percent below the average purchase price of a resale unit in the regional market area;
- b) In the case of rental housing, the least expensive of:
 1. A unit for which the rent does not exceed 30 percent of gross annual household income for low and moderate income households; or
 2. A unit for which the rent is at or below the average market rent of a unit in the regional market area. (Municipality of Clarington OP)

Provincial Policies

Provincial Policy Statement (2014): Section 1.1 ((Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use Patterns); Section 1.4 (Housing)

- The PPS states that healthy, liveable, and safe communities are sustained by accommodating an appropriate range and mix of residential options, including second units, affordable housing and housing for older persons (1.1.1).
- The PPS calls on municipalities to provide an appropriate range and mix of housing types and densities to meet projected requirements of current and future residents of the regional market area. To do so, planning authorities are required to:
 - Maintain at all times the ability to accommodate residential growth for a minimum of 10 years through residential intensification and redevelopment and, if necessary, lands which are designated and available for residential development;
 - Maintain at all times land with servicing capacity to support at least a three-year supply of residential units available through lands suitably zoned to facilitate residential intensification and redevelopment, and land in draft approved and registered plans;
 - Establish minimum affordable housing targets;
 - Permit and facilitate the development of special needs housing;
 - Permit second units;
 - Direct new housing to locations served by existing or planned infrastructure and public service facilities;
 - Promote residential densities that use land, resources, infrastructure and public service facilities efficiently, and support the use of active transportation and transit in areas where it exists or is to be developed; and,

- Establish development standards for *residential intensification, redevelopment and new residential* that minimize the cost of housing, facilitate compact form, and maintain public health and safety. (Sections 1.4.1 & 1.4.3).

A Place to Grow (2019): Section 1.2.1 (Guiding Principles); Section 2.2.1 (Managing Growth); 2.2.6 (Housing)

- A guiding principle of the Growth Plan is to “*support a range and mix of housing options, including second units and affordable housing, to serve all sizes, incomes, and ages of households*”.
- Section 2.2.1 of the Growth Plan states that to achieve complete communities, a diverse range and mix of housing options should be provided to accommodate people at all stages of life, as well as the needs of all household sizes and incomes.
- The Growth Plan requires municipalities to develop a housing strategy to meet the intensification/density targets with a diverse range of housing options and affordable housing. The strategy should:
 - Identify a range of mechanisms such as land use planning;
 - Be complementary to current housing and homeless plans;
 - Be implementable through official plan policies/designations and zoning by-laws;
 - Support the achievement of complete communities;
 - Support multi-unit residential developments; and,
 - Require the Municipality to maintain appropriate servicing capacity to support at least a three-year supply of residential units (Section 2.2.6)

Regional Policies

Region of Durham Official Plan (2017): Section 4 (Housing)

- Section 4, Policy 4.1.1 of the Durham Region OP sets forth the housing goal “*To provide a wide diversity of a residential dwellings by type, size and tenure in Urban Areas to satisfy the social and economic needs of present and future residents of the Region*”.
- Section 4 further states it is the policy of the Region to direct Municipal official plans to provide policies to enable a variety of housing by type, size and tenure; direct Regional Council to require at least 25% of all new residential units be affordable to low and moderate income households; and promote programs for provision of assisted housing for families, seniors and special needs groups.
- Section 4.3.7 notes that Regional Council shall monitor the housing market including the following:
 - Range of housing types produced on new residential lands
 - Housing prices, by housing type
 - New and innovative types of affordable housing
 - Progress in meeting housing targets
 - Adequacy of the supply of land
- Section 4.3.8 states that Councils of the area municipalities are encouraged to identify local needs and to adopt appropriate housing policies.

- Section 4.3.9 directs area municipal official plans to implement policies and implementation procedures to meet the objectives of the PPS and the Regional OP with respect to housing types, density, intensification and affordability; and maximum unit sizes.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 6 (Encouraging Housing Diversity); Section 9.4 (Neighbourhood Planning Areas); Appendix B

- The Study Area is within the urban boundary and designated as “Urban Residential” in the OP as identified on Map A4 Land Use.
- It is an objective of the Municipality to encourage a minimum of 30% of all new housing to be affordable in Urban Areas.
- Section 6.1.1 of the OP reflects the Regional goal of encouraging “a broad range of housing types, tenure, and cost within Settlement Areas to meet the evolving housing needs for people of all ages, abilities and income groups.”
- Section 6.2 sets forth objectives to maintain an adequate supply of land for housing purposes; encourage a minimum of 30% of all new housing to be *affordable* in Urban Areas; to promote high quality *affordable* housing through the maintenance, improvement, and adaptation of existing housing; and to create complete communities that will meet the daily housing needs of residents.
- The Municipality supports the integration of assisted housing and special needs housing into residential areas. Section 6.3.10 notes that *special needs housing* may include assisted housing, long term care facilities, retirement homes, and seniors housing, among others, with permissions for medical facilities in conjunction with a long-term care facility.
- The estimated unit targets for the Wilmot Creek Secondary Plan are set forth in the Official Plan under Appendix B – Unit Targets by Neighbourhood with a total residential unit target of 501 (mix of low, medium, and high).

Appendix B – Estimated Unit Targets for Future Secondary Plan Areas

Future Secondary Plan Areas	Low	Medium	High	Total
Future portion of Wilmot Creek Secondary Plan	100	100	301	501

Public Comments

- Comments received noted the need for an assisted living facility, long term care, and senior’s residence.
- Feedback also included the suggestion for high rise apartments along Highway 401, and the need for apartment condominiums in the area.
- Many comments noted that the new community should be an Adult lifestyle Community with support for having a 2 person per household restriction and discouraging children from living in the new community.
- Comments were also provided supporting a mix of housing and affordable housing options.

Housing Summary

1. The PPS, Growth Plan, Regional OP, and the Municipal OP, direct for a full range of housing types and tenures to be provided to meet the housing needs of all current and future residents throughout their lives, irrespective of income, ability, or lifestyle.
2. This mix and diversity make it possible for households to move within one community as housing needs and lifestyle preferences change and should be supported by the Secondary Plan.
3. Considering changing demographics, it is important to ensure sufficient housing options appropriate for and/or geared to seniors. Retirement and long-term care facilities should be placed close to the neighbourhood centre and incorporate multi-storey dense components to achieve a sufficient yield on small sites.
4. Universally accessible housing options should be provided to accommodate the widest spectrum of people, regardless of age or ability, to live within the community.
5. The Secondary Plan will need to facilitate the development of affordable housing and special needs housing, with the inclusion of an affordable and assisted housing target of 30%, complying with the Municipality's OP.

Issue and Opportunity #3: Urban Design

The development of a built environment that is well designed, compact, and supports people's needs for daily living should include a high quality public realm that is reinforced by urban design standards that create attractive and vibrant places.

The intent of this review is to provide an overview of the opportunities for structuring the built environment to support a high quality community. Key considerations for good community design are based on a community structure that supports walkability and the quality of the public realm and its overall connectivity, which includes street connectivity, streetscaping, parks and open spaces, and trails, and building orientation.

Provincial Policies

Provincial Policy Statement (2014): Part V, Section 1.1 (Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use Patterns)

- The PPS promotes "Building Strong Healthy Communities", but does not provide specific guidance on community design. Guidance related to efficient land use patterns, as well as providing a mix of densities and land uses in Settlement Areas does, however, support the achievement of compact and walkable communities (Section 1.1.1, 1.1.3.2).
- In addition, Section 1.1.3.4 states that "*Appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety*".
- The PPS advises that healthy and active communities should be promoted by planning public spaces, streets and recreational settings to be accessible, equitably distributed, foster social interaction, and promote travel by active transportation (1.51).
- In the context of new Provincial Accessibility for Ontarians with Disabilities (AODA) legislation and an aging population, accessible/universal design also needs to be considered.

A Place to Grow (2019): Section 2.2.1 (Managing Growth); and Section 5.2.5 (Targets).

- The Growth Plan is based on the need to develop complete communities that are healthy, safe, and balanced.
- Under Section 2.2.1 Managing Growth, the Growth Plan states that the achievement of complete communities will be supported by:
 - having a diverse mix of land uses, access to services and public facilities;
 - including a diverse range and mix of housing options to support people at all stages of life;
 - expanding access to a range of mobility and active transportation options, and publicly accessible open spaces, parks, and trails; and,
 - ensuring high quality public realm through site design and urban design standards.
- Further under Section 5.2.5 Targets, the Growth Plan directs municipalities to develop and implement urban design and site design policies to support the development of a high quality public realm and compact built form.

Regional Policies

Region of Durham Official Plan (2017): Section 2 (Environment); Section 7 (Regional Structure); Section 8 (Urban System)

- Section 2.3.5 states that Regional Council is to enhance the visual amenities of the urban environment and encourage area municipalities to enact by-laws that establish environment, aesthetic, and urban design controls on signs and outdoor lighting.
- Section 7.3.14 (l) states that it is the Region’s goal to direct municipalities to provide secondary plans that include “*the provision of a diverse and compatible mix of land uses, to support vibrant neighbourhoods, providing high quality public open spaces with site design and urban design standards that create attractive and vibrant places, support transit, walking and cycling and achieve an appropriate transition to adjacent areas*”.
- Councils of area municipalities are to implement the intent of the Regional OP through policies and designations implementing a variety of uses, intensification, urban design guidelines and solutions, and policies that enable transit-supportive development forms and patterns, pursuant to Section 8.2.1.
- Section 8B.2.3 states that development within Living Areas should achieve a compact urban form, as well as:
 - Good urban design principles that implement noise attenuation measures and the orientation and design of buildings to maximize exposure to sunlight;
 - Convenient pedestrian access to public transit, schools and parks;
 - A grid pattern of roads; and,
 - A distribution of parks, trails, pathways and educational facilities”.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 5.4 (Built Form)

- Section 5.4.2 outlines the design requirements for new development and emerging new neighbourhoods to create a neighbourhood identity with an appropriate built form that complies with architectural design controls,

provides for a variety of housing types and land uses, considers noise impacts and noise mitigation measures, achieves sustainable buildings and streetscapes, and that the neighbourhood is accessible and walkable, prioritizing pedestrians over vehicles.

- As noted under Issue and Opportunity #2 Housing of this report, multi-unit residential is proposed for the Secondary Plan Area. Section 9.4.5 of the OP sets forth site development criteria for this residential use. The criteria includes ensuring the site is suitable to accommodate the density and built form, that it is compatible with adjacent uses, impact of traffic is minimized, vehicular access is provided to a public street, adjacent residential unit types shall not replicate the same built form, townhouses on blocks shall not exceed 50 units and apartment blocks shall not exceed 2 buildings, street townhouses will not exceed 6 attached units, and in a mid-rise and high-rise development a phasing plan is required for amenity areas and shared pedestrian and vehicle access.

Public Comments

- Many comments/concerns were raised regarding integrating the new community with the existing community due to placing an even greater stress on already strained programs, facilities and infrastructure within the existing community.
- The new community should be a gated community.
- A wide variety of features and amenities will need to be provided to adequately accommodate the new population.
- Comments received noted that the design should maintain the street layout of the existing community with no curbs, sidewalks, or fencing.
- Many comments noting additional entrances, adequate emergency exit routes, and improved/upgraded security is required.

Urban Design Summary

1. Establish a clear policy framework for the design issues related to ensuring compatible development adjacent to existing neighbourhoods.
2. Key considerations for good urban design include community structure, street connectivity, streetscaping, building placement orientation and articulation, provision of parking, provision of public space, land use mix, variety of parks, and access to services and amenities. Other considerations should include sustainable design (e.g. passive solar orientation, Low Impact Development), active transportation, and Crime Prevention Through Environmental Design (CPTED).
3. It is recommended that policies be provided that support the Official Plan urban design principles, as well as the Priority Green Framework to:
 - Strengthen the requirements for high quality private and public realms and active transportation facilities;

- Establish built forms that achieve density targets without resulting in negative impact on surrounding neighbourhoods and adjacent properties; and,
 - Create a connected network of streets and open spaces to promote and support walkability that are safe, accessible, and pedestrian-friendly.
4. The community should be designed to include neighbourhoods that have a central focal point such as a park. To support walkability, neighbourhoods should have a centre and edge and prioritize pedestrians over vehicles.

Issue and Opportunity # 4: Healthy Communities

A successful community consciously seeks to improve the health of its citizens by putting public health high on the social and political agenda.

Physical, social, and mental well-being are the necessary components of public health. To ensure that these components are achieved, the built environment should be designed to create opportunities to encourage residents to be physically active and socially engaged.

Definition:

Healthy and Complete, Sustainable Communities: means communities where:

- a) People's needs for daily living are met without compromising the ability of future generations to meet their needs by providing convenient access to an appropriate mix of jobs, local services, a full range of housing (including affordable housing), schools, recreation, open space, and community infrastructure and alternative transportation options through transit-supportive development;
- b) There is an appropriate ratio of population to jobs;
- c) Decisions are based on integrating social, economic and environmental considerations; and,
- d) People can live, work and play in a safe, vibrant, healthy and prosperous environment. (Region of Durham Official Plan)

Provincial Policies

Provincial Policy Statement (2014): Section 1.0 (Building Strong Healthy Communities); Section 1.6 (Infrastructure and Public Service Facilities); Section 1.8 (Energy Conservation, Air Quality and Climate Change)

- The PPS provides a substantial policy framework aimed at building strong and healthy communities. Section 1.1.1 of the PPS states:

"1.1.1 Healthy, liveable and safe communities are sustained by:

 - a) *Promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term*
 - b) *Accommodating an appropriate range and mix of residential (including second units, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs*
 - c) *avoiding development and land use patterns which may cause environmental or public health and safety concerns;*

- d) *Avoiding development and land use patterns that would prevent the efficient expansion of settlement areas in those areas which are adjacent or close to settlement areas*
 - e) *Promoting cost-effective development patterns and standards to minimize land consumption and servicing costs*
 - f) *improving accessibility for persons with disabilities and older persons by identifying, preventing and removing land use barriers which restrict their full participation in society;*
 - g) *ensuring that necessary infrastructure, electricity generation facilities and transmission and distribution systems, and public service facilities are or will be available to meet current and projected needs; and*
 - h) *Promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate”*
- Further, the PPS states “*healthy, active communities should be promoted by planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity*” (Section 1.5.1 a)).
 - Under Section 1.8 the PPS directs planning authorities to support energy conservation, improved air quality, and reduced greenhouse gas emissions through compact form, active transportation, transit supportive design, mix of uses to shorten commute distances, and maximize energy efficiency through design and orientation.
 - In the context of new Provincial Accessibility for Ontarians with Disabilities (AODA) legislation and an aging population, accessible/universal design also needs to be considered.

A Place to Grow (2019): Section 1.2.1 (Guiding Principles); Section 2.2.1 (Managing Growth)

- A guiding principle of the Growth Plan is to achieve complete communities that are designed to support healthy and active living and meet people’s needs for daily living throughout an entire lifetime.
- To support the achievement of complete communities that are healthier, safer, and more equitable, the Growth Plan directs growth to establish healthy and balanced communities that will maintain and improve the quality of life for residents.
- Section 2.2.1 (4) further supports the achievement of complete communities through encouraging a diverse mix of land uses, access to services, range and mix of housing options, access to transportation options and use of active transportation, a vibrant public realm, integration of green infrastructure, and climate change mitigation.

Regional Policies

Region of Durham Strategic Plan (2015-2019): Section B (Population Health and Quality of Life)

- The Strategic Plan states that by 2019, Durham Region will support a healthier regional population and a better quality of life for residents, which is more affordable, livable, inclusive, and safe. This is to be achieved by:
 - Supporting and encouraging active living and healthy lifestyles to enhance the connectivity between our communities;
 - Taking a leadership role to provide accessible and responsive paramedic and public health services;
 - Cultivating strong, safe and secure communities and healthy workplaces;

- Enhancing our inclusive and welcoming communities to meet the evolving needs of youth, seniors and newcomers;
- Increasing the range of innovative and attainable housing options to reduce homelessness and support housing for all ages, stages and incomes;
- Boosting our efforts to reduce health inequities by addressing the social determinants of health, including poverty; and,
- Celebrating cultural diversity, heritage, the arts and our unique histories to strengthen local neighbourhoods and community cohesion.

Region of Durham Official Plan (2017): Section 1 (Basis, Goals and Directions); Section 5 (Cultural, Health & Community Facilities, and Infrastructure); Section 7 (Regional Structure); Section 8 (Urban System)

- As per the Regional definition of healthy and complete, sustainable communities, this can be achieved through the provision of convenient access to a mix of jobs, services, housing, recreation, open space, community infrastructure, and alternative transit modes, among others; ensuring an appropriate ratio of population to jobs; integrating social, economic and environmental considerations in decision making, and providing a place where people can live, work, and play in a safe, vibrant, healthy and prosperous environment.
- A goal of the Regional Official Plan, under Section 1.2.1 is to “*create healthy and complete, sustainable communities within liveable urban environments for the enjoyment of present and future residents;*”
- A direction of the Regional Official Plan, under Section 1.3.1 is to “*increase employment opportunities to create healthy and complete sustainable communities that balance growth in population with growth in employment.*”
- Section 5.3.1 states that Regional Council will continue to promote the establishment of health care facilities offering specialized services, in addition to the establishment of new or expanded health care facilities across the Region to meet the needs of existing and future residents.
- Under Section 7.1.6, it is the goal of the Regional Official Plan to “*promote distinct, compact Urban Areas which support the development of healthy and complete, sustainable communities*”.
- Under Section 8.1.1, it is the goal of the Regional Official Plan to “*establish an Urban System of distinct Urban Areas that are adaptable and able to evolve into healthy and complete sustainable communities that balance growth in population, with growth in employment*”.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 2.2.2 (Healthy Communities); Section 5 (Creating Vibrant and Sustainable Urban Places)

- The Clarington Official Plan recognizes three key principles which provide direction for the policies in the Plan; sustainable development, healthy communities, and the management of growth.
- Under Section 2.2.2 Healthy Communities, the OP seeks to implement the following directions to support a healthy community:
 - Personal Well-being
 - Urban Design Excellence
 - Economic Vitality
 - Community Identity
 - Public Involvement

- Arts, Culture and Heritage
- Housing Diversity
- The objectives under Section 5.2 are a reflection of the goal of the Municipality to create a built environment that supports the well-being of residents both in the present and in the future. Community and environmental health objectives include:
 - Compact and connected communities that support an efficient use of land;
 - High quality public realm;
 - Priority to walkability and the facilitation of active transportation systems;
 - Safe communities; and,
 - Accessibility.

Public Comments

- Comments noting the security of the residents in the existing community needs to be preserved and enhanced.
- Concerns about additional exit routes in the event there is an emergency that requires evacuation.
- Participants said that Community Care Durham has been serving the existing community for 10 years with personal support workers and other services. It was noted that this is a very important service for many residents and needs to be maintained regardless of whether or not the new community is integrated.
- Concerns about the existing security gates at the entrances to Wilmot Creek and need for upgrading
- Concerns with road safety with a combination of cars, golf carts, cyclists, and pedestrians (seniors) on narrow roads with no sidewalks
- Hydro transmission lines and impacts to air quality with increased vehicular traffic are a health concern
- Many comments were provided in regards to the impacts that the new community may have to existing community facilities and programs. The facilities and programs are a great benefit to the residents and they do not want them negatively impacted. The retention of the baseball diamond and the protection and maintenance of the existing trail were also a concern.

Healthy Communities Summary

1. Provincial, Regional, and Municipal planning frameworks provide direction for healthy communities. However, it is not one single action or policy topic that will define or lead to the achievement of a healthy community, but rather an approach to implementation that considers all of the policy sections of the Secondary Plan comprehensively.
2. A high quality, well-designed built environment is valued within the Municipality. To support this environment the plan and policy document must respond to the existing conditions while providing a built environment that creates opportunities for daily physical activity, addresses an ageing population, and supports the needs of residents of all ages and abilities.
3. Based on the above policy direction, development within the Wilmot Creek Secondary Plan Area will accomplish several goals, including:
 - Accommodating residential growth without needing to expand the settlement areas;
 - Ensuring that new development does not negatively impact the character and appearance of existing stable residential communities;
 - Providing for a mix of residential dwelling types, tenure, and affordability to meet projected needs of current and future residents;
 - Achieving mixed-use development where residents are closer to commercial areas and are more able to use alternative modes of transportation;
 - Promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;
 - Accommodating an appropriate range and mix of residential, employment, institutional, recreation, park and open space, and other uses to meet long-term needs;
 - Promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate;
 - Planning public streets, spaces and facilities to be safe, meet pedestrian needs, foster social interaction and facilitate active transportation and community connectivity;
 - Integrating arts, cultural, and recreational facilities with local business, health and social services, schools, parks, and civic buildings;
 - Promoting the accessibility of services, culture, and recreation facilities by walking, cycling, or transit;
 - Providing a full range and equitable distribution of publicly accessible built and natural settings for recreation facilities;
 - Facilitating accessibility for persons with disabilities and older persons; and
 - Promoting conservation in energy, water and wastewater management.

Issue and Opportunity #5: Residential and Commercial Activity

Attracting commercial and residential development is necessary to support economic development, a diversified tax base, and complete communities where residents have access to jobs, goods, and services.

The ability of the Municipality and the landowners to attract new investment in Wilmot Creek will be influenced by the changing nature of retail and affordability of housing. Providing for a variety of housing types and tenure, as well as services for existing and future residents is important to supporting the viability of not only the new development but the existing community as well.

Provincial Policies

Provincial Policy Statement (2014): Section 1.3 (Employment)

- Under the PPS, the province requires planning authorities to promote economic development and competitiveness by:
 - Providing an appropriate mix and range of employment and institutional uses to meet long-term needs;
 - Maintaining a range and choice of suitable sites for employment uses and take into account the needs of existing and future businesses;
 - Encouraging compact, mixed use development that incorporates compatible employment uses to support liveable and resilient communities; and,
 - Ensuring the necessary infrastructure is provided to support current and projected needs (Section 1.3.1).

A Place to Grow (2019): Section 2.2.5 (Employment); Section 2.2.6 (Housing)

- Under Section 2.2.5 Employment, the Growth Plan directs retail and office uses to locations supported by active transportation and transit, that the retail sector be supported by compact built form and intensification of retail and service uses, and the integration of these uses to further achieve complete communities (Section 2.2.5, 3. and 12).
- Providing housing options and densities through the development of a housing strategy that includes the identification of a diverse range and mix of housing types, second units, and affordable housing to meet the needs of current and future residents (Section 2.2.6 a)).
- To further support the achievement of complete communities, municipalities should consider available tools to require that multi-use residential developments incorporate a mix of unit sizes (Section 2.2.6, 3.).

Regional Policies

Region of Durham Strategic Plan (2015-2019): Section A (Economic Growth, Diversification & Local Employment)

- Section A of the Strategic Plan includes directions to strengthen the economy and promote more local employment, including:
 - Propelling the business and investment climate forward to enable more local employment;
 - Diligently attracting, retaining and mentoring the next generation of employees to build a skilled, engaged and diverse workforce;
 - Promoting and actively capitalizing on opportunities to make the Region a premier destination that attracts and retains entrepreneurs, innovators, visitors and residents;

- Renewing commitment to enhance the economic viability of the Region’s agricultural sector to advance sustainable and innovative agriculture production practices and promote food system security; and,
- Finding new ways to work with partners to revitalize and grow the Region’s position as a renowned centre of technological excellence.

Region of Durham Official Plan (2017): Section 1 (Basis, Goals and Directions); Section 3 (Economic Development); Section 8 (Urban System)

- Section 1 of the OP outlines the basis of the plan and the population and employment forecasts for the Region to 2031. Employment opportunities are essential to meeting the forecasts and supporting growth.
- Section 3 of the Regional OP directly relates to economic development, promoting development of a healthy and sustainable community with a balance of jobs and population, and a diversified Regional employment base.
- Section 3.3.1 states that it is the Region’s policy to establish the means to achieve a ratio of jobs to population of 50%.
- Section 3.3.8 states that it is the Region’s policy to ensure the provision of a range of housing types and tenure to support a diversified labour force.
- Section 8B.2.1 states that Living Areas should incorporate “*limited office development and limited retailing of goods and services, in appropriate locations*”.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 10.5 (Neighbourhood Centres)

- A “Neighbourhood Centre” has been identified within the Subject Lands on Map A – Land Use Newcastle Village Urban Area.
- Section 10.5 of the OP provides policy directions for “Neighbourhood Centres” to serve as a focal point for residential neighbourhoods; provide a range of retail and service uses with the maximum amount of leasable floor space 5,000 square metres; and be developed as transit nodes with higher density residential and where possible, recreational, community, cultural and institutional uses.
- Section 10.5.3 states that in Neighbourhood Centres a range of retail and service uses will be identified in the Zoning By-law that are located in proximity to adjacent residential areas; shall have a maximum of 300 square metres of gross leasable floor area with the exception of a grocery store, will be street-related buildings or provide direct pedestrian access from the street; and will respect the adjacent neighbourhood building design.
- Further under Section 10.5, any new Neighbourhood Centre shall:
 - Be gathering places that include public squares;
 - Be designed as a high-quality environment and interactive;
 - Be designed with appropriate paving, landscaped areas, benches, refuse containers, bicycle stands, lighting, public art and other elements that enhance the social and physical environment; and,
 - Include either a public parkette or part of a commercial development with public access.

Public Comments

- Comments suggested that no retail is needed. Shopping is abundant and close to the community, in Bowmanville and Newcastle.
- Conversely, there were comments that included the need for a convenience store and smaller retail, bank, stores, and restaurants.
- Comments were further provided to include medical offices and walk-in clinic, EMS/ambulance on site, and continued access to social services e.g. Community Care Durham

Residential and Commercial Activity Summary

1. In support of the Neighbourhood Centre designation, Wilmot Creek should be a focal point for mixed use development, and small scale commercial and office uses to support higher density residential. This creates more opportunities for residents to live within or near the neighbourhood centre services creating stronger support for local businesses, shared investment in the public realm, and contributes to the creation of a more dynamic neighbourhood.
2. It is important to be innovative and to respond to all forms of the new economy within the evolving economic context of Clarington, which includes leveraging quality of life/place attributes. Consideration for a policy in the Secondary Plan to facilitate growth in the 'new economy' and support and/or consider creative partnerships towards the creation of innovative work spaces, including incubators and flexible/shared work space, as well as appropriate support for home occupations.
3. The Secondary Plan will support compact built form and provide a range and mix of housing types and tenure, including affordable and senior's housing.

2.2 Mobility

Issue and Opportunity #6: Roads, Transit, and Active Transportation

How can the Secondary Plan support “complete streets”, an integrated trail/cycling network, and built form throughout the Secondary Plan that provides the opportunity for residents of all ages and abilities to travel safely and conveniently by active modes of transportation – including walking and cycling.

- A variety of transportation options should be available to residents, with the built environment designed to encourage physical activity, facilitate active transportation and support public transit in place of motor vehicles and driving. The accommodation of various travel choices ensures the economic, social, and environmental sustainability of transportation systems.
- Designing a safe, convenient, and accessible environment for walking and cycling encourages these alternative modes of transportation.
- Supported by the Municipality's *Clarington Transportation Master Plan (CTMP)*, dated Dec. 2016, that provides a coordinated and integrated implementation strategy for the transportation system to guide decision-making over the next 20 years.
- Access to transit improves mobility options for people who cannot or choose not to drive, such as youth, seniors, and people without access to a private vehicle. It can also be part of a community's strategy for reducing greenhouse gas emissions from the transportation sector.

Definition:

Complete Streets: means the roadways and *adjacent* public areas that are designed to accommodate users of all ages and abilities, including pedestrians, cyclists, transit users, and motorists. (Municipality of Clarington OP)

Provincial Policies

Provincial Policy Statement (2014): Section 1.6.7 (Transportation Systems); Section 1.6.8 (Transportation and Infrastructure Corridors); 1.8 (Energy Conservation, Air Quality and Climate Change); 1.5 (Public Spaces, Recreation, Parks, Trails and Open Space)

- The PPS states “healthy, active communities should be promoted by planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity” (Section 1.5.1 a).
- The PPS calls for the provision of safe, efficient, and multi-modal transportation systems that meet projected needs.
- The PPS recognizes the connection between land use patterns and transportation choices, and calls for integrated planning that minimizes the length and number of vehicle trips, and supports transit and active transportation (Section 1.6.7.4).
- The PPS also requires planning authorities to plan for and protect corridors and rights-of-way for infrastructure, including transportation and transit.
- To reduce greenhouse gas emissions from transportation, the PPS calls on planning authorities to:
 - Promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas; and,
 - Focus major employment, commercial and other travel-intensive land uses on sites which are well served by transit where this exists or is to be developed, or designing these to facilitate the establishment of transit in the future (Section 1.8 b&c).

A Place to Grow (2019): Section 3.2.2 (Transportation); Section 3.2.3 (Moving People)

- The Growth Plan requires municipalities to plan for transportation system and offer a “*balance of transportation choices that reduces reliance upon the automobile and promotes transit*” (Section 3.2.2.2 b)) and multimodal access to a range of destinations. Municipalities should also develop and implement transportation demand management policies so that, amongst other things, modal share of alternative to the automobile is increased, active transportation is prioritized, and infrastructure to support active transportation is expanded.
- The Growth Plan requires municipalities to plan for transportation system and improve connectivity among transportation modes. In addition, “*in the design, refurbishment, or reconstruction of the existing and planned street network, a complete streets approach will be adopted that ensures the needs and safety of all road users are considered and appropriately accommodated*” (Section 3.2.2.3). Municipalities should also develop and implement transportation demand management policies so that, amongst other things, trip distance and time are reduced.
- Section 3.2.3.1 states that “*public transit will be the first priority for transportation infrastructure planning and major transportation investments*”. In addition, municipalities should make decisions regarding transit on the basis on the following criteria:
 - Plan for transit whereby residential and employment high densities are existing and/or planned;
 - Improve transit in strategic growth areas;

- Expand transit whereby transit-supportive densities and mix of uses are existing and/or planned;
 - Improve connections to urban growth centres, major transit station areas and other strategic growth areas;
 - Increase modal share of transit; and,
 - Reduce greenhouse gas emissions.
- Section 3.2.3.3 states that “*municipalities will work with transit operators, the Province, Metrolinx where applicable, and each other to support transit service integration within and across municipal boundaries*”.
 - Under Section 3.2.3.4 Municipalities will ensure active transportation networks are comprehensive and integrated into transportation planning to provide safe, comfortable travel for pedestrians and cyclists, and are continuous linkages between adjacent neighbourhoods and transit stations with dedicated lanes for bicyclists on the major street network.

Regional Policies

Region of Durham Strategic Plan (2015-2019): Section C (Healthy Environment and Sustainable Communities)

- Section C.3 of the Strategic Plan related to creating a healthy environment and sustainable communities seeks to ensure that the Regional transportation infrastructure is functional, integrated, reliable, and barrier-free to support the movement of residents to work, school, and local services.

Region of Durham Official Plan (2017): Section 8 (Urban System); Sub-Section 8B (Living Areas); Section 11 (Transportation System)

- Section 8.2.1 states that Urban Areas are to be developed with “*linkages for pedestrians and cyclists which link communities internally and externally and to the public transit system*” and “*a grid system of arterial roads, and collector roads, where necessary, to provide for a transit-supportive road pattern while recognizing environmental constraints*”.
- Section 8B.1.3 states that Living Areas will be developed to support and provide access to public transit.
- Section 8B.2.3 provides direction to developments within Living Areas and states that they should incorporate “*the provision of convenient pedestrian access to public transit, educational facilities and parks*” and “*a grid pattern of roads*”.
- Under Section 11.1 the goals of the Regional Official Plan for the transportation system are to provide an integrated, safe, efficient, and reliable system for all users and modes that offers a variety of mobility choices, and supports sustainable transportation initiatives that respect natural, social and cultural environments.
- The major road network that is adjacent to Wilmot Creek, as shown on Schedule C1 – Road Network, identifies Highway 401 as a “Freeway”, Highway 2 and 115 as “Type A Arterial”, and Highway 117 as “Type B Arterial”.
- Schedule C3 – Transit Priority Network identifies Highway 2 and 115 as “Transit Spine”.
- Under Section 11.3.18 development adjacent to “Transit Spines” shall provide for complementary high density and mixed uses at an appropriate scale and context, buildings should be oriented towards the street to reduce walking distances to transit facilities; support non-auto modes, and have limited surface parking.
- More broadly, the Region encourages suitable transit services to be provided in newly developing areas as early as possible, where this is technically and financially feasible.

Region of Durham Transportation Master Plan (2017)

- The Region of Durham Transportation Master Plan (TMP) resulted from the input of many individuals and stakeholders, representing the Region's vision for a sustainable future and building on several foundational documents including the Regional Official Plan. In June of 2018, Durham Region adopted ROPA 171 to implement the Durham Transportation Master Plan.
- The TMP builds on the ROP's land use and transportation framework by providing additional detail on several of its policies, and by identifying the facilities and services required to support Durham Region's future development pattern and growth targets.
- The TMP outlines the policies, actions and recommended infrastructure modifications that are required to address transportation needs to 2031 and beyond, based on the seven following directions:
 - Strengthening the bond between land use and transportation;
 - Elevating the role of integrated public transit including Rapid Transit;
 - Making walking and cycling more practical and attractive;
 - Optimizing road infrastructure and operation;
 - Promoting sustainable travel choices;
 - Improving goods movement to support economic development; and,
 - Investing strategically in the transportation system.
- The TMP identifies solutions to respond to Durham Region's transportation needs, as well as to take advantage of opportunities in the Region and the broader Greater Toronto and Hamilton Area.
- This TMP is designed around the overall goal of creating a transportation system that provides improved travel choices for walking, cycling and transit, while accommodating continued, but moderated growth in automobile and truck traffic.
- The TMP recognizes that it is neither feasible nor sustainable to build infrastructure to meet all demands and that making better use of infrastructure is critical.

Municipal Policies

Municipality of Clarington Official Plan (2018): Part 4 (Infrastructure); Section 5.3 (Public Realm); Section 19.3 (General Policies); Section 19.4 (Transit); Section 19.5 (Active Transportation); Section 19.6 (Road Network)

- The goal of the Municipality is to *“facilitate the movement of people and goods by means of an integrated, accessible, safe, and efficient transportation system providing a full and practical range of mobility options”*.
- Section 5.3 Public Realm includes policies for the design of public streets *“to provide an interconnected grid-like pattern of streets and blocks that are walkable and flexible”*. The design of public streets will have consideration for natural features, will limit the length of streets and blocks to assist with pedestrian and bicycle circulation; will maximize the number of street connections to arterial roads, will be designed for pedestrian and cyclist safety, will have a connected system of sidewalks, will avoid cul-de-sacs; and not and street to- street walkways; and restrict access and circulation through neighbourhoods.
- Section 19.3.4 recognizes the importance of integrating complete streets principles in the planning and design of new roads, particularly in new neighbourhoods.
- The Region of Durham is responsible for the public transit system in the Municipality of Clarington and under Section 19.4.4, the Municipality will work to ensure a transit supportive environment and will:

- Direct higher density development along Regional and Local Corridors;
 - Orient buildings towards the street frontage in Centres and along Corridors to reduce walking distances to transit and enhance the pedestrian environment;
 - Develop an active transportation network that supports transit use;
 - Improve pedestrian access from the interior of neighbourhoods to arterial streets;
 - Facilitate the securement of lands required for public transit rights-of-way;
 - Design of streets in accordance with complete streets principles;
 - Improve connections of sidewalks and multi-use trails to major destinations, transit, and neighbourhood facilities;
 - Wayfinding signage;
 - Ensure new development connects to active transportation network;
 - Prioritize pedestrian and cyclist crossings;
 - Promote cycling as a safe mode of transportation; and,
 - Accessible Waterfront Trail.
- Section 19.5 outlines the Municipality's policies in regards to the active transportation network and all modes of human powered movement that combined create a foundation for a walkable community that supports an efficient transit system.
 - Complete streets principles are recognized by the Municipality as important criteria for the planning and design of urban streets in new neighbourhoods. Section 19.6.4 includes principles that are to be considered to implement complete streets in secondary plans, such as:
 - Street design elements to improve the quality of service for pedestrians, cyclists, transit users, and vehicles
 - Safe and convenient access to transit stops
 - Local streets with multiple points of access and limited block lengths;
 - Intersections designed to not only meet the desired level of service for vehicles but the desired level of service for pedestrians and cyclists
 - Streets designed with integrated accessibility features.

Public Comments

- Comments referenced active transportation networks – walking and cycling, but also includes mobility aids (wheelchairs) and requires increased network connectivity with crossing over key barriers including railways.
- Safety concerns were raised related to transportation options other than vehicles – room on roads for pedestrians, golf carts, vehicles; that roads are narrow with no sidewalks creating conflict between users.
- Safety concerns related to railway crossing - currently no crossing for pedestrians, dangerous for golf carts, no safe way to cross over the railroad except by automobile.
- Sidewalks vs no sidewalks or curbs.
- Concerns over increased traffic volumes on an already strained bridge crossing and Wilmot Trail, the main access route, and road conditions.
- Golf carts are used for internal community transportation in the existing community.

- The existing CN overpass bridge already contains a separate pedestrian walkway on the east side of the bridge. This is fully protected by a concrete barrier running the full length of the bridge. However, access to this walkway has been blocked for several years by the placement of a guard rail on both sides of the bridge in the northbound lane. By removal & relocation of this guard rail, access to this pedestrian walkway could be achieved. This would satisfy the requirement of the Bylaw but does not address the issue of golf carts using the CN overpass.

Roads, Transit, and Active Transportation Summary

1. The PPS emphasizes the need to provide the necessary public infrastructure and services in coordination with land use planning in order to support and encourage growth. In regard to transportation, this includes promoting connectivity within and between different transportation systems and modes, including across jurisdictional boundaries. The PPS promotes land uses patterns, density, and a mix of uses that work to minimize vehicular trips and support existing and planning transportation infrastructure.
2. Similar to the PPS, the Growth Plan also promotes the provision of transit and active transportation infrastructure to support achieving complete and healthy communities that reduce the reliance on personal vehicle usage. The Growth Plan also emphasizes the role of transit in the allocation of growth and intensification of existing areas, as providing regional and local transit that facilitates compact development and smart growth.
3. A variety of transportation options should be available to residents in the Secondary Plan Area. Establish a transportation framework that supports and encourages a multi-modal system for cars, bikes, pedestrians, and future transit.
4. Recognize walking and cycling as viable modes of transportation for a variety of trips, ensuring safe and direct routes for pedestrians to services and amenities.
5. Complete streets principles will be incorporated into the Secondary Plan. Complete streets are recognized by the Municipality as important criteria for the planning and design of urban streets in new neighbourhoods, including considering a context-based approach for the character of the planned land uses with the appropriate street design; street design elements that improve the quality of service for pedestrians, cyclists and transit users in addition to the level of service for vehicles; providing safe and convenient access to transit stops and multiple points of access to and from local streets, with limited block lengths, and designing intersections to meet desired levels of service while minimizing crossing distances, as well as integrating accessibility features into street design.
6. Introduce policies to support the provision of pedestrian and cycling amenities along streets (e.g. street trees, benches, bicycle racks, etc.).
7. Given that a culture of walking is fundamental to achieving requirements for daily physical activity, streetscapes must be designed to balance pedestrian, cycling, transit, land use, and civic functions, in addition to the movement of cars.
8. Comply with Priority Green Framework and support the criteria for all roads to have sidewalks and street trees on both sides.

2.3 Natural Environment and Open Space

Issue and Opportunity #7: Natural Heritage System

How can the natural heritage system be enhanced and its features and functions protected?

The natural heritage system is an important component of the Municipality's landscape and ecology, encompassing the key natural features and linkages. The preservation and enhancement of the natural heritage features must be supported in the design of the community and the policies of the Secondary Plan. New Endangered Species and Species at Risk policies must be introduced.

Provincial Policies

Provincial Policy Statement (2014): Section 2.1 (Natural Heritage); Section 4.0 (Implementation and Interpretation)

- The province requires that *“Natural features and areas shall be protected for the long term”* (Section 2.1.1).
- The PPS further states that *“The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features”* (Section 2.1.2).
- The PPS requires identification of natural heritage systems in southern Ontario (Section 2.1.3).
- The PPS also requires that *“Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.”* (Section 2.1.7).
- The PPS provides direction for municipalities, through their Official Plans, where they *“shall identify provincial interests and set out appropriate land use designations and policies. To determine the significance of some natural heritage features and other resources, evaluation may be required. Official plans should also coordinate cross-boundary matters to complement the actions of other planning authorities and promote mutually beneficial solutions. Official plans shall provide clear, reasonable and attainable policies to protect provincial interests and direct development to suitable areas”* (Section 4.7).

A Place to Grow (2019): Section 4.2.1 (Water Resource Systems); 4.2.2 (Natural Heritage System); 4.2.4 (Lands Adjacent to Key Hydrologic Features and Key Natural Heritage Features)

- Section 4.2.1 states that municipalities undertake watershed planning, identify and protect through designations and policies water resource systems, allocate growth based on watershed planning, inform designated greenfield areas with subwatershed plan and consider the Great Lakes Strategy.
- Section 4.2.2 states that municipalities will map Natural Heritage System (NHS) and exclude settlement areas, as well as overlay the NHS on top of the municipality's official plan and incorporate policies to maintain, restore and enhance the NHS. Development is to demonstrate that there will be no adverse effect on the NHS.
- When mapping the NHS, Municipalities must also permit for agricultural uses, agriculture-related uses, on-farm diversified uses, and normal farm practices; protect identified NHS under existing policies; refine provincial mapping of the NHS through a municipal comprehensive review; protect natural heritage features beyond the NHS; and, continue protecting, in the event where a settlement area is expanded into the NHS, the natural heritage features within the NHS.

- Section 4.2.4 states that municipalities shall generally limit “*new development or site alteration within 120 metres of a key natural heritage feature within the Natural Heritage System or a key hydrologic feature will require a natural heritage evaluation or hydrologic evaluation that identifies a vegetation protection zone*” (Section 4.2.4.1), where development is generally not permitted. In addition, permitted development shall incorporate mitigation measures to protect and restore key natural heritage features, key hydrologic features, and their functions.

Regional Policies

Region of Durham Official Plan (2017): Section 2 (Environment); Section 10 (Greenlands System)

- Section 2.1 states that the Region’s goals for its environment are to:
 - *“Ensure the preservation, conservation and enhancement of the Region’s natural environment for its valuable ecological functions and for the enjoyment of the Region’s residents;*
 - *Incorporate good community planning and design that enhances the Regional landscape and minimizes pollution of air, water and land resources;*
 - *Preserve and foster the attributes of communities and the historic and cultural heritage of the Region;*
 - *Undertake planning functions based on the understanding that there is a relationship between the natural and built environments and the principle of preserving resources and protecting the natural environment for future generations; and,*
 - *Promote good community planning and design that enhances public health and safety”.*
- Schedule B identifies Key Natural Heritage and Hydrologic Features within the Study Area:
- Section 2.2.12 states that outdoor lighting shall be directed away from those features.
- Under Section 2.3.7 pedestrian, bicycle and bridle paths may be permitted in proximity to those features provided that they are not adversely affected.
- Section 2.3.15 states that infrastructure and minor recreational uses are permitted within Key Natural Heritage and Hydrologic Features, but that other forms of development/site alteration are not permitted.
- Section 2.3.20 states that water resources are encouraged to be rehabilitated to a natural state and that alterations to watercourses are discouraged.
- Sections 2.3.21 and 2.3.22 provide policies that direct development to maintain hydrological functions and minimize impact on water resources.
- Section 10.1 outlines the Regional Official Plan for its Greenlands System as follow:
 - *“To establish a continuous Greenlands System of open spaces [...] that weave through and between the Urban and Rural Systems to ensure ecological health and renewal, and to assist in creating distinct Urban Areas;*
 - *To protect significant habitats of plants, fish and wildlife within natural, built and cultural environments; and,*
 - *To protect, sustain and enhance waterfronts within the Region as major and vital components of the Region’s natural, built and cultural environments.”*

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 3 (Protecting the Natural Environment and Managing Natural Resources); Section 3.4 (Natural Heritage System); Section 3.5 (Watershed and Subwatershed Plans); Section 14 (Open Space System); 14.4 (Environmental Protection Areas)

- Section 3.1 states that it is the Municipality's goal to “*protect and enhance the natural heritage system and its ecological integrity.*” and to “*promote responsible stewardship of the natural heritage system and wise use of natural resources in order to provide long term and sustainable environmental, economic and social benefits.*”
- Section 3.2 sets forth objectives to protect the natural heritage system and its features and functions; enhance ecological processes and biodiversity; protect residents from natural and man-made hazards; and to recognize Lake Ontario Waterfront as a dynamic and distinctive element of the Municipality.
- Section 3.4.2 identifies the following natural heritage features and hydrologically sensitive features comprise the natural heritage system. Natural Heritage Features include wetlands, areas of natural and scientific interest, significant woodlands, all significant valleylands, fish habitat and riparian corridors, habitat of endangered species and threatened species, rare vegetation communities, and wildlife habitat. Hydrologically Sensitive Features includes wetlands, watercourses, seepage areas and springs, groundwater features, and Lake Ontario and its littoral zones.
- Section 3.5.4 states that “*Consideration shall be given to relevant watershed and subwatershed plans and the achievement of overall watershed targets identified in these plans during the preparation of secondary plans and during the development approval process.*”
- Sections 14.2.1 and 14.2.3 provide strategic objectives such as the need to protect natural heritage features, hydrologically sensitive features and their ecological function and to ensure passive recreational activities are compatible with the natural environment.
- Section 14.4 provides policy directions as to the preservation and protection of the natural environment such as:
 - No development permitted on lands designated Environmental Protection;
 - Extent of the Environmental Protection Area designation includes a 30 metre vegetation protection zone from the natural heritage system and hydrologically sensitive features outside of urban and rural settlement areas;
 - Precise limits shall be detailed through the appropriate studies as part of a development application;
 - The setback for development from lands designated as Environmental Protection Area shall be determined based on the sensitivity of the specific feature; and,
 - For new development, lot lines shall not extend beyond the established setback.

Public Comments

- There were no specific comments related to the natural heritage system but comments that relate to the environment include the following:
 - Environmentally sustainable design.
 - Water systems and environmental impact.
 - Concerns with erosion of the waterfront.

Natural Heritage System Summary

1. The Region of Durham Official Plan identifies Rickard Creek as a “Key Feature” within the Regional Natural Heritage System. Maintenance, enhancement, and integration of this feature in the community must be considered in the Secondary Plan policies and community design.
2. The Natural Heritage System is a fundamental structuring element and is required to be accurately identified and protected by Provincial and Regional policies.
3. Where Natural Heritage and Hydrologic Features are located, outdoor lighting is to be directed away from these features, with active transportation paths, infrastructure and minor recreational uses permitted provided no adverse effects on these features, while other forms of development/site alteration are not permitted.
4. Explore options for restoration and further the greening of the area with recommendations for native planting.
5. Incorporate and connect the natural heritage system into the open space and parks system.
6. Maintain views and vistas to the natural heritage system and where feasible, Lake Ontario.
7. To comply with Priority Green Framework, the Natural Heritage System is to be protected and enhanced, connectivity is provided between natural heritage features; maintain views and vistas of landmarks and NHS; integrate NHS with parks and open space system; parks are provided within a 400m walking distance; and establish a tree cover target for public and private property.

Issue and Opportunity #8: Parks and Community Facilities

What policies are needed to support and ensure Wilmot Creek’s parks system, open spaces, trails, and recreational facilities continue to support the community for the next 20+ years?

Ensuring residents have convenient access to a connected and diverse range of open spaces and parks offers increased opportunities for improved public health. Offering a range of alternative open space opportunities in Wilmot Creek will provide for an enhanced public realm that is both animated and pedestrian friendly.

Provincial Policies

Provincial Policy Statement (2014): Section 1.5 (Public Spaces, Recreation, Parks, Trails and Open Space

- To achieve “healthy, active communities”, the PPS promotes the provision of “a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources” (Section 1.5.1 b)).
- Section 42 of the Planning Act supports the provision of parks by enabling municipalities to require parkland dedication as part of development, at the rate of 5% of the land area for residential uses or up to 1 hectare per 300 dwelling units, and 2% of the land area for commercial and industrial land uses.
- Under Provincial legislation the design of all new public spaces must meet AODA standards as of January 1, 2016.

Bill 108 - More Homes, More Choices Act (2019)

- Consideration must be given to changes to the Planning Act that will impact parkland dedication.

Section 42 - Parkland Dedication. The intention is that parkland acquisition land and/or cash-in-lieu funds would no longer be eligible under Section 42, but are **to be captured within the new Section 37 Community Benefits Charge System**. The changes to the Planning Act:

- Upon proclamation of Bill 108 - Remove the ability for municipalities to charge developments alternative rates for parkland dedication (1 hectare/300 units for land and 1 hectare/500 units for payment-in-lieu). The maximum parkland dedication charges will be the standard maximum rates of 5% of the land area for residential development and 2% of the land area for commercial, industrial and institutional development; and,
- Ensure that the ability of municipalities to implement a Parkland Dedication By-law that is directly tied to a municipality's decision whether or not to enact a Community Benefits By-law.

A Place to Grow (2019): Section 4.2.5 (Public Open Space)

- The Growth Plan requires municipalities to plan for a park system that is publicly-accessible that includes open space and trails that demarcate permitted and not permitted public access, is based on a coordinated approach to trail planning, and is based on good land stewardship practices for public and private lands. (Section 4.2.5.1).
- Section 4.2.5.2 states that “*Municipalities are encouraged to establish an open space system within settlement areas, which may include opportunities for urban agriculture, rooftop gardens, communal courtyards, and public parks*”.

Regional Policies

Region of Durham Official Plan (2017): Section 5 (Cultural, Health & Community Facilities, and Infrastructure); Section 8 (Urban System); Sub-Section 10C (Waterfront Areas)

- Section 5.1.1 states that it is the Region's goal to “*accommodate opportunities for locating cultural, health and community facilities in the Region*”.
- Section 5.2.2 states that municipally owned and operated community facilities shall be encouraged within Urban Areas.
- Section 8B.2.3 states that development within Living Areas should include “*parks, trails, pathways and educational facilities*”.
- Section 10C provides direction for Waterfront Areas within the Region, including lands located southwest of the Subject Site. In general, these areas should be developed to become “people places”, while protecting the natural environment.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 5.3 (Public Realm); Section 14 (Open Space System); Section 14.7 (Green Space); Section 18.3 (Parks); Section 18.4 (Trails); Section 21 (Infrastructure and Utilities)

- Section 5.3 states “*that the public realm is the most highly visible portion of our community. It comprises public streets, sidewalks, parks and publicly accessible open spaces, trails and paths, rights-of-way, public buildings and civic facilities.*”

- The Municipality of Clarington OP has established an Open Space System which includes the designation Green Space which is identified within the Wilmot Creek Community on Map A4 Land Use. Green Space under Section 14.7 includes lands that are *“intended to link other significant components of the Municipality’s Open Space System, including Environmental Protection Areas, and Waterfront Greenway.”*
- Further under Section 14.7.2 lands designated Green Space *“shall be used primarily for conservation and low intensity recreational uses...”*.
- The Municipal parkland standard is 1.8 hectares per 1,000 persons. (Section 18.3.2)
- To implement this standard, under Section 18.3.3, the requirement by park type that is applicable to Wilmot Creek is that Neighbourhood Parks, Parkettes, and Public Squares shall have a combined target of 0.8 hectares per 1,000 persons.
- Under Section 18.3.6 parkland throughout the Municipality will include urban design elements to improve thermal comfort, connect with the Open Space System utilizing trails, bicycle paths, walkways, sidewalks, and utility corridors; will be centrally located to the areas which they serve, street frontage shall not be less than 30% of the park perimeter; and parks will be designed to be accessible and inclusive to all users.
- Under Section 18.3.7, park classifications define the function and facilities of parks in the Municipality. The classifications that may be applicable to the Study Area include the following:
 - Neighbourhood Parks - serve the basic recreational needs of the surrounding residents, shall be of a size between 1.5 to 3 hectares
 - Parkettes - shall be between 0.5 ha and 1 ha in size and are required wherever the Municipality deems it necessary to augment or adjust the park requirements of any neighbourhood.
 - Public Squares - provide defined spaces for social interaction year round; shall be up to 1 ha in size, be highly visible, and can be used for cultural events, public art, farmer’s markets, and small scale outdoor activities/games.
- The Municipality intends to develop an integrated trail network that is accessible to all age groups (Section 18.4.1) and will be designed to minimize impacts on the natural heritage system (18.4.6).
- Section 21.3.6 pertains to the hydro corridor and states that *“Subject to approval of Hydro One Networks Inc., the Municipality encourages the use of lands within hydro corridors for:*
 - *Recreational uses such as parks, hiking trails and bicycle paths;*
 - *Community or allotment gardens;*
 - *Underground utilities;*
 - *Agricultural cultivation; and*
 - *Other uses compatible with adjacent land uses and consistent with the intent and policies of this Plan.*

Public Comments

- Concerns about lake access and maintenance of trails.
- Concern with an integrated trail system and issues of security. Comments received noted that there is resistance to the existing trail being open to the public, negating the whole purpose of the gated community.
- Comments on the future parkland development in the east end and status of the park development. Noted that it is currently designated as future parkland.

- Few comments related to the provision of parks but rather the retention or replacement of the baseball diamond and its importance as a recreational facility for the existing community

Parks and Community Facilities Summary

1. Consider the development of a Public Realm Framework to establish a legible, coherent, and appealing physical environment in Wilmot Creek that identifies neighbourhood parks, urban squares, parkettes, gateways, key views, sites for landmarks, a streetscape hierarchy; and public art opportunities.
2. A variety of parkland options in addition to neighbourhood parks and parkettes should be considered in Wilmot Creek, such as pocket parks, which are small scale components of the parks system generally between 75 m² and 1,000 m² in size, with frontage on at least one public street and surrounded by built form to provide activated building frontages.
3. Further park options should be considered, such as POPS, or privately owned publicly accessible space that are a specific type of open space which is accessible to the public but remains privately owned, offering opportunities for additional open space that will complement the public park system.
4. Mid-block connections that provide access within and between development blocks and are barrier free and visible from the sidewalk should also be considered.
5. Consider opportunities for passive recreation within the Hydro corridor.
6. The introduction of AODA standards/universal design and CPTED policies are to be included in elements of all parks and greenway system, as well as all community facilities.
7. Active transportation network including paths and trails in appropriate green spaces should be considered to connect with the municipal-wide network
8. To comply with Priority Green Framework, parks are provided within a 400m walking distance of residents, located adjacent to school site or community facilities, will form part of a connected system of open spaces, trails, sidewalks, and pedestrian links.

2.4 Infrastructure and Buildings

Issue and Opportunity #9: Servicing & Low Impact Development

How can green infrastructure, such as water, wastewater and stormwater management, as well as emerging stormwater management (SWM) strategies be effectively implemented in Wilmot Creek?

The appropriate supply and quality of servicing is integral to the management of growth, conservation of resources, and quality of life. Provincial, regional and municipal policies are placing an emphasis on promoting and encouraging green infrastructure, innovative stormwater management strategies, energy conservation, and low impact development to support infrastructure systems. The need to mitigate the impacts of climate change is also at the forefront of recent policies and plans. These strategies include reducing the number of paved surfaces to reduce run-off flows, using green infrastructure/natural corridors, and Low Impact Development (LID) methods to increase infiltration in urban areas.

Definitions:

GREEN INFRASTRUCTURE means 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, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces, and green roofs. (PPS)

INFRASTRUCTURE means physical structures (facilities and corridors) that form the foundation for development. Infrastructure includes: sewage and water systems, septage treatment systems, stormwater management systems, waste management systems, electricity generation facilities, electricity transmission and distribution systems, communications/telecommunications, transit and transportation corridors and facilities, oil and gas pipelines and associated facilities. (PPS)

LOW IMPACT DEVELOPMENT (LID) is a stormwater management strategy and design approach that seeks to manage urban runoff and stormwater pollution. LID emphasizes conservation and use of on-site natural features to protect water quality by implementing infiltrating, filtering, storing, evaporating, and detaining runoff close to its source.

MUNICIPAL SEWAGE SERVICES mean a sewage works within the meaning of section 1 of the Ontario Water Resources Act that is owned or operated by a municipality. (PPS)

MUNICIPAL WATER SERVICES mean a municipal drinking-water system within the meaning of section 2 of the Safe Drinking Water Act, 2002. (PPS)

Provincial Policies

Provincial Policy Statement (2014): Section 1.1 (Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use Patterns); Section 1.6 (Infrastructure and Public Service Facilities); Section 1.8 (Energy Conservation, Air Quality and Climate Change)

- Healthy, liveable and safe communities are achieved by:
 - e) promoting cost-effective development patterns and standards to minimize land consumption and servicing costs;
 - g) ensuring that necessary infrastructure, electricity generation facilities and transmission and distribution systems, and public service facilities are or will be available to meet current and projected needs; and,
 - h) promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate” (Section 1.1.1).
- Under the PSS, the province requires that growth be planned such that existing servicing systems are optimized and such that water conservation and water use efficiency are promoted (Section 1.6.6.1).
- Municipal sewage services and municipal water services are the preferred form of servicing for settlement areas and individual on-site sewage and water services may only be used for infilling and minor rounding out of existing development within settlement areas (Sections 1.6.6.2 & 1.6.6.4).
- Section 1.6.6.5 states that partial services shall be permitted within settlement areas only *“to allow for infilling and minor rounding out of existing development on partial services provided that site conditions are suitable for the long-term provision of such services with no negative impacts”*.

- Under Section 1.6.6.7 the PPS states that “Planning for stormwater management shall minimize increases in contaminant loads and changes in water balance; not increase risks to human health and safety and property damage; maximize vegetative and pervious surfaces; and, promote stormwater management best practices, including stormwater attenuation and re-use, and low impact development.
- Under Section 1.8 of the PPS “*Planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and climate change adaptation through land use and development patterns*”.

A Place to Grow (2019): Section 3.2.6 (Water and Wastewater Systems); Section 3.2.7 (Stormwater Management); Section 4.2 (Policies for Protecting What is Valuable)

- The Growth Plan requires municipalities to “*generate sufficient revenue to recover the full cost of providing and maintaining municipal water and wastewater systems*” (Section 3.2.6.1).
- Servicing will be planned, designed, constructed, or expanded based on opportunities for optimization and improved efficiency of the current servicing system through strategies, location of growth, a comprehensive water or wastewater master plan informed by watershed planning, and attenuation capacity for large subsurface sewage disposal systems (Section 3.2.6.2).
- The Growth Plan requires municipalities to develop stormwater master plans that:
 - “*are informed by watershed planning;*
 - *protect the quality and quantity of water by assessing existing stormwater facilities and systems;*
 - *characterize existing environmental conditions;*
 - *examine the cumulative environmental impacts of stormwater from existing and planned development, including an assessment of how extreme weather events will exacerbate these impacts and the identification of appropriate adaptation strategies;*
 - *incorporate appropriate low impact development and green infrastructure;*
 - *identify the need for stormwater retrofits, where appropriate;*
 - *identify the full life cycle costs of the stormwater infrastructure, including maintenance costs, and develop options to pay for these costs over the long-term; and,*
 - *include an implementation and maintenance plan*” (Section 3.2.7.1).
- Section 3.2.7.2 states that large-scale development requires a stormwater management plan.
- The Growth Plan establishes policies under Section 4.2 to ensure that decisions on allocation of growth and planning for water, wastewater, and stormwater infrastructure will be informed by applicable watershed planning (4.2.1.3).
- Further under 4.2.9, water conservation is supported through official plan policies and other strategies by including water demand management and water recycling objectives.

Regional Policies

Region of Durham Official Plan (2017): Section 2 (Environment); Section 5 (Cultural, Health & Community Facilities, and Infrastructure); Section 8 (Urban System)

- Section 2.3.20 (f) states that the Region shall “*promote groundwater infiltration, through improved stormwater management design*”.

- Section 5.1.2 states that it is the Region’s goal to “*provide adequate Regional municipal services and enable utilities to meet the existing and future needs of orderly growth in the Region in an environmentally and financially sound and efficient manner*”.
- Section 5.2.3 states that the Region shall give priority to municipal water and sewage services within Urban Areas for development and redevelopment proposals that are of a compact form of development.
- Sections 5.2.4 and 5.2.5 state that the location, design and construction of municipal services will be determined and provided in a cost-effective manner, based on capitalizing the use of existing infrastructure, while utilities will be provided that minimize negative impacts on the natural, built and cultural environment. In addition, proponents are to give primary consideration to existing utility corridors in locating and designing new utilities.
- Section 5.3.11 states that “*Urban Areas shall be developed [...] based on the principles of sequential development, progressive extension, improvement, rehabilitation and economical utilization of the Regional water supply and sanitary sewerage systems, and minimization of financial impacts on the Region*”.
- Section 7.3.14 notes that for the preparation of a secondary plan, servicing of the area will be on full municipal water and sanitary sewerage systems in accordance with Policy 5.3.11.
- Section 8B.2.3 states the development within Living Areas should have regards to “the types and capacities of the existing municipal services, infrastructure and the feasibility of expansion”.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 4.6 (Secondary Plans); Section 7 (Growing a Prosperous Community); Section 20 (Stormwater Management)

- Managing growth in Clarington must ensure an efficient and cost-effective use of existing infrastructure. As stated under Section 4.6.6, Secondary Plans shall include phasing policies that address the following: Sequential phasing of development within the Secondary Plan; efficient use and extension of all infrastructure and services, in particular, optimizing the use of existing infrastructure and services; and, minimizing the financial implications to the Municipality of servicing, operating and cost recovery for municipal services.
- Further under Section 4.6.7, new secondary plan areas must address Clarington’s Green Development Program and plan for more resilient infrastructure.
- The Municipality will seek the assistance of other levels of government to meet economic development objectives and include water supply and sanitary sewer services (Section 7.3.3) and encourage the Region to construct municipal infrastructure works to service all areas within the lakeshore urban area boundaries (Section 7.3.4).
- The objectives for stormwater management are provided under Section 20.2 and include the following:
 - *To manage development impacts on watercourses in order to enhance water quality, protect fish habitat and to prevent increases to flood and erosion hazards*
 - *To promote green infrastructure measures, including low impact development, as part of the overall stormwater management strategy.*
- Section 20.3.2 pertains to stormwater management plans and the need for an integrated approach that protects the ecological health of watersheds, improves resiliency, and contributes to the protection of human life and property during storm events.
- Section 20.3.3 pertains to a treatment train approach to stormwater management through green infrastructure, lot level controls and low impact development techniques.

- Section 20.3.7 notes the permissions for stormwater management facilities to be located in any land use designation with the exception of the natural heritage system, identified as floodplain or Environmental Protection Area.
- Section 20.3.8 sets forth policies for the design of stormwater management facilities in accordance with the Municipality's Engineering Design Guidelines which include:
 - retention and infiltration of stormwater to the fullest extent possible to maintain the natural hydrology of the site;
 - stormwater discharged into watercourses and the waterfront in a manner that does not cause additional flooding, erosion, slope instability, and/or reduced water quality;
 - stormwater management techniques that contribute to reducing or mitigating risk due to actual or predicted impacts of climate change;
 - encouragement of passive and active renewable energy sources;
 - installation of high quality landscaping, enhancement of natural heritage features, permeable surfaces, and the use of natural design; and,
 - integration into the open space system.

Public Comments

- Comments on the provision of adequate sewer and water infrastructure.
- Permeable pathways.
- Water and sewer system impacts. Participants said sewer and water infrastructure needs to be studied to ensure there is adequate capacity for the existing and new community.
- Comments received noted consideration should be given to utilizing the new sewer system to the west of the complex that is serviced by the Bowmanville Treatment Plant on Port Darlington Rd., rather than overloading the existing sewer system that requires pumping. The existing sewers are pumped to the Newcastle Treatment plant via several pumping stations located throughout the Complex. There are emergency generators at each of these pumping stations. The system is overloaded now and in need of maintenance.
- Concerns for requirement of existing residents to update water and sewer to facilitate demand of new developments to the north.

Servicing & Low Impact Development Summary

1. Provide provisional guidance for the choice of best practices in stormwater management in order to control flooding, erosion, sedimentation, and water quality in any natural or manmade waterway.
2. Encourage and promote the appropriate integration of natural waterways and ponds to enhance and develop functional corridors for wildlife habitat, open space, and parkland.
3. Protect and enhance, through stormwater management techniques and design, the water quality, environmental, aesthetic, and recreational potential of Rickard Creek.
4. Consider Low Impact Development policies that promote and incorporate innovative and appropriate LID opportunities and best practices, such as infiltration/filtration facilities that may include: permeable pavement, bioretention trenches, rain gardens, infiltration trenches, soakaway areas, and grass swales as part of a treatment train approach. The facilities may be located on public or private property within parks, front and back yards, parking lots and road rights-of-way.
5. To comply with the Priority Green Framework, stormwater management will plan for maximizing retention and infiltration with negative impact on wetlands, water bodies, groundwater and natural hydrological systems, Low Impact Development approaches; minimize hard surface infrastructure such as reduced parking standards, permeable paving; SWM facilities designed as an amenity and part of recreational system; provision of community gardens; maximize energy efficiency and water conservation; and design for passive solar opportunities.

Issue and Opportunity # 10 - Climate Change and Resiliency

What policies are needed to start preparing Wilmot Creek residents and the Municipality's infrastructure for the community mitigation and adaption changes that will be required in future years to deal with climate change?

- The impacts of climate change are already being felt in Ontario. They include more frequent and severe weather events that challenge the Municipality's stormwater management (SWM) capacity
- Major storm events are increasingly creating risks to public safety and damage to public infrastructure and private property.
- Emerging SWM strategies include reducing the amount of paved surface to reduce run-off flows and using green infrastructure/natural corridors and Low Impact Development (LID) methods to increase infiltration in vegetated areas and SWM ponds before run-off reaches the Municipality's sewer pipes.
- The need for resiliency is becoming more urgent due to weather extremes, economic disruption, and resource depletion. There is a need to better understand how resilience can be built into our urban environments to ensure our ability to adapt, as well as establish a focused way of understanding and applying resilience within urban design and planning.

Provincial Policies

Provincial Policy Statement (2014): Section 1.0 (Building Strong Healthy Communities); Section 1.6 (Infrastructure and Public Service Facilities); Section 1.8 (Energy Conservation, Air Quality and Climate Change); Section 3.1 (Natural Hazards)

- Under the PPS, the Province requires that impacts of climate change be considered in different areas including land use, air quality and natural hazards. Healthy, liveable and safe communities are achieved by “*promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate*” (Section 1.1.1h).
- The PPS states under Section 1.6.1 that “*Infrastructure, electricity generation facilities and transmission and distribution systems, and public service facilities shall be provided in a coordinated, efficient and cost-effective manner that considers impacts from climate change while accommodating projected needs*”.
- The PPS states further under Section 1.6.2 that “*Planning authorities should promote green infrastructure to complement infrastructure.*”
- Under the PPS, Planning Authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and climate change adaptation through land use and development patterns and must also consider the potential impacts of climate change that may increase the risk associated with natural hazards (Section 1.8 and Section 3.1.3).

A Place to Grow (2019): Section 4.2.9 (A Culture of Conservation); 4.2.10 (Climate Change)

- The Growth Plan requires municipalities to establish policies and strategies pertaining to:
 - Water conservation through water demand management and water recycling;
 - Energy conservation through energy efficiency and demand management initiatives
 - Air quality improvement and protection through reduction in emissions from municipal, commercial, industrial, and residential sources;
 - Integrated waste management; and,
 - Excess soil reuse (Section 4.2.9).
- Section 4.2.10 states that “municipalities will develop policies in their official plans to identify actions that will reduce greenhouse gas emissions and address climate change adaptation goals, aligned with the Ontario Climate Change Strategy, 2015 and the Climate Change Action Plan, 2016”. In addition, municipalities should develop:
 - Strategies to reduce greenhouse gas emissions;
 - Greenhouse gas inventories for transportation, buildings, waste management and municipal operations; and,
 - Interim and long-term greenhouse gas emission reduction targets.

Regional Policies

Region of Durham Strategic Plan 2015-2019: Section C (Healthy Environment and Sustainable Communities)

- Section C of the Strategic Plan states that by 2019, Durham Region will have a healthier environment that is more resilient, adaptable and sustainable.
- A number of strategic directions are provided to help achieve this objective, including:
 - Investing in efforts to mitigate and adapt to climate change to build resiliency across the region;

- Protecting, enhancing and where appropriate restoring significant water resources, agricultural land, natural heritage and environmentally sensitive areas;
- Ensuring that Regional transportation infrastructure is functional, integrated, reliable and barrier-free to support the movement of residents to work, school, and local services;
- Demonstrating leadership in sustainable asset management and environmentally friendly municipal practices; and,
- Working more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.

Region of Durham Official Plan (2017): Section 2 (Environment)

- Section 2.1.2 states that it is the Region's goal to *“incorporate good community planning and design that enhances the Regional landscape and minimizes pollution of air, water and land resources”*.
- Section 2.3.45 states that energy efficiency and improving air quality shall be considered in the planning and development of the region.
- Section 2.3.47 outlines policy directions for Regional Council, as follow:
 - *“Promote tree planting for the purposes of improving air quality, health and reducing energy use through shading and sheltering;*
 - *Support alternative, renewable energy sources and green technology;*
 - *Recognize the potential implications of climate change and will continue to investigate and implement mitigation measures where appropriate; and,*
 - *Promote more energy efficient buildings and infrastructure including retrofitting existing development to more energy efficient standards [..]”*.

Region of Durham Community Energy Plan (2018)

- The Durham Community Energy Plan is a pathway to a low carbon future which requires “new investments by the public sector, the private sector and households, and will stimulate a new economy”.
- The Energy Plan notes that municipal and regional interventions are foundational to achieving this future as they will unlock strategies through creating policies to support district energy, supporting advanced building performance standards, financing retrofits and renewable energy, as well as education.
- A number of recommendations are provided to support this low carbon pathway, including:
 - Continuing to test novel approaches and new strategies to reduce GHG emissions as part of the monitoring and evaluation of the DCEP;
 - Establishing a central entity to lead and coordinate between municipalities, the Region and other organizations to ensure implementation and maximize economies of scale;
 - Developing a five-year implementation plan based on the DCEP program areas, as well as implementing a monitoring and evaluation strategy for the DCEP;
 - Working with financial partners to develop a DCEP capitalization strategy; and,
 - Recognizing and enabling the DCEP in any revisions to the Durham Region Official Plan and local area municipal official plans.

Towards Resilience: Durham Community Climate Change Adaptation Plan (2016)

The Region of Durham has a number of initiatives and strategies (18 proposed programs) set forth under *Towards Resilience: Durham Community Climate Adaptation Plan (DCCAP)*, which is the Region's plan to prepare the region for climate change and extreme weather. One of the main points is that Durham's infrastructure (roads, bridges, stormwater systems, water supply and sewage treatment systems, buildings, energy supply systems, communication networks) were built in the period 1950 to 2000. This infrastructure was designed and built to be resilient to the climate of this period. This climate no longer exists and steps need to be taken to ensure that upgrades and new development are built to the requirements of this changing environment.

One such strategy is the *Draft Durham Climate Resilience Standards for New Buildings*. This is a standard developed to improve the disaster resilience of new low-rise residential buildings. The Region is expecting 53,000+ new housing units to be built between now and 2025. The opportunity is now to ensure that new development can be resilient.

The Region also undertook a study that looked at urban heat islands and its effects in the Region. The report is called *Keeping Our Cool: Managing Urban Heat Islands in Durham*. Urban heat island effects are intensified by land use and development decisions, as well as and climate change. The report examined heat island mapping in each of the 8 municipalities in the Region and the context of risks and concerns for Durham Region.

Durham Region has also created the *Durham Community Energy Plan (DCEP)* in association with all 8 local municipalities, utilities, and the regional government of Durham. The objective of the Report is to "*accelerate the transition to a clean energy economy in Durham while simultaneously achieving multiple economic, environmental and social benefits*". The report highlights Energy Use by Sector in the Region: 36% transportation, 30% residential, and 19% industrial. The report also discusses how the Region is going to reduce energy and GHG emissions by the year 2050 across all sectors. Six programs are outlined including the development of a Durham Green Standard that would use the Toronto Green Stand (TGS) as a model program for adaptation for Durham.

Envision Durham - Climate Change and Sustainability Discussion Paper, May 2019

The Climate Change and Sustainability Discussion Paper is the second discussion paper to be prepared as part of Envision Durham, the Municipal Comprehensive Review (MCR) of the Regional Official Plan. The report was presented to the Planning and Economic Development Committee on May 7, 2019, with a recommendation to forward the report to Regional Council, area municipalities, and agencies. The report provides an overview of the impacts that climate change will have on Durham and sets forth strategic directions for public input. It highlights the current ROP policy framework related to climate change and sustainability and recognizes Provincial policy requirements since the last ROP review. The key areas of discussion that have implications on climate change policies include: Urban Built Form, Energy Infrastructure, Transportation, and Natural Environment.

Municipal Policies

Municipality of Clarington Official Plan (2018): Section 2 (Vision and Principles); Section 4.6 (Secondary Plans); Section 5.5 (Sustainable Design and Climate Change), Section 7.0 (Growing a Prosperous Community)

- The Official Plan is predicated on three key principles, one of which is Sustainable Development. The Plan sets forth a number of directions under Section 2.2.1 Sustainable Development that include:
 - Acting locally in response to climate change, threats to air quality and other environmental concerns will
 - Recognizing the interaction of all parts of ecosystems and protects the integrity and vitality of natural systems and processes.

- Recognizing cumulative impacts by not exceeding the carrying capacity of air, land and water to absorb the impact of human use.
- Remediation of past environmental degradation
- Contributing to the reduction of energy and water consumption
- Shared stewardship of natural resources
- Development and built form will have consideration for resilience and sustainability
- Section 4.6.7 requires new secondary plan areas to address the criteria outlined under the Green Development Program to plan for more resilient infrastructure and to move towards net zero communities by incorporating techniques to reduce greenhouse gas emissions.
- The Official Plan promotes sustainability and climate change mitigation under the objectives of Section 5.2 by creating neighbourhoods that promote environment-first principles, land efficiency, compact and connected communities, and managing resources and energy efficiently.
- Under Section 5.5 Sustainable Design and Climate Change, the Municipality will seek to address climate change, become a more sustainable community, minimize the consumption of energy, water, and other resources, and reduce impacts on the natural environment through the promotion of:
 - energy, water and resource efficiency and conservation in existing and new development;
 - the reduction of greenhouse gas emissions, improved air and water quality;
 - mixed land uses at higher densities to efficiently utilize existing infrastructure;
 - the integration of transit and active transportation modes into the early stages of new development;
 - the reduction, reuse and recycling of waste,
 - employment and housing in Urban and Village Centres and Regional Corridors to shorten commute times and decrease greenhouse gas emissions.
- Section 5.5.2 states that urban forests are fundamental to address climate change and shall be protected to absorb carbon dioxide from the atmosphere and to mitigate heat island effects of development. Street trees shall also be provided within the public right-of-way.
- Under Section 7.3.6 the Municipality *“encourages innovative developments and practices that are sustainable, and supports the use of green infrastructure which minimizes the effects of human activity on the environment.”*

Public Comments

- Concerns were raised about the impact additional cars would have on air quality.
- Environmentally sustainable design, implementation of permeable pathways/walking trail not asphalt.
- Inclusion of EV charging stations in the new community.
- Ensure climate adaptation is taken in consideration such as stormwater management, emergency management.
- Climate modeling to look at GHG impact of the new community.
- Comment on the energy from waste facilities being close by, and if there is an opportunity for district heating and cooling.

Climate Change & Resiliency Summary

1. Opportunities for intensification, cost-effective development standards, and the use of active transportation and transit in proximity to existing services and infrastructure will help minimize land consumption and servicing costs, in line with the PPS, should be promoted in the Secondary Plan.
2. Provisional guidance for the choice of best practices in stormwater management in order to control flooding, erosion, sedimentation, and water quality in any natural or manmade waterway, should be promoted in the Secondary Plan.
3. The appropriate integration of natural waterways and ponds to enhance and develop functional corridors for wildlife habitat, open space, and parkland should be encouraged and promoted.
4. Low Impact Development policies that promote and incorporate innovative and appropriate LID opportunities and best practices, such as infiltration/filtration facilities that may include: permeable pavement, bioretention trenches, rain gardens, infiltration trenches, soakaway areas, and grass swales as part of a treatment train approach should be considered. The facilities may be located on public or private property within parks, front and back yards, parking lots, and road rights-of-way.
5. Building on the Priority Green Framework, the new community design will take into consideration climate change mitigation and resilience planning. To understand how to build resilience into our urban environments, we need to understand the local context. Not all areas are the same, nor do they have the same issues. The Secondary Plan should incorporate climate change adaptation and mitigation policies, as well as policies that speak to resilience.
6. Identify different shocks and stresses to better understand vulnerabilities either natural or manmade, such as major hazards, events, or crisis and where actions or interventions need to be focused. Interventions can include the integration of resilience in policies, standards, and by-laws to direct development and infrastructure; allocate infrastructure spending towards building resilience and addressing priority risks and vulnerabilities; and major event response and preparedness.
7. Incorporate Urban Forest System policies that speak to the benefits of the urban forest such as reduction in air pollution, urban heat island effect, energy savings, habitat for urban wildlife, biodiversity, and opportunities for recreation and physical activity. Consider a tree canopy target.
8. Promote innovative residential building designs that contribute to energy reduction and natural resource conservation, green roofs, synergies between buildings, and site management practices.
9. Utilize passive solar orientation in the layout of the community to maximize solar energy gain opportunities.
10. Complete streets, active transportation, reduced parking strategy, separation of sensitive land uses, among others, should be applied to improve air quality and minimize climate change impacts associated with new growth.

SECTION 3 – TECHNICAL STUDIES

3.0 Technical Studies Update Overview

The studies completed as required for the COPA 2003-0012 application are being amended or updated to accommodate an expanded study area and, if necessary, to revise previous data, modelling, or information. The expanded study area includes an approximate 2.6 hectare parcel of land known as the Humphrey Lands.

In Phase 1, the consultants listed below submitted the updates/addendums to their original reports. As stated previously, several of the technical study updates require additional information to proceed with finalization. The reports requiring additional information will be completed during Phase 2 once a Preferred Plan and accompanying statistics have been prepared and reviewed by the team, the municipality, the landowners, and the public. In those instances, a technical memorandum outlining work completed to date was provided for inclusion in the Summary Report.

- Air Quality Feasibility Assessment (RWDI Air Inc.)
- Archaeological Assessment (Archeoworks Inc.)
- Hydrological Assessment / Geotechnical Investigation (Terraprobe Inc.)
- Traffic Impact Study – Existing Conditions Assessment (GHD)
- Noise and Vibration Study (HGC Engineering)
- Existing Environmental and Geomorphological Conditions Report (Savanta | A GEI Company and GEO Morhpix Ltd.)

The reports or memorandums in their entirety have been submitted separate from the Summary Report. Excerpts from the reports have been included to highlight the key findings and outline the parameters for moving forward with the development of a land use plan for the Study Area.

3.1 Air Quality Feasibility Assessment

The Air Quality Feasibility Assessment was prepared by RWDI Air Inc. Excerpts from the report and a summary of the conclusions and recommendations are provided below.

Purpose

The 2016 air quality land use compatibility study was updated to include a description of the sampling previously completed and updated modelling results for the expanded study area including the Humphrey lands. The study was undertaken in accordance with the Ministry of the Environment, Conservation and Parks (MECP) Guideline D-6 to determine land use compatibility. The air quality assessment focuses on odour and fugitive dust as they are the main air quality issues for land use compatibility. Two industrial facilities, Canopy Growth and Detox Environmental Limited, located west of Bennett Road were assessed in the report.

The Ministry of the Environment, Conservation and Parks (MECP) D-series guidelines provide direction for land use planning to maximize compatibility of industrial uses with adjacent land uses. The goal of Guideline D-6 is to minimize encroachment of sensitive land uses on industrial facilities and vice versa, in order to address potential incompatibility due to adverse effects such as noise, odour and dust. Recommended minimum separation distances are provided based on the industry size and operation type.

The air quality assessment focuses on odour and fugitive dust because they are the main air quality issues for land use compatibility. Other types of air contaminants are addressed through the Province's industrial air permitting process. Odours and certain types of dust emissions (e.g., dust from on-site vehicle traffic) are not always addressed in the permitting process and, therefore, are considered here.

Air dispersion modelling was completed for odour and particulate matter (dust) to predict air quality in the Wilmot Creek study area. The predicted air quality concentrations are compared to provincial ambient air quality standards and guidelines.

Surrounding Context

Two industrial facilities, Canopy Growth and Detox Environmental Ltd., are located to the west of Bennett Road, south the Highway 401. Other adjacent land-uses include a rail corridor through the study area, and agricultural land to the north (above Highway 401) and to the southwest.

Canopy Growth is a licensed manufacturer of recreational and medical cannabis. Their operations are included within an approximately 4,800 sq. metre facility that was once occupied by Atlantic Lifts. All operations related to the growing and manufacture of cannabis occurs inside the building. Due to the potential for contamination of their product from spray drift from local agriculture operations, the facility recirculates 100% of its building air.

Detox Environmental Ltd. handles, transports, and disposes of industrial hazardous and non-hazardous wastes to secure landfill sites for disposal. The building structure is approximately 1,700 sq. metres with an open storage/shipping yard in behind the building of approximately 13,000 sq. metres.

Land Use Planning Guidelines

RWDI reviewed the current framework for federal and provincial environmental regulations regarding air quality and odour to establish the classification of the industrial land uses adjacent to the study area.

The Ministry of the Environment, Conservation and Parks (MECP) D-Series Guidelines provides a classification scheme for industries, based their potential for fugitive emissions that could cause adverse effects. For each class, the guideline provides an estimate of potential influence area and a recommended minimum separation distance between each class of industry and sensitive land uses. Three Industry Classes are defined with influences areas, and associated separation distances.

Federal Regulations pertain to the recent 2018, Cannabis Regulations SOR/2018-144 that came into effect that provides guidance in Part 5 – Good Production Practices. This regulation includes provisions related to a facility's ventilation system including odour control requirements to prevent the escape of odours.

Provincial Regulations that pertain to industrial air emissions in Ontario are governed by the Environmental Protection Act (EPA) and its regulations. Please refer to the full document for a summary of the Ontario Regulations.

Canopy Growth was defined as a Class I facility with a potential area of influence of 70 metres and recommended setback distance of 20 metres. Canopy Growth also operates with a license from Health Canada and any air emissions are regulated under Federal Regulations.

Detox Environmental was defined as a Class II facility requiring a minimum setback of 70 metres. The distance between the eastern edge of the facility building and the closest sensitive receiver within the study area is approximately 75 metres.

Modelling Results

The predicted concentration for particulate in the Wilmot Creek study area due to vehicle movement on the unpaved Detox yard is expected to be below the applicable ambient air quality criteria. It should be noted that the calculated particulate emission rate is conservative as the emission factor data for vehicles on unpaved roads assume a vehicle speed much higher than what would be expected in the yard.

The results of the odour dispersion modelling indicate that odour levels from Canopy Growth are predicted to be below 1 OU anywhere within the Wilmot Creek study area. This study has assumed some air leakage of odour from cannabis production. The predicted levels are relatively low and therefore a frequency analysis was not completed.

Recommendation

The predicted particulate and odour levels are within the applicable thresholds and are therefore considered to be acceptable throughout the Wilmot Creek Secondary Plan study area. The setback requirements for the two facilities; Canopy Growth at 20 metres and Detox Environmental Ltd. at 70 metres; both fall outside of the Wilmot Creek study area. Based on the analysis, there are no impacts to development within Wilmot Creek with respect to the nearby industries.

3.2 Stage 1 and 2 Archaeological Assessment

The Archaeological Assessment was prepared by Archeoworks Inc. Excerpts from the report and findings are summarized below.

Purpose

Archeoworks Inc. conducted a Stage 1-2 Archaeological Assessment in support of a proposed development of a 2.6 hectare parcel of land located immediately north of the Canadian National (CN) Railway, south of the Hydro corridor, and immediately east of Bennett Road, known as the Humphrey Lands (study area). These lands form part of the Wilmot Creek Secondary Plan study area.

Previous background work had identified elevated potential for the recovery of archaeologically significant materials within the study area. As the study area consisted of a ploughed agricultural field, it was subjected to a pedestrian survey at five-metre transects. No archaeological material was encountered during the pedestrian survey.

To establish the historical context and archaeological potential of the study area, Archeoworks Inc. conducted a comprehensive review of Aboriginal and Euro-Canadian settlement history, and a review of available historic mapping. To establish the archaeological context and further establish the archaeological potential of the study area, Archeoworks Inc. conducted a comprehensive review of designated and listed heritage properties, commemorative markers and pioneer churches and early cemeteries in relation to the study area. Furthermore, an examination of registered archaeological sites and previous Archaeological Assessments within proximity to the study area limits, and a review of the physiography of the study area, were performed.

Recommendation

In consideration of the study area testing negative for archaeological resources during the Stage 1-2 AA, the following recommendation is presented:

1. The study area is considered free of archaeological concern. No further work is recommended.

No construction activities shall take place within the study area prior to the *Ministry of Tourism, Culture, and Sport* (Archaeology Programs Unit) confirming in writing that all archaeological licensing and technical review requirements have been satisfied.

3.3 Hydrogeological Assessment/Geotechnical Investigation

The Hydrological Assessment and Geotechnical Investigation were prepared by Terraprobe Inc. for the Wilmot Creek study area and the Humphrey lands. Excerpts from the reports and a summary of the conclusions and recommendations are provided below.

Purpose

Terraprobe conducted a Hydrogeological Assessment for the Wilmot Creek study area (formerly the Wilmot Creek Phase 8 lands). Previous Phase One Environmental Site Assessment (ESA) and Phase Two ESA were conducted at the site in 2015 by Terraprobe. The purpose of the investigation is to provide information regarding the requirements for groundwater control for the development, both during the construction phase and following construction. The monitoring was initiated in July 2017 and included monitoring of six wells. As the property is proposed for residential development the Central Lake Ontario Conservation Authority (CLOCA) wants to assess the potential impact of the development on the groundwater resources including flow of groundwater, the possibility of contamination and temperature changes.

Conclusions and Recommendations

Based on the results of the investigation, the following conclusions and recommendations are provided:

- In summary, the Site is mostly underlain by a surficial layer of topsoil, underlain by undisturbed native soils of sandy silt to silty sand and clay and silt extending to the full depth of investigation. Exceptions were observed at borehole location BH4 and BH9 where the surficial layer of topsoil was underlain by silt to clayey silt earth fill which in turn was underlain by undisturbed native soils consisting of silt and sand.
- The groundwater level generally fluctuates seasonally at the Site, with the lower water level observed between summer and fall months and higher water level observed during late winter and spring time. The groundwater flow at the Site is towards the south on the majority of the site with the eastern edge of the Site flowing towards the east.
- The western and eastern portion of the Site are located within a regulated area of the Central Lake Ontario Conservation Authority (CLOCA).
- The hydraulic conductivity of the water bearing zone (silt and sand to silty sand) approximately ranges from 10-5 to 10-7 m/second based on the in-situ SWRT tests. For the purpose of assessing groundwater seepage rate, hydraulic conductivity of 10-6 m/second was assigned to the water bearing strata.
- The Site is located within an agricultural and residential area of the Municipality of Clarington. The Site is serviced by private well and septic systems. The surrounding areas are serviced by a mix of municipal water and sewer systems and private well and septic systems.
- The total ground water recharge component for the area is estimated as 140 mm/a with 563 mm/a of evapotranspiration, and 140 mm/a of runoff. The infiltration volumes over the pre-developed site were calculated as 13,080 m³. These calculations are based on a total pre-development area of approximately 333,673 m² (33 ha). Post development conditions should attempt to match the pre-development rates.

Geotechnical Investigation - Humphrey Lands

Purpose

Terraprobe conducted a geotechnical investigation for the lands located in the northeast quadrant of the intersection of Bennett Road and the CN Railway, known as the Humphrey Lands. Terraprobe had previously completed a preliminary geotechnical investigation for the Wilmot Creek lands in 2009, which at the time did not include the Humphrey Lands. The purpose of this report is to provide an addendum to the work undertaken in 2009 to include the Humphrey Lands.

The field investigation for the Humphrey Lands was conducted October 9th and 10th, 2018 and consisted of advancing a total of eight exploratory boreholes within the intended development area. The investigation was conducted to obtain site specific prevailing subsurface soil and ground water conditions, to provide geotechnical engineering recommendations for the design of proposed house foundations, basement floor slab and drainage, earth pressure design parameters, pipe bedding/embedment, and pavement design.

The subsurface conditions are summarized below:

- Topsoil – a topsoil layer was encountered at the ground surface in each borehole. The topsoil thickness ranged from about 150 to 600 mm with an average thickness of 300mm. A shallow test pit investigation is recommended to determine a precise topsoil thickness.
- Sandy silt and undisturbed native clay and silt to clayey silt were encountered beneath the surficial topsoil layer. The measured moisture contents of the soil samples indicated a moist condition.
- Sandy silt to sand and silt glacial till were encountered beneath clay and silt to clayey silt soil in each borehole. Values obtained from the glacial till deposit indicated a compact to very dense relative density. Moisture contents of the soil samples indicated a moist condition.

More detailed geotechnical test results and groundwater levels are provided in the Terraprobe Geotechnical Investigation report, dated May 9th, 2019.

Recommendations

The geotechnical investigation provided recommendations for house foundations on native soil and engineered fill, foundation installation, basement floor slab, earth pressure design parameters, basement drainage, pavement design and drainage, pipe bedding, backfill, and excavations. The recommendations provided in the report are more appropriate for the detailed design stage and construction of residential dwellings and the road system.

3.4 Traffic Impact Study – Existing Conditions Assessment

The Traffic Impact Study – Existing Conditions Assessment was prepared by GHD. Excerpts from the report and findings are summarized below.

Purpose

The purpose of the Traffic Impact Study – Existing Conditions Assessment was to update the existing conditions assessment with the objective to assess the existing conditions, to determine the traffic volumes anticipated to be generated by the proposed development during the critical weekday am and weekday pm peak periods; to assess the impact of this traffic on the nearby roadways; and if needed, to recommend improvements to accommodate the projected traffic. The report will be finalized in Phase Two once a Preferred Plan has been prepared.

Current Conditions - Existing Road Network

Highway 401 is a controlled access highway to the north of the site under the jurisdiction of the Ministry of Transportation Ontario (MTO). The highway has six lanes of travel, a rural divided cross-section and a posted speed limit of 100 km/h. At the Bennett Road partial interchange both the eastbound and westbound off-ramps are stop controlled intersections providing a shared left/right-turns lane onto Bennett Road.

Bennett Road is a north-south Type C arterial roadway bounding the west side of the site. Bennett Road includes two lanes of travel, an urban cross section until the intersection of Wilmot Creek Drive and then a rural cross section to the south. Bennett road has an assumed speed limit of 50 km/h. Bennett Road intersects Wilmot Creek Drive, South Service Road/eastbound Highway 401 ramps and the Highway 401 westbound on/off ramps. All approaches provide shared through/left/right-turn lanes. South of Wilmot Creek Drive it is currently a gravel rural dead end road,

potentially improved in the longer term when the lands on the west side develop in the future. While Bennett Road has an existing partial interchange with Highway 401, the Clarington Transportation Master Plan recommends closure and replacement with new interchange at Lambs Road to the west. Clarington is currently working with the MTO to assess this interchange modification as well as its timing in the longer term.

South Service Road is an east-west Type C arterial roadway with two lanes of travel, one for each direction of traffic, a posted speed limit of 50 km/h and a rural cross section. At its eastbound stop controlled intersection with Bennett Road and the eastbound Highway 401 ramps, the eastbound approach provides a shared through/right/left-turn lane. Its existing intersection with Bennett Road is planned to be the new intersection of a planned easterly extension of Lake Road. The first phase of this extension to Lambs Road is under construction now. The next two Lake Road phases linking to Bennett Road have no definite timing but are expected to be triggered by development demand in the South Bowmanville Industrial Park. The road is under the jurisdiction of the Municipality of Clarington.

Wilmot Creek Drive is an east-west local roadway that on the east side of Bennett Road connects to the Wilmot Creek Community. It is currently a municipal two-lane local road within the subject community intersecting Bennett Road approximately 60 metres south of Eastbound Ramp / South Service Road (future Lake Road). It currently ends as a cul-de-sac at the main entrance gate into the community. In a later stage of the development, the existing public road may be abandoned in favour of a new private access approximately 70 metres to the south. It is also expected to 'Tee' intersect with Bennett Road.

Current Conditions – Transit and Active Transportation

Durham Region Transit (DRT) currently provides services in the study area via Route 506: Route 506 provides weekday service from 9:40 am to 4:38 pm. This route serves the Wilmot Creek Lifestyle Community in the south and connects to the Clarington Centre at the intersection of Highway 2 and Green Road to the north.

Pedestrian facilities and cycle lanes do not exist along Bennett Road from Highway 2 and its terminus south of the waterfront trail. The introduction of these facilities in the future is restricted due to the existing bridge structure over Highway 401 which has insufficient right-of-way width to accommodate the addition of these facilities. A component of the Municipal Active Transportation Network, proposed as part of the Clarington Transportation Master Plan, includes cycling provisions as part of the Highway 410 interchange upgrades.

Conclusions

Under existing conditions, the study area intersections are currently operating with acceptable levels of service and delays with minimal queuing. The analysis of the a.m. and p.m. peak hours confirm that there is reserve capacity available within the existing road network to accommodate additional future development.

3.5 Noise and Vibration Study

The Noise and Vibration Study was prepared by HGC Engineering. The key findings from the 2015 investigation are summarized below.

HGC Engineering completed a draft noise and vibration feasibility study in 2015. At that time, the lands were identified as Wilmot Creek Phase 8.

- A site visit was conducted in 2015 which reviewed the existing industrial/commercial uses in the area of the subject site. The existing commercial/industrial uses were not considered to be significant. A site visit will need to be performed to determine what has changed in the area since 2015.
- Road traffic data was obtained from the Ministry of Transportation (MTO) and rail traffic from CN railway in 2015. Current and/or projected data will need to be obtained from MTO and CN Railway.

- Sound level predictions were performed at various locations around the subject site from road and rail traffic.
- The draft report identified areas requiring noise barriers comprised of berms and acoustic fencing on top and preliminary heights, dwellings which require forced air ventilation systems and central air conditioning, upgraded building constructions and the recommendation for a further detailed noise report.
- Ground borne vibration measurements were also completed at the closest proposed residential building façade adjacent to the railway right of way, at 30 m. Vibration levels were found to be below the CN guideline and therefore mitigation for vibration was not required.

The updated Noise and Vibration Study will be prepared in Phase 2 following the preparation of a Preferred Plan. HGC will identify areas for mitigation and provide recommendations for mitigation.

3.6 Existing Environmental and Geomorphological Conditions

The Existing Environmental and Geomorphological Conditions Report was prepared by Savanta. Excerpts from the report and key findings are summarized below.

Purpose

The Existing Conditions report describes the extent and quality of natural heritage features on, and surrounding, the Wilmot Creek study area (Subject Lands), as well as describing GEO Morphix’s desktop and field investigations that will ultimately support the development of an erosion threshold and the erosion mitigation component of the SWM plan. The fluvial assessment will also include meander belt width assessments that will, in conjunction with Savanta’s delineation of wetland limits, assist in defining development limits within the Secondary Plan lands.

The work undertaken by Savanta builds upon previous site investigations, and recognizes that the Humphrey Lands in the southwest corner of the study area have not been previously assessed and will be included in the field investigation.

Previous work has been undertaken by Savanta for the Subject Lands. In 2010, Rice Development Corp retained Savanta to undertake a scoped EIS in response to residential development proposed for these lands within the Wilmot Creek subwatershed, south of Highway 401 and north of existing residential subdivisions and the CNR corridor. The scoped level of assessment in 2010 was based upon discussion with staff of Central Lake Ontario Conservation Authority (CLOCA) and the generally limited extent and quality of natural heritage features located on these lands. Additional site investigations occurred in 2014 and 2015 to update the previous ecological surveys and inventories and to complete a field staking of wetland features with staff of CLOCA and the Municipality of Clarington, and to assess the potential for Species at Risk (SAR) within these Subject Lands. The wetland staking from 2014 was supplemented with confirmatory wetland delineation in the summer of 2015. Further confirmatory site observations occurred in early Fall 2018 to assess current terrestrial and aquatic conditions, as well to examine the Humphrey Lands that had not been the subject of previous assessment.

Natural Heritage Planning Considerations

An assessment of the quality and extent of natural heritage features found on, or adjacent to, the Subject Lands and the potential impacts to these features from the proposed development application was completed to address the natural heritage components of the following regulatory agencies, local and regional municipalities, and/or legislation:

- Municipality of Clarington Official Plan (2018);
- Durham Region Official Plan (2017);
- Central Lake Ontario Conservation Authority;
- Ganaraska Region Conservation Authority;

- Provincial Policy Statement (PPS; MMAH 2014);
- Endangered Species Act (ESA; S.O. 2007, c:6); and,
- Fisheries Act (R.S.C, 1985, c. F-14).

The Subject Lands are under the jurisdiction of two conservation authorities: CLOCA and the far eastern portion within the Ganaraska Region Conservation Authority (GRCA). The Subject Lands are not found within the Greenbelt or Oak Ridges Moraine Planning Areas.

The following highlights the various updated survey information collected in 2015 and confirmatory field observations undertaken in 2018.

Wetland Boundaries

The wetland boundaries as staked in 2015 identify portions of mineral marsh that extend easterly some distance from Rickard Creek. The 2014 and 2015 wetland boundaries were juxtaposed and in general the two lines coincide closely, with minor discrepancies. The July 2015 survey, undertaken by Savanta, had the advantage of assessing the vegetation communities during the best time of the growing season and this delineated boundary is therefore considered as best representing the wetland extent and location. The wetland boundary, particularly on the east side, is quite irregular and there may be an opportunity in considering potential limited encroachment in portions of the eastern limits of the wetland, subject to discussions with both the Municipality and CLOCA.

Bird Breeding

The purpose of the breeding bird surveys conducted on the Subject Lands was to determine the presence, abundance and behaviours of existing avian species. A total of 31 bird species were observed within the Subject Lands. Of this total, seven species are confirmed, 14 are probable and four are possible breeders on the Subject Lands. The remaining six bird species are considered non-breeders, flyovers or migrants.

A total of 24 (96%) of the confirmed, probable or possible breeders are provincially ranked S5 (common and secure), S4 (apparently common and secure) or SNA (species not native to Ontario). One bird species is considered provincially rare (S1-S3; NHIC 2016) - Bank Swallow (*Riparia*; Threatened in Ontario and Canada). Several Bank Swallows were observed in flight over the Subject Lands; however, there is no suitable nesting habitat for this species.

The results of the survey concluded that there were no observations of grassland bird SAR, no suitable cultural meadow habitat for Bobolink or Eastern Meadowlark, and the minimum area identified for indicator species for breeding habitat did not meet the Province's SWH criteria.

Subject Lands and Humphrey Lands

The Subject Lands were surveyed on September 28, 2018 to compare current conditions to those initially observed in 2010 and 2014/2015. The previous conditions remain substantially the same across the Subject Lands. Areas of cultural meadow and disturbed lands continue in this state and the areas of wetland associated with Rickard Creek that were surveyed in 2015 are similar (many of the stakes are still evident in the field). The Humphrey Lands in the southwestern part of the Secondary Plan area are dominated by active agricultural fields and does not contain any drainage features or terrestrial habitat of value.

Summary of Ecological Conditions and Future Phase 2 Activities

The extent and quality of the natural heritage features on the Subject Lands have been influenced by historic agricultural activities, past disturbances, and the presence of the Hwy 401 and CNR corridors. The primary future development constraint will involve the maintenance of the Rickard Creek watercourse and its associated

riparian/wetland corridor. The wetland that was staked in 2014/2015 will form a terrestrial setback that will need to be considered as the Concept Plan is formulated as part of the Secondary Plan. Ultimately, the Rickard Creek development limits will be formulated on the basis of the Phase 2 floodline analysis, meander belt width limits, and a delineation of a “greater of” boundary that will consider the range of constraints. On the eastern limits of the Subject Lands, future development of this area will be constrained by the Hwy 401 and CNR corridors that result in considerable “pinching” of these tablelands.

The future development of the Humphrey parcel will be constrained largely by the CNR corridor to the south and Bennett Road to the west. These lands have no defined drainage features or aquatic habitat, and are dominated by active agricultural fields; resulting in low-functioning terrestrial habitat.

Fluvial Geomorphic Conditions

The fluvial geomorphological assessment, prepared by GEO Morphix, included a background review, reach delineation, rapid geomorphic assessments, a detailed geomorphic assessment of the most sensitive reach within Rickard Creek, erosion threshold modelling in support of the SWM plan, and determination of meander belt widths for both tributaries. This portion of the Existing Conditions report provides details of the field work completed to date to characterize fluvial geomorphological conditions of watercourses within the study area in support of the Wilmot Creek Secondary Plan. Field investigations completed include the following activities:

- Delineation of reaches based on scientifically defensible methodology;
- Completion of rapid geomorphic assessments along Rickard Creek on a reach-by reach basis; and,
- Completion of a detailed geomorphic assessment of the most sensitive reach of Rickard Creek.

To date, reach delineation, rapid geomorphic assessments along reaches of Rickard Creek, and a detailed geomorphic assessment of the most sensitive reach of Rickard Creek have been completed. Results of the rapid geomorphic assessments indicated that Reach **R2** was the most sensitive reach. A detailed geomorphic assessment was then completed within the reach to inform erosion threshold modelling. Meander belt width values were empirically modelled as reaches had been previously modified and there were no measurable meanders. Based on historical aerial photographs and field observations meander belt width values for Reaches **R3**, **R4**, and **U4** were 15.0 m, 19.0 m, and 20.0 m, respectively.

4.0 New Technical Studies Overview

Additional studies are required to support the development of the Secondary Plan. The purpose of the studies in Phase 1 are to provide an overview of existing conditions and set forth recommendations for the preparation of the land use options and Secondary Plan in Phase 2. In Phase 2, the reports will be finalized based on the information from the Preferred Plan and accompanying statistics that have been prepared and reviewed by the team, the municipality, the landowners, and the public. As with the technical studies updates under Section 3.0, the following technical studies in their entirety have been submitted separate from the Summary Report.

- Functional Servicing (SCS Consulting Group Ltd.)
- Active Transportation (thtinc)
- Sustainability Background Report (urbanEquation)
- Urban Design (The Planning Partnership)
- Landscape Analysis (The Planning Partnership)

The reports have been summarized in the following sections to highlight the key findings and outline the parameters for moving forward with the development of a land use plan for the Study Area.

4.1 Functional Servicing – Existing Conditions

The Draft Functional Servicing report was prepared by SCS Consulting. The preliminary investigation of the existing water and sanitary servicing and drainage conditions are summarized below.

Purpose

The review of existing and future water, wastewater, and stormwater servicing focused on understanding the available capacity implications in the study area with regards to potential future development. The identification of potential servicing options and challenges, and recommendations were prepared for further analysis at the next planning stage.

The purpose of the Water and Wastewater Servicing, Floodplain Analysis and Stormwater Management Report (FSSR) is to:

- Demonstrate that the proposed development can be graded and serviced in accordance with the Municipality of Clarington, Central Lake Ontario Conservation Authority (CLOCA), and the Ministry of Environment, Conservation and Parks (MOECP) design criteria.
- Delineate the existing Regulatory Floodplain on the site; and
- Confirm the stormwater management criteria and preliminary stormwater management options.

Please refer to the full report for all mapping and location of catchment areas.

Existing Storm Drainage

The western portion of the study area (Catchment 101) generally sheet drains from north to south toward a low point approximately 225 m east of Bennett Road at the CN Railway. This outlet is referred to as Outlet 1.

The central portion of the study area (Catchment 102) drains to the Un-named Tributary East of Bennett or Rickard watershed (herein referred to as Rickard Creek). This outlet is referred to as Outlet 2.

The eastern portion of the study area (Catchment 103) generally sheet drains east toward a watercourse that traverses the study area from north to south. This outlet is referred to as Outlet 3. The watercourse is identified to be within the Wilmot Creek watershed, although it drains directly into Lake Ontario rather than Wilmot Creek, and is within the jurisdiction of Ganaraska Region Conservation Authority.

Existing Sanitary Servicing

The existing Wilmot Creek Community to the south of the CN Railway (Phases 1 to 7) is serviced with a private sanitary sewer system. The existing system consists of three private sanitary pumping stations. The existing Pumping Station 3 pumps flows via a 150 mm diameter forcemain to the Newcastle Water Pollution Control Plant.

The proposed Secondary Plan area was previously referred to as Phase 8 of the Wilmot Creek Community. According to a report titled "Wilmot Creek Adult Lifestyle Community Expansion, Phase 8", prepared by KMK, dated June 5, 2007, Pumping Station 3 has a pumping capacity of 6.17 L/s, was designed to accommodate the flows from Phases 6, 7, and 8, and acts primarily as a transfer pumping station conveying the flow through a 100 mm diameter PVC forcemain connecting Phase 6 to the collection system of Phases 1 to 5. However, the amount of flow that is available in the existing sanitary sewer system was not assessed and is not available at the time of writing this report. This report has no status and the servicing approach was not accepted by the Region of Durham.

Engineering drawings and system maps for the existing municipal services in the area were provided by Durham Region and are included in Appendix A of the full Functioning Servicing Report, submitted separately from the Summary Report.

An existing 250 mm diameter sanitary sewer is located on the easement/future Lake Road at Bennett Road near the northwest corner of the site that conveys flows west to the Bowmanville Water Pollution Control Plant. The Region of Durham has indicated that there is capacity in this sewer for an additional maximum flow of 20 l/s.

An existing 300 mm diameter sanitary sewer is located south of the CN Railway on Port Darlington Road. The Municipality of Clarington has indicated that there is an allowance of 30 l/s for the Study Area. This sewer is at a depth that can be extended northerly on Bennet Road to south of the CN Railway/emergency access road to the Wilmot Creek Community, that can be utilized to service the Study Area. The Region of Durham has also indicated that sanitary flows from the existing Pumping Station No. 3 (servicing Phases 6 and 7 of the existing Wilmot Creek Community) can be diverted to the extended sanitary sewer from Port Darlington Road.

Therefore, the Study Area can be serviced by connections to both of the existing sanitary sewers: one connection to the existing Lake Road sanitary sewers for the west side of Study Area and the second connection to the existing Port Darlington Road sanitary sewers for the remaining areas.

Existing Water Servicing

The existing phases of the Wilmot Creek Community are serviced by a watermain network that is connected to the Newcastle water supply system. Durham Region has indicated that the proposed development will not be permitted to interconnect with the existing phases of the community.

Based on the Engineering drawings and system maps provided by Durham Region, there is an existing 400 mm diameter watermain located on the easement/future Lake Road at Bennett Road near the northwest corner of the Study Area that is connected to the Bowmanville Water Distribution System. There is also a relatively new 300 mm diameter watermain on Bennett Road that connects to a 300 mm diameter watermain from Port Darlington Road to the existing 400 mm diameter watermain at Lake Road.

The Study Area has water servicing to the west with opportunity to connect to existing watermains.

Floodplain Analysis

Rickard Creek traverses the central portion of the site and is located approximately 270 m east of Wilmot Creek Drive. Rickard Creek is within the jurisdiction of CLOCA and it has been identified that Regulatory floodplain mapping is required. The main channel dimensions were measured in the field by GEO Morphix in November 2018.

Hydrology Modelling

An upstream external drainage area, from land north of and including Highway 401, drains to the Rickard Creek. The total upstream drainage area to Rickard Creek just downstream of the CN Railway is approximately 129 ha. For the purpose of Regulatory floodplain mapping, the future conditions per the Official Plan were used to establish the land use.

The lands north of Highway 401 (Catchment 301) are noted in the Official Plan as Prime Agriculture Area and are therefore modelled as the existing rural condition. Catchment 302 includes the Study Area, Highway 401, and open spaces outside of the Study Area. The lands within the Study Area have been assumed to have a developed land use with a total imperviousness of 60% and a directly connected imperviousness of 45%. Therefore, catchment 302 has been modelled as an urban catchment with a weighted total imperviousness of 55%.

The peak runoff rate generated by greater of the 100 year or the Regional Storm (Hurricane Hazel) will be defined as the Regulatory flow rate for the purpose of the Regulatory floodplain mapping. The results of the hydrology modelling show that the Regional storm event (Hurricane Hazel) produces a peak flow rate of 11.00 m³/s

Hydraulic Modelling

The main channel dimensions were measured in the field by GEO Morphix in November 2018. The CN Railway that is located immediately downstream of the study area was modelled using field surveyed culvert information by JD Barnes in July 2019. The existing CN Rail culvert consists of a 0.9 m diameter corrugated steel pipe with a length of 24.8 m. Using the provided information, a regulatory floodline was mapped and will be used in determining the development limits for the Study Area.

Conclusions

- The western portion of the Study Area sheets drains to the southwest, the central portion drains to Rickard Creek, and the eastern portion sheet drains to the east to a watercourse in the Wilmot Creek watershed.
- Study Area can be serviced by connections to both of the existing sanitary sewers: one connection to the existing Lake Road sanitary sewers for the west side of Study Area and the second connection to the existing Port Darlington Road sanitary sewers for the remaining areas.
- The Study Area has water servicing to the west with opportunity to connect to existing water mains.

4.2 Active Transportation Analysis

The Active Transportation Analysis was prepared by thtinc. Excerpts from the report and key findings are summarized below.

Purpose

The development of the Active Transportation Plan focused on a review of existing and planned pedestrian/cycle trail systems adjacent to and connecting to the Wilmot Creek Secondary Plan area and identified opportunities for providing enhanced or new linkages. The results from the trail system opportunities review established a baseline from which to assess existing and future usage of pedestrian, cycling and golf cart traffic crossing the Wilmot Creek

railway bridge with the primary purpose to identify a safe and community accessible trail that will be incorporated in the final Secondary Plan with recommended policies and implementation strategies.

The Active Transportation Analysis Phase 1 report provides a review of:

- Existing Active Transportation system and functionality within and adjacent to the existing Wilmot Creek development;
- Conformity with Official Plan Active Transportation Policies included in the Clarington Transportation Master Plan and the Region of Durham Transportation Master Plan;
- Opportunities for connecting Active Transportation between existing and new neighbourhoods including the CN bridge; and,
- Interconnection of Waterfront Trail with future Technology Park Trail and future Wilmot Creek Trail.

Role of Active Transportation

The planning and implementation of Active Transportation within the Wilmot Creek Secondary Plan requires consideration of the following:

- Network Connectivity - On-road and Off-road routes need to connect to key destinations (recreation centres, commercial activities etc.) with supporting wayfinding / signage. A key recommendation of the CTMP is the provision of new connections to the Waterfront Trail and paving the entire length of the Trail.
- Directness of Route - The directness of route increases usage as lower speeds for walking and cycling are sensitive to increases in trip length.
- Cost / Maintenance - Both capital construction and maintenance costs for Active Transportation need to be considered as On-road facilities may be maintained as part of “normal” roadway maintenance costs, whereas Off-road facilities do not have shared cost activities.
- Safety - A safe environment can be provided with proper visibility, signage, maintained travel surfaces, gentle slopes, and pavement markings (On-road facility).
- Design Standards - The use of consistent design and standards, especially for On-road facilities, provide a consistent look and level of safety.
- Trip End Facilities - The provision of convenient bicycle storage facilities and golf-cart parking at key destinations can play a role in further encouraging non-auto modes.

Recommendations

The key guidelines of the recommended Active Transportation Plan include:

- Design safe and direct routes for pedestrian travel to walkable nodes such as community facilities, transit terminals and commercial areas;
- Design Active Transportation networks that incorporate trails with natural features, open spaces, parks and integrates with the planned road system;
- Ensure that all roadways are designed with Complete Street principles that provide sidewalks and street trees on both sides of arterial and collector road rights-of-way;
- Integrate pedestrian and cycle networks with adjacent trail systems and provide connections across key physical barriers such as railways; and,
- Provide direct and continuous collector streets for transit accessibility and efficiency of service.

Based on the above noted guidelines, the development concepts for Phase 2 should include:

- Incorporating the opportunity of developing a Trail System within the 14m MTO setback corridor, parallel to existing Highway 401, with pedestrian links to the internal road system.
- Incorporating Complete Street design principles to ensure that the needs of all users (vehicles, pedestrians and cyclists) are considered in the design and construction of Wilmot Creek Drive which functions as the main collector road within the Secondary Plan Area.
- For the Wilmot Creek Drive entrance from Bennett Road, entering the Secondary Plan area, consider a Complete Streets layout, incorporating the following elements:
 - Wide sidewalks and high-quality pedestrian amenities, including pedestrian scale lighting, benches, etc.;
 - Passive traffic calming including narrow vehicle travel lanes, on-street parking, mid-block crossings, bump-outs and signals;
 - Pedestrian crossings at signalized intersections or unsignalized mid-block crossings;
 - Landscaping – street trees, shrub/perennial beds, decorative planters; and,
 - Cycling facility (bike lanes).
- Local roadway design within the Secondary Plan area would focus on 2-lane roadways with sidewalks, boulevards for street planting / trees and cycle lanes where warranted.
- Review the opportunity of shifting the Bennett Road/Wilmot Creek Drive intersection south (approximately 50 to 100 metres) to improve traffic operations
- Provide a sidewalk on the east side of Wilmot Creek Drive that links the Secondary Plan Area to the existing community south of the CN rail line utilizing the existing barricaded pedestrian sidewalk provided on the CN bridge structure
- Sign travel speeds on Wilmot Creek Drive at 50 km/h with consideration of line painting that reduces the travel lane width to support the lower travel speed.
- Ban the use of golf carts crossing the CN rail line to restricted periods to access a golf cart parking area located on the south side in the vicinity of the Community Centre Woodworking Shop / Lawn Bowling area on Twillingate Lane.

4.3 Sustainability Background Report

The Sustainability Background Report was prepared by urbanEquation. Excerpts from the report and findings are summarized below.

Purpose

An overview of policies and recommendations for green development principles for the community have been set forth through a review of existing provincial, regional, and municipal policy documents to inform the Sustainability Plan and Green Development Guidelines, including the Official Plan and the Priority Green Clarington Development Framework. A cross-jurisdictional scan of green development precedents and best practices at the scale of the Wilmot Secondary Plan area was also undertaken to assist with leveraging background research to develop an approach to development that respects the function of green infrastructure, remains adaptable over time, and is informed by green standards including resilient infrastructure and reduced greenhouse gas emissions in support of a move towards a net zero community.

The Municipality of Clarington has committed to pursuing a sustainable future for its communities, as outlined in the Clarington Official Plan and the Priority Green Clarington Development Framework. These documents, which together establish Clarington's principles of sustainability, are used by the Municipality to guide the development of vibrant communities and strengthen the economy. This report has been prepared to ensure that the Wilmot Creek Secondary Plan Area reflects the ambitions advanced in these documents.

The report is structured to provide the necessary background information to assist with the preparation of sustainability policies for inclusion in the secondary plan and the necessary steps for moving towards the preparation of the Sustainability Plan and the Green Development Guidelines.

Policy Context

A policy review of the relevant policies, strategies, and directions from provincial, regional, and local documents and plans was undertaken. The Planning Act, PPS, Regional Official Plan, and documents such as the community energy plan and climate change adaptation plan, to the Municipal Official Plan and the Priority Green Clarington were assessed and the policies or directions connected to each of the ten principles, where applicable. For a fulsome review of the policy framework, please refer to the complete document.

The Priority Green Clarington (PGC) framework was used to establish recommended Secondary Plan policy. The PGC criteria have been translated into recommended Secondary Plan policies, with particular attention given to synergies between the criteria and across each of the four theme areas. These policies will be refined alongside the creation and evolution of the preferred development concept.

Recommendations - Secondary Plan Policy Direction

Built Environment

- Streets and blocks shall be organized into compact, walkable grids
- Local street block lengths shall be no longer than 400 metres.
- Where appropriate, street rights-of-way shall include sidewalks and bicycle paths
- Designing arterial and collector roads with sidewalks and street trees on both sides of the right-of-way, particularly along the portion of Bennett Road within the Secondary Plan area.
- Supporting transit access and efficiency of service through the provision of direct and continuous collector streets, connecting to Clarington's existing network.
- Designing all local roads with sidewalks and street trees on both sides of the right-of-way, paying specific attention to those local streets connecting to community amenities, transit facilities, and trails.
- The Secondary Plan area shall support livability and walkability by providing community supportive amenities within 800 metres walking distance. Routes to and between amenities shall be direct and safe in order to support active transportation options.
- At least three existing or planned amenities are within 800 metres of all residential areas. Amenities may include, but are not limited to, schools, community/cultural facilities, recreation facilities including parks, libraries, retail/convenience commercial uses, pharmacy/medical facilities, and institutional uses (daycares).
- Provide opportunities for community gardening within 800 metres of multifamily residential areas.
- Higher density housing shall be located along Local Corridors (northwest corner of the Secondary Plan area) and along the rail corridor.
- Residential areas shall include a variety of housing types, such that densities are achieved by way of multiple accommodation types, tenures, and affordability.

- Plant trees and introduce greenery in urban landscapes, noting that the expansion of green space provides cooling through shade and evapotranspiration.
- Install green roofs to reduce the urban heat island effect and aid in stormwater management.
- Use reflective and light-coloured materials for roads, sidewalks, and other infrastructure surfaces to combat the urban heat island effect;

Natural Environment and Open Space

- Development applications within the Secondary Plan Area shall demonstrate a commitment to achieving an optimal tree cover target, having regard for the recommendations of the Wilmot Creek Watershed Plan.
- The mobility network shall ensure connectivity to parks, distributed such that they are accessible to residents within a 400 metre walking radius.
- The pedestrian and cycling network, comprised of sidewalks, trail systems, and pedestrian links, shall connect all planned parks and open spaces; provide connections to the existing trail system; and be designed to accommodate future connections to public transit facilities
- The mobility network shall promote linkages to natural features, including Rickard Creek, in a manner that minimizes negative environmental impacts.
- The mobility network, where appropriate, should be designed to accommodate stormwater management facilities and low impact development technologies.
- Low impact development features shall be integrated into the design of parks and other outdoor spaces in such a way that demonstrates maximum water conservation.
- All development within the Secondary Plan area shall protect and enhance the Natural Heritage System, including Rickard Creek and its related ecosystems and ecosystem services.
- Public green spaces or parks shall be located adjacent to Rickard Creek, in a way that provides naturalized views to the Creek, complements and, where possible, improves the creek's functions; and establishes a trail with linkages to the existing trail system.
- Stormwater retention and infiltration strategies shall be included in all development applications within the Secondary Plan area, with demonstrated consideration of Rickard Creek's hydrological services and systems.

Mobility

- Where appropriate, low impact development features shall be incorporated into the design of streetscapes within the Secondary Plan area.
- Where mixed-use development is planned within the Secondary Plan area, it shall be easily accessible from surrounding residential neighbourhoods by bicycle and foot.
- All roads within the Secondary Plan area shall be designed using a "complete streets" approach, having regard for the types of uses supported by and adjacent to the road.
- Development in the Secondary Plan area should foster a sense of place and celebrate cultural history through the introduction of public art in parks, open spaces, and within rights-of-way where appropriate and the installation of plaques and other commemorative art to celebrate Clarington's history.

Infrastructure and Buildings

- All Draft Plan of Subdivision and Site Plan application drawings shall demonstrate regard for maximum passive solar gain through appropriate road design and orientation.

- In order to support the Municipality's Energy Management Plan, energy efficient measures shall be integrated, where appropriate, into the design of parks, outdoor spaces, and streetscapes.
- A Stormwater Management Plan shall be completed, demonstrating:
 - o Low impact development treatment train(s) that prioritize on-lot source controls for stormwater capture, retention, and infiltration
 - o The integration of low impact development measures into landscape amenities
 - o Integration with recreational amenities
 - o Utilization of natural drainage patterns to reduce overland flooding within the Secondary Plan area and adjacent communities
 - o The control and return 90% of rainfall volumes to natural hydrologic pathways
 - o The capture and treatment of runoff with an efficiency of greater than 90% of the annual average rainfall volume
- In order to reduce overland flow of stormwater, development applications within the Secondary Plan area shall demonstrate the minimization of hard surfaces, including asphalt and other impermeable materials, and the use of permeable paving within parking facilities, where appropriate.
- Development applications should address the following resilience measures:
 - o Emergency planning for vulnerable populations
 - o Public education and training with a special focus on vulnerable people, such as the elderly, isolated people, and those with medical situations.
 - o Urban tree cover and shading structures in parks and public spaces
 - o Low impact development and green infrastructure.
 - o Light-coloured building materials to reduce ambient summer temperatures, and resilient, light coloured asphalt and alternative pavement surfaces to improve the performance of roads under extreme heat conditions
 - o Reflective roofs to improve thermal performance and utilizing passive cooling and heating design.
- Development applications should include strategies in support of integrated waste management, including enhanced waste reduction, composting, and recycling initiatives and the promotion of reusing and recycling construction materials.

4.4 Urban Design

The Urban Design Analysis Phase 1 report was prepared by The Planning Partnership. The opportunities and challenges are summarized below.

Purpose

The Urban Design Analysis examined the existing urban design conditions and opportunities. The first component of the study, Part 1 – Existing Conditions, reviewed existing conditions within the Study Area and in the surrounding areas. The review included existing and proposed development surrounding the Study Area, connectivity such as roads and active transportation, views and vistas, destinations, and community infrastructure. The analysis concluded with urban design opportunities and constraints for Wilmot Creek. The second component of the urban design analysis, Part 2 - Proposed Plan, will be prepared in Phase 2 after completion of the preferred land use plan.

Existing Conditions

- **Land Uses:** The Study Area is predominantly designated “Urban Residential” and “Green Space”. In addition, the area located west is designated “Light Industrial”, area located north is designated “Prime Agriculture”, area located east is designated “Green Space”, and the area south is mostly designated “Urban Residential”.

- **Proposed Developments:** The Study Area is adjacent to a few construction projects including a residential development of 699 dwelling units by Port Darlington Land Corporation and 341 townhouse condominium units by Bowmanville Lakebreeze East Village Ltd.
- **Connectivity:** The Study Area is framed with both primary and secondary roads, providing for vehicular connectivity. However, little infrastructure is in place for pedestrians and cyclists, with the exception of the Waterfront Trail.
- **Community Destinations:** Community destinations in the broader area surrounding the Study Area include facilities and amenities in Port Darlington, Newcastle, and Bowmanville. A number of facilities are part of the existing Wilmot Creek Community but are private and only available to residents of the existing community.

Urban Design Intent

Based on the review of existing conditions, Official Plan policy directions, and the Priority Green Checklist criteria, the urban design intent for the Wilmot Creek Secondary Plan and development options should consider the following:

A high quality, well-designed **Built Environment** is valued within the Municipality. To support this environment the plan and policy document must respond to the exiting conditions while providing a built environment that creates opportunities for daily physical activity, addresses an ageing population, and supports the needs of residents of all ages and abilities.

The **Natural Heritage System**, made up of Environmental Protection Areas, hedgerows, and stormwater ponds that provide key organizing elements of the Plan, as well as a recognizable and ever-present way to orient oneself within the community. Opportunities to frame and direct views to these elements should be encouraged throughout the Plan.

A **High-Quality Public Realm**, consisting of a hierarchy of active and passive parks, along with a variety of streets, will enhance mobility, promote healthy and active lifestyles and contribute to the character of the community. The public realm should be developed to support and enhance the range of activities and functions of the community.

An **Accessible and Connected Active Transportation Network**, consisting of pedestrian and cycling routes, sidewalks and trails, will be important to promoting healthy, active lifestyles.

Gateways and Landmarks are important parts of the fabric of the neighbourhood and can be created using a combination of buildings, landscapes, open spaces, or public art. Properly designed, these elements have the ability to enhance wayfinding and the sense of place.

A **Permeable Street and Block Pattern**, with a modified grid of streets and block lengths in the range of 120 – 130 metres in length will create a more pedestrian-scaled environment and provide multiple points of access and routes of movement through the community.

A **Neighbourhood Centre** will create an animated focal point that will include a combination of high to medium density housing forms, public space, mixed-use/live-work opportunities and potential community uses. This creates more opportunities for residents to live within or near the neighbourhood centre services creating stronger support for local businesses, shared investment in the public realm, and contributes to the creation of a more dynamic neighbourhood. In this location, it will be important to create a strong and consistent building edge and continuous and coordinated streetscape treatments around the public space. Transition from the Neighbourhood Centre to the surrounding neighbourhood should also be carefully considered.

Challenges

Urban design must also take into consideration the challenges of the Study Area, such as the Hydro and CN Rail corridors, Highway 401, adjacent employment uses, access to the Study Area, and Rickard Creek and associated wetland setbacks. These create constraints to development and potential setbacks that will need to be addressed at the plan preparation stage and confirmed through the findings of the technical studies in Phase 2 of the study process.

Opportunities

Building on the urban design intent and an understanding of the existing conditions of the Study Area and the broader area of influence, a number of opportunities have been identified below for consideration in the preparation of the development options for the Wilmot Creek community.

Healthy, Complete Community - Promote a healthy, connected, and complete community with a community structure that promotes the following:

- An intensified form of development with appropriate synergies with the public realm
- A mix and variety of housing forms to provide for life cycle housing
- A permeable street and block pattern to create a pedestrian-scaled environment
- A Neighbourhood Centre that incorporates a consistent building edge and coordinated streetscape treatments around a public space, special built form and public spaces that communicate the character of the neighbourhood,
- Gateway and landmark features at key intersections
- A Natural Heritage System that is framed and provides for view corridors onto natural features
- A high-quality public realm that enhances mobility, promotes a healthy lifestyle and contributes to the character of the community
- An active transportation network that is accessible and connected

Neighbourhood Centre – Opportunity for a community focal point that provides a gathering place and a location for a number of community amenities and services for the residents, such as retail, parkettes, community centre, transit stop, and higher density residential.

Streetscape Treatment – Opportunity to enhance the streetscape along Bennett Road to provide both sidewalks and separated bike lanes. Streetscapes within the community must be designed to balance pedestrian, cycling, transit, land use, and civic functions, in addition to the movement of cars. Consideration must be given to the provision of sidewalks and street trees on both sides of the right-of-way.

Wayfinding – Opportunity to create a connection and way-finding signage to the Waterfront Trail which is currently difficult to access from the Study Area and is disconnected (i.e. not continuous off-road trail).

Highway Buffer – With a highway that produces extensive noises, there is an opportunity to use commercial and retail buildings, and/or high density residential buildings as buffers between the highway and the lower density residential portion of the Study Area.

Passive Recreation – There is an opportunity to establish a trail system that complements the Hydro Corridor and existing watercourses with passive recreation uses such as trails and community gardens, amongst others, and connects to the Waterfront Trail and the future Municipal Wide Park located south of the CN Railway and east of Bennett Road.

Gateways – Gateways are an opportunity to form landmarks within the built environment and create a sense of place. More than just landscape features, gateways combine a number of elements, including built form, landscape, streetscape, signage, heritage, and public art, to create special and recognizable places within the built environment.

1. **Primary gateway** – The area located in proximity to Bennett Road and Highway 401 has the opportunity to act as the Primary gateway that welcomes both residents and visitors to the Study Area and to the existing Wilmot Creek Community. Due to mature trees and its proximity to the highway, this Gateway should include an open space function while providing commercial/retail spaces. This Gateway should be accompanied with traffic calming measures to slow down traffic before entering the community and to promote a sense of arrival.
2. **Secondary Gateway** – The area south of the Primary gateway has the potential to provide a second entrance into the new community. Secondary gateways may include landscaping and signage.

Views – Enhancing views of community elements can assist in creating a sense of place. Views to natural features and Lake Ontario should be maximized to reinforce these elements as landmark features.

4.5 Landscape Analysis

The Landscape Analysis was prepared by The Planning Partnership. The key findings and recommendations are summarized below.

Purpose

The Landscape Analysis examined the existing context of the lands within the study area. As a part of this inventory and analysis the following was undertaken: a description and assessment of the existing context of the lands within the Study area, existing natural features, and the study area's topography and grading to comprehensively understand the slopes of the site and their orientational aspect.

On October 15, 2018, a landscape and ecological site analysis was conducted by The Planning Partnership (TPP) on the Wilmot Creek Secondary Plan subject lands. The scope of the investigation addresses the existing vegetation, hydrology, soils and topography, and biodiversity conditions.

The subject lands include both naturalized and manicured landscapes, as well as two large agricultural fields. The site is bounded to the north, west, and east by perimeter roads, and to the south by an active rail corridor. As a starting point, the site was divided into sections based on the Ecological Land Classifications (ELCs) previously established as part of the Environmental Impact Assessment, prepared by Savanta. In total seven Ecological Land Classifications are defined for the site, including:

- Agricultural (AG)
- Scotch Pine Coniferous Plantation Type (CUP3-3)
- Cultural Woodland (CUW)
- Dry-Moist Old Field Meadow Type (CUM1-1)
- Forb Mineral Meadow Marsh Type (MAM2-10)
- Cattail Mineral Shallow March Type S (MAS2-1)
- Willow Mineral Deciduous Swamp Type (SWD4-1)

Recommendations

As a result of this landscape analysis study a series of recommendations have been established to guide future work within the subject lands.

Vegetation

- The north-west corner of the site is presently home to a group of impressive mature Sugar Maple and Black Walnut trees, which provide important ecological functions and aesthetic character not matched by newly planted trees. These trees are a stunning feature of the site, and as such TPP recommends reconsidering entrance in order to preserve these valuable assets. The preservation of these trees can be achieved if each tree's critical root zone is observed with sufficient tree protection offsets, and appropriate strategies of excavation (i.e. Air blade with sterilized cuts) are used throughout the project duration. Furthermore, a certified arborist should be retained to remove deadwood and prune canopies to contribute to the continued health of these trees, actions which could result in an additional 50 years of life for these trees.
- Establish Critical Root Zones and Tree Protection Zones and observe these areas during construction activities. Ensure that minimal excavation occurs in these areas, and promote clean root cutting in the event that the root zone is impacted in any way.
- Remove any trees in poor health or which pose a hazard to safety
- Two areas of the site, the principal alley and the principal understory, have a high number of Ash trees present. Under the threat of Emerald Ash Borer, it is recommended that a successional plan be established now, to address and prepare for the foreseeable loss of these trees.

Hydrologic Features

- In moving forward, TPP recommends that the currently established offset from the crest of the slope is observed, so as to minimize disturbance to the watercourses.
- The riparian system for both water courses should be improved. TPP recommends that the existing vegetation be removed, the banks regraded, and appropriate, native plantings be reinstalled. It is recommended that a native meadow seed mix be applied, with an appropriate species gradient as the application approaches wet and dry areas. Live fascines, wattling, and live-staking should also be employed to introduce native woody species and to provide slope stabilization in order to mitigate creek bank erosion.

Topography

- If any soil reuse is to occur within the site ensure that the soil is thoroughly tested. Ensure that only clean fill is used in areas of future planting.

Cultural Landscape

- To improve resilience, it is recommended that a planting strategy be established which increases species diversity and ensures that a higher proportion of locally native species are employed. Select species that are resistant to the pest and diseases present in tree specimens identified in these areas.
- Remove all invasive Buckthorn.
- Safely dispose of stored materials and remediate any affected soils appropriately.

Vistas and Views

- Make use of existing vistas, both natural and anthropogenic, throughout the site for key community open spaces.
- Maintain landscape features that serve as interesting subjects for future views.
- Maintain Wilmot Creek Drive view corridor, which currently establishes a defined entry for the site.
- Maintain or introduce view corridors to Lake Ontario.

SECTION 3 – ANALYSIS

5.0 Preliminary Assessment

The following section provides an overview of the existing conditions and constraints/opportunities associated with the Wilmot Creek Secondary Plan study area. Based on the policy review, a summary of key points have been set forth to guide the development of the secondary plan and study area. Further, the findings and recommendations based on the results of the background work and review of conditions have been coalesced to provide potential opportunities and challenges for development. By defining the site conditions, potential opportunities, and challenges for development a clear direction can be established for proceeding with the development of alternative concepts for the study area in Phase 2.

5.1 Opportunities and Challenges Established through Policy Review

Further to the parameters established by the technical studies, a number of directives have been set forth through the review of the provincial, regional, and local policy frameworks and priorities as set out in Section 2.0. To summarize, the following key points are provided to guide and support the development of the study area:

Opportunities

- The Secondary Plan area will address criteria established through the Green Development Program, with policies to plan for more resilient infrastructure, and to move towards net zero communities by reducing greenhouse gas emissions.
- The scale and density appropriate for the area in the context of growth to the 2041 planning horizon, and the targets of the Growth Plan will be reviewed. The Region requires that Greenfield Areas achieve a minimum overall density of 50 residents and jobs combined. The feasibility for an increased density target will be discussed with the Municipality and the Region of Durham, and reviewed in correlation with a more compact built form.
- Currently, the estimated residential unit targets identified in the Clarington OP for the secondary plan area are 100 low density, 100 medium density, and 301 high density for a total of 501 units. There is a potential to increase the number of units based on the above noted discussions with the Municipality and the Region of Durham on density.
- Provide an appropriate range and diversity of housing types, densities, tenures, and cost to meet the needs of residents throughout all stages of their lives. This includes affordable housing options, as well as housing specifically designed for seniors close to neighbourhood centre locations, and universally accessible housing. The Clarington OP directs for 30% of all new housing to be affordable and assisted housing.
- The Secondary Plan policy document must respond to existing conditions while also creating opportunities for daily physical activity, addressing an ageing population, and supporting needs of residents of all ages and abilities.
- Under the Clarington OP, the Neighbourhood Centre designation provides for a range of retail service uses with maximum amount of leasable floor space of 5,000 square metres, developed as transit nodes with higher density residential and where possible, recreational, community, cultural and institutional uses.
- Multi-unit residential is proposed for the secondary plan area and that built form should be compatible with the surrounding neighbourhood in terms of scale, massing, height, siting, setbacks, shadowing, and location

of parking. Creates an opportunity to provide for housing options specifically designed for seniors close to the neighbourhood centre.

- Provincial, Regional, and Municipal planning frameworks provide direction for healthy communities. However, it is not one single action or policy topic that will define or lead to the achievement of a healthy community, but rather an approach to implementation that considers all of the policy sections of the Secondary Plan comprehensively.
- Key considerations for good urban design include community structure, street connectivity, streetscaping, building placement orientation and articulation, provision of parking, provision of public space, land use mix, variety of parks, and access to services and amenities. Other considerations should include sustainable design (e.g. passive solar orientation, Low Impact Development), active transportation, and Crime Prevention Through Environmental Design (CPTED). A clear policy framework should be established for design related to compatible development with existing neighbourhoods.
- Based on the policy direction provided in Section 2.0, development within the Wilmot Creek Secondary Plan Area will accomplish several goals, including:
 - Accommodating residential growth without needing to expand the settlement areas;
 - Ensuring that new development does not negatively impact the character and appearance of existing stable residential communities;
 - Providing for a mix of residential dwelling types, tenure, and affordability to meet projected needs of current and future residents;
 - Achieving mixed-use development where residents are closer to commercial areas and are more able to use alternative modes of transportation;
 - Promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;
 - Accommodating an appropriate range and mix of residential, employment, institutional, recreation, park and open space, and other uses to meet long-term needs;
 - Promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate;
 - Planning public streets, spaces and facilities to be safe, meet pedestrian needs, foster social interaction and facilitate active transportation and community connectivity;
 - Design streets in accordance with complete streets policies;
 - Integrating arts, cultural, and recreational facilities with local business, health and social services, schools, parks, and civic buildings;
 - Promoting the accessibility of services, culture, and recreation facilities by walking, cycling, or transit;
 - Providing a full range and equitable distribution of publicly accessible built and natural settings for recreation facilities;
 - Facilitating accessibility for persons with disabilities and older persons; and
 - Promoting conservation in energy, water and wastewater management.
- A variety of transportation options should be available to residents, with the built environment designed to encourage physical activity, facilitate active transportation and support public transit in place of motor vehicles and driving. The accommodation of various travel choices ensures the economic, social, and environmental sustainability and accessibility of transportation systems.

- The Natural Heritage System will be protected and enhanced to protect its ecological integrity and, where appropriate, incorporated and connected into the open space and parks system, with views and vistas maintained.
- Low Impact Development (LID) policies that promote and incorporate innovative and appropriate LID opportunities and best practices, such as infiltration/filtration facilities that may include: permeable pavement, bioretention trenches, rain gardens, infiltration trenches, soakaway areas, and grass swales as part of a treatment train approach should be considered. The facilities may be located on public or private property within parks, front and back yards, parking lots, and road rights-of-way.
- Stormwater management facilities will be integrated into the open space system with high quality landscaping, permeable surfaces, and use of natural design.
- The community design should take into consideration climate change mitigation and resilience planning for the local context. The Secondary Plan should include climate change adaptation and mitigation policies, as well as policies that speak to resilience. Climate change interventions can include the integration of resilience in policies, standards, and by-laws to direct development and infrastructure; allocate infrastructure spending towards building resilience and addressing priority risks and vulnerabilities; and major event response and preparedness.
- Innovative residential building designs that contribute to energy reduction and natural resource conservation, green roofs, synergies between buildings, and site management practices should be promoted.

Challenges

- Ongoing changes to provincial policy will be monitored and addressed through the Study process to ensure that the Secondary Plan conforms with any new or amended provincial policy.
- Impacts of **Bill 108 – More Homes, More Choice Act** (2019):
 - Proposed legislative changes to increase the supply of housing and provide more affordable housing options by, among other things, changing how funds are collected from developers and eliminating the basis for appeal and the two stage LPAT hearing process implemented under Bill 139.
 - **The Local Planning Appeal Tribunal Act** - Reinstates the rules of the Ontario Municipal Board (OMB) but under the name of its replacement the Local Planning Appeal Tribunal (LPAT). Bill 108 is giving the Local Planning Appeal Tribunal (LPAT) the ability to overturn elected municipal council's planning decisions on things like new developments
 - **The Planning Act** – Planning Act changes are not yet in force. Transition Regulations set out the rules for planning matters in process upon proclamation of Bill 108. Changes that are not specifically addressed under the Transition Regulations would apply upon proclamation of Bill 108.

Section 37 - Height and Density Bonusing, is replaced with a new Section 37 that introduces a **Community Benefits Charge System** which will allow municipalities to charge for community benefits (excluding those included under the amended Development Charges Act), based on the value of land the day before building permit, subject to a percentage cap, and which can also include in-kind contributions. Prior to passing a Community Benefits Charge By-law, the municipality must carry out a Community Benefit Strategy.

The Community Benefits Charge By-law is applicable for all development applications (except OPAs and SPAs), as well as for building permits. Draft Regulations propose that the deadline for municipalities to

transition to the community benefits system by January 1, 2021, after which municipalities could no longer collect DCs for soft services or collect through bonusing. The Draft Regulations also address:

- Reporting requirements for new Community Benefits Charges similar to existing requirements for Development Charges and Parkland Dedication;
- Exemptions from Community Benefits Charges for long-term care facilities, retirement homes, universities and colleges, memorial homes, clubhouses or athletic grounds of the Royal Canadian Legion, hospices and non-profit housing from community benefits charges;
- Providing a range of percentages for land value caps to take into account varying values of land, although specific percentages have not yet been proposed. These ranges will be developed in accordance with 2 goals: to ensure historic municipal revenues (DCs for soft services, alternative parkland rate and bonusing) are maintained, and to make costs more predictable;
- An ineligible services list, consistent with the ineligible services list for Development Charges; and,
- A dispute process for property valuation.

Section 42 - Parkland Dedication. The intention is that parkland acquisition land and/or cash-in-lieu funds would no longer be eligible under Section 42, but are **to be captured within the new Section 37 Community Benefits Charge System**. The changes to the Planning Act:

- Upon proclamation of Bill 108 - Remove the ability for municipalities to charge developments alternative rates for parkland dedication (1 hectare/300 units for land and 1 hectare/500 units for payment-in-lieu). The maximum parkland dedication charges will be the standard maximum rates of 5% of the land area for residential development and 2% of the land area for commercial, industrial and institutional development; and,
 - Ensure that the ability of municipalities to implement a Parkland Dedication By-law that is directly tied to a municipality's decision whether or not to enact a Community Benefits By-law. The proposed changes indicate that Section 42 By-laws are to be deemed of no force and effect when a municipality passes and enacts a Community Benefits By-law under the proposed amendments to Section 37. Once enacted, parkland acquisition/improvements would be funded through the Community Benefits By-law.
- **Development Charges Act** – Legislation related to the Community Benefits Charges are currently proposed to come into force on January 1, 2020. The intention is that the **'soft services' (recreation, library, housing) would be removed from the Development Charges Act** and considered as part of a new Community Benefits Charge. The appropriate Development Charge amount would be determined based on the charges in effect on the day of a rezoning or site plan application (or building permit) with collection remaining at the time of building permit issuance. Some
- **Growth Plan (2019)** – proposed/future changes to the Growth Plan may impact Envision Durham MCR process. A Place to Grow includes a number of policy changes that will affect the Region's Growth Management Study including revisions to key intensification and density targets that the Region must plan to achieve.
- **Intensification and Density Targets – Durham Specific**
Gradient Intensification Targets: Previous targets of 60 per cent of all residential development have been reallocated as follows:
- 50 percent for the Cities of Barrie, Brantford, Guelph, Orillia and Peterborough, and the Regions of Halton, Durham and Niagara;

Gradient Greenfield Area Density Targets: Previous targets of 80 residents and jobs per hectare reduced to:

- 50 residents and jobs per hectare for the Cities of Barrie, Brantford, Guelph, Orillia and Peterborough and the Regions of Durham, Halton and Niagara;

5.2 Opportunities and Challenges Based on Technical Review

Based on the findings of the technical studies, a summary of the key opportunities has been established to provide the parameters for the design and development of the study area.

Opportunities

- Opportunity for a trail within the 14.0m MTO required setback, parallel to Highway 401 with pedestrian links to the internal road system.
- Incorporate complete street design principles in the design of the road network to address the needs of all users (vehicles, pedestrian, cyclists).
- Local roadway design within the Secondary Plan area would focus on 2-lane roadways with sidewalks, boulevards for street planting / trees on both sides, and cycle lanes where warranted.
- Opportunity for shifting the Bennett Road/Wilmot Creek Drive intersection south (approximately 50 to 100 metres) to improve traffic operations.
- Streets and blocks should be organized into compact, permeable, and walkable grids to support connectivity and active transportation.
- Demonstrate regard for maximum passive solar gain through appropriate road design and orientation.
- There is an opportunity to establish a trail system that complements the Hydro Corridor and watercourses with passive recreation uses such as trails and community gardens, amongst others, and connects to the Waterfront Trail.
- The area in the northwest corner of the site includes a group of mature Sugar Maple and Black Walnut trees, which provide important ecological functions and aesthetic character not matched by newly planted trees. These trees should be preserved.
- To improve species resilience, it is recommended that a planting strategy be established which increases species diversity and ensures that a higher proportion of locally native species are employed. Select species that are resistant to the pest and diseases present in tree specimens identified in these areas.
- Make use of existing vistas, both natural and anthropogenic, throughout the site to key community open spaces and maintain and introduce view corridors to Lake Ontario.
- Provide a full range and equitable distribution of publicly accessible parks and open spaces.
- A variety of parkland options should be considered, including neighbourhood parks and parkettes. Alternative parks such as pocket parks, which are small scale components of the parks system generally between 75 m² and 1,000 m² in size
- Integrate the natural heritage system into the parks and open space system.
- The area located in proximity to Bennett Road and Highway 401 has the opportunity to act as the Primary gateway that welcomes both residents and visitors to the Study Area and to the existing Wilmot Creek Community. Due to mature trees and its proximity to the highway, this Gateway should include an open space function while providing commercial/retail spaces. This Gateway should be accompanied with traffic calming measures to slow down traffic before entering the community and to promote a sense of arrival.

- A Neighbourhood Centre will create an animated focal point that will include a combination of high to medium density housing forms, public space, mixed-use/live-work opportunities and potential community uses. This creates more opportunities for residents to live within or near the neighbourhood centre services creating stronger support for local businesses, shared investment in the public realm, and contributes to the creation of a more dynamic neighbourhood.
- The predicted particulate and odour levels from the industrial uses to the west of the study area are within the applicable thresholds and are therefore considered to be acceptable throughout the Wilmot Creek Secondary Plan study area. The setback requirements for the two industrial uses fall outside of the Wilmot Creek study area. Based on the analysis, there are no impacts to development within the Study Area with respect to the nearby industries.
- The study area can be serviced by connections to both of the existing sanitary sewers: one connection to the existing Lake Road sanitary sewers for the west side of Study Area and the second connection to the existing Port Darlington Road sanitary sewers for the remaining areas.
- The Study Area has water servicing to the west with an opportunity to connect to existing watermains.
- Use built form and community design to cater to a diverse range of residents, regardless of income, age, or ability.
- Stormwater management facilities should be designed as landscape amenities that are integrated into the recreational system.

Challenges to Consider

- MTO 14.0 metre setback from Highway 401 along the northern boundary of the study area needs to be confirmed. Additional setbacks and a 16.0 metre noise berm may be required based on the results of the Noise and Vibration Study.
- The CN Rail line creates a barrier to connecting the study area to the existing community. Currently one level crossing at Service Road to the east of the study area.
- Incorporation of the existing CN Bridge. The bridge has steep north and south approaches, has restricted sight lines, is not pedestrian accessible, and the width of the travel lanes does not allow for adequate pedestrian and vehicle sharing of the roadway.
- Setbacks from the rail corridor will need to be incorporated, as well as berming and a sound wall or fence. A 30.0 metre setback from the centre of the rail line and mitigation measures will need to be confirmed.
- The Hydro Corridor crosses the lower half of the Study Area and incorporates extensive transmission towers that create visual barriers, in addition to visually dividing the western portion of the Study Area. The transmission towers also limit development in proximity and within the Hydro Corridor right-of-way (ROW). A 15-metre clear working radius around transmission structures is required in order to maintain access for vehicles carrying out routine maintenance.
- The width of the Study Area varies greatly (smallest width=50m), posing limitations for development in the east portion.
- The western portion of the study area generally sheet drains from north to south toward a low point approximately 225 m east of Bennett Road at the CN Railway. The soils are moist in the south west portion of the site due to sheet draining and the topography of the study area.
- Rickard Creek bisects the Study Area in a north-south orientation and may constrain east-west road connections as crossings may be limited.

- Two wetlands are identified along Rickard Creek. The Rickard Creek development limits will be formulated based on the floodline analysis, meander belt width limits, and delineation of a greater boundary that will consider the range of constraints.
- Durham Region has confirmed that water supply to the site can be provided from the existing 400 mm diameter watermain. However, due to the topography of the site and the potential for a long water feed, the existing 400 mm diameter watermain alone may not be sufficient to provide adequate fire protection flows.
- Clarington Transportation Master Plan - The existing full interchange of Bennett Road and Highway 401 is recommended for closure and replacement with new interchange at Lambs Road to the west. Clarington is currently working with the MTO to assess this interchange modification, as well as its timing in the longer term.

6.0 Conclusion and Next Steps

The Municipality of Clarington is growing and the Wilmot Creek Secondary Plan area will be a focus for residential development in the coming years. The Wilmot Creek Secondary Plan is an opportunity to establish a forward-thinking policy framework for a dynamic mixed use community. A Secondary Plan is required to conform with the Municipality's new Official Plan and initiatives, Durham Region policies and strategies, and Provincial policy, but to also establish sustainable and urban design guidelines that support and reflect the Priority Green Framework and future growth in this community.

The Municipality has the opportunity to capitalize on the development interest in the area to bring forward a vision that promotes intensified development, establishes a supportive public realm and active transportation network, and prioritizes sustainability, all the while reinforcing the role of the Wilmot Creek Community as a mixed-use residential community.

To ensure that Wilmot Creek is well-equipped to succeed as a residential and commercial community, under evolving economic, environmental, and social conditions, the following must occur from a growth management perspective:

- Developing as a complete community with a wide range of uses that supports age-in-place;
- Supporting existing residents and built form with a new land use structure and transportation and public realm network;
- Understanding the existing infrastructure and the financial implications of future infrastructure requirements;
- Careful consideration for community infrastructure and public realm elements;
- Preserving, enhancing, and restoring the natural environment;
- Enhancing public health and addressing climate change adaptation and mitigation opportunities through sustainable design; and,
- Creating opportunities for mobility options and daily physical activity.

Next Steps:

Key considerations have been identified for moving forward with the next phase of work which will establish evaluation criteria for the alternative land use plans.

Reports

The technical reports and studies completed as part of Phase 1 have established a baseline for moving forward with Phase 2 and the development and evaluation of alternative land use concepts. The reports will be updated as the Preferred Plan is prepared, and field work continues for the natural heritage evaluation.

Growth Targets

New targets for growth in terms of intensification and the density of development will be undertaken as an analysis of the opportunities and constraints for the Wilmot Creek Secondary Plan area based on the technical background work and discussions with the Steering Committee. An analysis of the current land uses, population and employment densities, looking at both existing and forecasted numbers will be prepared, to assist with establishing development scenario programs for the alternative land use plans that will be prepared in Phase 2.

Evaluation Criteria

Themes and evaluation criteria will be established for the evaluation of the alternative land use plans for the Wilmot Creek Secondary Plan. The Evaluation Themes and Criteria will be based on the policy analysis and findings of the technical reports from Phase 1. The analysis of the alternatives will be a comparative evaluation where the options are assessed in relation to one another.

