

Appendix A:

Southwest Georgetown Integrated Planning Project Transportation Background Report



Vision Georgetown Transportation Background Report

February 2014

Town of Halton Hills/Meridian Planning Consultants

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Executive Summary

In 2013, the Town of Halton Hills initiated the Southwest Georgetown Future Residential/Mixed Use Area Integrated Planning Project (SWG IPP), now referred to as **Vision Georgetown**. The purpose of the project is to develop a Secondary Plan to guide future development of this area of the Town being planned to accommodate an additional 20,000 residents and 1,700 jobs between 2021 and 2031. The subject lands comprise a 1,000 acre concession block bounded by 15 Side Road, Trafalgar Road, 10 Side Road, and Eighth Line/Main Street.

Meridian Planning has been retained by the Town to manage the preparation of the Secondary Plan, and has engaged Hatch Mott MacDonald (HMM) to complete the transportation analysis. This **Transportation Background Report** is the first in a series and summarizes available information pertaining to the Study Area.

Numerous overarching plans, policies and initiatives influence land use and transportation planning within the Study Area, in particular:

- The GTA West Transportation Corridor;
- The Halton-Peel Boundary Area Transportation Study (HPBATS);
- The Halton Regional Official Plan and Amendments 37, 38 and 39;
- The Halton Region Transportation Master Plan (The Road to Change);
- The Town of Halton Hills Official Plan; and
- The Town of Halton Hills Transportation Master Plan.

The Southwest Georgetown area features defined road and trail/pathway networks, with plans for expansion, but currently is not served by conventional local transit. GO Transit provides interregional service.

The preliminary assessment of existing transportation conditions indicated no significant traffic operational issues within the Southwest Georgetown area, but local traffic volumes are growing due to ongoing development.

Future phases of work will provide a comprehensive assessment of future transportation conditions for different land use scenarios. The work will include:

- Assessment of 2021 base and 2031 future scenarios transportation conditions;
- Evaluation of various transportation opportunities and challenges affecting the Study Area;
- Development of alternative networks for pedestrians, cyclists, and general purpose vehicles;
- Assessment/evaluation of identified networks and identification of a technically preferred option;
- Drafting of transportation-related policies;
- Development of implementation phasing strategies; and
- Preparation of order of magnitude cost estimates.



1.0 Introduction

In 2013, the Town of Halton Hills initiated the Southwest Georgetown Future Residential/Mixed Use Area Integrated Planning Project (SWG IPP, now referred to as the Vision Georgetown Project) to develop an appropriate Secondary Plan to guide future development in this area of the Town. The subject lands comprise a 1,000 acre concession block bounded by 15 Side Road, Trafalgar Road, 10 Side Road, and Eighth Line/Main Street, which is being planned to accommodate an additional 20,000 residents and 1,700 jobs between 2021 and 2031. **Figure 1** shows the Study Area for the SWG IPP.

The study is being undertaken as an integrated planning project, with the two main components being a land use planning study (or Secondary Plan) and a subwatershed study. The work completed in preparing the plan will also fulfill Phases 1 and 2 of the Municipal Class Environmental Assessment (EA) process for the planning of water/wastewater and transportation services.

Meridian Planning has been retained by the Town to manage the preparation of the Secondary Plan, and has engaged Hatch Mott MacDonald (HMM) to complete the transportation analysis for the study. This report is the first in a series and summarizes available information and relevant studies pertaining to the Study Area. The report also provides a preliminary assessment of existing transportation conditions based on the information received to date and outlines the proposed approach and methodology for completing subsequent stages of analysis.

The **Vision Georgetown Transportation Background Report** is organized as follows:

- Chapter 2 provides the **Context/Study Area** for the transportation study;
- Chapter 3 describes the **Background/Assessment** of the existing and planned area transportation system;
- Chapter 4 presents the **Results/Findings** of the existing transportation conditions analysis; and
- Chapter 5 summarizes the **Conclusions** of this report.



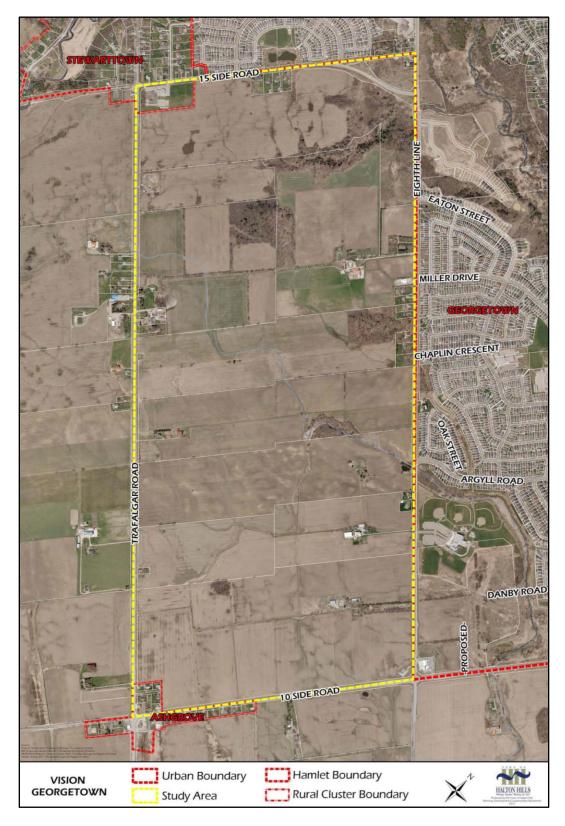


Figure 1 – Southwest Georgetown Secondary Plan Area



2.0 Context/Study Area

The following studies, projects and initiatives provide a planning context for the future transportation system serving the Southwest Georgetown area:

2.1 Provincial and Inter-Regional

2.1.1 Provincial Growth Plan for the Greater Golden Horseshoe – "Places to Grow"

The Growth Plan for the Greater Golden Horseshoe – Places to Grow was adopted in June 2006 under the provisions of the *Places to Grow Act*, 2005. The plan provides the framework for implementing the Provincial government's vision for building stronger, prosperous communities by better managing growth to the year 2041 in the burgeoning Greater Toronto and Hamilton Area (GTHA).

The Growth Plan contains specific policies and directives regarding transportation, infrastructure, land use planning, urban form, natural heritage and resource protection to be considered by municipalities in their planning activities. Of particular interest, the Growth Plan provides direction around where growth can occur, the form of future development, and future population and employment forecasts, which have been reflected in the Halton Region and Town of Halton Hills Official Plans.

The plan also offers guidance regarding transportation system development, envisioning an "integrated transportation network that will allow people choices for easy travel both within and between urban centers." While travel by automobile will remain a significant means of transport, other travel mode choices, including efficient, convenient and affordable public transit, and walking and cycling, will become more important elements of the urban transportation system.

2.1.2 Metrolinx "The Big Move" – Regional Transportation Plan for the GTHA

Pursuant to the *Metrolinx Act*, 2006, the Province created Metrolinx to develop, fund, coordinate and promote transportation within the GTHA municipalities. Metrolinx has developed a Regional Transportation Plan (RTP) for the GTHA, entitled "The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area", based on a seamless, integrated transportation network, focusing on public transit. The plan outlines a 25 year vision for sustainable transportation in the GTHA, as well as the policies, programs and infrastructure investments required to achieve the vision.

The Big Move is primarily focused on enhancing and expanding public transit. In the vicinity of the Study Area, the RTP identifies one rapid transit initiative of relevance, being the expansion of Regional Rail service on the



Kitchener GO line to full-day, two-way. The plan also includes policies related to goods movement, Active Transportation (AT) and transit to be considered in developing and improving infrastructure.

2.1.3 GTA West Planning and Environmental Assessment Study

The Ministry of Transportation (MTO) is conducting the GTA West Corridor Planning and Environmental Assessment Study to identify the preferred solution for providing better linkages between Urban Growth Centres in the west part of the GTHA, including Downtown Guelph, Downtown Milton, Brampton City Centre and Vaughan Corporate Centre.

The GTA West Transportation Development Strategy (TDS) released in November 2012 recommends a broad range of measures to address future transportation needs in the northwest part of the GTHA, including building a new transportation (freeway) corridor from Highway 400 westerly to Highway 401 east of the Niagara Escarpment. The corridor is proposed to include six lanes along the north-south section near the Region of Halton and Region of Peel municipal boundary (once known as the Halton/Peel Freeway), and anticipated to provide interchanges at major arterial roads such as Ninth Line and 5 Side Road in Halton Hills and Bovaird Drive in Brampton, as well as Highways 401 and 407. The proposed new corridor would function in combination with the expansion of existing highway facilities, including the widening of Highway 401 to 12 lanes from Regional Road 25 (Milton) to Trafalgar Road (Regional Road 3). The Preliminary Route Planning Study Area for the new corridor, which will be identified through Stage 2 of the EA process, is shown in **Figure 2**. It is noted that the TDS assumed the future widening of several roads in the vicinity of the Study Area as part of the overall transportation network solution.

The GTA West study has also identified the need for several transit improvements including the expansion of all-day, two-way GO Train service to Milton and Georgetown, to meet future transportation demands in this growing part of the Greater Toronto and Hamilton Area (GTHA). These new services in combination with the proposed transportation corridor will have a significant influence on local and regional trip patterns in the Town, and future travel behaviour for the Southwest Georgetown area.

2.1.4 Halton-Peel Boundary Area Transportation Study

The Halton-Peel Boundary Area Transportation Study (HPBATS) was initiated in response to commitments made by the Region of Halton for the approval of Halton Regional Official Plan Amendment (ROPA) 25. HPBATS was conducted jointly by the Region of Peel, Region of Halton, the City of Brampton, the Town of Caledon and the Town of Halton Hills to identify a long-term (2021-2031) transportation network to serve future demands in the municipal boundary area. Growth projections from the Growth Plan served as the basis for the demand forecasts.



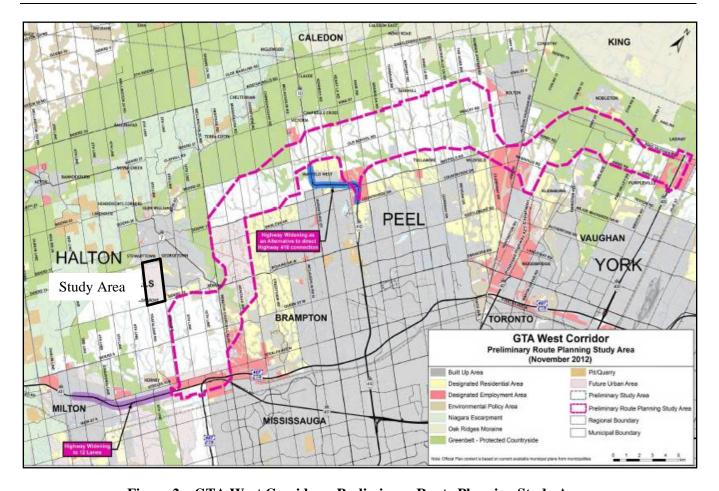


Figure 2 – GTA West Corridor – Preliminary Route Planning Study Area (Source: GTA West Corridor Planning and EA Study – Transportation Development Strategy Report, November 2012)

The HPBATS transportation strategy endorsed by Town, City and Regional Councils in May 2012 includes a range of measures designed to promote change in travel behaviour, in addition to essential infrastructure improvements. The strategy features enhancements to the transit and road networks, and Transportation Demand Management (TDM) initiatives to encourage employer-based trip reduction programs, to link transportation and land use decisions, and to promote High-Occupancy Vehicle (HOV) travel.

Figure 3 illustrates the recommended transportation network for the Halton/Peel boundary area from HPBATS. The figure identifies the following improvements within the Study Area (proposed year of implementation noted):

- Widening of Steeles Avenue from two to four general purpose lanes from Winston Churchill 2021
 Boulevard to Milton
- Widening of Steeles Avenue from four to six lanes for transit (HOV) lanes from Winston
 Churchill Boulevard to Milton



•	Widening of Trafalgar Road from two to four lanes, from Steeles Avenue to Highway 7	2021
•	Widening of Winston Churchill Boulevard from two to six lanes from Highway 401 to 5 Side Road/Embleton Road	2031
•	Provision of Winston Churchill Bypass at four lanes from north of 5 Side Road / Embleton Road to 10 Side Road/Norval West Bypass	2016
•	Widening of Winston Churchill Boulevard from 5 Side Road/Embleton Road to the junction with Winston Churchill Bypass from two to four lanes	2016
•	Widening of 10 Side Road from two to four lanes from Trafalgar Road to Winston Churchill Bypass/Norval West Bypass	2021
•	Provision of Halton/Peel Freeway at eight lanes from Highway 401/407 ETR interchanges west of Ninth Line in Halton to Bovaird Drive. (Subsequent to the completion of HPBATS, the Halton/Peel Freeway has become part of the GTA West Transportation Corridor. Its location and implementation will be determined through the GTA West Corridor Planning and Environmental Assessment Study being undertaken by MTO).	2031
•	Provision of Norval West Bypass at four lanes from 10 Side Road/Winston Churchill Bypass to Guelph Street	2016
•	Widening of Highway 7 west of the intersection with Norval West Bypass to provide consistent four-lanes capacity	2016
•	Provision of east-west connection from Bovaird Drive west of Halton/Peel Freeway to Georgetown (corridor to be determined by EA)	2021
•	Road reconstruction to rural collector standards for Eighth Line and Tenth Line from Steeles Avenue to 10 Side Road in Halton Hills	2021
•	Road reconstruction to rural collector standards for 5 Side Road	2021



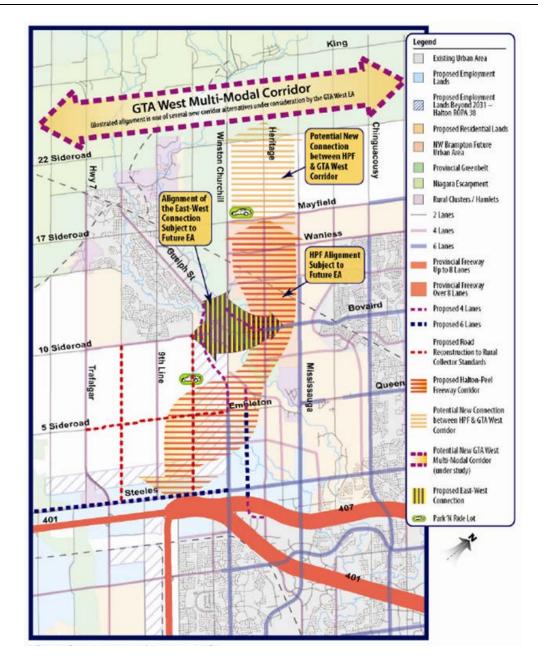


Figure 3 – HPBATS Recommended Road Network, 2031 (Source: Halton-Peel Boundary Area Transportation Study, May 2010)

2.2 Halton Region

2.2.1 Halton Region Official Plan

The Halton Region Official Plan (Halton OP) provides a long term vision for Halton's physical form and community character to the year 2021 and direction as to how development should take place to achieve that vision. The plan includes a broad policy framework for transportation planning in the Region, with the goal of



providing a safe, efficient, affordable, efficient and energy-conserving transportation system, while minimizing environmental impact. Objectives and policies related to transportation system development are provided.

In 2006, Halton Region began the task of updating its Official Plan by launching the Sustainable Halton process. Sustainable Halton provides the Region's response to the Growth Plan, the Greenbelt Plan and the Provincial Policy Statement, and sets out its growth management strategy to the year 2031. In 2009, the Region initiated two plan amendments – ROPAs 37 and 38 – to implement the outcome of the process, which also served as its statutory five-year review of the Halton OP under the *Planning Act*. Subsequently, Regional Council adopted ROPA 39 in July 2011 to establish development phasing policies, pursuant to ROPA 38. The following elaborates on these Official Plan amendments and their implications for the Southwest Georgetown plan:

ROPA 37 - An Amendment to Incorporate the Basic Requirements of the Places to Grow Plan

ROPA 37 approved by the Ministry of Municipal Affairs and Housing in November 2010, was intended as an interim step to address the basic requirements of the Growth Plan prior to the mandated date for bringing official plans into conformity with this Provincial plan. ROPA 37 included policies to support transit, walking and cycling, as wells as reduce the dependence on the automobile through the development of mixed-use, transit supportive, pedestrian-friendly urban environments. These policies will ensure that the planning of Southwest Georgetown provides an urban design that promotes transit ridership and active transportation modes.

ROPA 38 – An Amendment to Incorporate the Results of Sustainable Halton, Official Plan Review Directions and Other Matters

ROPA 38 adopted in December 2009 and currently before the Ministry of Municipal Affairs and Housing for approval, further integrates the policies introduced by ROPA 37 with more detailed and further reaching directives. The amendment provides updated population and employment allocations, urban expansion boundaries and intensification targets for Halton Hills, with the most significant portion of the population growth between 2021 and 2031 assigned to the Southwest Georgetown Secondary Plan Area. ROPA 38 also includes numerous amendments to the transportation policies in the Halton OP consistent with the requirements of the Growth Plan and the Metrolinx RTP, and policies regarding major transit station areas and mobility hubs.

ROPA 39 - Regional Development Phasing to 2031

Adopted by Regional Council on July 13, 2011, ROPA 39 consists of 21 revisions to the Halton OP to implement development phasing provisions to the year 2031. The amendment provides recommended Best Planning Estimates, which establish checkpoints for new residential units and jobs within each local municipality in five year increments to the year 2031. The amendment also introduces a new Regional phasing schedule (Map 5) for the Urban Areas within Halton, which denotes development of Southwest Georgetown between 2021 and 2031.



2.2.2 Halton Region Transportation Master Plan

The Halton Region Transportation Master Plan (RTMP) update approved by Council in 2012 provides a sustainable, integrated transportation plan and associated strategies that will consider all modes of travel to the year 2031. The plan known as "The Road to Change" identifies required network improvements that include widened Regional Roads to 6 lanes (where needed) and new regional links and network features to accommodate cycling, walking and transit. Key to the RTMP is the assumption that 15 to 20% of peak period trips will be accommodated by local and Provincial (GO) transit services by the year 2031.

To help achieve these transit mode split targets, the RTMP recommends significant enhancements to transit services, a strong commitment to transit-supportive development and related policies, and implementation of the Metrolinx RTP. The RTMP includes a conceptual Transit Strategy that features implementation of Bus Rapid Transit (BRT) service along Trafalgar Road in Oakville and protection for other higher order transit corridors. Although no corridors are foreseen in the Southwest Georgetown area, it is expected that significant transit ridership will be attracted by the Trafalgar Road BRT and the GO Rail improvements described in the Metrolinx RTP (see Section 2.1.2 above).

The RTMP provides further direction regarding TDM and Active Transportation (AT) to guide development of the Southwest Georgetown transportation plan. The plan also recommends the following road improvements in the vicinity of the Southwest Georgetown area (proposed year of implementation noted):

•	Widening of Trafalgar Road to four lanes from 10 Side Road to Steeles Avenue	2019
•	Widening of Trafalgar Road/Regional Road 3 to four lanes from 10 Side Road to Highway 7	2020
•	Widening of 10 Side Road/Regional Road 10 to four lanes from Trafalgar Road to Winston Churchill Boulevard	2031
•	Widening of Ninth Line to four lanes from Steeles Avenue to 10 Side Road	2016
•	Widening of Winston Churchill Boulevard to four lanes from 2km south of 5 Side Road to potential bypass near 10 Side Road	2019

2.3 Town of Halton Hills

2.3.1 Town of Halton Hills Strategic Plan and Strategic Action Plan 2010-2014

The Town's Strategic Plan guides the municipality's plans, programs and services, providing a Vision and Corporate Mission for Halton Hills to the year 2031. The Strategic Plan is implemented through the capital and operating budgets, planning documents, departmental/service area work plans and Council decisions.



The Strategic Plan identifies several strategic objectives related to transportation, which include:

- Encouraging air quality improvements through land use planning, transportation management and other programs and work with other orders of government to address greenhouse gas emissions;
- Conserving energy through means, such as community design, and land use and transportation planning;
- Sizing new urban areas appropriately relative to the planned growth and in conjunction with the required infrastructure improvements to achieve sustainable growth;
- Providing infrastructure and services that meet the needs of the community and ensuring that infrastructure required for growth is provided in a timely manner; and
- Working with other orders of government to ensure the provision of a safe, diverse and integrated transportation system.

In June 2011, Town Council identified ten priority strategic actions to be addressed before 2014. Included in those actions was the preparation of a Secondary Plan for the Georgetown Future Residential/Mixed Use Area.

2.3.2 Town of Halton Hills Official Plan

The Halton Hills Official Plan (Town OP) approved in 2008 articulates a vision for the future land use structure of the Town to manage change until the year 2021. The goal of the plan is to maintain the unique character of the Town of Halton Hills as a municipality, with the two distinct urban communities of Georgetown and Acton, surrounded by a predominantly rural area. The plan includes a broad range of policies to guide future development, including transportation policies and detailed schedules related to roadway function, roadway classification and road right-of-way.

The Town OP sets out requirements for the design of new communities that include the need to establish land use patterns that promote mixed-use, transit-supportive and walkable communities and to locate high density housing on arterial and collector roads to facilitate transit service and pedestrian friendly corridors in the future. Traffic permeability and connectivity should also be promoted via design of grid-pattern subdivision streets and development blocks.

The Town OP also establishes policies for the preparation of Secondary Plans. Policies related to transportation require the preparation of a detailed Transportation Study to assess the new development impacts on the surrounding road network and provide recommendations for network improvements.

Over the past few years, the Town has adopted a series of Official Plan Amendments (OPAs) and commenced studies to bring its plan into conformity with the Growth Plan and the Halton Region Official Plan. OPA 10 (Provincial Growth Plan Conformity – Urban Matters), pending approval from the Region, details the amendments to the Town's OP required to achieve conformity with the Growth Plan, ROPA 38 and other land use



planning matters affecting the urban areas of the Town. The amendment implements the Preferred Growth Option of the Sustainable Halton study set out in ROPA 38, including the 2031 planning horizon and related population and employment targets of 94,000 people and 43,000 jobs.

OPA 10 provides the basis to accommodate an additional population of 20,000 residents in 370 hectares of residential/mixed use area contiguous to the Georgetown Urban Area, and 340 hectares of employment land adjacent to the 401/407 Employment Corridor between 2021 and 2031. The amendment establishes minimum density targets for Designated Greenfield Areas, designates new urban expansion areas (Southwest Georgetown, Southeast Georgetown, Stewarttown and the 401/407 Employment Corridor), and provides policy direction appropriate for the parent Official Plan prior to Secondary Plan preparation.

Among the objectives of OPA 10 is to ensure that the new development areas are planned and built as complete communities, with compact pedestrian-friendly neighbourhoods, a mix of housing types, community facilities, commercial centres and open spaces. The amendment sets a minimum development density for the future Residential/Mixed Use Areas of 55 to 60 residents and jobs combined per gross hectare. OPA 10 also stipulates the requirements to be completed prior to the approval of any new development, which include the preparation of comprehensive Secondary Plans and Block Plans to formulate planning visions and detailed land use planning frameworks for the new expansion areas.

2.3.3 Town of Halton Hills Transportation Master Plan

The Town of Halton Hills Transportation Master Plan (HHTMP) provides direction for transportation infrastructure decisions in the Town of Halton Hills to the year 2031by providing policies, objectives and goals based on sustainable development principles. The plan integrates municipal transportation planning with environmental assessment objectives and land use planning, ultimately providing for a transportation system that is sustainable, integrated and encourages a healthy and active lifestyle.

In assessing future transportation needs, the HHTMP utilized population and employment forecasts from the Halton Region document "Best Planning Estimates of Population, Occupied Dwelling Units and Employment 2011-2031 Research Paper", dated March 2011. According to the Best Planning Estimates, the majority of population growth by 2031 in the Town will occur in Georgetown, while most employment growth is expected within the 401/407 Employment Lands adjacent to Highways 401 and 407.

The HHTMP identifies a broad range of improvements to meet future demands. The plan includes a series of short term road improvements, primarily in the developed areas within Georgetown and Acton, to address immediate needs. In the vicinity of the Southwest Georgetown, these improvements include:



•	Addition of a southbound right turn lane at the Guelph Street with Maple Avenue intersection	2015
•	Addition of a northbound right turn lane to Main Street South at the intersection with Maple Avenue	2015
•	Addition of northbound and southbound dual left turn lanes at the intersection of Guelph Street with Mountainview Road	2016
Longer	term road improvements affecting the Study Area include:	
•	10 Side Road modification/improvement from Local Road to Major Arterial with addition of paved shoulders from Regional Road 25 to Trafalgar Road	2022
•	15 Side Road modification from Arterial/Minor Arterial to Rural Collector with the addition of paved shoulders from Nassagaweya–Esquesing Town Line to Trafalgar Road	2023
•	Widening of Trafalgar Road/Regional Road 3 to four lanes from Highway 7 to Steeles Avenue	2031
•	Widening of 10 Side Road to four lanes from Trafalgar Road to realigned Winston Churchill Boulevard (Norval Bypass)	2031

2.3.4 Town of Halton Hills Cycling Master Plan

The Town of Halton Hills Cycling Master Plan (HHCMP) approved in 2009 was developed to guide the implementation of a town-wide cycling system. The plan, which updates the 1999 Trails and Cycling Master Plan, establishes a vision for cycling in Halton Hills by setting out short, mid and long term actions and recommendations.

The plan establishes a primary system of routes that will serve as the "backbone" of the cycling network, directly linking urban areas of Halton Hills and connecting to key destinations in surrounding municipalities. A secondary system of routes will feed into the overall network from local neighbourhoods.

The HHCMP features a range of cycling facilities to accommodate users of all ages and skill levels, including:

- On-Road Cycling Facilities, which include bike lanes, paved shoulder bikeways, signed-only bicycle
 routes, signed bicycle routes enhanced with edge lines or sharrows, and cycle tracks; and
- Off-Road Multi-Use Facilities, which include paths and multi-use trails completely separated from the traveled portion of the roadway, located within abandoned rail corridors, hydro corridors, roadway boulevards and separate off-road rights-of-way.



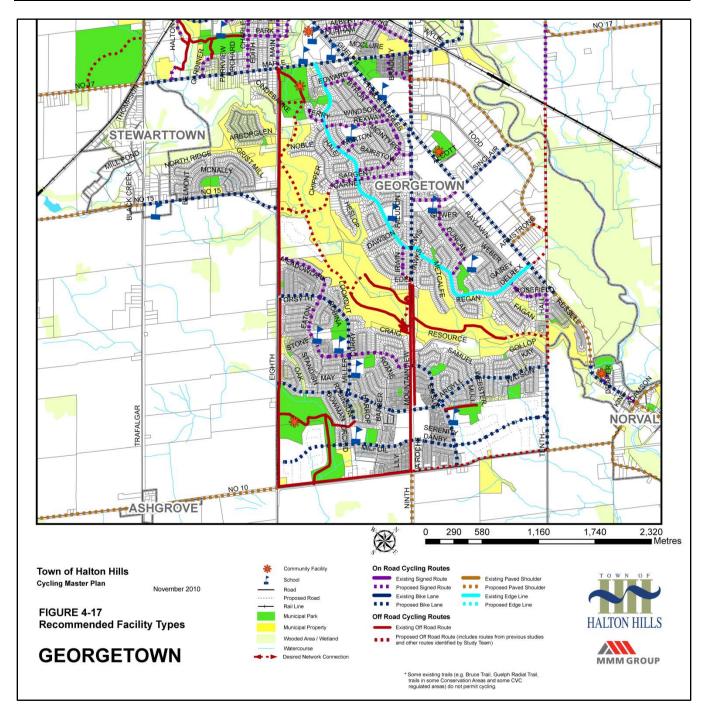


Figure 4 – Recommended Cycling Network in the Vicinity of the Georgetown Area (Source: Town of Halton Hills Cycling Master Plan Study, 2009)



The HHCMP does not establish a cycling network for the Southwest Georgetown area, but identifies routes at the periphery of the Study Area as shown in **Figure 4**, including:

- Proposed on-road bike lane on 15 Side Road from Trafalgar Road to Eighth Line, with connections to a
 proposed paved shoulder facility to the west and a new proposed off-road route the east of Eighth Line;
- Proposed (some now existing) on-road bike lanes on Miller Drive, Argyll Road and Danby Road, and proposed on-road signed route along Eaton Street; and
- Existing off-road routes along Eighth Line from Maple Avenue to 10 Side Road, 10 Side Road east of Eighth Line, and east of Eighth Line.

2.3.5 Town of Halton Hills 2012 Development Charges Background Study

Appendix C of the Town's 2012 Development Charges Background Study identifies the road construction and traffic signalization projects required to serve planned growth. Relevant projects not identified in the HHTMP include:

•	New left turn lane at the Guelph Street and Albert Street intersection	2014
•	New traffic signal at Eighth Line and 15 Side Road	2014
•	Addition of turn lane to Main Street South at Maple Avenue	2015
•	New traffic signal at Eighth Line and Danby Road	2016
•	New traffic signal at Eighth Line and Miller Drive	2017
•	New traffic signal at Eighth Line and Argyll Road	2018

2.4 Future Road Connections and Assessments

2.4.1 Miller Drive, Argyll Road and Danby Road Extensions

Miller Drive, Argyll Road and Danby Road are existing/planned roads within abutting subdivisions to the east that have the potential to be extended west of Eighth Line as part of the future collector road network serving the Southwest Georgetown area. If extended, the roads will provide continuous collector road routes and serve as important community transportation facilities, characterized by bike lanes, on-street parking and neighbourhood traffic management measures to calm traffic (e.g. roundabouts).



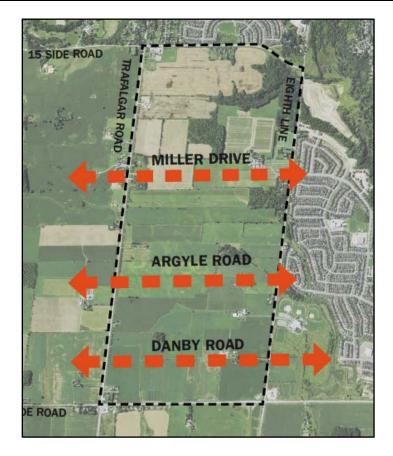


Figure 5 – Potential Miller Drive, Argyll Road and Danby Road Extensions (Source: Google Earth)

2.4.2 Southwest Georgetown Lands Road Needs Assessment

In 2006, Semas Transtech (now GHD) completed an assessment of the existing east-west and north-south Regional Road corridors located adjacent to the Study Area to identify the road improvements required to accommodate a population of 16,200 people for the Southwest Georgetown community. The assessment was based on the screenline analysis presented in the 2004 Region of Halton Development Charge Transportation Background Study. The Region's study examined two screenlines in the vicinity of the Southwest Georgetown area: east-west (Georgetown South) and north-south (Georgetown East). These screenlines capture the traffic coming from the east and south during the afternoon peak period, which is the peak direction of flow for work to home based trips in Georgetown and Halton Hills.

The study concluded that, after taking into consideration the Region of Halton's 2004 Capital Works program, one additional lane would be required at build out of the Southwest Georgetown lands along the Georgetown South screenline to accommodate a projected population growth of 16,200 people. No additional lanes are required along the Georgetown East screenline.



3.0 Background/Assessment

This section provides background pertaining to the transportation system serving the Southwest Georgetown area, and an assessment of already planned improvements.

3.1 Road Network

Road networks are based on a hierarchical system of interconnected roadways that provide for a balance between the need to safely and efficiently move goods and people, and to minimize conflicts with adjacent land uses. Roadways are classified as freeways and expressways, arterials, collectors or local roads. Freeways and expressways carry large volumes of high speed traffic including major truck volumes. Local roads generally carry low volumes of low speed traffic with truck traffic generally being associated only with deliveries to adjacent land uses. Access to/from local roads to adjacent land uses is frequent and pedestrian / bicycling activities are common. Arterials and collector roadways provide for a progression between the fast-moving major freeways and a local road classification.

The Town of Halton Hills is responsible for minor arterial, collector road, employment roads and local roads. The Region of Halton is generally responsible for minor and major arterial roads, and the Ministry of Transportation (MTO) is typically the road authority for major arterials and freeways.

The primary roads within the Study Area include:

- Trafalgar Road (Regional Road 3) is a two lane Major Arterial under the jurisdiction of the Region of Halton. The road has a rural cross section, a posted speed limit of 80 km/ h and runs northwest-southeast within the Study Area. For the purposes of this report, it will be referred to as a north-south roadway.
- 15 Side Road is a two-lane Suburban Collector between Eighth Line and Belmont Boulevard, and a Suburban Arterial west of Belmont Boulevard. Under the jurisdiction of the Town, the road runs eastwest through the Study Area and features an urban cross section and sidewalk on the north side. The road has a posted speed limit of 50 km/h west near Stewarttown Public School, and 60 km/h further east.
- Main Street South/Eighth Line is a two-lane Suburban Arterial between 10 Side Road and Miller Drive and becomes an Urban Arterial north of Miller Drive. Under the jurisdiction of the Town, the road runs north-south through the Study Area and features an urban cross section and sidewalk on the east side. The posted speed limit is 70 km/h.
- 10 Side Road (Regional Road10) is a two-lane Major Arterial under the jurisdiction of the Region of Halton with a rural cross section. The road runs east-west through the Study Area and has a posted speed limit of 80 km/h.



Figure 6 illustrates existing roadway characteristics, number of travel lanes, posted speed limits, intersection control and configurations.

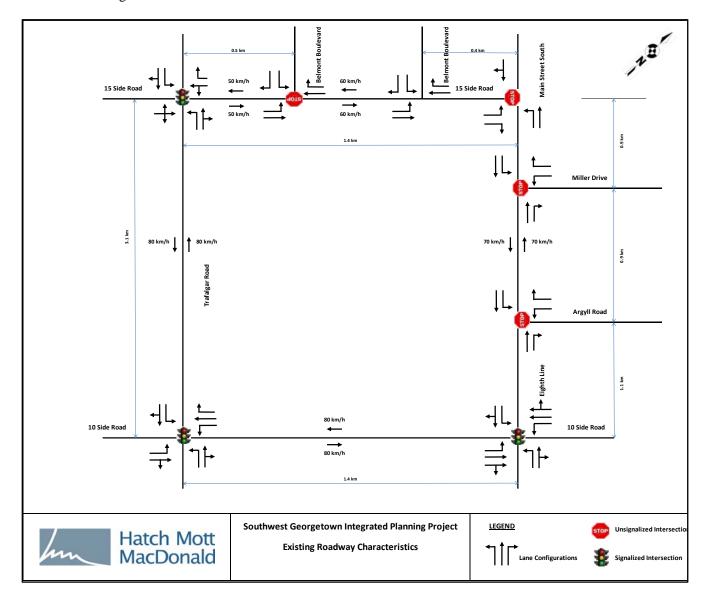


Figure 6 – Existing Road Network

3.2 Transit Services

3.2.1 Local Transit

There are no local conventional transit services operating within the Town of Halton Hills currently. Select segments of the population have access to community based transportation services, which include:



- The Town of Halton Hills ActiVan program, which provides transportation services to eligible seniors and persons with disabilities; and
- The Red Cross service funded by the Ministry of Health and Long Term Care, which provides transportation service to seniors (over 60) and persons with disabilities throughout the week for medical appointments, dialysis and day programs.

3.2.2 Interregional Transit

Interregional transit service is provided by GO Transit and VIA Rail. GO Transit provides weekday peak period rail service between Kitchener and Toronto Union Station (currently five trips in the peak direction, with plans for all-day service) that serves the Southwest Georgetown area through the Georgetown GO Station. GO Transit also offers all-day bus service to Georgetown along routes 30, 31, 33 and 39, with connections at the Georgetown GO Station and bus stops at various locations in town.

VIA Rail provides service between Georgetown and Toronto Union Station along its Toronto-London-Sarnia route twice daily.

3.3 Trails and Pathways

Figure 7 shows the trails and pathways in the vicinity of the Study Area. **Figure 8** illustrates the cycling facilities. **Section 2.3.4** outlines the existing and future cycling network for the Town from the Cycling Master Plan. Since adoption of the plan, the Town has introduced on-road bike lanes on Delrex Boulevard and Danby Road in the vicinity of the Study Area.



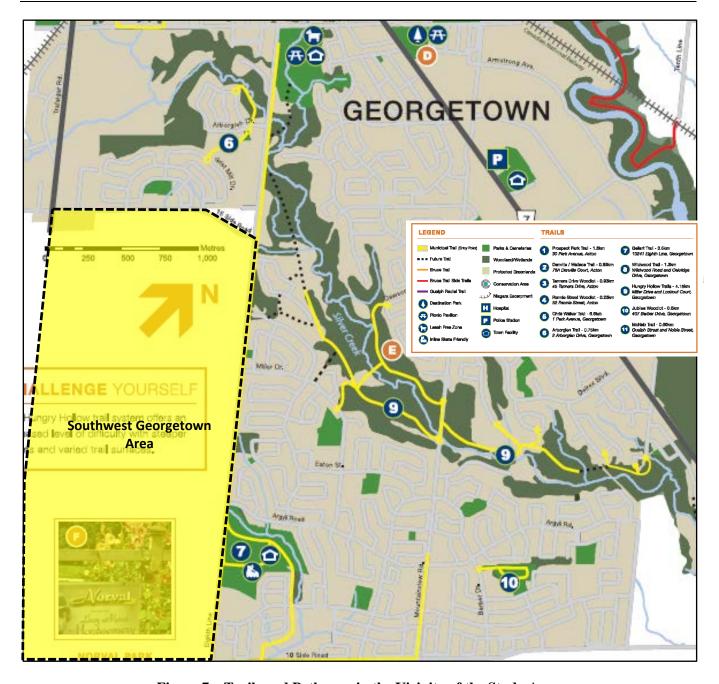


Figure 7 – Trails and Pathways in the Vicinity of the Study Area

(Source: Town of Halton Hills Website, http://www.haltonhills.ca/trails/pdf/trailBrochure.pdf)



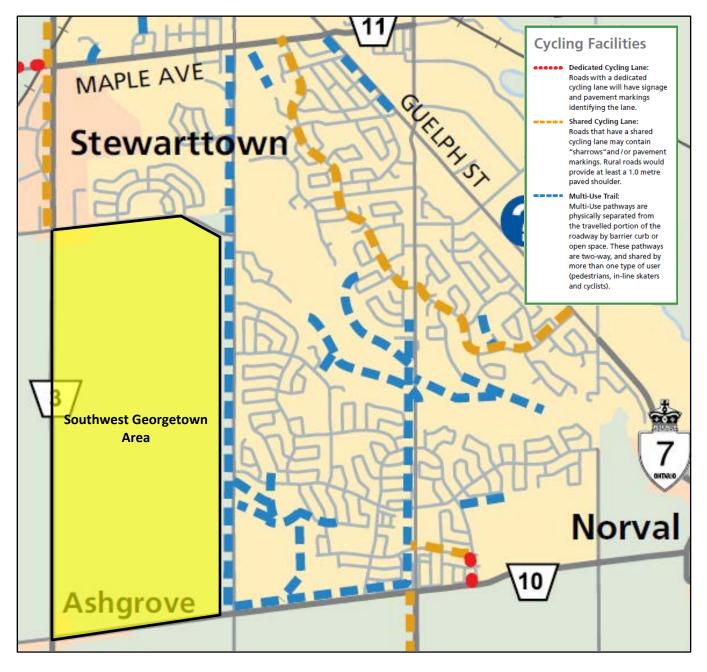


Figure 8 – Cycling Facilities in the Vicinity of the Study Area

(Source: Region of Halton Website, http://www.halton.ca/cms/one.aspx?portalId=8310&pageId=12599)



3.4 Planned Capital Works in the Area

3.4.1 Region of Halton

The 2013 Halton Region Capital Budget and 2013 – 2022 Project Forecast identify the following road expansion projects for the Georgetown area:

•	Widening of Ninth Line north between Steeles Avenue and 10 Side Road from 2 to 4 lanes	2016
•	Construction of Trafalgar Road grade separation at the CN Rail Crossing north of Maple Avenue	2017- 2018
•	Construction of Trafalgar Road grade separation at the GEXR Crossing south of Highway 7	2018
•	Widening of Trafalgar Road (Regional Road 3) between Steeles Avenue and 10 Side Road from 2 to 4 lanes	2019
•	Widening of Winston Churchill Boulevard between Steeles Avenue and 10 Side Road from 2 to 4 lanes	2019
•	Widening of Trafalgar Road (Regional Road 3) between 10 Side Road and Highway 7 from 2 to 4 lanes	2020
•	Construction of Norval Bypass	2020

3.4.2 Town of Halton Hills

The 2013 Town of Halton Hills Capital Budget and 2014 – 2022 Capital Budget Forecast identify the following road projects for the Georgetown area:

•	Traffic signal installation at the intersection of Eighth Line with 15 Side Road	2014
•	Traffic signal installation at the intersection of Eighth Line with Miller Drive	2017
•	Construction of 10 Side Road from Regional Road 25 to Trafalgar Road	2022

The Capital Forecast also allocates funding for undefined trail system improvements and preparatory engineering studies and design.

3.4.3 Region of Peel

The 2013 Region of Peel Capital Budget and 2013 – 2022 10-Year Capital Plan identify the following road expansion projects in the vicinity of the Study Area:



- Widening of Bovaird Drive (Highway 7) between Lake Louise Drive/Worthington Avenue
 and Mississauga Road to 4 lanes
- Widening of Winston Churchill Boulevard between 2km south of Embleton Road/5 Side Road 2018 and potential Norval Bypass

3.4.4 City of Brampton

The City of Brampton 2013 Capital Budget and 2014 – 2022 Capital Forecast do not identify any projects adjacent to the Southwest Georgetown area.



4.0 Results/Findings

This section presents preliminary information regarding existing transportation conditions in the Southwest Georgetown area.

4.1 Travel Characteristics

Travel patterns and characteristics for the Town of Halton Hills have been based on data obtained from the 2006 Transportation Tomorrow Survey (TTS) for the PM (4:00 p.m. – 6:00 p.m.) peak period.

Approximately 84% of all trips made in the PM peak period were by automobile (driver and passenger). School bus and walking/cycling trips each account for approximately 7% of total trips, with transit accounting for the remaining 2%. It is noted that most transit trips were made using GO Transit rail and bus services since local transit services are not available in Georgetown.

Figure 9 illustrates existing PM peak period travel characteristics and patterns for the Town of Halton Hills based on 2006 TTS data. Upwards of 56% of the 17,700 person trips made in the PM peak period start and end their trip in the Town reflecting a high level of self-containment. Trips originating outside and destined to the Town during the PM peak period originate in the City of Mississauga (13%), the City of Toronto (7%), the City of Brampton (9%), the Town of Caledon (1%) and Region of York (2%). The remaining 7% of the trips start in the Halton Region communities of Milton (4%), Oakville (2%) and Burlington (1%).

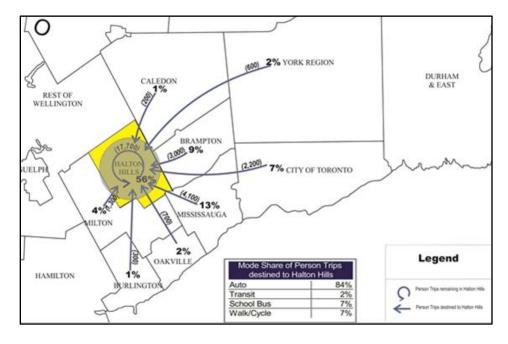


Figure 9 – 2006 TTS P.M. Peak Period Total Person Travel Patterns (Source: Town of Halton Hills Transportation Master Plan Report, November 2011)



4.2 Traffic Volumes

Historic Annual Average Daily Traffic (AADT) volumes for Town of Halton Hills roads adjacent to the Study Area were obtained from background information used for the Halton Hills TMP. **Table 1** shows AADT volumes on various road sections for the years 2005 to 2009.

Table 1 – AADT Volumes on Town Roads – 2005 to 2009

Location	2005	2006	2007	2008	2009	Annual Average Growth Rate
Eighth Line Between No. 5 Side Road and No. 10 Side Road	4,455	4,500	4,545	4,590	4,760	1.7%
Eighth Line Between No. 10 Side Road and Argyll Road	6,680	6,750	6,820	6,890	6,960	1.0%
Eighth Line Between Argyll Road and Miller Drive	6,950	7,020	7,090	7,160	7,230	1.0%
Eighth Line Between Miller Drive and No. 15 Side Road	6,425	6,490	7,330	8,270	8,355	6.8%
No. 15 Side Road between Belmont Boulevard and Main Street South/ Eighth Line	3,480	3,510	3,550	3,590	3,630	1.0%
No. 15 Side Road between Belmont Boulevard and Belmont Boulevard	2,400	2,430	2,450	2,480	2,500	1.0%
No. 15 Side Road between Chantelay Crescent and Belmont Boulevard	2,390	2,410	2,430	2,450	2,480	0.9%
No. 15 Side Road between Trafalgar Road and Chantelay Crescent	2,340	2,360	2,380	2,400	2,430	1.0%
Argyll Road Between Eighth Line and Oak Street	2,860	3,110	3,380	3,670	3,960	8.5%

4.3 Operational Analysis

4.3.1 Screenline/Link

Current transportation network deficiencies were identified in the Halton Hills TMP based on the Halton Region Transportation Demand Model. The following link capacities and speeds were assumed in the model:

- Trafalgar Road: 950 vehicles per hour, 80 km/h
- 10 Side Road: 750 vehicles per hour, 70 km/h
- 15 Side Road: 600 vehicles per hour, 60 km/h
- Eighth Lane: 500 vehicles per hour, 70 km/h



The Halton Hills TMP identified the section of Trafalgar Road north of 15 Side Road as experiencing moderate congestion during the PM peak hour. Moderate congestion is observed when v/c ratios are greater than or equal to 0.8 and less than or equal to 0.8 of the available capacity. When the v/c ratio exceeds 0.9, the facility is deemed to have significant levels of congestion. There are no links/roads within the Study Area with significant levels of congestion.

Cordon counts at the screenline level were also available from the Halton Hills TMP. Relevant screenline volumes are summarized below:

- S-G1 corresponds to the South screeenline parallel to 10 Side Road from Trafalgar Road to Winston Churchill Boulevard. The 2006 cordon count volume was 1,064 vehicles per hour during the PM peak.
- S-G2 corresponds to the West screeenline parallel to Trafalgar Road from 10 Side Road to 15 Side Road.
 The 2006 cordon count volume was 318 vehicles per hour during the PM peak.

4.3.2 Intersection

The Halton Hills TMP included operations analysis for various intersections with weekday morning and afternoon peak hour traffic volumes under existing traffic signal plans. Although the intersections within the Study Area do not present significant operational issues, some concerns were identified for the intersection of Maple Avenue and Main Street South. Operations at this intersection could be improved by the addition of a dedicated southbound left turn lane.



5.0 Conclusion

The conclusions of the Vision Georgetown Transportation Background Report are as follows:

- The Southwest Georgetown area is being planned to accommodate 20,000 residents and 1,700 jobs between 2021 and 2031. This growth will need to be served by an efficient and effective multi-modal transportation system focussed less on travel by automobile.
- Numerous overarching plans, policies and initiatives influence land use and transportation planning within the Study Area, in particular:
 - The GTA West Corridor, which identifies a proposed six lane freeway along the Region of Halton and Region of Peel municipal boundary (once known as the Halton/Peel Freeway) expected to influence travel patterns and behaviour in the Southwest Georgetown area;
 - The Halton-Peel Boundary Area Transportation Study (HPBATS), which identifies: a strategy to
 promote changes in travel behaviour; and a long-term transportation network to serve future
 growth in the municipal boundary area;
 - The Halton Regional Official Plan and Amendments 37, 38 and 39, which include policies to promote transit and alternative transportation modes;
 - The Halton Region Transportation Master Plan (The Road to Change), which identifies planned road network improvements and significant enhancements to transit service to increase peak hour ridership to up to 20% within Halton Region;
 - The Town of Halton Hills Official Plan, which sets out requirements for the design of new communities and preparation of Secondary Plans; and
 - The Town of Halton Hills Transportation Master Plan, which identifies a broad range of transportation network improvements to meet future demands within the Town to the year 2031.
- Key features of the transportation system serving Southwest Georgetown:
 - The road network within the Study Area is comprised of arterial, collector and local roads under the jurisdiction of Halton Region and the Town of Halton Hills. Halton Region is planning for significant improvements to Trafalgar Road (Regional Road 3) and 10 Side Road (Regional Road 10), the key arterials accessing Southwest Georgetown.
 - There are no local conventional transit services operating within the Town of Halton Hills currently. GO Transit provides interregional service along the Kitchener GO line.



- Several existing and planned trails and pathways are located in the vicinity of the Study Area.
- Travel behavior data from the 2006 Transportation Tomorrow Survey (TTS) indicates that:
 - The automobile is the predominant mode of travel within the Town, with 84% of all afternoon peak period trips made by car. Walking/cycling (7%), school bus (7%) and transit (2%) account for the remainder; and
 - The Town has a high level of self-containment, as more than 56% of trips start and end locally. Other significant origins/destinations are the City of Mississauga (13%), the City of Brampton (9%) and the City of Toronto (7%).
- The preliminary assessment of existing transportation conditions within the Southwest Georgetown area indicated no significant traffic operational issues, with the exception of the Maple Avenue and Main Street South intersection within the Georgetown urban area.
- According to the Town of Halton Hills Transportation Master Plan, traffic volumes grew annually between 1.0% and 6.8% along Eighth Line and at about 1.0% along 15 Side Road between 2005 and 2009.
- The review of existing conditions provides insight into current travel behaviour and network performance, but is provided primarily for reference. Future impacts will reflect the substantial changes to the road network and land use with the future development of the Southwest Georgetown area. Future traffic growth will represent the majority of travel demand within the Study Area as existing traffic is considerably less.
- Future phases of work will provide a comprehensive assessment of future transportation conditions for different land use scenarios. The work will include:
 - Assessment of 2021 base and 2031 future scenarios transportation conditions;
 - Evaluation of various transportation opportunities and challenges affecting the Study Area;
 - Development of alternative networks for pedestrians, cyclists, and general purpose vehicles;
 - Assessment/evaluation of identified networks and identification of a technically preferred option;
 - Drafting of transportation-related policies;
 - Development of implementation phasing strategies; and
 - Preparation of order of magnitude cost estimates.



Appendix B:

Background Review of Water and Sanitary Servicing

Background Review Water and Sanitary Servicing

TOWN OF HALTON HILLS • FEBRUARY 2014





Executive Summary

A review has been completed to inventory the existing water and wastewater systems in Georgetown, and to determine the improvements currently proposed to service the planned Georgetown urban expansion areas.

The Sustainable Halton Water & Wastewater Master Plan (AECOM, 2011) recommended servicing the Southwest Georgetown area through new Lake-based systems, whereby treated water from Lake Ontario is brought up to Southwest Georgetown in an expanded water supply network, and wastewater is conveyed south in an expanded sanitary sewer system for treatment and eventual discharge to Lake Ontario. These systems would be in place to service the Southwest Georgetown lands by 2021.

There is some limited capacity in the existing local groundwater wells and Georgetown WWTP to service new development in Georgetown. The existing groundwater supply system limits potential growth in Georgetown (there is considerable capacity available at the Georgetown WWTP). However, according to the Sustainable Halton Water and Wastewater Master Plan, planned infill development and intensification within the existing Georgetown urban area will consume all the available capacity in the water supply system before 2021.

Background Review - Water and Sanitary Servicing VISION GEORGETOWN TOWN OF HALTON HILLS FEBRUARY 2014

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1 Introduction

The Municipal Infrastructure Group (TMIG) was retained by Meridian Planning Consultants to carry out a Functional Servicing Report for the proposed development Southwest of Georgetown, as part of the overall Vision Georgetown Project (formerly referred to as the Southwest Georgetown Integrated Planning Project).

The first step in Phase 2 of the Vision Georgetown Work Program (Community Visioning and Information Gathering) was to carry out a detailed review of the background information relevant to the study area. This memo provides the relevant background information on the existing and planned water and sanitary services potentially available to the Southwest Georgetown lands.

2 Context / Study Area

The Vision Georgetown Study Area is illustrated in **Figure 2-1**. The primary study area is located in the south-west corner of the community of Georgetown, generally bounded by Trafalgar Road to the west, 15 Sideroad to the north, Eighth Line to the east, and 10 Sideroad to the south.

The existing settlement area receives potable water from a number of municipal groundwater wells, and wastewater is directed to the Georgetown Wastewater Treatment Plant (WWTP) before discharging to Silver Creek, a tributary of the Credit River.

Hamlet Boundary Urban Boundary VISION **GEORGETOWN** Rural Cluster Boundary Study Area

Figure 2-1 Study Area

3 Background / Assessment

A considerable number of relevant documents were made available to TMIG via the Sharepoint site created for the Vision Georgetown Project. In addition to this TMIG reviewed the Region of Halton Water Treatment Plant Annual Report 2010. The most relevant document for water and wastewater servicing was the Sustainable Halton Water & Wastewater Master Plan (AECOM, 2011).

3.1 Relevant Background Information – Water Servicing

Georgetown is currently serviced by groundwater. The Master Plan identified a total of seven operating water supply wells in three different well fields located within Georgetown. The location of the seven wells is shown in **Figure 3-1**.

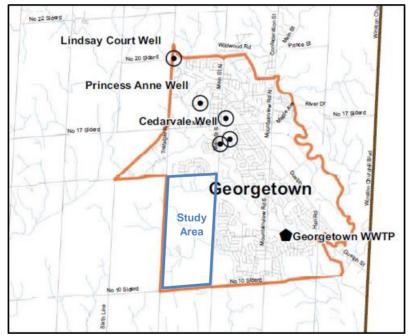


Figure 3-1 Georgetown Water Supply Well Locations

(from Sustainable Halton Water and Wastewater Master Plan, 2011)

According to the 2011 Master Plan, the projected growth in Georgetown will exceed the sustainable groundwater capacity before 2021. In order to meet the water supply demand, the existing Georgetown South service area and planned Southwest Georgetown and Stewarttown expansion areas were recommended to be serviced by extension of the Lake-based system.

The preferred Lake-based system for the Georgetown Southwest area includes the extension of the existing distribution system through a larger network of lake-based watermains, reservoirs and pumping stations (**Figure 3-2**). Infrastructure would be extended in phases, generally proceeding northward from the Town of Milton. The construction phasing plan from the 2011 Master Plan would have the Lake based

FEBRUARY 2014

system extended to the Southwest Georgetown area by 2021. This is consistent with the Region's current (2009-2018) 10 year capital construction program, which only proposes extending the Lake based water supply as far north as No 5 Side Road by 2018.

The 2011 Master Plan also recommended a number of improvements to the groundwater supply system to meet future predicted demands for redevelopment and intensification within the existing Georgetown urban area.

The predicted water demands used in the 2011 Master Plan are summarized in **Table 3-1**, and the permitted capacities used in the Master Plan are summarized in **Table 3-2**.

Table 3-1 Summary of Predicted Georgetown Water Demand (2011-2031)

	Maximum	Maximum Daily Water Demand Requirements (m ³ /day)						
	2011	2016	2021	2026	2031			
Supplied by Groundwater	24,620	26,080	19,530	20,600	23,720			
Existing Groundwater Service Area Transferred to Lake Based System	-	-	8,630	8,670	8,730			
New Development Supplied by Lake Based System	-	-	30	7,030	12,030			
Total	24,620	26,080	28,190	36,300	44,470			

Table 3-2 Summary of Water Supply System Capacity

Municipal Well Field	Permitted Average Daily Taking (m³/day)	Permitted Maximum Daily Taking (m³/day)	Actual Average Amount Available for Distribution (m³/day) 1	Actual Max. Amount Available for Distribution (m³/day) 1
Lindsay Court	6,545	6,545	6,218	6,218
Princess Anne	ss Anne 6,800 13,091		6,800	12,436
Cedarvale	Cedarvale 4,500 14,404		4,240	8,120
TOTAL	17,845	34,040	17,258	26,744

Actual amount available for distribution is less than permitted due to operational losses (ex. backwash) and/or treatment capacity

Study Area

Figure 3-2 Proposed Lake-Based Water Supply Infrastructure

(from Sustainable Halton Water and Wastewater Master Plan, 2011)

3.2 Relevant Background Information – Wastewater Servicing

The Georgetown urban area is divided into three major drainage areas, which ultimately drain into the Georgetown Wastewater Treatment Plant (WWTP). The Georgetown WWTP drainage area is approximately 2,200 ha and is serviced by 15 wastewater pumping stations. There are three main trunk sewers that outlet to the plant: the Flamingo Court trunk sewer; the Silver Creek trunk sewer, and; Georgetown trunk sewer. The WWTP utilizes the a conventional activated sludge process and the final treated effluent is discharged into Silver Creek, approximately 1.5 km upstream of the confluence point with Credit River. The location of the Georgetown WWTP and the sanitary sewage infrastructure through Georgetown is presented in **Figure 3-3**.

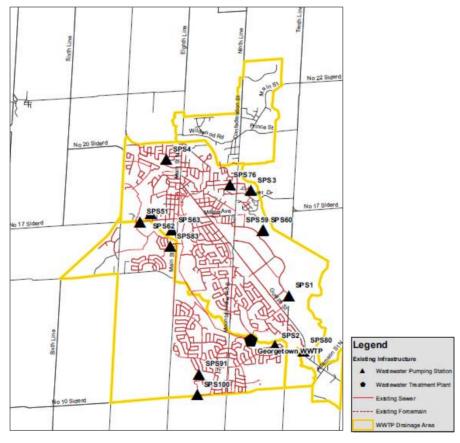


Figure 3-3 Georgetown Wastewater Infrastructure

(from Sustainable Halton Water and Wastewater Master Plan, 2011)

The 2010 water quality annual report for the Region of Halton confirmed that the existing rated capacity of the Georgetown WWTP is approximately 22,700 m³/day. The average daily flows into the plant in 2010 were reported to be approximately 14,700 m³/day, which is 65 % of the rated capacity. The 2010 maximum day flow of 45,400 m³/day and the maximum instantaneous peak rate of 90,600 m³/day occurred in September.

The Sustainable Halton Water & Wastewater Master Plan 2011 stated that there is limited area within the existing Georgetown WWTP site to expand the plant. The Master Plan also noted that further expansion of the plant is restricted by the limited assimilative capacity of Silver Creek.

While the Georgetown WWTP is currently operating well below its approved capacity, the Master Plan concluded that the existing plant would not have sufficient capacity to service anticipated growth of Georgetown to 2031. Note that the 2031 growth scenario includes Southwest Georgetown as well as other urban expansion areas. **Table 3-3** shows the projected wastewater treatment requirement for Georgetown from the Master Plan.

Table 3-3 Summary of Georgetown Max Day Treatment Requirements (2011-2031)

	Maximum Daily Treatment Requirements (m³/day)					
To Year	2011 2016 2021 2026 2031					
Georgetown (Total)	17,800	18,870	20,420	26,420	32,800	

^{*}Current capacity 22,700 m³/day

The Master Plan recommended conveying sanitary flows Southwest Georgetown and other existing and planned developed areas south of Silver Creek southward to the South Halton wastewater system and ultimately treated at Mid-Halton WWTP (See **Figure 3-4**). The Master Plan and the Region's 2009-2018 Capital Works program show that the Lake-based wastewater treatment system would be extended up to Southwest Georgetown by 2021.

Study Area

Figure 3-4 Proposed Lake-Based Wastewater Infrastructure

(from Sustainable Halton Water and Wastewater Master Plan, 2011)

4 Conclusion

A review has been completed to inventory and assess the capacity of the existing water and wastewater systems in Georgetown, and to determine the improvements currently proposed to service the planned Georgetown urban expansion areas.

The Sustainable Halton Water & Wastewater Master Plan (AECOM, 2011) recommended servicing the Southwest Georgetown area through new Lake-based systems, whereby treated water from Lake Ontario is brought up to Southwest Georgetown in an expanded water supply network, and wastewater is conveyed south in an expanded sanitary sewer system for treatment and eventual discharge to Lake Ontario. These systems would be in place to service the Southwest Georgetown lands by 2021.

There is some limited capacity in the existing local groundwater wells and Georgetown WWTP to service new development in Georgetown. The existing groundwater supply system limits potential growth in Georgetown (there is considerable capacity available at the Georgetown WWTP). However, according to the Sustainable Halton Water and Wastewater Master Plan, planned infill development and intensification within the existing Georgetown urban area will consume all the available capacity in the water supply system before 2021.



Appendix C:

Parks and Recreation Preliminary
Discussion Paper

Southwest Georgetown Integrated Planning Project

Parks & Recreation Component: BACKGROUND REPORT

FOR DISCUSSION PURPOSES ONLY

February 13, 2014

Provided to: Meridian Planning Consultants

Prepared by:

Monteith+Brown planning consultants

Executive Summary

Monteith Brown Planning Consultants has initiated a high level review of the parks and facilities assessments contained in the Recreation & Parks Strategic Action Plan (2007). Our review is based on our understanding of the Terms of Reference and email correspondence provided by Meridian Planning Consultants, directing our efforts to contribute to a Phase 1 Background Paper for the Southwest Georgetown Integrated Planning Project (SWGIPP) through:

- undertaking a review of the Parks & Recreation Strategic Action Plan in light of ROPA 38 population projections;
- based on the above, determining if changes to Strategic Action Plan are required;
- completing a high level facilities assessment for the study area/community; and
- preparing a paper summarizing the assessment.

This Background Report has been prepared in the absence of consultations to be conducted as part of the SWGIPP, nor has it been based upon any initial outcomes or directions from other initial assessments conducted by other members of the Consulting Team. While this Background Report focuses solely on parks and recreation facilities, the final study will be a comprehensive Community Infrastructure Plan is intended to be provided by the Consulting Team that includes a broader scope of institutional services. This Report should be viewed as a point of departure for evaluating high-level requirements of the Study Area, and is subject to revision pending further assessments that consider subsequent directions arising from the SWGIPP planning process as it unfolds. Accordingly, please be advised that this Background Report does not constitute our final conclusions or direction.

The following is a brief summary of our initial findings.

Updated Indoor Facility Needs

The 2007 Strategic Action Plan (SAP) recommended an expansion to the Gellert Community Centre, which is located at 10241 Eighth Line and sits immediately adjacent to the Southwest Georgetown secondary plan area boundary. The updated needs assessments confirm this direction and support the addition of a gymnasium, youth and seniors space, and an enlarged fitness centre at the Gellert Community Centre. While the SAP originally envisioned this expansion to take place by the year 2016, the Town is investigating alternative financing arrangements given certain constraints to funding this capital project; accordingly, the timing may be pushed back which is supported by the updated needs assessments given that the Region of Halton anticipates population growth to remain relatively modest until the year 2021.

Projection methodologies also forecast the need for two new ice pads between 2021 and 2031, contingent upon current capture rates remaining constant. One of these ice pads will be reconciled if the Town proceeds with the construction of a new ice pad as part of the planned expansion of the Acton Arena & Community Centre that is slated for 2015. It is noted, however, that Halton Hills has experienced a 10% decline in ice sport registrations since 2006 and therefore the provision of any subsequent ice pads should be reconfirmed between 2016 and 2021. Should ice participation rates remain constant or revert to previous highs, it is plausible that two ice pads would suffice in Georgetown as the Southwest area is expected to generate the majority of Town-wide demand by the year 2031. Accordingly, a parcel of land large enough to accommodate such a facility should at least be a consideration in the Integrated Planning Project, even if it is for the purposes of land-banking (i.e. the

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Town could dispose of this land in the future, or potentially utilize it for other recreational purposes if needed, should arena demands not materialize).

As such, there is no indication that future indoor facility needs will result in a significant land requirement within Southwest Georgetown apart from a potential parcel of land to bank for a twin pad arena given the ability of the existing Gellert Community Centre site to meet non-arena needs.

Updated Outdoor Facility Needs

Southwest Georgetown's 20,000 build-out population is expected to generate the need for a significant quantity of **sports fields**, amounting to 15.5 unlit equivalent soccer fields and 10 unlit equivalent ball diamonds. As land intensive facilities, the quantum of land associated with these sports fields needs to be explored further after discussions with Town Staff and the rest of the Consulting Team in order to determine the degree of sports fields to be addressed within and/or external to the Southwest Georgetown boundary. Potential options to consider may include one or a combination of the following options:

- creating a new sports field complex (e.g. the Acton Quarry lands) or determining whether fields can be added to an existing sports field complex (e.g. Trafalgar Sports Park, the Gellert Community Centre Park or the Acton Sports Park, recognizing the latter will be a fairly lengthy distance from Southwest Georgetown);
- the aforementioned land banking option for an arena could serve as a location for a sports field complex as well, should arena-related needs not materialize; and/or
- intensifying new and existing sports fields to expand their utilization (e.g. lighting, irrigation, artificial turf, etc.) which can allow for extended usage of sports field and thereby reduce the number of unlit equivalents required (although at a higher cost to construct).

With respect to other facilities requirements generated by the anticipated build-out population in Southwest Georgetown, the following is proposed as a result of the updated assessments:

- 5 **tennis courts** and 4 half court **basketball courts**, the latter especially of which should be distributed in a manner that achieves an appropriate degree of walkability from residential areas proposed in the secondary plan area.
- 1 splash pad (subject to future confirmation based on walkability of future residential areas to the existing splash pad at the Gellert Centre).
- 1 **skateboard park** on the basis that a skateboard park is <u>not</u> otherwise constructed at the nearby Gellert Centre.
- 13 **playground sets** (the number of parks containing these playgrounds will be determined after assessing the walkability from residential areas proposed in the secondary plan area).

Updated Parkland Needs

At this early stage in the SWGIPP planning process that has not yet had the benefit of community engagement or establishment of comprehensive land assessments, the actual amount of parkland required cannot be definitively determined. On this basis, we have used the Official Plan parkland target (contained in Section F7.2.3) as a preliminary point of departure in which the process of determining park needs can commence. Application of the Official Plan parkland targets to Southwest Georgetown's

build-out population of 20,000 residents generates a parkland requirement of 74 hectares, consisting of 24 hectares of Local Parkland and 50 hectares of Non-Local Parkland.

We emphasize at this time that attaining the full requirement set out through the Official Plan standard may or may not be achievable due to a variety of considerations. As such, the acreage identified above is not intended to be a rigid amount, but should be reconfirmed and/or adjusted pending future outcomes as the SWGIPP process unfolds, and by considering the following factors:

- The overall vision for the SWGIPP and how resulting residential and non-residential land balances will affect the amount of parkland that the Town of Halton Hills is entitled to received under Sections 42 and 51.1 of the Planning Act.
- Consultations with residents and stakeholders to determine the type and function of parks that
 they would like to see in their individual neighbourhoods and in their general community (which
 would be the Study Area).
- The pragmatic mix of Local versus Non-Local Parkland within the Study Area, using the Official Plan target (Section F7.2.3) as a guide recognizing that it is a Town-wide target. For example, it is plausible that the Town will want to adhere to the Local Parkland target of 1.2 hectares per 1,000 within the Study Area but recognize that a degree of Non-Local Parkland may be addressed in other areas of Halton Hills.
- The ability of the Town to build in programmatic flexibility into its park designs should current trends or demographic profiles change in the future, thus requiring parks to be readapted/redesigned to respond to future change in their usage profile.
- The extent and ability of natural heritage lands and its buffer areas to meet a degree of passive recreational demands.
- Confirmation of the number of sports fields to be located within and/or external to the Southwest Georgetown boundary (e.g. Trafalgar Sports Park, Acton Quarry lands if acquired, etc.), in order to gain a better sense of how outdoor facility requirements will impact the amount of parkland required in the Study Area.
- The existence or planned addition of any non-municipal parkland or recreational facilities (e.g. through other public agencies, such as conservation authorities, or private landowners) within the Study Area.

Upon advancement of the SWGIPP process through work completed by the rest of the Consulting Team, with guidance provided by the Town's Technical Advisory Committee, we will be in a better position to understand the amount of land that can be expected to receive from *Planning Act* dedications. Subsequently, the Consulting Team will need explore ways to best to address any difference between parkland dedication receipts and the Official Plan parkland targets at that time. Accordingly, any adjustments to the overall 74 hectares of parkland targeted through Official Plan policy will be examined.

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Appendix: Parks & Outdoor Facility Inventory, 2012

1. Introduction

It is the intent of this Background Report to inform the Integrated Planning Project through determining potential land requirements arising from facility (both indoor and outdoor) and park needs in Southwest Georgetown. This analysis will subsequently form the basis of the Parks and Public Facilities Master Plan subcomponent of the Community Infrastructure Plan, the latter of which is a deliverable required through the Terms of Reference for the SWGIPP. While this Background Report focuses solely on parks and recreation facilities, the final study to be provided by the Consulting Team will be a comprehensive Community Infrastructure Plan that includes a broader scope of institutional services.

2. Context

Study Context

In 2007, the Recreation & Parks Strategic Action Plan (SAP) was presented to Town of Halton Hills Council for consideration. The SAP contains comprehensive assessments on recreation facility and parkland needs, as well as a review of the way in which services are provided by the Recreation & Parks Department. A total of 107 recommendations were developed to guide decision-making with respect to Halton Hills' recreation and parks system.

This Update to Parks and Facility Assessments contained in the 2007 Recreation & Parks Strategic Action Plan ("the Update") forms a part of the Southwest Georgetown Integrated Planning Project (SWGIPP) and focuses on facilities and parkland. The Update is primarily necessitated by the need to consider updated population forecasts that have been developed in the time since the SAP was prepared. In the years following the SAP:

- Data from the 2011 Census and National Household Survey was (and continues to be) released.
- The Growth Plan for the Greater Golden Horseshoe was passed and establishes population targets throughout the GTA, which in the case of Halton Hills has been reflected through ROPA 38 which contains updated set of population projections.

The analysis/update of recreation and park-related facility needs forms part of the Southwest Georgetown Integrated Planning Project, considered in tandem with a wide range of other municipal service needs through an integrated secondary planning exercise. The purpose of this Update is to reconsider and adjust, where necessary, the recreation facility and park assessments in light of ROPA 38 and other relevant population forecasts. Other elements of the Strategic Action Plan, such as the service delivery assessments, have not been revised.

It is our understanding that Town is planning for development in Southwest Georgetown to begin in 2021 with build-out being December 31, 2030. Accordingly, high-level assessments will be taken with respect to determining needs of Southwest Georgetown between the 2021 and 2031 planning horizon.

Population Basis

The Recreation & Parks Strategic Action Plan prepared by Monteith Brown Planning Consultants in 2007 utilized population projections up to 2021. The SAP identified a Town-wide population of 70,000 by the year 2021 based on forecasts prepared by the Region of Halton.

ROPA 38 forecasts a population of 94,000 (including Census undercount) in Halton Hills by the year 2031. As ROPA 38 does not specify population forecasts for years prior to 2031, the Town's projections contained in the Development Charges Background Study are used as the basis for this Update.¹ These population figures (exclusive of Census undercount) are presented as follows.

Table 1: Population Forecasts, Town of Halton Hills, 2011-2031

	2011	2016	2021	2026	2031
Halton Hills Total	59,008	62,661	64,392	77,003	91,885
Georgetown (Urban Area)	40,150	42,207	44,093	55,252	69,089

Note: Georgetown population is derived from proportional allocation from the Region's Best Planning Estimates (2011) and applied to population forecast contained in the Development Charges Background Study (2012)

Source: Statistics Canada Census, 2011; Region of Halton, Best Planning Estimates (June 2011); Halton Hills Development Charges Background Study, 2012.

Based on the Development Charges Study (that aligns with Regional estimates), growth in Halton Hills will remain fairly moderate between the years 2011 and 2021 when the Town's population is expected to be 64,400 residents; this population forecast is about 7% less than originally projected during the preparation of the SAP. After the year 2021, population growth will accelerate considerably and it is at this time when Southwest Georgetown is expected to commence development. As shown above, the 2031 population for the Town as a whole is forecasted to reach 91,885 (noting that inclusion of the Census undercount could add upwards of 2,000 additional persons).

With respect to the Georgetown urban area, the 2031 population is anticipated to be 69,100. Correspondence with the Planning, Development & Sustainability Department indicates that Town Staff are of the view that a population of 20,000 for Southwest Georgetown should be used for the purposes of the SWGIPP. At this time, we do not have a breakdown on the timing of growth for the Southwest Georgetown secondary plan area by five-year time increments (as such, they are not reflected in the table above).

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¹ Town of Halton Hills. May 2012. *Development Charges Background Study*. Table A.4.

3. Assessments

The 2007 SAP was developed with park and facility service level targets that were built upon local demographics, trends and consultations with the community and municipal representatives. While a comprehensive consultation program and trend assessment is not in the purview of this Update, the SAP's service level targets are applied in the context of the Town's new growth projections.

Attaining service target thresholds contained in the SAP were intended to represent a point of departure for the Town to consider further justification and priority of additional investment in certain facilities. As such, the Town should consider a number of criteria (e.g. current market conditions, availability of funding, etc.) prior to developing new facilities and parks. The Recreation & Parks Department undertook a five year review of progress² made on implementing the SAP, and in another five years it is expected that the Town will initiate a comprehensive update to the SAP (which will again employ a more comprehensive consultation programme and examination into service delivery practices, in relation to future market conditions).

The following section examines the need for recreation facilities and parkland in the context of the updated population growth projections and noting population and facility requirements based on the Georgetown Urban Area portion. It is noted that the total population expected to be accommodated within the Southwest Georgetown area is 20,000, however, as the time frame for this growth is not presently available, the assessments below provide a separate section for potential implications associated with this new secondary plan area.

Ice Pads/Arenas

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of ice pads:

- Evaluate the Georgetown Memorial Arena to determine its future viability.
- Undertake a site selection study to determine a location for a new twin pad arena.
- Re-assess the need for a sixth municipal ice pad around the year 2016.

Since the SAP, Georgetown Memorial Arena has been decommissioned and two new ice pads have been added to the Mold Masters SportsPlex; this has resulted in a net gain of one ice pad and the municipal supply now stands at 5 full size ice pads and 1 leisure/mini pad, equating to an effective supply of 5.25 ice pads.³ In addition, the Town has planned to add one new ice pad to its supply in 2015 that will be achieved through an expansion to the Acton Arena & Community Centre.

Based on the capture rates and population forecasts at the time, the SAP anticipated ice-sport registrations increasing to reach about 4,300 arena users in 2011. Based on registration data from the Town, registration has actually decreased by 400 participants and stands at about 3,750 participants. This decrease has been experienced in certain GTA communities (nationally, participation in hockey

² Town of Halton Hills. 2012. Five Year Report Card: Recreation & Parks Strategic Action Plan.

³ In line with the SAP, the small leisure pad at the Acton Arena is reflected in the supply as the equivalent of one quarter (0.25) of an ice pad.

peaked in 2008) though the effects are notable in Halton Hills given that it remains a relative young and growing municipality.

Updated Strategies

Due to a considerable decrease in ice-sport registrations (a decline of 10% since 2006), the capture rate for arena users has been adjusted downwards. The following table indicates the need for ice pads using the adjusted capture rate in relation to the revised population forecasts. With an ice sport registration of 3,750, the Town would require 5 ice pads to meet present needs if providing the level of service targeted in the SAP and the modest growth expected to 2021 would result in a similar level of demand.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1:750 registrants	6.25*	5.3	0.95	7.6	(1.35)
Georgetown Urban Area portion		4	3.6	0.5	5.7	(1.8)

^{*}includes the addition of one new ice pad planned for construction in 2015 at the Acton Arena & Community Centre

By the year 2031, one new ice pad is forecasted to be required (assuming that the Acton Arena is twinned in 2015 as planned). A major caveat, however, is the five year decline in participation rates among arena users in Halton Hills which if continues to persist, will reduce the demand for ice pads stated in the table above. At present time, Halton Hills is not expected to require the new ice pad until sometime between 2026 and 2031; preferably if developed as an addition to an existing arena as the construction of single pad arenas is strongly discouraged (twin pad arenas are the minimum recommended template for new facility construction due to their capital and operating efficiencies).

Prior to committing to constructing new ice pads, the Town should undertake a comprehensive review of arena needs around the year 2016 through a specific study or as part of the Update to the Parks & Recreation Strategic Action Plan. This review is critical to determine whether ice sport participation rates continue to decline, stabilize, or grow between now and that future time, as well as to assess if the population growth projections employed today have deviated in any way. However, annual participation ice participation trend tracking should be undertaken annually by the Town to ensure that Halton Hills is able to respond to changing market conditions.

Potential Implications for Southwest Georgetown

With 20,000 residents forecasted to reside in Southwest Georgetown at that time, this population will generate the majority of future arena needs (equivalent to about 1.8 ice pads). While this level of need could plausibly justify the provision of a twin pad arena in Southwest Georgetown, the Town (as noted above) should confirm demand as part of a future comprehensive arena review particularly since a twinned Acton Arena & Community Centre, along with the other existing arenas in Halton Hills, are anticipated to serve a Town-wide role in meeting needs.

Nevertheless, a parcel of land large enough to accommodate a twin pad arena should be a consideration in the Integrated Planning Project, even if it is for the purposes of land-banking (i.e. the Town could dispose of this land in the future, or potentially utilize it for other recreational purposes if needed, should arena demands not materialize). With a planned Phase 2 expansion of the Gellert Community Centre incorporating a gymnasium, youth centre, seniors centre, and outdoor amenities, there is no information to suggest that the Gellert Community Centre is a plausible candidate for a twin pad arena.

Indoor Aquatics

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of indoor aquatic centres:

- Do not construct indoor pools, provided community access to existing facilities is maintained;
- Continue to work with the Halton Board of Education to ensure public access to secondary school pools.
- Subject to confirmation through separate study, consider functional improvements to the secondary school pools to enhance amenity and quality of experience to aquatic users.

It is our understanding that the Town continues to actively utilize all three indoor pools in its supply, including the two located at the secondary schools in Georgetown and Acton.

Updated Strategies

The Town's current supply of three indoor aquatic centres is forecasted to be sufficient to meet forecasted needs beyond the year 2031, assuming that access is maintained to all three facilities and that capital replacement/lifecycle costs are not prohibitive to maintaining each existing aquatic centre over this period. As such, no new indoor aquatic centres are anticipated to be required thereby reconfirming the directions proposed in the SAP.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1:40,000 pop.	3	1.6	1.4	2.3	0.7
Georgetown Urban Area portion		2	1.1	0.9	1.7	(0.3)

Potential Implications for Southwest Georgetown

Future residents to utilize capacity within the existing indoor aquatic system.

Community Centres

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of community centres:

• Initiate a Phase 2 expansion of the Gellert Centre to include a gymnasium, youth space and seniors space.

With respect to expansion of the Gellert Centre, it is our understanding that the Town is investigating the merits of a buy/lease/partnership alternative given the municipality's financial constraints associated with fully financing the construction of the space on its own.⁴ The Town has already secured a seven acre portion of the parcel adjacent to the Gellert Community Centre.

⁴ Town of Halton Hills. Report *ADMIN-2012-0026*: Realization of Gellert Phase II (Gymnasium, Georgetown Seniors Centre, Georgetown Youth Centre) Acton Seniors Centre Expansion and Acton Youth Centre. June 29, 2012.

Updated Strategies

The directions from the SAP remain relevant in the context of the updated population forecasts. Assessments carried out as part of this Update suggest that the Town should continue to pursue the addition of a gymnasium, youth space and seniors centre at the Gellert Community Centre. While provision of these facility components will fulfill many recreational needs to the 2016 timeframe articulated in the SAP, the fiscal realities of such a major capital initiative are recognized and may require that the Town defer construction to a later date. With development of the Southwest Georgetown area expected to be initiated around the year 2021, it is plausible that the Town target this timeframe if necessary to do so due to fiscal constraints given the growth forecast between 2013-2021 is not expected to generate a large volume of new residential growth.

Potential Implications for Southwest Georgetown

Expansion of the Gellert Community Centre is recommended between 2016 and 2021. The Town has purchased a seven acre parcel adjacent to the existing community centre site which can be used to accommodate the community centre expansion.

Seniors Centres

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of seniors centres:

- Provide seniors space at the Gellert Community Centre.
- Develop a plan to expand the amount of seniors space at the Acton Seniors Recreation Centre.

In 2009, the Town completed an analysis of seniors space requirements that culminated in a number of recommendations, including expansion of the Acton seniors space and relocation of the Georgetown seniors centre. The analysis calls for a 12,000 square foot seniors space integrated as part of a larger community centre, such as the Gellert Community Centre.⁵

It is our understanding that the Town of Halton Hills has recently retained an architectural firm to prepare detail design drawings and cost estimates for the redesign and expansion of the Acton Seniors Centre. This project is tentatively estimated for completion by November 2014. As mentioned in the Community Centres assessment, the provision of seniors space in Georgetown is being contemplated as part of an expansion to the Gellert Centre.

Updated Strategies

The directions from the SAP remain relevant in the context of the updated population forecasts. Inclusion of dedicated seniors space as part of an expansion to the Gellert Community Centre will maximize Departmental cross-programming opportunities as a seniors space could benefit from colocated aquatics and fitness facilities presently onsite.

⁵ Town of Halton Hills. December 2009. *Seniors Centre Space Requirements and Recommendations Report*.

⁶ Town of Halton Hills. Report *R-2013-0021: Acton Seniors Centre Re-design and Expansion Project*. April 10, 2013.

Potential Implications for Southwest Georgetown

If the Town of Halton Hills proceeds with the expansion of the Gellert Community Centre, inclusion of dedicated or priority-based programming space for older adults and seniors is recommended.

Youth Space

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of youth centres:

- Provide youth space at the Gellert Community Centre.
- Renovate space at the Mold Masters SportsPlex to accommodate drop-in youth activities.
- Pursue the provision of space in Actor to accommodate drop-in youth activities.

The Town's Youth Needs Study, prepared in 2011, reinforces the need to provide dedicated space for youth in Halton Hills. This Study reinforced the suitability of the Gellert Centre as a location for youth space as well as providing space at the Acton Arena and Community Centre.⁷

As mentioned in the Community Centres assessment, the provision of youth space in Georgetown is being contemplated as part of an expansion to the Gellert Centre. It is our understanding that the Town is looking at a youth space that will be separate from the Acton Arena and Community Centre as a downtown location is now favoured.⁸

Updated Strategies

The directions from the SAP remain relevant in the context of the updated population forecasts. Inclusion of dedicated youth space as part of an expansion to the Gellert Community Centre will maximize Departmental cross-programming opportunities as a youth space could benefit from colocated gymnasium (proposed) and fitness facilities onsite, as well as the outdoor amenities (e.g. hard surface courts, sports fields, splash pad) located at the adjacent Gellert Community Centre Park.

Furthermore, there is potential for drop-in youth activities at the newly expanded Mold-Masters SportsPlex, and a planned expansion to the Acton Arena & Community Centre (in 2015) will consider programmable space as well. The Town has also secured a portion of the Acton Town Hall through lease, and design/engineering for the space is scheduled to begin in 2014 whereby youth needs will be explored.

Potential Implications for Southwest Georgetown

If the Town of Halton Hills proceeds with the expansion of the Gellert Community Centre, inclusion of dedicated or priority-based programming space for youth is recommended.

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⁷ Town of Halton Hills. December 2011. Youth Needs Study.

⁸ Town of Halton Hills. Report *ADMIN-2012-0026*: *Realization of Gellert Phase II (Gymnasium, Georgetown Seniors Centre, Georgetown Youth Centre) Acton Seniors Centre Expansion and Acton Youth Centre*. June 29, 2012.

Gymnasiums

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of gymnasiums:

- Continue to work with School Boards to maintain/improve existing agreements to access their gyms.
- Include a gymnasium as part of an expanded Gellert Community Centre.

As mentioned in the Community Centres assessment, the provision of a municipal gymnasium in Georgetown is being contemplated as part of an expansion to the Gellert Centre.

Updated Strategies

Application of the SAP's gymnasium standard continues to reinforce the need for one new municipal gymnasium, though extending the forecast out to 2031 necessitates that a second (potentially smaller) gymnasium be provided. With Georgetown's population expected to generate over three quarters of Town-wide needs (equivalent to 1.4 gyms), the strategy of including a gymnasium at the Gellert Community Centre remains appropriate. The Town is presently exploring partnership opportunities as part of the Gellert Phase 2 review that could include an option to acquire 2.8 hectares. Provision of a gym at this facility would lend itself extremely well to the existing aquatics and fitness centre, as well as proposed youth and seniors space.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1:50,000 pop.	0	1.3	(1.3)	1.8	(1.8)
Georgetown Urban Area portion		0	0.9	(0.9)	1.4	(1.4)

Given land constraints and the fact that the updated indoor assessments do not call for a new multi-use community centre (apart from potentially a twin pad arena), there is merit in constructing a slightly larger gymnasium (e.g. FIBA regulation size of 15 metres by 28 metres plus buffers, at a minimum) at the Gellert Centre. In doing so, the Town ensures that it can accommodate any future latent demand (i.e. the 0.4 gym equivalent that is forecasted to remain after construction of one gym) and it will also achieve economies of scale in construction and operation. As this strategy would not involve provision of a municipal gym outside of Georgetown South, maintaining relationships/agreements to access to school gyms is essential. The alternative of constructing a second (albeit smaller) municipal gym should only be considered after undertaking future study (such as a comprehensive Update to the SAP) to understand long-term market needs and the degree of access afforded through school gyms at that time.

Potential Implications for Southwest Georgetown

If the Town of Halton Hills proceeds with the expansion of the Gellert Community Centre, inclusion of a gymnasium is recommended (potentially constructed as a double gym to reconcile all demands associated with the year 2031 population).

Fitness Space

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of fitness centres:

- Include an expanded fitness space as part of an expansion to the Gellert Community Centre.
- Continue to develop appropriate partnerships with community-based fitness providers.

Updated Strategies

The directions from the SAP remain relevant in the context of the updated population forecasts. Inclusion of an expanded fitness centre as part of an expansion to the Gellert Community Centre will maximize Departmental cross-programming opportunities as a fitness space could benefit from the existing aquatics centre and the proposed gymnasium, youth and seniors space onsite.

Potential Implications for Southwest Georgetown

If the Town of Halton Hills proceeds with the expansion of the Gellert Community Centre, inclusion of an expanded fitness centre is recommended.

Indoor Turf Facilities

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of indoor turf facilities:

- Facilitate the development of an indoor sports centre with the Acton Agricultural Society.
- The development of a second indoor turf facility is not recommended.

Shortly after the SAP was finalized, an indoor turf facility known as the Dufferin Centre was opened at Prospect Park, built by the Acton Agricultural Society with assistance provided by the Town of Halton Hills.

Updated Strategies

With the Dufferin Centre recently surpassing its fifth full year of operation, the directions of the SAP remain relevant in the context of the updated population forecasts. At this point in time, there is no information that suggests a second indoor turf facility is warranted in Halton Hills.

Potential Implications for Southwest Georgetown

Future residents to utilize capacity at the Dufferin Centre.

Soccer Fields

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of soccer fields:

• Construct the equivalent of 5 unlit fields by the year 2016

The SAP conducted its assessments based on a supply of 37 (38.5 unlit equivalent) fields, including 12 non-municipal fields. The supply now consists of 27 municipal fields, 6 leased fields at the Croatian Club, and 5 school fields. After considering the number of lit and artificial fields, the effective supply is considered to be 44 unlit equivalent fields.

Updated Strategies

Utilization of the SAP's service level target for soccer to the 4,680 registered players results in the need for about 52 fields at present time, placing the Town is a current deficit situation of 8 fields. Application of a similar capture rate results in a total of about 10 new fields required by 2021 growing to 27.5 new unlit equivalents by 2031.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1:90 registrants	44	53.7	(9.7)	76.6	(32.6)
Georgetown Urban Area portion		27	36.7	(9.7)	57.6	(30.6)

Potential Implications for Southwest Georgetown

Southwest Georgetown's forecasted build-out population of 20,000 residents will generate over 20% of future soccer field needs, translating into about 15.5 unlit equivalent fields (also equivalent to about 10 lit natural fields or 5 artificial turf fields). Recognizing the challenges in obtaining this quantum of land, or financing more intensive fields (e.g. lit and/or irrigated fields, artificial turf, etc.), further discussions will be required with Town Staff and the rest of the SWGIPP Consulting Team to determine the degree of field requirements to be addressed within and/or external to the Southwest Georgetown boundary. For example a full size soccer field can occupy a land area of anywhere between 1 to 2.5 hectares of land (depending upon setback buffers, circulation areas, the number and configuration of fields within a park, etc.) while artificial turf fields can cost upwards of \$1 million to construct.

Ball Diamonds

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of ball diamonds:

Provide 5 new ball diamonds by 2016, at least 2 of which should be designed for hardball.

The SAP conducted its assessments based on a supply of 33.5 unlit equivalent diamonds, including 2 school diamonds. Since the SAP, the Town has added 1 lit softball diamond (at Trafalgar Sports Park) to its inventory. The effective supply of diamonds now stands at 35 unlit equivalents.

Updated Strategies

The number of players registered in local ball leagues has remained similar to that in 2006 (adding only 30 players, or 1%), despite the increase in population. The capture rate has thus been slightly adjusted downwards while the targeted level of service remains the same as proposed in the SAP.

			2021		2031	
	SAP Standard	Equivalent Supply	Supply Required	Surplus (Deficit)	Supply Required	Surplus (Deficit)
Town-Wide Needs	1:100 registrants	35	31.6	3.4	45.0	(10.0)
Georgetown Urban Area portion		17.5	21.6	(4.1)	33.9	(16.4)

The current supply of diamonds is expected to be sufficient until after the year 2021. By the year 2031, a total of 10 new unlit equivalents will be required. Although the table above shows a greater deficit in Georgetown than the Town-wide needs, this is attributed to the fact that there is often a need to rely on facilities located in other areas of a given community to meet needs since sports fields are land intensive facilities (i.e. it is expected that users will have to drive to some sports fields).

Furthermore, we do not have any information to suggest that the SAP's direction to construct two new hardball diamonds is no longer relevant. As a result, it is recommended that two of the future diamonds be constructed for hardball unless otherwise directed through a comprehensive study (including a consultation component) for softball and baseball (e.g. as would be undertaken through the SAP Update). As previously discussed, sports fields occupy a considerable land base with a major softball diamond consuming a land area of between 1.5 hectares and 3.0 hectares, and hardball diamonds requiring larger areas (depending upon setback buffers, circulation areas, the number and configuration of fields within a park, etc.).

Potential Implications for Southwest Georgetown

Approximately 20% of future needs (about 10 diamonds) are associated with the build-out population of Southwest Georgetown. Recognizing the challenges in obtaining this quantum of land, further discussions will be required with Town Staff and the rest of the SWGIPP Consulting Team to determine the degree of diamonds to be addressed within and/or external to the Southwest Georgetown boundary.

Tennis Courts

Relevant Directions from the 2007 Strategic Action Plan

The SAP recommended the following actions with respect to the supply of tennis courts:

- Develop a new four-court tennis facility in South Georgetown.
- Future courts should be developed in multi-court pods rather than single courts.

Since the SAP, the Town has added 6 courts at the Gellert Centre (having removed and relocated the Mold Masters SportsPlex courts) and 1 court at Prospect Park to its inventory. The current supply stands at 14 tennis courts in total.

Updated Strategies

By the year 2031, the Town will require 9 new tennis courts, 7 of which should be provided in Georgetown. The direction to group a minimum of two court pods remains appropriate.

		2021		2031		
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1:4,000 pop.	14	16.1	(2.1)	23.0	(9.0)
Georgetown Urban Area portion		10	11.0	(1.0)	17.3	(7.3)

Potential Implications for Southwest Georgetown

A total of 5 tennis courts would be required to serve Southwest Georgetown's anticipated build-out population. As recommended in the SAP, these courts should be constructed in pods of at least two courts.

Basketball Courts

The SAP recommended the following actions with respect to the supply of basketball courts:

• Develop a total of 3.5 full court equivalent basketball courts

Since the SAP, the Town has added 1 half basketball court (at Meadowglen Park) to its inventory. The supply of basketball courts is presently 2.5 full court equivalents across four parks.

Updated Strategies

By the year 2021, the Town will require 4 new full court equivalents growing to a need for about 6.5 full court equivalents by the year 2031.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1 : 1,500 youth (full court equiv.)	2.5	6.4	(3.9)	9.2	(6.7)
Georgetown Urban Area portion		1.5	4.4	(2.9)	6.9	(5.4)

Potential Implications for Southwest Georgetown

Assuming the current proportion of youth stays constant, Southwest Georgetown's forecasted build-out population will necessitate 2 full court equivalents by the year 2031. Maximizing geographical distribution and ensuring walkability for youth users is encouraged through the secondary plan area.

Outdoor Aquatics

The SAP recommended the following actions with respect to the supply of outdoor aquatic facilities:

No new outdoor lane or wading pools are recommended.

- Replace the Prospect Park wading pool with a water play feature.
- Develop one new water play facility in Georgetown.

Since the SAP, the Town has added 2 splash pads, one of which has replaced the former wading pool at Prospect Park in Acton. The other splash pad was added at Dominion Gardens in Georgetown.

Updated Strategies

The direction to discontinue provision of outdoor pools continues to be supported in favour of providing waterplay facilities instead. The current supply of splash pads will be sufficient until the year 2026 (assuming the current proportion of children aged up to 14 remains constant) after which 1 new splash pad will be required.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1 : 4,000 children	2	3.2	(0.2)	4.6	(1.6)
	(up to age 14)	3	3.2	(0.2)	4.0	(1.0)
Georgetown Urban Area portion		2	2.2	(0.2)	3.5	(1.5)

Potential Implications for Southwest Georgetown

Southwest Georgetown's population will generate the need for 1 new splash pad. Given the proximity of the area to the Gellert Centre (which already contains a splash pad), further discussions will be required with Town Staff and the rest of the SWGIPP Consulting Team to determine if the provision of this new splash pad is best suited within or external to the Southwest Georgetown boundary.

Skateboard Parks

The SAP recommended the following actions with respect to the supply of skateboard parks:

- Expand the Georgetown Skatepark (at Mold Masters SportsPlex).
- Add smaller scale skate elements (skate zones) at new or rejuvenated parks.

Since the SAP, the Town has added the 3 Musketeers Skate Park in Acton to its inventory. It is also worth noting that the Youth Needs Study⁹ recommended a skateboard park be developed at the Gellert Centre to serve youth residing in Georgetown South.

Updated Strategies

The recommendations contained in the SAP and Youth Needs Study remain relevant in the current population context whereby the Town should consider expanding the Mold Masters SportsPlex skatepark (to serve youth in Georgetown North) and construct a new skateboard park to serve youth in Georgetown South.

⁹ Town of Halton Hills. December 2011. Youth Needs Study.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1:5,000 youth	2	1.9	0.1	2.8	(0.8)
Georgetown Urban Area portion		1	1.3	(0.3)	2.1	(1.1)

Potential Implications for Southwest Georgetown

Southwest Georgetown's anticipated youth population at build-out (assuming the current proportion of youth stays constant) will generate the need for about 20% of future skateboard park needs (amounting to about 0.6 skateparks). This demand will be effectively serviced if proceeding with the construction of a skateboard park at the Gellert Community Centre Park.

Playgrounds

The SAP recommended the following actions with respect to the supply of playgrounds:

- Provide playgrounds within walking distance of major built-up residential areas, using a 500 metre radius as the basis for assessment (unobstructed by pedestrian barriers).
- Develop a fully accessible playground in Georgetown.

Updated Strategies

While the 500 metre service radius remains appropriate, to assist in the updated needs assessment a 1 playground per 1,500 population service level has been used; this per capita service level is appropriate as a high level assessment technique to assess the number of playgrounds required in a given community but will need to be rationalized by a distribution analysis.

			2021		2031	
	SAP	Equivalent	Supply	Surplus	Supply	Surplus
	Standard	Supply	Required	(Deficit)	Required	(Deficit)
Town-Wide Needs	1 : 1,500 pop.	51	42.9	8.1	61.3	(10.3)
Georgetown Urban Area portion		42	29.4	12.6	46.1	(4.1)

The supply of playgrounds, from the perspective of quantity (i.e. not geographic distribution), is projected to suffice until the year 2026 after which 10 new playgrounds are required. Geographic distribution should determine the number of parks through which these playgrounds are required (i.e. 10 separate parks with playgrounds may or may not be required, as multiple playground sets could be located in fewer parks as is current practice of the Town). Geographic distribution will also necessitate construction of playgrounds prior to the year 2026, superceding the quantitative standard that suggests additional provision, as newly developing residential areas will require access to playgrounds.

Potential Implications for Southwest Georgetown

Southwest Georgetown's anticipated build-out population generates the need for 13 playgrounds. As mentioned above, this does not necessarily imply that 13 parks are required with playground sets within them; the number of playground sets per park should be determined after understanding their

distribution/walkability to future residential areas located within the secondary plan area. The timing of playground construction should coincide with the timing of residential development phases in the secondary plan area.

Other Recreation Facilities

The SAP also made recommendations to the following other parks based facilities:

- BMX Challenge Parks
- Off leash dog areas;
- Sand volleyball courts;
- Track and field facilities;
- Outdoor ice skating rinks;
- Public gardens;
- Special event areas.

The SAP's recommendations associated with these facilities continue to remain relevant and generally direct the Town to investigate their provision on an individual basis as requests are brought forward by the community (service level standards were not recommended for these facilities). Where appropriate and feasible, such facilities may be considered in Southwest Georgetown provided needs are justified at that future time and can be reasonably accommodated within the Town's capital and operating budgets.

Parkland Assessments

Policy Basis

The Parks & Recreation Strategic Action Plan (SAP) articulates a two-tier parkland hierarchy consisting of Local and Non-Local Parkland; these classifications are further subdivided, with Local Parkland consisting of Parkettes and Neighbourhood Parks, while Non-Local Parkland consists of Community Parks and Town-wide Parks. Building off Section F7.2.3 of the Town of Halton Hills Official Plan (2008), the SAP recommends that the Town target:

- Local Parkland at a rate of 1.2 hectares per 1,000 residents.
- Non-Local Parkland at a rate of 2.5 hectares per 1,000 residents.

The amount of parkland that the Town may receive through parkland dedications set out through the *Planning Act* amounts to 5% of residential land to be conveyed and 2% for all other developed lands to be conveyed, or cash-in-lieu thereof. Alternatively, the Town may require parkland dedication at a rate of 1 hectare per 300 dwelling units, or cash-in-lieu thereof, which is useful in higher density scenarios. Sections F7.2.6 to F7.2.10 of the Town of Halton Hills Official Plan specify these, and other, permissions for parkland dedication.

The Town should recognize that *Planning Act* dedications alone are highly unlikely to meet outdoor recreational facility needs of future populations, and thus it is critically important that the Town mandate acceptance of only high quality tableland/parkland through dedication (in terms of size, unencumbered by natural or built constraints, etc.). The implications of not doing so are such that the Town will be responsible for finding suitable parklands on its own to meet the needs of the future

population, something that can be extremely costly considering the quantum of land required by sports fields and other land-intensive facilities. Alternative acquisition methods advanced by the SAP, including negotiated acquisition through agreements with landholders, is essential to achieving a sustainable and fiscally-appropriate approach to providing future parkland.

Town-Wide Park Needs

The Town's inventory of parkland comprises 200 hectares across 12 Non-Local Parks and 44 Local Parks, exclusive of passive open spaces and the natural heritage system (see Appendix B). This quantum achieves a service level of 3.3 hectares per 1,000 residents (based on an estimated 2013 population of about 60,000), which is slightly lower than that specified in the Halton Hills Official Plan and the SAP. Of the total supply of parkland, about two-thirds (133 hectares) is considered to be "useable" for most recreational activities as the remainder is typically associated with non-tableland or encumbered areas within individual parks. Accordingly, the "useable" service level is 2.2 hectares per 1,000 residents.

There is a considerable deviation between the parkland figures provided through the SAP and the current supply numbers. The SAP noted that a total of 33.5 hectares of additional Local Parkland and 72 hectares of Non-Local Parkland would be required by 2016 (a total of about 105 hectares). As a result, the considerable deficits projected in the SAP are not as significant as originally thought (in the next ten years) when looking at the updated assessments contained in the following table.

	2021	2026	2031
Projected Population	64,392	77,003	91,885
Local Parkland Supply (hectares)		53.4*	
Local Parkland – Needs @ 1.2 ha/1,000	77.3	92.4	110.3
Local Parkland – Deficit (hectares)	23.9	39.0	56.9
Non-Local Parkland Supply (hectares)		146.6	
Non-Local Parkland – Needs @ 2.5 ha/1,000	161.0	192.5	229.7
Non-Local Parkland – Deficit	14.4	45.9	83.1
TOTAL PARLAND SUPPLY (hectares)	200*		
TOTAL PARKLAND NEEDS @ 3.7 ha/1,000	238.3	284.9	340.0
TOTAL PARLAND DEFICIT (hectares)	38.3	84.9	140.0

^{*}based on the 2013 supply of parkland (chart will need to be updated as future parks are developed and are assumed by the Town of Halton Hills)

Note: acreage of parkland supplies provided by the Town of Halton Hills.

With the updated population and parkland supply numbers, the Town of Halton Hills will need to obtain 38 hectares by the year 2021 to achieve its Official Plan standard. With the subsequent growth in population, a total of 140 hectares of new parkland will be required by the year 2031 approximately 57 hectares of which is attributable to Local Parkland and the remaining 83 hectares should consist of Non-Local Parkland.

¹⁰ By comparison, the 2007 SAP inventory recorded 146 hectares across 54 parks. With only 2 new parks added since that time, it appears as though the acreages contained in the SAP are understated and may be a function of deviations in parkland accounting practices.

In meeting future parkland deficits, there are presently 2.6 hectares in draft-approved parkland sites¹¹ that will slightly contribute towards meeting the stated needs. The greatest opportunity, however, is the potential acquisition of the 43 hectare Acton Quarry lands along with the previously mentioned 2.8 hectares associated with the Gellert Phase 2 (though the latter may be consumed in part by indoor facility space). The Acton Quarry lands could also reconcile a sizeable portion of future sports field demands as Town staff estimate that the site could accommodate up to 10 soccer fields and 4 ball diamonds.

Based on the above, along with projected Local Parkland contributions received through the SWGIPP (see next subsection), the forecasted 140 hectare parkland deficit for the year 2031 could be reduced to about 68 hectares.

Parkland Deficit (2031)	140 ha
Less: Draft Approved Parkland	2.6 ha
Less: Potential Acquisitions	45.8 ha
Less: Assumed Minimum Contribution of Local Parkland from SWGIPP	24 ha
Potential Parkland Shortfall	67.6

Southwest Georgetown Park Needs

Utilizing the Official Plan parkland targets as a preliminary point of departure in assessing needs within Southwest Georgetown, at the time of build-out the parkland requirements would be as follows:

Local Parkland – 24 hectares

Non-Local Parkland – 50 hectares

Total Parkland – 74 hectares

As this Background Report represents a starting point for subsequent assessment, it should be noted that attaining the full requirement set out through the Official Plan standard may or may not be achievable due to a variety of considerations. As such, the 74 hectares identified above is not intended to be a rigid amount, but should be reconfirmed and/or adjusted pending future outcomes as the SWGIPP process unfolds.

Upon advancement of the SWGIPP process through work completed by MBPC, Meridian and the rest of the Consulting Team, we will be in a better position to understand the amount of land that can be expected to receive from *Planning Act* dedications after the mix of residential and other land uses is conceptualized. Subsequently, the Consulting Team will need explore ways to best to address any difference between parkland dedication receipts and the Official Plan parkland targets at that time. Accordingly, any adjustments to the overall 74 hectares of parkland targeted through Official Plan policy will be examined.

¹¹ Consists of West Branch Park (1.7 ha), Fernbrook Ph. 3 Parkette (0.3 ha), Upper Canada College Parkette (0.2 ha) and Maple Creek Park Ph. 2 (0.4 ha), all of which comprise Local Parkland. It is assumed that the other future expansion areas of Norval and Stewarttown will not contribute significantly to parkland areas in this timeframe.

4. Findings

Indoor Facility Needs

Based on its 2021 population forecast of 70,000 residents, the 2007 Strategic Action Plan (SAP) recommended an expansion to the Gellert Community Centre, which is located at 10241 Eighth Line and sits immediately adjacent to the Southwest Georgetown secondary plan area boundary. The updated needs assessments, using adjusted forecasts for 2021 and 2031 of 64,400 and 91,885 persons, respectively, confirm this direction and support the addition of a gymnasium, youth and seniors space, and an enlarged fitness centre at the Gellert Community Centre. While the SAP originally envisioned this expansion to take place by the year 2016, the Town is investigating alternative financing arrangements given certain constraints to funding this capital project; accordingly, the timing may be pushed back which is supported by the updated needs assessments given that the Region of Halton anticipates population growth to remain relatively modest until the year 2021.

Projection methodologies also forecast the need for two new ice pads between 2021 and 2031, contingent upon current capture rates remaining constant. It is noted, however, that Halton Hills has experienced a 10% decline in ice sport registrations since 2006 and therefore the provision of future ice pads must be reconfirmed between 2016 and 2021 prior to construction of a new arena, or expansion of an existing arena. Should ice participation rates remain constant or revert to previous highs, it is plausible that two ice pads would suffice in Georgetown with the Southwest area generating about two-thirds of Town-wide demand by the year 2031. Accordingly, a parcel of land large enough to accommodate such a facility should at least be a consideration in the Integrated Planning Project, even if it is for the purposes of land-banking (i.e. the Town could dispose of this land in the future, or potentially utilize it for other recreational purposes if needed, should arena demands not materialize).

As such, there is no indication that future indoor facility needs will result in a significant land requirement within Southwest Georgetown apart from a potential parcel of land to bank for a twin pad arena given the ability of the existing Gellert Community Centre site to meet non-arena needs.

Outdoor Facility Needs

Southwest Georgetown's 20,000 build-out population is expected to generate the need for a significant quantity of **sports fields**, amounting to 15.5 unlit equivalent soccer fields and 10 unlit equivalent ball diamonds. As land intensive facilities, the quantum of land associated with these sports fields need to be explored further after discussions with Town Staff and the rest of the Consulting Team in order to determine the degree of sports fields to be addressed within and/or external to the Southwest Georgetown boundary. Potential options to consider may include one or a combination of the following options:

- creating a new sports field complex or determining whether fields can be added to an existing sports complex (e.g. Trafalgar Sports Park, the Gellert Community Centre Park or the Acton Sports Park, recognizing the latter will be a fairly lengthy distance from Southwest Georgetown);
- the aforementioned land banking option for an arena could serve as a location for a sports field complex as well, should arena-related needs not materialize; and/or

• intensifying new and existing sports fields to expand their utilization (e.g. lighting, irrigation, artificial turf, etc.) which can allow for extended usage of sports field and thereby reduce the number of unlit equivalents required (although at a higher cost to construct).

With respect to other facilities requirements generated by the anticipated build-out population in Southwest Georgetown, the following is proposed as a result of the updated assessments:

- 5 **tennis courts** and 4 half court **basketball courts**, the latter especially of which should be distributed in a manner that achieves an appropriate degree of walkability from residential areas proposed in the secondary plan area.
- 1 splash pad (subject to future confirmation based on walkability of future residential areas to the existing splash pad at the Gellert Centre).
- 1 **skateboard park** on the basis that a skateboard park is <u>not</u> otherwise constructed at the nearby Gellert Centre.
- 13 **playground sets** (the number of parks containing these playgrounds will be determined after assessing the walkability from residential areas proposed in the secondary plan area).

While there appears to be some opportunity for additional facilities in other park locations (e.g. Trafalgar Sports Park, Acton Quarry - if acquired), much of these opportunities would serve a more local population and not the SWGIPP area.

Parkland Needs

At this early stage in the SWGIPP planning process that has not yet had the benefit of community engagement or establishment of comprehensive land assessments, the actual amount of parkland required cannot be definitively determined. On this basis, we have used the Official Plan parkland target (contained in Section F7.2.3) as a preliminary point of departure in which the process of determining park needs can commence. Application of the Official Plan parkland targets to Southwest Georgetown's build-out population of 20,000 residents generates a parkland requirement of 74 hectares, consisting of 24 hectares of Local Parkland and 50 hectares of Non-Local Parkland.

A degree of flexibility is required in determining the ultimate parkland requirements of the Study Area. At a minimum, the Town should maximize the amount of parkland that it is entitled to under Sections 42 and 51.1 of the *Planning Act*. To reconcile any outstanding parkland requirements beyond dedicated parkland, the following considerations will be further explored through subsequent assessments of the SWGIPP process:

- The overall vision for the SWGIPP
- Consultations with residents and stakeholders to determine the type and function of parks that they would like to see in their individual neighbourhoods and in their general community (which would be the Study Area).
- A pragmatic mix of Local versus Non-Local Parkland within the Study Area, using the Official Plan target (Section F7.2.3) as a guide recognizing that it is a Town-wide target. For example, it is plausible that the Town will want to adhere to the Local Parkland target of 1.2 hectares per 1,000 within the Study Area but recognize that a degree of Non-Local Parkland may be addressed in other areas of Halton Hills.

- The ability of the Town to build in programmatic flexibility into its park designs should current trends or demographic profiles change in the future, thus requiring parks to be readapted/redesigned to respond to future change in their usage profile.
- The extent and ability of natural heritage lands and its buffer areas to meet a degree of passive recreational demands.
- Confirmation of the number of sports fields to be located within and/or external to the Southwest Georgetown boundary (e.g. Trafalgar Sports Park, Acton Quarry - if acquired, etc.), in order to gain a better sense of how outdoor facility requirements will impact the amount of parkland required in the Study Area.
- The existence or planned addition of any non-municipal parkland or recreational facilities (e.g. through other public agencies, such as conservation authorities, or private landowners) within the Study Area.

5. Conclusion

The Background Report for the Parks & Recreation Component of the Southwest Georgetown Integrated Planning Project (SWGIPP) represents a point of departure for subsequent work. The core emphasis of assessments to date is to proceed with the expansion of the Gellert Community Centre and determine the extent that sports field needs of the 20,000 Southwest Georgetown residents can be met within, and external to, the secondary plan area boundary. In addition, it is important that land banking or land securement opportunities be considered as part of the SWGIPP to ensure the Town can respond to future arena and/or Local/Non-Local Parkland needs.

APPENDIX:

Parks and Outdoor Facility Inventory, 2012

Table 2: Non-Local and Local Park Inventory

NON-LOCAL PARKLAND: COMMUNITY AND TOWN WIDE PARKS

Name	Address	Total Area	Useable
		(ha)	Area (ha)
Acton Sports Park	415 Queen Street East	6.27	4.75
Cedarvale Park	181-185 Main Street South	16.32	4.05
Croatian Social & Cultural Centre	9118 Winston Churchill (leased)	7.05	7.05
Dominion Gardens Park	135 Maple Avenue	4.00	3.12
Old Seed House Garden			
Georgetown Fairgrounds	1 Park Avenue	9.28	8.4
Gellert Community Park	10200 Main Street S.	30.19	13.27
Glen Williams Park	509 Main Street (portion leased)	10.90	2.74
Hornby Park	12790 Steeles Avenue	5.20	4.57
Limehouse Park	12169 Sixth Line (leased)	5.90	2.65
Mold-Masters SportsPlex	221 Guelph Street	4.54	2.28
Prospect Park	30 Park Avenue	6.99	6.16
Trafalgar Sports Park	11494 Trafalgar Road	39.97	35.72
Summary		146.61	94.76

Source: Town of Halton Hills Recreation & Parks Department, 2013

LOCAL PARKLAND: PARKETTES AND NEIGHBOURHOOD PARKS

Name	Address	Total Area	Useable
		(ha)	Area (ha)
Acton Rotary Park	24 Elizabeth Drive	3.69	3.69
Ainley Trail Parkette	12 Ainley Trail	0.26	0.26
Barber Drive Park	271 Barber Drive	1.34	1.34
Barber Mill Park	75 River Drive	0.73	0.33
Berton Boulevard Park	40 Berton Boulevard	2.24	2.05
Birchway Place Parkette	73 Birchway Place	0.09	0.09
Bovis Park	31 Wallace Street	1.52	0.62
Calvert Dale Parkette	27 Cotswold Court	0.17	0.17
Danby Road Park	14395 Danby Road	1.76	1.76
Danville Park	76A Danville Avenue	0.60	0.22
Dayfoot Park	45 Dayfoot Drive	0.23	0.23
Delrex Parkette	317 Delrex Boulevard	0.49	0.49
Dr. Charles Best Parkette	2 Arborglen Drive	0.28	0.15
Durham Street Parkette	46 Durham Street	0.34	0.34
Eaton Street Park	41 Eaton Street	1.47	1.47
Emmerson Park	52 Carruthers Road	1.01	1.01
Ewing Street Park	59 Ewing Street	3.70	0.21
Greenore Park	66 Greenore Crescent	0.81	0.21
John Street Park	64 John Street	0.58	0.45
Joseph Gibbons Park	77 Weber Drive	2.22	2.22
Jubilee Woodlot		3.76	0.8
Kinsmen Parkette	5 Byron Street	0.16	0.16
Lions Club Park	11 Dayfoot Drive	0.58	0.07
Maple Creek Park	14 Watson Road	1.72	1.72

Name	Address	Total Area	Useable
		(ha)	Area (ha)
Maple Creek Parkette	41 Gooderham Drive	0.16	0.16
Mary Street Park	30 Mary Street	0.17	0.17
McNab Park	Part Lot 11, Con 11	0.53	0.53
McNally Street Park	12 McNally Street	1.72	1.72
Meadowglen Boulevard Park	29 Meadowglen Boulevard	1.26	1.12
Meadowlark Parkette	24 Meadowlark Drive	0.26	0.26
Miller Drive Park	87 Miller Drive	3.15	2.85
MSB Park	52 Churchill Road North	2.67	2.67
Morden Neilson Parkette	14 Morden Neilson Way	0.21	0.07
Norval Park	477 Guelph Street	1.53	1.39
Remembrance Park	29 James Street	0.49	0.39
Rennie Street Park	32 Rennie Street	2.00	2
Shelagh Law Parkette	75 Main Street	0.15	0.15
Sir Donald Mann Park	58 Mowbray Place	2.00	0.73
Smith Drive Parkette	75 Smith Drive	0.32	0.32
Standish Street Parkette	70 Standish Street	0.15	0.15
Tanners Drive Park	45 Tanners Drive	0.85	0.85
Tolton Park	11134 22 Side road	0.90	0
Wallace Street Park	150 Wallace Street	3.00	1.37
Willow Park Ecology Centre	463 Guelph Street (leased)	2.11	1.57
Summary		53.38	38.53

Source: Town of Halton Hills Recreation & Parks Department, 2013

	Total Area	Useable
	(ha)	Area (ha)
TOTAL NON-LOCAL & LOCAL PARKLAND	199.99	133.29

Table 3: Outdoor Recreation Facility Inventory

	YEAR 2012																	
										•							:ACILITY	
PARK NAME	PARK ID SIGN	PLAYGROUND	SPLASHPAD	BASEBALL LIT	BASEBALL UNLIT	SOCCERLIT	SOCCER UNLIT	TENNIS LIT	BLEACHERS	TRAILS (m)	BRIDGES	BANDSTAND/GAZEBO	LIGHTING (NOT FIELDS)	MAILBOX KIOSK	FENCING (FT)	SITE FURNISHINGS	PARKING STALLS W/O FACILITY	OTHER
3 Musketears Skate Park Acton Rotary Park	1						1		1	630	1				290	6 30		skatepark Max MacSween garden
Acton Sports Park - Phase 1&2	1		Н			2		Н	2	030	-				290	30	90	Max MacSween garden
Barber Drive Park	1	1	H			_	1	Н	_	330			5	H	390	20		basketball
Barber Mill Park	1	2											2			14		basketball
Berton Boulevard Park - Phase 1	1	2					1	Ц		260			9	-	400	20		
Birchway Place Parkette Bovis Park	1	1	\vdash					\vdash		160		H	1	Н	100 680	6 20		
Calvert Dale Park	1	1	Н					\vdash		100		H	 	Н	70	6		
Cedarvale Park	1	2	L			1		П	6	810	2	1	6		280	90		
Croatian Centre (leased property)	1						6										250	
Danby Road Park - Phase 1	1	2						Ш		300			L_	1	470	14		basketball
Danville Park Dayfoot Park	1	1	\vdash					\vdash		100		H	1	Н	170 120	14 6	 	
Delrex Parkette	1	1	H					H					3		330	14		
Dominion Gardens Park	1	2	1							789		2	25		220	40		
Dominion Gardens : Old Seed House	1									330	1	1	16			14		
Dr. Charles Best Parkette	1	1								90			_	1	70	6		
Durham Street Parkette Eaton Neighbourhood Park	1	1	_		1					190 450			6 7		230 290	8 18		
Emmerson Park	1	2			_			2	2	130			3		120	16		
Ewing Street Park	1	1											3		650	28		
Fairgrounds Park	1	1		3	4				25				8		1800	54		bat cage
Gellert Community Park	1	2	1	3		1	1	6	10	1730	2		30		1000	100		rugby field
Glen Williams Park Greenore Park	1	1	_	2					8	160		1			300 200	60 16		
Hornby Park	1	1	H	2	1			H	7			1			400	24		concession
John Street Park	1	1													350	14		
Joseph Gibbons Park	1	1			1			2	1	380			4		600	22		
Jubilee Woodlot	1									620					760	26		
Kinsmen Park Limehouse Park	1	1	_	1	1				6				2		150	6 40		
Lions Club Park	1	0	H					H	- 0						180	14		
Maple Creek Park - Phase 1	1	2			1			H		100		H	2	H	190	20		
Maple Creek Parkette	1	1											1		130	6		
Mary Street Park	1							Ш							120	6		
McKenzie Smith Bennett School Park McNab Park	1		\vdash		2		2	Н	2			H		Н	110	6 14		
McNally Street Park	1	2	\vdash				1	\vdash		350		\vdash	10	2	130			
Meadowglen Park	1	1	Н				1	H		300		1	8	_	213			basketball
Meadowlark Parkette	1	1								45					29	6		
Miller Drive Park	1	2					2	П		340			10	П	320			
Mold-Masters SportsPlex Park Morden Neilson Parkette	1	1	\vdash			1		${oxdot}$	3			\vdash	1	Н	620 90	34 6		skatepark
Norval Park	1	1	\vdash		1			\vdash	1	240		1	1	_	500	18		
Prospect Park	1	1	1	2	1			4	19	850		3		-	500	46		
Remembrance Park	1									100		1	8		150	14		cenotaph
Rennie Street Park - Phase 1	1	1	\Box				1	Щ					L	Ц	40	6		
Shelagh Law Parkette Sir Donald Mann Park	1	1	<u> </u>		1			\vdash				H	1	Н	820	6 22		
Smith Drive Parkette	1	1	\vdash		H			Н				H	- -	Н	140	6		
Standish Street Parkette	1	1	Н					H				Т	1	H	120	6		
Tanners Drive Park	1	1					1							1	50	6		
Trafalgar Sports Park	1			1		3	_		18				19	_	280			
Wallace Street Park - Phase 1&2	1	1	\vdash				1	Ш		190	_		6	Ц	140	26	30	
Willow Park Ecology Centre	1		⊢					Н		800	1			Н		22	-	
TOTAL Source: Town of Halton Hills, 201	55	51	3	14	14	8	27	14	113	10774	7	13	205	5	14442	1163	1533	

Source: Town of Halton Hills, 2013



Appendix D:

Agricultural Impact Assessment for Vision Georgetown

VISION GEORGETOWN AGRICULTURAL IMPACT ASSESSMENT – PHASES 1 & 2

PREPARED FOR:



1 HALTON HILLS DRIVE HALTON HILLS, ONTARIO L7G 5G2

PREPARED BY:



COLVILLE CONSULTING INC. 404 QUEENSTON STREET ST. CATHARINES, ONTARIO L2P 2Y2

EXECUTIVE SUMMARY

Colville Consulting Inc. was retained by the Town of Halton Hills to complete an Agricultural Impact Assessment in support of the Southwest Georgetown Secondary Plan. The Agricultural Impact Assessment is being completed in four phases, with this report summarizing the findings of Phase I and II. Phases I and II include the characterization of agricultural lands within the Study Area and identifies the Minimum Distance Separation (MDS) setback requirements for livestock operations.

The Primary Study Area discussed within this report includes all lands north of 10 Side Road, east of Highway 3 (Trafalgar Road) and south of Highway 15. The Secondary Study Area included all lands south of Highway 15 and within 1 km of the Primary Study Area.

Soil and climate data for the Study Area was also reviewed for the purposes of characterizing the Agricultural lands in the Primary and Secondary Study Areas. Two reconnaissance level land use survey were completed to document the mix of land uses observed in both the Primary and Secondary Study Areas. Detailed information regarding farm operations was also collected. Livestock operators were contacted either during or following the land use survey in order to obtain more detailed information regarding the operation for the purposes of completing MDS I calculations for each livestock operation within the Secondary Study Area.

The study concluded that the majority of the soils in the overall Study Area are derived from morainal till deposits and consist of soils from the Oneida catena (Oneida, Chinguacousy and Jeddo soil series). All of the lands within the Study Area consist of CLI Class 1-3, with the majority being CLI Class 1. The climatic information confirmed that there are no limitations for growing most common field crops. The artificial drainage mapping for the Study Area revealed that there are some drainage systems installed within the Primary Study Area.

The MDS I calculations for the Study Area were made using the data collected during the land use survey as well as communication with farm operators and calculations made using aerial photography. At most, the MDS I setbacks encroach within the Primary Study Area at three locations. One of these livestock facilities (Farm #16), is retired and the facility may not be suitable for housing livestock. Additional information regarding this facility is expected to be forthcoming from the landowners and if it can be confirmed that the building is not suitable for housing livestock, the MDS I formula would not apply.

Although the soils and agricultural capabilities of the Study Area are high, it is not considered a specialty crop area. The overall the Study Area appears to be in agricultural decline, with very little investment being made in agricultural infrastructure and only one active farm operation within the Primary Study Area.

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APPENDICES

Appendix A – Land Use Descriptions & MDS I Details

Appendix B – MDS I Reports

1. Introduction

Colville Consulting Inc. was retained by the Town of Halton Hills to provide input to the Vision Georgetown project through the completion of an Agricultural Impact Assessment (AIA) as required in support of the Southwest Georgetown Secondary Plan. The Regional Municipality of Halton has draft guidelines for completing an AIA (Agricultural Impact Assessment Guidelines, 2011, Draft). As stated in this document "An AIA will be required as part of a secondary plan process that, if approved, would permit development within an Urban Area on lands that abut or are in close proximity to an Agricultural Rural Area, and will address mitigation of negative impacts on agricultural operations resulting from the development."

As per the Terms of Reference for the study, the AIA will be prepared in two stages. The first stage will be to characterize the agricultural lands within the Study Area. The second phase of the study will be to identify potential impacts of the proposed boundary expansion and where possible, develop mitigation measures to reduce the level of impact on farm operations and agricultural resources. This report has been prepared to address the first phase of the study.

2. CONTEXT/ STUDY AREA

In this report, the urban boundary expansion area is referred to as the Primary Study Area and includes the lands north of 10 Side Road and east of Highway 3 (Trafalgar Road). The current urban boundary comprises the northern and eastern boundaries. The Secondary Study Area includes all lands within one kilometer of the Primary Study Area. This generally includes the lands south of the 15th Side Road between Trafalgar Road and the 6th Line and Lots 9 and 10, Concessions 7-11 which are south of the 10th Side Road.

The area of study is shown in Figure 1.



Primary Study Area

Secondary Study Area



500 Meters

1:15,300

VISION GEORGETOWN Agricultural Impact Assessment

Figure 1 - Study Area

Prepard for: TOWN OF **HALTON HILLS**



Prepard by:



Date: February 2014

File C13002_01

3. BACKGROUND / ASSESSMENT

3.1 Information Reviewed

The study included a review of existing agricultural resources information for the Primary and Secondary Study Areas. The materials consulted are listed on page 10 of this report and include information regarding:

- the soil resources and CLI agricultural capability of the lands;
- climatic information for the area; and
- OMAFRA's Artificial Drainage Systems mapping.

In addition, in some cases, land owners were contacted by phone to obtain site specific information regarding their farm operations.

3.2 Field Work

A land use survey of the Primary and Secondary Study Areas was completed in two phases. The first reconnaissance site visit was made on June 18, 2013 and a subsequent site visit was completed on August 16, 2013. The reconnaissance level, land use survey identified the cropping pattern observed, the number and type of agricultural operations within the area (both existing and retired), and the extent and type of non-farm land uses in the area. Where livestock operations were identified more specific information was obtained regarding the type of livestock facility, the maximum capacity of the barns capable of housing livestock and the type of manure system used. This information is required to address the Minimum Distance Separation I (MDS I). Farm operators were contacted in person during the land use survey or were contacted by telephone following the survey.

4.0 RESULTS/FINDINGS

4.1 Agricultural Resources

4.1.1 Soil Resources

The soils in the Primary Study Area are comprised mainly of soils developed from morainal till from which the soils of the Oneida catena have developed. The Oneida catena includes the well drained Oneida soil series, the imperfectly drained Chinguacousy soil series and the poorly drained Jeddo soil series. Two additional soils have been mapped in the northern portion of the Primary Study Area. These include the well drained, Font and Grimsby soil series which comprise most of Lot 15, Concession 8. The Font soils are well sorted, coarse sands and gravels; glacio-fluvial in origin. The Grimsby soils are also of glacio-fluvial origin, however they have developed from medium to fine sands.

All of the Secondary Study Area is comprised on soils from the Oneida catena.

According to OMAFRA's 1:50,000 scale CLI manuscript mapping, all of the soils within the Primary and Secondary Study Areas are rated CLI Classes 1-3. The majority of these soils are rated CLI Class 1 soils.

4.1.2 Climate

Climate data is available through Environment Canada's National Climate Data and Information Archive's online database. Climate Normals and Extremes for Georgetown (1971-2001) were obtained from the online database (Appendix A).

Georgetown receives an average of 885 mm of precipitation annually (Environment Canada website); 743.8 mm of rainfall and 114.0 mm of snowfall. The daily average temperature ranges from a high of 12.6°C to a low of 1°C.

According to the OMAFRA Factsheet Freeze Risk During Spring and Autumn in Ontario (Brown, D.M., & A. Bootsma, 1991) the average length of the frost-free period is estimated to be between 150 and 160 days. The frost-free period ranges from about May 5th to October 5th.

Georgetown receives annually an average of between 2700 and 2900 accumulated crop heat units (CHU). The crop heat unit ratings are based on the total accumulated CHU for the frost-free growing season (Brown, D. M., and A. Bootsma. 1993). All common field crops can be grown in areas receiving CHU at these levels.

4.1.3 Artificial Drainage

The OMAFRA Artificial Drainage Systems mapping (Halton Hills map sheet) shows that there are five (four systematic and one random) locations within the Primary Study Area where tile drainage has been installed.

There are only two, relatively small areas within the Secondary Study Area where systematic tile drainage has been installed.

4.2 Assessment of the Minimum Distance Separation I Requirements

Proposed new non-farm land uses, including settlement expansion areas, are required to meet the Minimum Distance Separation I formula as contained in Minimum Distance Separation Implementation Guidelines, Publication 707 of the Ontario Ministry of Agriculture, Food and Rural Affairs, 2006.

Section 2.3.3.3 of the PPS 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 MDS is a tool used

to determine the separation distance between livestock facilities and non-compatible land uses. It deals specifically with odour and does not account for noise, dust or other farm generated products. It is applied to all farm operations that have infrastructure reasonably capable of housing livestock. The MDS I formulae provides the minimum distance separation between existing livestock facilities (and empty livestock facilities) and new non-agricultural use including urban boundary expansion.

The Minimum Distance Separation I formula was applied to all livestock facilities within the Study Area and within one kilometer (1,000 m) of the proposed boundary expansion area, with the exception of livestock facilities within the Primary Study Area. This is due to the fact that this area will become "urban" and the MDS formula is not applied to lands within a settlement area unless specifically stated in the municipality's Official Plan. According to Ms. Tara Buonpensiero, Senior Planner with the Town of Halton Hills, the local Official Plan does not require the application of the MDS I formula for farm operations located within the Town's urban area.

The MDS I formula uses the following factors to determine the MDS I setback requirements: the type of livestock; the maximum capacity of the barn for livestock; type of manure system and the type of land use (Type A or Type B). For settlement area expansion, the type of land use is considered to be a Type B land use. The amount of tillable acres is often used in the calculation of the MDS I setback however the formula does not include this factor when calculating the MDS I requirement for settlement area expansion.

The MDS I formulae applies to all existing livestock facilities and empty livestock facilities. An empty livestock facility is one that may be retired or no longer is used to house livestock, however it appears to be reasonably capable of housing livestock. The MDS is not applied to barns that are in poor condition and not suitable for housing livestock.

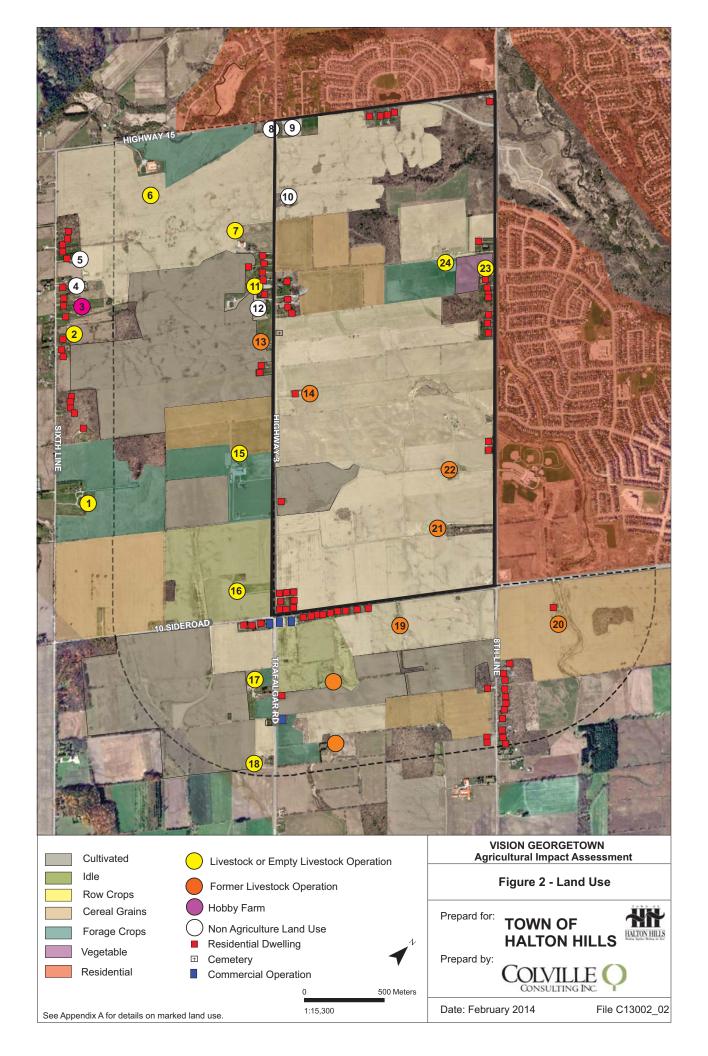
Specific information regarding each farm operation was obtained from land owners or their agents. In cases where this information was not directly available, we relied on best judgement to determine the MDS I factors most likely applicable to the farm operation. These factors are based on the observations recorded during the land use survey and other sources such as other local farmers and through aerial photographic interpretation. In some cases, the building capacity was estimated based on the building dimensions as measured using aerial photography (e.g., Google Earth®). Where information is not readily apparent or available, the most likely scenario (e.g., type of livestock or manure system) is used in the MDS I calculation.

Two site visits were completed; one in June and another in August, 2013. The land uses and cropping patterns were observed and recorded. The factors required to determine the MDS I setback requirements was also collected during the land use surveys. The MDS I factors were input to the MDS I software provided by OMAFRA to determine the MDS I requirements.

Figure 2 shows the land uses and cropping pattern observed during the land use survey. The farm and non-farm land uses were numbered and descriptions for these land uses are contained in Appendix A.

Several farm operations were identified however only six operations are located within the Secondary Study Area and the MDS I formula would potentially only apply to four of these. Those farm operations include Farm No. 6, Farm No. 7, Farm No. 15 and Farm No. 16.

Figure 3 shows the MDS I setback requirements for these farm operations.



Only limited information is available at this time for Farm #16. We have confirmed that the farm is owned by Treeola Farms Ltd. in Brampton, Ontario. Both the planning staff at the Town of Halton Hills and Colville Consulting have attempted to contact the landowners on several occasions. We have learned that the farm is indeed a retired livestock operation. No livestock have been housed in the barns for at least eight years. The owners have also applied for and received a demolition permit for the barn although we have learned that it is now expired. The fact that a demolition permit has been granted in the past would suggest that the barn may not be structurally sound and fit for housing livestock. We will continue to clarify the situation and should it be confirmed that the barn is not structurally sound, the MDS I formula would not be applied to this facility. Until then, Figure 3 continues to demonstrate a conservative estimate that assumes that the barn was in good condition and capable of housing livestock.

The application of the MDS I formula impacts the proposed expansion area at three locations. The extent of encroachment is shown in Table 1.

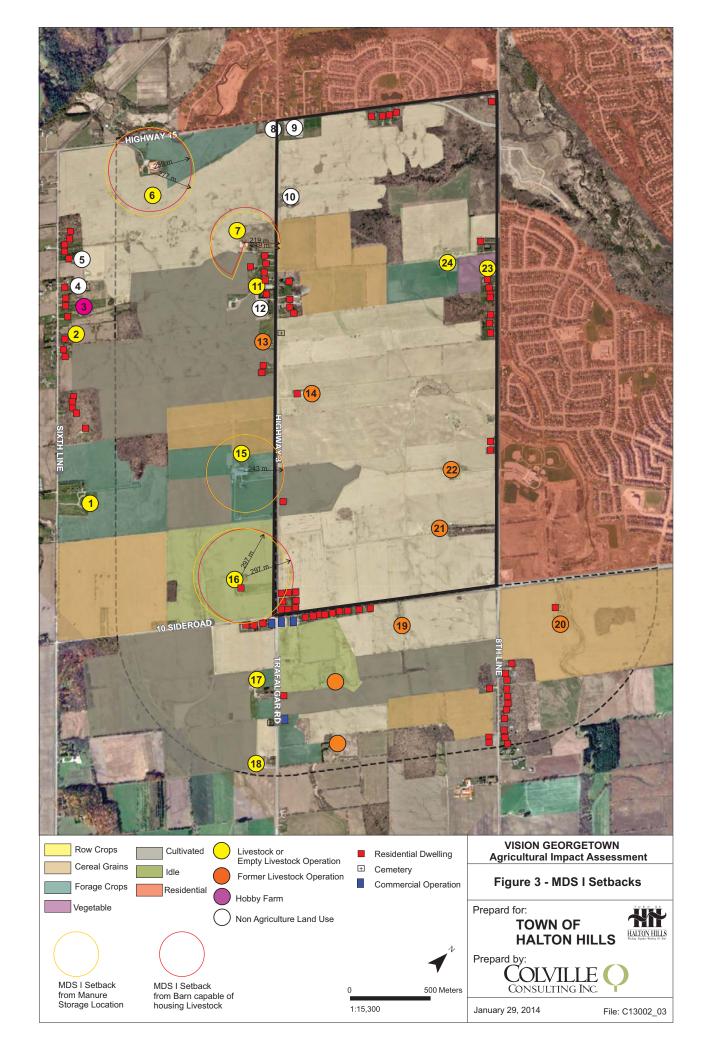
Table 1 – Summary	of MDS	l Setback Red	quirements

Farm Operation No.	MDS I from Livestock Occupied Portion of Barn	MDS I from Manure Storage Location	Encroachment into Settlement Expansion Area (as measured from Trafalgar Rd.)
No. 6 – Valentina Farms	259 m	277 m	None
No. 7 - Devolin	219 m	219 m	Approximately 17 m
No. 15 – Wanless (Horses)	243 m	243 m	Approximately 35 m
No. 16 - Retired	297 m	297 m	Approximately 90 m

In the case of Farm No. 7 which is leased to a local farmer, the MDS I formula only partially applies as there are several non-farm land uses located between and closer to the proposed expansion area (see Figure 3). Where there are four or more non-farm land uses located in close proximity and closer to the proposed development the MDS I is not applied as per MDS I Guideline No 12. This particular Guideline also applies in its entirety to farm operations No. 17 and No. 18.

There are also several retired or remnant farm operations in the area that were not considered to be empty livestock facilities. The MDS I formula was not applied to these facilities because of the poor condition of the barns making them unsuitable for housing livestock, or lack of infrastructure due to the removal of the barns.

More details regarding the MDS I factors used in the calculations are provided in Appendix A and the MDS I reports for each of these livestock operations are provided in Appendix B.



5. CONCLUSION

The Primary and Secondary Study Areas are comprised entirely of CLI Classes 1, 2 and 3 lands which are considered to be Prime Agricultural Lands. These lands are considered to be within a Prime Agricultural Area as per the PPS. Settlement area expansion will consume Prime Agricultural Lands within a Prime Agricultural Area.

The soils and climate are suitable for common field crops and the majority of the lands are in common field crop production (corn, soybean, cereal grains and forage). Vegetable crops are grown within the proposed settlement expansion area, however, specialty crops make up a minor component of the crops grown in the area. This area is not considered to be a specialty crop area as defined in the Provincial Policy Statement.

Expansion will also consume investment in agricultural infrastructure and land improvements (i.e., tile drainage). However, in many cases the infrastructure has already been removed. There is only one active farm operation with infrastructure remaining within the Primary Study Area.

The land uses observed show that agriculture in the area is in decline. For the most part infrastructure is being removed or maintained with minimal investment. Little new or significant investment in modern farm infrastructure was observed in the study area.

There are potentially up to three existing farm operations that have MDS I setback requirements which slightly encroach into the proposed settlement area boundary. Land uses proposed within the settlement area will have to respect the MDS I setbacks while the barns are considered suitable for housing livestock.

This report was prepared to address Phases 1 and 2 of the Agricultural Impact Assessment for Vision Georgetown.

Date: February 14, 2014

Sean Colville, President

Colville Consulting Inc.

INFORMATION SOURCES

The following list provides an example of the relevant information sources that will be reviewed as the Study progresses.

- Chapman, L.J. and D.F. Putnam, 1994. *The Physiography of Southern Ontario*, Third Edition. Government of Ontario. Ontario, Canada.
- Gillespie, J. E., R. E. Wicklund and M. H. Miller. 1971. *The Soils of Halton County*. Report No. 43 of the Ontario Soil Survey. Soil Research Institute, Canada Department of Agriculture and Ontario Agricultural College, University of Guelph.
- Ontario Ministry of Agriculture, Food and Rural Affairs website, May 2004. Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario.
- Ontario Ministry of Agriculture, Food and Rural Affairs 1997. Crop Heat Units for Corn and Other Warm Season Crops in Ontario. OMAFRA Factsheet 93-119., Queen's Printer for Ontario.
- Ontario Ministry of Agriculture, Food and Rural Affairs, Artificial Drainage Systems mapping. Halton Hills Map Sheet (last updated 1993).
- Ontario Ministry of Agriculture, Food and Rural Affairs and Ministry of Environment. 2006. Minimum Distance Separation (MDS) Formulae, Implementation Guidelines. Publication 707, Queen's Printer for Ontario.
- Ontario Ministry of Agriculture, Food and Rural Affairs and Ministry of Environment. October 2006. Minimum Distance Separation (MDS) Formulae, Training Manual
- Ontario Ministry of Agriculture, Food and Rural Affairs. 1:50,000 scale manuscript mapping.
- Ontario Ministry of Municipal Affairs and Housing. Provincial Policy Statement. 2005, Queen's Printer for Ontario.

APPENDIX A

LAND USE DESCRIPTIONS

&

MDS I DETAILS

LAND USE & MDS DETAILS

Land Use Survey completed June 18th and August 16th, 2013. Each land use mapped and described below is identified by number which correlates to the land use mapping in Figure 2 and MDS I Setback in Figure 3.

Land Use Descriptions:

- 1. Hopefield Farm 14 stall equestrian facility. Hay on surrounding lands. Outside of study area.
- 2. Small poultry or hog operation. Difficult to see from road, 2 small steel sided barns visible. Cultivated adjacent lands. Outside of study area.
- 3. Small green house operation with approximately 7 plastic sided-green houses. Identified as a hobby farm. Outside of study area.
- 4. Non-agricultural land use. Landscaping operation. Outside of study area.
- 5. Non-agricultural land use. Possibly associated with neighboring landscaping operation. A connected driveway was visible from road and equipment located on both properties. Idle lands located between properties, likely to have been previously planted with corn. Outside of study area.
- 6. Valentina Farms Large retired dairy farm operation. Large farm complex in good condition but has not housed animals since 1980's. Once used for cattle export dairy cows (Holstein) to Europe. All surrounding lands are leased to other farm facilities for cash crops. Surrounding lands are currently in soybean production. Spoke with Mr. Henry Parasol who says there are absolutely no plans on ever using the buildings again as a dairy or any other type of livestock. There are two horses on site but these are tenant horses and will not be kept on site there permanently. Despite the size of the operation, only a relatively few dairy cows were ever on site. Small concrete block barn on west side housed dairy cows. He could not provide me with an estimate as to the numbers however based on barn dimensions (using Google Earth®) it is estimated that the barn could house 26 cows. The manure was removed from the barn and stored outside at the southern end of building, uncovered (V4). The MDS I setback requirement for this operation was determined to be 277 m from the manure storage location and 259 m from the barn. The MDS does not encroach within the proposed settlement expansion area.
- 7. Associated with Valentina farms. Bank barn with concrete caped silo formerly used for livestock. Barn is rented to a local farmer (Mr. Devolin) who has operated a cow-calf operation and kept up to 25 beef cattle. He does not have any cattle on the site now but continues to rent the barn to store hay from home farm. Mr. Devolin estimates that the barn capacity for beef feeders is between 30 and 40 cattle. He only rents 10 acres of land and therefore has to provide additional feed. The manure storage system is an inside, bedded packed which is periodically cleaned out (>14 days) (V1) and sold to topsoil manufacturer in the area. The MDS I setback requirement for this operation was determined to be 219 m. The MDS encroaches into the proposed settlement expansion area approximately 17 m.
- 8. Non-agricultural land use. St. John's Anglican Church.
- 9. Non-agricultural land use. Stewarttown Senior Public School.
- 10. Non-agricultural land use. Top Soil Gillett Haulage Excavating. Soybeans planted north of property and winter wheat to the south.
- 11. Agram Meats butcher shop. Associated abattoir facility located at back of property. Lands located behind facility are cultivated. MDS does not apply.

- 12. Non-agricultural land use. Unknown facility, does not appear to be an agricultural use.
- 13. Lands believed to be associated with former Valentina Farms. Same roof and silo design and colours. Cultivated lands located behind property.
- 14. Abandoned farm house- no barn or farm infrastructure present. Corn planted on either side of property.
- 15. Large farm complex New, steel roof on barns. There are at least two barns capable of housing livestock. Two large-framed and two medium-framed horses observed in pasture. Several paddocks and an apparent riding ring on property. Farm likely converted from other livestock operation (dairy?). Based on measured dimensions (using Google Earth®) the maximum capacity of the barns for horses was determined by MDS software to be 23. The MDS I setback requirement for an equestrian facility was determined to be 243 m. This will encroach approximately 35 m into the proposed settlement expansion area. The landowner was contacted subsequent to our field investigations and he confirmed that the factors used in the MDS formula were appropriate.
- 16. Hillcrest Farm Owned by Treeola Farms Ltd. This is a former livestock facility with an old barn which appears to be in fair condition however there is an expired demolition permit for the facility which suggests that perhaps it is not structurally sound and suitable for housing livestock. No other associated buildings other than house and garage. Should the facility be capable of housing livestock, based on measured dimensions (using Google Earth®) the maximum capacity of the barn is approximately 121 beef backgrounders (i.e., the most likely use). It is assumed that the facility would have an inside bedded packed manure system (V1). Given these factors, the facility would require an MDS I setback requirement of 297 m. The MDS I setback will encroach approximately 90 m into the proposed settlement expansion area. More information is needed to confirm the structural integrity of the barn to confirm whether the MDS formula should be applied.
- 17. Empty livestock operation. Infrastructure appears to be in good condition and could house livestock in future. Several non-farm land uses located between and closer to the proposed expansion area, therefore the MDS I formula would not apply (MDS I Guideline #12). MDS I not determined for this facility.
- 18. Empty livestock operation. One bank barn with a steel roof and a concrete caped silo. Lands currently cultivated field crops. It does not appear that there are be any livestock present. The buildings appear to be in fairly good condition, however, several non-farm land uses are located between and closer to the proposed expansion area. Therefore the MDS I formula would not apply (MDS I Guideline #12). MDS I not determined for this facility.
- 19. Former livestock operation. Infrastructure has been removed and is no longer a farm operation.
- 20. Former livestock operation. Infrastructure is in poor condition and not suitable for housing livestock (confirmed by owner). Owner considering removing old barn as it is considered a safety hazard.
- 21. Former livestock operation. Infrastructure has been removed and is no longer a farm operation.
- 22. Former livestock operation. Infrastructure has been removed and is no longer a farm operation.
- 23. Alison's Farm Market.
- 24. Livestock operation with large bank barn, uncapped silo and several outbuildings and grain storage bins. Appears to be sheep and pasture lands based on Google Earth® interpretation. There are also several fields of vegetables. Observed sweet corn, squash crops and other vegetable crops during land

COLVILLE CONSULTING INC.							
use survey. Vegetable likely sold at Alison's Farm Market. Because this livestock operation is located within the proposed urban boundary expansion area, the MDS I formula will not apply.							

APPENDIX B MINIMUM DISTANCE SEPARATION REPORTS

Minimum Distance Separation I (MDS I) Report

MDS 1.0.2 17-Oct-2013 16:47 Page 1

Application Date: 19-Aug-2013

File Number: C13002

Preparer Information Applicant Information

Sean Colville Regional Municipality of Halton
Colville Consulting Inc. Town of Halton Hille Town of Halton Hills

Colville Consulting Inc. 404 Queenston St.

St. Catharines, ON, Canada L2P 2Y2 Email: sean@colvilleconsultinginc.com

Calculation #1

File: MDS.mds

Farm No. 6 Valencia Farms

Retired dairy operation. Not active since late 80's. Infrastructure still in good condition.

Raised dairy cattle for export to Europe.

Adjacent Farm Contact Information

Unspecified

Farm Location Regional Municipality of Halton Town of Halton Hills

Manure Form	Type of Livestock/Material	Existing Capacity	Existing NU	Estimated Barn Area
Solid	Dairy; Milking-age Cows (dry or milking) Large Frame (545 - 636 kg) (eg. Holsteins); Tie Stall	26	37.1	266 m²
Solid	Horses; Large-framed, mature; > 680 kg (including unweaned offspring)	2	2.9	60 m²

Encroaching Land Use Factor: Type B Land Use

This calculation is required for the purposes of a settlement area expansion.

Manure/Material Storage Type: L1. Solid, outside, no cover, 18-30% DM, with uncovered liquid runoff storage

Factor A (Odour Potential): 0.7
Factor B (Nutrient Units): 240
Factor D (Manure/Material Type): 0.7
Factor E (Encroaching Land Use): 2.2
Total Nutrient Units: 40

Required Setback

Actual Setback

Distance from nearest livestock building 'F' (A x B x D x E): 259 m (849 ft)

Distance from nearest permanent manure/material storage 'S': 277 m (910 ft)

Signature of Preparer:

Sean Colville, Colville Consulting Inc.

Date: February 14, 2014



File: MDS.mds

Calculation #2

Farm No. 7

Owned by Valencia Farms, leased to local farmer who keep beef cattle.

Adjacent Farm Contact Information

Unspecified

Farm Location Regional Municipality of Halton Town of Halton Hills

Manure	Type of Livestock/Material	Existing	Existing	Estimated
Form		Capacity	NU	Barn Area
Solid	Beef; Feeders (7 - 16 months)	40	13.3	Unavailable

Encroaching Land Use Factor: Type B Land Use

This calculation is required for the purposes of a settlement area expansion.

Manure/Material Storage Type: V1. Solid, inside, bedded pack

Factor A (Odour Potential): 0.8 Factor B (Nutrient Units): 178 Factor D (Manure/Material Type): 0.7 Factor E (Encroaching Land Use): 2.2 **Total Nutrient Units:** 13

Required Setback

Actual Setback

Distance from nearest livestock building 'F' (A x B x D x E): Distance from nearest permanent manure/material storage 'S': 219 m (719 ft)

219 m (719 ft)

Calculation #3

Farm No. 16 - Retired Farm OP

Farm appears to have been retired for several years (decades)

Adjacent Farm Contact Information

Unspecified

Farm Location

Regional Municipality of Halton

Town of Halton Hills

Manure Form	Type of Livestock/Material	Existing Capacity	Existing NU	Estimated Barn Area
Solid	Beef; Backgrounders (7 - 12.5 months); Yard/Barn	121	40.3	450 m²

Signature of Preparer:

Sean Colville, Colville Consulting Inc.

Date: February 14, 2014



Minimum Distance Separation I (MDS I) Report

MDS 1.0.2 17-Oct-2013 16:47 Page 3

File: MDS.mds

Encroaching Land Use Factor: Type B Land Use

This calculation is required for the purposes of a settlement area expansion.

Manure/Material Storage Type: V1. Solid, inside, bedded pack

Factor A (Odour Potential): 0.8
Factor B (Nutrient Units): 241
Factor D (Manure/Material Type): 0.7
Factor E (Encroaching Land Use): 2.2
Total Nutrient Units: 40

Required Setback

Actual Setback

Distance from nearest livestock building 'F' (A x B x D x E): 297 m (973 ft)

Distance from nearest permanent manure/material storage 'S': 297 m (973 ft)

Calculation #4

Farm No. 15 - Wanless Farm

Calculated for horses

Adjacent Farm Contact Information

Unspecified

Farm Location
Regional Municipality of Halton
Town of Halton Hills

Manure	Type of Livestock/Material	Existing	Existing	Estimated
Form		Capacity	NU	Barn Area
Solid	Horses; Large-framed, mature; > 680 kg (including unweaned offspring)	23	32.9	694 m²

Encroaching Land Use Factor: Type B Land Use

This calculation is required for the purposes of a settlement area expansion.

Manure/Material Storage Type: V3. Solid, outside, no cover, >= 30% DM

Factor A (Odour Potential): 0.7
Factor B (Nutrient Units): 226
Factor D (Manure/Material Type): 0.7
Factor E (Encroaching Land Use): 2.2
Total Nutrient Units: 33

Required Setback

Actual Setback

Distance from nearest livestock building 'F' (A x B x D x E): 243 m (798 ft)

Distance from nearest permanent manure/material storage 'S': 243 m (798 ft)

Signature of Preparer:

Sean Colville, Colville Consulting Inc.

Date: <u>February 14, 2014</u>





Appendix E:

Cultural Heritage Resources Existing Conditions Report

EXISTING CONDITIONS REPORT CULTURAL HERITAGE RESOURCES

VISION GEORGETOWN PROJECT

TOWN OF HALTON HILLS REGIONAL MUNICIPALITY OF HALTON ONTARIO

February 2014

Prepared for: Meridian Planning

Prepared by:



UNTERMAN McPHAIL ASSOCIATES HERITAGE RESOURCE MANAGEMENT CONSULTANTS

EXISTING CONDITIONS REPORT CULTURAL HERITAGE RESOURCES

VISION GEORGETOWN PROJECT

TOWN OF HALTON HILLS REGIONAL MUNICIPALITY OF HALTON ONTARIO

February 2014

Prepared for: Meridian Planning

Prepared by:
Unterman McPhail Associates
Heritage Resource Management Consultants
540 Runnymede Road
Toronto, ON, M6S 2Z7
Tel: 416-766-7333

Executive Summary

Meridian Planning Consultants retained Unterman McPhail Associates, Heritage Resource Management Consultants, to undertake a cultural heritage resource assessment of the built heritage resources and cultural heritage landscapes for the Vision Georgetown Project in the Town of Halton Hills. This study is being undertaken as an integrated planning project with two main components, i.e., a land use planning study (known as a secondary plan) and a subwatershed study, which deals with all aspects of the natural environment. Phase I and Phase II of the Environmental Assessment process will be satisfied during the planning for transportation and services.

Unterman McPhail Associates undertook a windshield survey of the Vision Georgetown study area in August 2013 and identified cultural heritage landscapes and built heritage resources older than 40 years of age within and adjacent to the study area for the project as a first step in the planning process. This Existing Conditions Report (ECR) has been prepared to inform the client as to the result of the survey and the current conditions of the study area with regard to built heritage and cultural heritage landscapes. The identification of cultural heritage resources is based on age, architecture, site context, historical settlement and cultural landscape context. Known municipal cultural heritage significance is indicated in Table 1. Other identified resources have not been evaluated under Ontario Regulation 09/06 of the OHA for heritage interest/value. The ECR identification has been prepared to better inform the planning and design decision-making process. A subsequent cultural heritage assessment report to address the impacts to built heritage and cultural heritage landscapes as a result of the development planning process and provide mitigation recommendations will build on this first stage report.

The 1,000 acre study area, which is located within the central part of the Town of Halton Hills, developed as rural agricultural land in the 19th century, and is still characterized, for the most part, by active and former agricultural land. The watershed of the Credit River traverses the area. Overall, the vegetation of the area consists predominantly of agricultural lands with scattered woodlands and wetlands. The population centre of Stewarttown located at Trafalgar Road and 15th Side Road is located adjacent to the study area on its northwest corner. The northeast corner of the historical crossroads hamlet Ashgrove, which is located at Trafalgar Road and 10th Side Road, is situated within the study area.

A total of fourteen (14) built heritage resources and cultural heritage landscapes were identified within and adjacent to the study area. This includes nine (9) cultural heritage landscapes, one (1) associative agricultural landscape, one (1) cemetery, two (2) historical settlements of Ashgrove and Stewarttown adjacent to the study area, and five (5) farm complexes, and five (5) built heritage resources, comprising one (1) church and four (4) residences, were found within and adjacent to the study area. Three (3) identified properties, namely, 10014 (10114) Eight Line (Site #1), 10996 Trafalgar Road (Site #4) and 13552 10 Side Road (Site #13) are included on the Town of Halton Hills Heritage Register.

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1.0 INTRODUCTION

Meridian Planning Consultants retained Unterman McPhail Associates, Heritage Resource Management Consultants, to undertake a cultural heritage resource assessment of the built heritage resources and cultural heritage landscapes for the Vision Georgetown project in the Town of Halton Hills (*Figure 1*). The study area comprises 1,000 acres of land bounded by Trafalgar Road on the west, 15th Side Road on the north, Eight Line on the east and 10 Side Road on the south.

The study is an integrated planning project with two main components, i.e., a land use planning study (known as a secondary plan) and a subwatershed study, which deals with all aspects of the natural environment. The study will also fulfill Phases I and II of the Environmental Assessment (EA) process when planning for transportation and services. This new community will assist in accommodating the Town's projected population growth to the year 2031. It is 1,000 acres and is anticipated to be home to approximately 20,000 people.



Figure 1. Map showing the location of the Vision Georgetown Project study area in the Town of Halton Hills [Google Maps 2013].

This Existing Conditions Report (ECR) has been prepared to inform the client as to the result of the survey and the current conditions of the study area with regard to built heritage and cultural heritage landscapes. Known municipal cultural heritage significance is indicated in Table 1. Other identified resources have not been evaluated under Ontario Regulation 09/06 of the OHA for heritage interest/value. The ECR identification has been prepared to better inform the planning and design decision-making process. A subsequent cultural heritage assessment report to address the impacts to built

heritage and cultural heritage landscapes as a result of the development planning process and provide mitigation recommendations will build on this first stage report.

2.0 DESCRIPTION OF STUDY AREA

The study area is located within the central part of the Town of Halton Hills and encompasses Lots 11 to 15, Concession 8 NS, geographical township of Trafalgar, Historically, this land was developed for agricultural purposes in the early to mid 19th century. The lots run east to west, as laid out in the original township survey, and were typically divided into two, 100 acre properties, one fronting onto Trafalgar Road on the west and the other onto Eight Line on the east. The historical hamlets of Ashgrove and Stewarttown developed in the mid 19th century at the intersections of 10 Side Road and 15 Side Road, respectively.

The physiography in the Town of Halton Hills is the result of glacial action that occurred during the late Lake Wisconsin period of the Pleistocene Era. Advances and the melting of huge continental ice sheets characterized this era. The Niagara Escarpment, a high relief of bedrock, bisects the Town from southwest to northeast. The watershed of the Credit River traverses the area. Overall, the vegetation of the area consists predominantly of agricultural lands with scattered woodlands and wetlands.

The area remains largely as rural agricultural land in character and use; however, it is in transition to more urban use. Both the population centre of Stewarttown and the crossroads hamlet of Ashgrove experienced residential development in the latter part of the 20th century.

3.0 **BACKGROUND/ASSESSMENT**

3.1 **Historical Overview of the Study Area**

3.1.1 **Esquesing Township**

Charles Kennedy and Richard Bristol conducted the first survey of Esquesing Township in 1818. The survey was organized into a grid pattern of 11 concessions with 32 lots each. Originally part of the Gore District, which included the area that became Halton and Wentworth Counties, Esquesing Township was established in 1816 as part of the area encompassing the future Halton County. In 1853, Halton County separated with Wentworth and received full municipal and judicial powers on January 1, 1855. It included the townships of Trafalgar, Nelson, Nassagaweya and Esquesing.²

¹ Livingstone, Dawn. "Are You the One?" Access: --< http://www.esquesinghistoricalsociety.ca/ ioinUs.htm> (October 2013).

² Illustrated Historical Atlas of the County of Halton Ontario (Toronto: Walker & Miles, 1877) 54-55; and Gibson, Colin. "Stewarttown: Capital of Esquesing", Tackaberry Times. Access: -- (October 2013).

In 1819, James Hume and Ronald MacDonald arrived in Esquesing Township as its first settlers. The village of Esquesing (renamed Stewarttown in 1849) was founded in 1819 on Credit River at the Seventh Concession (Trafalgar Road). Other early township settlements included, amongst others, Georgetown founded in 1823, Dansville, renamed Acton in 1844, and the hamlet of Ashgrove at the intersection of Seventh Line (Trafalgar Road) and 10 Side Road around 1820. Georgetown, located on the Credit River, became the site in 1888 of first paper mill in Canada to use hydroelectric power. Acton's early industries also included a saw and gristmill; however, the local tannery became the settlement's main industry.

The township developed quickly, and the first town meeting was held on January 1, 1821. The population had reached 424 in that year.³ Esquesing's population was predominately composed of immigrants from the British Isles (England, Ireland and Scotland). The first post office in the township was opened in 1820 at the home of Henry Fyfe on Lot 9, Concession 7. It was moved to the village of Esquesing in 1840.⁴ By 1846, *Smith's Canadian Gazetteer* was reporting that 57,347 acres of Esquesing's total 66,700 acres had been purchased and 19,622 acres were under cultivation. The township was described as a fine township with excellent land and many good farms, which are generally well cultivated.⁵

Two main roads were opened in the township in the 1830s. York Road, which eventually connected Little York (Toronto) to Guelph, reached Georgetown in 1832.⁶ In the 1830s, the Gore District Council decided to build a road running northwards from Oakville to the township of Erin through the townships of Esquesing and Trafalgar to facilitate the transportation of goods. The road followed the Seventh Concession in Esquesing passing through Ashgrove and Stewarttown. It was named the Garafraxa Road when it was extended at a later date into Garafraxa Township.⁷ In 1850-51, the Trafalgar, Esquesing and Erin Road Company improved the road between Oakville and Stewarttown by building a plank/corduroy road. Stewarttown was the site of its official opening ceremony dinner. The road was later extended to Georgetown. In the 1860s, the planking, which proved to be too expensive to maintain, was replaced by a gravel surface.⁸

By 1877, two railway companies had built lines through Esquesing Township, namely, the Grand Trunk Railway and the Hamilton and Northwestern Railway. The Grand Trunk Railway had a line in the northern part of the township passing through Georgetown and Acton, and the Hamilton and Northwestern Railway ran diagonally northwards through the township, passing just north of Stewarttown. Esquesing Township was described in 1877 as a well developed agricultural landscape with established farmsteads, an established grid pattern of sidelines and concession roads, numerous villages and hamlets, schools, churches and small business

Unterman McPhail Associates Heritage Resource Management Consultants

³ Illustrated Atlas, 55.

Gibson, "Stewarttown: Capital of Esquesing".

⁵ The Esquesing Historical Society, The Historical Hamlet of Ashgrove. Access: --

http://www.esquesinghistoricalsociety.ca/Communities/VillageAshgrove.html (October 2013);

W.H. Smith, Smith's Canadian Gazetteer (Toronto: H & W Rowsell, 1846) 56.

⁶ Illustrated Atlas, 55.

⁷ Steven J. Brown and Krista A. Taylor. *East Garafraxa, A History* (Orton: The Corporation of the Township of East Garafraxa, 2006) 15.

⁸ Brown & Taylor, 17-18; Gibson, "Stewarttown: Capital of Esquesing".

⁹ Illustrated Atlas, 55; Gibson, "Stewarttown: Capital of Esquesing".

enterprises that served the local population, as well as, larger commercial mills and businesses in the larger population centres. ¹⁰

Twentieth century topographic maps indicate the township remained essentially rural and agricultural in character outside of the population centres through most of the century. By the end of the 20th century and into the 21st century urban development and growth had taken place, for the most part, around the centres of Acton, Georgetown and Stewarttown. The Town of Halton Hills was established in 1974 through the amalgamation of the Towns of Georgetown and Acton, much of the land comprising Township of Esquesing and a small section of the Town of Oakville north of Highway 401.

3.1.2 Stewarttown

The village of Esquesing (renamed Stewarttown in 1849) was founded in 1819 on the west bank of the Credit River on the Seventh Concession. Stewarttown's early industries included saw and gristmills. In the 1840s, John and Duncan Stewart dammed the Credit River to increase the power needed for their saw and gristmills. The first post office in Esquesing Township was established in 1820 in the store of Henry Fyfe at Lot 9, Concession 7 and later moved to Stewarttown. The Village of Esquesing became Stewarttown at a town meeting on February 28, 1849. Stewarttown became the seat of local government in 1850.

In the early 1850s, with the arrival of the railway and problems due to a non-resident owner of the mills, Stewarttown suffered an economic decline in the 1850s that lasted into the 1870s. By 1877, the population had reached over 200 people. The Lawson Bros. had taken over the mills, erecting a steam sawmill and planning to build a steam shingle mill. A flour mill was operating on the west branch of the Credit River. Other industries in the late 1870s included, but were not limited to, Captain Johnston's saw and shingle mill, a tannery, a saddle and harness maker, and a blacksmith.¹³

In 1963, new township offices were built north of Stewarttown on Trafalgar Road. On January 1, 1974, Halton County became the regional municipality of Halton, and the name Halton Hills was adopted for the area comprising Esquesing Township and part of the old Trafalgar Township. The Town of Halton Hills government is held in the Civic Centre in Georgetown.

3.1.3 Ashgrove

The hamlet of Ashgrove in Esquesing Township was established at the intersection of Seventh Line (Trafalgar Road) and 10 Side Road around 1820. It was originally known as Leonard's Corners after Edward Leonard who built a hotel on the intersection.

Irish born Samuel Watkins arrived in the Ashgrove area in 1817 and acquired property on three corners of the intersection. His business operations included grain storage sheds, which were

¹⁰ Illustrated Atlas, 55.

¹¹ Illustrated Atlas, 56; Gibson, "Stewarttown: Capital of Esquesing".

¹² Gibson, "Stewarttown: Capital of Esquesing".

¹³ Illustrated Atlas, 55.

used by farmers from as far away as Hillsburgh, and the transportation of the grain to the Oakville Harbour. Watkin's son, Thomas C. Watkins operated a store in the settlement from 1844 until 1847. He then moved to Hamilton. Other hotels and stores were built in the hamlet in the early years, with the hotels servicing the stagecoach travel along Seventh Line. The Ashgrove United Church, originally a Methodist New Connexion Church, was built in 1860 on Lot 9. Concession 8. A cemetery was established across the road. The Ashgrove Public School opened in 1842. In 1851, the School Section built a frame building about one-half mile south of the hamlet. A brick building replaced it in 1870. By 1877, Ashgrove was described as having a hotel, blacksmith shop, a store and a post office and is shown as being developed on the northeast, southwest and southeast corners of the intersection.¹⁴

Twentieth century topographic maps continue to show Ashgrove as a crossroads hamlet.

4.0 **RESULTS/FINDINGS**

Unterman McPhail Associates undertook a windshield survey of the study area for the Vision Georgetown Project in August 2013 to identify heritage resources older than 40 years of age within and adjacent to the study area for an Existing Conditions Report. The identification of cultural heritage resources is based on age, architecture, site context, historical settlement and cultural landscape context. Known municipal cultural heritage significance is indicated in Table 1. Other identified resources have not been evaluated under Ontario Regulation 09/06 of the OHA for heritage interest/value. The ECR identification has been prepared to better inform the planning and design decision-making process. A subsequent cultural heritage assessment report to address the impacts to built heritage and cultural heritage landscapes as a result of the development planning process and provide mitigation recommendations will build on this first stage report.

The identified cultural heritage resources, including cultural heritage landscapes (CHL) and built heritage resources (BHR), are listed in the Table 1 and mapped in Figure 2. Table 1 includes a site number, resource category, resource type, location, description, heritage recognition and digital photographs or an aerial view of the site. The identified sites are mapped in *Figure 2* and described in Table 1.

The following explanatory notes provide background material on the information contained in Table 1.

- Sites are numbered and mapped generally in a counter clockwise manner from east to west around study corridor.
- o Resources are identified by category: Cultural Heritage Landscape (CHL) or Built Heritage Resource (BHR) and by type: roadscape, farm complex, church/cemetery, residence, etc.
- The municipal address, when applicable, locates the identified cultural heritage resources.

¹⁴ Ibid., 56.

- A brief description of the cultural heritage resource, e.g., notable landscape features, structures on the property, construction period(s), building materials, roof shape, number of storeys, important architectural details, architectural style or influence and alterations/additions, is based upon information gained from the public roadway.
- Digital photographs of the resource, with a caption, taken from the public roadway are supplied for each resource. Where access was not provided or the resource is not visible from the public roadway, an aerial photograph is provided. An historical map was used for the historical settlements.

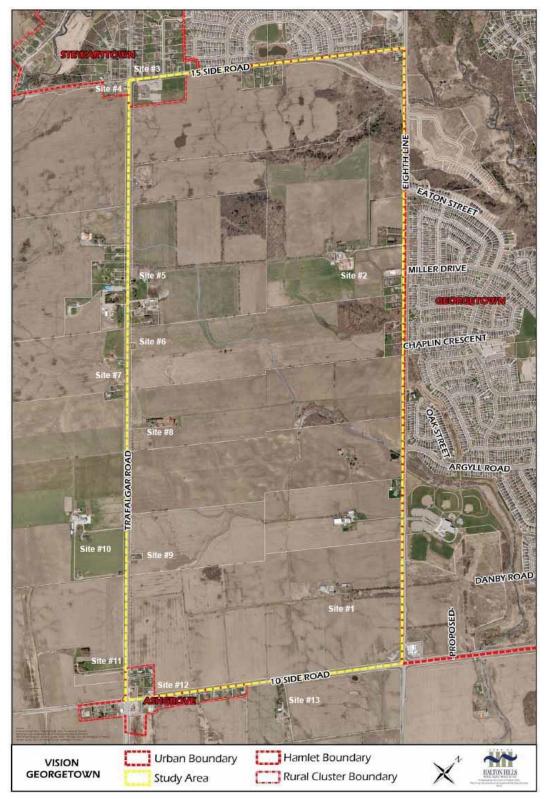


Figure 2. Map showing site number of the identified built heritage resources and cultural heritage landscapes located within and adjacent to the study area for the Vision Georgetown Project

TABLE 1: IDENTIFIED CULTURAL HERITAGE LANDSCAPES (CHL) AND BUILT HERITAGE RESOURCES (BHR) LOCATED WITHIN OR ADJACENT TO THE VISION GEORGETOWN PROJECT STUDY AREA Site # Category **Description** Heritage Photograph/Aerial/ Map Resource Location Recognition Type Included on the Town 1. CHL Within the Study Area Farm Complex Agricultural Reed Farmhouse of Halton Hills Heritage Register. No. 10014 (also known as 10114) Eighth Line, Constructed in 1882, this 1 ½ west side storey dichromatic brick (Lot 11, Con. 8, structure is set on a rubble stone foundation and has a geographical township of Esquesing) Town of multiple gable roof with a centre gable on the north Halton Hills (front) elevation and a View of the east and north elevations of 10014 distinctive triple gable on the Eighth Line. east elevation. Window openings have stone sills, arched yellow brick voussoirs with labels and a projecting narrow brick band. The farmhouse was vacant at the time of the survey, and has not been properly secured against vandalism or deterioration by the elements. View of the farm lane at 10014 8th Line west from Eighth Line. Associated with the landscape is a tree lined farm lane, a windbreak north of lane, and mature trees to the east and south sides of the farmhouse

TABLE 1: IDENTIFIED CULTURAL HERITAGE LANDSCAPES (CHL) AND BUILT HERITAGE RESOURCES (BHR) LOCATED WITHIN OR ADJACENT TO THE VISION GEORGETOWN PROJECT STUDY AREA Photograph/Aerial/ Map Site # Resource Category Location Description Heritage Type Recognition CHL Within the Study Area 2. Not included on the Agricultural Farm Complex Town of Halton Hills No. 10686 Eighth Line Constructed c 1880, this 2 Heritage Register. west side storey dichromatic brick (Lot 14, Con. 8, structure sits on a rubble geographical township stone foundation and has a 1 of Esquesing) Town of ½ storey brick tail wing, a hip Halton Hills roof with centre gable on the east elevation and a boxed cornice with decorated frieze and brackets. Stone sills and arched yellow brick voussoirs accent the window openings View of east and north elevations of 10686 with 2/2 double hung sashes. Eighth Line. The east (front) elevation has W.L a double leafed door with a distinctive arched transom and bay window. Associated with the landscape are mature trees lining the north side of the farm lane; a complex of farm outbuildings, including a gambrel roof bank Bank barn on property. barn (built 1890s, modernized 1920s), a poured concrete silo, older sheds, and modern structures. Tree lined drive.

esource ype	Category	Location	Description	Heritage Recognition	Photograph/Aerial/ Map
	Historical Settlement	Adjacent to the Study Area Trafalgar Road and 15th Side Road (Lots 15 & 16, Con. 7 & 8, geographical township of Esquesing) Town of Halton Hills	Stewarttown This historical settlement was established in 1819 on the Credit River at Trafalgar Road. The Village of Esquesing took on the name Stewarttown in 1849, and became the seat of local government in 1850. In 1877 it had over 200 people and numerous mills and businesses. In 1963, new township offices were built north of Stewarttown on Trafalgar Road. On January 1, 1974, Stewarttown became part of the Town of Halton Hills.	Not included on the Town of Halton Hills Heritage Register as a cultural heritage landscape, but several individual buildings within Stewarttown, but not within the Vision Georgetown study area, are included on the heritage register,	Map of Stewarttown from Illustrative Historical Atlas (1877).

Site #	Resource Type	Category	Location	Description	Heritage Recognition	Photograph/Aerial/ Map
4.	BHR	Religious	Adjacent to the Study Area No. 10996 Trafalgar Road, Stewarttown, east side (Lot 15, Con. 7, geographical township of Esquesing) Town of Halton Hills	St. John's Anglican Church This Gothic Revival style building, which has functioned as church since 1840, is a 1 storey stucco clad structure with a front gable roof, and Gothic window openings with 4/2 sashes. The upper sash has framing emphasizing a pointed design. There is a typical 3 window arrangement on the side elevations and 2 window openings on the front elevation on either side of the entrance, which has a gable roof porch that contains a bell. The entrance vestibule has 2 fixed sashes; the upper sash has complex glazing. There is a 1 storey rear addition with a gable roof.	Included on the Town of Halton Hills Heritage Register as a listed property.	View of the east and north elevations of 10996 Trafalgar Road.

Site #	Resource Type	Category	Location	Description	Heritage Recognition	Photograph/Aerial/ Map
5.	BHR	Residential	Within the Study Area No. 10677 Trafalgar Road, east side (Lot 14, Con. 8, geographical township of Esquesing) Town of Halton Hills	Residence This vernacular, 1 ½ storey, solid red brick structure is set on a rubble stone foundation and has a side gable roof with returned eaves and a chimney on north roof ridge. Window openings have stone sills (ground floor), wood lug sills upper floor, radiating brick voussoirs, and 2/2 sashes (ground floor). The front door opening has been altered, There is a 1 storey modern wing added to the rear of the building.	Not Included on the Town of Halton Hills Heritage Register	View of the north and west elevations of 10677 Trafalgar Road.

TABLE 1: IDENTIFIED CULTURAL HERITAGE LANDSCAPES (CHL) AND BUILT HERITAGE RESOURCES (BHR) LOCATED WITHIN OR ADJACENT TO THE VISION GEORGETOWN PROJECT STUDY AREA Photograph/Aerial/ Map Site # Resource Category Location Description Heritage Type Recognition Within the Study Area Mount Pleasant Wesleyan 6. CHL Not Included on the Religious Methodist Cemetery Town of Halton Hills Trafalgar Road, east Heritage Register. side In 1833, land was donated for (Lot 13, Con. 8, a cemetery and a schoolhouse geographical township or Methodist meeting house, or of Esquesing) Town of both. A chapel was built in Halton Hills 1844 and closed in 1858 when it was moved to Lot 16. Concession 8 and reopened as the Stewarttown Wesleyan Church in the following year. In the mid 20th century, the Ashgrove Women's Institute View of the Mount Pleasant Wesleyan Methodist removed the neglected Cemetery. cemetery markers on the east side and placed them in a concrete pad. The site is mainly a green space with a few isolated mature trees and shrubs. 7. CHL Agricultural Adjacent to the Study Farm Complex Not Included on the Town of Halton Hills Area This early 20th century farm Heritage Register. No. 10552 Trafalgar complex contains a 2 storey Road, west side red brick house with a hip roof (Lot 13, Con. 7, set on a concrete block View southwest to 10552 Trafalgar Road. geographical township foundation. An early 20th of Esquesing) Town of century, gambrel roof, bank Halton Hills barn set on a poured concrete foundation and a concrete silo are located to the north of the farmhouse.

Site #	Resource Type	Category	Location	Description	Heritage Recognition	Photograph/Aerial/ Map
8.	BHR	Residential	Within the Study Area No. 10445 Trafalgar Road, east side (Lot 13, Con. 8, geographical township of Esquesing) Town of Halton Hills	Residence Built circa 1910-1920, this Edwardian style, 2 ½ storey, red brick structure has a cut stone foundation, a cross gable roof with a slate roof and 2 tall chimney stacks. Typical window openings have stone lintels and sills and 1 /1 sash. Oriel window openings with wood surrounds and shallow brackets are found on the south projection. A Palladian window accents the west gable. There is a 1 storey 'front veranda, side veranda and a 1 storey rear wing.	Not Included on the Town of Halton Hills Heritage Register.	View of the west and south elevations of 10445 Trafalgar Road.
9.	BHR	Residential	Within the Study Area No. 10229 Trafalgar Road, east side (Lot 12, Con. 8, geographical township of Esquesing) Town of Halton Hills	Residence This vernacular 2 storey structure was built in the late 19th or early 20th century. It sits on a rubblestone foundation, is clad in modern siding and has an asphalt shingled, cross gable roof. A 1 storey veranda is located in the "L" on the front elevation. Typical window openings are 2 x 2 sashes (ground floor) and 5 x 2 sashes (upper floor) and there is a 1 storey bay window on front ground floor.	Not Included on the Town of Halton Hills Heritage Register.	View of the north and west elevations of 10229 Trafalgar Road.

TABLE 1: IDENTIFIED CULTURAL HERITAGE LANDSCAPES (CHL) AND BUILT HERITAGE RESOURCES (BHR) LOCATED WITHIN OR ADJACENT TO THE VISION GEORGETOWN PROJECT STUDY AREA Photograph/Aerial/ Map Site # Resource Category Location Description Heritage Recognition Type CHL Adjacent to the Study Not Included on the 10. Farm Complex Agricultural Town of Halton Hills Area Heritage Register. This 19th century, 1 ½ storey dichromatic brick residence is No. 10284 Trafalgar set on a cut field stone Road, west side (Lot 12, Con. 7, foundation. It has a cross geographical township gable roof with an additional of Esquesing) Town of gable centred over the 1 storey Halton Hills veranda, an "L" plan structure View to the east elevation of 10284 Trafalgar, with rounded window openings above; the barn below. in the gables, a bay window and 2 /2 sashes and a front entrance with side lights and a rectangular transom. The large barn has a gable roof with dormers and sits on a cut stone foundation. It has an attached gable roofed shed. A tree lined farm lane and mature trees around the house accent the site.

TABLE 1: IDENTIFIED CULTURAL HERITAGE LANDSCAPES (CHL) AND BUILT HERITAGE RESOURCES (BHR) LOCATED WITHIN OR ADJACENT TO THE VISION GEORGETOWN PROJECT STUDY AREA Photograph/Aerial/ Map Site # Resource Category Location Description Heritage Type Recognition CHL Adjacent to the Study 11. Farm Complex Not Included on the Agricultural Area Town of Halton Hills This vernacular Gothic style, 1 Heritage Register. ½ storey solid brick residence No. 10054 Trafalgar sits on a stone rubble Road, west side (Lot 11, Con. 7, foundation and has a gable roof with a centre gable geographical township of Esquesing) Town of accented by decorative vergeboard. The rectangular Halton Hills plan structure has a tail wing. The window openings are flat headed with radiating brick The east elevation of the farmhouse at 10054 Trafalgar Road, above; and north elevation of voussoirs (ground floor) and modern 6 x 6 sashes. The front the barn and attached shed, below. entrance has side lights and a rectangular transom. The large gable roof barn with a dormer sits on a fieldstone foundation. There is an attached gable roof shed. A tree lined farm lane and mature trees around house are elements of the landscape.

Site #	Resource Type	Category	Location	Description	Heritage Recognition	Photograph/Aerial/ Map
12.	CHL	Historical Settlement	Within the Study Area (Northeast corner) Trafalgar Road and 10 th Side Road (Lot 11, Con. 8, geographical township of Esquesing) Town of Halton Hills	Ashgrove was established at the intersection of Seventh Line (Trafalgar Road) and 10 Side Road around 1820. It was originally known as Leonard's Corners. By 1877, Ashgrove was described as having a hotel, blacksmith shop, a store and a post office. Twentieth century topographic maps show Ashgrove as a crossroads hamlet through that century. On January 1, 1974, Esquesing Township, including Ashgrove, became part of the Town of Halton Hills. Currently, the northeast corner of the centre comprises residences, principally from the latter part of the 20th century.	No properties located in the northeast corner of Ashgrove are included on the <i>Town of Halton Hills Heritage Register</i>	Ashgrove as shown on the Esquesing Township Map in the Illustrative Historical Atlas (1877).

ite#	Resource Type	Category	Location	Description	Heritage Recognition	Photograph/Aerial/ Map
13.	BHR	Residential	Adjacent to the Study Area No. 13552 10 Side Road, south side (Lot 10, Con. 8, geographical township of Esquesing) Town of Halton Hills	John Wilson Farm Residence This building was not visible from the public roadway during the survey and since it is located outside of the study area, access was not available. The Town of Halton Hills Heritage Register notes the property is associated with the Wilsons, a prominent local family, and that the farmhouse is a good example of Italianate architecture with paired brackets, hip roof and arched windows.	Included on the Town of Halton Hills Heritage Register as a listed property.	Aerial view of the property at 13552 10 Sid Road [Google Earth, 2005].

Site #	Resource Type	Category	Location	Description	Heritage Recognition	Photograph/Aerial/ Map
14.	CHL	Agricultural	Within the Study Area Lots 11 to 15, Concession 8, geographical township of Esquesing) Town of Halton Hills	Existing and Former Agricultural land The study area was first settled in the early 19th century and well-developed as rural agricultural land by mid century. It has retained its historical agricultural character into the present with the historical landscape delineated by former and existing agricultural fields, tree lines, fence lines, and hedgerows. The east to west survey pattern of the original lots is clearly visible in the landscape. The few remaining farm complexes continue to define the historical agricultural character of the area. The CHL represents a	Recognition	VISION CASON Ulthan Boundary Study Area Rural Cluster Boundary Rural Cluster Boundary
				contextual descriptive layer and its cultural heritage merit		Aerial of the study area showing the east to wes lots, and agricultural character of the land.

5.0 CONCLUSIONS

Principal cultural heritage landscapes and aboveground built heritage resources older than forty years of age located within and adjacent to the study area were identified. Generally, development has the potential to adversely affect cultural heritage landscapes and built heritage resources by displacement and/or disruption. Built heritage resources and/or cultural heritage landscapes may experience displacement, i.e., removal, if they are located within the development area. There may also be potential for disruption, or indirect impacts, to cultural heritage resources by the introduction of physical, visual, audible or atmospheric elements that are not in keeping with their character and, or setting. Isolation of cultural heritage resources may occur due to severance of land. Isolation of a built heritage resource within a development can lead to demolition due to neglect and/or vandalism.

A total of fourteen (14) built heritage resources and cultural heritage landscapes were identified within and adjacent to the study area. A total of fourteen (14) heritage resources were identified. This includes nine (9) cultural heritage landscapes, one (1) associative agricultural landscape, one (1) cemetery, two (2) historical settlements of Ashgrove and Stewarttown adjacent to the study area, and five (5) farm complexes, and five (5) built heritage resources, comprising one (1) church and four (4) residences, were found within and adjacent to the study area. Three (3) identified properties, namely, 10014 (10114) Eighth Line (*Site #1)*, 10996 Trafalgar Road (*Site #4)* and 13552 10 Side Road (*Site #13*) are included on the Town of Halton Hills Heritage Register.

The *Ontario Heritage Act* (OHA) provides the framework for provincial and municipal responsibilities and powers in the conservation of cultural heritage resources. Individual properties may be designated of cultural heritage value under Part IV of the OHA by a municipality. In addition, municipalities may designate 'Heritage Conservation Districts' under Part V of the legislation. As laid out in subsections 27 (1) and 39.2 (1) of the OHA, the municipal clerk is required to keep a current register of properties of cultural heritage value or interest located in the municipality. The municipal register must include all properties designated under Parts IV and V of the OHA by the municipality or under Part IV by the Minister of Culture. Designation of heritage resources publicly recognizes and promotes awareness of heritage properties, provides a process for ensuring that changes to a heritage property are appropriately managed and that these changes respect the property's heritage value. This includes protection from demolition.

The OHA subsection 27(2) also allows a property that is not designated, but considered to be of cultural heritage interest or value by the municipal council, to be placed on the register; this is commonly referred to as "listing". In many cases, listed (non-designated properties) are candidates for protection under section 29 of the OHA. Although the listing of non-designated properties does not offer any specific protection under the OHA, section 2 of the Provincial Policy Statement of the Planning Act acknowledges "listed" properties.

SOURCES

- Archaeological Services Inc. Stage 4 Salvage Excavation of the Ashgrove site (AjGx-207) Part Lot 11, Concession 8, Geographic Township of Esquesing. Prepared for Mattamy Development Corporation and the Ministry of Tourism, Culture and Sport, 7 June 2013.
- Brown, Steven J. and Krista A. Taylor. *East Garafraxa*, *A History*. Orton: The Corporation of the Township of East Garafraxa, 2006.
- Mika, Nick and Mika, Helma. *Places in Ontario*. Volume 1. Belleville, Ontario: Mika Publishing Company, 1977.
- Illustrated Historical Atlas of the County of Halton Ontario. Toronto: Walker & Miles, 1887.
- Environmental Assessment Act RSO 1990, c. E.18. (as am. S.O. 1993, c. 27; 1994, c. 27; and 1996, c. 27).
- Guideline for Preparing the Cultural Heritage Component of Environmental Assessments. Ontario Ministry of Culture and Communications and Ontario Ministry of the Environment, October 1992.
- McIlwraith, Thomas, F. *Looking for Old Ontario*. University of Toronto Press. Toronto. 1998.
- Ontario Heritage Act. RSO 1990.
- Ontario Heritage Act Regulation 9/06: Criteria for Determining Cultural Heritage Value or Interest, January 25, 2006.
- Ontario Ministry of Culture. *Heritage Resources in the Land Use Planning Process*, Queen's Printer for Ontario, Toronto, 2006.
- Ontario Ministry of Culture. Info Sheets.
 - Cultural Landscapes in Ontario. November 27, 2007.
 - Eight Guiding Principles in the Conservation of Built Heritage Properties. Spring 2007.
 - Listing Cultural Heritage Properties on the Municipal Register. Spring 2007.

Heritage Conservation Principles for Land Use Planning. Spring 2007.

Town of Halton Hills Heritage Register. Phase 1: Consolidated November 14, 2012 and Phase 2: Approved by Council January 9, 2012.

Smith. W. H. Smith's Canadian Gazetteer. Toronto, Ontario: H & W Rowsell, 1846.

Websites

Gibson, Colin. "Stewarttown: Capital of Esquesing," *Tackaberry Times*.

Access: --http://www.tackaberrytimes.com/default.asp (October 2013).

The Esquesing Historical Society.

Brownridge, Betty. The Historical Hamlet of Ashgrove.

Access: -http://www.esquesinghistoricalsociety.ca/Communities/

VillageAshgrove.html > (October 2013).

Livingstone, Dawn. Are You the One?

Access: --< http://www.esquesinghistoricalsociety.ca/joinUs.htm> (October 2013).

Ontario Genealogical Society Halton-Peel Branch Mount Pleasant Wesleyan Methodist Church & Cemetery.

Access: --< http://www.haltonpeel.ogs.on.ca/h/es13.htm> (October 2013).

Maps

Map of Esquesing Township. Pope, J. H. *Illustrated Historical Atlas of the County of Halton Ontario* (Toronto: Walker & Miles, 1877)

Google Maps, 2013.

National Topographic Map. Brampton 30 M/12, 1922, 1938, 1964, 1985, and 1994.

Tremaine, George R., *Tremaine's Map of the County of Halton, Canada West.* G. R. & G. M. Tremaine, Toronto, 1858.



Appendix F:

Stage 1 Archaeological Resource Assessment

Type of Report	☑ Original☐ Revised☐ Addendum☐ Preliminary
Date of Submission to MTCS:	

Stage 1 Archaeological Resource Assessment
of the
Southwest Georgetown Integrated Planning Project,
Lots 11-14 and Part of Lot 15, Concession 8,
Geographic Township of Esquesing,
Town of Halton Hills,
Regional Municipality of Halton, Ontario

Prepared for:

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Stage 1 Archaeological Resource Assessment
of the
Southwest Georgetown Integrated Planning Project,
Lots 11-14 and Part of Lot 15, Concession 8,
Geographic Township of Esquesing,
Town of Halton Hills,
Regional Municipality of Halton, Ontario

EXECUTIVE SUMMARY

The Stage 1 Archaeological Resource Assessment of Southwest Georgetown Integrated Planning Project study area entailed consideration of the locations of previously registered archaeological sites, the original environmental setting of the property, nineteenth- and twentieth-century land use patterns, review of existing conditions based on a property inspection, the extent of previous archaeological assessments carried out within portions of the study area, and determinants of archaeological potential as derived from the *Master Plan of Archaeological Resources of the Regional Municipality of Halton*. This research has led to the conclusion that there is potential for the presence of significant precontact or Euro-Canadian archaeological resources throughout the vast majority of the study area.

In light of these results the following recommendations are made:

- Any future development within the study area, beyond those portions of Lots 11 and 12 that
 have already been examined and mitigated, must be preceded by Stage 2 archaeological
 assessment. Such assessment(s) must be conducted in accordance with the Ministry of
 Tourism, Culture and Sport's 2011 Standards and Guidelines for Consultant. This work is
 required prior to any land disturbing activities in order to identify any archaeological
 remains that may be present.
 - It should be noted that the archaeological assessment of any proposed development (e.g., a draft plan of subdivision) must be carried out on **all** lands within that particular subject property, not simply those lands identified as exhibiting potential in this study. It should also be noted that, depending upon outcomes, engagement with relevant First Nations may be required during the assessment process, consistent with the requirements of the 2011 *Standards and Guidelines for Consultant Archaeologists* and the general process outlined in the *Region of Halton Archaeological Master Plan* as summarized in Section 5.0 of this report.
- 2. The Lot 11 and the south half of Lot 12, Concession 8 portion of the study area has been subject to Stage 1-4 archaeological assessment and salvage excavations, and recommendations have been made to clear these lands of further archaeological concern in the relevant assessment reports filed with the Ontario Ministry of Tourism, Culture and Sport. As of the time of writing, the Ministry has not issued letters of concurrence with these recommendations.



ARCHAEOLOGICAL SERVICES INC.

PLANNING DIVISION

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1.0 PROJECT CONTEXT

1.1 Development Context

Archaeological Services Inc. was retained by Meridian Planning to conduct a Stage 1 Archaeological Resource Assessment of the Southwest Georgetown Integrated Planning Project, which consists of Lots 11-14 and Part of Lot 15, Concession 8 in the former Township of Esquesing, now in the Town of Halton Hills, Regional Municipality of Halton (Figure 1). The study area, which is bounded by Eighth Line, 10 Side Road, Trafalgar Road and 15 Side Road, encompasses approximately 425 hectares. Note that 15 Side Road diverts from the concession grid for a short distance west of Eighth Line and that the study area flanks both sides of the road in this locale.

This assessment forms part of a broader Secondary Plan for the Southwest Georgetown Future Residential/Mixed Use Area, guided by the Halton Hills Official Plan (as amended by Official Plan Amendment No. 10), the Town Strategic Plan, and Regional Official Plan Amendment No. 38. The assessment was conducted under the project management and project direction of David Robertson (MTCS PIF P372-027-2013), as required by the Ontario Planning Act. All activities carried out during this assessment were completed in accordance with the terms of the Ontario Heritage Act and the Ministry of Tourism, Culture and Sport's 2011 *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011).

Permission to access the subject property and to carry out all necessary activities necessary for the completion of the assessment was granted by the landowners' group via Meridian Planning on August 15, 2013.

2.0 HISTORICAL CONTEXT

The study area consts of Lots 11-14 and the major portion of Lot 15, of Concession 8 in the former Township of Esquesing. The rural communities of Stewarttown and Ashgrove are located at the general northwest and southwest corners of the study area, respectively.

In 1819, the government of Upper Canada entered into the purchase of the lands that would become Nassagaweya and Esquesing, and Nelson and Trafalgar townships from the Mississaugas (Mathews 1953:8). These four townships formed the original County of Halton, which was governed by Justices in Quarter Session of the larger Gore District until the Baldwin Act established smaller municipal districts in 1849 (Clark 1955:131). While agriculture formed the economic foundation of the township, paper and woolen milling, tanning and brewing were important early industries.

Most of the early families to establish themselves in Esquesing Township following its survey into lots and concessions originated from Britain. The population of the township was 424 by 1821 and around 6,000 by 1876, excluding the communities of Georgetown and Acton (Mika and Mika 1981, Walker and Miles 1877).



The first post office, known as Esquesing, was established in 1832 at the intersection of Trafalgar Road and 15 Sideroad. This crossroads community was later renamed Stewarttown, in honour of Duncan Stewart, one of the original settlers of the township. It was considered to be the oldest village in the township and was the site of a number of mills (Mika and Mika 1981, Walker and Miles 1877).

The Grand Trunk Railway arrived to the township in 1857, building its line through Georgetown, which prospered in consequence. The fact that it by-passed Stewarttown resulted in a decline in the fortunes of that community, at least temporarily. However, by the mid-1870s, Stewarttown boasted water and steam mills for grist, lumber and shingles, employing at least 30 hands, a tannery, saddle and harness maker, blacksmith, a two-storey brick school, two churches, a public hall, a drill shed for the local militia, and several fraternal lodges. Its population at the time was around 200 (Miles and Walker 1877).

A post office was opened at Ashgrove in 1852. By 1876, the community was served by a hotel, blacksmith shop and store as well, but it was noted that "the business done here is very small" (Miles and Walker 1877).

Historical Map Sources

The 1858 map of the County of Halton, Canada West (Tremaine 1858) and the 1877 *Illustrated Historical Atlas of the County of Halton* (Miles and Walker (1877) were reviewed to determine the potential for the presence of nineteenth-century Euro-Canadian archaeological resources within the study area (Figures 2-3). Similarly, early twentieth-century topographic maps were reviewed to evaluate the extent of any land use changes up to that time (e.g., Figures 4-6).

The 1858 and 1878 maps provide a record of the owners/residents of the individual properties that make up the study area and the features that had been established on the properties (Tables 1 and 2), although it must be noted that not all features of interest were mapped systematically on these maps, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided. Moreover, not every feature of interest would have been within the scope of the surveyors or map compilers.

Table 1 Property Owners and Historic Features Illustrated within the Study Area on the 1858 Tremaine Map

Lot	Owner(s)	Feature(s)
11 (south 1/4)	John Hunter	No features depicted
11 (north 3/4)	Henry Hoffman	No features depicted
12 (south ½)	M. Parker	No features depicted
12 (north 1/2)	George Wisdom	No features depicted
13 (south ½)	Peter Miller	No features depicted
13 (north ½)	Estate of William Applebee	No features depicted
14 (west ½)	H.P. Thompson	No features depicted
14 (east ½)	Thomas Reid	No features depicted
15 (east 1/4)	Thomas Reid	No features depicted
15 (southwest 1/4)	T. Sparrow	No features depicted
15 (northwest 3/4)	Thomas Reid	No features depicted



Table 2 Property Owners and Historic Features Illustrated within the Study Area on the 1877 Historical Atlas

Lot	Owner(s)	Features
11	Henry Huffman	Building (east half), 2 orchards (east half), "built up" area of
		Ashgrove at intersection)
12 (south 1/2)	Robert A. Reed	Building and orchard (east 1/2)
12 (north ½)	Thomas A. Reed	Building and orchard (east ½)
13 (south ½)	Andrew Miller	Building and orchard (west ½)
13 (north ½)	John S. Appletree	Three buildings, cemetery and orchard (west ½)
14 (west ½)	P.M. Rowe	One building and two orchards (west 1/2)
14 (east ½)	Henry A. Reid	One building and two orchards (central)
15 (southwest 1/4)	Thomas Sparrow	Building and orchard (west ½)
15 (west central 1/4)	Mrs. William Webber	No features depicted
15 (northwest 1/4)	Mrs. Ann J. Johnson	Building and "built up" area of Stewarttown at intersection
15 (severance of	S. Campbell	Building and orchard
northwest 1/4)	-	
15 (east ½)	Henry A. Reid	No features depicted

The 1877 atlas reveals a comparatively established agrarian landscape, with farmsteads established on almost all of the individual properties, as well as development at the crossroads communities of Ashgrove and Stewarttown.

A cemetery is also shown on Lot 13, fronting the road between Concessions 7 and 8 (Trafalgar Road). Known as the Mount Pleasant Weslyan Methodist Cemetery, this plot was set aside in 1833 as the site of a school and/or Methodist meeting house and graveyard. A roughcast chapel was apparently built on the land in 1844, but was closed in 1858 after the congregation built another chapel on Lot 16, Concession 8 to the north of the study area. Some burials may still have been made in the cemetery after the meeting house was closed (Robinson 2008). The surviving grave markers have been consolidated into a single monument. The extant stones cannot be taken to be indicative of the number of interments in the cemetery. Nor can the extent of the area used for burials be assumed to be confined to area defined by the existing boundary features.

The majority of the structures shown on the 1877 map appear to survive into the first decades of the twentieth century as reflected by the settlement patterns shown on the 1909-1922 topographic mapping. Exceptions include the farmstead shown on the Thomas Sparrow property (the southwest quarter of Lot 15) which is only shown on the 1909 sheet, and the farmstead shown on the P.M. Rowe property (the west half of Lot 14), which is not depicted by 1922 (Figure 4-6).

3.0 ARCHAEOLOGICAL CONTEXT

3.1 Physiographic Setting

The study area is located in the South Slope physiographic region of southern Ontario, a short distance east of the Niagara Escarpment. Specifically, it falls within the Ashgrove Till Plain. The topography of this portion of the South Slope is characterized by subdued morainic relief. The terrain is gently to steeply



rolling (Chapman and Putman 1984: 172). The soils of the northernmost portion of the study area (the majority of Lots 14 and 15) were mapped as loams and sandy loams for the purposes of the archaeological site potential model developed for the *Master Plan of Archaeological Resources of the Regional Municipality of Halton* (ASI 1998, 2009). The balance of the study area was mapped as clay loams. The majority of these soils were classed as well-drained. The pre-settlement forest of the area was dominated by maple (likely sugar maple [*Acer saccharum*]) and beech (*Fagus grandifolia*), with frequent associates of oak (*Quercus* sp.), pine (*Pinus* sp.), basswood (*Tilia americana*), and elm (*Ulmus* sp.). Prenineteenth-century clearance records note that extensive stands of pine were a prominent feature of the forest cover.

The Lot 11-14 portions of the subject property are drained by a network of headwater tributaries of East Sixteen Mile Creek, while Lot 15 is traversed by a tributary of the West Branch of the Credit River. Black Creek, another major tributary of the West Branch of the Credit, flows through the Stewarttown area, north of the study area.

3.2 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the subject property and surrounding area, three sources of information were consulted: the site record forms for registered sites housed at the Ministry of Tourism, Culture and Sport (MTCS), published and unpublished documentary sources, and files located at Archaeological Services Inc.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MTCS. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referenced by a four-letter designator, and sites within a Borden block are numbered sequentially as they are found. The subject property under review is located within Borden block AjGx.

Seven archaeological sites have been registered within the limits of the study area. All were documented during the course of a Stage 1-2 Archaeological Resource Assessment of Lot 11 and the south half of Lot 12 conducted by Golder Associates between 2007 and 2009 (Golder 2012a, 2012b). These sites include two isolated finds of Early Archaic Kirk corner-notched (c. 8000-7000 B.C.) projectile points (AjGx-203 and AjGx-208), and a third isolated find of a Late Archaic to Early Woodland Adena projectile point (c. 1100 B.C.-A.D. 400). All of these finds are likely the result of random discard or loss on the part of mobile task groups.

The remaining three registered sites are associated with the nineteenth-century agricultural settlement of Lots 11 and 12. Golder carried out Stage 3 site-specific archaeological resource assessments at each site (Golder 2012c). This was followed by complete Stage 4 salvage excavations at each site, which were completed by ASI in 2012 (ASI 2012a, 2012b, 2013). The Ashgrove site (AjGx-207) was established as a domestic residence in the 1830s and expanded to include a blacksmith shop by at least 1849. It continued



as a blacksmith shop until approximately 1884. The shop was owned and operated by three people, Robert McKinnon, Thomas Walsh, and William Hood, and performed general blacksmithing for the historic hamlet of Ashgrove and the neighbouring farming communities. While the numerous occupations make it impossible to link specific artifacts to individual occupants, most of the material culture suggests that the inhabitants were not very affluent. The Atkinson site (AjGx-202) represents the farmstead established in the late 1830s or early 1840s by Lambert Coatis or Frank Atkinson and their families and continued to be occupied until John Hunter purchased the land in 1851. The Watkins-Huffman site (AjGx-205) represents a farmstead occupied by the Watkins and later the Huffman families from circa 1836 to the twentieth century.

An additional five sites have been documented within approximately one kilometre of the study area's boundaries (Table 1).

Table 3: Registered Arc	chaeological Sites	within an A	pproximate 1km Radius of the Study Area
	- 1	1	

Borden	Site Name	Cultural Affiliation	Site Type	Researcher
AjGx-68	-	Late Archaic	Isolated Find	ASI 1991
AjGx-70	_	Early Woodland	Isolated Find	ASI 1993
AjGx-119	_	Undetermined Precontact	Isolated Find	ASI 2000
AjGx-120	Little McKInnon	Multi-component:		ASI 2001
•		Paleo-Indian	Isolated Find	
		Euro-Canadian	Farmstead	
AjGx-121	John E. Reid	Euro-Canadian	Farmstead	ASI 2000
AjGx-202	Mattamy 1/Atkinson	Euro-Canadian	Farmstead	Golder 2007
AjGx-203	Mattamy 5	Early Archaic	Isolated Find	Golder 2007
AjGx-204	Mattamy 6	Late-Archaic-Early Woodland	Isolated Find	Golder 2007
AjGx-205	Mattamy 7/ Watkins-Huffman	Euro-Canadian	Farmstead	Golder 2007
AjGx-206	Mattamy 9	Undetermined Precontact	Isolated Find	Golder 2007
AjGx-207	Mattamy 10/Ashgrove	Euro-Canadian	Farmstead	Golder 2007
AjGx-208	Location 12	Early Archaic	Isolated Find	Golder 2007
AjGx-226	Reed	Euro-Canadian	Farmstead	ASI 2011

3.3 The Predevelopment Landscape and Modelling Aboriginal Archaeological Resource Potential

Water is arguably the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in southern Ontario after the Pleistocene era, proximity to water can be regarded as the primary indicator of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modelling of archaeological site location.

The Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011:4-5, 7) stipulate that undisturbed lands within 300 m of primary water sources (lakes, rivers, streams, creeks, etc)., secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc)., ancient water sources, and the shorelines of extant or former waterbodies are considered, at a generic level, to exhibit archaeological potential. A variety of other criteria that may indicate potential are also identified in the MTCS document, however, they generally are not relevant to the study area.



The generic MTCS distance to water potential model has been refined for the Region of Halton, as part of the Master Plan of Archaeological Resources (ASI 1998, 2009). The 1998 analysis of the distribution of known archaeological resources indicated that 85% of all registered precontact sites in the region are found within 200 metres of water, which suggested that a buffer zone extending 200 metres from any water source constitutes an acceptable characterization of precontact archaeological site potential. The validity of this 200 metre threshold was reconfirmed by the 2009 review of the model and its effectiveness as a tool for identifying archeological potential (ASI 1998, 2009).

3.4 Property Inspection and Existing Conditions

A property inspection was conducted on September 9, 2013, under appropriate clear weather conditions, in order to document existing conditions and land uses of the study area lands (Figure 7, Plates 1-xxx) and to permit consideration of their implications with respect to the distribution of archaeological potential as derived on the basis of accepted criteria or indicators.

The property inspection was carried out by means of traveling around the perimeter of the study area and entering at key points (laneways, driveway etc.) in order to gain a comprehensive view of the study area.

Approximately 85% of the study area consists of active agricultural lands, while 10% is wooded. These wooded areas are generally located adjacent to sections of the various watercourses that drain the study area. The remaining 5% of the study area consists of residential lots, with four fronting Trafalgar Road, four fronting 15th Side Road, and ten fronting Eighth Line. There is a topsoil facility fronting Trafalgar in Lot 15 (photos 28, 30, 31, 33).

The topography is generally gently undulating across most of the study area, interspersed by the tributaries of East Sixteen Mile creek, all but two of which are evidently seasonal as they were dry at the time of the inspection.

The topography in the northeast corner of the study area is far more abrupt; it slopes down steeply to the tributary of the West Branch of the Credit and rises again sharply to the south and north. The top of bank to the south of this creek rises to a small hill, the highest rise in the study area. All the slopes and banks of the creek in the northeast corner of the study area wooded.

Although it can be difficult to precisely correlate farm complexes depicted on historical maps with extant structures, it would appear that a number of the nineteenth-century buildings have been demolished as they are no longer immediately visible in the modern landscape or modern aerial photography. These include the two houses shown in 1877 on the southwest quarter of Lot 15 (one of which the topographic mapping suggests disappeared between 1909 and 1915), the house south of Stewarttown on the northwest quarter of Lot 15 and the four houses located on Lot 13 to the south and southeast of the Mount Pleasant Cemetery.



4.0 ANALYSIS AND CONCLUSIONS

For the purposes of this study, attention is concentrated upon of the distribution of archaeological potential zones within the north half of Lot 12 and the Lot 13-15 portions of the study area. Lot 11 and the south half of Lot 12 have been subject to previous Stage 1-3 archaeological resource assessments and, where necessary, Stage 4 mitigative excavation of specific resources. Preliminary or final reports on all of this work have been submitted to the Ontario Ministry of Tourism, Culture and Sport in order to secure clearance of any further archaeological concerns with respect to these lands (Golder 2012a, 2012b, 2012c; ASI 2012a, 2012b, 2013).

4.1 Aboriginal Archaeological Resource Potential

As noted in Section 3.3, the 200 metre distance to water threshold is considered to be the primary criterion on which precontact archaeological potential is defined by the Region of Halton Master Plan of Archaeological Resources (ASI 1998, 2009), and so all identified sources of water within the study area have been buffered accordingly (Figure 8).

All of the north half of Lot 12 is considered to exhibit potential for the presence of precontact archaeological resources, as all portions of the property lie within 200 metres of tributaries of East Sixteen Mile Creek. Approximately 90% of the lands within Lot 13 and 60% of the lands within Lot 14 also fall within 200 metres of a tributary of East Sixteen Mile Creek (and a tributary of the West Credit River in the case of Lot 14) and so are considered to constitute areas of archaeological potential. All lands within the Lot 15 portion of the study area exhibit archaeological potential by virtue of the fact that they are within 200 metres of one of the numerous streams comprising the tributary creek of the West Credit River. Aside from areas of localized disturbance surrounding the existing farm complexes and residences within the study area, there are no apparent factors related to integrity that negate potential within these generally defined zones.

4.2 Euro-Canadian Archaeological Resource Potential

The original 1998 potential model for Euro-Canadian archaeological resources (ASI 1998) involved mapping of settlement centres as polygons to capture the range of their constituent features (e.g., meeting halls, school houses, blacksmith shops, stores, grain warehouses, hotels, taverns, etc.). In addition a wide variety of feature types that occurred outside of the major settlement centres were mapped individually as points buffered by a radius of 100 metres, if their locations were shown on maps dating to the first half of the nineteenth century. These included schools, places of worship and commercial buildings, such as inns, industrial features such as mills, manufactories, lime kilns, quarries and mines. Transportation routes such as trails, early settlement roads and early railways were buffered by zones of 50-100 metres either side.

Cemeteries and family burial grounds were included in the historic theme layer due to their particularly sensitive nature and the fact that these sites may become invisible in the modern landscape. All pioneer cemeteries listed in the Inventory of Cemeteries maintained by the Halton-Peel Branch of the Ontario



Genealogical Society (for which locations could be ascertained based on examination of the available mapping) were plotted and buffered.

Isolated rural homesteads, some of which are illustrated on various nineteenth century maps, were not incorporated within the master plan potential modelling. They were excluded for several reasons. First, neither nineteenth century maps nor more recent studies provide comprehensive locational data for rural homesteads. Second, isolated rural settlements (homesteads/farmsteads) were not specifically identified as a significant historical theme worthy of systematic archaeological inventory and investigation given their quantity and ubiquity (although this generalization may or may not pertain to any particular site). Third, it was thought that the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources) were likely to be captured together with precontact sites, since both were subject to similar environmental constraints. Finally, it was thought that a significant percentage of rural homesteads would be captured coincidentally to the buffering of other historic themes, particularly early settlement trails, roads, and railways. For the purposes of the 2009 up-date to the master plan, however, all rural farmsteads depicted on nineteenth-century mapping were incorporated within the potential model as points and buffered by 100 metres (ASI 2009).

Euro-Canadian archaeological potential zones within the study area (Figure 9) have been defined on the basis of these criteria, which is in keeping with the factors/features indicative of Euro-Canadian archaeological site potential identified in the 2011 Ministry of Tourism, Culture and Sport *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). The concession roads that define the majority of the study area limits have been buffered by 100 metres, as have the locations of all of the mapped 1877 farmsteads. The Stewarttown and Ashgrove settlement centres have been are also flagged. It should be noted that portions of the study area incorporate buffers around farm complexes located beyond the limits of the subject property. Given Euro-Canadian patterns of tenure and land use, these areas of potential are more apparent than real.

4.3 Composite Archaeological Potential

Combining the precontact and Euro-Canadian potential layers (Figure 10) results in well over 90% of the of the study area land mass being identified as exhibiting archaeological potential.

4.4 Summary

The Stage 1 archaeological assessment revealed that seven archaeological sites have been registered within the limits of the study area as a result of a Stage 1-2 archaeological assessment carried out on Lot 11 and the south half of Lot 12 (Golder Associates 2012a, 2012b). Four of the sites represent isolated finds of Early Archaic through Early Woodland projectile points and Golder Associates (2012a, 2012b) recommended that these sites be considered clear of any further archaeological concern. Stage 3 assessments and Stage 4 salvage excavations were carried out on the remaining three sites (Golder Associates 2012c; ASI 2012a, 2012b, 2013). An additional five sites had been registered within one kilometre of its limits.



The field review determined that with the major land uses within the study area are agricultural/rural with relatively few areas of disturbance. Based on application of the modelling criteria developed for the Region of Halton Archaeological Master Plan (ASI 1998, 2009), over 90% of the study area exhibits archaeological potential for the presence of precontact Aboriginal and/or Euro-Canadian archaeological resources.

5.0 ABORIGINAL ENGAGEMENT

The 2009 archaeological master plan review and up date included consideration of the emerging need for archaeological assessment, planning and mitigation programs to include an adequate Aboriginal engagement process with respect to precontact archaeological resources that may be affected by a proposed development. This was brought about in response to a series of recent events related to First Nations concerns with the prevailing development process in southern Ontario, which were seen to have important implications for the Regional Municipality of Halton. Most notable among these were the ongoing controversies over a proposed residential development within the Town of Caledonia and the status of Six Nations claims regarding past treaty processes and land disposition within the Haldimand Tract, as well as the Ipperwash Inquiry. In York and Durham regions, there had also been a number of Environmental Assessment Act related projects that have highlighted the need to engage Aboriginal communities and have resulted in protocols for First Nations consultation. Since that time, the with 2011 implementation of the Standards and Guidelines for Consultant Archaeologists, the Ministry of Tourism, Culture and Sports now requires that Aboriginal engagement between Stage 3 and 4 archaeological investigations on Aboriginal sites and recommends consultation before Stage 2 and 3 assessments. As a result, such consultation is now expected by many First Nations.

It is often assumed that the First Nation that is geographically closest to the project is the most suitable group with whom to consult, particularly when the issues at stake are those of archaeological resources and human remains. However, the complex histories of the First Nations of southern Ontario, both before and after European contact and settlement, means that such assumptions can be simplistic and detrimental to the success of the entire consultation process. This can be complicated by the fact that many archaeological sites are of such antiquity, or may yield such sparse material remains (in terms of representing culturally of "ethnically" diagnostic material, that no conclusive identification of affiliation to modern communities is possible. The same may or may not be true of any sites discovered as a result of future Stage 2 assessments that are undertaken as part of the secondary planning process and subsequent development.

Under circumstances of this sort there should be an effort to identify all groups that are appropriate (on cultural-historical grounds) to act as the designated descendants of those who occupied the project area in the past, and who are willing to participate and ensure that cultural heritage remains are treated in an appropriate and seemly manner. This identification process is best achieved through discussion with a variety of communities in order that they may themselves arrive at the final decision.

First Nations engagement with regard to archaeological site mitigation strategies in similar planning contexts may be used to provide a general understanding of preferred Stage 4 mitigation priorities and



actions. While there are different levels of concern for sites of various time periods and types, it should be noted that in all cases there is a presumption in favour of avoidance and preservation of any First Nation site that has not been disturbed by ploughing or other modern land uses. Any such site should be deemed to be of high cultural heritage value. An additional complicating factor is that many sites may represent occupations of more than one general time period. The existence of such different components on a single site may or may not be apparent upon conclusion of a Stage 3 assessment. In such cases, the most conservative mitigative option should be preferred.

The logic underlying this discussion is that archaeological sites of cultural heritage value are comparable, at the very least, to significant natural resource features, such as wetlands, in that they are scarce, fragile, and non renewable. They must therefore be managed in a similar manner and allowances for their existence and long term conservation must be made as early as is possible in the development planning process.

Paleo-Indian and **Early Archaic** sites, which on the basis of Stage 3 assessment are found to be more than a single isolated find, are deemed to be of high heritage value. Large sites of this period, (e.g., tool stone acquisition sites and large base camps used on multiple occasions) or specialized sites such as caches or burials should be protected. Caches and burials *may* be identified on the basis of Stage 3 assessment through the recovery of a suite of diagnostic/unusual artifacts. Smaller transitory camps or apparently single-occasion chert reduction events are also of high heritage value, but may be subject to salvage excavation, provided that the appropriate methodological approaches for such sites are applied (see 2011 *Standards and Guidelines*).

Middle Archaic, and **Late Archaic** sites, which on the basis of Stage 3 assessment are found to be more than a single isolated find, are deemed to be of high heritage value. Large sites of this period (e.g., tool stone acquisition sites and large base camps used on multiple occasions), or specialized sites such as caches, isolated burials, or cemeteries (which appear during the Late and Terminal Archaic) are of high value and should be protected. Caches, burials and cemeteries *may* be identified on the basis of Stage 3 assessment through the recovery of a suite of diagnostic/unusual artifacts. Sites that exhibit an unusual degree of preservation of organic materials are also of heightened value. Smaller transitory camps or apparently single-occasion chert reduction events are also of high heritage value, but may be subject to salvage excavation, provided that the appropriate methodological approaches for block excavation of such sites are applied (see 2011 *Standards and Guidelines*).

It should be noted that many lithic sites that produce debitage, but lack formal diagnostic tools are assumed to be of generalized Archaic origin. Such sites may be of almost any size, although larger sites will be more likely produce at least some formal tools that can be more specifically dated. Small lithic sites that cannot be ascribed a more specific date are generally regarded as having lower heritage value, at least in terms of their information potential, and are often not subject to any form of Stage 4 mitigation. Should such a site exhibit other unusual or unique attributes, however, preservation and/or salvage excavation would be required.

Early Woodland, **Middle Woodland** and **Transitional Woodland** sites, which on the basis of Stage 3 assessment are found to be more than a single isolated find, are deemed to be of high heritage value.



Large sites of this period (e.g., tool stone acquisition sites and large base camps used on multiple occasions), or specialized sites such as caches, isolated burials or cemeteries should be protected. Caches, burials and cemeteries *may* be identified on the basis of Stage 3 assessment through the recovery of a suite of diagnostic/unusual artifacts. Sites that exhibit an unusual degree of preservation of organic materials are also of heightened value. Smaller transitory camps or locales marked by an apparently single chert reduction event or the breakage and discard of ceramic artifacts are also of high heritage value, but may be subject to salvage excavation, provided that the appropriate methodological approaches for block excavation (and potentially topsoil stripping) of such sites are applied (see 2011 *Standards and Guidelines*).

Large **Late Woodland** and **Contact** period First Nation villages are deemed to be of high heritage value. Such sites should be protected. It is preferable that such sites be preserved through full avoidance, or a combination of avoidance and salvage excavation. There is a presumption that Late Woodland period settlements, in particular villages, exhibit a heightened potential for human burials. This can rarely be predicted on the basis of any Stage 3 assessment, but should be considered in determining an appropriate Stage 4 strategy, whereby avoidance is the preferred option where feasible. Should such a site be subject to salvage excavation, the appropriate methodological approaches for block excavation and topsoil stripping must be applied (see 2011 *Standards and Guidelines*). Should one or more human burials be encountered during a Stage 4 salvage excavation, the disposition of the remains (preservation and avoidance versus exhumation and reburial elsewhere) must be negotiated between all relevant stakeholders.

Smaller Late Woodland and Contact period First Nation camps, cabins/hamlets and specialized resource extraction sites are deemed to be of high heritage value, depending on their size and characteristics. It is preferable that the larger sites be preserved through full avoidance or a combination of avoidance and salvage excavation provided that the appropriate methodological approaches for block excavation and topsoil stripping of such sites are applied (see 2011 *Standards and Guidelines*). Smaller camps that evidently were only briefly occupied or marked by a limited range of activities are also of high heritage value, but may be subject to salvage excavation, provided that the appropriate methodological approaches for block excavation (and potentially topsoil stripping) of such sites are applied (see 2011 *Standards and Guidelines*). There is potential that some Late Woodland period sites provisionally identified as "camps" or "cabins" may have served as specialized burial sites. This can rarely be predicted on the basis of any Stage 3 assessment, but should be considered in determining an appropriate Stage 4 strategy.

Late Woodland and post-contact period First Nation ossuaries or cemeteries are deemed to be of high heritage value, and should under all possible circumstances be protected through avoidance. It must be acknowledged that the detection of cemeteries and/or ossuaries during Stage 2 archaeological assessment is virtually impossible. Moreover, it is difficult to predict the location of such features in more than a general manner. This is partially a reflection of the available data, although the data that do exist have not been rigorously examined by archaeologists in either the academic or cultural resource management context. Many of the cemeteries and ossuaries known to archaeologists were first discovered as a result of land clearance in the nineteenth century. The locations of these sites may or may not be well-documented. Modern discoveries of such sites are generally accidental results of large scale earth-moving or other construction activities. Upon discovery of such burial features during the course of construction some



remedial documentation and excavation may be required, but avoidance and preservation through project redesign/revision should be the ultimate preferred alternative.

In areas where ossuary burial was not a traditional practice, or was only one of several contemporary practices, Late Woodland and Contact period First Nation cemeteries *may* be detected during Stage 3 assessment by the recovery of human bone and/or a suite of diagnostic/unusual artifacts. As historic Neutral cemeteries are often in close proximity to their associated villages, a 200 metre buffer zone around the perimeter of documented villages might be considered as having elevated potential for the discovery of human remains.

Upon confirmation that a Late Woodland or Contact period First Nation site served as a cemetery, preservation through avoidance through project redesign/revision should be the ultimate preferred alternative.

6.0 RECOMMENDATIONS

Given the findings of the Stage 1 Archaeological Resource Assessment research, the following recommendations are made:

- 1. Any future development within the study area, beyond those portions of Lots 11 and 12 that have already been examined and mitigated, must be preceded by Stage 2 archaeological assessment. Such assessment(s) must be conducted in accordance with the Ministry of Tourism, Culture and Sport's 2011 *Standards and Guidelines for Consultant*. This work is required prior to any land disturbing activities in order to identify any archaeological remains that may be present.
 - It should be noted that the archaeological assessment of any proposed development (e.g., a draft plan of subdivision) must be carried out on **all** lands within that particular subject property, not simply those lands identified as exhibiting potential in this study. It should also be noted that, depending upon outcomes, engagement with relevant First Nations may be required during the assessment process, consistent with the requirements of the 2011 *Standards and Guidelines for Consultant Archaeologists* and the general process outlined in the *Region of Halton Archaeological Master Plan* as summarized in Section 5.0 of this report.
- 3. The Lot 11 and the south half of Lot 12, Concession 8 portion of the study area has been subject to Stage 1-4 archaeological assessment and salvage excavations, and recommendations have been made to clear these lands of further archaeological concern in the relevant assessment reports filed with the Ontario Ministry of Tourism, Culture and Sport. As of the time of writing, the Ministry has not issued letters of concurrence with these recommendations.

Notwithstanding the results and recommendations presented in this study, Archaeological Services Inc. notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Tourism, Culture and Sport should be immediately notified



The documentation related to this archaeological assessment will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the Ontario Ministry of Tourism, Culture and Sport, and any other legitimate interest groups.

7.0 ADVICE ON COMPLIANCE WITH LEGISLATION

The following advice on compliance with legislation is provided

- This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, RSO 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the Ontario Heritage Act for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the Ontario Heritage Act.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act.
- The Cemeteries Act, R.S.O 1990 c. C.4 and the Funeral, Burial and Cremation Services Act, 2002, S.O. 2002. c.33 (when proclaimed in force) require that any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Consumer Services.

8.0 BIBLIOGRAPHY AND SOURCES

ASI (Archaeological Services Inc).

- 1998 Master Plan of Archaeological Resources of the Regional Municipality of Halton: Technical Report. Report on file, Regional Municipality of Halton.
- 2009 Master Plan of Archaeological Resources of the Regional Municipality of Halton: 2008 Update. Report on file, Regional Municipality of Halton.
- 2012a Stage 4 Salvage Excavation of the Atkinson Site (AjGx-202), Part of Lot 11, Concession 8, Geographic Township of Esquesing Now the Municipality of Halton Hills, Regional Municipality of Halton: Preliminary Report. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto. MTCS PIF P047-353-2012.
- 2012b Stage 4 Salvage Excavation of the Watkins-Huffman Site (AjGx-206), Part of Lot 11, Concession 8,



Geographic Township of Esquesing Now the Municipality of Halton Hills, Regional Municipality of Halton: Preliminary Report. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto. MTCS PIF P047-344-2012.

Stage 4 Salvage Excavation of the Ashgrove site (AjGx-207), Part of Lot 11, Concession 8, Geographic Township of Esquesing Now the Municipality of Halton Hills, Regional Municipality of Halton. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto. MTCS PIF P047-354-2012.

Chapman, L.J., and D.F. Putnam

2013

1984 *The Physiography of Southern Ontario*. Ontario Geological Survey, Special Volume 2. Ministry of Natural Resources, Toronto.

Clark, G.

1955 Halton's Pages of the Past. Dills Printing and Publishing, Acton, Georgetown & Milton.

Golder Associates

2012a Stage 1 and 2 Archaeological Assessment, Revised, Mattamy Homes Georgetown Subdivision, Lot 11 and Part of Lot 12, Concession 8 Geographic Township of Esquesing Now Municipality of Halton Hills Regional Municipality of Halton, Ontario. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto. MTCS PIF P001-537-2007.

2012b Stage 2 Archaeological Assessment, Revised, Mattamy Homes Georgetown Subdivision, Lot 11 and Part of Lot 12, Concession 8 Geographic Township of Esquesing Now Municipality of Halton Hills Regional Municipality of Halton, Ontario. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto. MTCS PIF P001-530-2009.

2012c Stage 3 Archaeological Assessment: Mattamy Homes Georgetown Subdivision, Lot 11 and Part of Lot 12, Concession 8 Geographic Township of Esquesing Now Municipality of Halton Hills Regional Municipality of Halton, Ontario. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto. MTCS PIF P001-545-2009.

Mika, N., and H. Mika

1981 Places in Ontario: Their Name Origins, and History. Mika Publishing Company, Belleville.

MTCS (Ministry of Tourism, Culture and Sport)

2011 Standards and Guidelines for Consultant Archaeologists. Ontario Ministry of Tourism, Culture and Sport, Toronto.

Robinson, E.

2008 Mount Pleasant Wesleyan Methodist Church & Cemetery. Ontario Genealogical Society, Halton-Peel Branch. http://www.haltonpeel.ogs.on.ca/h/es13.htm

Tremaine, G.

1858 Tremaine's Map of the County of Halton, Canada West. Compiled and Drawn from Actual Surveys. Lithographed by J. Ellis for G.R. and G.M. Tremaine, Toronto.

Walker and Miles

1877 Illustrated Historical Atlas of the County of Halton. Walker and Miles, Toronto.



9.0 **IMAGES**



Plate 1: View east from Trafalgar across Lot 11.





Plate 3: View of existing house fronting Trafalgar



Plate 4: View east from Trafalgar across Lot 12.



Plate 5: View east from Trafalgar across Lot 12.



Plate 6: View of house fronting Trafalgar on Lot



Plate 7: View east from Trafalgar across Lot 13.



Plate 9: View east from Trafalgar across Lot 13.



Plate 11: View of one of the houses fronting Trafalgar on Lot 14.



Plate 8: Mount Pleasant Cemetery on Lot 13.



Plate 10: View of one of the houses fronting Trafalgar on Lot 14.



Plate 12: View east from Trafalgar to wooded area on Lot 14.



Plate 13: View east from Trafalgar across Lot 14.



Plate 14: View east from Trafalgar towards topsoil operation on Lot 14.



Plate 15: View east from Trafalgar across Lot 15.



Plate 16: View east from Trafalgar across Lot 15.



Plate 17: View of one of the houses fronting 15 Sideroad on Lot 15.



Plate 18: View of one of the houses fronting 15 Sideroad on Lot 15.



Plate 19: View of one of the houses fronting 15 Sideroad on Lot 15.



Plate 20: View of the deviation of 15 Sideroad from the concession grid. The study area flanks both sides of the road in this area.



Plate 21: View of wooded area on Lot 15 on the south side of 15 Sideroad.



Plate 22: View of one of the houses on Lot 15 near the intersection of 15 Side Road and Eighth Line.



Plate 23: View west from Eighth Line to wooded area on Lot 15.



Plate 24: View west from Eighth Line across Lot 14.



Plate 25: View of a business fronting Eight Line on Lot 14.



Plate 26: View of one of the group of houses fronting Eight Line on Lot 14.



Plate 27: View west across Lot 13 from Eighth Line.



Plate 28: View west across Lot 12 from Eighth Line.



Plate 29: View of an active tributary of East Sixteen Mile Creek on Lot 12 from Eighth Line.



Plate 30: View of one of the houses on Lot 12 fronting Eighth Line.

10.0 MAPS

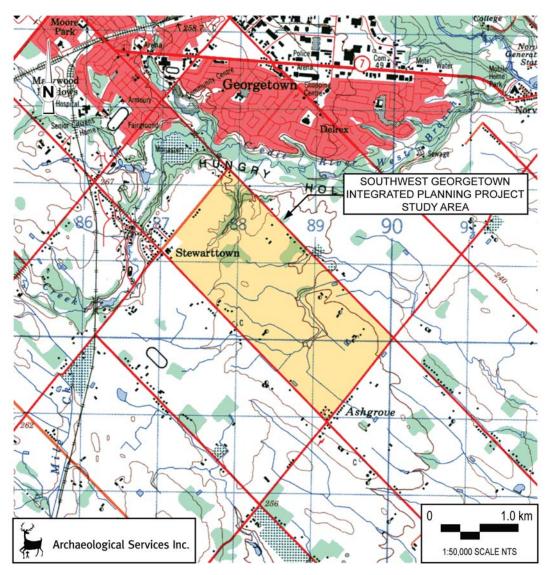


Figure 1: The location of the Southwest Georgetown Integrated Planning Project study area.

NTS Sheet 30M/12 Brampton, edition 7, 1994

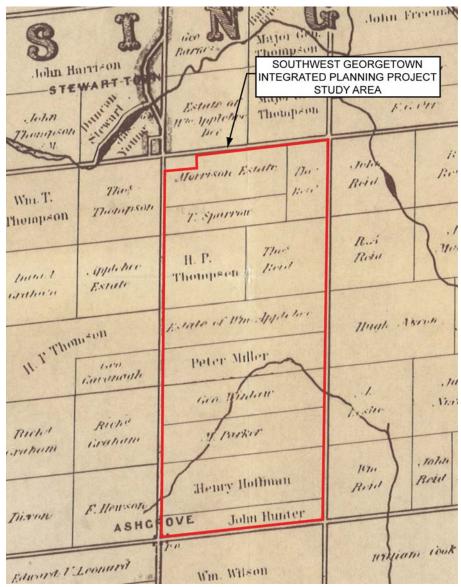


Figure 2: The study area overlaid on the 1858 *Tremaine's Map of the County of Halton*.

Figure 3: The study area overlaid on the map of Esquesing Township in the 1877 Illustrated Historical Atlas of the County of Halton.

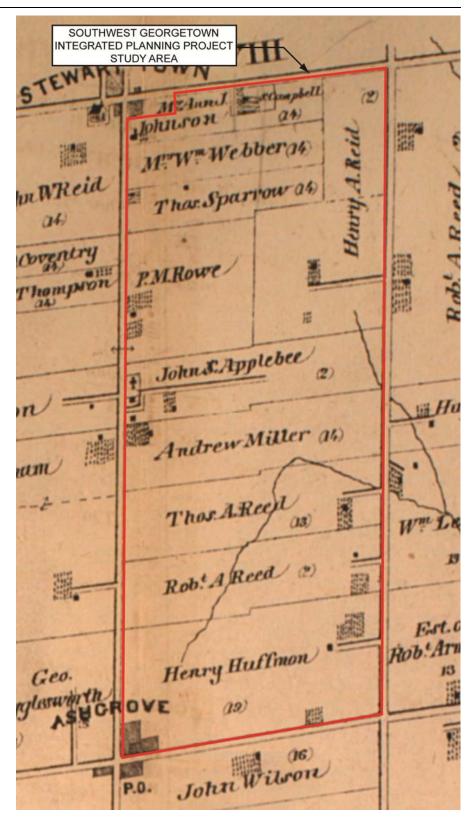




Figure 4: The study area overlaid on the 1909 Department of Militia and Defence topographic map.



Figure 5: The study area overlaid on the 1915 Department of Militia and Defence topographic map.

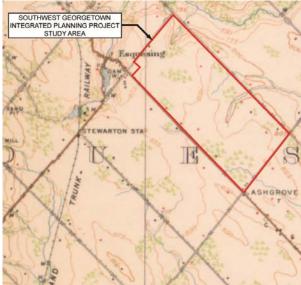
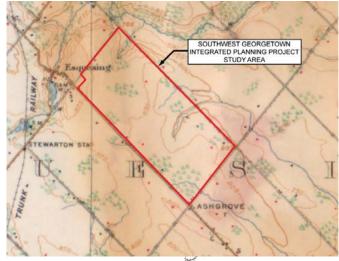


Figure 6: The study area overlaid on the 1922 Department of Militia and Defence topographic map.



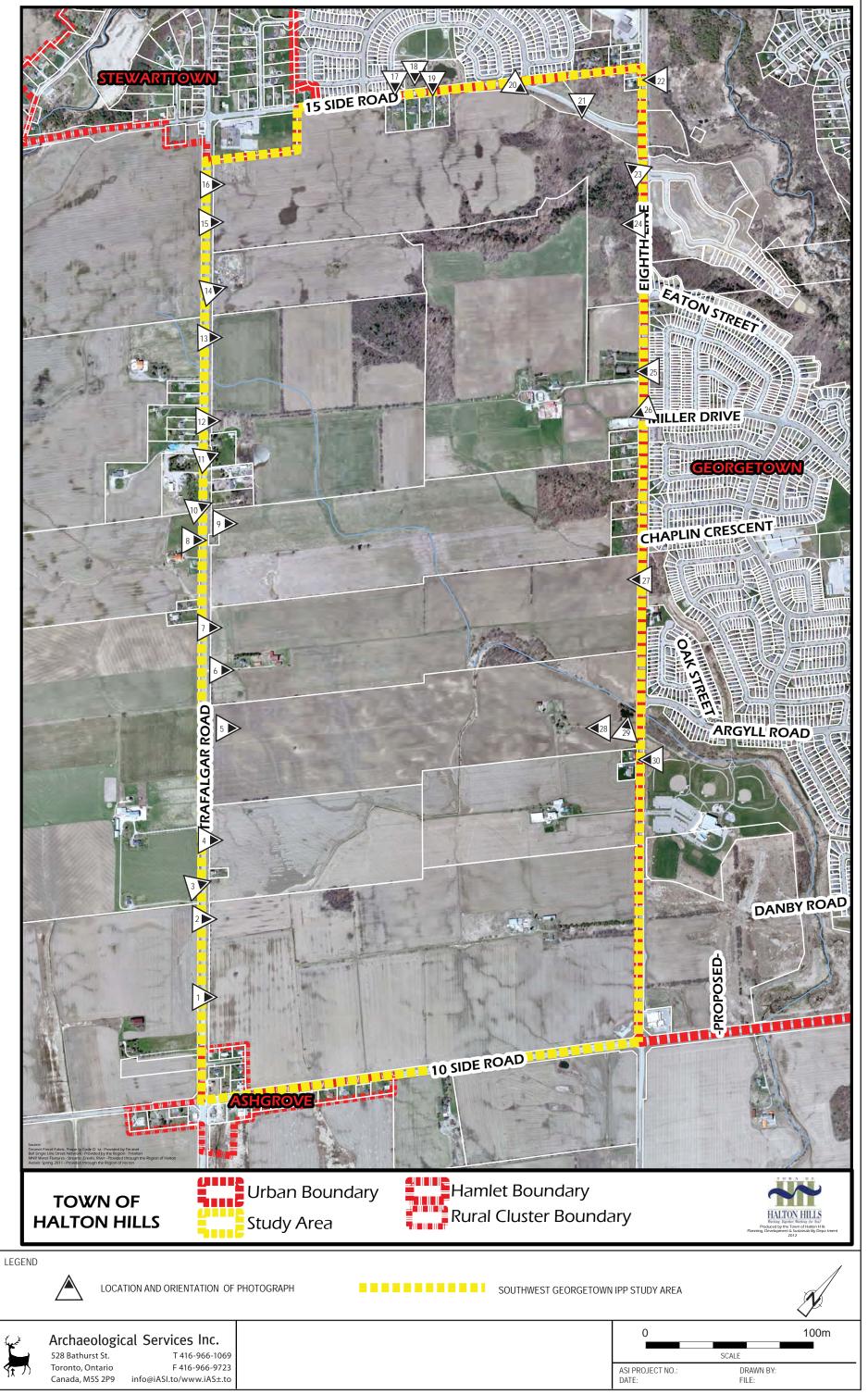


Figure 7: Southwest Georgetown Integrated Planning Project Stage 1 ARA Property Inspection

