Puslinch By Design - Employment Lands Study

BACKGROUND SUMMARY REPORT

County of Wellington & Township of Puslinch September 2024















Executive Summary

This Background Summary Report forms part of Phase 2 for the *Puslinch By Design: Employment Lands Needs Study* ("*Puslinch By Design*"). *Puslinch By Design* is a project undertaken in partnership by the County of Wellington and Township of Puslinch. The Study is led by a team of consultants with a wide range of expertise to address the specific needs of Puslinch. NPG Planning Solutions Inc. (NPG) are lead consultants for this Study and are assisted by the expertise of Parcel Economics, MobilSafe Solutions, King EPCM, and Colville Consulting Inc.

The title, *Puslinch By Design*, recognizes that planning for employment growth in Puslinch must be premised on the specific conditions and needs of the Township and the County in order to plan for a successful and competitive new Rural Employment Area. The County of Wellington and Township of Puslinch are undertaking *Puslinch by Design* in partnership given the anticipated employment growth within Puslinch and its importance to the County as a whole. Recognition of this importance resulted in the County of Wellington Official Plan designation of a Regionally Significant Economic Development Area in Puslinch, which has been slightly refined to serve as the Study Area for a new employment growth area.

This Background Summary Report aims to outline the existing conditions and context of the Study Area through a series of Background Papers focusing on discrete topics. The Background Paper address land use compatibility, land use planning policies, servicing infrastructure, transportation infrastructure, cultural heritage resources, natural heritage resources, agricultural impacts, urban design, aggregates, and the employment land market to offer strategic recommendations for sustainable economic growth. The Background Paper provide an in-depth analysis of existing conditions, trends, and future needs related to employment lands in the Township of Puslinch.

The following summarizes the key findings of the Background Papers found in the subsequent Chapters of this Background Summary Report:

Key Findings

- 1. Land Use Planning Considerations:
 - ➤ Key factors to be considered include proximity to major transportation infrastructure, employment land supply needed for future job growth, appropriate separation from sensitive uses, scale and intensity of employment uses, availability of large parcels for development, proximity to other employment lands, and the existing condition of lands.
 - ➤ Location, site planning and design are integral for ensuring land use compatibility, with considerations for buffering, vehicle ingress/egress, and minimizing conflicts with surrounding land uses.

Land use compatibility for employment lands is key to address sensitive land uses within the Study Area and adjacent to the Study Area. This information will assist with determining land use options for future employment lands as well as assessing approaches to mitigate any impacts from employment lands.

2. Best Practices Review:

> Similar municipalities show the importance of locating employment lands near major transportation networks and implementing urban design policies and guidelines to support high quality design and minimize impacts.

3. Transportation:

- Existing transportation systems within the Township consist of MTO highways, Wellington County Roads, and Township roads.
- Planned upgrades to transportation infrastructure such as the Morriston Bypass are crucial for supporting employment land options.

4. Municipal and Private Servicing:

➤ The Township relies on private systems for water and wastewater due to the absence of municipal water and wastewater infrastructure. Each industrial lot must have adequate space for private septic systems.

5. Aggregates:

- Aggregate resources are prevalent within the Study Area. There are areas with active aggregate operations as well as areas yet to be extracted.
- ➤ The extraction of aggregate resources involves heavy equipment operations which can result in land use compatibility issues with sensitive land uses (residential, day care, health care etc.) due to noise, dust, vibration and other elements.
- Transportation infrastructure is an important factor for aggregate extraction.

6. Agriculture:

- ➤ The Study Area is largely comprised of Secondary Agricultural lands with agricultural production of common field crops.
- MDS I setbacks for livestock facilities impose constraints on potential employment growth areas, particularly in the north and north-central portion of the Study Area.
- Fragmentation of the agricultural land base can be avoided by co-locating existing non-agricultural uses alongside future employment growth area(s)

7. Natural Heritage:

- ➤ The Study Area contains significant natural features, including wetlands, woodlands, watercourses, linkages, and potential significant wildlife habitat within Study Area that affect development potential.
- Natural heritage features are subject to the environmental policies of the Wellington County Official Plan and the policies of the Grand River Conservation Authority, which generally require that proposed development demonstrate no negative impacts on the natural heritage features or their ecological functions.
- ➤ The Greenlands System mapping from the County Official Plan provides a general idea where natural heritage features are located, however, site specific surveys and inventories are required to further refine the Greenlands System and its components to reflect the condition and extent of existing natural heritage features. These site-specific surveys and inventories are generally done as the lands are proposed for development.
- ➤ While the Study Area is outside the Greenbelt Plan Area, the minimum buffer requirements for natural heritage features are applicable to the Study Area from adjacent lands regulated by the Greenbelt Plan.

8. Design:

- ➤ It is important to employ a comprehensive set of relevant design policies and guidelines applicable to the Study Area.
- Design considerations guiding the Study Area include compatibility with the adjacent streetscape, compatibility with surrounding uses, excellent site design, layout, and landscaping and incorporation of approaches that address environmental sustainability and climate change.
- ➤ There are opportunities to further expand or define existing design objectives as well as to introduce additional guidelines to ensure design objectives are effectively and comprehensively achieved.

9. Cultural Heritage:

➤ Two cultural heritage resources were identified within the Study Area. Recommendations have been provided to map these resources to avoid negative impacts.

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1. Introduction

1.1 Puslinch

The Township of Puslinch is a rural municipality within the County of Wellington. Puslinch is characterized by an extensive agricultural land base, some of which falls within the Greenbelt Plan Area, significant natural features and natural areas, the communities of Aberfoyle and Morriston, and a significant aggregate industry with active aggregate extraction.

Within the County of Wellington, Puslinch has 15% of the County's employment (jobs) and 7% of the County's employment land. This makes Puslinch a key economic priority for the Township and the County. Part of the reason for the high employment function in Puslinch is the proximity to existing and planned highway infrastructure. Puslinch has Provincial Highway 401 – an east west corridor – traversing the municipality with an interchange at provincial highway 6 – a north south link connecting Puslinch to the City of Hamilton (to the south) and the City of Guelph (to the north). Planned road and highway improvements, as described in the Background Papers, will support and augment the employment function and regional significance of the Township's current and future employment areas.

1.2 Planning for Employment in Puslinch

The County of Wellington completed a phased Municipal Comprehensive Review (MCR) to plan for growth to 2051. The Phase 2 MCR Report (Land needs Assessment) concluded that a minimum of an additional 30 hectares of employment land is needed in Puslinch to achieve the County's job forecast. The County of Wellington adopted Official Plan Amendment No. 119 (OPA 119) to implement portions of the Phase 1 and 2 MCR technical reports and associated policies. Included in OPA 119 is policy establishing the future identification of the Rural Employment Lands for Puslinch. Recognizing the specialized nature of employment land planning, the County of Wellington and the Township of Puslinch are undertaking the *Puslinch By Design: Employment Lands Study* to identify the best location for new employment lands.

The purpose of *Puslinch By Design* is to develop:

- a) Land use options for a minimum of 30 ha of new employment growth within the Study Area (mainly industrial, but some associated/ancillary commercial uses);
- b) A preferred land use location; and,
- c) A local development framework including Official Plan land use designations, policies and design guidance for the employment lands.

This Background Summary Report ("the Report") forms part of Phase 2 of *Puslinch By Design* and evaluates the existing conditions of the Study Area through a series of Background Papers. The Background Papers examine discrete topics that inform employment planning for the Township of Puslinch, including the employment land

market, transportation, servicing, land use planning and land use compatibility, aggregates, agriculture, natural heritage, design, and cultural heritage. This Background Summary Report summarizes key findings and analysis from these key topics, which is crucial for assessing potential options for suitable new employment lands. Each Background Paper provides potential evaluation criteria to assist in assessing future employment land growth areas. The information and analysis from the Background Papers will inform the Detailed Planning Study for Phase 3 of *Puslinch By Design* and subsequent study phases.

1.3 Study Area

The Wellington County Official Plan identifies a *Regionally Significant Economic Development Study Area* in Puslinch as a special policy area on Schedule A7 to the County of Wellington Official Plan. The Study Area boundary is bordered at the north by the City of Guelph, by Aberfoyle to the northeast, by Morriston and the Greenbelt Plan Area to the south and by Sideroad 20 North and Concession 7 at the west. The limits of the Study Area for *Puslinch By Design* were slightly refined through OPA 119 to include the following additional areas:

- Northeast corner of Concession 4 and Sideroad 20 N (Estill), and
- North side of Hwy 401, east side of Sideroad 25 and west side of Concession 7 (Farhi)

Lands removed from the Study Area at the south limit generally follow the Greenbelt Plan boundary, consistent with Provincial modifications to OPA 119 and recent legislation. **Figures 1-1** and **1-2** identify the Study Area for *Puslinch By Design* and existing land use designations in the Wellington County Official Plan.

The Study Area contains a mix of existing uses. Primarily, the Study Area is comprised of agricultural lands containing a variety of crop and livestock operations. The Study Area also contains a business park with commercial and industrial operations, aggregate operations, natural heritage features and a number of rural residences. The mix of uses in the Study Area means that there is a need to consider the potential constraints for the identification of future employment growth areas as posed by existing uses.

Figure 1-1: Study Area for Puslinch By Design

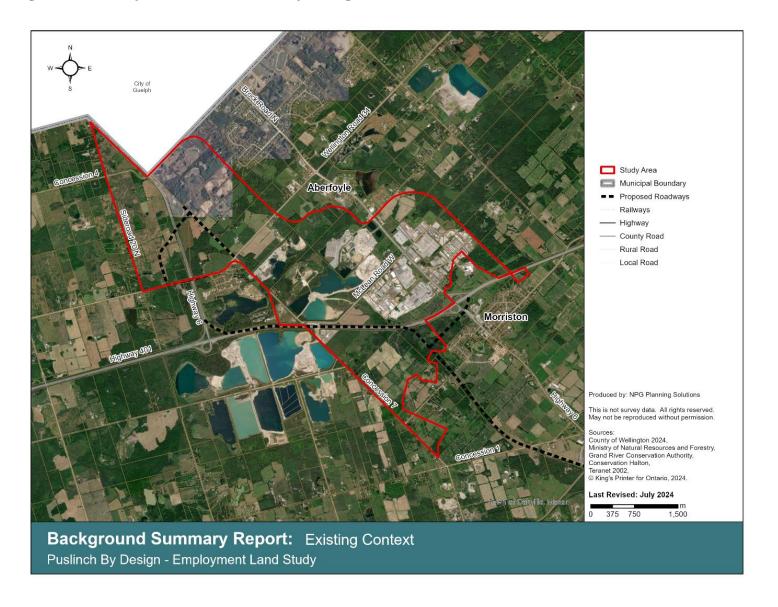
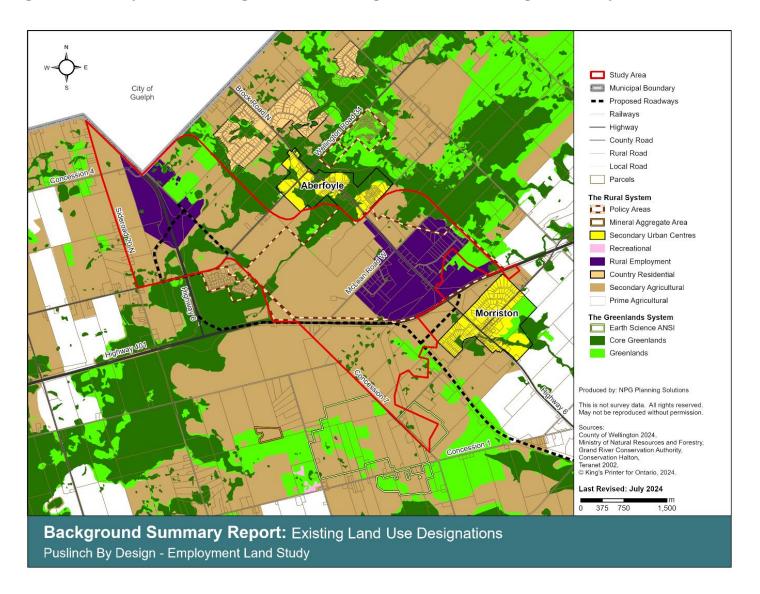


Figure 1-2: Study Area showing Land Uses designated in the Wellington County Official Plan



1.4 Methodology

This Background Summary Report examines the existing employment-related background information and conditions within the Study Area. The discrete topics are addressed in a series of Background Papers prepared as Chapters in this overall Background Summary Report.

Each Background Paper outlines the purpose, existing conditions, applicable policy and legislation, with an in-depth analysis of the Study Area and implications for identifying land use options. At the conclusion of each Paper preliminary evaluation criteria have been prepared to assist in identifying suitable land use options (to be determined in a later phase) and data sources that informed the preparation of the Paper. The potential evaluation criteria provided at the end of each Background Paper consists of two separate categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which assess options based on degrees of impact.

This approach provides an understanding of existing conditions, opportunities and constraints to assist decision makers in identifying suitable new employment lands.

The Background Papers examine the following topics:

- 1. Employment Land Market Study
- 2. Transportation
- 3. Municipal and Private Servicing
- 4. Land Use Planning & Land Use Compatibility
- 5. Aggregates
- 6. Agriculture
- 7. Natural Heritage
- 8. Design
- 9. Cultural Heritage Resources

This Background Summary Report forms part of Phase 2 of *Puslinch By Design*, which includes the following six phases:

- Phase 1 Project Initiation and Management
- > Phase 2 Existing Conditions Background Summary Report
- Phase 3 Detailed Planning Study
- Phase 4 Land Use Options
- Phase 5 Preferred Land Use Plan

1.5 Provincial Policies and A Place to Grow

This Background Summary Report is prepared in September 2024. As of the writing of this report, the Provincial Policy Statement (2020) and A Place to Grow are the applicable provincial policies. As of October 20, 2024, the Provincial Planning Statement (2024) will replace the Provincial Policy Statement (2020) and A Place to Grow will be repealed. Future phases of this Study will utilize the Provincial Planning Statement (2020) and references to A Place to Grow will no longer be included.

2. SUMMARY OF EXISTING CONDITIONS



2. Summary of Existing Conditions

The following section provides a detailed summary of existing conditions within the *Puslinch By Design* Study Area that will influence the identification of future employment growth areas. The individual Background Papers should be consulted for a more fulsome and technical analysis of current conditions.

2.1 Employment Land Market

The Employment Land Market Study analyzes the available employment lands within the Township to identify the types of employment sectors that could locate on lands within the Regionally Significant Economic Development Area. The Township of Puslinch currently has nearly 830 gross hectares of land designated as Rural Employment Area in the County of Wellington Official Plan. The existing inventory of Rural Employment Area lands is spread over two primary industrial parks, namely Kerr and Nicholas Beaver Industrial Parks. These areas are located opposite one another at Brock Road South, bordered by McLean Road to the north and Highway 401 to the south. The employment lands at Maltby Road at Highway 6 are undeveloped and represent a potential opportunity for future economic growth. However, these areas do not have enough land area to meet the needs of the County and Township for planned job growth.

A comparative market analysis was conducted for municipalities within the Western Greater Golden Horseshoe (GGH) to identify market trends which will impact the Township. Industrial vacancy rates were identified at approximately 2% to 3%, with the gap continuing to tighten between 2018-2024, reflecting the significant demand for industrial lands within the Western GGH. The average net lease rate has been steadily increasing, with a steep increase in Q3 2022 in the net lease rates of approximately \$11 per square foot (PSF) for municipalities in the Western GGH. Based on data from CoStar, approximately 8,865,000 square feet of industrial space is proposed within the Western GGH municipalities. It is noted there are no new industrial projects currently proposed in Puslinch and there is limited vacant industrial space in Puslinch, consistent with trends in neighbouring municipalities.

To accommodate the changes in the market demand for employment lands, there have been changes in built form for employment uses. The built form of industrial buildings across the Western GGH has changed over time, with the average building size increasing to 200,000 square feet in the last few years (previous average of 40,700 square feet). Building heights have also increased from approximately 20 feet in the 1990s to 33 feet from 2020.

Interviews were conducted with organizations familiar with the industrial market in the Township and Western GGH. The general themes of these interviews stressed the need for large industrial parcels with high-quality transportation linkages and the need for flexibility in built form of industrial uses. A competitive landscape review was also conducted which reaffirmed these findings. Access to a range of transportation networks

is key to attracting business activity, expanding opportunity for inventory exchange and encouraging trade. One potential constraint to the Township is the lack of rail facilities. While two rail lines traverse the Township, there is no immediate connectivity provided within the area. That said, some of negative views from a lack of rail connectivity may be mitigated by the proximity of the Regionally Significant Economic Development Area to the recently approved Milton Intermodal Hub located on lands east of Tremaine Road and south of Britannia Road.

It is recommended that the County and Township consider:

- designating more than 30 hectares of land for Employment Uses;
- designating large blocks of contiguous land;
- creating multiple industrial zones, to facilitate Prestige Industrial uses; and
- increasing zoning provisions to allow for heights of at least 40-feet and site coverages of 30%-40%.

2.2 Transportation

The Background Paper for Transportation reviews the most recent transportation related studies conducted by Wellington County, Puslinch Township, and the Ministry of Transportation (MTO) and considers existing and planned transportation systems.

Existing transportation systems within the Township consist of MTO highways, Wellington County Roads, and Township roads.

The MTO highway system includes the Highway 401 corridor that is the major east to west Freeway that traverses the Township of Puslinch providing access to Southwestern Ontario and other Wellington County communities The MTO has plans to construct the Morriston Bypass as a new alignment of Highway 6 that will enhance the corridor between Guelph and Hamilton. The MTO is completing upgrades to Highway 6 North (Highway 401 to Maltby Road as a 4-lane highway) with a new midblock interchange on Highway 6 / Hanlon Expressway north of Wellington Road 34.

County roads within the Township of Puslinch provide a high-order rural arterial transportation network for both north-south and east-west travel. County roads generally consist of 2 lane cross sections, except for Wellington Road (WR) 46 where portions expand to 4-5 lanes. Traffic count data, circa 2021, indicates that most County Roads experience daily traffic volumes of 5,000 to 10,000 vehicles per day with WR 46 between Highway 401 and McLean Road experiencing daily traffic volumes of 20,000 to 30,000 vehicles per day. The majority of County Roads are operating with a Volume/Capacity ratio of .7 or less which represents a stable operating condition as measured by traffic volumes. WR 46 north of WR 34 and Townline Road south of WR 34 are operating with V/C ratio of >.70 to .85 representing a level of service which indicates that these roadways are operating at a stable operating condition but accommodating high traffic volumes.

The County operates the following roads in Puslinch:

North-South Roadways		
WR 46	Highway 6 / Highway 401 to Maltby Road	
WR 35	Gore Road to Forestell Road	
WR 32	Townline Road (WR 33) to South of WR 124	
WR 41	Arkell Road (WR 37) to Stone Road	
East-West Roadways		
WR 36	Nassagaweya – Puslinch Townline to Highway 6	
WR 34	Nassagaweya – Puslinch Townline to Townline Road (WR 33)	
WR 37	Nassagaweya – Puslinch Townline to Victoria Road South	

The Township of Puslinch finalized the Roads Management Plan (RMP) in August 2023. The RMP study identified that over 70% of the existing Township Road system (128 km) is asphalt paved with the remaining 51 km classified as gravel roads. Approximately 90% of the Township roads are classified as being within a rural environment. Approximately 63% of the paved roads are classified as being within "good" condition. With 26% being classified as "fair". Conversely, 28% of the gravel roads are rated "good" with 55% rated "fair".

Wellington County completed the Road Master Action Plan (RMAP) in 2021, which provides long-term guidance on transportation policy and needs. The RMAP concluded the County Road system within the Township of Puslinch is forecasted to have significant traffic congestion. Future network improvements are proposed with Wellington Road 46 between Maltby Road and Wellington Road 34 is projected to be over capacity by 2041 operating with a Level of Service F requiring roadway expansion.

In summary, the Wellington County Road Master Action Plan (RMAP) and the Township of Puslinch Roads Master Plan (RMP) provide an excellent data base for both the existing and future transportation needs and roadway design standards to address Employment Land use Considerations. The proposed Highway 6 / Morriston Bypass as planned provides opportunities for changing land use and travel patterns. Thus, the planned transportation network is a positive support for identifying land use options.

2.3 Municipal and Private Servicing (Water, Sanitary & Storm)

A review of existing municipal servicing conditions and availability was conducted to identify any potential issues which may arise during the Employment Land Study. The Township of Puslinch completed a municipal water and sewage servicing study in 2018. After review by Council and the community, the Township decided not to provide municipal servicing. Further, similar to most municipalities, the Township does not support assumption of communal servicing systems should those systems require municipal operation at some future point in time.

Wellington County completed a Municipal Servicing Analysis, in 2022 as a part of the Municipal Comprehensive Review. The Township of Puslinch does not have municipal servicing infrastructure, and therefore no detailed study was undertaken by the County.

Private communal systems will be required for all employment land uses, and where not feasible, must have partial or on-site individual servicing. A review determined there does not seem to be any existing communal on-site sewage systems within the Study Area. However, several sewage works with Environmental Compliance Approvals (ECAs) were found for large septic systems for an industrial business centre. It is believed that for the existing industrial lands, each commercial / industrial lot generally has sufficient lands to construct large private sewage treatment units (septic systems).

There is no dedicated wastewater treatment plant in the Study Area. All existing industrial/commercial lands have sufficient surface area to dispose of sanitary waste into septic systems. As there are some small-scale existing residential uses either within the Study Area, or just immediately outside of the Study Area, detailed reviews should be completed for each development in order to confirm that the on-site sewage systems can adequately protect the groundwater for a drinking water supply to these residents, as per the Ontario Drinking Water Standards.

No communal water wells were found within the Study Area, most likely because the industrial water demand is quite varied between each business owner and cost-sharing / volume capacity sharing would be difficult to manage. It can be demonstrated that for each business which requires water, the business has pursued their own independent water well.

Additional investigation is required to determine what is the current catchment area for each of the large catchment stormwater management ECAs, but for most large industrial employment lands, the requirement to prevent additional flooding hazards and to prevent discharge of nutrients or contamination is mandatory and should be required for within the Study Area for any proposed development.

Based on municipal policy, any potential employment lands must obtain their own servicing. Water supply (both potable and industrial) can generally be managed on-site by each individual landowner, through the drilling of a O.Reg 903 potable water well. It is recommended that for all industrial and commercial buildings that a private-serviced fire sprinkler system to be installed for each property to ensure firefighting water supply requirements are met. In most situations, where fire sprinklers fully cover the entirety of a building, then static water storage requirements would be waived.

2.4 Land Use Planning & Land Use Compatibility

Puslinch is bounded by the City of Guelph to the north, and includes the Township's Secondary Urban Centres, Aberfoyle to the east, and Morriston to the south. The Study Area is comprised of lands that are predominantly designated Secondary Agricultural in the County Official Plan, along with lands designated Greenlands, Core Greenlands, and two existing Rural Employment Areas. The Township's existing two Rural Employment Areas are located south of the City of Guelph, along Provincial Highway 6 and along Provincial Highway 401 and County Road Brock Road South.

The Study Area is addressed in a variety of policy documents including the *Planning Act*, Provincial Policy Statement, Growth Plan for the Greater Golden Horseshoe, Greenbelt Plan, and the County of Wellington Official Plan. These policy documents establish land use designations and planned functions. Additional important elements such as "sensitive land uses" and "adverse effects" within the context of land use compatibility are key to addressing policy requirements and achieving continued community goals for liveability, employment, design, natural heritage protection and more.

Land use compatibility is a key consideration in this Study. Land use compatibility involves many considerations beginning with permitted uses. For this Study, the permitted uses are largely defined in the County Official Plan, but also within the Township of Puslinch Comprehensive Zoning By-law. Related to the permitted industrial uses is the approach to water and wastewater servicing in Puslinch which relies on private servicing. Private servicing means only certain land uses can be accommodated – high water users (e.g. certain food manufacturers) cannot not be located or permitted in the Rural Employment area.

Sensitive land uses are another key consideration in land use compatibility. Sensitive land uses are those that could be impacted by adverse effects such as noise, dust, or vibration. Sensitive land uses include residential uses, certain institutional uses (e.g. nursing homes), day care centres, and hospitals, as examples. The various policy documents outline the legislative framework pertaining to sensitive land uses and compatibility with employment land uses by providing requirements for separation and/or mitigation from sensitive land uses to ensure that the sensitive uses are protected. Policy 6.8.3 of the County of Wellington Official Plan further requires Council to ensure that existing and proposed Rural Employment uses are compatible with and adequately separated from sensitive land uses both within the Study Area and the lands adjacent to the Study Area.

Land use compatibility is also important when considering the overall design issues and approach to developing employment lands. Factors such as site design, landscaping, architectural design, transportation access and active transportation are crucial considerations for the development of a future Rural Employment Area with a high-quality built environment. A high-quality built environment assists in ensuring compatibility with other non-sensitive land uses such as agriculture and natural heritage.

A best practices review was conducted for comparable municipalities of a similar size and structure to the Township of Puslinch that contain employment lands primarily along the interchanges of 400-series highways and/or close to arterial roads. The review examined employment planning and land use compatibility policies from the Municipality of North Dumfries, the Municipality of Strathroy-Caradoc, the County of Brant, and the City of Brantford. The review determined that employment areas are generally located in proximity to major transportation networks, can be serviced (either privately or municipally), have regard for natural heritage and sensitive land uses, and feature consistent urban design elements. Urban design characteristics for employment lands

included locating parking and loading facilities at the rear of properties, screening open storage, and the strategic use of landscaping for screening and buffering purposes.

The best practices review also outlined various land use considerations to reconcile compatibility and minimize potential impacts between different land uses. Generally, these considerations related to buffering and mitigation measures that included implementing appropriate separation distances, providing for an intervening and transitioning land use, and incorporating various design measures. Separation distances are generally determined based on the Ministry of Environment's D-series land use compatibility guidelines with implementation through the Zoning By-law and/or Site Plan Control. Various design measures can be implemented to mitigate land use impacts including specific building orientation, design, scale, and setbacks, landscaping, odour, dust, and noise mitigation measures, controls on exterior lighting; signage controls, road improvements and widenings; restrictions on outdoor storage, and more. These measures can help mitigate potential noise/odour impacts and reduce visual impacts, demonstrating that design solutions can play a key role in facilitating land use compatibility.

When considering potential location of employment land uses consideration must be given to: proximity to major infrastructure, proximity to sensitive land uses, available servicing, scale and intensity of use, availability of large land areas, proximity to other employment lands, and the existing conditions of lands. These elements are further detailed in Chapter 3.

2.5 Aggregates

A review of aggregate resources was conducted to provide an initial analysis of the key aggregate policies that should be considered in the later phases of the project. Aggregate resources are prevalent in the Township and the Study Area. There are areas identified as mineral aggregate resources in the County of Wellington Official Plan which have yet to be extracted. The Study Area features a significant number of existing active aggregate operations in proximity to existing Rural Employment designated lands within the Township. There is a significant amount of Sand and Gravel Resource within and adjacent to the Study Area. The County Official Plan identifies both Sand and Gravel Resources and Bedrock Resources; however, there are no Bedrock Resources in the Study Area.

A large portion of the Study Area is impacted by either existing or potential future aggregate resources. The protection of aggregate resources is a key public policy requirement. *Puslinch by Design* will need to incorporate Provincial and County policy direction into the land use options and address any potential interface with aggregate operations.

Aggregate operations are generally industrial operations. The extraction and processing of the resource involves heavy equipment operation, trucking of the resources, and the processing of the resource which can include noise, dust, vibration, and other elements

impacting land use compatibility. The most potential for impacts from aggregate resources is on sensitive land uses – residential uses, day care centres, schools, health care facilities, and institutional uses such as retirement homes and nursing homes. Other impacts can include impacts on commercial cores if the haul routes transverse those cores. Sensitive land uses will not be in the permitted uses in the Rural Employment Area designation to minimize land use compatibility conflicts.

2.6 Agriculture

Reviews of constraints related to agriculture was undertaken through a desktop exercise, utilizing information sources such as provincial planning documents and guidelines, Official Plan Land Use Schedules, aerial imagery, and OMAFRA's AgMaps, Agricultural Systems Portal, and AgriSuite software.

The majority of the Subject Lands are comprised of prime agricultural lands. Fragmentation of agricultural lands can have a negative impact on the viability of agricultural lands and long-term preservation for agricultural purposes. While fragmentation is evident within the Study Area, it is not considered to be a highly fragmented area.

Nine agricultural uses were identified within the Study Area including two hobby farms, four beef operations, one empty livestock facility, and two remnant farms; however additional agricultural and former agricultural uses were identified in proximity to the Study Area. Thirteen livestock operations have MDS I setbacks which would constrain development. Lands surrounding the existing Rural Employment Area, north of Morriston, have the lowest potential for MDS-related development constraints.

Consideration should be given to the proximity of existing non-agricultural uses when determining preferred locations for new employment growth areas which may allow for the reduction of MDS I setback requirements and maintain a more contiguous agricultural land base.

2.7 Natural Heritage

The Study Area contains approximately 280 ha (691.89 acres) of land mapped as part of the County of Wellington Greenlands Systems which includes three components: Core Greenlands, Greenlands, and Earth Science Area of Natural and Scientific Interest (ANSI). The Greenlands System mapping provides a general idea where natural heritage features are located within the Study Area. Additional natural heritage features that may meet the criteria for inclusion into the Greenlands System were observed during the preliminary windshield survey conducted for this project. Ground truthing would be required to further refine the Greenlands System and its components.

The Grand River Conservation Authority (GRCA) regulates natural heritage features in the Study Area including watercourses and wetlands. Any future employment lands and subsequent development within or adjacent to these features will be subject to the environmental policies of the Wellington County Official Plan and the policies of the GRCA. Policies generally require that potential development demonstrates no negative impacts on the natural heritage features or their ecological functions.

While the Study Area is outside the Greenbelt Plan Area, the minimum buffer requirements for natural heritage features located within the Greenbelt Plan Area and the Natural Heritage System are applicable, which may encroach into the Study Area.

An assessment of potential Species At Risk habitat and use will be required as part of future works completed for the new employment lands.

2.8 Design

A review was conducted of the applicable County and Township policy documents, design guidelines, and development standards as well as the *Planning Act* and the PPS (2020) to consolidate existing design guidance for the Study Area. The paper synthesized key factors from this review to inform the design approach for the future employment lands/area. The municipal policies, guidelines, and standards highlighted four important areas that should inform the land use options and the design approach of the future employment lands/area, in addition to the existing design objectives for the Study Area. These areas include compatibility with the adjacent streetscape, compatibility with surrounding uses, building and site design of excellent standards, and incorporating approaches that address environmental sustainability and climate change. Design considerations for these key areas are provided for the future employment lands/area, which are intended to guide the design approach in subsequent phases of the Study.

2.9 Cultural Heritage

There were two cultural heritage resources identified within the Study Area at the time of the preparation of this report. One property is designated under Part 29, Section IV of the *Ontario Heritage Act*, the other is listed on the Township of Puslinch Heritage Register. It is recognized that the identification and protection of additional cultural heritage resources is on-going in Puslinch. Recommendations have been provided to mitigate potential negative impacts to cultural heritage resources as a result of the designation of new employment lands.



3. BACKGROUND PAPERS



3. Background Papers

3.1 Background Paper: Employment Land Market Study

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington

By Parcel Economics

I. Background

This Employment Land Market Study has been prepared as part of the *Puslinch by Design: Employment Land Study*, which is being completed in partnership with the County of Wellington (the "County") and Township of Puslinch (the "Township" or "Puslinch"). *Puslinch by Design* recognizes that maintaining the right amount and type of employment land in Puslinch is vital to the economic competitiveness of the Township and the County over the long-term.

The Township of Puslinch currently has nearly 830 gross hectares of land designated as Rural Employment Area in Schedule A7 of the County of Wellington Official Plan (shown in **Figure 3.1-1**).

As of July 2019, approximately two-thirds of these lands are considered developed and are occupied by a range of "dry" industrial uses. As noted in a report to the County of Wellington Chair and Members of the Planning Committee, the Rural Employment Area lands in Puslinch have a high concentration of employment, a high economic impact and play a strategic role in the south Wellington County area. In addition to these occupied Rural Employment Area lands, there are an additional 170 hectares of land that are considered to be vacant and available to accommodate future growth.

As shown in **Figure 3.1-1**, there are two clusters or Rural Employment Area lands in Puslinch. The cluster located north of Highway 401 on either side of Brock Road South is generally known as the Nicholas Beaver and Kerr Industrial Parks. These lands are largely occupied with a range of industrial uses, with commercial uses bordering Brock Road South. The second cluster of Rural Employment Area lands borders Highway 6, generally north of Wellington Road 34 and south of Maltby Road. These lands are vacant and available to accommodate future uses.

As part of the County of Wellington Official Plan Review, Watson & Associates Economists Ltd. ("Watson") was retained to prepare a *Phase 2 M.C.R. Report: Urban Land Needs Assessment* ("LNA").⁴ As part of this LNA, Watson identified that during the period between 2011 and 2019, approximately 3.0 hectares of Rural Employment Area lands in Puslinch were absorbed annually, mainly for logistics / warehousing and construction uses.

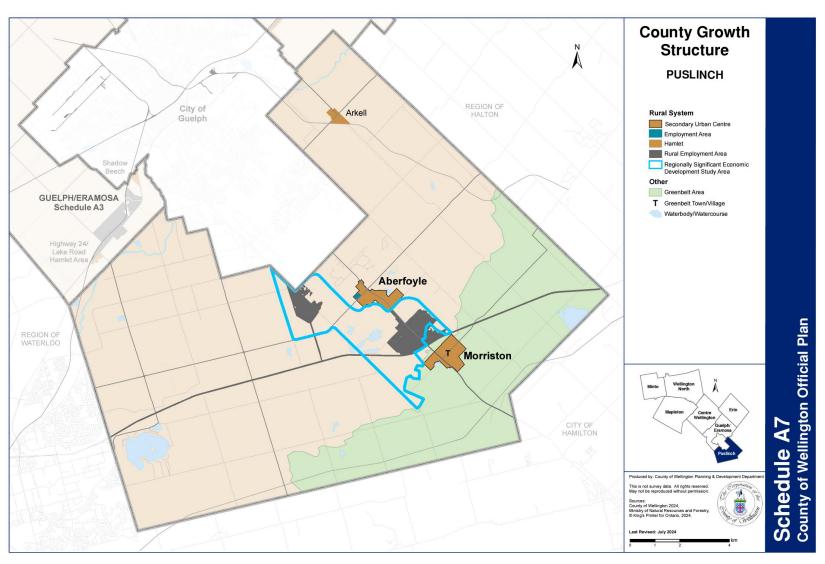
¹ Phase 2 M.C.R. Report: Urban Land Needs Assessment, County of Wellington, Final Report, prepared by Watson & Associates Economists Ltd., August 29, 2022.

² Committee Report, May 13, 2021. Subject: County Official Plan Review – Regionally Significant Economic Development Area.

³ Based on Figure 4-13 of the *Phase 2 M.C.R. Report: Urban Land Needs Assessment*, County of Wellington, Final Report, August 29, 2022, Watson & Associates Economists Ltd. Vacant land area adjusted for 20% land vacancy to account for lands that could remain vacant over the long term.

⁴ Phase 2 M.C.R. Report: Urban Land Needs Assessment, County of Wellington, Final Report, August 29, 2022, Watson & Associates Economists Ltd.

Figure 3.1-1: Wellington County Official Plan – County Growth Structure Schedule A7



Based on recent growth trends and forecast future needs, the LNA projected that 10% of the County's employment growth to 2051 could be accommodated in the Rural Employment Areas of the County, with most of this growth (71%) occurring in Puslinch. Based on the Watson LNA, forecast demand for Rural Employment Area lands is expected to result in the need for, <u>at a minimum</u>, an additional 30 hectares of Rural Employment Area lands in Puslinch to accommodate forecast growth to 2051.

Based on the findings by Watson, the County of Wellington initiated a request with the Ministry of Municipal Affairs and Housing ("MMAH") for a Regionally Significant Economic Development Study Area in Puslinch. These lands in Puslinch are intended to provide options for new Rural Employment Lands in strategic locations near the intersection of Highway 401 and Highway 6 and create a unique economic development opportunity for the Township and County.

The location of the Regionally Significant Economic Development Study Area is shown (outlined in blue) in Schedule A7 of the County of Wellington Official Plan (see **Figure 3.1-1**).

II. Purpose

The purpose of this Employment Lands Market Study paper is to identify the opportunities and constraints, as well as the types of employment sectors that could locate on lands within the Regionally Significant Economic Development Area. This includes uses such as light industrial, manufacturing and warehousing uses that do not produce noxious emissions and do not require outside storage as well as those uses which need outside storage and possibly produce noise, odour and other emissions.

III. Approach

The following section describes the major work tasks undertaken by Parcel in carrying out this Employment Land Market Study. The scope of work has been divided into the following categories:

Economic and Market Overview

We have reviewed economic growth trends at the provincial level to identify how emerging trends could shape industries attracted to the Regionally Significant Economic Development Area in Puslinch. The purpose of this analysis is to better understand the types of tenants that could potentially locate on these lands, as this will help inform the appropriate land use designations, zoning, built form, lot coverage, clear heights, etc. that will be most successful in maximizing absorption of lands identified for development within the Regionally Significant Economic Development Study Area.

Industrial Real Estate Trends

We have examined industrial real estate trends in the Greater Golden Horseshoe ("GGH") as well as municipalities in the Western GGH, including Puslinch. This includes trends in lease rates, vacancy rates and recent construction activity. We have also considered trends in built form among recent developments across the GGH to help inform the types

of uses, ceiling heights and lot coverages that could be expected in the Regionally Significant Economic Development Study Area.

Case Study Research

Recognizing that the Regionally Significant Economic Development Study Area can only accommodate "dry" industrial uses, we have completed a case study review of select Employment Areas within the GGH that have similar restrictions to compare the types of tenants and built form accommodated in these areas. The purpose of this analysis is to assist in determining the built-form and land uses that could be expected in the Regionally Significant Economic Development Study Area.

Market Sounding Interviews

To verify our findings in the Economic Overview and Industrial Real Estate Trends, we conducted market sounding interviews. Participants in these market sounding interviews included people/organizations engaged in economic development, leasing and development.

Competitive Landscape Review

We have reviewed the competitive landscape for industrial lands across the Western GGH with a particular focus on the municipalities most competitive with Puslinch when it comes to attracting tenants to industrial lands. As part of the competitive landscape, we have considered metrics such as access to transportation, service, etc. to help identify the competitive strengths and weaknesses of the Regionally Significant Economic Development Area.

SWOT Assessment and Recommendations

Based on the above analysis, we have prepared a strengths, weaknesses, opportunities and threats ("SWOT") matrix and recommendations that could unlock lands within the Regionally Significant Economic Development Study Area for development.

Assumptions

There are several underlying and basic assumptions upon which the validity of the analysis and findings presented in this report depend. Based on our considerable experience as market analysts, we recognize and appreciate the problems associated with making broad and generalized assumptions about future market conditions. Undoubtedly, deviations from historic and current trends will take place in the future. However, core assumptions are required to determine the extent of such deviations. The official statistical sources utilized in our analysis (based largely on Statistics Canada, CoStar Realty Data, which have been noted where utilized) are considered sufficiently accurate for the purposes of our analysis.

If for any reason major changes occur in the marketplace which would influence the basic assumptions stated above, the recommendations and/or conclusions in this report should be reviewed in light of circumstances and revised, if necessary.

IV. Policy Context

This section of the report outlines the respective Regional and municipal planning policy for the Rural Employment Area lands within the Regionally Significant Economic Development Study Area.

Section 6.8: Rural Employment Areas, County of Wellington Official Plan

The Regionally Significant Economic Development Study Area at present consists of two clusters of Rural Employment Areas, defined in the *County of Wellington Official Plan, Office Consolidation February 2024* ("County OP") as 'lands set aside for industrial and limited commercial uses which would benefit from a rural location' and 'provide diversity to Wellington's land supply for business.' (6.8.1)

The County OP further specifies that in all cases, the permitted uses will be 'dry' in nature, thus not using *significant* amounts of water or producing *significant* amounts of effluent. (6.8.2)

Policy 6.8.2 of the County OP also provides examples of uses that can be accommodated within the Rural Employment Area, including the following industrial and commercial uses.

Table 3.1.1 – Permitted Uses as per County of Wellington Official Plan

Section 6.8.2 – Permitted Uses, County of Wellington Official Plan		
Industrial	Commercial	
 Manufacturing, processing, fabrication or raw materials Repair, servicing, distribution and storage of materials Accessory uses including the retail sale of products 	 Business or professional offices Farm machinery sales, supplies, produce sales Small scale motels or inns, restaurants Automobile sales and services 	

As shown in **Figure 3.1-2**, Township of Puslinch Comprehensive Zoning By-Law No. 023 – 18 zones the Rural Employment Area lands north of Highway 401 as Industrial (IND), while the Rural Employment Area lands bordering Highway 6 are zoned Future Development, exception 3 (FD3).

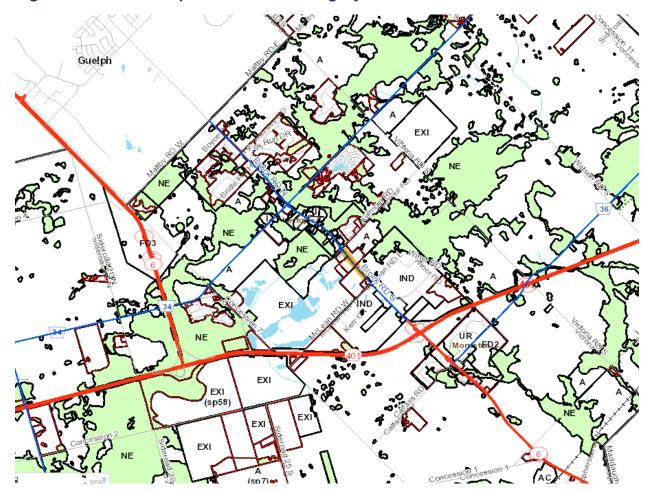


Figure 3.1-2: Township of Puslinch Zoning By-Law

Source: Parcel Economics Inc. based on Wellington County GIS.

Industrial (IND) zones regulate dry industrial and limited commercial uses. The Puslinch Zoning By-Law states that dry industrial uses do not require significant water or significant sewage disposal. 'Significant' is defined as water use 'requiring a Permit to Take Water and/or greater than 50,000 litres of water per day' and sewage disposal systems 'exceeding 10,000 litres per day'. The types of uses permitted in the Industrial Zone are outlined below.

Table 3.1.2 – Permitted Uses as per Township of Puslinch Zoning By-law

Section 9.2 - Permitted Uses, Industrial Zone (Puslinch Zoning By-law)

- Agricultural service and supply
- Motor vehicle body shop
- Building supply store
- Business or professional office
- Caterer's establishment
- Commercial fitness centre
- Commercial self-storage facility
- Contractor's yard
- Dry cleaning plant
- Factory outlet (accessory use)
- Fuel depot
- Grain operation

- Industrial equipment rental establishment
- Medical marijuana production facility
- Outdoor storage area or accessory processing area
- Outdoor storage use
- Postal or courier outlet
- Equipment rental establishment
- Restaurant (accessory)
- Sawmill
- Service or repair establishment
- Trade service establishment
- Transport terminal
- Warehouse

V. Existing Conditions

As noted earlier, the existing inventory of Rural Employment Area lands is spread over two primary industrial parks, namely Kerr and Nicholas Beaver Industrial Parks. They are located opposite one another at Brock Road South, bordered by McLean Road to the north and Highway 401 to the south. The employment lands at Maltby Road at Highway 6 are undeveloped and represent a potential opportunity for future economic growth.

The Kerr and Nicholas Beaver Industrial Parks consist primarily of transportation and warehousing, wholesale trade, manufacturing, and construction uses. **Figure 3.1-4** summarizes the breakdown of businesses located in the Kerr and Nicholas Beaver Industrial Parks, as well as the share of occupied lands associated with each of these uses.

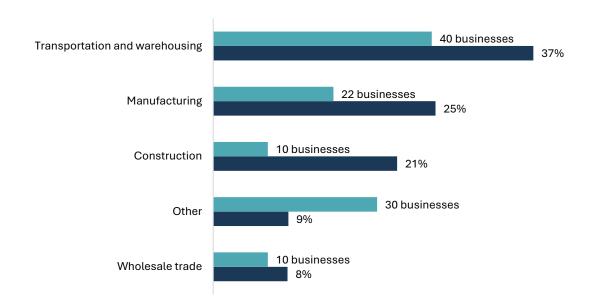


Figure 3.1-3: Sectoral Distribution of Built Rural Employment Lands, hectares

Source: Parcel Economics Inc.

Transportation and warehousing accounts for the largest proportion of businesses and land area within the Kerr and Nicholas Beaver Industrial Parks. The large concentration of businesses engaged in transportation and warehousing reflects the proximity of these lands to both Highway 401 and Highway 6.

There is also a concentration of businesses engaged in manufacturing in Puslinch. Manufacturing uses located in these industrial areas include the manufacturing of chemicals, wood products, non-metallic mineral products, fabricated metal products, electrical equipment and machinery. Similar to the transportation and warehousing sector, manufacturing uses also benefit from proximity to core transportation arteries.

Economic Overview

The following section summarizes recent and future economic trends that are likely to influence the types of businesses that will locate in the Regionally Significant Economic Development Study Area.

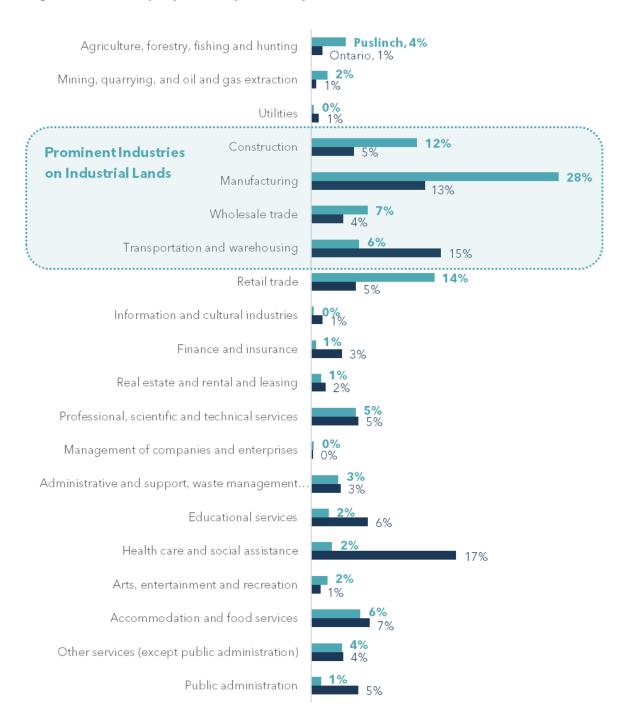
Economic Growth & Industry Clusters

Future development in Puslinch and surrounding communities will be influenced, at least in part, by economic growth in the Province and local economy. To this end, it is important to understand broader economic trends as it will help inform potential absorption trends in Puslinch and the surrounding area, including on industrial lands.

Industrial activities are a significant contributor to the Ontario economy. Relative to other industrial-based sectors, construction and manufacturing contributed most significantly to growth in Gross Domestic Product ("GDP") in Ontario in recent years. Recognizing the significance of manufacturing and construction businesses in Puslinch and Wellington County, continued growth in these sectors is favourable in terms of absorbing lands within the Regionally Significant Economic Development Study Area.

Economic development and growth in Puslinch will depend on attracting and sustaining industries in the area going forward. This potentially includes growth across a broader range of industries, such as wholesale trade and transportation and warehousing, to minimize the community's dependence on individual industries and/or operations, particularly those that are more prone to boom/bust cycles and recessions.

Figure 1.1-4: Employment by Industry, Ontario and Puslinch



Source: Parcel Economics Inc. based on 2021 Census of Canada Custom Tabulation. Figures shown are rounded to the nearest percentage.

Understanding the key clusters that typically locate on industrial lands is important in ensuring the future success and appeal of lands across Puslinch, including the types of industries that may choose to locate on available lands in the area.

Manufacturing

Manufacturing is a prominent employment sector across most municipalities in and around Wellington County. As shown in **Figure 3.1-5**. Puslinch and the neighbouring municipalities of Guelph and Cambridge have a relatively large share of people employed in the manufacturing sector. The existing concentration of people employed in manufacturing is positive in terms of attracting future businesses to the area, as these businesses can leverage the existing skilled labour force.

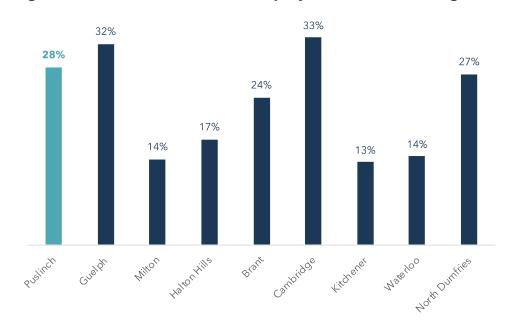


Figure 3.1-5: Share of Workers Employed in Manufacturing

Source: Parcel Economics Inc. based on 2021 Statistics Canada.

Much of the success of manufacturing in these areas is due to the accessibility of the area to key markets, highway proximity and the size of the labour pool.

The manufacturing industry maintains its role as a key industry in Ontario. That said, it has been impacted by skilled labour shortages and high material costs more recently prompting development of advanced manufacturing technologies to remain competitive.

As shown below, food manufacturing and machinery manufacturing have seen the strongest growth in recent years. As artificial intelligence continues to unlock the potential adoption of new technologies, it is expected there will be continual shifts in demand for industrial lands across Ontario, including Puslinch.

The characteristics of employment lands inherent to Puslinch and Wellington County more broadly—including its location, clustering of existing businesses and expansion opportunities—make it an attractive location to support growth across several manufacturing industries.

Recognizing that manufacturing is a significant employment sector in Puslinch and Wellington County, there should be continued effort to promote opportunities for these uses in the area. While providing other benefits, sustaining opportunities in this sector is key to maintaining the local economy's resilience and stability.

There is opportunity to attract a broader range of manufacturing uses to lands available in Puslinch. While opportunities for food manufacturing may be more limited due to a lack water servicing, there is opportunity for lands to host other industrial uses including non-metallic mineral products manufacturers and machinery manufacturers which often have less need for municipal water and wastewater services and would benefit from the location of these lands.

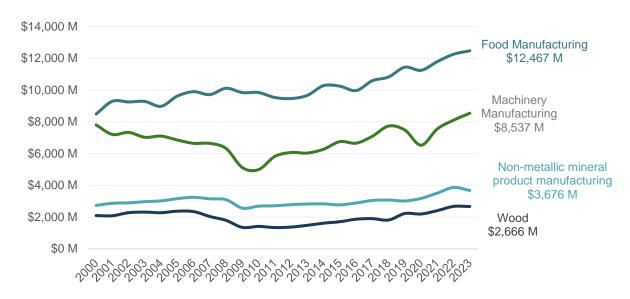


Figure 3.1-6: Selected Manufacturing GDP, Ontario

Source: Parcel Economics Inc. based on Statistics Canada Table: 36-10-0402-02.

Puslinch should continue to be aware of broader changes to the manufacturing industry to best position their lands for a range of uses. In particular:

 The Township should recognize the use of new technologies in the manufacturing sector (such as robotics, autonomous racking systems and advanced manufacturing) and specifically how each impacts the types of industrial land and space sought by businesses (such as the likely need for larger buildings, lot sizes and clear heights).

- Puslinch should continue to promote the local concentration of a skilled manufacturing workforce (Figure 3.1-5), as this will help distinguish Puslinch from other municipalities.
- The Township should strive to maintain a range of parcel sizes to accommodate future tenants. Given the size and scale of manufacturing businesses, an adequate supply of land, including various parcel sizes is often key to attracting future users.

Collectively, these factors will help bolster the attractiveness of Rural Employment Area lands in Puslinch and will position them to benefit from growth across this sector regardless of their existing servicing capacities.

Construction

The construction industry continues to be a key industry for growth in Ontario, influenced by a push for residential and non-residential development necessary to support continued population and employment growth.

GDP output from the construction sector has been increasing since 2009 as shown in **Figure 3.1-7**. Despite short-term softening associated with elevated interest rates, it is expected that the construction sector will continue to grow in support of continued population growth and development needs in Ontario.

The construction industry is important to the economy of Wellington County, including a range of industries involved in electrical and equipment contracting, residential building construction, and specialty trades.

Construction businesses typically require a limited amount of indoor space for storage and showrooms and sometimes require space for outdoor storage. Given the size of these businesses, land costs and lease rates are sometimes important in locational decisions and may help increase the appeal of lands in Puslinch. Furthermore, recognizing the prevalence of existing construction businesses in Wellington County and Puslinch more specifically, Puslinch should leverage their land supply to continue to support and expand the number of businesses engaged in the construction sector.

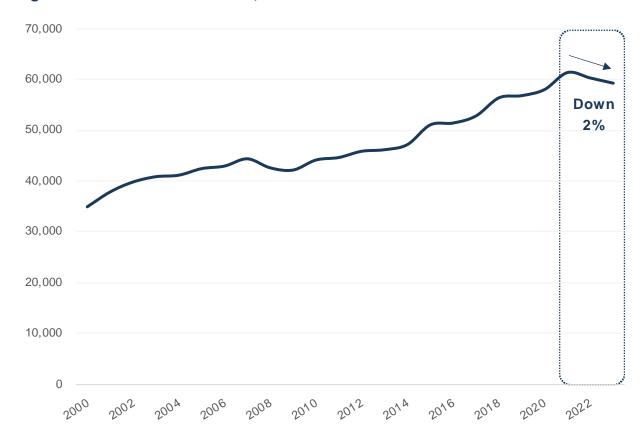


Figure 3.1-7: Construction GDP, Ontario

Source: Parcel Economics Inc. based on Statistics Canada Table: 36-10-0402-02.

Transportation and Warehousing

As a whole transportation and warehousing sectors in Ontario have expanded over the past two decades. The warehousing and storage industry is 3 times larger than it was in 2000. The need for industrial lands to accommodate transportation and warehousing uses is anticipated to continue, recognizing further increases in e-commerce. In fact, in 2024, global retail e-commerce sales are expected to reach \$6.3 trillion, which is a nearly 10% increase from 2023 (**Figure 3.1-8**).

The shift towards transportation, warehousing and storage is having an impact on demand for industrial lands. These industries typically require large greenfield parcels with convenient access to highway transportation. This could increase demand for industrial lands serving this sector, in comparison to historical trends.

Figure 3.1-8: Selected Transportation and Warehousing GDP, Ontario



Source: Parcel Economics Inc. based on Statistics Canada Table: 36-10-0402-02.

Industrial Market Overview

Market Overview

Parcel completed an analysis of industrial market trends in municipalities in the Western GGH (including Puslinch). As shown in **Figure 3.1-9**, for the purposes of this study, the Western GGH includes the municipalities of Halton Hills, Milton, Guelph, Puslinch, Cambridge, Kitchener, Waterloo, North Dumfries, the County of Brant and Brantford. These municipalities were selected as they have similar locational characteristics to lands located in Puslinch.

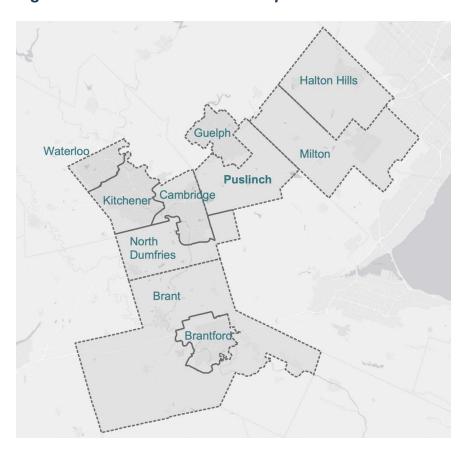


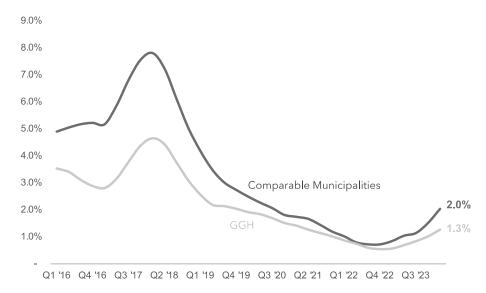
Figure 3.1-9: Western GGH Municipalities

Source: Parcel Economics Inc.

We have benchmarked industrial market trends in the Western GGH against the GGH where applicable. The vacancy trend in Western GGH municipalities mirrors the general vacancy trend for all the GGH. Historically, the delta between the vacancy rates for the two benchmarks was approximately 2% to 3%, however, this gap has continued to tighten between first quarter of 2018 and the fourth quarter of 2024.

The existing vacancy highlights the significance of demand across the Western GGH municipalities (**Figure 3.1-10**). Industrial users are currently limited in their ability to relocate in the market while there are also minimal opportunities for new users to enter the market. These trends highlight the potential—and likely need—for expanded industrial opportunities.

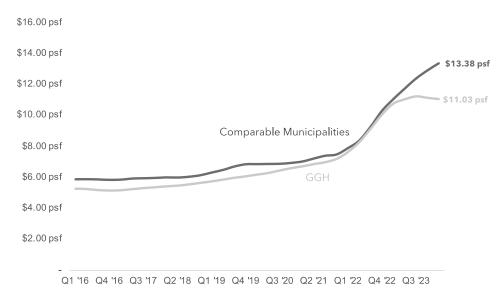
Figure 3.1-10: Industrial Vacancy Rate



Source: Parcel Economics Inc., based on Co-Star.

The four-quarter average net lease rate has been steadily increasing, in line with the falling vacancy rates. However, since the third quarter of 2022 there has been a steep increase in the net lease rates, reaching approximately \$11 per square foot (PSF) for municipalities in the Western GGH. Not only are current and new industrial tenants faced with a lack of available space in the area, but they are simultaneously experiencing increased pressures and costs from rising market rents.

Figure 3.1-11: Average Net Lease Rates (4-Quarter Average)



Source: Parcel Economics Inc., based on Co-Star.

New Industrial space in comparable municipalities has a positive absorption rate, with more space being leased than vacated across the market. This pattern in absorption combined with the relative lack of new space, explains the tight vacancy conditions and rising lease rates.

Figure 3.1-12: 4-Qtr Net Absorption for Competitive Municipalities



Source: Parcel Economics Inc., based on Co-Star.

Industrial Development Activity

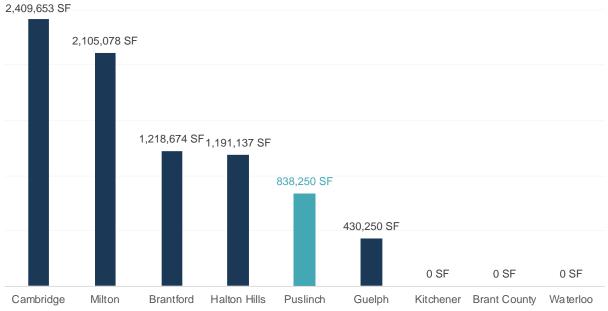
Recently Constructed

As per Co-Star data, Western GGH municipalities have added an estimated 13.5 million square feet of industrial space between 2020 and 2023. This mostly includes a mix of larger warehouse and distribution spaces. Milton contributes to approximately 50% of the new industrial space added, followed by Cambridge at 14%. During this period, there have not been any new industrial buildings completed in Puslinch.

Under Construction

However, there are approximately 839,000 square feet of industrial space under construction in Puslinch. This space is concentrated in just one, multi-tenant development project at 7475 Mclean Rd E being completed by Dream Industrial REIT. It is the second largest development project among all the neighboring municipalities, where a total of 8,200,000 square feet of space is under construction. Following a similar primary use trend seen in recently constructed projects, majority of the under-construction projects are proposed to be used for warehousing and distribution.

Figure 3.1-13: Industrial Space Under Construction in Competitive Municipalities
2,409,653 SF



Source: Parcel Economics Inc., based on Co-Star.

Proposed

Based on data from CoStar, approximately 8,865,000 square feet of industrial space is proposed within the Western GGH municipalities, with Brantford positioned to

accommodate more than half of the total space. Data from CoStar indicates there are no new industrial projects currently proposed in Puslinch. However, it is our understanding that there may be pending applications, which highlights the attractiveness of the southwest Ontario region for industrial uses and validates the significant potential of Puslinch to position itself to capture this trend going forward.

4,851,221 SF 2.168.133 SF 853.631 SF 563,652 SF 200,000 SF 182,140 SF 57.000 SF 0 SF 0 SF Brantford Cambridge Milton Kitchener Halton Hills Guelph Waterloo Puslinch Brant County

Figure 3.1-14: Industrial Space Proposed Across the Competitive Municipalities

Source: Parcel Economics Inc., based on Co-Star data.

Built-Form Trends on Employment Lands

The industrial market surrounding Wellington County and Ontario more broadly is changing. New technologies, increasing rent and heightened competition between and across differing lands uses is shifting demand. Employment lands are becoming more diverse, such that they can host a broader range of complementary uses in one facility. Simultaneously, there is continued need for Employment lands to continue accommodating land-extensive warehouses and distribution centres that typically have lower employment densities.

The ultimate type and format of uses that locate in an area ultimately depend on a myriad of factors, including location, surrounding and competing land uses, access to transportation, land availability and land prices. Nonetheless it is important to understand general trends in industrial development to identify factors or considerations that could influence the desirability of lands in Puslinch.

To better understand these trends, Parcel has examined trends and features associated with industrial development in Western GGH municipalities that host a sizeable amount

and diversity of industrial development. This includes average building size, clear heights, and lot coverage.

Built Form

The built form of industrial buildings across the Western GGH has changed over time, as illustrated in Figure 3.1-15: . As shown, the average rentable building area pre-1990 was some 40,700 square feet. This has increased to an average building size of 200,000 square feet in the last few years.

Recent growth trends are also indicative of the types of uses occupying industrial lands. A growing share of industrial lands are being occupied by single-bay and multi-bay warehouses designed to support the combined space needs of multiple tenants.

Land constraints combined with heightened land costs has also impacted the type of industrial development being introduced. Smaller developments are often too expensive to pursue especially in markets where land supply is limited. To this end, introducing opportunity for industrial uses to attain significant and expansive land opportunity in Puslinch may be an advantage to attracting a diversity of uses, particularly has many municipalities grapple with a shortage of industrial space.

250,000 sf

200,000 sf

150,000 sf

129,300 sf

50,000 sf

40,800 sf

49,400 sf

2000 to 2009

2010 to 2019

2020+

Figure 3.1-15: Average Industrial Building Size, Competitive Municipalities

Source: Parcel Economics Inc. based on CoStar Realty Data.

1990 to 1999

Pre 1990

0 sf

Clear Heights

Figure 3.1-16 shows how clear heights across industrial developments in the Western GGH have trended in recent years. In the past, average clear heights across industrial developments averaged less than 20 feet. More recent industrial developments maintain clear heights of some 33 feet on average, with some developments offering clear heights above 40 feet.

Increasing clear heights is consistent with the changing composition and needs of industrial uses. New technologies (e.g., racking systems, robotics etc.) have also enabled industries to take advantage of building verticality and allowed them to operate more efficiently in less space.

As the supply of industrial land diminishes and the price of land increases, it is likely the trend for higher clear heights will continue. Price escalation is an impetus for the more efficient uses of buildings. To avoid having to locate in less desirable areas, it is likely building up will be the continued solution to help industries minimize their land needs and costs. This is a key consideration when considering the built form of new buildings in the Regionally Significant Economic Development Study Area.

28 ft 28 ft 28 ft

2000 to 2009

2010 to 2019

2020+

Figure 3.1-16: Average Ceiling Height, Competitive Municipalities

Source: Parcel Economics Inc. based on CoStar Realty Data.

1990 to 1999

Pre 1990

Site Coverage

Similar to the above, the average land coverage of industrial developments has increased overtime. This trend is likely influenced by heightened land costs and lease rates necessary to construct and sustain industrial developments. It has also increased how efficiently buildings use their land as evidenced by the reduction in land-to-building ratios shown below. Low and decreasing ratios suggest that industrial lands across the surrounding area are being used more efficiently in light of broader trends in the market. While it is anticipated that this trend will occur in the Regionally Significant Economic Development Study Area, there will be limits on site coverage in comparison to service industrial lands in neighbouring municipalities, particularly on properties where on-site servicing solutions are necessary.

Ratio Coverage 16.0 35% Coverage 14.0 30% 12.0 25% 10.0 20% 8.0 15% **Land to Building Ratio** 6.0 10% 4.0 5% 2.0 0.0 0% Pre 1990 1990 to 1999 2000 to 2009 2010 to 2019 2020+

Figure 3.1-17: Site Coverage & Land-to-Building Ratios, Competitive Municipalities

Source: Parcel Economics Inc. based on CoStar Realty Data.

Market Sounding Interviews

To supplement the analysis above, Parcel conducted virtual research interviews with five individuals/organizations that are familiar with the industrial market in Puslinch and the GGH more broadly. These market sounding interviews were conducted with local landowners/developers, commercial brokers and economic development professionals.

Through these interviews, we were able to identify key themes and commentary about the opportunity and need for industrial lands in the Regionally Significant Economic Development Study Area. We were also able to collect insights on broader trends, demand factors and supply issues that Puslinch could leverage as they seek to better position this growing industrial area to attract new businesses.

Summary of Key Themes

- #1 Need for Large Contiguous Industrial Parcels
- #2 The Requirement for "Dry" Industrial Uses is Both an Opportunity and Constraint
- #3 Transportation and Access Will be Key to Supporting Industrial Uses
- #4 There is a Need for Employment Serving Uses to Support the Area
- #5 Provide for Flexibility in Built Form

Theme #1

There is a Need for Large Continuous Industrial Parcels

- All participants emphasized the need for industrial lands to support recent trends that have resulted in declining vacancy rates, rising lease rates and rising land prices.
- There is even a greater lack of supply when it comes to large industrial parcels that can support facilities with at least 1 million square feet of industrial space within one building.
- Even in municipalities where there are large parcels of vacant industrial land, in many cases these lands are designated but not serviced. Therefore, they cannot accommodate growth over the short to medium term.
- Recently the market has shown confidence in accommodating prestige-type industrial uses within the Regionally Significant Economic Development Study Area. Puslinch should continue to build on this confidence by ensuring there are lands available to accommodate employment growth.
- Puslinch has an opportunity to designate industrial lands that can be brought to market more quickly than many other municipalities in the GGH.

Theme #2

The Requirement for "Dry" Industrial Uses is Both an Opportunity and Constraint

- The requirement that future industrial uses in the Regionally Significant Economic Development Study Area must be 'dry' industrial uses presents both opportunities and constraints when attracting certain types of tenants.
- These opportunities and constraints need to be recognized when establishing land use designations and zoning that impact built form.
- As the lands in the Regionally Significant Economic Development Study Area are not serviced, they can be brought to market quicker than lands in neighbouring

- municipalities that are contingent on the municipality extending water and wastewater services.
- Much of the growth on industrial lands in recent years have accommodated warehousing and logistics type uses that have less of a need for wastewater infrastructure. In many cases the need for water servicing is tied to fire suppression. However, many participants acknowledged there are ways to address fire suppression in dry industrial areas.
- The lack of servicing could be a constraint in attracting certain types of manufacturing uses that require water and have levels of effluent that exceed the restrictions in Puslinch. However, many participates noted that manufacturing uses have only accounted for a small share of industrial development in recent years.
- One participant noted that not being reliant on municipal servicing is a big selling point in comparison to other municipalities.
- Some participants noted that while truck and trailer storage does not generate significant municipal revenues, these types of uses are important to supporting growth in manufacturing and warehousing/logistics in surrounding markets.
- In many Prestige Industrial Parks, truck and trailer storage is not permitted. The heavy industrial lands in Puslinch are one of the few places where these uses are permitted with access to Highway 401.

Theme #3

Transportation and Access Will be Key to Supporting Industrial Uses

- Being located at the intersection of Highway 401 and Highway 6, the Regionally Significant Economic Development Study Area has a unique opportunity to serve markets to the east, west and south.
- Access to markets in the east and west, as well as growing markets to the south is a key advantage for the Regionally Significant Economic Development Area.
- The Regionally Significant Economic Development Area is far enough west of the GTA to avoid significant traffic disruptions.

Theme #4

There is a Need for Employment Serving Uses to Support the Area

- The Regionally Significant Economic Development Study Area has the advantage of being located adjacent to the growing labour force in Guelph and Cambridge. Access to this growing labour force will be key in attracting tenants to the area.
- There is a general lack of public transit serving the Regionally Significant Economic Development Study Area. While some participates noted the GO Transit bus terminal at Brock Road and McLean Road, there is a need for more readily available public transit to bring employees to the area.
- There is also a general lack of retail / service commercial amenities in the area to serve existing and future employees.

Theme #5

Provide for Flexibility in Built Form

• Built form and zoning for the area should reflect the types of tenants that are likely to be accommodated in the area, as well as the lack of servicing.

• Site Coverage

- New large-scale warehousing and logistics buildings typically have site coverage of 40%. However, due to the lack of servicing in Puslinch, all sites will require on-site septic services, which lowers site coverage. The need for on-site septic and the impact on site coverage should be considered.
- The lack of public transit in the area also means that nearly all employees will drive to work. The need for employee parking will also impact site coverage.
- When identifying future industrial lands, Puslinch should focus on lot patterns that would allow for both large lots, as well as subdivision into smaller lots. This would help attract multiple types of users to their lands.

Ceiling Heights

- Typically, clear heights range between 24 and 26 feet (7.3 to 7.9 metres) for small bay users and between 28 and 32 feet (8.5 and 9.8 metres) for big bay users. Logistics and large distribution spaces generally require increased clear heights, ranging from 36 feet up to 40 feet (11.0 to 12.2 metres) on occasion.
- Participants in the market sounding interviews suggested that most tenants do not actually have the technology to warrant or utilize a 40-foot clear height. Rather, some developers are integrating height as a way to "future proof" their buildings. That said, many also noted that going higher is often challenged because the industry has not determined how to charge for vertical space.

Land Uses

- While there is growing market acceptance in accommodating "prestige" industrial uses in Puslinch, there is still a need from businesses that require outdoor storage for trucks / trailers, as well as raw materials and finished goods.
- Some participants in the market sounding interviews identified good examples of businesses currently in the Regionally Significant Economic Development Study Area that were engaged in manufacturing that had both raw materials and finished goods stored outside. These are important businesses that employ many people. However, due to the requirement for outdoor storage, these types of tenants are unable to locate in Prestige industrial areas.

 Allowing for some outdoor storage is a key advantage in Puslinch that should be considered when establishing land uses and zoning.

Case Study Research

We have identified two industrial parks in the GGH that do not have water / wastewater servicing available and have similar locational characteristics to the Regional Significant Economic Development Study Area. This includes the Gormley Industrial Area in Whitchurch-Stouffville and Hwy 401 / Regional Road 97 Employment Area, North Dumfries. In the following sections, we have completed a profile of these industrial areas to help inform the types of uses that could be accommodated in the Regional Significant Economic Development Study Area.

Gormley Industrial Area, Stouffville

The Hamlet of East Gormley is located east of Highway 404, in the Town of Whitchurch Stouffville. The Whitchurch Stouffville Official Plan identifies the region as an employment area where development must be sustained on private or communal water services (4.16.2.4), due to environmental conservation policies which do not permit the extension of servicing.⁵ A non-potable fire suppression network provides pressurized water for firefighting – new dry industrial development is given the option of integrating with this system.

⁵ Oak Ridges Moraine Conservation Act

Stouffville Road

Stouffville Road

Figure 3.1-18: Location of Gormley Industrial Area

Source: Parcel Economics Inc. based on Google Earth

The industrial park is home to several manufacturers and transportation services, including TÜV SÜD, a 25,000 square foot regulatory testing laboratory. Based on data from the 2021 Census of Canada, there is also a large concentration of businesses engaged in the construction industry.

Land use designations within the Gormley Industrial Area are shown in **Figure 3.1-19**. As shown, land uses in the area generally include Industrial and Prestige Industrial land use categories. In both cases, uses are restricted to dry industry insofar as not relying on water and/or discharge for any processes.

Section 10 of the Town of Whitchurch-Stouffville Official Plan outlines permitted uses and restrictions for dry industrial development, whereby outdoor storage is limited, and high-quality building design is encouraged in areas with exposure to major roadways (10.1.2). Development may proceed on the basis of private or communal sewage systems subject to appropriate studies and the approval of the Ministry of Environment and Energy, the Ministry of Natural Resources, and the Regional Municipality of York (10.4.2). While Prestige Industrial uses prohibit outdoor storage, Industrial uses limit outdoor storage to rear yards and screening from public view (10.2.2.2).

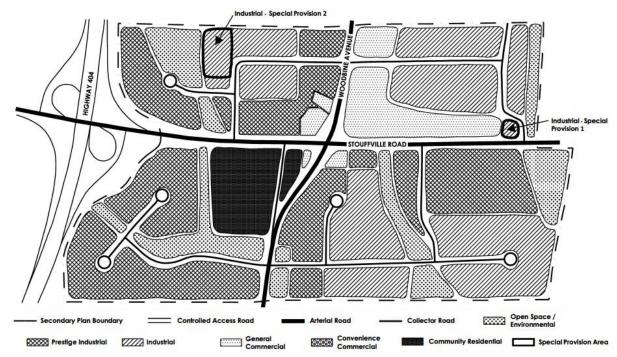


Figure 3.1-19: Land Uses in the Gormley Industrial Area

Source: Schedule A Land Use and Road Plan, Stouffville Secondary Plan Gormley

Hwy 401 / Regional Road 97 Employment Area, North Dumfries

The Township of North Dumfries is located at the southern end of Waterloo Region and wraps around the City of Cambridge. The Township of North Dumfries Official Plan identifies Highway 401 and Regional Road 97 as a Rural Employment Area. This existing cluster of industrial uses supports the long-term labour needs of the township and is intended to provide additional opportunities for employment growth. Freight-supportive businesses, such as truck dealers, service centres and repair shops, are common to the lands given the intersection of a core transportation corridor. The area also hosts several manufacturers, including Bend All Automotive, a 290,000 square foot supplier of automotive parts and automation tooling equipment. Within the Rural Employment Area, manufacturing and transportation are the two most common uses.

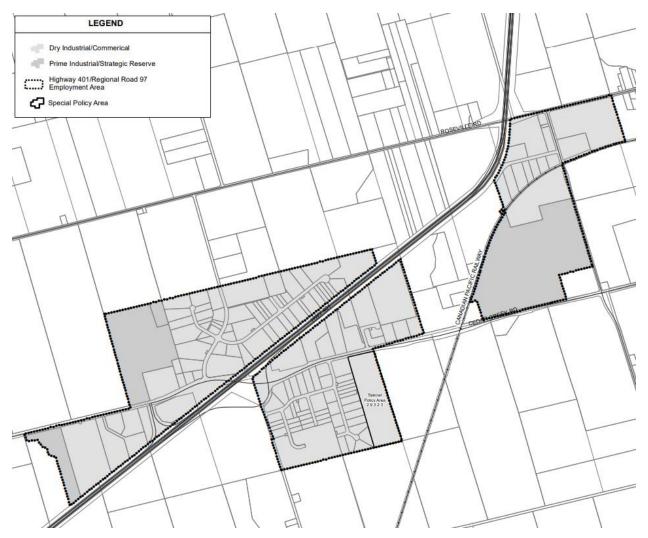
Roseville Road
Roseville Road
Cedar Creek Road

Figure 3.1-20: Location of Hwy 401 / Regional Road 97 Employment Area

Source: Google Earth

The Township of North Dumfries Official Plan designates these lands as Dry Industrial/Commercial and Prime Industrial/Strategic Reserve lands. This specific rural employment area provides a range of industrial uses and related activities. Developments are restricted to providing water and sewage through private wells and individual wastewater treatment systems.

Figure 3.1-21: Land Use Designations in the Highway 401 / Regional Road 97 Employment Area



Source: Map 2.27, Township of North Dumfries Official Plan

Competitive Landscape Review

Access to transportation infrastructure, local labour force availability, land prices, etc. are examples of key factors that are considered when businesses make decisions on where to locate within a region.

As part of the strengths and weaknesses assessment, we have compared Puslinch against other nearby municipalities in the Western GGH that have competitive industrial lands.

The focus of this review has been to compare industrial trends across these municipalities/regions to the Regionally Significant Economic Development Area in Puslinch. Based on a range of factors that typically attract tenants and land uses (e.g., transportation, transit, land prices, etc.) to certain locations, this review has identified the potential benefit—or lack thereof—in each of these industrial areas. As illustrated below, this includes an individualized assessment ranging from competitive disadvantage to competitive advantage.

Figure 3.1-22: Competitive Assessment Spectrum



Source: Parcel Economics Inc.

Access to Transportation

Highway Access

Access to a range of transportation networks is key to attracting business activity, expanding opportunity for inventory exchange and encouraging trade. It also helps create an attractive environment for employees, customers and occasional visitors, while simultaneously saving businesses time and money due to improved market connectivity.

Across comparable municipalities, municipalities in the north benefit most directly from their accessibility and connectivity to Highway 401. That said, only some municipalities—including Puslinch, Halton Hills, Milton, Cambridge and to a lesser extent Kitchener have employment land well positioned to benefit from this proximity. Recent attraction of new industrial development in Cambridge, including the Toyota Motor Manufacturing plant in the Cambridge Business Park is largely attributed to the proximate location of employment lands to Highway 401.

Proximity to Highway 401 is beneficial in attracting industries as it expands industry access to labour, goods and services, and is more favourable to the delivery of products and services as mentioned above. In this case, it also specifically increases connectivity between industrial users and the Greater Toronto Area ("GTA"). This positions users to benefit from the larger population, employment and talent pooled in this area.

Similar benefits can also be associated with lands in Brant County and the City of Brantford, where employment lands have access to Highway 403. Highway 403 provides similar benefits to businesses by providing enhanced connectivity to Hamilton Region.

Figure 3.1-23: Surrounding Highway Network



Source: Parcel Economics Inc. based on data from the Ontario Ministry of Transportation (MTO).

Puslinch: The Regionally Significant Economic Development Study Area offers similar—and in some cases better—access to major highways than surrounding municipalities. Located at the intersection of Highway 6 and the Highway 401, lands in the Regionally Significant Economic Development Study Area offer a unique opportunity to serve and connect with markets to the east, west and south. Highway adjacency also reduces the time trucks must sit on local roads and in turn, saving industries time and money. This may be of particular value to logistics companies, and larger manufacturing or warehousing industries who more often rely on 'just-in-time' inventory and the efficient distribution of products and other goods.

Anticipated improvements to Highway 6 and Highway 401 in the Township of Puslinch (Wellington County and the City of Hamilton) moving forward under the Ontario Ministry of Transportation (MTO) will further the draw of industrial lands in Puslinch. Anticipated new roadways could unlock potential new land areas and/or improve the viability of existing designated lands to a broader range of uses.

Rail Access

Rail access is attractive to many industrial uses as it eases the movement of raw materials and finished goods across significant distances. It enables users to ship significant volumes of goods easily and efficiently and reduces industry dependence on truck transport. In turn, it provides a unique sustainability benefit to many clients, reducing company's carbon footprints and transportation-related costs, including reductions on shipping and staffing.

Municipalities surrounding the Township of Puslinch including Cambridge, Kitchener, Milton and Guelph benefit from railway access and traffic, enabling and easing the movement of goods across southwestern Ontario and beyond.

By comparison, other municipalities like North Dumfries and Brant do not benefit from the same connectivity to rail networks. While railways generally travel through their boundaries, they do not offer the same connectivity to specific routes as there are not freight stations.

Halton Hills Milton Guelbh Waterloo Puslinch Kitchener Cambridge North **Dumfries** - RAIL RAIL STATION Freight Station Brant Passenger Station Brantford

Figure 3.1-24: Surrounding Rail Network

Source: Parcel Economics Inc.

Puslinch: Employment lands in the Regionally Significant Economic Development Study Area do not benefit from direct access to freight or rail stations. While two rail lines traverse the Township, there is no immediate connectivity provided within the area. As rail often provides an alternative to trucking and vehicular movements—particularly attractive to industries that transfer a significant amount of goods—this may limit the types of uses attracted to the employment lands in Puslinch. That said, some of this may be mitigated by the proximity of the Regionally Significant Economic Development Study Area to the recently approved Milton Intermodal Hub located on lands east of Tremaine Road and south of Britannia Road.

Access to intermodal facilities through neighbouring municipalities may be sufficient to maintain interest from industries dependent on shipping large volumes and interested in more effective transportation.

Access to Transportation Review - Puslinch

Township of Puslinch



Employment lands in Puslinch offer proximity to Highway 401 and Highway 6. This location offers future industrial users the unique opportunity to connect to markets east, west and south of the Township, including the GTA and Hamilton Region.

Anticipated upgrades to Highway 6 will further bolster the appeal of these lands, increasing the viability of existing lands to a broader range of industries.

While lands do not benefit from immediate proximity to the rail network, access through neighbouring municipalities helps mitigate the likelihood that this will deter industries from this location.

Access to Public Transit

Public transit can bolster business' ability to attract and retain employees, improving the ability for businesses to access skilled labour.

There is a limited amount of public transit infrastructure in Puslinch. There is a GO transit facility located at Brock Road South and McLean Road. However, there is no local public transit serving the industrial area. Only a few municipalities north and west of Puslinch are served by the GO Rail, which offers connectivity to Peel Region and Toronto in the east.

Others—including Kitchener and Waterloo—benefit from LRT/BRT lines. Specifically, the Grand River Transit connects the Regional Municipality of Waterloo, including Waterloo, Kitchener and Cambridge. This network enhances the connection between employment lands, employees and surrounding urban centres.

Puslinch: The Township is not currently supported by any local transit connectivity, limiting access across neighbouring municipalities and potential employees. This could limit the attraction of employment lands in Puslinch, relative to other areas where employment lands are concentrated near to existing transit networks and may benefit from access to a larger market.

Access to Public Transit Review - Puslinch

Township of Puslinch



With no local transit infrastructure near employment lands in Puslinch or across the Township more broadly, this may limit the types of industrial businesses interested in the area, particularly those that rely on skilled labour and employees that arrive by public transit.

Access to Skilled Labour

Relative to surrounding municipalities, Puslinch has a considerable share of its labour force employed in construction and manufacturing industries. The existing presence of these sectors may help attract additional construction and manufacturing opportunities to Puslinch that will enhance the appeal of this area to businesses.

While Puslinch has a considerably smaller concentration of its labour force in wholesale trade and transportation and warehousing, the surrounding municipalities of Guelph and Cambridge have larger concentrations, which could assist in attracting businesses to the Regionally Significant Economic Development Study Area.

Guelph Construction Cambridge Kitchener Waterloo Puslinch, 11% Guelph Milton Halton Hills Manufacturing Brant Kitchener Waterloo Guelph Wholesale Trade Cambridge Kitchener Waterloo Puslinch, 4% Halton Hills Transportation and Warehousing Cambridge Kitchener Waterloo

Figure 3.1-25: Access to Skilled Labour

Source: Parcel Economics Inc. based on Statistics Canada data.

Access to Labour Review - Puslinch

Township of Puslinch



The existing prominence of skilled labour working in construction and manufacturing combined with a growing population in neighbouring municipalities will enhance the competitiveness of these industrial lands. While proximity to highway provides convenient labour access to/from Puslinch, the lack of transit infrastructure available in the area will also influence demand from companies that rely on skilled labour.

Land Prices

The average sale price of industrial land in Puslinch has recently averaged \$2.1 million per acre. This is generally comparable and in line with industrial land being sold in other competitive municipalities, where industrial lands are serviced. In comparing Puslinch against larger municipalities, namely in Waterloo Region (Cambridge, Kitchener, Waterloo) and Halton Region (Milton and Halton Hills), the price of land is only relatively less. Maintaining competitive land prices will therefore be pertinent in attracting new businesses to industrial lands in Puslinch. While Puslinch does not have direct control over private sector land prices, ensuring there is an adequate supply of Rural Employment Area lands within the municipality can help relieve pressures associated with land shortages.

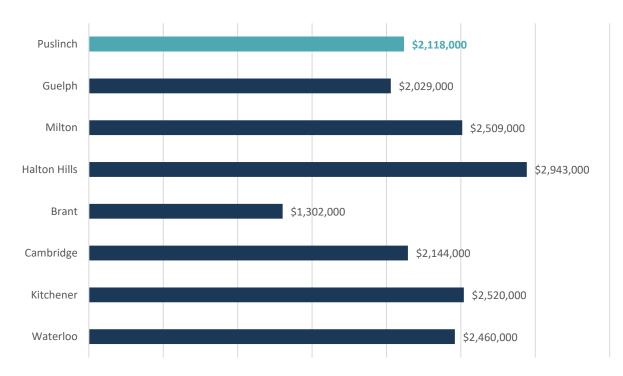


Figure 3.1-26: Average Sale Price (Per Acre) of Industrial Land Since 2020

Source: Parcel Economics Inc. based on data from CoStar Realty. Includes land sales occurring between 2020 and 2024 to date.

Average Sale Price Review - Puslinch

Township of Puslinch



Existing land prices in Puslinch are in-line or slightly below other lands across competing municipalities.

Lower land prices would help enhance the competitiveness of Puslinch's industrial lands.

Vacancy Rates and Lease Rates

Based on data from CoStar, there is currently no vacant industrial space in Puslinch. This is generally consistent with many municipalities in the Western GGH, where industrial vacancy rates are very low. The exceptions are Cambridge and Milton, where recent construction activity is likely contributing to higher vacancy rates, as it is becoming more common for developers be build prior to securing a tenant. The lack of vacant industrial space in Puslinch highlights the need for additional space to support new business growth and allow existing businesses to expand.

Despite the lack of vacant industrial space, net lease rates in Puslinch remain competitive with local municipalities. However, this could be due, in part, to the lack of new inventory in the area, as recently completed industrial buildings generally command higher lease rates.

Puslinch 0.0% Guelph 2.8% Milton 9.6% Halton Hills **Brant** 0.0% Brantford 0.4% Cambridge 6.3% Kitchener Waterloo 0.0%

Figure 3.1-27: Industrial Vacancy Rates Across Competitive Municipalities

Source: Parcel Economics Inc. based on data from CoStar Realty.



Figure 3.1-28: Industrial Net Lease Rates Across Competitive Municipalities

Source: Parcel Economics Inc. based on data from CoStar Realty.

Vacancy & Lease Rates Review - Puslinch

Township of Puslinch



The lack of vacant industrial space in Puslinch is challenging for industries looking for opportunities to expand or relocate.

The current net lease rate in Puslinch is a potential incentive for industrial tenants, particularly those who are struggling amidst rising costs.

Property Tax Rates & Development Charges

As part of this analysis, we have also considered the property tax rates and development charges in Puslinch relative to other nearby municipalities.

The current tax rate for Industrial properties in Puslinch is comparable to other competitive municipalities. Higher property tax rates in neighbouring areas such as Guelph, Brantford, Brant may push businesses to consider or redirect development in Puslinch overtime, especially if smaller municipalities with lower rates do not have sufficient land supply to accommodate for more expansive industrial projects.

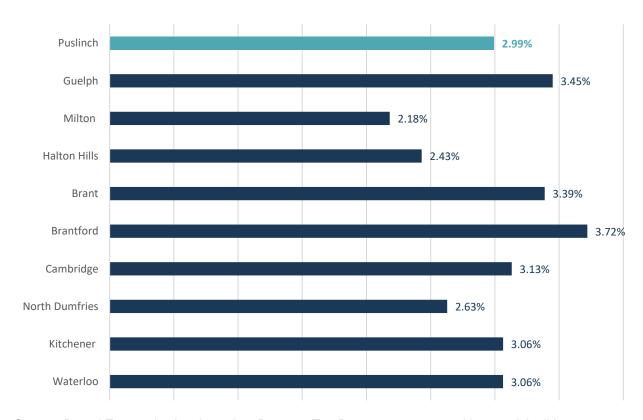


Figure 3.1-29: Industrial Property Tax Rates

Source: Parcel Economics Inc. based on Property Tax Rates across competitive municipalities.

Industrial Development Charges (DCs) in Puslinch are well below rates in neighbouring municipalities. Most of the difference in DC rates between Puslinch and neighbouring municipalities is related to Puslinch not having DCs for water and wastewater services. However, it is important to note that new industrial developments in Puslinch would still have costs associated with water and wastewater (e.g. wells, septic beds, etc.).

Reduced development costs have the potential to attract more investment into the township's industrial sector. For Puslinch, this will likely enhance its competitiveness as lower development charges have the potential to reduce the initial upfront costs for new development, if private services can be provided at a reduced cost.



Figure 3.1-30: Industrial Development Charges

Source: Parcel Economics Inc. based on Development Charges across competitive municipalities. DCC Rates herein are provided in dollars per acre.

Property Tax & DC Review - Puslinch

Township of Puslinch



Maintaining lower property taxes and development charges will serve as a competitive advantage for industrial properties in Puslinch.

Collectively, they will help reduce upfront costs and contribute to lower operating costs for tenants and businesses over the long term. As industries face rising interest and inflation rates, opportunities to reduce upfront costs will be attractive to prospective businesses.

SWOT Assessment Analysis

Based on the above analysis, we have prepared a SWOT assessment that summarizes the keys strengths and weaknesses of the Regionally Significant Economic Development Study Area in Puslinch as well as market-based recommendations to consider in future planning for these lands.

Strengths

 Ample Supply of Rural Employment Area Land – Puslinch has the potential to create an ample supply of Rural Employment Area land that will allow for a significant employment cluster in the region. The potential supply of land within the

- boundary of the Regionally Significant Economic Development Study Area is well beyond the additional 30 hectares identified in the LNA. As the Rural Employment Area lands can be brought to market quickly, the County and Township should not limit themselves to only the 30 additional hectares identified in the LNA.
- Attractive and Growing Municipalities Puslinch, as well as adjacent municipalities offer an attractive balance of rural and urban surroundings and a growing population. These factors will help sustain a strong local workforce, helping to attract new businesses to the area.
- Convenient Highway Access One of the greatest strengths of the Regionally Significant Economic Development Study Area is the convenient access and exposure to both Highway 401 and Highway 6. This strategic location offers access to markets in the east, west and south, in addition to the employment area in Guelph.
- Large Contiguous Blocks of Land When identifying future Rural Employment
 Area lands in the Regionally Significant Economic Development Study Area
 emphasis should be placed on lands that provide an opportunity to accommodate
 large contiguous blocks of land that can accommodate users requiring over 1
 million square feet of space. These types of sites are in short supply across the
 GGH and provide a key strength for Puslinch.
- Recent and Ongoing Interest There is recent and ongoing interest from developers looking to build prestige industrial uses in the Regionally Significant Economic Development Study Area. Puslinch has an opportunity to capitalize on this interest by making lands available to accommodate new businesses, including warehousing and logistics uses.

Weaknesses

- Public Transit The general lack of local public transit to the Regionally Significant Economic Development Area could impact the types of businesses that consider the area, specifically businesses where employees typically rely on public transit to get to their place of employment.
- Servicing (water and wastewater) As noted earlier, the requirement for businesses to be "dry" industrial uses is both a strength and a weakness. Some manufacturing businesses that have significant water and wastewater requirements will not be able to locate in the Regionally Significant Economic Development Study Area.
- Retail / Service Commercial Amenities There is currently a lack of retail / service commercial amenities within a short drive to serve employees working in the area. In planning for the Regionally Significant Economic Development Study Area, Puslinch should ensure there are lands available to accommodate these types of uses as the employment area grows.

Opportunities

 Shovel Ready Lands – As the Rural Employment Area lands are not contingent on the Township providing water and wastewater servicing, they can be brought

- to market more quickly than vacant lands in neighbouring municipalities that are reliant on this type of infrastructure. This is a key advantage when responding to changes in market demand.
- Outdoor Storage As many prestige industrial areas do not permit outdoor storage (or limited outdoor storage), the Regionally Significant Economic Development Area has a key advantage in attracting manufacturing uses that require outdoor storage of raw materials and finished goods. These are important sectors of the economy that generate employment opportunities. Puslinch should build on this opportunity by allowing for outdoor storage in strategic locations that are set back from roadways.
- Pre-Zoning Lands As noted above, not being reliant on water and wastewater infrastructure will allow the lands in the Regionally Significant Economic Development Area to be brought to market quickly. Pre-zoning the lands will also assist in shortening approval timelines, as long as zoning is flexible enough to accommodate a range of built forms.
- Variety of Parcel Sizes The size and configuration of lands within the Regionally Significant Economic Development Area will allow for a variety of parcel sizes to accommodate a range of end users.
- Truck and Trailer Parking There is an increasing need for land that can accommodate truck and trailer storage to serve local manufacturing and warehousing/logistics uses. Opportunities for these uses should be considered in strategic locations within the Regionally Significant Economic Development Study Area. While these types of uses typically do not generate significant municipal revenues, convenient access to transportation uses could help attract some prestige industrial uses to the area.

Threats

- More Limited Range of Uses – the requirement for businesses to be "dry" industrial uses will limit the range of users attracted to the area. Further, if some developers are trying to "future proof" their buildings, they may see the requirement for water and wastewater servicing as a necessity. This could further limit the number of businesses attracted to the area.

Recommendations

The following summarize our strategic recommendations as it relates to future planning for the Regionally Significant Economic Development Area.

Need for Additional Rural Employment Area Lands – While the LNA identified the need for an additional 30 hectares of Rural Employment Area lands in Puslinch to 2051, the Township and County should be forward-looking and consider designating more than 30 hectares and potentially all lands located within the boundary of the Regionally Significant Economic Development Area. This will allow for more market choice in the area and ensure that lands within the area are "market-ready" to respond to demand when it materializes.

- Large Blocks of Contiguous Land When considering future Rural Employment Area lands, focus should be on areas with large contiguous parcel sizes and access / exposure to highways (both Highway 401 and Highway 6).
- Land Use Designations and Zoning (Prestige and General Industrial Uses) Currently all lands located in the Nicholas Beaver Industrial Park and the Kerr Industrial Park are designated and zoned Industrial. To help create the 'feel' of a prestige industrial park; while still allowing for industries that require outdoor storage, consideration should be given to multiple industrial designations and zones. Using the Gormley Industrial Park as an example, the lands designated Prestige Industrial are adjacent to Stouffville Road, while lands designated Industrial do not have frontage on Stouffville Road. This provides a prestige industrial 'feel' to the industrial area, while still providing opportunities for outdoor storage.
- Zoning (Height and Coverage) Recognizing that the Regionally Significant Economic Development Study Area is likely to attract businesses engaged in logistics and warehousing, it will be important for the zoning to allow for clear heights of at least 40-feet (interior). While it is becoming more common for new industrial buildings to accommodate site coverage of 30% or 40%, lands within the Regionally Significant Economic Development Study Area should be less prescriptive as it relates to site coverage. This reflects the possibility that some sites will require on-site sewer treatment, which could result in lower site coverages.
- Zoning (Outdoor Storage) Allowing for some outdoor storage within the Regionally Significant Economic Development Study Area will be important in differentiating this industrial area from competitive municipalities where outdoor storage is not permitted or is significantly limited. The key will be allowing for outdoor storage in strategic locations and set back from the property line and behind the main building on the property.

V. Potential Evaluation Criteria

The following evaluation criteria are recommended to assess potential new employment growth areas that will minimize impacts land use planning conflicts. Criteria are separated into two categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which evaluate the option based on a Likert scale of five degrees of impact. There are no screening criteria for Employment Market.

Screening Criteria

None.

Evaluation Criteria

Table 3.1-1: Potential Evaluation Criteria

Criteria	Criteria Respon	Criteria Reference (where applicable)				
Large	Best Option	Better Option	Acceptable	Less Preferred	Least Preferred	
contiguous	l arga blooks of	Lorge blocks of	Option	Option	Option	
blocks that allow for a	Large blocks of land that can	Large blocks of land that can	Large blocks of	Lorgo blooks of	Small individual	
	accommodate	accommodate	Large blocks of land that can	Large blocks of land that can	parcels of land	
range of parcel sizes.	tenants	tenants	accommodate	accommodate	that allow for lot	
parcer sizes.	requiring 1	requiring	tenants	tenants	assembly	
	million square	500,000 square	requiring	requiring	docomory	
	feet of space			100,000 square		
	(40-to-50-	(20-to-30-	feet of space	feet of space		
	hectare parcel	hectare parcel	(10-to-15-	(3-to-5-hectare		
	size), but	size), but	hectare parcel	parcel size)		
	provide	provide	size), but			
	opportunity for	opportunity for	provide			
	subdivision	subdivision	opportunity for			
	based on	based on market	subdivision			
	market	conditions	based on			
	conditions		market			
Deep lots that	Blocks should	Blocks should	conditions Blocks should	Narrow lots that	Narrow lots that	
provide	also be	also be	also be	do not provide	do not provide	
opportunity	sufficiently	sufficiently deep	sufficiently	opportunities	opportunities for	
for outdoor	deep	(approximately	deep	for outdoor	outdoor	
storage	(approximately	300 metres) to	(approximately	storage/parking	storage/parking	
behind main	400 metres) to	allow for storage	300 metres) to	at rear of	at rear of	
building	allow for	at rear of	allow for	building.	building.	

Criteria	Criteria Respon	Criteria Reference (where applicable)				
	storage at rear	property with no	storage at rear			
	of property with	exposure to	of property with			
	no exposure to	major roads	some exposure			
	major roads		to roads			
Visibility to	Bordering	Bordering	No visual	No visual	No visual	
Highway 401	Highway 401	Highway 6	exposure to	exposure to	exposure to	
and Highway			highways, but	highways, with	highways or	
6 provides an			visible along	some visibility	major roadways	
opportunity to			major	along major		
attract high			roadways	roadways		
profile						
national						
tenants						

3.2 Background Paper: Transportation

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington

By MobilSafe Solutions

I. Purpose

Wellington County and the Township of Puslinch are undertaking the *Puslinch By Design: Employment Land Study* to provide an implementation plan that:

- provides a basis of economic competitiveness within the County and Township
- addresses the future rural employment land requirements
- identifies the best location for siting additional employment, and
- addresses the strategic importance of lands near Highway 401 and Highway 6

The preparation of the implementation plan requires the supporting technical studies to be undertaken for the Study Area presented on **Figure 3.2-1**:

- transportation analysis
- servicing strategy
- agricultural land review
- environmental plan review
- aggregates review
- urban design review
- land use compatibility review
- built heritage review

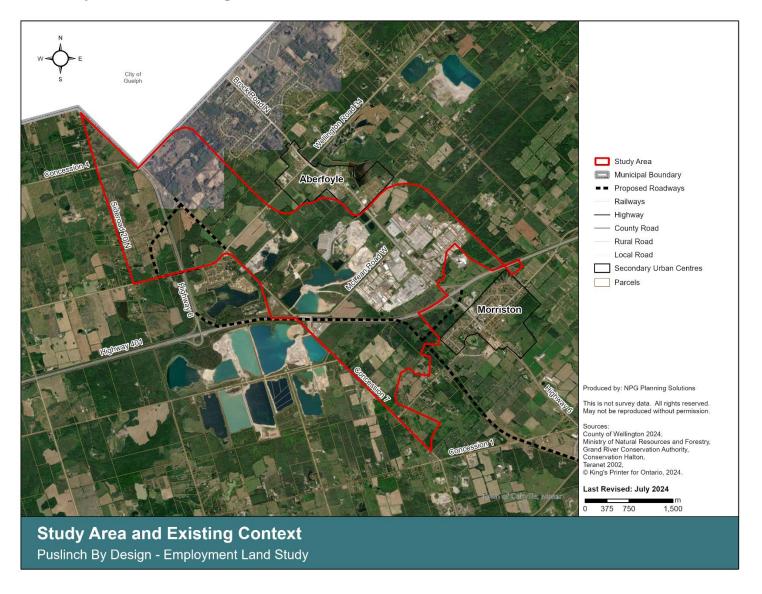
The *Transportation Background Paper* includes a review of the most recent transportation related studies conducted by Wellington County, Puslinch Township and the Ministry of Transportation (MTO) that addresses:

- existing Transportation System constraints and opportunities
- existing Transportation System operations
- planned County Transportation infrastructure
- planned Township Transportation infrastructure
- planned MTO Highway 6 realignment
- future transportation system operations and opportunities

Building on the available transportation studies and transportation operational data, the *Transportation Background Paper* will include supporting analysis related to:

- identifying Employment Land sites access to major transportation systems
- transportation opportunities and constraints related to Rural Employment Land areas
- transportation evaluation criteria for new Rural Employment Land areas

Figure 3.2-1: Study Area and Existing Context



II. Existing Transportation System and Planned Improvements

The transportation system serving the Township of Puslinch includes the following transportation authorities and systems:

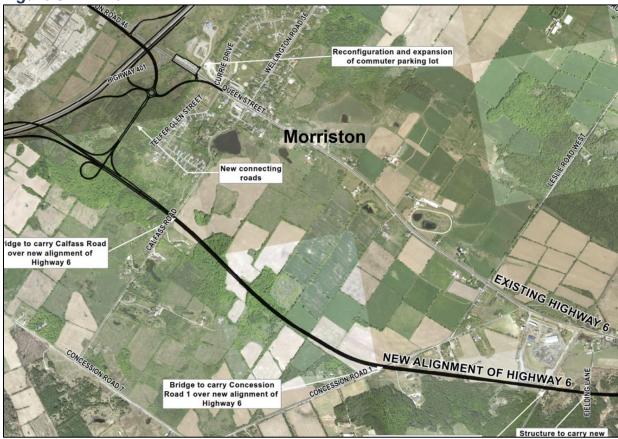
- Ministry of Transportation Highways
- Wellington County Roads
- Township of Puslinch Roads

Ministry of Transportation (MTO) Highway System – Puslinch Township

The MTO highway system includes the Highway 401 corridor that is the major east-west Freeway that traverses the Township of Puslinch providing access to Southwest Ontario including communities in Wellington County and the Township of Puslinch. Specific to the Study Area, Highway 401 is a 6-lane freeway with interchanges located at Highway 6 South/RR 46 and at Highway 6 North. To address increasing auto and truck traffic along the Highway 40 corridor, MTO has plans to continue widening Highway 401 from Townline Road (Cambridge) to Region Road 25 (Milton) to upwards of 10 lanes.

Highway 6 South (Hwy 401 to Maddaugh Road) is a 2-lane highway that experiences traffic congestion through Morriston and at Highway 6 South/Hwy 401 interchange. To address the existing traffic congestion issue, the MTO has plans to construct the Morriston Bypass which is a "new alignment" of Highway 6 that will enhance the Hwy 6 corridor between Guelph and Hamilton. The planned Highway 6/Morriston Bypass is presented in **Figure 3.2-2** – New Alignment of Highway 6/Morriston Bypass.





Alignment of Highway 6 / Morriston Bypass

Highway 6 North (Hwy 401 to Maltby Road) is a 4-lane highway that MTO is planning to upgrade with a new midblock interchange on Hwy 6 / Hanlon Expressway north of Wellington Road 34 as presented on **Figure 3.2-3.**

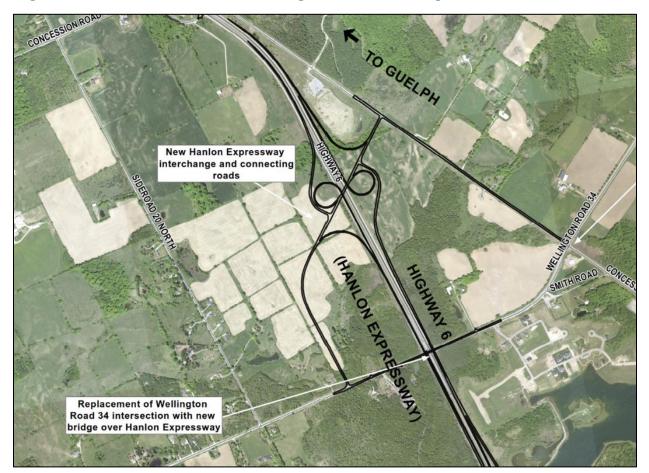


Figure 3.2-3: New Midblock Interchange North of Wellington Road 34

The proposed works for the New Midblock Interchange include:

- Construction of a new interchange on Highway 6 / Hanlon Expressway
- Construction of a new road to connect the Midblock Interchange to Concession Road 7 and to Wellington Road 34
- Removal of the signalized intersection at Highway 6 / Hanlon Expressway at Wellington Road 34 and the addition of a new bridge over the Hanlon Expressway
- Reconstruction of Concession Road 7 between Wellington Road 34 and Maltby Road
- Closure of the Maltby Road / Concession Road 4 intersection
- New roundabout at Wellington Road 34 / Concession Road 7 intersection

An overview of the project limits and the proposed early works is presented in **Figure 3.2-4.** Correspondence from the Ministry of Transportation, dated November 15, 2023, is provided in Appendix A to this Paper, outlining potential access options to the Hanlon Expressway.

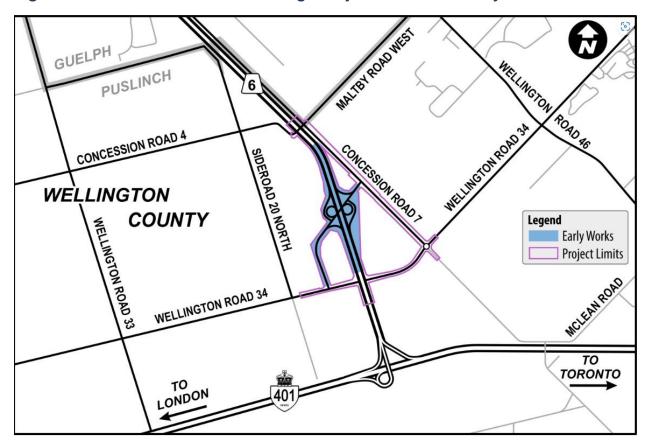


Figure 3.2-4: New Midblock Interchange Project Limits and Early Works

County of Wellington Transportation System – Township of Puslinch

The County of Wellington roads within the Township of Puslinch provide a high-order rural arterial transportation network for both north-south and east-west travel. An overview of the County Road system in Puslinch Township is summarized in **Table 3.2-1** and presented in **Figure 3.2-5 and Figure 3.2-6.**

Table 3.2-1 - County Road	Network Serving	Puslinch Township
---------------------------	-----------------	-------------------

North-South Roadways				
WR 46	Highway 6 / Highway 401 to Maltby Road			
WR 35	Gore Road to Forestell Road			
WR 32	Townline Road (WR 33) to South of WR 124			
WR 41	Arkell Road (WR 37) to Stone Road			
East-West Roadways				
WR 36	Nassagaweya – Puslinch Townline to Highway 6			
WR 34	Nassagaweya – Puslinch Townline to Townline Road (WR 33)			
WR 37	Nassagaweya – Puslinch Townline to Victoria Road South			

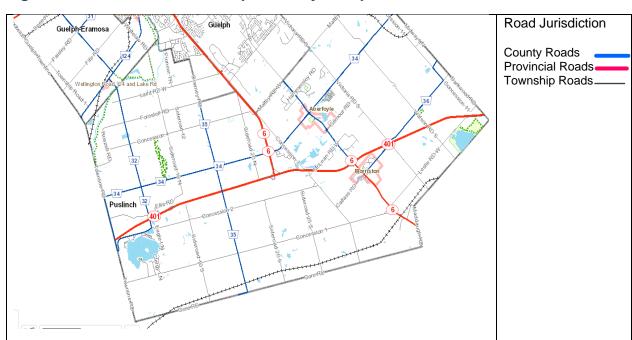
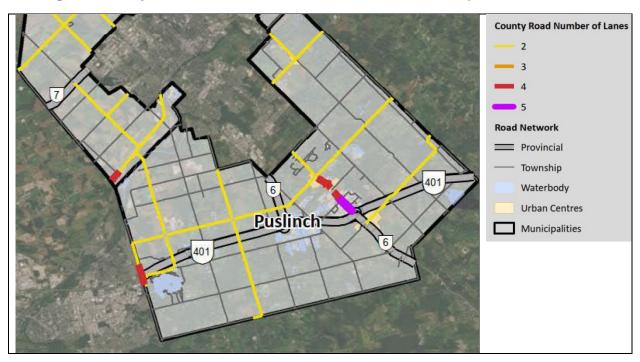


Figure 3.2-5: Puslinch Township Road System j

Figure 3.2-6: Puslinch Township – County Road Network Number of Lanes (Source: Wellington County Road Master Action Plan, December 2021)

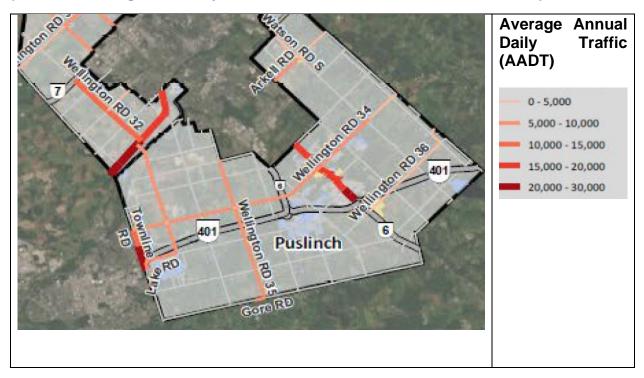


Within the Township of Puslinch, County roads generally consist of 2 lane cross sections except for Wellington Road 46 between Wellington Road 34 and Highway 401 (4 to 5 lanes).

Existing Traffic Flows

Annual Average Daily Traffic (AADT) sourced from Wellington County Traffic Counting Stations provide an overview of existing traffic flows on County Roads within the Township of Puslinch. The traffic count data, circa 2021, indicates that the majority of the County Roads experience daily traffic volumes of 5,000 to 10,000 vehicles per day with WR 46 between Hwy 401 and McLean Rd. experiencing daily traffic volumes of 20,000 to 30,000 vehicles per day. The section of WR 46 north of McLean Rd. experiences daily traffic volumes of 15,000 to 20,000. An overview of existing traffic volumes on County Roads within Puslinch Township are presented in **Figure 3.2-7**.

Figure 3.2-7 – Existing Annual Average Daily Traffic Flows – County Roads (Source: Wellington County Road Master Action Plan, December 2021)



Existing County Road Network Operating Level of Service

The Road Network Action Plan (2021) included an operational analysis (Level of Service-LOS) of the County roads within the Township of Puslinch. The LOS analysis procedure is based on estimating peak hour peak direction traffic flows from existing AADT volumes

and comparing the resulting peak hour peak direction traffic to the following roadway capacity:

- Urban arterial 700 vehicles / lane / hour
- o Rural arterial 900 vehicles / lane / hour
- Rural Highway 1200 vehicles / lane / hour

The resulting Volume / Capacity (V/C) ratio per roadway is translated into an Operating LOS as follows:

- Level of Service A /B V/C 0.0 .50
- Stable flow, low moderate volumes
- Level of Service C V/C .50 .70
- Stable flow, high volumes
- Level of Service D V/C .70 .85
- Unstable flow, high volumes
- Level of Service E V/C .85 1.0
- Unstable flow, approaching capacity
- Level of Service F V/C > 1.0
- Forced flow, congestion, at capacity

An overview of the existing operating LOS on the County roads within Puslinch Township is presented in **Figure 3.2-8**.

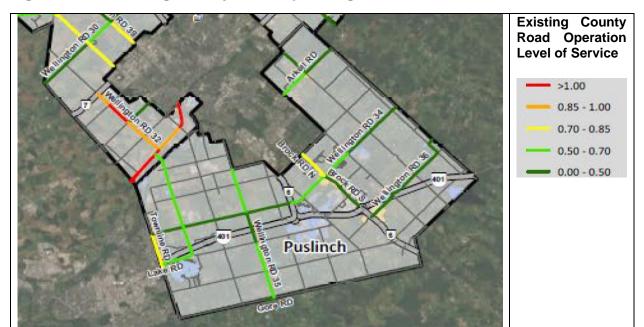


Figure 3.2-8: Existing County Road Operating Level of Service

The majority of County Roads are operating with a V/C ratio of .7 or less which represents a stable operating condition due to low traffic volumes. WR 46 north of WR 34 and Townline Road south of WR 34 are operating with V/C ratio of >.70 to .85 representing a LOS which indicates that these roadways are operating at a stable operating but accommodating high traffic volumes.

Existing Road Safety Overview

Information from Ontario Provincial Police – West Region for the Township of Puslinch indicate that 2023 motor vehicle statistics are significantly higher than recorded for 2020 for fatalities, personal injury and property damage. The primary cause of collisions was:

- Following too closely
- Failed to yield the right of way
- Animal Wild or Domestic

Existing Goods Movement – Township of Puslinch

Wellington County roads serve as routes for the delivery of goods by providing a connected and convenient transportation system for larger trucks. The majority of County roads in the Township of Puslinch experience truck volume percentages of 5% or less with the exception of Wellington Road 34 between Highway 6 and Wellington Road 35 with truck volume percentage ranging from 5% to 10%.

Existing Public Transit –Township of Puslinch

Wellington County provides an ON Demand public transit service called Ride Well which offers curb to curb service within the boundaries of Wellington County and to/from City of Guelph provided the trip starts or ends in the County. Ride Well transit service for Puslinch Township provides mobility for individuals that do not have access to a private automobile or cannot drive.

Township of Puslinch Transportation System

The Township of Puslinch finalized the Roads Management Plan (RMP) in August 2023 which included the following objectives:

- Plan and undertake required maintenance of Township Road system
- Prioritize capital works
- Establish road maintenance service request procedure
- Identify road rehabilitation needs
- Facilitate proactive planning for future operations, replacements, and upgrades

The RMP study identified that over 70% of the existing Township Road system (128 km) is asphalt paved with the remaining 51 km classified as gravel roads. Approximately 90% of the Township Roads are classified as being within a rural environment.

The Pavement Condition Index (PCI) analysis for paved Township Roads identified approximately 63% of the paved road system being classified as Very Good/Good with approximately 26% classified as Fair. The PCI analysis for the Township's gravel road system indicated that 28% of the gravel road system rated Good and with 55% rated Fair.

The RMP included the following discussion on Road Design Standards:

- Proposed (new) roads are expected to be designed by the developer's engineer following the Township's Municipal Development Standards, Section 3.0 Roads and the design to be reviewed by Township staff
- Sections of the existing road network often cannot meet the proposed (new) road design standards, therefore, the RMP recommends the Township rely on the Geometric Design Guide for Canadian Roads
- The Typical Rural Cross-Section provided in the Municipal Development Standards is presented in **Figure 3.2-9**
- The Typical Urban Cross-Section provided in the Municipal Development Standards is presented in **Figure 3.2-10**

Figure 3.2-9: Typical Rural Cross-Section

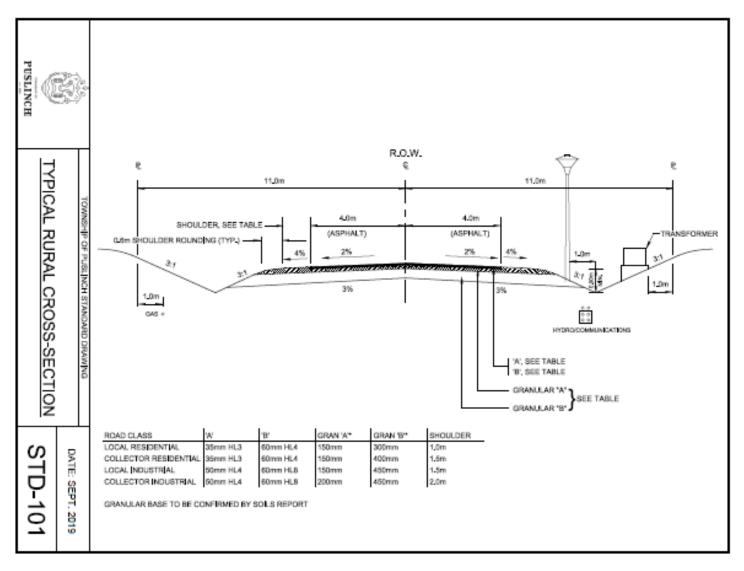
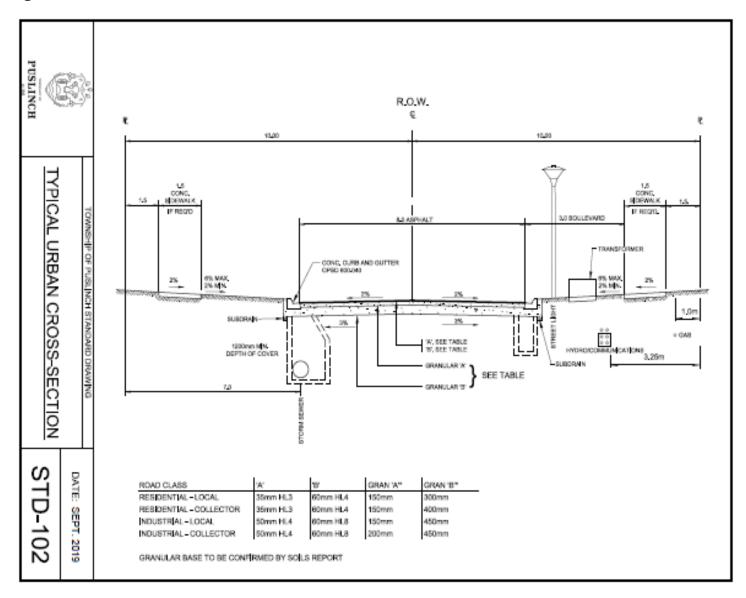


Figure 3.2-10: c



Future Transportation System and Planned Improvements

1.2.4.1 Population and Employment Growth Forecasts

The County of Wellington Official Plan includes growth forecasts for Wellington County with a projected residential population of 160,000 and an employment level of 70,000 which represents growth of 59% and 63% respectively for the 30 -year period between 2016 and 2041.

Specific to the Township of Puslinch, the County of Wellington Official Plan indicates the population and employment will increase by 27% and 36% respectively between 2021 and 2051.

Table 3.2-2 provides a summary of the population and employment growth forecasts for Wellington County and Puslinch Township presented in the County of Wellington Official Plan (July 2024 consolidation).

Table 3.2-2 - Population and Employment Growth Forecasts

Wellington County					
	2016	2021	2051		
Population	95,800	100,800	160,000		
Employment	40,000	43,000	70,000		
Township of Puslinch					
	2016	2021	2051		
Population	7,815	7,900	10,000		
Employment	4,020	5,800	7,900		

1.2.4.2 Road Master Action Plan

The Road Master Action Plan (RMAP) completed by Wellington County in 2021 provides long-term guidance on transportation policy direction and transportation needs. Former Official Plan growth forecasts to 2041 were used as the basis for this Plan. A key component of RMAP study was the review of existing and future traffic and roadway operating level of service using a Transportation Forecasting Model that included the following steps:

- Step 1- Existing Traffic Data
 - Undertake traffic counts at selected traffic count stations
- Step 2 Add Background Traffic Growth
 - Include additional traffic growth exclusive to traffic generated by County population and employment by applying annual compound growth rates to each traffic count station
- Step 3 Add Development Related Traffic Growth

- Forecast development related traffic growth (municipal population and employment forecasts to 2041) using trip generation, trip distribution and trip assignment procedures
- Step 4 Undertake Network Capacity Analysis
 - Capacity analysis of future traffic demand on the existing transportation system to identify areas of traffic congestion and the associated transportation improvements required to address the congestion

A summary of 2041 Average Annual Daily Traffic on the County Road system within Puslinch Township is presented in **Figure 3.2-11**. The majority of the County Roads within Puslinch Township are forecast to experience AADT of 10,000 vehicle or less excepting Wellington Road 46 between Highway 401 and Maltby Road with forecast AADT ranging from 30,000 to 100,000.



Figure 3.2-11: Future Annual Average Daily Traffic (2041)

The transportation forecasting model was used to determine year 2041 areas of congestion on the County Road system using the volume to capacity (V/C) analysis procedure that reflects an road operating Level of Service (LOS).

The resulting Volume / Capacity (V/C) ratio per roadway is translated into an Operating LOS as follows:

- Level of Service A /B V/C 0.0 .50
- Level of Service C V/C .50 .70
- Level of Service D V/C .70 .85
- Level of Service E V/C .85 1.0
- Level of Service F V/C > 1.0
- Stable flow, low moderate volumes
- Stable flow, high volumes
- Unstable flow, high volumes
- Unstable flow, approaching capacity
- Forced flow, congestion, at capacity

The V/C conditions for County roads within Puslinch Township are shown on **Figure 3.2-12**.

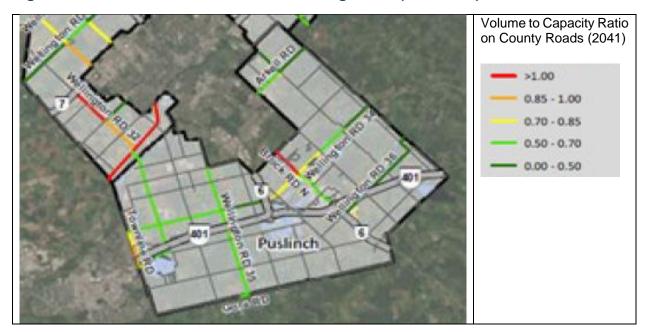


Figure 3.2-12 – Forecast 2041 Network Congestion (V/C Ratio)

The County Road system within the Township of Puslinch is forecasted to have significant traffic congestion and associated future network improvements are:

- Wellington Road 46
 - Wellington Road 46 between Maltby Road and Wellington Road 34 is projected to be over capacity by 2041 operating with a Level of Service F requiring roadway expansion
- Wellington Road 32
 - Wellington Road 32 is projected to exceed capacity between Wellington Road 124 and Highway 7 by 2041 operating with a Level of Service F

III. Applicable Legislation

Planning Act, R.S.O. 1990, Chapter P.13

• Not applicable for the Transportation Background Report

Provincial Policy Statement (2020)

1.6.7 Transportation Systems

1.6.7.1 Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs.

1.6.7.2 Efficient use should be made of existing and planned infrastructure, including through the use of transportation demand management strategies, where feasible.

1.6.8 Transportation and Infrastructure Corridors

- 1.6.8.1 Planning authorities shall plan for and protect corridors and rights-of-way for infrastructure, including transportation, transit and electricity generation facilities and transmission systems to meet current and projected needs.
- 1.6.8.2 Major goods movement facilities and corridors shall be protected for the long term.
- 1.6.8.3 Planning authorities shall not permit development in planned corridors that could preclude or negatively affect the use of the corridor for the purpose(s) for which it was identified. New development proposed on adjacent lands to existing or planned corridors and transportation facilities should be compatible with, and supportive of, the long-term purposes of the corridor and should be designed to avoid, mitigate or minimize negative impacts on and from the corridor and transportation facilities.
- 1.6.8.4 The preservation and reuse of abandoned corridors for purposes that maintain the corridor's integrity and continuous linear characteristics should be encouraged, wherever feasible.
- 1.6.8.5 The co-location of linear infrastructure should be promoted, where appropriate.
- 1.6.8.6 When planning for corridors and rights-of-way for significant transportation, electricity transmission, and infrastructure facilities, consideration will be given to the significant resources in Section 2: Wise Use and Management of Resources.

Provincial Planning Statement (2024 Draft)

3.2 Transportation Systems

- 1. Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, are appropriate to address projected needs, and support the use of zero- and low- emission vehicles.
- 2. Efficient use should be made of existing and planned infrastructure, including through the use of transportation demand management strategies, where feasible.
- 3. As part of a multimodal transportation system, connectivity within and among transportation systems and modes should be planned for, maintained and, where possible, improved including connections which cross jurisdictional boundaries.

3.3 Transportation and Infrastructure Corridors

- Planning authorities shall plan for and protect corridors and rights-of-way for infrastructure, including transportation, transit and electricity generation facilities and transmission systems to meet current and projected needs
- 2. Major goods movement facilities and corridors shall be protected for the long term.
- 3. Planning authorities shall not permit development in planned corridors that could preclude or negatively affect the use of the corridor for the purpose(s) for which it was identified. New development proposed on adjacent lands to existing or planned corridors and transportation facilities should be compatible with, and supportive of, the long-term purposes of the corridor and should be designed to avoid, or where avoidance is not possible, minimize and mitigate negative impacts on and adverse effects from the corridor and transportation facilities.
- 4. The preservation and reuse of abandoned corridors for purposes that maintain the corridor's integrity and continuous linear characteristics should be encouraged, wherever feasible.
- 5. The co-location of linear infrastructure should be promoted, where appropriate.

Growth Plan for Greater the Golden Horseshoe (Office Consolidation 2020)

The Growth Plan for the Greater Golden Horseshoe recognizes the importance of efficient transportation and transit systems to support growth and enhance quality of life. Here are some ways it addresses these needs:

- Transit-Oriented Development (TOD): The plan encourages development around transit hubs, promoting walkable communities and reducing reliance on cars.
- 2. **Intensification Targets**: It sets targets for intensification (redevelopment within existing urban areas), which can lead to better transit utilization.
- 3. **Complete Streets**: The plan promotes "complete streets" that accommodate pedestrians, cyclists, and transit users alongside vehicles.
- 4. **Active Transportation**: It emphasizes walking and cycling infrastructure, connecting neighborhoods and transit nodes.
- 5. **Regional Transit Networks**: The plan supports regional transit networks, including GO Transit, municipal transit, and future high-speed rail.
- 6. **Coordination with Infrastructure**: It aligns land use planning with transportation infrastructure investments

County of Wellington Official Plan

9.8 PUSLINCH LOCAL POLICIES

9.8.1 Wellington Rd 46

Specific development policies have been established for Wellington Rd 46 to ensure that proposed *development* will not interfere with the safe and efficient operation of this transportation corridor. The following policies are to be considered:

- a) For every development where direct access to Wellington Rd 46 is proposed, identify the following:
 - posted speed limit;
 - clear sight distance along the roadway in both directions from the mouth of the access
 - approach grades on access driveway;
 - traffic controls:
 - existing width of county road right-of-way adjacent to the site;
 - width of paved roadway and shoulders;
 - turning or stacking lanes on roadway;
 - width of access driveway and radii of corners;
 - distance between proposed driveway and existing driveways on adjacent sites;
 - project trip ends for average day and peak hours on roadway.
- b) For every industrial and commercial development project which generates more than 50 additional peak direction trips to or from the site during the roadway's peak hour, a complete traffic impact study is required to be submitted to the County Engineer.
- c) Where a site has frontage and access to a local township road or Wellington Rd 34, new commercial or industrial access to Wellington Rd 46 is not permitted;
- d) In areas designated industrial or commercial, each new driveway for commercial or industrial access shall be separated from other industrial or commercial driveways located on the same side of the road by 100 metres, where access is acceptable;
- e) In areas designated industrial or commercial, a maximum of one driveway for commercial or industrial access is permitted for each existing property with up to 100 metres of frontage along the county road, where access is acceptable;
- f) In areas designated Secondary Agricultural, each new driveway for commercial or industrial access shall be separated from other industrial or commercial driveways located on the same side of the road by 300 metres, where access is acceptable;
- g) Where feasible, mutual driveway access to a county road and service roads are required;
- h) Obtain evidence that approval from the County of Wellington is available with regard to access driveway location and design, improvements to County Road, including turning lanes, traffic controls, stacking lanes;
- i) Identify content of agreement with the County regarding financial responsibility for road improvements on the County Road and construction access driveway.

4.6.4 Traffic Impacts Assessment

Where a development proposal may add significant volumes of traffic to a road system or where development is proposed in an area with recognized road deficiencies, a Council may require a traffic impact assessment. The assessment may include any or all of the following:

- a) pre and post development traffic patterns and volumes;
- b) structural adequacy and capacity of the existing and proposed road system;
- c) convenience, accessibility and safety of the site for people and vehicles and the effect on traffic customarily on the road;
- d) sight distance visibility;
- e) grade (slope) of road;
- f) suitability of the road for all weather conditions;
- g) suitability of the site or roads for snow plowing and removal;
- h) pedestrian and bicycle traffic flows and potential conflicts, particularly where schools or senior facilities are nearby;
- i) ability of new roads to meet municipal standards;
- j) means by which negative impacts will be reduced or eliminated;
- k) such additional concerns as a Council may consider relevant.

Section 12 of the Official Plan provides general policies for transportation in Wellington County and encourages safe and efficient transportation systems that are environmentally responsible and convenient for users. Within Section 12.5.3, major roadways are expected to provide and serve high volumes of traffic, including truck traffic.

IV. Best Practices Review

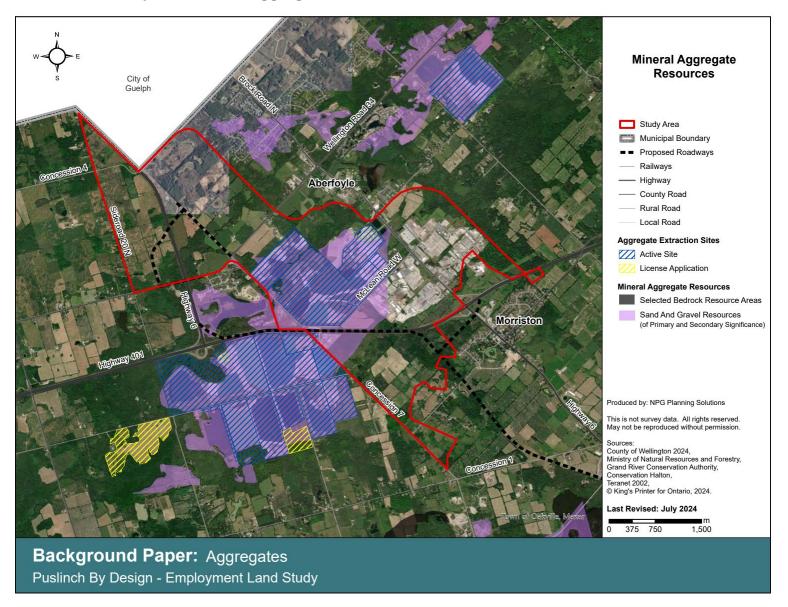
The Wellington County Road Master Action Plan (RMAP) and the Township of Puslinch Roads Master Plan (RMP) provide an excellent data base for both the existing and future transportation needs and roadway design standards to address Employment Land use Considerations and Land use Compatibility Considerations.

V. Study Area and Implications for Identifying Land use Options

The extent of Active Aggregate Extraction Sites within the Township of Puslinch and especially within the Employment Lands Study Area is presented on **(Figure 3.2-13).** The associated heavy truck movements associated with the Aggregate Sites will have operational and safety concerns in the review and development of Land Use Options as well as applicable road design requirements.

The proposed Highway 6 / Morriston Bypass as planned provides opportunities for changing land use and travel patterns. Thus, the planned transportation network is a positive support for identifying land use options.

Figure 3.2-13 – Township of Puslinch Aggregate Sites



VI. Potential Evaluation Criteria

Table 3.2-3 provides potential evaluation criteria to assess potential new employment growth areas that will minimize impacts land use planning conflicts. Criteria are separated into two categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which evaluate the option based on a Likert scale of five degrees of impact. There are no screening criteria for Transportation.

Screening Criteria

None.

Evaluation Criteria

Table 3.2-3 – Potential Evaluation Criteria

Criteria	Criteria Response				Criteria Reference (if applicable)	
	Best Option	Better Option	Acceptable Option	Less Preferred Option	Least Preferred Option	
Accessibility to Highway 401 Interchange	Within 1 km of Interchange	Within 2 km of Interchange	Within 3 km of Interchange	Within 4-5 km of Interchange	Greater than 5 km from interchange	PPS 2020 – 2.5.1; 2.5.2.4; 2.5.2.5 County OP Mapping
Potential impacts of the midblock interchange project and the Morriston Bypass on access to Highway 6	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	

Criteria	Criteria Response				Criteria Reference (if applicable)	
and Highway 401						
Proposed Employment Lands Access/Egress from County Road	Signalized site access with advanced signal timing for left turn movements	Signalized suite access allows for all movements but no advance signal timing for left turn movements	Unsignalized access allows all inbound and outbound movements	Unsignalized access allows inbound left and right movements only, no through	No direct access	PPS (2020) PPP (2024 County OP County RMAP
Potential impacts on traffic demand and capacity of existing roads	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	
Potential Access to Major Transit Service	Existing transit service extended to Employment Lands	Municipal and Inter County planned transit service available	Planned inter county transit service available	Limited transit service connections	No transit service connections	PPS (2020) PPP (2024 County OP GGHTMP (2020)
Potential Active Transportation Connections	Direct Access to existing trail and bike lane systems serving Guelph and Wellington County	Direct access to existing trail and bike lanes systems serving Wellington County	Access to County Road network with planned designated bike lanes	Limited active transportation opportunities	No Active Transportation Opportunities	PPS (2020) PPP (2024 County OP County RMAP GGHTMP (2020)

VII. Data Sources

County of Wellington Official Plan

County of Wellington Road Master Action Plan

Township of Puslinch Road Master Plan

Township of Puslinch Municipal Development Standards

Ministry of Transportation – Correspondence Nov 15, 2023

Highway 6 Midblock Interchange - Concession Road 4 Closure

OPP West Region Data Summary for Motor Vehicle Collisions and Speeding

Data Management Group - 2016 Transportation Tomorrow Survey

Greater Golden Horseshoe Transportation Plan

Growth Plan for Greater the Golden Horseshoe

Appendix A - Ministry of Transportation Correspondence

Ministry of Transportation

Design and Engineering Branch Project Delivery West

659 Exeter Road London, Ontario N6E 1L3 Telephone: (519) 873-4561 Facsimile: (519) 873-4600

Nov 15, 2023

Mayor James Seeley 7404 Wellington Road 34 Puslinch, Ontario NOB 2J0

Ministère des Transports

Direction de conception et d'ingénierie Section de la livraison du projet de l'Ouest

659, chemin Exeter London (Ontario) N6E 1L3 Téléphone: (519) 873-4561 Télécopieur: (519) 873-4600



RE: Highway 6 Midblock Interchange - Concession Road 4 Closure

Dear Mayor Seeley,

Thank you for your comments on the Highway 6 (Hanlon Expressway) Midblock Interchange Project regarding a request to create a right-in-right-out access to/from the Hanlon Expressway at Concession Road 4. The ministry appreciates the opportunity to respond.

The plan for closure of Concession Road 4 on the west side of the Hanlon Expressway was included within the Recommended Plan documented in the Transportation Environmental Study Report (TESR) prepared as part of the Environmental Assessment (EA) for GWP 3002-05-00 Highway 6 (Hanlon Expressway) Improvements from 0.5 km South of Maltby Road to Speed River, June 2009. This EA was approved on November 17, 2009.

The need to close these roads at the Hanlon Expressway is driven by the proximity of the Midblock Interchange north of Wellington Road 34 and south of Concession Road 4 / Maltby Road which is included in the Recommended Plan identified by the approved Environmental Assessment and Preliminary Design Report (EA/PDR) for WP 65-76-05 Highway 6 Freelton to Guelph, and currently under construction.

The ministry has been building the Hanlon Expressway to be a fully controlled-access freeway with access restricted to interchange locations only when it has been fully upgraded. Removing the at-grade intersections will help address growing traffic demands and the need for operational and safety improvements. Once the Wellington Road 34 intersection and Concession Road 4 / Maltby Road intersection have been replaced by the Midblock Interchange, the Hanlon Expressway will operate consistently as a fully controlled-access freeway from Highway 401 to Laird Road. The ministry has another project in design, Highway 6 (Hanlon Expressway) Interchanges from Maltby Road northerly to the Speed River, that will extend the limits of the fully controlled -access freeway portion to Wellington St W, in Guelph when completed.

The Ministry has reviewed the Township's request for a right-in-right-out access to/from Hanlon Expressway at Concession Road 4. The request cannot be accommodated for the following reasons:

There would be approximately 1 km spacing between the partial Concession Road 4
 Interchange and the Midblock Interchange. Based on the MTO Highway Corridor
 Management Manual, the minimum interchange/access spacing for a Freeway or
 Staged Freeway is 2.0 km, with 3.0 – 8.0 km being desirable.

 As a result, the proximity of Concession Road 4 to the new Midblock interchange,
 would not provide sufficient space for accelerating or decelerating vehicles to
 complete the transition safely from/to the entrance/exit ramps between interchanges.

- There are noted sight distance challenges associated with the Midblock Interchange southbound off-ramp. Southbound traffic approaching the interchange has a limited sightline to the exit due to the rolling terrain of the region. To aid southbound drivers the recommended plan for the interchange includes an advance overhead sign located approximately 170 m south of Concession Road 4 increasing driver workload here. Maintaining any access presents a safety concern related to additional driver workload and possible driver confusion associated with traffic entering from Concession Road 4.
- The Ministry is currently in the process of increasing the posted speed of some freeways
 to 110 km/h. If the posted speed along the Hanlon Expressway were to be increased to
 110 km/h, the on-ramp speed change lane would need to be extended, resulting in
 overlapping speed change lanes or a continuous speed change lane between sequential
 ramps which is an undesirable condition.

The Township could consider the following alternatives for improved access for the northwest quadrant of Concession Road 4 to the Hanlon Expressway:

• Extending Few Street to connect with Forestell Road (Figure 1). On the west side of Hanlon Expressway, Laird Road (the segment contiguous with the interchange) currently ends at Few Street. Vehicles in the Concession Road 4 / Sideroad 20 area wishing to access the Laird Road interchange would currently use Sideroad 20, Forestell Road, Downey Road, Laird Road, and Hanlon Creek Boulevard. Extending Few Street to connect with Forestell Road would help improve municipal access to Laird Road interchange by cutting travel distance.



Figure 1 - Extend Few Street to connect with Forestell Road

 Constructing a new roadway, to provide access to the Midblock Connection Road (Figure 2). This would help minimize out-of-way travel for vehicles on the west side of Hanlon Expressway, as well as shift development traffic away from Sideroad 20. This new roadway would require property acquisition resulting in impacts to agricultural fields and some vegetated areas.

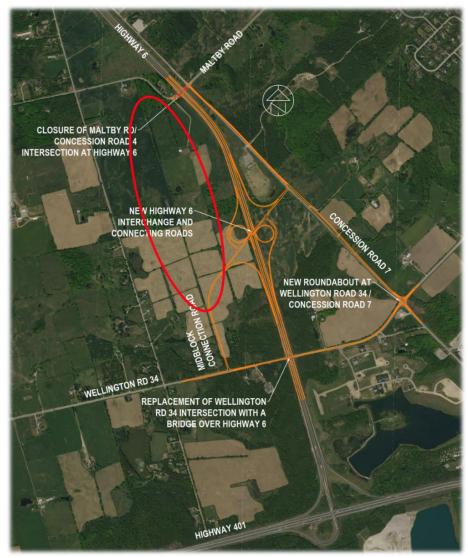


Figure 2 - Construct new road to connect with Midblock Connection Road

Constructing a new flyover structure to provide access to the interchange and points
east. Based on the roadway geometrics, Concession Road 4 would likely need to be
realigned to the north to provide sufficient spacing for the grade separation. Due to the
new flyover structure and associated grading impacts, there would likely be property
and environmental impacts on both the east and west side of the Hanlon Expressway.

Ministry staff are willing to meet with Township of Puslinch staff to futher discuss these comments and options or any other options. Please feel free to contact Olga Khuskivadze, Senior Project Engineer at Olga.Khuskivadze@ontario.ca if you would like to discuss further.

Once again, than you for sharing your comments on the Highway 6 (Hanlon Expressway) Midblock Interchange Project.

Robert Bakalarczyk

Robert Bakalarczyk, P.Eng. Head, Project Delivery West

3.3 Background Paper: Municipal and Private Servicing

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington

By King EPCM

Land use Planning and Compatibility

I. Purpose

King EPCM (the Engineer) is a part of the group of consultants, led by NPG Planning Solutions Inc., preparing the *Puslinch By Design: Employment Land Study*. This Paper includes review of existing municipal servicing conditions, availability, and identifies potential issues that may arise.

II. Existing Conditions

1. 2018 LOCAL TIER MUNICIPALITY - SERVICING STUDY

The Township of Puslinch completed a municipal water and sewage servicing study in 2018 (CIMA, 2018). A questionnaire and polling showed that greater than 60% of residential owners were against new municipal water and sewage servicing, while for employment landowners (industrial, commercial, institutional), between 30-37% was against new municipal water and sewage servicing. The Township ultimately decided not to provide municipal servicing. Additionally, it was stated that the Township of Puslinch did not want to enter into assumption agreements for communal water and/or wastewater systems (a requirement in Ontario).

2. 2022 UPPER TIER MUNICIPALITY - SERVICING STUDY

Wellington County completed a Municipal Comprehensive Review for Municipal Servicing Analysis, in 2022 (WSP, 2022). The Township of Puslinch does not have municipal servicing infrastructure, and therefore no detailed study was undertaken for Puslinch. The consultant confirmed in the report that all water and wastewater services are provided by private wells and private wastewater treatment or septic systems. It was discussed by the consultant that private communal systems would be required, and where not feasible, must have partial or on-site individual servicing:

The Township of Puslinch does not have municipal servicing infrastructure but is projected to accommodate some growth within the County over the planning horizon(3). Without municipal servicing infrastructure, Puslinch will need to accommodate growth through private communal systems, or where this is not feasible, through partial or on-site individual servicing.

3. EXISTING MECP ECA REVIEW

King EPCM conducted a detailed Ministry of Environment, Conservation and Parks data review (this information can be made available upon request), specifically for any and all relevant Environmental Compliance Approvals (ECAs). The Study Area for the proposed Employment Land Study (ELS) is currently a mix of existing large-scale heavy industrial, aggregate extraction / aggregate refinement and value addition, and vacant agricultural lands. ECA is the Provincially mandated system when managing any on-site sewage

systems greater than 10,000L/day, any water-taking activities greater than 50,000L/day, and any sewage treatment for discharge into a watercourse (both stormwater, industrial or any other requirements). For large complex systems (such as large industrial uses, or communal shared systems), it is reasonable to assume that it would trigger a relevant MECP ECA.

On-Site Sewage System (Septic System)

Based on the King EPCM review, there does not seem to be any existing communal onsite sewage systems within the Study Area. However, several sewage works ECAs were found for large septic systems of industrial business centre. King EPCM believes that for the existing industrial lands, each commercial / industrial lot generally have a large area, with sufficient lands to construct large private sewage treatment units (septic systems).

Wastewater Treatment Plant (WWTP)

No dedicated wastewater treatment plant (sanitary sewage for discharge into watercourse) was found. All industrial / commercial lands have sufficient surface area to dispose of sanitary wastes into septic systems.

Stormwater Management (SWM)

Based on King EPCM's review, there are multiple MECP ECA records for large stormwater management within the Study Area. The most important is the Carroll Pond Stormwater Management permit.

The Carroll Pond ECA was designed for the purpose of:

expanding of the existing Carroll pond stormwater management Works for the treatment and disposal of stormwater runoff from a catchment area of approximately 80 hectares, to provide attenuation and flood protection, discharging to the St. Mary's Cement Inc. pond, for all storm events up to and including the 100-year return storm, consisting of the following:

a stormwater management system to service the existing industrial, commercial and agricultural catchment area, located on both sides of Brock Road in the Township of Puslinch, relying on one 2 cell extended detention pond, having a permanent pool volume of 1,216 m3, an active detention volume of 23,667 m3, a total storage volume of 41,217 m3 complete with 600 mm diameter inlet from a catchment area of approximately 20 hectares and 450 mm inlet complete with 300 mm orifice from the existing extended detention Carroll pond, forebay, emergency overflow weir and 900 mm outlet storm sewer complete with 600 mm orifice allowing a maximum discharge rate of 1.93 m3/s to the existing St. Mary's Cement Inc. pond which drains to the Mill Creek which flows to the Grand River;

Other than the above-noted Carroll Pond, a significant number of large industrial sites carry their own MECP ECA for stormwater management of large areas, such as

- Cascade (Canada) Ltd. for SWM catchment area of 80Ha
- Royal Canin Canada Company for SWM catchment of 8.57Ha
- TransX and Co. for SWM catchment area of 11.6Ha

Permit To Take Water (PTTW)

Based on King EPCM review, there does not seem to be any existing communal water wells within the Study Area. This is most likely because for each industrial property, the industrial water demand is quite varied between each business owner and cost-sharing / volume capacity sharing would be difficult to manage. It can be demonstrated that for each business which requires significant water, the business has pursued their own independent water well.

Additionally, where heavy industrial uses require additional industrial water, due to the significant number of aggregate extraction properties within the Study Area, each industrial business uses the water within their own dug-out pond in order to process their materials on-site. Other specialty uses include bottled water activities, pavement equipment, concrete plants, etc.

III. Applicable Legislation Planning Act

In general, through the previously discussed evaluation reports in 2018, the Township of Puslinch has decided against municipal services, and in general, the municipal servicing portion of the *Planning Act* of Ontario does not significant affect the Employment Lands Study area.

Development charges for these areas are expected to be lower than other comparative regions, as without municipal servicing costs, there is a lower development charge.

Every business owner will be required to provide their own private services or must contribute to a communal service system if the Township agrees to an assumption agreement.

Provincial Policy Statement (2020) and anticipated Provincial Planning Statement (2024)

Section 1.6.6 of the Provincial Policy Statement (2020) describes Sewage, Water and Stormwater. Specifically, Section 1.6.6.4 describes:

Where municipal sewage services and municipal water services or private communal sewage services and private communal water services are not available, planned or feasible, individual on-site sewage services and individual on-site water services may be used provided that site conditions are suitable for the long-term provision of such services with no negative impacts. In settlement

areas, individual on-site sewage services and individual on-site water services may be used for infilling and minor rounding out of existing development.

At the time of the official plan review or update, planning authorities should assess the long-term impacts of individual on-site sewage services and individual on-site water services on the environmental health and the character of rural settlement areas. Where planning is conducted by an upper-tier municipality, the upper-tier municipality should work with lower-tier municipalities at the time of the official plan review or update to assess the long-term impacts of individual on-site sewage services and individual on-site water services on the environmental health and the desired character of rural settlement areas and the feasibility of other forms of servicing set out in policies 1.6.6.2 and 1.6.6.3.

Growth Plan for the Greater Golden Horseshoe (Office Consolidation 2020)

There are no specific policies that discuss private servicing requirements, such as water supply, sanitary sewer, stormwater management, etc.

County of Wellington Official Plan

County Official Plan Sections 11.2 discuss water and wastewater services and storm water management applicable to all local municipalities, including Puslinch.

Objectives in 11.2.2 for water and sewage services include:

- a) to protect the quality and quantity of ground and surface water;
- b) to deliver an adequate supply of potable water and means of sewage disposal to meet the needs of existing and future residents and businesses;
- c) to encourage development to use the highest level of service practical based on a priority of municipal, then private communal and then individual on-site services;
- e) to promote efficient water use and to minimize waste water flows;
- f) to ensure that adequate capacity exists in municipal water and sewage services to serve both residential and economic development activities;

The determination of sufficient reserve sewage system capacity shall include treatment capacity for hauled sewage from private communal sewage services and individual onsite sewage services.

g) to implement strategies to make optimum use of water and sewage services where constraints exist.

Policies in Section 11.2 for Water and Sewage state:

11.2.3 Servicing Options Assessment

Site specific multi-lot or multi-unit development applications relying on private communal or individual on-site servicing may be required to:

- assess site and soil suitability and the viability of all reasonable servicing options;
- recommend the type of sewage disposal system and establish appropriate lot, unit and/or block sizes, acceptable to the local municipality which demonstrate suitability for the onsite services;
- assess the impact of the proposed means of servicing on: ground and surface water and associated ecological functions; potential interference with other wells; potential adverse impacts to natural features.

Where any private communal services are recommended, the Servicing Options Assessment will address to the satisfaction of the municipality:

- o that the land is held under one ownership;
- o requirements for a responsibility agreement signed with the municipality that will be registered on title to provide for the operation and maintenance of the system and the take over and cost recovery in the case of a failure of the system or of the owner to properly operate the system; and
- that the capacity of the system will be sufficient for the size and density of development proposed, including an appropriate amount of excess capacity.

Construction of new, or expansion of existing municipal or private communal water and wastewater systems should only be considered where the following conditions are met:

- strategies for water conservation and other water demand management initiatives are being implemented in the existing service area; and
- plans for expansion or for new services are to serve growth in a manner that supports achievement of the intensification target and density target.

11.2.6 Rural System Servicing

The following water and sewage policies apply in the rural system outside of secondary urban centres and hamlets:

- a) development in the rural system is anticipated to be on individual on-site systems where soil conditions are suitable over the long term;
- b) private communal services may be allowed in recreational developments or if specifically allowed in a special policy area subject to the recommendations of a Servicing Options Assessment as set out in Section 11.2.3.

IV. Study Area and Implications for Identifying Lands-Use Options

Given that the 2018 and 2022 servicing reports by both lower tier and upper tier municipality has confirmed there are and will not be any municipal services, any potential employment lands that must obtain their own servicing.

Potable and Industrial Water Supply

Water supply (both potable and industrial) can generally be managed on-site by each individual landowner, through the drilling of a O. Reg 903 potable water well. Groundwater is relatively shallow in the area and can be found in open ponds by the nearby aggregate resources excavations. Potable water quality must be established through various testing, though in an employment lands setting, each business owner may have a small water treatment train for the water well, where certain parameters does not meet the Ontario Drinking Water Standards.

Firefighting Water Supply

As per the Ontario Building Code and various levels of Planning framework, adequate firefighting water and supply must be provided as part of servicing review.

In general, firefighting water is separated into several separate types:

- On-site private / communal system
 - Fire sprinkler system (static storage, private pump, connected to various types of manual, automatic, 24/7 monitored systems, etc.)
 - Private static water reservoir (dug ponds, underground reservoirs, etc.)
- Municipal services water supply system
 - Fire sprinkler system connected with municipal watermain supply
 - Fire hydrants connected to municipal watermain supply
 - Public watercourses and lakes

Generally, static water reservoir minimum volume requirements become excessively large for multi-acre heavy-duty industrial buildings, and in general are not realistic. Instead, it is recommended that for all industrial and commercial buildings that a private-serviced fire sprinkler system to be installed for each property. In most situations, where fire sprinklers fully cover the entirety of a building, then static water storage requirements would be waived.

Sanitary Sewage

In general, employment lands are made up of large land areas, and usually have sufficient surface area for the construction, maintenance, and operation of on-site sewage systems (septic beds). *Ontario Building Code* Part 8 deals directly with sanitary sewage systems less than 10,000L/day, while MECP ECA would be required for any systems greater than 10,000L/day.

Where industrial sub-division is proposed for high-density employments (such as high-density industrial condominiums with a large unit count and small footprint per each unit), Ontario MECP Guideline D-5-5 and D-5-4 are readily available to investigate the influence of high-density septic systems in a large massing scenario, and their influence on potable water supply.

Sufficient low-cost sanitary sewage treatment units, such as OBC Class IV-B, tertiary treatment units, are available with relatively low installation and low maintenance costs. It is recommended that both upper tier and lower tier municipality update their engineering guidelines for hydrogeology to allow for the use of weekend balanced discharge, tertiary treatment unit, and other additional technologies for review.

From a regulatory perspective, sanitary sewage volumes less than 10,000L/day falls under OBC, and Class IV-B tertiary system septic systems must have a yearly maintenance inspection, including sewage concentration testing, completed by a Certified Professional. Systems greater than 10,000L/day falls under MECP ECA, which is a provincial programme and generally not under the purview of local or upper tier municipality.

There are some small-scale existing residential uses either within the Study Area, or just immediately outside of the Study Area. Detailed site plan should be evaluated for each development in order to confirm that regional on-site sewage systems can adequately protect the groundwater for a drinking water supply to these residents, as per the Ontario Drinking Water Standards. MECP Guideline D-5-5 and D-5-4 must be completed for each industrial sub-division, especially as it pertains to regional development with nearby residential uses that depend on the aquifer for drinking water.

Stormwater Sewage

Additional investigation is required to determine what is the current catchment area for each of the large catchment SWM ECAs (such as Carroll Pond ECA and other large industrial SWM ECAs), but for most large industrial employment lands, the requirement to prevent additional flooding hazards (quantity control) and to prevent discharge of nutrients or contamination (quality control) is mandatory.

There are sufficient engineering knowledge and solutions, such that for most properties, stormwater sewage is not a concern, although shared roadside ditching / point source discharge need to be reviewed. Business owners and employment landowners would be strongly incentivized to be allowed higher development density / more intensive uses, and they must conform to engineering requirements to manage the quantity and quality of their own stormwater, as well as any upland receiving areas.

Significant landmasses that are currently undeveloped agricultural or forested areas currently has sheet flow during large storm events. Where concentrated point discharge for a post-development employment setting, then largescale community coordination is required.

Finally, floodplain and watercourse review should be coordinated with Grand River Conservation Authority to confirm that any employment land storm sewers may discharge into the local watercourse. Generally, low-risk commercial or institutional lands may be developed with a Site Plan Agreement with the Town and review by GRCA, while high-risk industrial / commercial lands will require a dedicated MECP ECA for industrial storm treatment prior to discharge.

V. Evaluation Criteria

Table 3.3-1 provides potential evaluation criteria for each servicing category, to assess impacts to the environment, neighbours, or other recipients. Criteria are separated into two categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which evaluate the option based on a Likert scale of five degrees of impact.

Screening Criteria

None.

Evaluation Criteria

Table 3.3-1: Potential Evaluation Criteria

Potential Evaluation Criteria	Criteria F	Response				Policy Direction and/or Best Practice Guidance
Will the increase in private potable / industrial water demand affect the regional groundwater supply, such as impacting the yield of existing wells by sensitive land uses such as residential?	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	Ministry of Environment Guideline D-5-5 Private Wells: Water Supply Assessment.
Will there be sufficient firefighting water supply while lacking municipal watermain / fire hydrants?	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	Private sprinklers may fully replace the requirements for fire hydrants / fire reservoir storage ponds.
Will significant regional private on-site sewage systems cause additional risks to regional groundwater and potable water supply, especially to nearby residential land uses?	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	Ministry of Environment Guideline D-5-4 Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment is the guiding principle / technical threshold to meet. Heavy density for employment lands may be required to utilize additional sewage treatment technologies, such as OBC Part 8 Level IV Treatment Units / Ontario BMEC certified treatment units, or other small-scale sewage treatment plant as per MECP ECA process

Potential Evaluation Criteria	Criteria Response					Policy Direction and/or Best Practice Guidance
Will the proposed development cause additional stormwater impacts (both quantity and quality) on downstream recipients (either private owners, or watercourses)?	_	Minimal Impact	Modest Impact	High Impact	Critical Impact	All development must ensure that stormwater discharge can be controlled, such that the average post-development conditions for quantity and quality meets the same average of predevelopment conditions. This requirement is within all tiers of authority approvals, such as local Township of Puslinch, Wellington County, or Conservation Authorities. Point source discharge versus large sheet flow discharge may require additional studies and review.

I. Data Sources

Township of Puslinch feasibility study for municipal water and sewage servicing, public information centre, CIMA, March 2018

Memo – Municipal comprehensive review municipal servicing analysis (To Wellington County), WSP, Jan 2022

Ontario Building Code, 2016 as amended

Water Supply for Public Fire Protection, A Guide to Recommended Practice in Canada, Fire Underwriters Survey, 2020

Publication OFM-TG-03-1999, Fire Protection Water Supply Guideline for Part 3 in The Ontario Building Code, Oct 1999, Office of the Fire Marshal

3.4 Background Paper: Land Use Planning & Land Use Compatibility

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington By NPG Planning Solutions Inc.

I. Purpose

The purpose of this paper is to review the key elements of land use planning that are integral to good decision-making for employment planning, and to consider factors impacting land use compatibility to ensure the decisions on additional Rural Employment lands reflect the broad community interest. This paper will review applicable Provincial and County legislation, policies, and best practices for employment planning and land use compatibility considerations in comparable municipalities. Overall, the paper will summarize the land use considerations in planning for new employment lands and provide an initial analysis of land use compatibility policies that should be considered for subsequent phases of the *Puslinch By Design* Study. This paper will also recommend criteria to minimize or mitigate potential negative land use impacts when considering a new employment growth area.

II. Existing Conditions

As shown in **Figure 3.4-1**, the Study Area is bounded by the City of Guelph to the north and abuts the Township's Secondary Urban Centres, Aberfoyle to the east, and Morriston to the south. Notably, the Study Area directly abuts a residential subdivision bounded by Wellington Road 34 to the north, Highway 6 to the west, and Concession Road 7 to the east. This residential subdivision is part of the County's Policy Area 7-3 Reid's Heritage Lake, which permits country residential development and interim aggregate uses. Directly south of the Study Area is the Greenbelt Area, which establishes an important contextual relationship for land use compatibility, agriculture, and rural character/design.

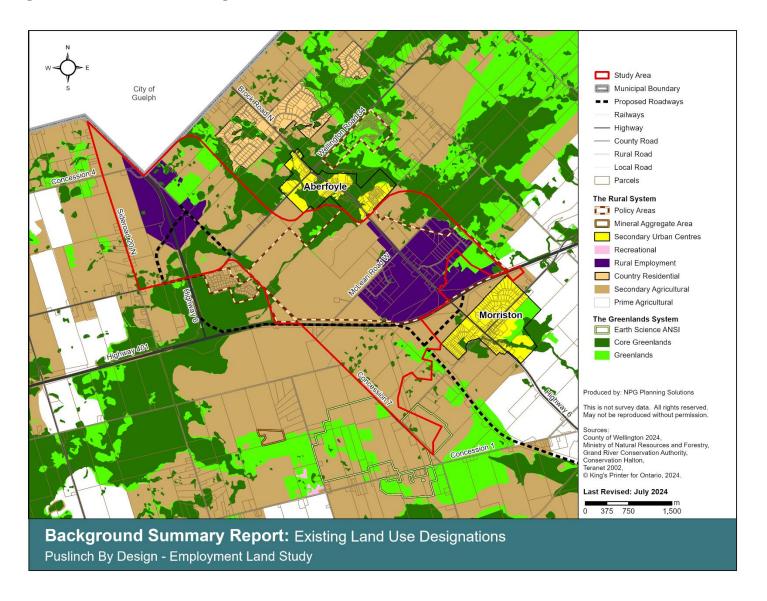
The Study Area is comprised of lands that are predominantly designated Secondary Agricultural in the County Official Plan, along with lands designated Greenlands, Core Greenlands, and two Rural Employment Areas (see **Figure 3.4-2**). The Township's existing Rural Employment Areas are located south of the City of Guelph, along Provincial Highway 6 and along Provincial Highway 401 and County Road Brock Road South. Throughout the Study Area, Highway 6, Concession 7 Road and Brock Road South function as the primary north-south roadways, with Highway 401 and Wellington Road 34 as the primary east-west roadways.

There are also lands within the Study Area that are zoned for industrial uses but are not currently designated for such within the County Official Plan (see locations in **Figure 3.4-3**). The lands that are currently zoned for industrial uses do not contribute to the minimum of 30 additional hectares required for future rural employment growth. However, it is important to consider how these industrial lands might be co-located with future employment growth uses to minimize land use conflicts and reduce unnecessary fragmentation of the agricultural lands.

Figure 3.4-1: Study Area and Existing Context



Figure 3.4-2: Land Use Designations



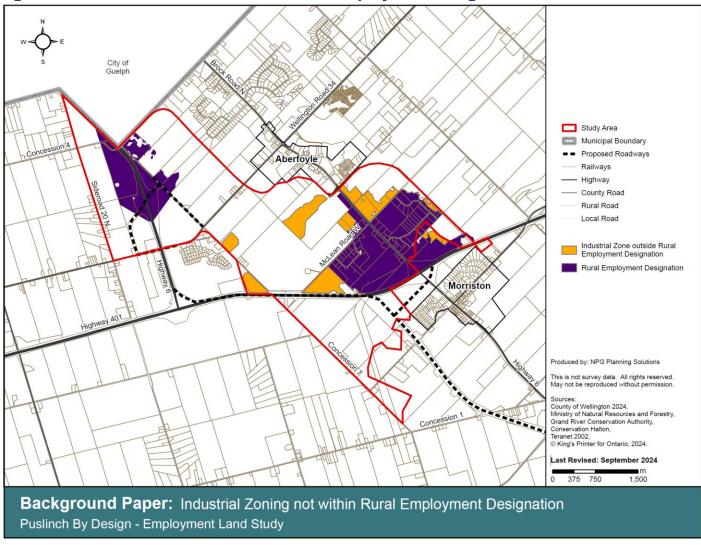


Figure 3.4-3: Industrial Zones outside Rural Employment Designations

III. Applicable Legislation *Planning Act*

The *Planning Act* governs land use planning in Ontario, Canada. Its primary goal is to promote sustainable development by ensuring that land use planning contributes to environmental, social, and economic sustainability. The Act establishes clear, fair, and efficient processes for decision-making regarding land use, emphasizing the importance of public participation to ensure that community needs and concerns are considered. The *Act* also plays a significant role in shaping the economy and employment within Ontario by ensuring strategic planning through municipal Official Plans consider economic development and areas of employment.

Section 1 of the *Act*, entitled Interpretation, provides the following definition for "area of employment":

"area of employment" means an area of land designated in an official plan for clusters of business and economic uses including, without limitation, the uses listed in subsection (5), or as otherwise prescribed by regulation;

- (5) The uses referred to in the definition of "area of employment" in subsection (1) are,
 - a) manufacturing uses;
 - b) warehousing uses;
 - c) office uses;
 - d) retail uses that are associated with uses mentioned in clauses (a) to (c); and
 - e) facilities that are ancillary to uses mentioned in clauses (a) to (d).

The *Planning Act* was amended through Bill 97, Helping Homebuyers, Protecting Tenants Act, 2023 to revise the definition of area of employment under the Act. Bill 97 received royal assent on June 8, 2023, however, the revised definition will come into effect on a date to be proclaimed by the Lieutenant Governor. Once proclaimed, the following definition will apply instead of the one referenced above:

"area of employment" means an area of land designated in an official plan for clusters of business and economic uses, those being uses that meet the following criteria:

- 1. The uses consist of business and economic uses, other than uses referred to in paragraph 2, including any of the following:
 - i. Manufacturing uses.
 - ii. Uses related to research and development in connection with manufacturing anything.

- iii. Warehousing uses, including uses related to the movement of goods.
- iv. Retail uses and office uses that are associated with uses mentioned in subparagraphs i to iii.
- v. Facilities that are ancillary to the uses mentioned in subparagraphs i to iv.
- vi. Any other prescribed business and economic uses.
- 2. The uses are not any of the following uses:
 - i. Institutional uses.
 - ii. Commercial uses, including retail and office uses not referred to in subparagraph 1 iv; ("zone d'emploi")

Section 2 of the *Planning Act* identifies matters of Provincial interest that Council shall have regard for carrying out its responsibilities under the *Act* including the adequate provision of employment opportunities within municipalities and the protection of the financial and economic well-being of the Province and its municipalities. This ensures that municipalities consider employment lands and opportunities when developing land use policies in addition to more sensitive land uses.

Provincial Policy Statement (2020)

Section 1 of the PPS provides guidance for facilitating efficient land use and development policies to support "strong, livable, healthy and resilient communities," and protect the environment, public health, and safety of communities. Other policies in section 1 of the PPS encourage the promotion of economic growth, diversification of the economic base, and employment opportunities in rural areas (Policy 1.1.4.1f).

Section 1.2.1 of the PPS (2020) provides policies specifically related to land use compatibility with respect to major facilities and employment uses, acknowledging that these uses may have adverse impacts on adjacent sensitive land uses. Of note is Policy 1.2.6.1, which states that major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures. Where avoidance is not possible, the PPS (2020) emphasizes protecting the long-term viability of existing or planned industrial, manufacturing or other uses that are vulnerable to encroachment by ensuring the planning and development of proposed adjacent sensitive land uses are only permitted subject to criteria and where adverse effects to both employment and sensitive land uses are minimized and mitigated.

Section 1.3 of the PPS (2020) provides specific policies for employment. Policies require planning authorities to promote compatible economic development and competitiveness

by providing an appropriate mix and range of employment, institutional and broader mixed uses. Policy direction also supports facilitating conditions for economic investment by identifying strategic sites for investment, monitoring the availability and suitability of employment sites, including market-ready sites, and seeking to address potential barriers to investment.

Section 1.3.2 provides policies for Employment Areas that require planning authorities to plan for, protect and preserve employment areas for current and future uses (Policy 1.3.2.1). Policy 1.3.2.2 permits the assessment of employment areas identified in local official plans during an official plan review or update to ensure that this designation is appropriate. Employment areas planned for industrial or manufacturing are to provide separation or mitigation from sensitive land uses to maintain the operational and economic viability of planned uses and functions. Policy 1.3.2.3 permits prohibiting residential and other sensitive land uses within employment areas planned for industrial or manufacturing uses to maintain land use compatibility. Policy 1.3.2.7 permits planning authorities to plan beyond the 25-year planning horizon for the long-term protection of employment areas, provided the lands are not designated for employment purposes beyond the 25-year planning horizon.

Section 6.0 of the PPS provides various definitions of the terminology used within. The PPS provides the following relevant definitions:

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

Adverse effects: as defined in the Environmental Protection Act, means one or more of:

- a) impairment of the quality of the natural environment for any use that can be made of it;
- b) injury or damage to property or plant or animal life;
- c) harm or material discomfort to any person;
- d) an adverse effect on the health of any person;
- e) impairment of the safety of any person;
- f) rendering any property or plant or animal life unfit for human use;
- g) loss of enjoyment of normal use of property; and
- h) interference with normal conduct of business

A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020 (Growth Plan)

The Growth Plan, which was created under the *Places to Grow Act*, 2005, was updated in August 2020. It sets out where and how growth will occur across the Greater Golden Horseshoe to 2051, and all planning decisions shall conform to it. The Growth Plan, 2020 provides growth forecasts for single- and upper-tier municipalities and provides policy direction on a range of matters including land use, infrastructure, and transportation.

The Growth Plan requires upper- and single-tier municipalities, in consultation with lower-tier municipalities, to establish minimum density targets for all Employment Areas within the settlement area. The density targets are to reflect the current and anticipated type and scale of employment that characterizes the Employment Area to which the target applies. Further, the minimum employment density target reflects opportunities for the intensification of Employment Areas on sites that support active transportation and are served by existing or planned transit.

The Growth Plan provides the planning framework for protection of the long-term supply of employment land. Policies 2.2.5.7 and 2.2.5.8 requires municipalities to plan for employment areas and protect existing industrial uses and office parks from non-compatible and sensitive land uses. This includes prohibiting residential uses in Employment Areas and avoiding (or mitigating) encroachment of sensitive land uses, major retail uses, or major office uses on industrial, manufacturing, or other similar uses.

The Study Area is outside of the Settlement Areas identified in A Place to Grow, Schedule 2. The Study Area is addressed in Section 2.2.9 - Rural Areas of A Place to Grow. Of note, the following policy is applicable:

5. Existing employment areas outside of settlement areas on rural lands that were designated for employment uses in an official plan that was approved and in effect as of June 16, 2006 may continue to be permitted. Expansions to these existing employment areas may be permitted only if necessary to support the immediate needs of existing businesses and if compatible with the surrounding uses.

The purpose of this Study is to identify the preferred location for the additional employment land required for the County of Wellington to achieve its growth forecasts. Recognizing the challenges of planning for additional employment in the context of Growth Plan policies on Rural Areas, the County and the Province worked to create new policy through OPA 119 to support the Study to identify future employment uses "based on need". OPA 119 has been approved by the Province and thus the policies within the County Official Plan support new employment uses based on the needs determined through the County's Growth Management Report completed by Watson and Associates.

The Growth Plan also provides policies related to Provincially Significant Employment Zones. There are no Provincially Significant Employment Zones located within the Study Area.

Greenbelt Plan

The Greenbelt Plan is a legislative framework established by the Province of Ontario, Canada, designed to protect over 2 million acres of environmentally sensitive and agricultural land around the Greater Golden Horseshoe area. Enacted in 2005, and most recently updated in 2017, the plan aims to curb urban sprawl and preserve the natural environment, agricultural lands, and water resources.

While portions of the Township of Puslinch are in the Greenbelt Plan, the Study Area does not include Greenbelt lands.

County of Wellington Official Plan

The County of Wellington Official Plan (County OP) is the County's long-term, strategic policy planning framework for managing growth within Wellington County. The policies of the County OP guide land use and development influencing economic, environmental and community development/growth decisions until 2051 and beyond. The County OP includes several commitments to the future growth with a focus on providing opportunities for jobs, commerce and services.

Through Provincial approval of OPA 120, the County is anticipated to grow from approximately 100,800 people in 2021 to approximately 160,000 in 2051. To accommodate this growth, development is to be directed primarily to primary urban centres, regional Significant Economic Development Study Area, and rural employment areas. Portions of Puslinch are designated as being Regionally Significant Economic Development Study Area as shown in Schedule A7 of the Wellington County Official Plan (**Figure 3.4-3**).

Figure 3.4-3 – Wellington County Official Plan – County Growth Structure Schedule A7

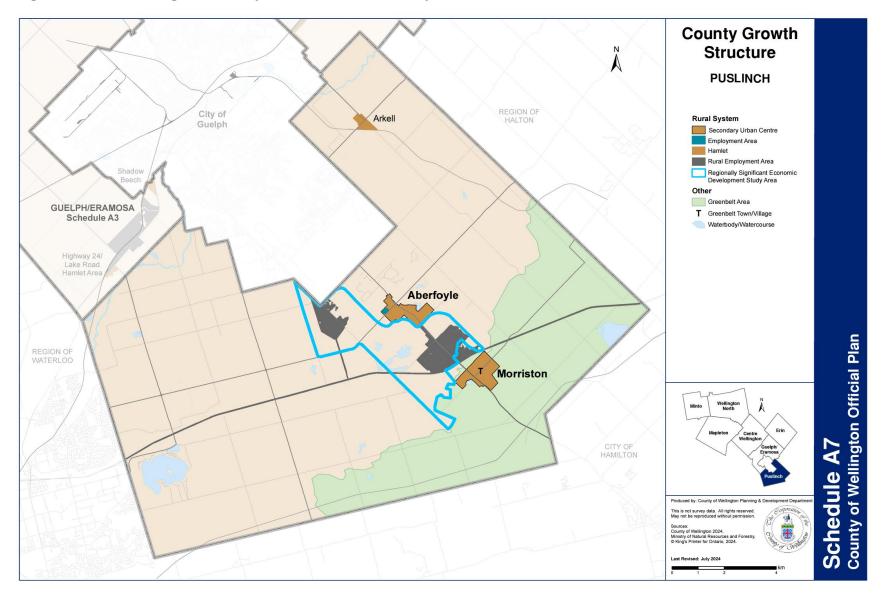
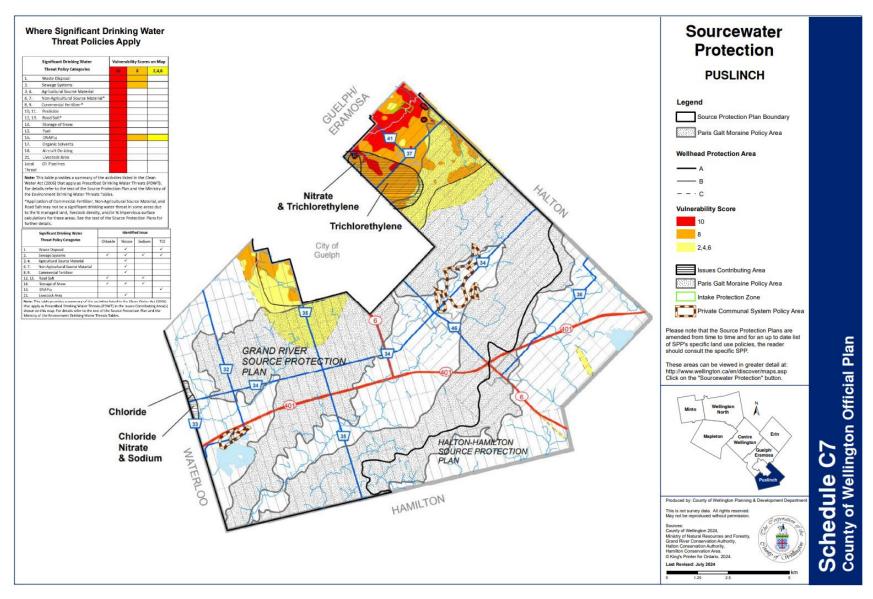


Figure 3.4-4 – Wellington County Official Plan – Sourcewater Protection Puslinch Schedule C7



Alongside the residential growth of the County the total employment figures are anticipated to increase from 43,000 in 2021 to 70,000 in 2051. The employment figures for the Township of Puslinch are anticipated to grow from 5,800 to 7,900 across the same period, reflecting an increase of 1,610 jobs.

Section 4.2 of the County OP provides policies related to Economic Development within the County. Policy 4.2.2 outlines that conversions of employment lands are only permitted subject to strict criteria.

Policy 4.2.5 states that the Rural System can contribute sites for employment based on its ability to provide large buffers for compatibility.

Policies in Section 4.7.1 speak to a distinct urban rural boundary within Section 4.7 – Urban Area Protection. The policies prohibit new development adjacent to settlement areas (primary, secondary, hamlets) unless through an urban area expansion. This generally applies to lands within 1 km of the settlement area. It is noted that the City of Guelph, although not in the County of Wellington, is a settlement area.

Source Water Protection is addressed in Section 4.9.5, which provides policies relative to the protection of municipal drinking water supplies. Policy 4.9.5.6 addresses new large-scale development on private servicing or communal servicing. The policies require detailed studies to understand the potential impact on municipal drinking water sources – these studies will be required as part of individual development applications.

The Paris and Galt Moraines as unique geological landforms in the County are addressed in Section 4.9.7. Within and around these landforms are natural heritage features and developed lands, such as aggregate extraction, and complex natural and built environments. The Partis Galt Moraine Policy Area is mapped on Schedule C7 of the County Official Plan (see **Figure 3.4-4**). Policies in Section 4.9.7.2 for the Paris and Galt Moraines Policy Area require new development, including rural employment area designations, to address the protection and function of groundwater and surface water. Agriculture is an accepted and supported use on the moraines.

A portion of the Study Area is within the Mill Creek Subwatershed. A Subwatershed Study for Mill Creek was completed by the Grand River Conservation Authority in 1997. Policies in 4.10.1 of the County Official Plan identify priorities relative to *Puslinch by Design*:

- Protection of the Greenlands System;
- Addressing enhanced landscaping and infiltration of stormwater for industrial uses;
- Limiting impervious cover in sub catchment areas to 20% to support infiltration of stormwater.

Part 6 of the County OP provides policies related to the Rural System. Land use compatibility policies are provided for every land use within the Rural System ensuring that all existing and proposed uses are compatible both through policy and the mapping

of land use designations in the County OP. Policy 6.8.3 requires Councils to ensure that existing and proposed Rural Employment uses are compatible with and adequately separated from sensitive land uses.

Puslinch Local Policies are addressed in Section 9.8 of the County OP. Section 9.8.1 provides policies related to Wellington Road 46 and provides policies specific to commercial and industrial development along the road such as the requirement for a transportation impact study for developments which generate more than 50 trips during peak hour (9.8.1.b), restrictions of driveways within 100 metres of each other on the same side of the road (9.8.1.d) and prohibiting access to Wellington Road 46 if the site also has frontage on a township road (9.8.1.c).

Section 9.8.3 outlines Puslinch Industrial Policies which permit additional uses for industrial lands, including offices and complementary commercial uses (9.8.3.a). This section speaks to two large parcels of land east and west of the Hanlon Expressway and provides policies limiting the severance of these lands until a detailed concept plan has been developed in cooperation with the City of Guelph.

Section 9.8.4 outlines the policies related to the Regionally Significant Economic Development Study Area within Puslinch. The lands within this Study Area are Secondary Agricultural lands which are to be considered for future employment uses which are compatible with the surrounding areas. The Regionally Significant Economic Development Study has been initiated by the Township in consultation with the County. This Background Paper will be used to support the implementation of this policy.

Finally, Section 9.8.6 – PA7-1 provides policy with regards to the Puslinch Economic Development Area. The Puslinch Economic Development Area is envisioned as the predominant location for business and industry in the Township but does not preclude the establishment of small-scale employment activities elsewhere in the Township. Areas of existing or future extractive uses that are within the Puslinch Economic Development Area should be considered for industrial, commercial, institutional and/or recreational activities or natural areas as after-uses when the extractive or aggregate-related activities have either ceased or are incorporated into an after-use. Please refer to the Background Report on Aggregates for more details on the relationship of Policy Area PA7-1 and aggregates.

MECP D-Series Guidelines

The MECP D-Series Guidelines established by the Ontario Ministry of Environment, Conservation and Parks (MECP) are designed to manage land use compatibility between industrial operations and sensitive land uses such as, but not limited to, residential areas. The guidelines aim to minimize adverse effects like noise, dust, and odour from industrial facilities impacting nearby sensitive land uses through the use of buffers and separation of uses, and the encroachment of incompatible land uses.

The D-Series Guidelines define Sensitive Land Use as:

A building, 'amenity area' or outdoor space where routine or normal activities occurring at reasonably expected times would experience 1 or more 'adverse effect(s)' from contaminant discharges generated by a nearby 'facility'. The 'sensitive land use' may be a part of the natural or built environment. Depending upon the particular 'facility' involved, a sensitive land use and associated activities may include one or a combination of:

- i. residences or facilities where people sleep (e.g. single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.). These uses are considered to be sensitive 24 hours/day.
- ii. a permanent structure for non-facility related use, particularly of an institutional nature (e.g. schools, churches, community centres, day care centres).
- iii. certain outdoor recreational uses deemed by a municipality or other level of government to be sensitive (e.g. trailer park, picnic area, etc.).
- iv. certain agricultural operations (e.g. cattle raising, mink farming, cash crops and orchards).
- v. bird/wildlife habitats or sanctuaries.

Adverse effect is defined as:

Means one or more of:

- i. impairment of the quality of the natural environment for any use that can be made of it,
- ii. injury or damage to property or to plant or animal life,
- iii. harm or material discomfort to any person,
- iv. an adverse effect on the health of any person,
- v. impairment of the safety of any person,
- vi. rendering any property or plant or animal life unfit for use by man,
- vii. loss of enjoyment of normal use of property, and
- viii. interference with the normal conduct of business.

Within the D-Series guidelines, the D-6 guidelines provide Recommended Minimum Separation Distances and Potential Influence Areas. These guidelines are based on three industrial classifications being: Class I, Class II, and Class III. The Recommended Minimum Separation Distance from an industry represents the area within which adverse effects to a sensitive land use are likely to occur. Developing a sensitive land use within an industry's Recommended Minimum Separation Distance requires detailed technical studies (e.g., air dispersion modelling, noise, vibration analyses) to demonstrate that the land uses are compatible. The Recommended Minimum Separation Distance was established based on MECP studies and historical complaint data. The "Potential Influence Area" is the area within which adverse effects from an industry may be experienced at a sensitive land use. Studies are to be completed to demonstrate compatibility between uses prior to approvals.

IV. Best Practices Review

NPG undertook a best practice review with comparable municipalities of a similar size and structure to the Township of Puslinch that contain employment areas primarily along the interchanges of 400-series highways and/or close to arterial roads. The review examined employment planning and land use compatibility policies from the Municipality of North Dumfries, the Municipality of Strathroy-Caradoc, the County of Brant, and the City of Brantford⁶. A number of common factors informing employment planning amongst these municipalities include location, servicing requirements, parking and loading considerations, architectural design standards, and impacts on land uses, along with land use compatibility considerations. A summary of the best practices review is shown in **Table 3.4-1.**

A review of other municipalities shows a trend to locating industrial areas/employment lands in proximity to Provincial highways, arterial roads, and railway corridors. Proximity to Provincial highways and arterial roads often prioritize Prestige Employment/Industrial uses, as well as specific employment uses. In particular, the Township of North Dumfries identified logistics, and warehousing uses as the primary employment uses for the Prime Industrial/Strategic Reserve designation, whereas the County of Brant identified Priority Employment Areas along Highway 403 for employment uses related to green energy technology, as part of the County's Green Energy Accord.

Servicing for employment lands ranged from private to full municipal services. Of note, the Employment Areas of the Township of North Dumfries are only privately serviced, whereas the Municipality of Strathroy-Caradoc requires adequate servicing to be demonstrated, with a preference for industrial uses that generate less than 10,000L/day of wastewater. The servicing requirements depend on the context of the municipality – whether it is urban, rural in nature and the extent of build-out – as well as the nature of employment uses. The Background Paper on Servicing will address the infrastructure servicing framework.

All four comparator municipalities have policies pertaining to site planning and traffic considerations, design standards, and impacts on natural heritage and sensitive land uses. Vehicular access is required to consider proper sightlines, proximity to traffic intersections or railway crossings, and should be oriented to divert industrial-related traffic away from local roads, where other options are available. Furthermore, individual access points should generally be restricted and shared access with similar adjacent developments are encouraged. Requiring the adequate provision of off-site parking and loading facilities is a best practice among these municipalities, with an emphasis on avoiding conflicts with sensitive land uses, pedestrian circulation, and vehicular movement, while screening these facilities from view of Provincial highways and/or arterial roads.

⁶ Although the employment lands in the City of Brantford are in the settlement area, Brantford is included due to the presence of Highway 403 and the relationship to the County of Brant.

As previously discussed, priority and/or prestige employment uses are generally encouraged in proximity to Provincial highways and arterial roads. It is a best practice for lands with prime exposure along Provincial highways and arterial roads to provide for a high standard of architectural design, with regards to built form, architectural detail, signage, building orientation (facing the roadway), and landscaping. Parking and loading facilities are not to be in the front or exterior side yard of the building, and open storage is required to be screened from roadways. Landscaping is encouraged both as a buffer for parking, loading, and storage areas, as well as to enhance these facilities.

Lastly, a significant factor informing employment planning is the evaluation of impacts on other land uses and the transportation network. An overarching principle in planning for employment lands is to minimize impacts such as noise, vibration, smoke, odour, toxic substances, fire, explosive hazards, lighting, and visual impacts on other land uses, while preserving the natural environment. While it is key to ensure that the proposed employment uses will mitigate potential impacts on other/sensitive land uses, it is also important to ensure the reverse: that other land uses do not impact the viability of employment uses. In this manner, as a best practice, residential, institutional, and commercial uses such as retail and office uses are generally prohibited in employment areas. Secondary commercial uses that are ancillary and/or supportive of the primary industrial uses may be permitted in employment areas, but residential land uses are not.

The best practices review outlined various land use considerations to reconcile compatibility and minimize potential impacts between different land uses. Generally, these considerations relate to buffering and mitigation measures that include implementing appropriate separation distances, providing for an intervening and transitioning land use, and incorporating various design measures. Separation distances are generally determined based on the Provincial D-series land use compatibility guidelines and implemented through the Zoning By-law and/or Site Plan Control. Specifically, the County of Brant provides that structures for heavy employment use shall not be located with 50 metres of the Employment Lands boundary or within 50 metres of an arterial or collector road. In addition to implementing separation distances, the Township of North Dumfries permits compatible land uses between employment areas and sensitive land uses, to act as a buffer, for transition and as a mitigating measure.

Other measures to mitigate land use impacts can include specific design measures such as building orientation, design, scale, and setbacks; landscaping; odour, dust, and noise mitigation measures; controls on exterior lighting; signage controls; road improvements and widenings; restrictions on outdoor storage; location of open space relative to noise sources; and fencing, berms, and/or screening. As previously discussed regarding the high quality of architectural design, measures such as building orientation, setbacks, landscaping, and fencing can help screen employment areas and their associated parking, loading, and storage facilities from neighbouring sensitive land uses. These measures can mitigate potential noise/odour impacts and reduce visual impacts, demonstrating that design solutions play a key role in facilitating land use compatibility.

Opportunities for design measures are discussed in the Background Report on Design for the future employment lands.

Detailed information for each of the comparator municipalities is outlined in the table below.

Table 3.4-1: Best Practices Review

Municipality	Employment Planning Land Use Considerations	Land use Compatibility Considerations
Municipality of North Dumfries	 Applicable to lands generally privately serviced and designated "Prime Industrial/Strategic Reserve (Unserviced)" Proximity to Provincial Highway, Regional Road, and/or railway as a priority Water and waste generated from uses are appropriate for preferred servicing method Dry industrial/commercial uses are permitted Prime Industrial/Strategic Reserve (Unserviced) lands will be limited to privately serviced logistics and warehousing uses requiring close access to the highway Prime Industrial lands shall be developed as parcels greater than 8 ha in size Preserving the natural environment to ensure adverse impacts are mitigated through buffering, separation distances, or other mitigative measures Adequate parking facilities required 	 Mitigating adverse impacts (noise, dust, emissions, or odours) through landscaping, separation distances (Ministry of Environment D-Series Guideline), screening, fencing, berming setbacks Placing intervening land uses between the two incompatible land uses as a transition Design compatibility by regulating scale, height, massing, landscaping, to maintain surrounding character
Municipality of Strathroy-Caradoc	 Applicable to Rural Industrial lands Proximity and convenient access to County Roads which are appropriate for industrial 	Compatibility with neighbouring uses through adequate separation distances and buffering, including controls on exterior lighting

Municipality	Employment Planning Land Use Considerations	Land use Compatibility Considerations
	uses involving freight movement Primary use of land for manufacturing, assembling and processing of materials, goods or products; warehousing and storage of bulk goods; repair, servicing, and maintenance operations; truck terminals and similar type uses Demonstrate adequate servicing with preference for industrial uses that generate wastewater with a peak daily loading of less than 10,000L/day Industrial uses visible from a County Road or Provincial highway must exhibit a high standard of design Vehicular access from public road or highway must consider sightlines and proximity to intersections/rail crossings, with shared accesses encouraged to limit individual access points Adequate off-street parking and loading facilities shall be provided	
County of Brant	 Applies to Employment designation Proximity to Provincial Highway or arterial road Prestige, light, and heavy industrial uses are permitted Employment uses located adjacent to highway or arterial road shall generally be limited to prestige industrial uses and self-contained non-noxious uses, and outside storage shall not be permitted 	 Consider mitigation of noise, vibration, smoke, odour, toxic substances, fire and explosive hazards, lighting, visual impacts Separation distance based on Ministry of Environment's land use compatibility guidelines Implementation of separation distance may include measures such as building orientation,

Municipality	Employment Planning Land Use Considerations	Land use Compatibility Considerations
	 Adequate off-street parking and loading facilities shall be provided Priority Employment Areas along the Highway 403 corridor are protected as a priority for employment uses related to green energy technology A high standard of site design and maintenance shall be implemented 	design, setbacks; landscaping and screening; odour, dust and noise mitigation measures; access controls; signage controls; road improvements and widenings; restrictions on range of permitted uses; restrictions on outside storage Parking areas, outdoor storage, and loading areas appropriated screened from roadways and loading facilities shall not be located in the front or exterior side yard Vehicle access shall be oriented to discourage industry-related traffic from using local roads if other options available Heavy industrial employment uses structures shall not be located within 50m of the Employment lands boundary or within 50m of an arterial or collector road
City of Brantford	 Applies to Prestige Employment and General Employment designations Prestige Employment designation applies to lands having prime exposure along Highway 403, arterial roads, and major collect roads Prestige Employment uses shall exhibit a high standard of building design and landscaping, with outdoor storage/display prohibited 	Separation distances subject to Provincial guidelines

Municipality	Employment Planning Land Use Considerations	Land use Compatibility Considerations			
	where visible from major roadways • Adequate off-street parking, loading, and garbage facilities shall be provided – shared access and parking between various properties is encouraged	between buildings and Highway 403 and/or roadways • Where permitted, outside storage areas shall be located away from adjacent lands containing residential uses or have adequate buffers including fencing, screening, and landscaping			

V. Study Area and Implications for Identifying Land use Options

Employment lands play a crucial role in Puslinch's economic growth potential, hosting a substantial portion of the community's businesses and jobs. A key factor in Puslinch's economic competitiveness is the accessibility, marketability, and availability of these lands compared to nearby areas and transportation options, while respecting the rural nature of Puslinch. Planning for employment-focused uses needs to address market demand, land use planning and policy, the nature of Puslinch as a rural municipality with a significant contribution to jobs in the County of Wellington, and land use compatibility.

Land Use Planning Considerations

The review of various upper- and single-tier municipalities across Southern Ontario revealed that the following characteristics are key considerations for the identification of new employment land/employment area. For greater detail and analysis, please refer to the Employment Land Market Study Background Paper.

Factors Impacting Location

Proximity to Major Infrastructure

 Nearly all employment lands across southern Ontario are situated in proximity to major transportation infrastructure, including provincial highways, arterial roads, rail corridors, ports, airports, and international border crossings. Accessibility facilitates the movement of goods and commuting for employees.

Servicing Infrastructure

 For rural employment areas adequate servicing must be demonstrated or restrictions on quantity of wastewater generated is required.

Proximity to Sensitive Land Uses

- Employment areas must be accessible to residents while maintaining adequate separation from sensitive residential uses. This separation ensures that sensitive land uses will be protected from potential noise, lighting, traffic, environmental, and other impacts associated with employment uses.
- Consideration must also be given with respect to nearby natural heritage areas, cultural heritage areas, hospitals and health care facilities, recreational areas, agricultural lands, and more.
- Buffer zones, landscaping, and other mitigation measures can be employed to enhance compatibility between land uses.

Scale and Intensity of Use

 It is important to recognize that varying intensities of employment uses must be analyzed independently against intensity and proximity to sensitive land uses.
 Consideration should be given to the size of buildings, number of employees, volume of production, and noise/traffic generated with regards to surrounding land uses.

Availability of Large Land Areas

- Lands considered for employment should consist of large, unconstrained parcels of land with opportunities for a range of sites, sizes, uses and prices.
- Large flexible lots allow the municipality to respond to evolving employment needs.

Proximity to other Employment Lands

- Employment lands are generally clustered, providing for a range of industries, employers and supply chains to be in proximity to each other, creating employment nodes.
- Having concentrated employment areas improves access to skilled trades/labour force.

Existing Condition of Lands

- Flat or gently sloping terrain is generally preferred for employment lands to minimize the costs and complexity of construction.
- Employment lands should generally be free from environmental constraints that could hinder development or result in costly implementation to protect and/or enhance natural features. Lands with environmental contamination could result in costly remediation.

Distinct Urban Rural Boundary

Site Planning and Design

Site planning and design are additional factors that must be considered in conjunction with the key land use planning considerations above. Although these design factors are not critical in the selection of the employment lands, they are integral to address in the land use planning process. The Background Paper on Design expands on the importance of a proper design approach and in ensuring that the planning and design of the employment lands uphold the County's and Township's design objectives for the area.

Further to this, additional site design considerations include buffering to mitigate impacts on surrounding properties, ensuring proper vehicle ingress/egress to minimize potential impacts on roadways and traffic circulation, ideally located away from local roads, and site circulation, parking, loading, and storage considerations. Buffering measures should be implemented for mitigation between land uses and to ensure land use compatibility. While consideration of land use compatibility is further discussed below and in the Land Use Planning Background Report, buffering measures may comprise of separation distances as determined by the applicable Provincial guidelines, building orientation and site layout, setbacks and open space, landscaping, and screening/fencing. Implementing berms within the separation distance, regulating building orientation through setbacks in the zoning by-law, and placing restrictions on use and location of facilities that emit adverse impacts (e.g. outdoor storage) can assist in achieving the appropriate separation distance.

Site design should also consider industry-related traffic generated by these land uses. Considerations include proper sightlines, proximity to intersections, rail crossings, as well as limiting individual access points where possible, to ensure that the site access is sufficient to support these industry needs while directing traffic away from local roads. Furthermore, sites should be designed to ensure safe and efficient circulation that minimizes potential conflicts between vehicles and pedestrians. Parking, loading, and outdoor storage areas should not be placed in the front or exterior side yard and should be screened from view through a combination of landscaping and/or fencing. Where appropriate along Provincial highways or major roadways, outdoor storage areas should be prohibited or limited to not be visible from major roadways.

Overall, site planning and design shall ensure that it enhances the surrounding rural character of the area; properly addresses frontage along Provincial highways, County roads, with consideration for proposed roadways; properly mitigates impacts on surrounding land uses (as further discussed below); and provides for the proper site circulation, parking, loading, and outdoor storage facilities.

Land Use Compatibility Considerations

As outlined in the legislative review and best practices review, land use compatibility is a key consideration in planning for employment lands and/or employment areas. This includes evaluating potential impacts on sensitive land uses as well as ensuring the sensitive land uses do not impede the function of the employment lands. The land use

compatibility assessment requires the examination of sensitive land uses within and adjacent to the Study Area, as well as consideration of potential mitigation measures to guide the selection of land use options and ensure continued land use compatibility in the future.

Sensitive land uses that are identified within and in proximity to the Study Area are categorized as either sensitive land use clusters or rural residential uses, as illustrated in **Figure 3.4-5**. A sensitive land use cluster represents an area that is comprised of five or more sensitive land uses. Rural residential uses, on the other hand, represent the individual instance of the sensitive land use (rural residential). Where there are areas with four or less sensitive land uses (rural residential), the rural residential use icon is utilized to represent the individual occurrence. This distinction is key in order to understand the magnitude of potential impacts on the community when determining the future employment area. This review was conducted through a desktop analysis using available Google Maps satellite imagery; the sensitive land use clusters generally follow property boundaries.

Within the Study Area, there is one sensitive land use cluster that is located wholly within the Study Area (Cluster 4), five sensitive land use clusters that are partially located or encroaching into the Study Area (Clusters 1, 2, 6, 8, and 9), and five individual instances of sensitive land uses (rural residential). The Study Area is in proximity to eight sensitive land use clusters (Clusters 1, 2, 3, 5, 6, 7, 8 and 9) located outside of the Study Area (including clusters that encroach on the Study Area). These clusters and rural residential uses within and in proximity to the Study Area are identified in **Figure 3.4-5.**

The sensitive land use clusters within and encroaching into the Study Area consist of residential dwellings and farm parcels along Concession Road 7 (Clusters 1 and 9), residential dwellings and farm parcels along Sideroad 20 North (Cluster 2), residential dwellings and farm parcels along Wellington Road 34 between Concession Road 7 and Brock Road (Clusters 4 and 6), and a residential dwelling along Calfass Road with a large lot size (Cluster 8). The five occurrences of rural residential uses are primarily located along Concession Road 7, Maltby Road West, Concession Road 4, and Sideroad 20 North.

Outside of the Study Area, the remaining sensitive land use clusters consist of a residential neighbourhood bounded by Wellington Road 34 and Concession 7 Road (Cluster 1), residential dwellings along Sideroad 20 North (Cluster 3), a residential neighbourhood to the west of Brock Road North (Cluster 5), the Aberfoyle Urban Centre (Cluster 6), the Morriston Urban Centre (Cluster 7), and a nursing home within a residential neighbourhood directly south of the Study Area boundary along Calfass Road (Cluster 8). These are key areas for review as the land use options must consider the adjacent context to ensure appropriate buffering, design, and mitigation measures.

Figure 3.4-5: Adjacent Sensitive Land Uses

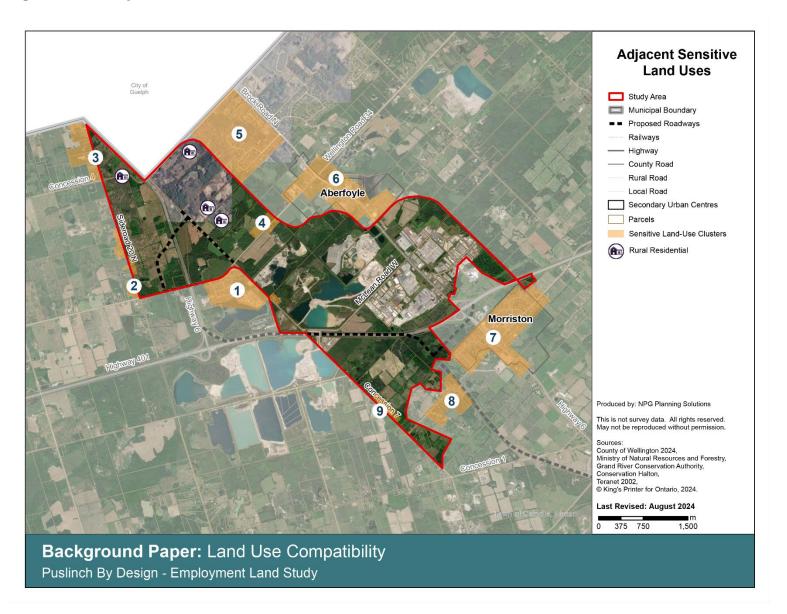
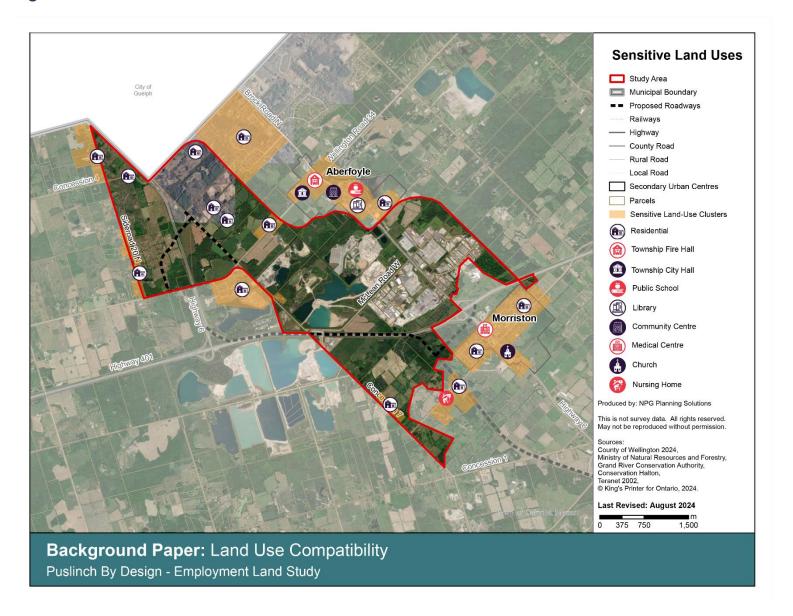


Figure 3.4-6 identifies the sensitive land uses within these areas. Sensitive land uses include residential areas, a school, library, community centre, medical centre, church, fire hall, and the Township office. Clusters 1, 2, 3, 4, 5, and 9 are comprised entirely of residential neighbourhoods, whereas Areas 6 and 7, being the Aberfoyle and Morriston Urban Centre respectively, contain a mix of residential and institutional/community uses. Cluster 8 is located within Morriston and contains residential uses and a nursing home. **Figure 3.4-6** illustrates the concentration and variety of sensitive uses. The concentration of sensitive uses will be a key consideration in assessing potential land use options and evaluating the degree of adverse impacts on these areas. These land use compatibility measures will inform the location, type of permitted uses, and design and mitigation requirements of the future employment lands.

Figure 3.4-6: Sensitive Land Uses

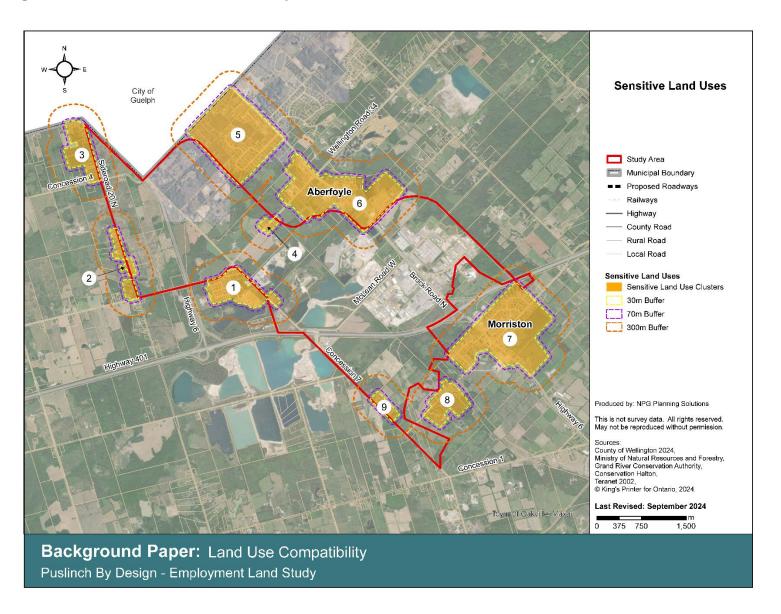


Further evaluation of land use compatibility shall have regard for the Province's D-6 series guidelines and the recommended separation distances. The Province's D-6 guidelines for compatibility between industrial facilities outline the recommended separation distances for the different classes of industry. The classification of industrial uses is outlined in ascending order, with a higher class of industry demonstrating increasing impacts of industrial operations. The classification is determined by the scale, process, operation intensity, and potential emissions (noise, dust/odour, and vibration). Minimum recommended separation distances are outlined as follows for different classes of industry:

- Class I—20 metres minimum separation distance
- Class II—70 metres minimum separation distance
- Class III—300 metres minimum separation distance

In determining permitted uses and location of the future employment lands and/or employment areas, these recommended separation distances must be applied to properly evaluate the potential impacts on sensitive land uses and to inform the appropriate design/buffering measures. **Figure 3.4-7** applies the Class I, Class II, and Class III separation distances to the sensitive land use clusters, which are measured from the property lines. It should be noted that these separation distances were not applied to the stand-alone rural residential uses as they only represent individual instances instead of a concentration of sensitive uses, the latter of which would have a greater impact on determining the future employment lands/areas. Furthermore, these rural residential uses generally have large lot areas that extend to the Study Area boundary – applying the separation distances would limit the availability of future employment lands.

Figure 3.4-7: Sensitive Land Uses Separation Distances



Separation distances may be implemented on-site or off-site. If the separation distance extends beyond the facility/site boundary of the employment lands, the intervening lands may be of a use or facility compatible with both the industrial facility and the sensitive use. This intervening use may include warehousing, various commercial uses that relate to types of industries or the neighbouring lands, open/green space, road allowance, and Class I industrial use for a Class II or Class III industrial uses. If a Class I is used as an intervening use, adequate separation/buffering must also be established per the D-6 guidelines.

Given that sensitive land uses are located adjacent to the Study Area, the County and Township can support ensure continued land use compatibility in the future through the final Official Plan Amendment for this Study as well as future development applications. If the separation distance is provided for partially or entirely on-site, the County and Township may choose to require spot-zoning or rezoning for the property despite conformity with the current zoning. As the change in industrial use may change the areas of influence and subsequently the on-site buffer area, requiring a zoning amendment ensures that the future industrial use continues to comply with the D-6 guidelines as the potential areas of influence change.

VI. Potential Evaluation Criteria

The following evaluation criteria are recommended to assess potential new employment growth areas that will minimize impacts land-use planning conflicts. Criteria are separated into two categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which evaluate the option based on a Likert scale of five degrees of impact.

Screening Criteria

None.

Evaluation Criteria

Table 3.4-2 – Growth Management Criteria

Potential Evaluation Criteria	Criteria Respo	Policy Direction and/or Best Practice Guidance				
Does the option contribute to a complete community?	Highest Contribution	Higher Contribution	Modest Contribution	Lower Contribution	Little to No Contribution	PPS 2020 – 1.1.3.8 County OP 2.1.4; 2.1.5
Does the option achieve the outcome of the Land Supply Analysis?	Most Favourable	Higher Favourability	Favourable	Lower Favourability	Least Favourable	PPS 2020 - 1.1.3.8 County OP - 2.2; Table 1
For lands within the Paris and Galt Moraines Policy Area, will ground and surface water functions be maintained, and where possible, restored and enhanced with new rural employment area designations?	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020 - 2.1.2, 2.2.1, 2.2.2 County OP 4.9.7.2

Table 3.4-3 – Land Use Compatibility

Potential Evaluation Criteria	Criteria Re	Policy Direction and/or Best Practice Guidance				
Will the proposed employment location result in negative impacts to existing	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020 – 1.3.2.2; 1.3.2.3
Sensitive Land Uses within the proposed location? If so: a. Is there an ability to minimize or mitigate negative						County OP – 2.1.4, 2.2.3, 2.2.4, 2.2.5
impacts?	No	Minima	Madad	High Import	0-:4:1	DDC 0000
Will the proposed employment location result in negative impacts to existing	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020 – 1.3.2.2; 1.3.2.3
employment uses within the municipality?						County OP – 2.1.4, 2.2.3, 2.2.4, 2.2.5
Do the lands have site suitability for employment land development including topography?	Highly Suitable	Higher Suitability	Suitable	Lower Suitability	Not Suitable	

VI. Data Sources

Planning Act

Provincial Policy Statement (2020)

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

County of Wellington Official Plan Policies and Mapping

North Dumfries Official Plan

Strathroy-Caradoc Official Plan

Brant County Official Plan

Brantford Official Plan

Environmental Land Use Planning Guides, Ontario

3.5 Background Paper: Aggregates

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington By NPG Planning Solutions Inc.

I. Purpose

The purpose of this paper is to review the key elements of land use planning that are integral to good decision-making on employment land planning, as well as to consider factors impacting land use compatibility as related to aggregates. This includes a review of applicable Provincial and County legislation, as well as a best practices review of employment land planning and land use compatibility considerations in comparable municipalities with significant aggregate resources (including active extraction operations). Overall, this paper will summarize and provide an initial analysis of the key aggregate policies that should be considered in the later phases of the project.

Aggregate resources are prevalent in the Township and the Study Area. There are existing aggregate operations where extraction is occurring. In addition, there are areas identified as mineral aggregate resources in the County of Wellington Official Plan which have yet to be operationalized for extraction. Finally, the County and the Township have a number of applications for which new/expanded aggregate operations are proposed. All of these items, together with implications for the employment land study, will be reviewed in this background paper.

II. Existing Conditions

As shown in **Figure 3.5-1**, Study Area has a significant number of aggregate operations. These are active quarrying operations within the Township. Of note, several of these sites are in proximity to the existing Rural Employment designated lands in Township.

Figure 3.5-2 shows the areas identified as having potential for aggregate extraction within the Township. These areas have been identified in the County of Wellington Official Plan. There are two types of resources:

- Sand And Gravel Resources of Primary and Secondary Significance
- Selected Bedrock Resources

There is a significant amount of Sand and Gravel Resource in the Study Area and adjacent to the Study Area. There are no Bedrock Resources in the Study Area. The identified Bedrock Resources are south of the Study Area.

Figure 3.5-1: Aggregate Operations in Study Area

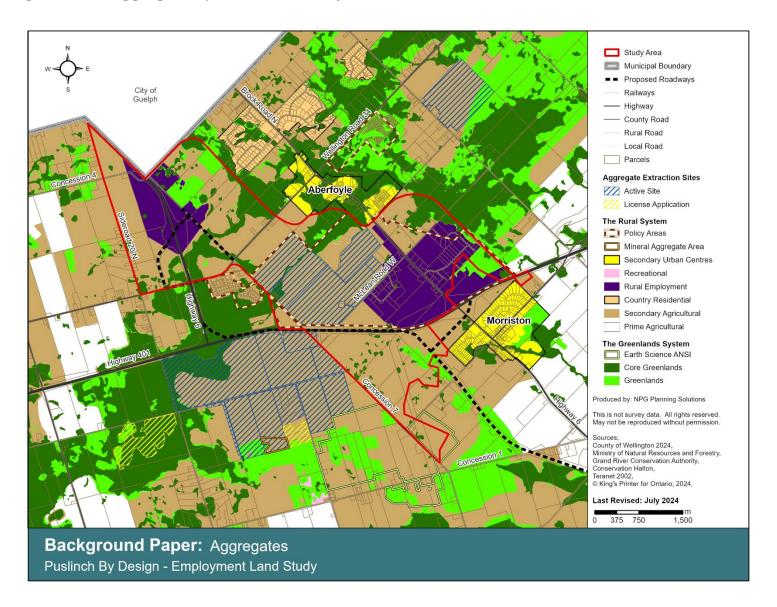


Figure 3.5-2: Mineral Aggregate Resources by Type

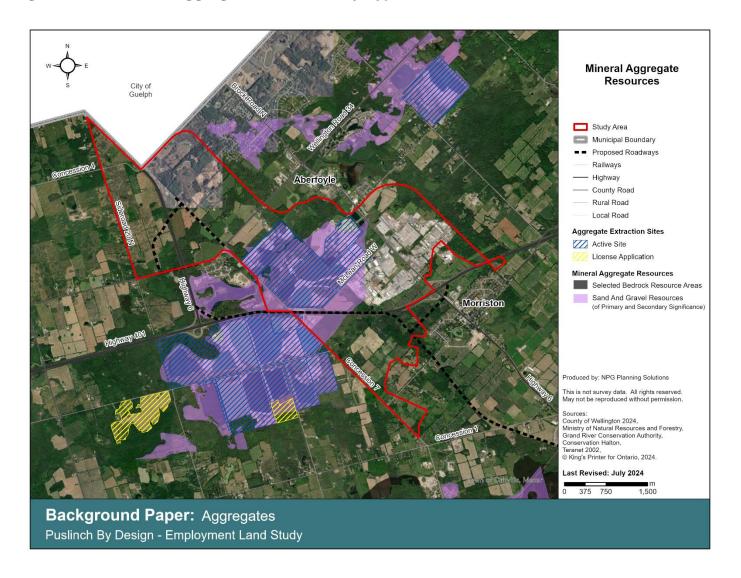


Figure 3.5-2 also shows the areas where there are active applications for future aggregate extraction. These applications are under consideration by the County and the Township, and no decision has been made on these proposed sites. The active applications are southwest of the Study Area, outside the Study Area boundaries.

The sum of all of the aggregate figures identifies a large portion of the Study Area is impacted by either existing or potential future aggregate resources. As will be seen in the review of the various policies in Ontario and Wellington County, protection of aggregate resources is a key public policy requirement. *Puslinch by Design* will need to incorporate addressing the Provincial and County policies into the land use options as well as addressing any potential interface with aggregate operations (land use compatibility, transportation routes, agriculture, natural heritage, are examples).

III. Applicable Legislation Planning Act

Section 2 of the *Planning Act* identifies matters of provincial interest. The Act requires decisions to "have regard" for matters of provincial interest. In regard to aggregates, the Act states the following as a matter of provincial interest:

(c) the conservation and management of natural resources and the mineral resource base;

As mentioned earlier, protection of the resource base for aggregates in Ontario is a key provincial priority. The *Planning Act* has identified the importance of the mineral aggregate base. This Provincial interest is further entrenched in the Provincial Policy Statement, Provincial Land Use Plans, and the County of Wellington Official Plan.

Section 34(2) confirms that the making or establishment of a pit or quarry is a land use for this section of the Act. This means that municipalities can regulate the use of land through their Zoning By-laws. The standards of development typically found in a Zoning By-law are dealt with through the *Aggregate Resources Act* licensing (see below).

The Aggregate Resources Act, R.S.O. 1990, Chapter A.8

The Aggregate Resources Act ("ARA") is the legislation that governs nearly all matters related to aggregates in Ontario. The ARA is used to establish the application and licensing process for new and/or expanding aggregate operations. The ARA also addresses key issues related to aggregates including matters such as annual reports related to a licensed pit or quarry. The application process for aggregate operations includes the requirements for various studies (site plan, noise, dust, vibration, haul route, land use compatibility etc.) in order to assess the appropriateness of the application and

any conditions to be imposed should the application be approved. Finally, the ARA also requires a rehabilitation plan for when extraction of the aggregate is concluded.

Of particular note, the ARA deals with the relationship to the *Planning Act* and municipal Official Plans, By-laws, Site Plans, and agreements. Section 66(1) of the ARA stipulates that the ARA has precedence over local plans, by-laws and agreements when there is an overlap in subject matter. Consistent with Section 34 of the *Planning Act*, municipalities identify location for the use; the ARA establishes the standards of development through the licensing process.

Aggregate Resources Policies and Procedure Manual

To assist and guide implementation of the ARA, the Province of Ontario has created this manual to provide administrative guidance, policies, and procedures related to applications for extraction and current operational quarries and pits. This manual is available publicly and can be used by applicants, municipalities, members of the public, and interested stakeholders to understand the ARA processes. The manual is a guidance document and is not regulatory.

One of the key components relative to *Puslinch by Design* is the requirement for land use compatibility. The ARA and the Manual are designed to ensure the long-term viability of aggregate resources for extraction. Of note, the Manual identifies the importance of distance separation to aggregate operations for sensitive land uses (e.g. residential uses, schools, day care centres etc.). For bedrock resources the recommended setback is 500 m; for sand and gravel resources the recommended setback is 300 m. While the proposed uses in the Rural Employment Lands will be industrial in nature and thus not typically sensitive land uses, compatibility with aggregate operations is an important consideration. This can be achieved through location, design standards, setbacks, and general policy guidance to ensure compatibility. All of these will be addressed in the subsequent phases of *Puslinch by Design*.

Provincial Policy Statement (2020) and anticipated Provincial Planning Statement (2024)

PPS (2020)

The PPS establishes policies on a wide range of topics relative to growth, development, resources, natural heritage, agriculture, and infrastructure for all of Ontario. Aggregate resources have a separate section in the PPS that covers three broad areas:

- Protection of Long-Term Resource Supply;
- Rehabilitation; and,
- Extraction in Prime Agricultural Areas.

Municipalities are required to implement the PPS policies in their Official Plans through both mapping of the resources and policies to implement the requirements related to the above three policy areas.

Key to *Puslinch by Design* is the requirement to protect the long-term resource supply. Figure 3.5.2 identifies the mapped resource supply for both sand and gravel and bedrock. The mapped resource is in the central part of the Study Area for *Puslinch by Design* and extends northeast and west of the Study Area. The PPS requires this resource to be protected from incompatible development on or adjacent to the mapped resource unless three tests are satisfactorily addressed:

- a) resource use would not be feasible; or
- the proposed land use or development serves a greater long-term public interest; and
- c) issues of public health, public safety and environmental impact are addressed.

As shown on **Figure 3.5-2**, most of the mapped aggregate resource in the Study Area also has active extraction. This means these lands are not available for other uses in the short term and if other uses were considered, the above policies would need to be achieved.

Proposed Provincial Planning Statement (2024)

The Province of Ontario has released a document to update the Provincial Policy Statement (2020). The document is entitled "Provincial Planning Statement" and is currently under review. A comparison of the PPS 2020 to the PPS 2024 revealed no changes to the Mineral Aggregate Resources policies.

Growth Plan for Greater the Golden Horseshoe (Office Consolidation 2020)

A Place to Grow is the Provincial Land Use Plan for the Greater Golden Horseshoe, also known as the Growth Plan. The Growth Plan is applicable in Wellington County, as well as the Township of Puslinch.

Section 4.2.8 of the Growth Plan addresses Mineral Aggregate Resources. There are no maps of Mineral Aggregate Resources in the Growth Plan. The policies in the Growth Plan address the following:

- Protection of the resource for aggregate use similar to and consistent with the PPS 2020;
- Direction for aggregate recycling;
- Direction on how to implement the Provincial Natural Heritage System under the Growth Plan for new quarrying applications; and,
- Rehabilitation policies for quarries where the resource is concluded.

The policies of the Growth Plan are consistent with the PPS (2020) and align with how aggregate resources are to be protected and managed in Ontario.

County of Wellington Official Plan

The County of Wellington Official Plan ("County OP") includes policies and mapping of Mineral Aggregate Resources. The following are the key elements of the policies and mapping.

Policies:

The policies within the County OP identify the location of Mineral Aggregate Resources and active sites for aggregate extraction. The County OP particularly identifies the areas with the potential for aggregate extraction.

Municipalities are required to implement the PPS policies relative to aggregates within their Official Plans. The County OP has completed this with key policy requirements as follows:

- The policies in the County OP identify that the mapping is an "overlay" which is information provided on the Mineral Aggregate Resources in the County. An overlay does not confer a land use designation on the mapped areas. Rather, the overlay identifies the potential for extraction subject to the requirements of the County OP and other legislation such as the *Aggregate Resources Act*.
- 2. The policies in the County OP replicate the policies in the PPS regarding the importance of aggregates for the needs of the Province. Similar to the PPS, the County OP includes the "tests" to determine if other uses are appropriate either on the mapped lands or on lands adjacent to the mapped lands:
 - a) resource use would not be feasible; or
 - b) the proposed land use or development serves a greater long-term public interest; and,
 - c) issues of public health, public safety and environmental impact are addressed.
- 3. Additional policies in the County OP establish the permitted uses for aggregate extraction sites. These uses include the extraction of the resources and the processing of the resource. These types of uses are intensive and can include blasting, drilling, landscape construction, washing, storage, loading, and general processing such as screening and sorting. Ancillary uses include asphalt plants, concrete plants, aggregate transfer stations and more. Generally, the uses would be considered a heavy industrial use.
- 4. The County OP requires all aggregate operations to be established through approvals by the County (Official Plan Amendment) and the Township (Zoning Bylaw Amendment). Policies are included in the County OP to address the requirements in assessing any application for land use change to establish an aggregate extraction site.

- 5. Rehabilitation is a requirement for aggregate applications in the County OP. Generally new applications will include a rehabilitation plan for the site as extraction concludes or moves to subsequent phases of the site, also known as progressive rehabilitation. For sites that are extracting below the water table, the policies identify the importance of rehabilitation and understanding, as part of the application process, if the site can be returned to another use. In many instances in Ontario, sites are not able to be returned to another use due to the presence of groundwater. These sites often result in the end use being a body of water.
- 6. Policy PA7-1 is relevant to the Mineral Aggregate Resource mapping and active uses. This policy is within the Study Area, is mapped in the County Official Plan, and focuses economic activity within the Township in this area. There is a significant overlap between the Mineral Aggregate Resource mapping and PA7-1. Of note, the policy also specifically recognizes the importance of economic activity as an after use when extraction is concluded. This policy, together with the Rural Employment policies, prioritizes Policy PA7-1 lands for economic activity.
- 7. Mapping has been completed through a Schedule identifying Mineral Aggregate Resources. The Schedule includes both Sand and Gravel Resources as well as Selected Bedrock Resources. The mapping is based on information provided in the Provincial Aggregate Resources Inventory Paper for the County of Wellington (ARIP 162) prepared by the Ontario Ministry of Natural Resources and Forestry ("MNRF"). Of note, the Study Area for *Puslinch by Design* includes only Sand and Gravel Resources.
- 8. Of all the municipalities in the County, Puslinch has the greatest extent of aggregate sites by land area.

Figure 3.5-1 and **Figure 3.5-2** have been prepared for *Puslinch by Design*. The figures integrate the information available on the County OP for the Mineral Aggregate Resources overlay, active aggregate sites, and the land use designations in the County OP. The Study Area boundary is also identified.

Observations in reviewing the figures are as follows:

- 1. A significant portion of the Study Area is mapped as Mineral Aggregate Resources.
- 2. The majority of the Study Area within the Mineral Aggregate Resources overlay includes active aggregate extraction sites. There are also lands in the Study Area that are shown as Mineral Aggregate Resources but are not currently the subject of an application or an existing extraction site. The policies of the PPS and the County OP regarding protection of this resources will be important in assessing the land use options to identify the future Rural Employment Lands.
- 3. There are two areas of Rural Employment identified in the County OP in Puslinch generally described as the northern area and the southern area. Both of these Rural Employment Areas are within the Study Area. The existing Rural Employment (northern area) is not in the vicinity of aggregate extraction. The

- existing Rural Employment (southern area) is adjacent to active extraction sites as well as lands identified in the County OP as Mineral Aggregate Resources.
- 4. Lands west of the Study Area boundary, in the vicinity of Highway 401 and the Hanlon Expressway include Mineral Aggregate Resources and existing residential uses. This situation also exists east and northeast of the Study Area boundary.

III. Best Practices Review

A best practices review has been undertaken in Table 3.5-1 below.

Table 3.5-1: Comparator Municipalities – Aggregates and Rural Employment

Municipality	Employment Planning Land	Land use Compatibility
	Use Considerations	Considerations
Niagara Region	The Region has identified Mineral Aggregate Resources and associated policies within the Official Plan. There are no mapped resources in	Proposed development other than extraction on or adjacent to lands that are Mineral Aggregate Resources must demonstrate: a) The proposed resource is
	Rural Employment lands are separate from Mineral Aggregate Resources – geographically these are distinct and a separate designation. Separate policies apply for Rural Employment lands. Rural Employment lands are "Dry Industrial" – no municipal servicing provided.	not feasible b) The proposed land use serves a greater public good c) Compatibility is addressed (matters such as public health, public safety and environment).
Waterloo Region	The Region has identified Mineral Aggregate Resources and associated policies within the Official Plan. There are no mapped resources in settlement areas. There are no separately designated Rural Employment Lands outside of Settlement Areas.	Proposed development other than extraction on or adjacent to lands that are Mineral Aggregate Resources must demonstrate: a) The proposed resource is not feasible b) The proposed land use serves a greater public good c) Compatibility is addressed (matters such as public health, public safety and environment).
Ottawa	The City has mapped aggregate resources within the Official Plan	The Official Plan includes goals of protecting existing

Municipality	Employment Planning Land	Land use Compatibility
	Use Considerations as well as shown these resources in the context of the village settlement areas.	and future potential aggregate operations from incompatible land uses.
	The Official Plan includes direction acknowledging that aggregate operations are best located away from villages and where people live. The Plan also acknowledges the importance of the transportation network to aggregate operations. There are no separately designated Rural Employment Lands outside of Settlement Areas.	The City's Official Plan also addresses potential new development in proximity to the Aggregate Resource Areas with the following: it must be demonstrated that such development shall not conflict with future mineral aggregate extraction. Conflicting land uses are new sensitive land uses that interfere with mineral aggregate extraction, including but not limited to: a) the creation of new lots; b) rezoning to permit dwellings or lodging places (motels, campgrounds, nursing homes, etc.); and c) small-scale business uses where animals, equipment or employees may be adversely affected by pit or quarry activities.
Uxbridge	The Town of Uxbridge Official Plan identifies that the entire Town is either in the Oak Ridges Moraine Plan Area or the Greenbelt Plan Area. Policies regarding aggregate extraction are derived from these Provincial land use plans.	Employment areas in Uxbridge are generally within settlement areas. The Plan references the Oak Ridges Plan and the Greenbelt Plan outside of settlement areas for mineral extraction.
	There is no separate mapping of potential aggregate resource areas.	
Oro-Medonte	The Official Plan for Oro-Medonte has a settlement structure that includes employment areas both within and outside the settlement	The Official Plan is similar to other Official Plans in terms of protection of the resources (see Niagara Region, PPS,

Municipality	Employment Planning Land Use Considerations	Land use Compatibility Considerations
	areas – there is no distinction creating Rural Employment Areas. The employment areas are	County OP) and the requirements for extraction.
	separate from the Mineral Aggregate Resources which are mapped as an Appendix to the Official Plan.	1

IV. Study Area and Implications for Identifying Land use Options

Understanding aggregate operations (existing and potential operations) is important to identifying future land uses options for the Rural Employment lands in the Township of Puslinch. The maps associated with this background paper identify existing operations, proposed operations and lands designated for sand and gravel resources.

Aggregate operations are generally industrial operations. The extraction and processing of the resource involves heavy equipment operations, trucking of the resources, and the processing of the resource which can include noise, dust, vibration, potential impacts on views and vistas in the community, and potential impacts on private wells and groundwater resources.

The greatest potential is for aggregate resources to impact on sensitive land uses, including residential uses, day care centres, schools, health care facilities, and institutional uses such as retirement homes and nursing homes. Other impacts can include impacts on commercial cores if the haul routes transverse those cores. Similar impacts from dust, noise, vibration etc. can impact commercial cores as well. None of these uses will be in the permitted uses in the Rural Employment land category however understanding the potential for these uses is a component of this study – within the Study Area and adjacent to the boundaries of the Study Area.

The Rural Employment Lands are typically identified as a separate land use designation as is the case in the Wellington County Official Plan and as found in the Niagara Region Official Plan. The focus of policy and provincial guidelines is on sensitive land uses and impacts on aggregate operations/potential impacts on the aggregate resource base. However, there is a community interest in identifying and mitigating impacts to the Rural

Employment Lands such that those Lands are quality employment lands – attractive to future businesses, address overall community design, and buffering of the aggregate operations/future operations through design policies, setbacks, landscaping, and buffering. In addition, ensuring appropriate transportation policies for shared use of the road network is important for safe trucking and safe road use.

Similar to the Niagara Region Official Plan and the Wellington County Official Plan, the Rural Employment Lands will be a separate designation of lands outside of the Sand and Gravel designated lands in the Wellington County Official Plan.

Of note, the County OP identifies policy area PA7-1 as the priority for economic activity. A significant portion of this policy area includes the Rural Employment (southern area). Lands outside of the Rural Employment designation in PA7-1 are largely existing extraction sites. The policy in the County OP identifies the priority of this area for economic development including the extraction sites when extraction concludes. Part of this study will need to assess if the extraction will conclude in the timeframe for which the additional employment lands are needed.

V. Potential Evaluation Criteria

The following evaluation criteria are recommended to assess potential new employment growth areas that will minimize land use planning conflicts. Criteria are separated into two categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which evaluate the option based on a Likert scale of five degrees of impact. There are no screening criteria for Aggregates.

Screening Criteria

None.

Evaluation Criteria

Table 3.5-2: Potential Evaluation Criteria

Criteria	Criteria Response					PPS Policy County OP Policy
What is the level of impact on existing or planned aggregate resources (within 300 m being critical and beyond 1000 m being negligible)?	Negligible Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020 – 2.5.1; 2.5.2.4; 2.5.2.5 County OP Mapping
To what degree does the option include lands designated Mineral Aggregate Resource in the Wellington County Official Plan (either in extraction or mapped)?	No Mineral Aggregate Resources	Minimal Mineral Aggregate Resources	Modest Mineral Aggregate Resources	High Mineral Aggregate Resources	All Mineral Aggregate Resources	County OP Mapping
For lands in active extraction, will the extraction conclude within the time horizon of the planned need for additional Rural Employment Lands?	Extraction will conclude in the short term	Extraction will conclude in the medium term	Extraction will conclude in the long term	Extraction will conclude near the end of the planning horizon	Extraction will continue beyond planning horizon	

VI. Data Sources

Planning Act

Aggregate Resources Act

Aggregate Resources Policies and Procedure Manual, Province of Ontario

Provincial Policy Statement (2020)

County of Wellington Official Plan Policies and Mapping

Niagara Region Official Plan

Waterloo Region Official Plan

City of Ottawa Official Plan

Town of Uxbridge Official Plan

Township of Oro-Medonte Official Plan

Land Information Ontario Mapping

3.6 Background Paper: Agriculture

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington By Colville Consulting Inc.

I. Purpose

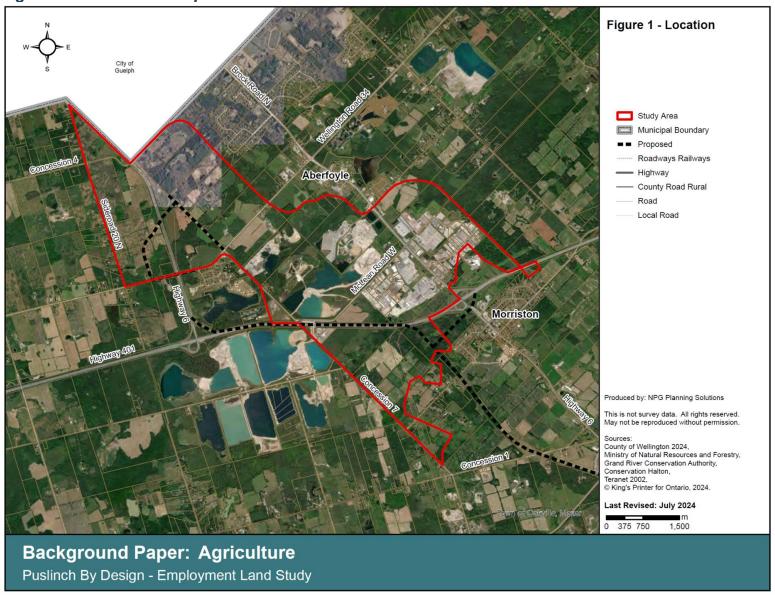
The purpose of this paper is to review provincial and municipal agricultural policies; identify agricultural, agriculture-related, and on-farm diversified uses; identify agricultural investments (e.g., tile drainage); assess the level of fragmentation of the agricultural land base; and calculate Minimum Distance Separation (MDS) setback requirements for all livestock operations which have the potential to constrain the development of new employment growth areas. The Agricultural Background Paper was primarily completed through a desktop exercise, utilizing information sources such as provincial planning documents and guidelines, Official Plan Land Use Schedules, aerial imagery, and OMAFRA's AgMaps, Agricultural Systems Portal, and AgriSuite software. The desktop information collected was supplemented with a windshield land use survey to confirm the presence of the various land uses identified and gather information directly from landowners to allow for the accurate calculation of MDS I setback requirements. This paper will also recommend potential evaluation criteria for new employment growth areas from an agricultural perspective.

II. Existing Conditions

Figure 3.6-1 identifies the Study Area for the new employment growth area as outlined within *Puslinch By Design*. However, to consider impacts on the Agricultural System as a result of new employment land uses, an area of land larger than the Study Area for *Puslinch By Design* has been considered. The expanded "Agricultural Context Area" is shown in **Figure 3.6-1**. The Agricultural Context Area encompasses all lands within 1.5 km of the boundaries of the *Puslinch By Design* Study Area and is generally bounded by Wellington Road 35 to the west, Gore Road to the south, Victoria Road South to the east, and Laird Road to the north. The Agricultural Context Area contains several agricultural and non-agricultural land uses. The majority of the Agricultural Context Area is in agricultural production of common field crops, but also contains large urban areas, pits/quarries, and natural heritage features.

The Study Area for *Puslinch By Design*, herein referred to as the "Study Area", is generally located east of Sideroad 20 North, south of Maltby Road West, north of Concession 1, and west of Victoria Road South. The Study Area is irregularly shaped and is approximately 1,405 ha (3,472 acres) in size.

Figure 3.6-1: Location Map



Land Use

A windshield land use survey was completed on April 30, 2024. The land use survey identified the number and type of agricultural operations (both existing and retired), agriculture-related uses, and on-farm diversified uses within the Agricultural Context Area.

The purpose of the land use survey is to document agricultural uses within the Study Area and Agricultural Context Area; identify agricultural operations that may be sensitive to the introduction of new land uses; and identify livestock facilities to calculate MDS I setback requirements. All observed land uses are numbered, and short descriptions of these operations are included in the land use survey notes in **Appendix A** to this paper. **Figure 3.6-2** shows the land uses identified within the Study Area and Agricultural Context Area.

Thirty-nine agricultural and former agricultural uses were identified during the land use survey. The agricultural uses include six hobby farms, one donkey operation, two poultry operations, six equestrian operations, five beef operations, two cash crop operations, one sheep operation, eight empty livestock facilities, and eight remnant farms. Remnant farms have no infrastructure that is capable of housing livestock, whereas empty livestock operations are not currently housing livestock, but have infrastructure that is capable of housing livestock with minimal investment.

Of the thirty-nine agricultural uses identified, nine are located within the Study Area. These uses include two hobby farms, four beef operations, one empty livestock facility, and two remnant farms.

No agriculture-related uses, nor on-farm diversified uses were observed during the land use survey and desktop review.

Canada Land Inventory

The Canada Land Inventory (CLI) is an interpretative system for assessing the effects of climate and soil characteristics on the limitations of land for growing common field crops. The CLI system has seven soil classes that descend in quality from Class 1, which have no significant limitations, to Class 7 soils which have no agricultural capability for common field crops. Class 2 through 7 soils have one or more significant limitations, and each of these are denoted by a capability subclass. There are thirteen subclasses described in CLI Report No. 2 (1971). Eleven of these subclasses have been adapted to Ontario soils. Prime agricultural lands include specialty crop areas and Canada Land Inventory (CLI) Classes 1, 2 and 3 soils, in this order of priority for protection

As shown in **Figure 3.6-3**, the majority of the Study Area is comprised of prime agricultural lands. The majority of the prime agricultural lands within the Study Area are CLI Class 3 lands, however a large area in the central portion of the Study Area is mapped as CLI Class 1 and 2 lands. Small pockets within the Study Area are non-prime agricultural lands,

with CLI Class 4 lands and organic soils located south of Aberfoyle and north of Concession 7, and CLI Class 6 lands located east of Sideroad 20 North.

Figure 3.6-2: Land Uses

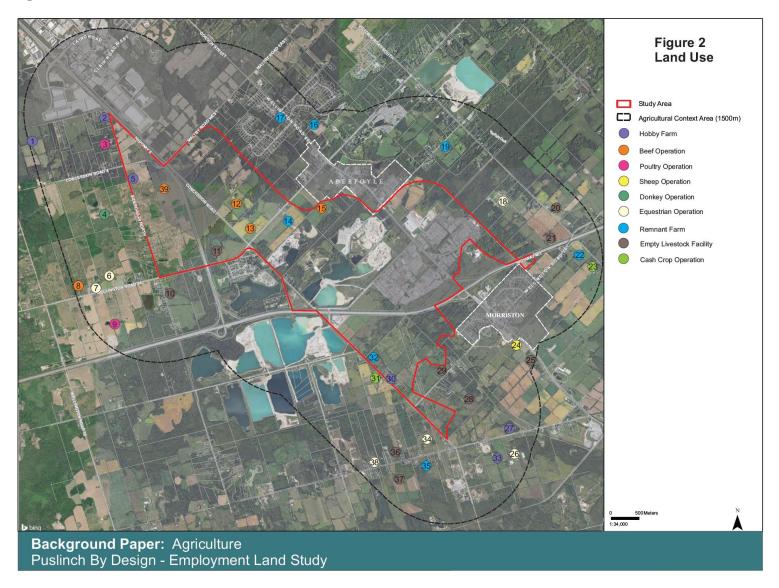
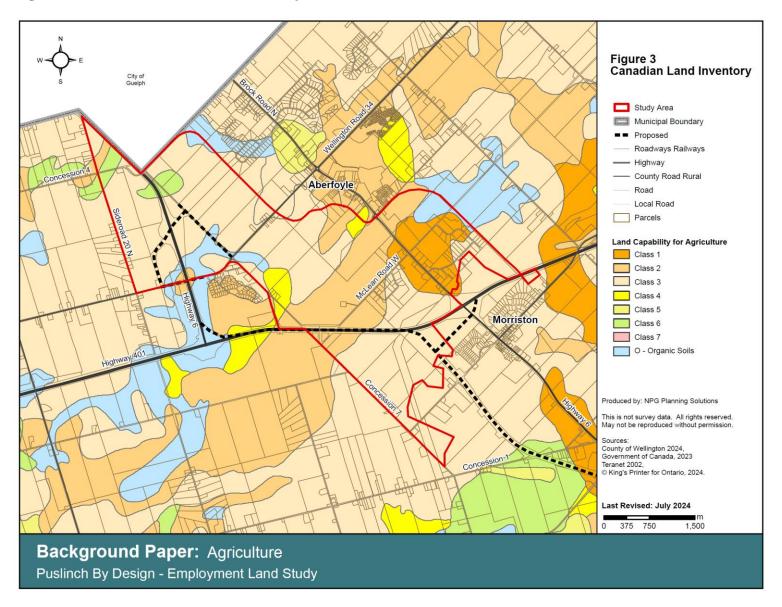


Figure 3.6-3: Canadian Land Inventory



Land Improvements

Artificial drainage mapping covering the Study Area and Agricultural Context Area are shown in **Figure 3.6-4.** The Study Area only contains small areas of systematic tile drainage installations. No random tile drainage is present within the Study Area. No other investments in land improvements were identified through the desktop review and land use survey.

Fragmentation

Fragmentation of agricultural lands can have a negative impact on the viability of agricultural lands and its long-term preservation for agricultural purposes. Fragmentation of farmlands can also diminish the economic viability of the agricultural area by reducing farming efficiency and increasing operating costs for farmers who must manage multiple small, separated parcels. Larger farm parcels can accommodate a wider range of agricultural activities and ensure long term viability of the property. In contrast, smaller farm parcels cannot offer the same flexibility and may not be viable as standalone parcels. Generally, smaller farm parcels cannot sustain a family farm without a secondary source of income (off farm) to maintain the agricultural operation.

Based on our review of the lot fabric in the Agricultural Context Area using AgMaps and direct observation, there is a mix of parcel sizes ranging from single residential (< 1 ha) to large agricultural parcels (>50 ha). It should be noted that a number of parcels within the Agricultural Context Area are not suitably sized for a variety of agricultural uses. While some fragmentation is evident within the Agricultural Context Area, it is not considered to be a highly fragmented area, as there are also a considerable number of parcels that are suitably sized for a variety of agricultural uses.

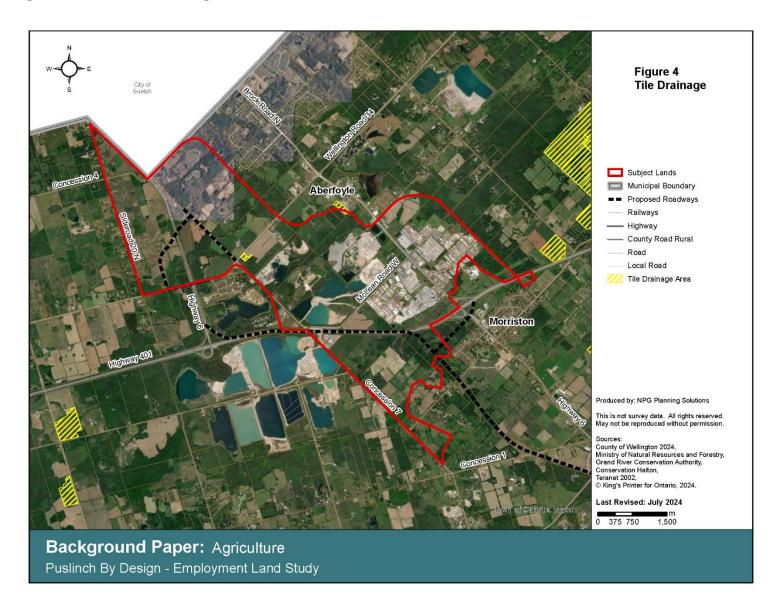
Within the Study Area, two existing Rural Employment Areas have already fragmented the agricultural land base. New employment growth areas will inevitably result in further fragmentation.

Minimum Distance Separation

MDS I setbacks were calculated for all livestock facilities observed within 1,500 m of the Study Area, which are both capable of housing livestock and have the potential to create MDS related constraints for development. The purpose of this exercise was to identify areas within the Study Area that could meet MDS I setback requirements for the proposed Rural Employment Area.

The factors used to determine the MDS I setback requirements for these facilities include: the type of livestock; the maximum capacity of the barn for livestock; the type of manure storage system; and the type of land use (Type A and Type B). The development of new employment growth areas will contain a mix of non-agricultural land uses, which are considered to be Type B (more sensitive) land uses.

Figure 3.6-4: - Tile Drainage



The remaining factors required to calculate the MDS setbacks were determined through field observations recorded during the land use survey, aerial photographic interpretation, and site-specific information provided by landowners, where possible. The lot sizes were determined using the AgMaps measuring tool. In some cases, the building capacity was estimated based on the building dimensions, as measured using either the AgMaps measuring tool or the Google Earth® measuring tool.

The MDS I formula was applied to nineteen livestock facilities within the Agricultural Context Area. **Figure 3.6-5** shows the MDS I setback distances for the identified livestock operations. Of the nineteen livestock facilities in which the MDS I formula was applied, thirteen of the livestock operations have MDS I setbacks which would constrain development in a portion of the Study Area. Lands surrounding the existing Rural Employment Area, north of Morriston, have the lowest potential for MDS-related development constraints.

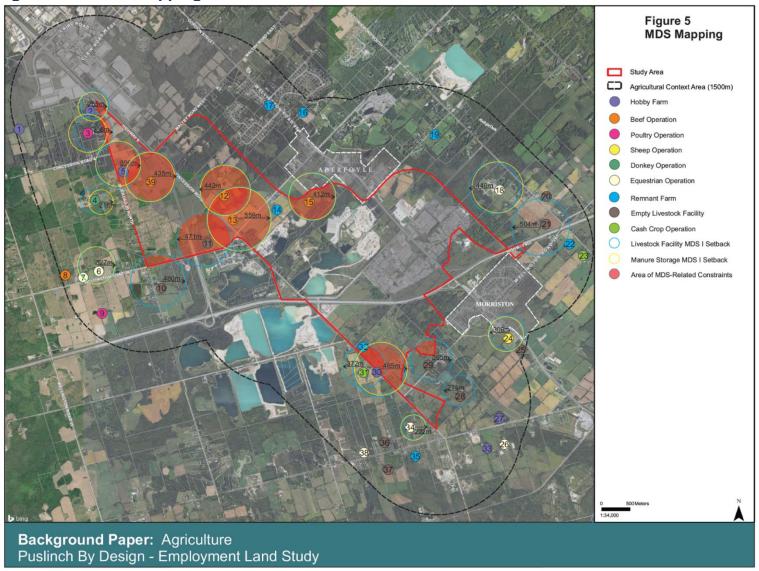
Table 1 summarizes the MDS I setback requirements for the identified livestock operations and their potential to create constraints for the new employment growth areas. The AgriSuite MDS reports for these operations can be made available upon request.

Table 3.6-1: MDS Setback Requirements

Table 1.	MDS Setback Requirements for Puslinch By Design					
Site Number	MDS I Setback Requirement – Livestock Facility	MDS I Setback Requirement – Manure Storage	Area of Encroachment Within Study Area			
2	255 m	255 m	2.3 ha			
3	336 m	336 m	5.9 ha			
4	216 m	216 m	0 ha			
5	396 m	396 m	30.8 ha			
6	327 m	327 m	0 ha			
10	480 m	N/A	7.2 ha			
11	471 m	N/A	55.4 ha			
12	442 m	442 m	63.3 ha			
13	559 m	559 m	78.0 ha			
15	412 m	412 m	35.0 ha			
18	448 m	448 m	0 ha			
21	504 m	N/A	0.7			
24	306 m	306 m	0 ha			
28	274 m	N/A	0 ha			
29	365 m	365 m	7.7 ha			
30	465 m	465 m	31.6 ha			
31	372 m	N/A	13.7 ha			
34	222 m	222 m	0 ha			
39	435 m	435 m	1.1 ha			
Total			292.1 ha*			

*Total area of encroachment shown accounts for overlap in MDS I setback requirements and is not a simple sum of all areas of encroachment.

Figure 3.5-5: MDS Mapping



III. Applicable Legislation

Planning Act

Section 2 of the *Planning Act* identifies matters of provincial interest. The Act requires decisions to "have regard" for matters of provincial interest. The *Planning Act* identifies the following as a matter of provincial interest:

(b) the protection of the agricultural resources of the Province

Provincial Policy Statement (2020)

Land Use Policy and development in the province of Ontario is directed by the PPS, which was issued under the authority of Section 3 of the *Planning Act* and came into effect on May 1, 2020, replacing the PPS issued April 30, 2014. It states that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act. This report has been prepared to investigate compliance with Part V, Policy 2.3 of the PPS, which deals specifically with agricultural policy, as well as Part V, Policy 1.1.5, which deal specifically with rural lands in municipalities.

Policy 1.1.5 of the PPS states in part that "When directing development on rural lands, a planning authority shall apply the relevant policies of Section 1: Building Strong Healthy Communities, as well as the policies of Section 2: Wise Use and Management of Resources and Section 3: Protecting Public Health and Safety."

Policy 1.1.5.6 states that "Opportunities should be retained to locate new or expanding land uses that require separation from other uses", while Policy 1.1.5.8 states that "New land uses, including the creation of lots, and new or expanding livestock facilities, shall comply with the minimum distance separation formulae."

The Study Area is primarily designated Secondary Agricultural in the County of Wellington Official Plan. As such, the Study Area is considered to be rural lands and must comply with the Rural Lands in Municipalities policies of the PPS. To ensure opportunities for new or expanding land uses that require separation from other uses are retained, MDS I setbacks have been calculated for livestock facilities which may create development constraints for the new employment growth areas.

Policy 2.3.1 of the PPS states that "Prime agricultural areas shall be protected for long-term use for agriculture". The PPS defines prime agricultural areas as areas where prime agricultural lands predominate. Prime agricultural lands include specialty crop areas and Canada Land Inventory (CLI) Classes 1, 2 and 3 soils, in this order of priority for protection. Policy 2.3.3.3, Permitted Uses, states that "New land uses in prime agricultural areas, including the creation of lots and new or expanding livestock facilities, shall comply with the minimum distance separation formulae."

As stated above, the Study Area is primarily designated Secondary Agricultural in the County of Wellington Official Plan. As such, the Study Area is not part of a prime agricultural area and are not required to comply with Policy 2.3 of the PPS.

Provincial Planning Statement (2024 Draft)

In 2022, the Province initiated a review on approaches for leveraging the housing supportive policies of the Provincial Policy Statement and the Growth Plan, removing barriers and continuing to protect the environment through a streamlined province-wide land use planning policy framework.

The feedback received from this review contributed to the development of the proposed Provincial Planning Statement (2024 PPS). The Provincial Planning Statement has not yet come into effect but will be replacing the policies of the Provincial Policy Statement and the Growth Plan.

Rural Lands in Municipalities policies in the 2024 PPS have been transposed to Section 2.6 under Chapter 2: Building Homes, Sustaining Strong and Competitive Communities. Rural Lands in Municipalities policies in the most recent 2024 PPS have not changed significantly from those policies in the 2020 PPS and still requires new land uses to comply with the minimum distance separation formulae.

Agriculture policies in the 2024 PPS have been transposed to Section 4.3 under Chapter 4: Wise Use and Management of Resources. Agriculture policies in the most recent 2024 PPS have not changed significantly from those policies in the 2020 PPS. One change to note, is that the proposed 2024 PPS allows for the identification of new or expanding settlement area boundaries outside of a municipal comprehensive review.

Growth Plan for Greater the Golden Horseshoe (Office Consolidation 2020)

In May 2019 the updated Growth Plan came into effect and was most recently updated in August 2020. The objective of the plan is to provide a long-term plan that works to manage growth, build complete communities, curb urban sprawl, and protect the natural environment.

The province has identified an Agricultural System for the GGH which includes a continuous and productive land base, comprised of prime agricultural areas, including specialty crop areas, and rural lands, as well as a complementary agri-food network that together enable the agri-food sector to thrive. The agri-food network includes many agricultural-related features such as regional infrastructure and transportation networks, on-farm buildings and infrastructure, agricultural services, farm markets, distributors, and primary processing, as well as small towns and hamlets that are supportive of agriculture and are important to the viability of the agri-food sector. To ensure the long-term viability of a healthy Agricultural System, land use planners must ensure that there are opportunities within the agricultural land base for key infrastructure, services, and assets which support the agricultural industry. This includes agri-food network features such as cold storage facilities, abattoirs, food processors, grain dryers, distribution centres, and food hubs/co-ops.

Section 2.2.9 of the Growth Plan deals with policy specific to Rural Areas. Policy 2.2.9.5 of the Growth Plan states that "Existing employment areas outside of settlement areas on rural lands that were designated for employment uses in an official plan that was approved and in effect as of June 16, 2006, may continue to be permitted. Expansions to these existing employment areas may be permitted only if necessary to support the immediate needs of existing businesses and if compatible with the surrounding uses."

It should be noted that the PPS 2024 amends the definition of the Agricultural System. In doing so, the use of the provincial mapping of the Greater Golden Horseshoe's agricultural land base will no longer be required.

County of Wellington Official Plan

The County of Wellington Official Plan (Consolidated 2024) is intended to give direction to the physical development of the County, its local municipalities and to the long-term protection of County resources. To help achieve this goal and protect the agricultural resources within the County, a Greenlands System was developed.

The intent of the Greenlands System, as defined in Section 5.1 of the Official Plan, is "to include those features and areas which are part of Wellington's natural heritage or areas in which natural or human-made conditions may pose a threat to public safety". These areas include, but are not limited to wetlands, environmentally sensitive areas, streams and valley lands, waterbodies, areas of natural and scientific interest, woodlands, fish and wildlife habitat, and threatened and endangered species.

Section 6.5 of the Official Plan provides Secondary Agricultural Areas policies. Secondary Agricultural Areas are defined as "lands within the Rural System which are determined to be non-prime agricultural areas, but which can sustain certain agricultural activities." Small scale commercial, industrial and institutional uses are permitted within Secondary Agricultural Areas. Large scale proposals within Secondary Agricultural Areas will require an official plan amendment. New land uses will also need to comply with the minimum distance separation formulae.

Section 9.8 of the Official Plan deals specifically with Puslinch Local Policies. Policy 9.8.1 outlines specific development policies for Wellington Road 46, which traverses a portion of the Study Area. The purpose of these policies is to ensure that proposed development will not interfere with the safe and efficient operation of this transportation corridor.

Policy 9.8.3 of the Official Plan outlines Puslinch Industrial Policies. There are two large parcels of land designated Rural Employment, which are allowed to have additional uses which include complementary commercial uses and offices. Rural Employment lands have a lower priority for development that the industrial lands in the Puslinch Economic Development Area.

Policy 9.8.4 of the Official Plan outlines policies for the Regionally Significant Economic Development Area (i.e., Study Area). Policy 9.8.4 states in part that "Schedule A7 and B7 of this Plan designates a Regionally Significant Economic Development Study Area in

Puslinch. This area includes Secondary Agricultural lands to be considered for future employment uses and as appropriate, other uses based on need which are compatible with the surrounding area. This area also includes lands which have been developed and/or are designated Rural Employment and form part of the Puslinch Economic Development Area (PA7-1). Other lands are licenced and active aggregate extraction operations."

Policy 9.8.6, PA7-1 of the Official Plan outlines policies for the Puslinch Economic Development Area. This policy states in part that "The land identified as PA7-1 on Schedule B7 is known as the Puslinch Economic Development Area. This is an area intended to service the Township by providing locations for economic activity and employment opportunities. This area is the predominant location for business and industry in the Township but does not preclude the establishment of small-scale activities outside of concentrations elsewhere in the Township." The lands identified as PA7-1 are located within the Study Area.

IV. Study Area and Implications for Identifying Land-Use Options

Based on a review of the CLI capability, land improvements, level of fragmentation and surrounding land uses, the majority of the Study Area has similar agricultural priority. The new employment growth areas will comply with all applicable provincial and municipal agricultural policies, so long as MDS I setback requirements are adhered to.

Development constraints related to MDS I setback requirement are most prominent in the north and north-central portions of the Study Area, as shown in **Figure 3.6-5**. Consideration should be given to the proximity of existing non-agricultural uses when determining preferred locations for new employment growth areas. This may allow for the reduction of MDS I setback requirements and allow for a more contiguous agricultural land base.

V. Potential Evaluation Criteria

The following evaluation criteria are recommended to assess potential new employment growth areas:

Screening Criteria (pass/fail)

Lands located within a calculated MDS I setback should be screened out as a potential new employment growth area. MDS I setback requirements will be the primary limitation for establishing new employment growth areas, from an agricultural perspective. There is no need for screening out lands located outside of the calculated MDS I setback requirements based on additional criteria.

Evaluation Criteria

Potential Evaluation Criteria	Criteria F	Response				Policy Direction and/or Best Practice Guidance
Will the proposed employment location comply with the calculated MDS I setback requirements? Will the proposed	No Impact Yes	Minimal Impact Minimal	Modest Impact Modest	High Impact High Impact	No Critical Impact	PPS 2020 1.1.5.8 County OP 6.5.7 PPS 2020 1.1.5.7
employment location result in unnecessary fragmentation of the agricultural land base? If so, why can it not be located near clusters of existing non-agricultural uses?	Impact	Impact Logical expansion of existing non-ag use clusters	Impact	New non-ag use cluster making farming more difficult	New non-ag cluster creating land locked ag lands	County OP 6.5.3
Will the proposed employment location result in increased traffic levels on rural roads used for moving farm equipment? If so, can the employment location be designed in a way to direct non-agricultural traffic to major roads?	No Impact	Minimal Impact All traffic directed to major roads	Modest Impact Most traffic directed to major roads	High Impact Large increase in non-farm traffic on rural roads	Critical Impact	PPS 2020 1.6.7.1 County OP 4.2.3

VI. Data Sources

County of Wellington, 2024. County of Wellington Official Plan Office Consolidation. 250pp. February 2024.

Ontario Ministry of Municipal Affairs. Places to Grow, Growth Plan for the Greater Golden Horseshoe. 2020, Queen's Printer for Ontario.

Ontario Ministry of Municipal Affairs and Housing. 2020. Provincial Policy Statement. Queen's Printer for Ontario, Ontario, Canada.

Ontario Ministry of Municipal Affairs and Housing. 2024. Proposed Provincial Planning Statement. April 10, 2024. Environmental Registry of Ontario Posting #019-8462

Ontario Ministry of Agriculture, Food and Rural Affairs. Agriculture Information Atlas. Available

Online:

http://www.gisapplication.lrc.gov.on.ca/AIA/Index.html?viewer=AIA.AIA&locale=en-US

Ontario Ministry of Agriculture, Food and Rural Affairs. Agricultural System Portal. Available Online:

https://www.arcgis.com/aPPS/mapviewer/index.html?webmap=09ff270acab24673858afe480a8fac4c

Ontario Ministry of Agriculture, Food and Rural Affairs. Minimum Distance Separation Document & AgriSuite Software (OMAFRA, 2017)

Ontario Ministry of Agriculture, Food and Rural Affairs website, December 2022. Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario.

Appendix A

Land Use Survey Notes – Puslinch By Design						
Weather	Partially Cloudy Date (s) April 30, 2024					
Temperature	21°C	File	C24020			

Site No.	Type of Use	Type of Operation	MDS Calculation Required?	Description of Operation
1	Agricultural	Hobby Farm	Yes	Hobby farm with small barn, paddock for horses, one horse observed in 2023 Street View photos
2	Agricultural	Hobby Farm	Yes	Hobby farm with small barn, paddock for horses, one horse observed in 2023 Street View photos
3	Agricultural	Poultry Operation	Yes	One large poultry barn, five silos, outdoor manure storage at back of barn
4	Agricultural	Donkey Operation	Yes	The Donkey Sanctuary of Canada. Multiple barns and paddocks, two Quonset huts. Website says they rehabilitate donkeys, mules, and hinnies who have been neglected or abused.
5	Agricultural	Hobby Farm	Yes	Small barn in fair to poor condition, paddock, likely an empty livestock facility, one ostrich observed in 2019 Street View photos
6	Agricultural	Equestrian Operation	Yes	Pitcaple Farm. Paddocks, barn in good condition, uncapped silo, outdoor manure storage
7	Agricultural	Equestrian Operation	Yes	Multiple barns, Quonset hut, riding ring, outdoor manure storage
8	Agricultural	Beef Operation	Yes	Large barn, no signs of livestock, barn in good condition, V4 manure storage
9	Agricultural	Poultry Operation	Yes	Whisper Wood Farms. Barn in good condition, implement shed, no sign of livestock but assumed to still be capable of housing.
10	Agricultural	Empty Livestock Facility	Yes	Bank barn in fair to poor condition, uncapped silo, no sign of livestock, likely a former dairy operation
11	Agricultural	Empty Livestock Facility	Yes	Bank barn in fair to poor condition, no sign of livestock, likely a former dairy operation
12	Agricultural	Beef Operation	Yes	Wood sided barn in good condition, cattle observed in pasture through aerial photos
13	Agricultural	Beef Operation	Yes	Wood sided barn in fair condition, implement shed, Quonset hut, fenced pasture, cattle observed in pasture through Street View photos

14	Agricultural	Remnant Farm	No	Former livestock operation now used for storage, barn in poor condition, not capable of housing livestock
15	Agricultural	Beef Operation	Yes	Barn with fenced yard for animals, implement shed, likely a beef operation.
16	Agricultural	Remnant Farm	No	Former livestock operation, barn in poor condition, uncapped silo, unkept pasture areas, no sign of livestock and does not appear capable of housing livestock
17	Agricultural	Remnant Farm	No	Implement shed, uncapped silo, no sign of livestock and does not appear have any infrastructure capable of housing livestock
18	Agricultural	Equestrian Operation	Yes	Likely an equestrian operation. Multiple paddocks, barn and implement shed.
19	Agricultural	Remnant Farm	No	Barn demolished, implement shed in poor condition, no structures capable of housing livestock
20	Agricultural	Remnant Farm	No	Barn in poor condition, grain silo, converted for storage use
21	Agricultural	Empty Livestock Facility	Yes	Bank barn in fair to poor condition, uncapped silo, capped silo, no sign of livestock, likely a former beef operation
22	Agricultural	Remnant Farm	No	Barn in poor condition missing sideboards and part of roof, no sign of livestock, no structures capable of housing livestock
23	Agricultural	Cash Crop Operation	No	Four grain bins, large implement shed, no structures capable of housing livestock
24	Agricultural	Sheep Operation	Yes	Barn and implement shed, large pasture area, sheep observed in 2023 Street View photos
25	Agricultural	Empty Livestock Facility	Yes	Bank barn in good to fair condition, two uncapped silos, no sign of livestock, barn appears capable of housing livestock.
26	Agricultural	Equestrian Operation	Yes	Eli Farms and Equestrian Club. One large barn, two implement sheds, two grain bins, one uncapped silo, multiple paddocks,
27	Agricultural	Hobby Farm	Yes	Barn in fair condition, two paddocks, horses observed in 2022 Street View photos
28	Agricultural	Empty Livestock Facility	Yes	Barn in good condition, pasture area, likely a former beef operation, no trespassing, no0 sign of livestock but likely capable of housing
29	Agricultural	Empty Livestock Facility	Yes	Two barns in good condition, no sign of livestock, barns still capable of housing livestock
30	Agricultural	Hobby Farm	Yes	Wooden bank barn in fair to poor condition, outdoor manure storage, no livestock observed but likely beef

31	Agricultural	Cash Crop Operation	Yes	Implement shed, barn, Harivstore, and small shed, likely a former livestock operation converted to cash crop operation. Barn appears to be capable of housing livestock	
32	Agricultural	Remnant Farm	No	Collapsed barn, two grain bins, two uncapped silos, no structures capable of housing livestock	
33	Agricultural	Hobby Farm	Yes	New barn with small yard for animals off back, likely a small beef or dairy operation	
34	Agricultural	Equestrian Operation	Yes	New barn and paddocks, Quonset hut, animals observed in aerial photos, likely horses, possibly beef	
35	Agricultural	Remnant Farm	No	Barn in poor condition and overgrown, no structures capable of housing livestock	
36	Agricultural	Empty Livestock Facility	Yes	Barn in fair to good condition, no sign of livestock but appears to be capable of housing livestock	
37	Agricultural	Empty Livestock Facility	Yes	Two barns in good to fair condition, historic photos show barn was overgrown but not cleared, no livestock observed but appears capable of housing livestock	
38	Agricultural	Equestrian Operation	Yes	Barn in fair to good condition, riding area, paddock, no livestock observed but capable of housing livestock	
39	Agricultural	Beef Operation	Yes	Beef operation with barn and outside access for cows, outdoor manure storage	

	Total Number	Active	Empty or Remnant
		Hobby Farm – 6	
		Donkey Operation – 1	
		Poultry Operation – 2	Empty Livestock Facility –
Agricultural	38	Equestrian Operation – 6	8
		Beef Operation – 5	Remnant Farm – 8
		Cash Crop Operation – 2	
		Sheep Operation – 1	
Agriculture-Related	0	0	0
On-farm Diversified	0	0	0

3.7 Background Paper: Natural Heritage

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington By Colville Consulting Inc.

I. Purpose

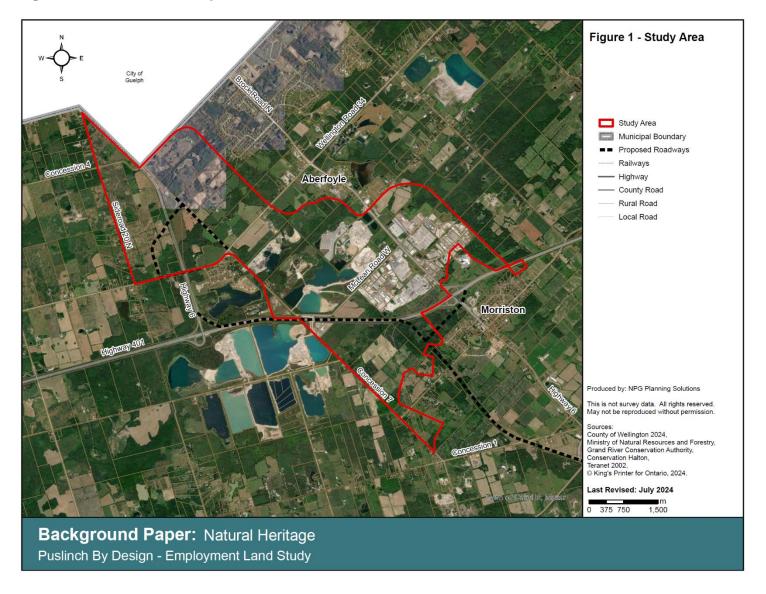
The County of Wellington and Township of Puslinch have identified a need for additional employment lands. A rural employment land needs analysis conducted by Watson & Associated Land Economists determined that a minimum of 30 ha of employment designated lands are needed in the Township of Puslinch. The "Puslinch by Design: Employment Land Study" identifies a Study Area (henceforth referred to as the "Study Area") in the County of Wellington Official Plan (Consolidated February 2024) as the area to be considered for future employment growth. The extent of this Employment Land Study area is provided in Figure 3.7-1 below.

The purpose of this natural heritage feature background paper is to review provincial and municipal natural heritage policies; identify natural heritage features, including but not limited to wetlands, woodlands, watercourses, linkages, and potential significant wildlife habitat within Study Area. The majority of this report has been completed through a desktop analysis exercise, utilizing information sources such as Provincial planning documents and guidelines, MNRF mapping, Grand River Conservation Authority (GRCA) mapping, NHIC data, Official Plan Land Use Schedules, aerial imagery, and additional background information.

Mapped Natural Heritage Features identified through the review of provincial and municipal background information has been assessed for potential constraints to the future development of the Employment Lands. It should be noted that due to the complex and dynamic function of natural heritage features, an assessment and analysis at the field level to confirm, and where necessary refine, the findings of this background report are anticipated to be required as the site selection process moves forward and prior to development.

This report also recommends potential evaluation criteria for new employment growth areas as it relates to natural heritage feature constraints to comply with provincial and municipal natural heritage policies (Section 1.5).

Figure 3.7-1: Location Map



II. Existing Conditions

The Study Area is located in the Township of Puslinch, County of Wellington, and is generally located south of the Community of Aberfoyle. The Study Area is uniquely shaped with the boundaries delineated by a mix of roadways, settlement areas, natural heritage features and provincial planning guideline designations (i.e. the boundary of the Greenbelt along the southeastern portion of the Study Area). The Study Area is comprised of several land uses including a business park with commercial and industrial operations, aggregate operations, natural heritage features, rural residences, and agriculture uses. The Study Area measures approximately 1405 ha (3471.83 acres) in size. Within the Study Area, approximately 280 ha (691.89 acres) are mapped as part of the County of Wellington Greenlands Systems.

Schedule B7 of the County of Wellington Official Plan identifies the Greenlands System. This system includes three components including Core Greenlands, Greenlands, and Earth Science Area of Natural and Scientific Interest (ANSI). Boundaries of these components and natural heritage features associated with them often overlap within the Greenlands System. Waterbodies and Watercourses are not mapped within the Greenlands System but are also identified on Schedule B7.

The Greenlands System mapping provides a general idea where natural heritage features are located within the Study Area. Additional natural heritage features that may meet the criteria for inclusion into the Greenlands System were observed during the preliminary windshield survey conducted for this project. Further assessment, including site specific surveys and inventories are required to further refine the Greenlands System and its components to reflect the condition and extent of existing natural heritage features.

The Study Area also includes components of the Rural System shown on Schedule B7. Land use designation within the Rural System consists primarily of Secondary Agricultural and Rural Employment Area.

The Grand River Conservation Authority (GRCA) regulates natural heritage features throughout the Study Area including, but not limited to, watercourses and wetlands. These features, in addition to natural hazards, form the GRCA regulated areas. The GRCA regulated areas generally coincide with the Greenlands System designated areas.

The extent of natural heritage features mapped in the County of Wellington Official Plan and GRCA regulated areas on and adjacent to the Study Area are illustrated in **Figures 3.7-2** and **3.7-3** respectively. **Figure 3.7-4** below illustrates Wetland features identified by MNRF located on and adjacent to the Study Area.

As mapping indicates that natural heritage features are located within the Study Area, any future employment lands identified and subsequent development located within or adjacent to these features will be subject to the environmental policies of the Wellington

County Official Plan, as well as the applicable policies of the GRCA. These policies generally require that proposed development demonstrate no negative impacts on the natural heritage features or their ecological functions through the completion of an Environmental Impact Assessment (EIA).

Figure 3.7-2: Wellington County Official Plan – Schedule B7

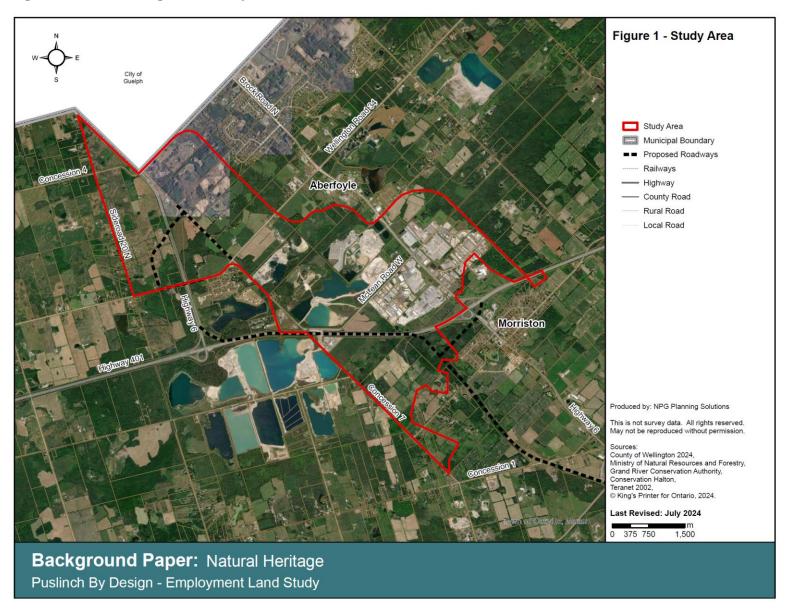


Figure 3.7-3 – GRCA Regulated Areas Mapping

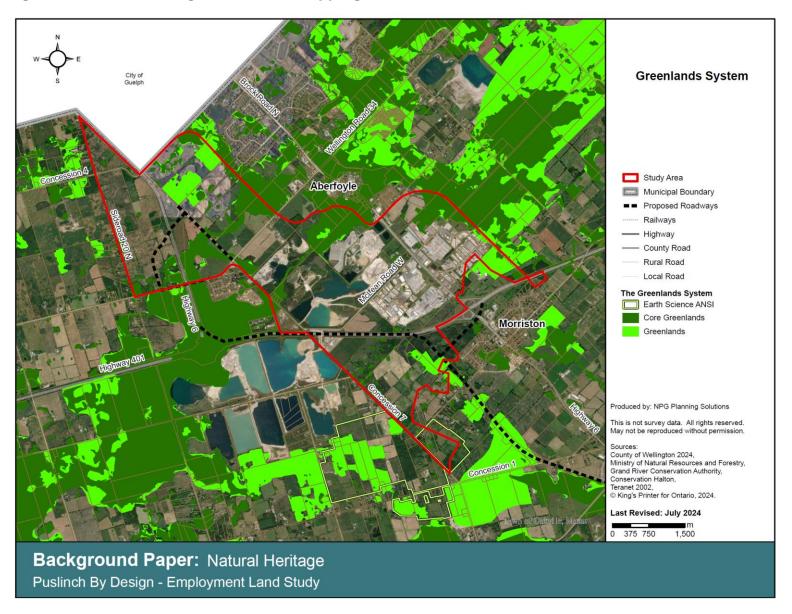
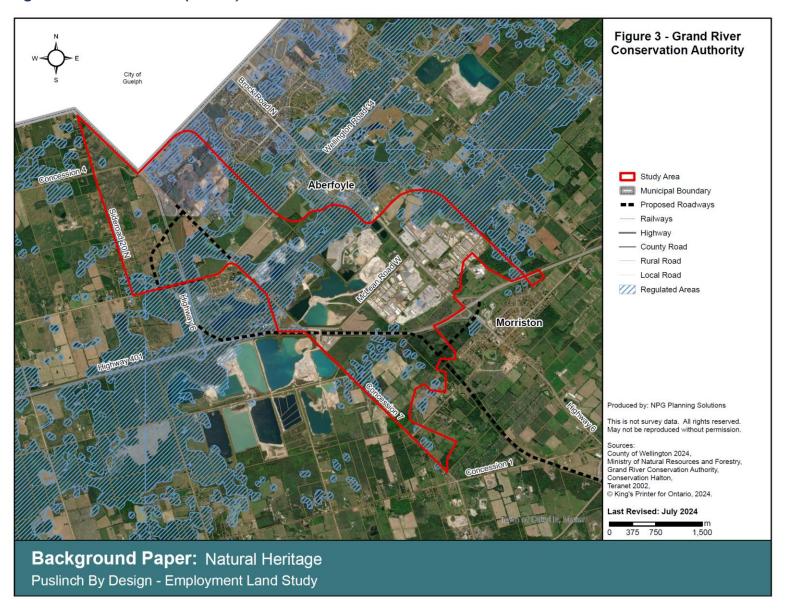


Figure 3.7-4: Wetlands (MNRF)



III. Applicable Legislation Planning Act

Section 2 of the *Planning Act* identifies matters of provincial interest. The Act requires decisions to "have regard" for matters of provincial interest. The *Planning Act* identifies the following as a matter of provincial interest:

(c) the conservation and management of natural resources and the mineral resource base

Provincial Policy Statement (2020)

Land Use Policy and development in the province of Ontario is directed by the PPS, which was issued under the authority of Section 3 of the *Planning Act* and came into effect on May 1, 2020, replacing the PPS issued April 30, 2014. It states that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act. This report has been prepared to investigate compliance with Part V, Policy 2.1 of the PPS, which deals specifically with the long-term protection and management of natural heritage features and areas.

The intent of the PPS is to ensure that natural features and areas are protected for the long term. The PPS indicates that 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.

Natural heritage features and areas are defined in the PPS as those which are important for their environmental and social values as a legacy of the natural landscapes of an area and include: significant wetlands, significant coastal wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant habitat of endangered species and threatened species, significant wildlife habitat and significant areas of natural and scientific interest.

Unless it can be demonstrated that there will be no negative impacts on the natural heritage features or their ecological functions, development and site alteration is not permitted in or adjacent to:

- significant woodlands and valleylands south and east of the Canadian Shield;
- significant wildlife habitat;
- significant fish habitat; and
- significant areas of natural and scientific interest.

Furthermore, development and site alteration shall not be permitted on adjacent lands to the natural heritage features identified above, unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Provincial Planning Statement (2024)

The Provincial Planning Statement 2024 (PPS 2024) will replace the Provincial Policy Statement 2020 and the *A Place to Grow: Growth Plan for the Greater Golden Horseshoe* (Growth Plan) when adopted by the province. The updated PPS contains a number of modifications to existing policies related to land use planning.

Natural Heritage Policies in the PPS 2024 have been transposed to Section 4.1 under Chapter 4: Wise Use and Management of Resources. The Natural Heritage policies in the most recent PPS 2024 have not changed from those policies in the 2020 PPS. However, an important change within the PPS 2024 as a result of the merging of the Growth Plan and PPS 2020, is that the proposed PPS 2024 does not include reference to the existing Natural Heritage System within the Growth Plan and based on the current draft this would be eliminated going forward and no longer form part of provincial policy.

Although there are no changes to the Natural Heritage polices in the PPS 2024, the PPS 2024 includes revisions to definitions related to natural heritage. These include, but are not limited, changes to the definitions of Natural Heritage Features and Areas, Negative Impacts, Significant, and Wetlands.

A Place to Grow – Growth Plan for the Greater Golden Horseshoe (2020)

In May 2019 the updated Growth Plan came into effect and was most recently updated in August 2020. The objective of the plan is to provide a long-term plan that works to manage growth, build complete communities, curb urban sprawl, and protect the natural environment. A selection of policies from the Growth Plan related to Natural Heritage Features are provided below.

The Growth Plans Natural Heritage System (NHS) is discussed in Section 4.2.2 and outlines the implementation of the NHS in municipal official plans and the protection of natural heritage features within it. The intent of the NHS is described as "...a comprehensive, integrated, and long-term approach to planning for the protection of the region's natural heritage and biodiversity." The NHS is intended to be incorporated into official plans and appropriate policies applied to address Growth Plan policy subsection 4.2.3 and 4.2.4 pertaining to the ecological and hydrologic functions.

Regarding the implementation and application of the Growth Plan NHS, Section 4.2.2.4 states:

"Provincial mapping of the Natural Heritage System for the Growth Plan does not apply until it has been implemented in the applicable upper- or single-tier official

plan. Until that time, the policies in this Plan that refer to the Natural Heritage System for the Growth Plan will apply outside settlement areas to the natural heritage systems identified in official plans that were approved and in effect as of July 1, 2017."

It is our understanding based on our review of the County of Wellington Official Plan, that although the County has developed an NHS, the mapping does not form part of the Official Plan and has therefore not been implemented at this time. Policies related to Key Hydrological Features, Key Hydrological Areas and Natural Heritage Features and areas adjacent to them (Section 4.2.3 and 4.2.4 respectively) are still applied outside of the NHS.

Greenbelt Plan (2017)

The Greenbelt Plan was first introduced in 2005 to help shape the future of the Greater Golden Horseshoe. It was most recently updated in 2017 and continues to build on the PPS 2020 to establish land use planning framework for environmental and agricultural protection. The Study Area for *Puslinch By Design* is located outside of the Greenbelt Plan Area, however minimum buffer requirements for natural heritage features located within the Greenbelt Plan Area and the Natural Heritage System will still need to be applied which may encroach into the Study Area. Section 3.2.5.4. states:

"In the case of wetlands, seepage areas and springs, fish habitat, permanent and intermittent streams, lakes and significant woodlands, the minimum vegetation protection zone shall be a minimum of 30 metres measured from the outside boundary of the key natural heritage feature or key hydrologic feature."

Although the Study Area is located outside of the Greenbelt Plan Area, these minimum buffers requirements for natural heritage features within the Greenbelt Plan Area are applicable and will need to be considered as part of the identification employment area site selection process.

County of Wellington Official Plan (2024 Consolidation)

The County of Wellington Official Plan (Consolidated 2024) is intended to give direction to the physical development of the County, its local municipalities and to the long-term protection of County resources. To help achieve this goal and protect the natural heritage system within the County, a Greenlands System was developed. The Greenlands System for the Study Area is illustrated in Schedule B7 of the Official Plan. The Greenlands System within the Study Area includes Core Greenlands, Greenlands, and Earth Science ANSI.

The intent of the Greenlands System as defined in Section 5.1 of the Official Plan is "to include those features and areas which are part of Wellington's natural heritage or areas in which natural or human-made conditions may pose a threat to public safety". These

areas include, but are not limited to wetlands, environmentally sensitive areas, streams and valley lands, waterbodies, ANSI's, woodlands, fish and wildlife habitat, and threatened and endangered species. The Greenland System is divided into two broad categories, Core Greenlands and Greenlands.

Section 5.4 of the Official Plan outlines policies for Core Greenlands and the features within them, which include areas that have a greater sensitivity or significance. These areas include provincially significant wetlands, all other wetlands, habitat of endangered or threatened species and fish habitat, and hazardous lands.

Section 5.4.1 provides development and site alteration limitations for significant and other wetlands. Where work is proposed in or adjacent to wetland features, consultation with the appropriate Conservation Authority is required. Section 4.4.2 outlines protection for significant habitat of endangered or threatened species and fish habitat. Where development is proposed adjacent to significant wildlife habitat, an Environmental Impact Assessment (EIA) is required to demonstrate no negative impact. Section 5.4.2 addresses fish habitat and states "Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements."

Section 5.5 addresses the Greenlands, which forms the second part of the Greenlands System. Lands designated as Greenlands include the following as:

"Other significant natural heritage features including habitat, areas of natural and scientific interest, streams and valleylands, woodlands, environmentally sensitive areas, ponds, lakes and reservoirs and natural links are also intended to be afforded protection from development or site alteration which would have negative impacts.

These areas are often found within Core Greenlands. Where they are outside Core Greenlands they are identified as Greenlands."

Sections 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.5.5, and 5.5.6 of the Official Plan address these Greenland components and identify development constraints for each. These constraints are discussed further in Section 1.5 of this report.

Policy related to development control within and adjacent to the Greenlands System is discussed in Section 5.6. Impacts associated with development and when it is permitted in the Core Greenlands and Greenlands are elaborated on further in Section 5.6.2 which states:

"Where development is proposed in the Greenland system or on adjacent lands, the County or local municipality shall require the developer to:

a) identify the nature of the features potentially impacted by the development;

- b) prepare, where required, an environmental impact assessment to ensure that the requirements of this Plan will be met and consider enhancement of the natural area where appropriate and reasonable.
- c) address any other relevant requirements set out in Section 4.6.3 Environmental Impact Assessment.

No development will be approved unless the County is satisfied that the Greenland and Environmental Impact Assessment policies are met."

As per Section 5.6.2.c above, Section 4.6.3 states that:

"Environmental impact assessments prepared by a qualified person may be required to evaluate the impacts a proposed development may have on the natural environment and the means by which negative impacts may be reduced or eliminated..."

"Adjacent lands" are defined in Section 5.6.3 of the Official Plan and range from 120 metres to 30 metres depending on the type of natural heritage feature present.

An EIA may be required prior to the onset of any development of the proposed employment lands to identify natural heritage features within the development footprint and adjacent area. The EIA would assess areas where development may be permitted subject to applicable policies and areas where development is not permitted based on the presence of natural heritage features. Mitigation measures are formulated through this process to ensure there is no negative impacts to the ecological form and function of natural heritage features as part of the development.

Section 5.6.2 also includes reference the Counties Natural Heritage System (NHS). The intent of the NHS is defined as

"In areas undergoing significant development, particularly in urban areas, an assessment of opportunities to link or connect natural features may be required to demonstrate how the development will maintain, restore or, where possible, improve linkages and connectivity;

In areas not undergoing significant development, particularly agricultural and rural areas, stewardship initiatives will be the main means to maintain, restore or, where possible, improve linkages and connectivity."

As discussed in Section 1.3.4 of this report, although the County has developed an NHS, it is our understanding that the mapping does not form part of the Official Plan. The intent of the County NHS is to provide information on stewardship initiatives and to help inform future policy.

Section 5.6.8 identifies that need for adherence with the *Conservation Authorities Act*. This requires that "Where *development* or *site alteration* is proposed within a regulated

area, as shown on Conservation Authority schedules and/or described in the text of the applicable Conservation Authority regulation, the Conservation Authority should be consulted before development (including construction, conversion, grading, filling, or excavating)."

Grand River Conservation Authority (GRCA)

The Grand River Conservation Authority (GRCA) is responsible for the administration of Ontario Regulation 41/24, which provides the GRCA jurisdiction to regulate, development activities within and adjacent to flood and erosion hazards, valleys, watercourses, and wetlands. The guiding principle of this regulation is to ensure any development works proposed within regulated areas will have no adverse impact on flooding, erosion, dynamic beaches, unstable soil, or bedrock.

To assist with administering Ontario Regulation 41/24, the GRCA continues to utilize a document titled "Grand River Conservation Authority Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation Ontario Regulation 150/06". The purpose of the document is to provide guidance for development applications that are located within and adjacent to regulated areas under the GRCA's jurisdiction.

Grand River Conservation Authority regulated lands in the Study Area include River or Stream Valleys, Wetlands and Areas of Interference, slope valleys, watercourse, and waterbodies. GRCA policies related to the management of these features are included in Section 8.0 of the GRCA Policy Document (GRCA 2015).

IV. Study Area and Implications for Identifying Land Use Options

Site Selection for the Employment Lands will need to comply with provincial and municipal policies and regulations related to the protection of natural heritage features. Section 1.3 above provides a general overview of applicable policies that will need to be considered during the site selection process. The area selected for the Employment Lands will need to conform with Provincial and Municipal natural heritage policies.

Changes to the existing provincial policy framework are anticipated as part of the PPS 2024 update. The proposed changes are subject to approval from the Ministry of Municipal Affairs and Housing (MMAH) and further refinements to policies related to natural heritage features may be incorporated. The proposed employment growth area will need to comply with the in-effect provincial natural heritage policies.

There are certain limitations related to the accuracy of mapped natural heritage features identified through this Paper. Section 5.6.7 of the Official Plan identifies the need for refining natural heritage features within the Greenlands System subject to site specific inventories being completed and more detailed mapping being prepared. Mapping of natural heritage features through air photo interpretation and GIS analysis has significantly improved the accuracy of mapping used in municipal level mapping. However, ground truthing is required to refine this high-level mapping where development is proposed within or adjacent to natural heritage features. Site specific surveys, including targeted wildlife surveys, botanical surveys, hydrologic assessments, etc. are required to evaluate impacts prior to the approval of development within or adjacent to natural heritage features.

Data from the Natural Heritage Information Centre (NHIC) on Species at Risk (SAR) located within and adjacent to the Study Area was also reviewed as part of this report. Information available from NHIC indicated that several Species at Risk (endangered, threatened, and special concern) have been historically observed on and adjacent to the Study Area. The NHIC data provides an overview of potential SAR in the Study Area but is not an exhaustive list. An assessment of potential SAR habitat and use will be required as part of future development applications completed for the future employment growth area. Data retrieved from the NHIC is provided can be provided upon request.

V. Potential Evaluation Criteria

The following evaluation criteria provided in the table below are recommended to assess potential new employment growth areas. Please note, these evaluation criteria are preliminary and are intended to provide a general overview of potential natural heritage constrains within the Study Area.

Screening Criteria

None.

Evaluation Criteria Table

Potential Evaluation Criteria	Criteria	Response)			Policy Direction and/or Best Practice Guidance
Will the proposed employment location result in pagetive impacts to	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020
negative impacts to Natural Heritage Features within or adjacent to the proposed location?						2.1.4 Development and site alteration shall not be permitted in: a) significant wetlands in Ecoregions 5E, 6E and 7E1; and b) significant coastal wetlands
If so:						2.1.5 Development and site alteration shall not be permitted in: a) significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E1; b) significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)1; c) significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)1; d) significant wildlife habitat; e) significant areas of natural and scientific interest; and f) coastal wetlands in Ecoregions 5E, 6E and 7E1 that are not subject to policy 2.1.4(b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
						2.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.
						2.1.7 Development and site alteration shall not be permitted in habitat of endangered

F			species and threatened species, except in
			accordance with provincial and federal
			requirements.
			2.1.8 Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions
			Greenbelt Plan
			3.2.5.1 For lands within a key natural heritage feature or a key hydrologic feature in the Protected Countryside, the following policies shall apply: 3.2.5.1.4. In the case of wetlands, seepage areas and springs, fish habitat, permanent and intermittent streams, lakes and significant woodlands, the minimum vegetation protection zone shall be a minimum of 30 metres measured from the outside boundary of the key natural heritage feature or key hydrologic feature.
			Grand River Conservation Authority
			8.1 River or Stream Valleys - Riverine Flooding Hazards
			8.2 River or Stream Valleys – Riverine Erosion Hazards

	8.3 River or Stream Valleys – Apparent
	Valleys - Other Valleylands
	8.4 Wetlands and Areas of Interference
	Development within Wetlands regulated by the GRCA
	Development within a wetland area of interference regulated by the GRCA
	8.4.1 Development/Interference within a wetland or development within an area of interference will not be permitted except in accordance with the policies in Sections 8.4.3-8.4.13.
	County of Wellington Official Plan
	5.4.2. Development and site alteration will not be allowed in significant habitat of endangered or threatened species except in accordance with provincial and federal requirements.
	5.4.2 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements
	5.5.1 Development and site alteration shall not be allowed in significant wildlife habitat unless it has been demonstrated that there will be no negative impacts on the habitat or its ecological functions. Development and site alteration shall not be allowed in

			fish habitat except in accordance with
			provincial and federal requirements.
			5.5.2 Both provincially and regionally
			significant Areas of Life Science or Earth
			Science Natural and Scientific Interest will
			be protected from development or site
			alteration which would have a negative
			impact on the natural feature or its
			ecological function.
			5.5.3 All streams and valleylands will
			<u> </u>
			be protected from development or site
			alterations which would negatively impact
			on the stream or valley- land or their
			ecological functions.
			5.5.4 Significant woodlands will be
			protected from development or site
			alterations which would negatively impact
			the woodlands or their ecological functions.
			5.5.5 . Environmentally sensitive areas as
			determined by the County from previous
			studies are included in the Greenlands
			system. The areas will be protected from
			development or site alterations which
			would negatively impact them or their
			ecological functions.
			5.5.6 Ponds, lakes and reservoirs are
			included in the Greenlands system where
			the County determines they require
			protection. These areas will be protected
			from development or site alterations which
			would negatively impact them or their
			ecological functions.
			Goological fullotions.

	5.6.1. Within the Core Greenlands designation, development and site alteration shall not be permitted within Provincially Significant Wetlands or in significant habitat of threatened or endangered species, except in accordance with provincial and federal requirements.
	5.8.6. Where development or site alteration is proposed within a regulated area, as shown on Conservation Authority schedules and/or described in the text of the applicable Conservation Authority regulation, the Conservation Authority should be consulted before development

VI. Data Sources

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3.8 Background Paper: Design

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington By NPG Planning Solutions Inc.

I. Purpose

The purpose of this paper is to examine the existing design guidance from the County of Wellington and the Township of Puslinch applicable to the *Puslinch By Design* Study Area. These policies and guidelines not only influence the land use options for employment lands within the Study Area but also inform the design approach for the final land use option. In general, the design approach for the Study Area will encompass considerations to achieve excellent site layout and building design as well as compatibility in built form with surrounding uses and adjacent streetscapes. The applicable design policy documents include the County of Wellington's Official Plan, the Township's Zoning By-law, the Puslinch Design Guidelines, and the Township's Municipal Development Standards. Additionally, this paper will also discuss the four design objectives identified by the Township for the Study Area that are critical for consideration and inclusion when planning for the future employment lands/area, which are as follows:

- a) maintaining rural character;
- b) enhanced buffering designs;
- c) higher level of building and site design; and,
- d) incorporating innovative approaches that address environmental sustainability and climate change.

Overall, the paper will summarize the existing design guidance from the County and Township, provide an assessment on the achievement of the four design objectives for the Study Area, and formulate design considerations for the future employment lands/area.

II. Existing Conditions

The Study Area comprises lands that are predominantly designated Secondary Agricultural, along with lands designated Greenlands, Core Greenlands, and two Rural Employment Areas. The Township's existing Rural Employment Areas are located south of the City of Guelph, along Provincial Highway 6 and along Provincial Highway 401 and County Road Brock Road South. Primary roadways within the Study Area include Provincial Highway 6, Provincial Highway 401, Wellington Road 34, Brock Road, Concession 7 Road, and Sideroad 20 North, and McLean Road West (see **Figure 3.8-1** below). Provincial Highways 6 and 401, and County roads Wellington Road 34 and Brock Road are the higher order roadways that bisect north-south and east-west of the Study Area.

Figure 3.8-1: Study Area and Existing Context



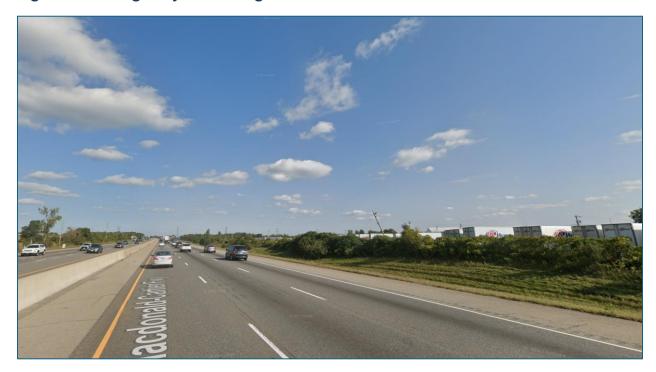
The following sections describe the prevalent existing streetscape and built form characters within the Study Area:

a) The existing streetscape along both Provincial highways are rural in nature, with agricultural uses that generally flank both sides of the highways, as well as grassed berms and trees (see **Figure 3.8-2** and **Figure 3.8-3**). At the southeastern corner of Concession Road 7 and Highway 401 are low-rise industrial uses with outdoor storage and parking of large vehicles dominating the interface with the public streets.

Figure 3.8-2: Highway 6 facing south



Figure 3.8-3: Highway 401 facing east



b) Wellington Road 34 is a County road that bisects the Study Area east-west with one lane in each direction. The streetscape along Wellington Road 34 is rural with grassed swales/ditches, mature trees, and agricultural fields (Figure 3.8-4). While the streetscape is generally rural in nature throughout the Study Area, Wellington Road 34 also interfaces with various residential uses. These residential uses generally have large front yard setbacks with long driveways and a combination of berms or landscaped front lawns. The images in Figure 3.8-5 and Figure 3.8-6 shows how the streetscape maintains its rural character as Wellington Road 34 interfaces with residential uses.

The streetscape along the frontage of Heritage Lake Estates residential subdivision, located along the western end of the Study Area and directly south of Wellington Road 34, demonstrates a high quality of design through the use of grassed swales, berming, tree plantings, landscaping, signage, lighting, and fencing. These design elements provide an appropriate setback that maintains the rural nature of the roadway. These low-rise residential uses lie immediately outside of the Study Area.

The streetscape changes at the eastern end of the Study Area close to the Aberfoyle Urban Centre, where a cluster of low-rise residential uses have smaller front yard setbacks, as the dwellings are located closer to the roadway. These dwellings maintain landscaped front lawns and plantings along the frontage,

upholding the rural nature of the streetscape. Both examples demonstrate the streetscape within various contexts and their contribution to the roadway's rural character.

Figure 3.8-4: Wellington Road 34 Rural Cross-Section with Rural Residential Driveway



Figure 3.8-5: Wellington Road 34 Interface with Subdivision (Heritage Lake Estates)



Figure 3.8-6: Frontage of Heritage Lake Estates Interface with Wellington Road 34



Figure 3.8-7: Heritage Lake Estates Interface with Wellington Road 34 Illustrating Mix of Fences and Berms



Figure 3.8-8: Wellington Road 34 at Edge of Study Area Boundary, Close to Aberfoyle Urban Centre



c) Brock Road (Wellington Road 46) is a County road that runs north-south, comprising two lanes in each direction with center turning lanes. Within the Study Area, Brock Road runs directly south of the Aberfoyle Urban Centre from Gilmore Road to the Highway 401 interchange, through an area with various low-rise commercial and industrial uses. The nature of the streetscape is generally

consistent with that of a mixed commercial/industrial corridor, with commercial uses located closer to the roadway and industrial uses located further away, as well as a combination of grassed swales/ditches, landscaping, parking, berming, and/or fencing in the front yard (see **Figures 3.8-7** to **3.8-9**). This segment of Brock Road within the Study Area also features a paved shoulder that transitions into an off-road path in various areas.

Figure 3.8-9:2 Brock Road South at Gilmour Road



Figure 3.8-10: Brock Road Looking South







d) Concession 7 Road is a local road with one lane in each direction, running the entire north-south length of the Study Area. The streetscape is rural in nature and interfaces with agricultural uses, rural residential uses, and industrial uses. The roadway maintains its rural character through different contexts by a combination of large front yard setbacks, long driveways, grassed lawns, grassed swales, tree plantings, landscaping, and/or fencing (see Figures 3.8-10 to 3.8-13). In particular, Figure 3.8-12 demonstrates how the combination of grassed swales, fencing, tree planting, and signage achieved an appropriate buffer for an industrial use along Concession 7 Road, maintaining the streetscape's rural character while enhancing the development.

Figure 3.8-12: Concession 7 Road at the Intersection of Wellington Road 34 Looking South



Figure 3.8-13: Concession 7 Road at the Intersection of Wellington Road 34 Looking North



Figure 3.8-14: Concession 7 Road Interface with Industrial Development, Illustrating Signage, Grassed Berms, Fencing, and Extensive Landscaping



Figure 3.8-15: Industrial Development's 3 High Quality of Landscaping and Signage Along Concession 7 Road

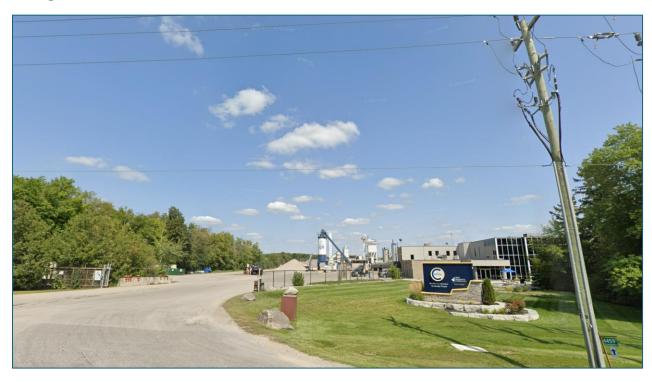
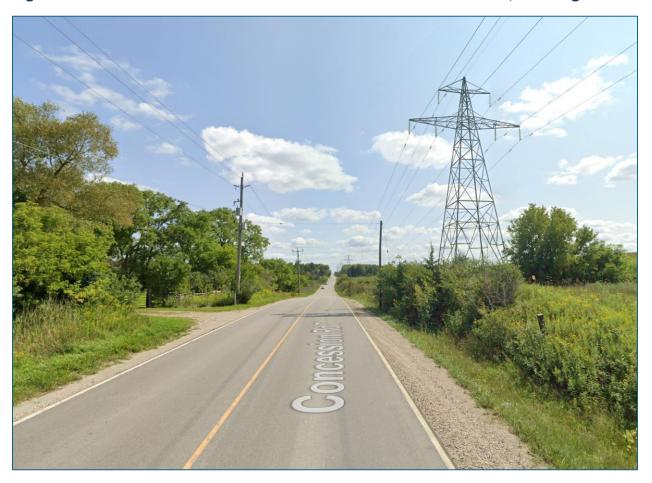


Figure 3.8-16: Concession 7 Road at intersection of McLean Road, Looking South



e) Sideroad 20 North is a local road that runs north-south along the northwestern boundary of the Study Area. Sideroad 20 North has one lane in each direction, in an area with predominantly agricultural and rural residential uses and can be characterized as a rural streetscape due to the long driveways, grassed lawns, trees framing the roadway, large landscaped front yards, grassed berms, and agricultural fields (see **Figure 3.8-17**).





f) McLean Road West is a local road that runs east-west. Within the Study Area, McLean Road West traverses predominantly industrial uses that range between one and two storeys. Front yard width varies between moderate to large and is largely occupied by parking, outdoor storage and driveways. Front yard landscaping, if provided, is usually limited to grass. Within the Study Area, the western end of McLean Road West does exhibit rural characters with vegetation making up the front yard and no visibility of buildings (see **Figures 3.8-18** and **3.8-19**).

Figure 3.8-18 – McLean Road West North Looking East



Figure 3.8-19: McLean Road West Looking West



III. Applicable Legislation

Planning Act

The *Planning Act* governs land use planning in Ontario, Canada. Its primary goal is to promote sustainable development by ensuring that land use planning contributes to environmental, social, and economic sustainability.

Section 2 of the *Planning Act* identifies matters of Provincial interest that Council shall have regard for carrying out its responsibilities under the *Act* including the orderly development of safe and healthy communities, the accessibility for persons with disabilities to all facilities and services, the promotion of development that is designed to be sustainable and to be oriented to pedestrians, as well as the promotion of built form that is well-designed, encourages a sense of place, and provides for public spaces that are of high quality, safe, accessible, attractive and vibrant. Lastly, another matter of Provincial interest that is relevant to design is the mitigation of greenhouse gas emissions and adaptation to a changing climate.

The four design objectives established by the Township address many of the Provincial interests outlined above. Areas that should be considered when developing design directions for the Study Area is the promotion of environmentally sustainable practices, and the provision of both the private realm and public realm that are of high quality, safe, accessible, attractive and vibrant.

Provincial Policy Statement (2020) and Provincial Planning Statement

Section 1.5 of the PPS (2020) provides direction that public streets and spaces should be safe and pedestrian-oriented while fostering social interaction and facilitating active transportation.

Section 1.8 provides policies promoting design and orientation which maximizes energy efficiency and conservation and considers the mitigating effects of vegetation and green infrastructure.

These topics have been covered by the design objectives established by the Township. Design directions and considerations for the employment lands within the Study Area will incorporate these topics.

County of Wellington Official Plan

The County of Wellington Official Plan provides design considerations for various land use designations, which are critical to determining the design approach for the new employment lands/area. The policy directions will also be key to informing detailed design guidance and in establishing the applicable designations and zoning.

Rural Employment Areas Designation

The Rural Employment Areas designation does not contain specific design guidance. However, Section 6.8.3 and 6.8.4 provides land use compatibility considerations that should guide the design approach of the future employment area. These policies stress land use compatibility as a key design consideration in order to ensure adequate separation and buffering. The County's Official Plan provides that the zoning by-law should contain detailed regulations, such as limiting the location and size of commercial uses. The relevant design policies for the Rural Employment Areas are as follows:

6.8.3 Land Use Compatibility

In Rural Employment Areas, establishing specific areas for detailed land use regulations is normally left to the Zoning By-law. In establishing zones and considering rezoning applications, Councils shall ensure that existing and proposed uses are compatible, and that sensitive uses are adequately separated from industrial uses. The Zoning By-law may also limit the location and size of commercial uses.

6.8.4 New Locations

New Rural Employment Areas shall only be established by amendment to this Plan. In establishing new rural employment land consideration shall be given to the following:

f) adequate separation or buffering from incompatible uses can be provided;

Highway Commercial Designation

In addition to the Rural Employment Area designation, the Highway Commercial and Industrial designations are two other key land use designations that would be applicable to the future employment lands. It should be noted however that the Highway Commercial and Industrial designations only apply to Primary and Secondary Urban Centres. Puslinch does not contain any Primary Urban Centres, and Aberfoyle and Morriston are the only Secondary Urban Centres that are located outside of but adjacent to the Study Area. The design considerations for these land use designations still merit consideration to guide future planning for the new employment lands/area.

Design considerations for the Highway Commercial designation is provided in 8.6.6 of the County's Official Plan, which states the following:

Highway Commercial

8.6.6 Design Considerations

Site design standards will be encouraged which provide aesthetically acceptable development. Where HIGHWAY COMMERCIAL areas are adjacent to residential areas, appropriate measures shall be taken to provide adequate setbacks, landscaping and screening and to control design elements which may detract from the residential area.

Industrial Designation

The Industrial designation provides more detailed design considerations that include regard for site design standards and architectural features; building orientation, siting, and scale; visual screening through landscaping; separation distances from incompatible land uses; setbacks and outdoor storage regulations; inclusion of various industrial zones; and traffic impacts and circulation. These design considerations are outlined in Section 8.7.4 as follows:

Industrial

8.7.4 Design Consideration

When reviewing industrial proposals within the urban centre, a Council shall encourage site design standards and architectural features such as building scale, orientation, colour and materials, which create industrial areas that confer a positive visual image and foster community pride.

In developing new industrial areas, consideration shall be given to the following:

- a) industrial traffic should be directed away from residential neighbourhoods wherever practical;
- appropriate setbacks, parking requirements, landscaping, screening, outdoor storage and yard requirements will be placed within the Zoning Bylaw;
- c) encouraging buildings which make use of attractive building materials, particularly on the front walls;
- d) the Zoning By-law may contain a variety of industrial zones and shall include provisions for light industrial uses and setbacks from adjacent parks or other sensitive uses;
- e) visual screening such as plantings, fencing or other similar forms of buffering shall be required where an industrial area abuts a residential or institutional area and may be required adjacent to commercial areas. The zoning by-law shall establish standards for buffering in these situations and site plan control shall be applied to such properties;
- f) separation distances from existing incompatible land uses.
- g) proper siting and containment facilities of chemicals used on site for uses within a vulnerable area and/or Communal Well Policy Area in accordance with Sections 4.9.5 and 4.9.5.13 of this Plan.

In summary, the County's Official Plan provides design guidance for Rural Employment Areas, Highway Commercial, and Industrial designations. The design guidance largely pertains to ensuring land use compatibility and a high standard of site and architectural design and does not contain policies regarding streetscape design/character.

Township of Puslinch Zoning By-law

The Township's Zoning By-law implements the County's Official Plan through detailed development regulations, which are key to achieving the design objectives of the Study Area. Regulations that impact the design approach of a development may include general regulations relating to planting strips, outdoor storage, and parking and loading, in addition to zone regulations for setbacks, lot coverage, height, landscaped open space, and required buffering.

General Provisions

The general provisions of the zoning by-law notes the following regulations that are applicable for the design considerations of the future employment lands:

- 4.14.2 (a) requires a minimum 3-metre-wide planting strip on any lot in any Mixed-Use, Institutional, Commercial, or Industrial Zone that abuts an interior side or rear lot line of a lot in any Residential Zone;
- 4.14.3 (a) provides special landscape regulations that require a minimum 3-metrewide planting strip abutting the full length of the lot line for any lot that abuts Brock Road between the Urban Centres of Aberfoyle and Morriston;
- 4.15 provides that the type, location, height, intensity, and direction of lighting shall be designed to ensure that it is confined to the building face, parking area, and vicinity of the lot, and that lighting fixtures should direct light downwards away from adjacent lots and streets;
- 4.22 (a) provides regulations for outdoor storage uses and areas which restrict outdoor storage to rear or interior side yards, the minimum distance permitted to the street, the size of the storage area, screening and height requirements, and prohibiting outdoor storage from locating in any yard abutting a residential zone;
- 4.24.2 provides regulations for shipping containers in Agricultural and Industrial zones which restrict the size, number, and location of the shipping containers (restricted to the rear yard and shall not be located in a required parking area or in proximity to residential uses or lots zoned for residential use) and require screening from the street and buildings on abutting lots in an industrial zone;
- 5.1.5 provides regulations related to where loading spaces may be permitted, which restricts loading spaces from locating a) in a front yard and any minimum required yard; b) closer than 3 metres to any lot line; and c) closer than 7.5 metres to any residential zone boundary; and,
- 5.2.7 requires a minimum 1-metre-width planting strip between a parking area and a required yard.

Parking Provisions

The Township prescribes requirements for developments to provide barrier-free parking spaces. The Zoning By-law contains provisions regulating the dimensions, location, design and minimum number of barrier-free parking spaces.

Zone Regulations

In addition to these general provisions, zone regulations provide further guidance that impact the design approach of a development. The zoning by-law was reviewed to determine applicable zones for the future employment areas, which are outlined as follows:

- Highway Commercial (HC) Zone
- Agriculture-related Commercial (AC) Zone
- Industrial (IND) Zone
- Extractive Industrial (EXI) Zone

An overview of the regulations for the applicable zones is provided in **Table 3.8-1** below. In summary, the zone regulations seek to ensure compatibility and minimize impacts on the streetscape and abutting land uses, particularly sensitive land uses, through requirements for lot area, yard setbacks, lot coverage, landscaped open space, building height, and buffering. The table demonstrates the varying requirements for each zone, illustrating how different land use contexts and requirements may impact the design and streetscape characters of the Study Area.

Table 3.8-1: Overview of Applicable Commercial and Industrial Zone Regulations

Standard	HC	AC	IND	EXI	
Minimum required lot area	0.4 ha	0.4 ha	0.4 ha	No minimum	
Minimum required lot frontage	20m	60m	30m	No minimum	
Minimum required front yard	3m	15m	6m		
Minimum required interior side yard	3m	3m	5m		
Minimum required interior side yard if adjacent to a Residential Zone boundary	7.5m	15m	15m	N/A	
Minimum required exterior side yard	7.5m	15m 15m			
Minimum required rear yard	3m	3m	7.5m		
Minimum required rear yard if adjacent to any Residential Zone boundary	7.5m	7.5m	15m		
Maximum permitted lot coverage	45%	35%	75%	No maximum	
Minimum required landscaped open space	25%	15%	15%	No minimum	
Maximum permitted building height	N/A	N/A	25m	25m	

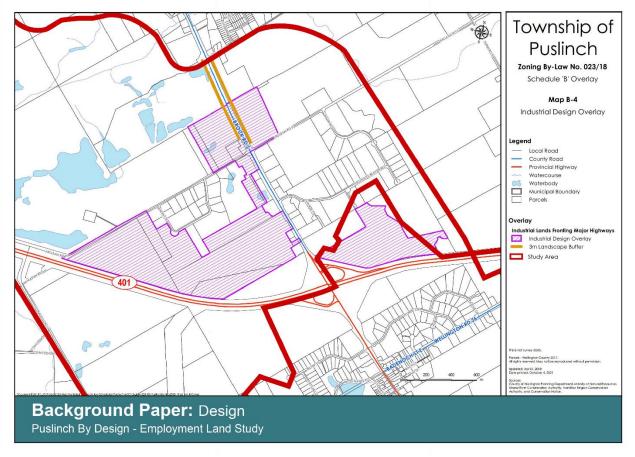
Standard	HC	AC	IND	EXI
Buffer requirement if adjacent to any Residential Zone boundary	length of a use, Institut	ional, Comme nterior side or	uired on a lot ercial or Indus	in any Mixed- strial Zone that

Industrial Design Zone Overlay

Section 13.5 of the zoning by-law outlines provisions for the Industrial Design Zone Overlay, which is applied to properties identified on Schedule B-4. Portions of the study area fall within this overlay – please refer to **Figure 3.8-20** with the approximate boundary of the study area overlaid on Schedule B-4. This overlay is intended to implement the direction of the Township's Design Guidelines to provide a high level of design for industrial development visible from the Provincial highways and arterial streets. Properties identified in Schedule B-4 are subject to the following special regulations:

- All uses permitted in the IND zone shall be permitted provided they are within a
 wholly enclosed building and with no outdoor storage areas. Notwithstanding this
 requirement, outdoor storage is permitted where specifically recognized in Section
 14.0 Site-Specific Special Provisions.
- Buildings shall have at least one entrance that faces Highway 401 or the Hanlon Expressway.
- Parking areas, loading spaces, and service areas shall not be visible from Highway 401 or the Hanlon Expressway, or shall be screened by architectural screening, landscape buffering or a combination.
- All exterior building elevations visible from Highway 401 or the Hanlon Expressway shall provide breaks in plane created by a change in plane, incorporation of an architectural detail, or a change in material.
- A strip of land not less than nine (9) metres in width shall be provided along the lot line which abuts Highway 401 or the Hanlon Expressway and shall be used for no other purpose than landscaping.

Figure 3.8-20: Study Area With Industrial Design Overlay of Township Zoning Bylaw



The Zoning By-law contains provisions that regulate various aspects of building and site design as well as built form of developments. These provide quantitative benchmarks when considering a site's ability in delivering higher level of building and site design as well as achieving built form compatibility with adjacent public streets and nearby uses.

These provisions will be evaluated to ensure they are effective at achieving the objectives stated above when developing design directions for the Study Area.

Township of Puslinch Design Guidelines

The Township's Design Guidelines (PDG) is a key document that contributes to positive community development and an enhanced streetscape throughout the Township. The guidelines are intended to be applied to commercial, industrial, and institutional development and redevelopment proposals throughout the Township, to develop an enhanced streetscape along Brock Road/Highway 6 North and South, improve the quality of site and building design, and to protect what makes Puslinch unique. While the guidelines are intended to be applied as above, the document notes two priority areas in the Township that are the primary focus of the guidelines, which are illustrated in **Figure**

3.8-21. Portions of the Study Area, which are outlined in red in the below figure, fall within these priority areas.

Hwy 6 N Industrial Corridor, Aberfoyle Brock Rd/ Hwy 6 S WR 34 Mixed Use Ş Corridor 6 Hwy 401 Hwy 40 Township of Morriston Puslinch

Figure 3.8-21:4 Priority Areas for Application of the Design Guidelines

The basis of the design guidelines is predicated upon three principles, namely "Enhancing the Streetscape", "Promoting Quality Development" and "Respecting Established Character".

Enhancing the Streetscape

This section of the design guidelines provides detailed design direction for enhancing the streetscape along four distinct sections of the Brock Road corridor and to the Highway 6 North corridor. The corridors applicable to the Study Area are A3 – Aberfoyle to Highway 401 Streetscape and A5 – Highway 6 North (Guelph to WR 34) Streetscape. Each section is subdivided into three different streetscape components: the adjacent land, which is the private property between the building and property line; the roadside, which is the strip of public property beside a road, typically comprising sidewalks, street trees, signs,

drainage, utilities, and amenities; and the road itself, which is the paved portion of the public right-of-way which is primarily used by traffic but may include medians, pedestrian crossings, and cycling facilities. Within each section, design guidelines are provided for the three components of the streetscape.

A3 - Aberfoyle to Highway 401 Streetscape

This section of the Brock Road corridor is identified in **Figure 3.8-22** below, which functions in part as a service area for Highway 401. The service commercial uses are interspersed, with industrial and institutional uses, and minimal landscaping along the road. Priorities for the streetscape in this area are to increase tree and landscape cover in order to harmonize disparate land uses, improve aesthetics, and provide passive traffic calming. These design measures include, but are not limited to, providing a 3-metre landscaped setback along the streetscape for tree planting, provide landscaping in front of buildings and parking areas, considering traffic calming measures, and incorporating sidewalks into the bridge over Highway 401 at the time of bridge replacement. The design guidelines for the three streetscape components are outlined in greater detail in **Table 3.8-2** below.



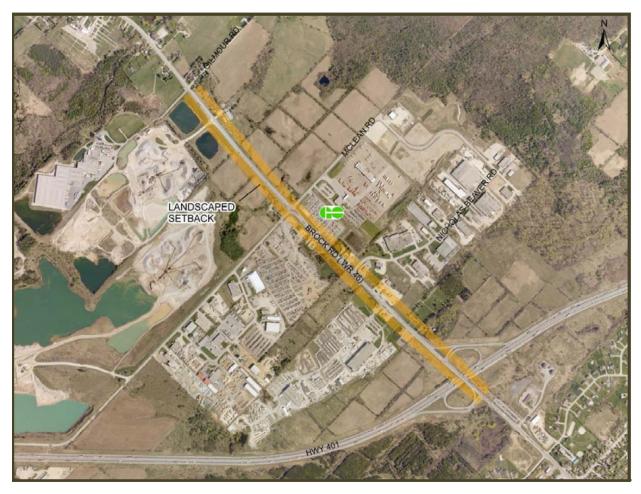


Table 3.8-2: Design Guidelines for Aberfoyle to Highway 401 Corridor

Streetscape Component	Design Guidelines
Adjacent Land	 Provide a minimum 3-metre-wide perimeter landscape area abutting Brock Road to accommodate trees spaced a minimum of 10 metres on centre. Provide trees, shrubs, and ground cover in front of buildings and in parking areas.
Roadside	 Minimize the impact of driveways by designing to the minimum width necessary and combine and/or eliminate entrances where feasible. Promote thematic plantings of bulbs and/or non-invasive perennials on the banks of roadside ditches along Brock Road where grades permit. Add sidewalks to bridge over Highway 401 at time of bridge replacement.

Streetscape Component	Design Guidelines
Road	 Incorporate traffic calming measures such as raised medians, traffic circles, or other appropriate approaches. Include low maintenance landscape and hardscape elements (e.g. random tree groupings, drought tolerant vegetation and locally sourced stone).

A5 – Highway 6 North (Guelph to WR 34) Streetscape

This section of the Highway 6 North corridor aims to provide enhanced building design along Highway 6 North, provide a sense of place and prestige, and improve the profile and visibility of the Highway 6 industrial area for the traveling public (see **Figure 20**). The design guidelines identify Concession 4/Maltby Road as a primary gateway. Design measures to achieve these objectives include, but are not limited to, orienting buildings to face the highway, prohibiting outdoor storage, and identifying the gateway into Puslinch from the City of Guelph through signage, landscaping, and lighting. Design guidelines for the adjacent land and roadside components are outlined in greater detail in **Table 3**.

Figure 3.8-23: Extent of Highway 6 North (Guelph to WR 34) Corridor

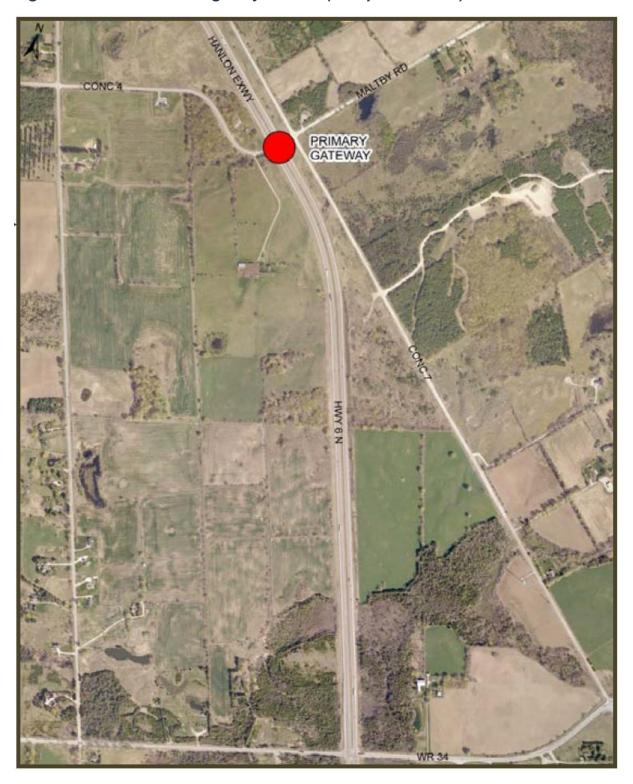


Table 3.8-3: Design Guidelines for Highway 6 North (Guelph to WR 34) Corridor

Streetscape Component	Design Guidelines
Adjacent Land	 Design buildings with Highway 6 North (Hanlon Expressway) frontage to give prominences to the location and a sense of prestige. Orient building entrances and office components to face the highway. Outdoor storage shall not be permitted.
Roadside	 Identify entry into Puslinch from the City of Guelph at Concession 4/Maltby Road with primary gateway signage, landscaping, and lighting.

The guidelines pertaining to the "roadside" and "road" components within the PDG are effective at informing the design of Brock Road and Highway 6 within the Study Area. Part of the design directions will consider developing more guidelines to enhance the streetscape for other types of public streets within the Study Area.

In addition, the guidelines pertaining to the "adjacent lands" component inform how adjacent developments could contribute to a positive streetscape through design treatment of the front yards. At the moment, these guidelines address landscaping treatment, outdoor storage and building orientation. The site's ability to effectively incorporate and address these guidelines for "adjacent land" should be taken into considerations when evaluating land use options for employment lands within the Study Area. They are also integral to achieving numerous design objectives within the Study Area and will form part of the future design directions for the Study Area.

There is an opportunity to incorporate built form guidelines for developments as they relate to the public realm in the design directions for the Study Area. The additional guidelines may address height, massing, at-grade uses and quality of exterior design to ensure developments achieve built form compatibility with their adjacent streets.

Promoting Quality Development

These guidelines apply primarily to the Brock Road Mixed Use Corridor, the Highway 6 North Industrial Corridor, and sites with highway/County road visibility or frontage. Guidelines that are applicable to the future employment lands include those for commercial, industrial and institutional uses; pedestrians and cyclists; vehicles, parking and service areas; and signs. In summary, a high quality of development should be promoted through site and building design that enhances visibility of buildings and gateways from highways and major roads; provides for pedestrian circulation throughout the development; screens parking and loading areas; and signage that incorporates landscaped buffers and elements of the building design and materials.

Applicable guidelines are further detailed in **Table 3.8-4** below.

Table 3.8-4: Design Guidelines for Promoting Quality Development

Areas	Design Guidelines
Commercial, Industrial and Institutional Uses	 Design buildings with highway or County road visibility to give prominence to the location and a sense of prestige. Orient building entrances and office components to face highway or County road frontage. Outdoor storage shall not be permitted on sites with highway visibility, shall be screened with a combination of berms, landscaping and fencing from County roads, and shall otherwise be screened from off-site view.
Corner Sites and Gateways	 Incorporate details such as wall projections, material variation and articulated building elements (e.g. dormers, bays) to enhance the visibility of buildings at gateways and intersections of other major roads. Connect the proposed development to the public street with entry features incorporating landscaping, street furniture, special paving, low walls, etc. Provide walkways from buildings and parking areas which connect to the public sidewalk or planned public sidewalk.
Pedestrians and Cyclists	 Incorporate accessible walkways to building entrances and within parking areas. Provide bicycle parking facilities for customers and staff.
Vehicles, Parking and Service Areas	 Incorporate landscaping (planting strips and landscaped traffic islands) in parking areas. Screen parking loading, service areas and equipment (e.g. mechanical, electrical, etc.) from public view through architectural screening, landscape buffering, berms or a combination. Use cut-off lighting fixtures to minimize glare. Ensure that site lighting does not infringe upon adjacent property, including roads.
Signs	 Free- standing monument-style signage which incorporates elements of the building design and materials is encouraged and preferred over pylon-type signage. Incorporate landscape buffer planting with pylon-type signage if considered for properties with frontage on Brock Road between McLean Road and Highway 401.

These guidelines promote a higher level of building and site design of developments along Brock Road Mixed Use Corridor and the Highway 6 North Industrial Corridor within the Study Area. They will be considered to be included in the future design directions for the Study Area. In addition, the site's ability to achieve higher level of building and site design should be taken into considerations when evaluating land use options for employment lands within the Study Area.

Respecting Established Character

The guidelines in this section have the objective of ensuring developments respect the established character of the area. These include guidelines for natural heritage resources, development near residential uses, and site landscaping. In summary, developments should preserve, enhance, and integrate natural heritage resources; be sympathetic with the rural and urban areas of the Township; minimize the impact of new development on established residential uses through building scale, design, and orientation; and improve the aesthetic quality of a development through landscaping, buffering, and screening.

Applicable guidelines are further detailed in **Table 3.8-5** below.

Table 3.8-5: Design Guidelines for Respecting Established Character

Areas	Design Guidelines
Natural Heritage Resources	 Make nature visible by site configurations which maximize visibility and, where appropriate, accessibility to natural features. Preserve rural landscapes, including rolling topography, ponds, hedgerows, trees, bush, etc.
Development Near Residential Uses	 Design buildings to complement the scale, proportion and materials of residential uses nearby. Locate site service, delivery and parking areas away from residential uses and provide buffers to screen undesirable uses.
Site Landscaping	 Provide an average of one tree for every 10 metres of Brock Road frontage. Street trees are not to be accommodated within the road allowance but are to be provided on private property close to the road allowance. Provide tree plantings in parking areas and on the perimeter of the property. Use shrubs and ground covers in large masses for lower maintenance and seasonal planting. Place special emphasis on early spring colour, fall colour, and September flower. Use shrubs to define and control pedestrian circulation and to screen undesirable views. Provide buffers to screen undesirable views. Buffers may consist of architectural screening, landscaping, berming or a combination. Where landscaping is used, planting is to consist of shrubs and trees, with 50% being coniferous planting. Site-specific circumstances may warrant continuous coniferous planting. Where berming is used, the berm should be 1-metre-high minimum, with maximum 33% side slopes and planted with shrubs and coniferous trees.

Areas	Design Guidelines
	 A list of recommended trees and shrubs are provided within the guidelines.

These guidelines ensure developments respect the rural landscapes and maintain compatibility in built form with nearby residential uses. The PDG also contains guidelines related to landscaping as a measure to achieve the objective of "respecting established character". Overall, these guidelines should be considered when evaluating land use options for employment lands within the Study Area as well as to be included in the future design directions for the Study Area.

Municipal Development Standards

The Township's Municipal Development Standards (MDS) provide a reference to guide development applications, summarizing submission requirements and design and construction standards. These development standards are intended to ensure consistency in developments throughout the Township and to facilitate an efficient approvals process. In addition to the Puslinch Design Guidelines previously discussed, applicable development standards that impact the design approach to the Study Area include accessibility, lighting, landscaping, and tree management standards.

Accessibility

Accessibility is an overarching development standard as the Township is committed to providing a barrier-free environment. Development applications within the Township are required to incorporate accessibility requirements outlined in the *Accessibility for Ontarians with Disabilities Act* (AODA). Concrete curbs and sidewalks must also be designed to comply with AODA requirements. Furthermore, for developments where infrastructure is to be assumed by the Township, the latest revision of the County of Wellington Facility Accessibility Design Manual (FADM) shall also apply.

Lighting

Lighting design is a requirement during the site plan process which all commercial and industrial developments within the Study Area are subject to. Although these standards do not significantly influence the land use options for employment lands, they are integral to the building and site design of commercial and industrial properties within the Study Area and will form part of the future design directions for the Study Area.

Of note, the lighting design, which is prepared by a qualified lighting design professional, must limit the impacts of excess and unnecessary external lighting on adjacent properties (including roadway). The light fixtures should be positioned across a site so as to give a uniform distribution of light over the relevant area, and fixtures should be 'full cut off' type such that light is focused down, preventing light trespass.

Additionally, all developments shall be provided with adequate street and sidewalk lighting, with the lighting design to be prepared by a Professional Engineer. The MDS

provides standards for street lighting with respect to location, spill control, and colour temperature. As with site lighting, fixtures are required to be 'full cut off' type such that light is focused down, preventing light trespass.

Landscaping

The MDS outlines the objectives of site landscaping, as well as standards related to plant materials, shrubs and groundcovers, landscape buffers, and tree maintenance. The standards also include a list of recommended trees, shrubs, and groundcovers.

Objectives for site landscaping is as follows:

- 1. To encourage landscape design that is compatible with the character of the surrounding rural or urban landscape.
- 2. To improve the aesthetic quality of a development and screen less attractive elements from view.
- 3. To protect and enhance the quality of natural heritage features found on and adjacent to proposed development sites.

While the standards largely provide direction on the species and composition of the landscaping, the following standards are applicable for site planning and design and streetscape considerations for the future employment lands/area, and in the achievement of the study's design objectives:

- Along all-weather roads an average of one tree is to be planted for every 10 meters
 of road frontage. Street trees are not to be planted within the road allowance but
 are to be provided on private property close to the road allowance.
- Trees are also to be planted in and/or around parking areas and along the perimeter of development properties in locations that enhance the appearance and functions of buildings and structures.
- Use shrubs to define and control pedestrian circulation and to screen undesirable views.
- Buffers may be needed to screen undesirable views along roads or property boundaries. Buffers may consist of architectural screening, landscaping, berming or a combination of these materials.
- Where berming is used to create the buffer, the berm must be a minimum of one
 meter high and have maximum side slopes of 3:1. It must be seeded with an
 appropriate native groundcover and planted with a mixture of shrubs and
 coniferous trees.

The MDS establishes landscaping standards that ensures developments contribute to a positive streetscape, maintain visual and built form compatibility with neighbouring uses and demonstrate high quality site layout and design. Particular standards concerning buffers and planting spatial requirements should be taken into considerations when evaluating land use options for employment lands within the Study Area. They are also

integral to achieving numerous design objectives within the Study Area and will form part of the future design directions for the Study Area.

Tree Management

The Township provides standards on tree management that seek to inventory woodland communities over 0.1 ha in size, retain and protect significant woodlands, and retain and protect good quality native trees that are greater than 10 cm in diameter at breast height (DBH), where possible. Where tree cover is present on proposed development properties subject to Site Plan Approval and/or Draft Plan of Subdivision, a Tree Preservation/Enhancement Plan will be required. The Tree Preservation/Enhancement Plan should outline the tree management recommendation, required compensatory plantings, as well as tree protection measures.

Furthermore, an approval/permit may be required in certain situations where tree removal is proposed as part of a development application, as per the County's tree by-law.

The tree management standards ensure developments maintain and respect the existing characters, contribute to a positive streetscape, and demonstrate high quality site layout and design. As such, the site's ability to satisfactorily achieve the tree management requirements outlined in the MDS should be taken into considerations when evaluating land use options for employment lands within the Study Area. These standards are also integral to achieving numerous design objectives within the Study Area and will form part of the future design directions for the Study Area.

Summary

The design guidance from the County's Official Plan and the Township's zoning by-law, Puslinch design guidelines, and Municipal development standards achieve the design objectives of the Study Area to varying degrees of comprehensiveness and effectiveness:

- Maintaining rural character the Township's Zoning By-law, the PDG and the MDS address this objective by regulating site plan matters such as building setbacks, planting strips, landscaping, tree cover, lighting, outdoor storage, location of parking and service areas. The existing design guidelines and policies focus on compatibility with surrounding uses as well as compatibility with the adjacent streets to maintain established character of the areas. It is worth noting that the existing policy documents do provide guidance on gateway locations which call for high quality and well-articulated buildings. More guidelines on built form and massing befitting different types of public streets and established character could expand this objective.
- Enhanced buffering designs the County's OP as well as the Township's Zoning By-law, the PDG and the MDS contain effective policies and regulations to ensure adequate and appropriate buffers are provided when necessary. Buffer designs are in the form of landscaping treatment such as planting strips and visual screening, as well as buildings setbacks.

- Higher quality building and site design this objective encompasses many aspects of urban design, ranging from built form compatibility with the streetscape and surrounding uses to provision of building and site design features of excellent standards. The latter includes design elements that incorporate universal design principles and a pedestrian-first approach in addition to an excellent exterior building design treatment and articulation. The first component of this objective is addressed through multiple policy documents while there are opportunities to provide more guidance for developments to achieve the second component of this objective. Because of the overlapped content with the first two objectives, it is recommended that this objective is further defined and limited to the provision of building and site design features of excellent standards
- Approaches that address environmental sustainability and climate change

 this objective aligns with the Provincial interests outlined in Section 2 of the Planning Act as well as the policies in Section 1.8 of the PPS (2020). The existing policies and guidelines address matters that inherently contribute to environmental sustainability and mitigation of climate change impacts such as tree management and required landscaping. However, policies that directly focus on environmental sustainability and climate change should be introduced to address this objective more effectively.

IV. Study Area and Implications for Identifying Land use Options

The review of the applicable municipal policies and development standards highlighted the importance of unified and comprehensive design directions and objectives for employment lands within the Study Area.

The established design objectives for the Study Area serve as the foundation to guide the land use options and future design directions for employment lands. As shown in Section 1.3.7, many objectives have potentially overlapping components while some could be further expanded or defined to offer a more comprehensive set of design objectives for the Study Area. As such, it is necessary to translate these overarching objectives into discrete design considerations to assist with identifying land use options for the Study Area. These design considerations include compatibility with the adjacent streetscape, compatibility with surrounding uses, and building and site design features of excellent standards.

The following sections will discuss how these design considerations contribute to the overall objectives and how they influence the land use options for the Study Area.

Compatibility with the Adjacent Streetscape

This design consideration implements two design objectives, namely "maintaining rural character" and "enhanced buffering designs".

Compatibility with adjacent streetscapes ensures developments within the Study Area not only respect and enhance the established character of their adjacent public streets but also contributes to a positive public realm environment. In general, buildings should not overwhelm but rather frames the streets effectively. Subject to the established character of the streets, treatment of parameters such as building height, massing, orientation, setbacks, vehicular accesses and treatment of the street-adjacent yards as they relate to the adjacent public realm varies to achieve compatibility. For example, this objective would be achieved differently along Brock Road, which has mixed commercial and industrial uses, rather than along streets that are predominantly rural in nature.

This consideration has an implication on identifying land use options as it requires land parcels to be capable of achieving compatibility with the adjacent streets. Factors such as lot depth and lot area need to be examined in relation to the type of public streets they front onto as they impact the site's capability of achieving compatibility with adjacent streets. For instance, a lot needs to be of an adequate depth to accommodate the recommended building setback and yard treatment, and of an adequate size to accommodate parking and service areas away from the streets.

Compatibility with Surrounding Uses

Compatibility with surrounding uses is another critical factor to consider when formulating land use options and developing a design approach for the future employment lands/area. Compatibility with surrounding uses ensures any potential impacts of the proposed built form on the surrounding uses is eliminated or mitigated through design measures, such as building height, massing, setback and step-backs as well as landscaping and location of parking and service areas as they relate to adjacent uses.

This design consideration also implements two design objectives established for the Study Area, namely "maintaining rural character" and "enhanced buffering designs". It should be noted that the design measures discussed in this section jointly contribute to achieving land use compatibility – further discussion is provided in the Background Paper on Land Use Planning and Compatibility.

This consideration has an implication on identifying land use options. Factors such as lot depth and lot area need to be examined in relation to their surrounding uses as they impact the site's capability of achieving compatibility with these uses. The following discusses how this consideration influences the land use options:

- Screening and planting strips requirements are heavily emphasized throughout the
 policies and guidelines. In this regard, land parcels need to be of appropriate size
 and configuration to provide adequate screening and planting strips adjacent to
 other uses.
- Restrictions on the location and configuration of parking, loading, outdoor storage, and shipping containers areas mean land parcels need to be of an adequate size to provide effective separation distances and/or to locate potential source of nuisances away from sensitive uses.

- The specific zone regulations in the zoning by-law provides for required setbacks, lot coverage and height. While required setbacks for each zone vary, they are generally large enough to ensure an appropriate distance from adjacent properties, with increased required setbacks when abutting residential uses. Built form compatibility is further regulated through the required lot coverage and building height these requirements ensure that future development provides a consistent built form in terms of mass and height across the streetscape. As such, land parcels need to be of an appropriate size and configuration to provide effective setback and buffering from surrounding uses. Stricter consideration is warranted when lands abut sensitive uses.
- Due to potentially noxious nature, certain industries require substantially larger land area to provide an effective transition towards surrounding uses. When identifying land use options, this should be taken into consideration as certain industries may require increased separation distance and buffer treatment to be compatible with surrounding sensitive land uses.

Building and site design features of excellent standards

This consideration directly implements the "higher level of building and site design" objective.

As discussed above, this consideration speaks to developments' ability to provide building and site design features of excellent standards such as universal and pedestrian-oriented design in addition to an exemplary exterior building design treatment and articulation:

- Universal design features include a building's design that makes them accessible
 to people of all abilities and ages such as barrier-free washrooms, step-free entries
 and provision of accessible parking spaces as well as the provision of pathways of
 adequate standard in compliance with the Accessibility for Ontarians with
 Disabilities Act throughout the site.
- Pedestrian-oriented design refers to site design that prioritizes pedestrian movement over vehicular movement which would typically provide for direct pedestrian connection from public sidewalks and building entrances as well as safe and convenient pedestrian pathways throughout the site including from parking areas.
- Exemplary exterior building refers to a higher level of architectural design that involves attractive and context-appropriate building materials and façade treatment that is adequately articulated and has limited extent of blank walls. An example of this is the current design guidelines, requiring buildings along the Highway 6 industrial corridor to give prominence to the location and a sense of prestige, while orienting building entrances and office components to face the highway. Corner/gateway sites such as those along the Highway 6 corridor are also encouraged to incorporate architectural details that enhance the visibility of buildings such as material variation, articulated building elements, and signage.

This consideration has an implication on identifying land use options as it requires land uses to be capable of incorporating building and site design features of excellent standards. It is anticipated that certain industrial land uses may not be able to provide a full range of building and site design features of excellent standards. For instance, industrial uses that involve regular truck movement may not be able to adopt a pedestrian-first design approach.

Environmental sustainability and climate change

This consideration directly implements the "Approaches that address environmental sustainability and climate change" objective and refers to a development's ability to contribute to environmental sustainability and to mitigate the impacts of climate change. Matters to be evaluated in conjunction with this consideration includes a development's capability to:

- Position and orientate buildings to make use of passive solar design;
- Retain the existing tree coverage or replant trees in adequate numbers;
- Incorporate green building standards that promote renewable energy, improve energy efficiency, and reduce heat island effects;
- Provide stormwater management at site level that maximizes infiltration and reduces phosphorus loading;
- Promote water conservation; and.
- Incorporate other relevant approaches.

This consideration may not have the most direct implication on identifying land use options, but it still merits evaluation. For instance, a parcel's ability to retain existing tree coverage while accommodating new proposed uses and certain land uses' ability to conserve water sustainably are considerations that should be explored during this land use process.

V. Potential Evaluation Criteria

Table 3.8-6 provides potential evaluation criteria that will minimize impacts on the existing character and uses of the area. Criteria are separated into two categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which evaluate the option based on a Likert scale of five degrees of impact. There are no screening criteria for Designs.

Screening Criteria

None.

Evaluation Criteria

Table 3.8-6: Potential Evaluation Criteria

Potential Evaluation Criteria	Criteria Res	ponse 		Policy Direction and/or Best Practice Guidance		
Will the land use option impact the compatibility with the adjacent streetscape?	No Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020 – 1.5 County OP – 6.8.3, 8.6.6, 8.7.4 Puslinch Design Guidelines – A3, A5, B1, B2, B3, B4, B5, C5
Will the land use option impact the compatibility with the surrounding uses?						PPS 1.2.6 County OP – 6.8.3, 6.8.4, 8.6.6, 8.7.4 Puslinch Design Guidelines – A3, A5, B1, B2, B3, B4, B5, C4, C5
Will the land use option impact the ability to provide building and site features of excellent standards?						Section 2 of the <i>Planning Act</i> County OP –8.7.4 Puslinch Design Guidelines –B1, B2, B3, B4, B5, C5
Will the land use option impact the ability to incorporate						Section 2 of the <i>Planning</i> Act

Potential Evaluation Criteria	•					Policy Direction and/or Best Practice Guidance
approaches that address environmental sustainability and climate change?						PPS 1.8

VI. Data Sources

Planning Act

Provincial Policy Statement, 2020

County of Wellington Official Plan, 2024

Township of Puslinch Zoning By-law No. 023-18, 2021

Township of Puslinch Design Guidelines, 2010

Township of Puslinch Municipal Development Standards, 2019

3.9 Background Paper: Cultural Heritage Resources

Puslinch by Design: Employment Land Study

Prepared for the County of Wellington By NPG Planning Solutions Inc.

Land use Planning and Compatibility

I. Purpose

The purpose of this background paper is to outline the cultural heritage resources within and adjacent to the Study Area and to consider potential negative impacts to cultural heritage resources as a result of the identification of a new employment growth area. This paper will recommend criteria to minimize or mitigate potential negative impacts to cultural heritage resources when considering a new employment growth area.

II. Existing Conditions

At the time of the preparation of this paper, there are currently two properties regulated under the *Ontario Heritage Act* within the Study Area (see **Figure 3.9-1**) including:

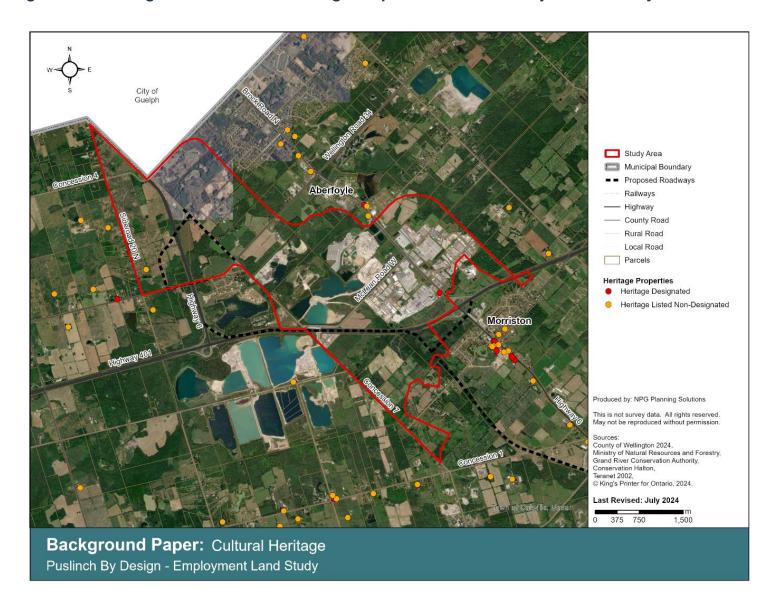
- Designated under the Ontario Heritage Act (Section 33, Part IV) 319 Brock Road South contains the Duff's Presbyterian Church/East Presbyterian Church built in 1854.
- Listed on the Municipal Heritage Register (Section 27, Part IV) 4495 Sideroad 20 North contains the Donald Cameron House built circa 1862, referred to as an "Ontario House". The Municipal Heritage Register indicates that the residence contains cultural heritage value and interest for the high degree of craftsmanship shown in its building, and historical and contextual value for its association with Scottish masons in Puslinch.

There are several listed heritage properties that are contiguous, but outside, the boundaries of the Study Area.

It is understood that Puslinch has established a process to prioritize properties on the Municipal Heritage Register for designation under the *Ontario Heritage Act* (Puslinch Report HER-2024-012). The timeline indicates that Staff will bring forward a report to Council seeking direction on designation in August 2024. As such, it is acknowledged that additional heritage designations within or adjacent to the Study Area are possible throughout the life of the Employment Lands Study.

Areas of Archaeological Potential are not mapped in the County of Wellington. As such, the County and Township should continue to follow provincial screening methods for assessing archaeological potential for lands prior to development.

Figure 3.9-1: Designated and Listed Heritage Properties within and adjacent to Study Area



III. Applicable Legislation

The Planning Act, R.S.O. 1990, Chapter P.13

The *Planning Act* provides provincial legislation that establishes the requirements for land use planning in Ontario. Section 2 sets out matters of Provincial Interest that the council of a municipality, a local board, a planning board and the Tribunal shall have regard to when carrying out their responsibilities, which includes:

(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest;

Subsection 3(5) of the *Planning Act* requires that decisions of Council shall be consistent with provincial policy statements and shall conform with provincial plans that are in effect.

Provincial Policy Statement (2020) and anticipated Provincial Planning Statement (2024)

The Provincial Policy Statement (the "PPS") establishes the policy foundation for regulating land use in Ontario and provides direction on key land use planning issues affecting communities. Decisions under the *Planning Act* must be consistent with PPS policy direction. The PPS provides the following relevant policy direction for the wise use and management of cultural heritage and archaeological resources in section 2.6:

- 2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.
- 2.6.2 Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.
- 2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

Relevant definitions in the PPS include:

Adjacent lands: means (d) for the purposes of policy 2.6.3, those lands contiguous to a protected heritage property or as otherwise defined in the municipal official plan.

Archaeological resources: includes artifacts, archaeological sites, marine archaeological sites, as defined under the Ontario Heritage Act. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the Ontario Heritage Act.

Built heritage resource: means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an

Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the Ontario Heritage Act, or that may be included on local, provincial, federal and/or international registers.

Conserved: means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

Cultural heritage landscape: means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the Ontario Heritage Act or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms.

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

Significant: means (e) in regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the Ontario Heritage Act...While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation.

Growth Plan for Greater the Golden Horseshoe (Office Consolidation 2020)

The Growth Plan for the Greater Golden Horseshoe (the "Growth Plan") provides policy direction and informs decision-making regarding growth management and environmental protection in the Greater Golden Horseshoe. The Growth Plan directs that cultural heritage resources are to be wisely protected and managed as they are irreplaceable. Cultural heritage resources are recognised as contributing to a sense of identity,

supporting a vibrant tourism industry, and attracting investment based on cultural amenities. Section 4 of the Growth Plan, "Protecting What is Valuable," provides the following relevant policy direction for cultural heritage resources:

4.2.7 Cultural Heritage Resources

1. Cultural heritage resources will be conserved in order to foster a sense of place and benefit communities, particularly in strategic growth areas.

Relevant definitions include:

Archaeological Resources defined as per PPS 2020.

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

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

County of Wellington Official Plan

The County Official Plan acknowledges that people of the County enjoy local cultural heritage resources as a highly visible part of the community fabric and commits to protecting cultural heritage for current and future generations. The County maintains a Municipal Heritage Register containing properties designated under the *Ontario Heritage Act* and listed properties that the County considers to be of cultural heritage value or interest, but which have not been designated.

The following County Official Plan policies inform decision making with respect to cultural heritage resources:

2.1.6 Decision Making

Wellington County will promote land use decisions which provide an economically strong, healthy and socially responsible community and which protect our natural and cultural heritage for this and future generations.

3.3 Guiding Growth

Wellington has the following objectives for growth:

• to support a culture of conservation, including water, energy and cultural heritage conservation, air quality protection and integrated waste management;

Section 4.1 provides the County's policies for Cultural Heritage and Archaeological Resources. The following policies are relevant for this study:

4.1.5 Policy Direction

- a) significant built heritage resources and significant cultural heritage landscapes shall be conserved. Conserved means the identification, protection, use and/or management of heritage and archeological resources in such a way that their heritage values, attributes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment in accordance with Section 4.6.7.
- b) The need for a Heritage Impact Assessment and/or Conservation plan will be based on the heritage attributes or reasons for which the resource is identified as significant, and will normally be identified in pre-consultation on development applications.
- e) Wellington will encourage the conservation of significant built heritage resources through heritage designations and planning policies which protect these resources.
- f) The re-use of heritage buildings is often a valid means of ensuring their restoration, enhancement or future maintenance. Projects to re-use heritage buildings may be given favourable consideration if the overall results are to ensure the long term protection of a heritage resource and the project is compatible with surrounding land uses and represents an appropriate use of land.
- g) Where a property has been identified as a protected heritage property, development and site alteration may be permitted on adjacent lands where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved. Mitigative measures and/or alternative development approaches may be required in order to conserve the heritage attributes of the protected heritage property affected by the adjacent development or site alteration.
- i) Where development and site alteration is allowed, significant archaeological resources must be conserved. Such resources will be conserved through removal, and documentation, or preservation on site. Where significant archaeological resources must be preserved on site, development and site alteration will only be allowed if the heritage integrity of the site is maintained.
- j) Where the County has determined a proposed development has areas of archaeological potential, an assessment of the property will be required to identify archaeological resources. Resources identified and determined to be significant

will be conserved. The County may also require parts of a site to be excluded from development in order to maintain the heritage integrity of the site.

Relevant definitions include:

Adjacent Lands: for the purposes of Policy Direction 4.1.5, means those lands contiguous to a protected heritage property or as otherwise defined in the municipal official plan.

Archaeological resources: includes artifacts, archaeological sites and marine archaeological sites. The identification and evaluation of such resources are based upon fieldwork undertaken in accordance with the Ontario Heritage Act.

Areas of archaeological potential: means areas with the likelihood to contain archaeological resources. Criteria for determining archaeological potential are established by the Province, but municipal approaches which achieve the same objectives may be used. Archaeological potential is confirmed through archaeological fieldwork undertaken in accordance with the Ontario Heritage Act.

Built heritage resources: means one or more significant buildings, structures, monuments, installations, or remains associated with architectural, cultural, social, political, economic, or military history, and identified as being important to a community. These resources may be identified through designation or heritage conservation easements under the Ontario Heritage Act, or listed by local, provincial or federal jurisdictions.

Conserved: means the identification, protection, use and/or management of cultural heritage and archaeological resources in such a way that their heritage values, attributes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment.

Cultural heritage landscape: means a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts designated under the Ontario Heritage Act; and villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, trailways and industrial complexes of cultural heritage value.

Heritage attributes: means the principal features, characteristics, context and appearance that contribute to the cultural heritage significance of a protected heritage property.

Protected heritage property: means real property designated under Parts IV, V or VI of the Ontario Heritage Act; heritage conservation easement property under

Parts II or IV of the Ontario Heritage Act; and property that is the subject of a covenant or agreement between the owner of a property and a conservation body or level of government, registered on title and executed with the primary purpose of preserving, conserving and maintaining a cultural heritage feature or resource, or resource, or preventing its destruction, demolition or loss.

Significant: means (f) in regard to cultural heritage and archaeology, resources that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people... Criteria for determining significance in sections c) - f) are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation.

IV. Study Area and Implications for Identifying Land use Options

Significant Cultural Heritage Resources

Cultural heritage policies within the PPS (2020) and the County Official Plan direct that significant cultural heritage resources are to be conserved. Significant resources are those resources that have been evaluated and determined to have cultural heritage value or interest (CHVI) as per the *Ontario Heritage Act* prescribed criteria for designation (Ontario Regulation 9/06 as amended). Significant, as defined under the PPS (2020), does not require a property to be designated under the Ontario Heritage Act, it may be listed on the Municipal Heritage Register. However, to meet the threshold for "significant," a property must be formally evaluated and determined to contain CHVI as per the prescribed criteria in Ontario Regulation 9/06. Currently, to be a listed property on the Municipal Heritage Register, a property must meet at least one prescribed criterion for designation. To be designated under the *Ontario Heritage Act* a property must meet a minimum of two of the prescribed criteria.

The Heritage Advisory Committee for the Township of Puslinch is currently preparing statements of CHVI for properties to be considered for designation. Where the evaluation of CHVI by the Heritage Advisory Committee and the referenced peer-reviewer assesses against the prescribed designation criteria under Ontario Regulation 9/06, these evaluated properties may form the basis for identifying significance.

Protected Heritage Property

A protected heritage property is any property that has formal protection under the Ontario Heritage Act (designated or easement properties) or under Provincial or Federal legislation. Protected heritage properties are afforded additional protection under the PPS and County Official Plan policies because development adjacent to these properties must

demonstrate that the heritage attributes of the protected heritage property will be conserved. 1.4.3 Conserving Cultural Heritage Resources

Conserved refers to the identification, protection, management and use of cultural heritage resources in a way that ensures cultural heritage value or interest is retained. Conservation approaches can vary depending on the particular heritage attributes identified for a property. As indicated in the County Official Plan, impacts to built heritage resources and cultural heritage landscapes are assessed through a Heritage Impact Assessment (HIA). The HIA assesses and evaluates the heritage significance of a property and provides recommendations for alternative designs or mitigation measures where negative impacts to CHVI are identified or anticipated. Negative impacts from new development on cultural heritage resource may include shadows that alter the appearance of a heritage attribute, isolation from surrounding context, or even vibration impacts with construction activities on early buildings foundations. Provincial guidance for the assessment of negative impacts and general guidelines for HIAs are provided within the Ontario Heritage Tool Kit prepared by the ministry responsible for administering the Ontario Heritage Act.

Recommendations for the Conservation of Cultural Heritage Resources within the Study Area

Within the future identified employment growth area, all significant cultural heritage resources and protected heritage property should be mapped and labeled to provide transparency for Staff and future developers.

Where *significant* cultural heritage resources are within the identified employment growth area and have the potential to be negatively impacted, it is recommended that an HIA be undertaken as part of any *Planning Act* process to assess potential negative impacts.

Where protected heritage property is within or contiguous to the proposed employment growth area and has the potential to be negatively impacted, it is recommended that an HIA be undertaken as part of any *Planning Act* process to assess potential negative impacts.

HIAs should be undertaken by a qualified heritage consultant with demonstrated expertise in cultural heritage planning.

V. Potential Evaluation Criteria

The following evaluation criteria are recommended to assess potential new employment growth areas that will minimize impacts on cultural heritage resources. Criteria are separated into two categories: Screening Criteria for which all options must meet the criteria (i.e. pass/fail) and Evaluation Criteria which evaluate the option based on a Likert scale of five degrees of impact.

Screening Criteria

None.

Evaluation Criteria

Table 3.1-2 - Potential Evaluation Criteria

Po	tential Evaluation Criteria	Criteria Response					Policy Direction and/or Best Practice Guidance
a.	Will the proposed employment location result in negative impacts to a <i>Protected Heritage Property</i> within or adjacent to the proposed location? If so: Will the <i>Protected Heritage Property</i> be conserved (heritage values, attributes and integrity are retained)?		Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020 - 2.6; 2.6.3 County OP - 2.1.6; 4.1.5
	Is there an ability to minimize or mitigate negative impacts?						
a.	Will the proposed employment location result in negative impacts to a <i>significant cultural heritage resource</i> within the proposed location? If so: Will the <i>significant cultural heritage resource</i> be conserved (heritage values, attributes and integrity are retained)? Is there an ability to minimize or mitigate negative impacts?	Impact	Minimal Impact	Modest Impact	High Impact	Critical Impact	PPS 2020 - 2.6; 2.6.3 County OP- 2.1.6; 4.1.5

VI. Data Sources

County of Wellington Official Plan Policies and Mapping

Ministry of Citizenship and Multiculturalism, Ontario Heritage Tool Kit (2005)

Ontario Heritage Act

Planning Act

Provincial Policy Statement (2020)

Puslinch Municipal Heritage Register



4. CONCLUSION



Conclusion

This Background Summary Report for *Puslinch By Design* provides a comprehensive analysis of the Study Area in order to plan for future employment growth in the Township of Puslinch. The Report highlights key elements to be considered related to land use planning, compatibility, and future economic growth. The Study Area comprises lands designated Secondary Agricultural, Greenlands System, and Rural Employment. These designations are governed by a variety of policy documents, including the *Planning Act*, Provincial Policy Statement 2020, Growth Plan for the Greater Golden Horseshoe, Greenbelt Plan, and the County of Wellington Official Plan. The Provincial Planning Statement (2024 draft) will also influence planning for employment lands for *Puslinch By Design* when it takes effect in October 2024.

The Employment Land Market Study Paper within this report reveals a high demand for industrial lands within the Western Greater Golden Horseshoe, reflected in low vacancy rates and increasing lease rates. The Township's nearly 830 hectares of designated Rural Employment Area lands present significant opportunities for economic growth, however this will be insufficient to achieve the planned job growth in Puslinch and Wellington County. Interviews with stakeholders and a competitive landscape review highlight the need for large industrial parcels with robust transportation linkages and flexible built forms. Recommendations for the County and Township include designating a minimum of an additional 30 additional hectares for employment uses, creating contiguous industrial zones, and updating zoning provisions to support taller building clearance heights and larger site coverages.

Other significant considerations within the Study Area include transportation infrastructure to support employment land uses. The Study Area includes existing major transportation infrastructure including MTO regulated highways, Wellington County roads, and Township roads. The proposed Highway 6 Morriston Bypass and upgrades to Highway 6 North are crucial for supporting employment land uses by improving access and traffic flow. The Background Summary Report also underscores the need to consider private water and wastewater systems due to the lack of municipal infrastructure. Cultural heritage resources within the Study Area are recognized, with recommendations to map and protect these resources with any future development.

The Background Summary Report emphasizes the opportunities in planning for employment lands and the important considerations for land use, high quality design, and addressing compatibility, particularly the importance of separating employment areas from sensitive land uses, such as residential areas, to mitigate adverse effects. The use of design measures, such as separation distances, building orientation, and landscaping, are recommended to promote land use compatibility. These design measures and an integrated design approach to the planning of the future employment lands is crucial to jointly achieve land use compatibility, built form compatibility with the streetscape and surrounding uses, promoting a high standard of design excellence, and fostering a distinct identity and sense of place.

In conclusion, the Background Summary Report sets the foundation to develop a strategic framework for planning and developing future employment lands in the Township of Puslinch through detailed analysis of existing conditions within the Study Area. The report emphasizes the need for compatibility with sensitive land uses, robust transportation infrastructure, and market-responsive land use policies to foster sustainable economic growth.