

**VIA EMAIL** 

December 2, 2020

Legislative & Planning Services Department Office of the Regional Clerk 1151 Bronte Road Oakville ON L6M 3L1

Ministry of Conservation and Parks, Aziz Ahmed Niagara Escarpment Commission, Debbie Ramsay Conservation Halton, Barb Veale City of Hamilton, Andrea Holland City of Burlington, Kevin Arjoon Town of Halton Hills, Suzanne Jones Town of Oakville, Vicki Tytaneck Town of Milton, Meghan Reid

Please be advised that at its meeting held Wednesday, November 25, 2020, the Council of the Regional Municipality of Halton adopted the following resolution:

#### RESOLUTION: LPS94-20/PW-31-20 re: Water Supply for 720, 768, and 780 Mountain Brow Road West in North Aldershot, Burlington

- 1. THAT Report No. LPS94-20/PW-31-20 re: "Water Supply for 720, 768, and 780 Mountain Brow Road West in North Aldershot, Burlington" be endorsed.
- 2. THAT Regional Council amend the Urban Services Guidelines, as outlined in Attachment #6, to support municipal water connections that cross municipal boundaries, outside of Halton Region's Urban Areas, without the need for a Regional Official Plan Amendment (ROPA) only under the following conditions:
  - a. Where an existing or planned municipal water service is located along the frontage of the properties requiring only a service connection;
  - b. Where the municipal water connection is for an existing approved land use, and can be provided without financial impact to Halton Region;
  - c. Where the abutting municipality assumes the Halton residents receiving the water connection will become customers for the municipal water service of that municipality to the satisfaction of the Commissioner of Public Works; and,
  - d. Where there is no plan to comprehensively service the area from the Halton system to the satisfaction of the Chief Planning Official.
- 3. THAT Regional Council amend the Drinking Water System By-Law No. 71-19 as outlined in Attachment #7 to Report No. LPS94-20/PW-31-20.



- 4. THAT Regional Council support a municipal water service connection from the City of Hamilton to service the existing dwellings at 720, 768, and 780 Mountain Brow Road West on the basis that the connection can meet the revised requirements of the Urban Services Guidelines as outlined in Recommendation #2 of Report No. LPS94-20/PW-31-20.
- THAT Regional Council direct the Commissioner of Public Works to enter into any necessary agreements with the City of Hamilton and/or the owners of 720, 768, and 780 Mountain Brow Road West, to facilitate the water service connection as outlined in Report No. LPS94-20/PW-31-20.
- 6. THAT the Regional Clerk forward a copy of Report No. LPS94-20/PW31-20 and attachments to the City of Burlington, the Town of Halton Hills, the Town of Milton, the Town of Oakville, the City of Hamilton, the Niagara Escarpment Commission, Conservation Halton, and the Ministry of Environment, Conservation and Parks for their information.

Enclosed please find a copy of Report No. LPS94-20/PW31-20 for your information.

If you have any questions please contact me at extension 7110 or the e-mail address below.

Sincerely,

Graham Milne Regional Clerk graham.milne@halton.ca



**The Regional Municipality of Halton** 

Report To:	Regional Chair and Members of Regional Council
From:	Bob Gray, Commissioner, Legislative and Planning Services and Corporate Counsel Kiyoshi Oka, Acting Commissioner, Public Works
Date:	November 25, 2020
Report No Re:	LPS94-20/PW-31-20 - Water Supply for 720, 768, and 780 Mountain Brow Road West in North Aldershot, Burlington.

#### RECOMMENDATION

- 1. THAT Report No. LPS94-20/PW-31-20 re: "Water Supply for 720, 768, and 780 Mountain Brow Road West in North Aldershot, Burlington" be endorsed.
- 2. THAT Regional Council amend the Urban Services Guidelines, as outlined in Attachment #6, to support municipal water connections that cross municipal boundaries, outside of Halton Region's Urban Areas, without the need for a Regional Official Plan Amendment (ROPA) only under the following conditions:
  - a. Where an existing or planned municipal water service is located along the frontage of the properties requiring only a service connection;
  - b. Where the municipal water connection is for an existing approved land use, and can be provided without financial impact to Halton Region;
  - c. Where the abutting municipality assumes the Halton residents receiving the water connection will become customers for the municipal water service of that municipality to the satisfaction of the Commissioner of Public Works; and,
  - d. Where there is no plan to comprehensively service the area from the Halton system to the satisfaction of the Chief Planning Official.
- 3. THAT Regional Council amend the Drinking Water System By-Law No. 71-19 as outlined in Attachment #7 to Report No. LPS94-20/PW-31-20.
- 4. THAT Regional Council support a municipal water service connection from the City of Hamilton to service the existing dwellings at 720, 768, and 780 Mountain Brow Road West on the basis that the connection can meet the revised requirements of the Urban Services Guidelines as outlined in Recommendation #2 of Report No. LPS94-20/PW-31-20.

- 5. THAT Regional Council direct the Commissioner of Public Works to enter into any necessary agreements with the City of Hamilton and/or the owners of 720, 768, and 780 Mountain Brow Road West, to facilitate the water service connection as outlined in Report No. LPS94-20/PW-31-20.
- 6. THAT the Regional Clerk forward a copy of Report No. LPS94-20/PW31-20 and attachments to the City of Burlington, the Town of Halton Hills, the Town of Milton, the Town of Oakville, the City of Hamilton, the Niagara Escarpment Commission, Conservation Halton, and the Ministry of Environment, Conservation and Parks for their information.

## <u>REPORT</u>

## **Executive Summary**

- The residents at 720, 768, and 780 Mountain Brow Road West in North Aldershot in the City of Burlington have long had concerns with the quality and quantity of their private well water supply.
- The residents attribute their declining well water supply to excavation related to industrial and commercial development occurring on the north side of their properties in the City of Hamilton.
- Over the years, connections to the municipal water system were not advanced due to a range of factors, primarily the proximity and availability of municipal water servicing and the prescriptive planning policies that prohibit connections outside of a settlement area unless it addresses a 'large scale failure' of private services.
- Following the 2017 approval of the Niagara Escarpment Plan Amendment that permitted a municipal water servicing connection for 768 Mountain Brow Road West, the residents of the Mountain Brow Road properties have made requests to Regional staff and City of Hamilton staff for a water servicing connection from the City of Hamilton. These requests also coincide with the planned installation of a watermain to service development in the City of Hamilton within the Mountain Brow Road allowance directly in front of these properties.
- Staff from Halton Region, the Cities of Burlington and Hamilton, and the Niagara Escarpment Commission have been meeting with the residents to discuss their concerns and to identify agency requirements for a possible solution.
- The purpose of this report is to summarize the Mountain Brow residents' well water concerns and requests for a municipal water connection, as well as agency activities and decisions in support of these requests, including the current and on-going discussions.
- This report recommends that Regional Council amend the Regional Urban Services Guidelines to support municipal water servicing connections that cross municipal boundaries, outside of Halton Region's Urban Areas, without the need for a Regional

Official Plan Amendment (ROPA) provided that they meet specific conditions outlined in this report.

 The Report also recommends that Regional Council support a municipal water services connection from the City of Hamilton to service the existing dwellings at 720, 768, and 780 Mountain Brow Road West on the basis that the connections can meet the revised requirements of the Urban Services Guidelines as outlined in Report No. LPS94-20/PW-31-20.

# Background

Residential properties at 720, 768, and 780 Mountain Brow Road West in North Aldershot, Burlington are located on the border between the City of Hamilton and the City of Burlington, and are accessed through the City of Hamilton. These properties are well outside of Halton Region's urban area and are not connected to or located within the vicinity of Halton's municipal water service. They rely on private services (well water and septic systems). Attachment #1 shows the location of the residential properties.

Since 2004, industrial and commercial development has been occurring on the north side of Mountain Brow Road West in the City of Hamilton. The residents assert that their well water supplies were sufficient and without interruption prior to development occurring on the north side of Mountain Brow Road between 2004 and 2010. Further, in 2019 similar concerns were raised about First Gulf's development within the Mountain Brow Road allowance directly in front of these properties and the impacts to their water quantity and quality.

Given renewed concerns about their well water supplies, in July 2019 the residents met with staff from Halton Region and the City of Hamilton to again request a water servicing connection to their properties from the City of Hamilton. A chronology of the residents' concerns and requests for a municipal water connection, agency activities and decisions in support of these requests, including the current and on-going discussion, is included as Attachment #2.

# Discussion

According to the Regional Official Plan (ROP), the residential properties at 720, 768 and 780 Mountain Brow Road West are outside of the Urban Area and are designated Regional Natural Heritage System (RNHS). The ROP and related Urban Services Guidelines prohibit municipal servicing connections to lands outside the Urban Area unless municipal services are provided to satisfy the following:

- 1) Large Scale Failure of Private Water or Wastewater Systems;
- 2) Public Uses Fronting on Existing Municipal Services; or
- 3) Public Uses Not Abutting Municipal Services.

The Urban Services Guidelines (<u>https://www.halton.ca/Repository/Urban-Services-Guidelines</u>) outline the circumstances under which connection/extension of urban services can be considered. Section 2.6.2 is particularly pertinent: "Where an abutting municipality (e.g. Region of Peel or City of Hamilton) constructs a water or wastewater main on a boundary road for the purposes of servicing lands within that municipality, the Region will not permit connections to those mains by properties outside the Urban Area.

A property owner is entitled to make an application requesting permission for connection. The process is as follows:

- The Region must receive confirmation, in writing, from the abutting municipality that they are willing and able to provide service to properties located within the Region of Halton;
- The property owner must formally submit an application to amend the Regional Official Plan to permit the connection of the property to the abutting municipality's system;
- Halton Regional Council must approve the amendment to the Regional Official Plan to extend service outside of the urban boundary;
- The Council of the abutting municipality must approve the connection of the owner's property to their system; and,
- An agreement must be executed between the Region of Halton, the abutting municipality and the property owner. This agreement will be registered on title to the owner's lands.

Connections will only be supported if the owner can demonstrate that the private services are inadequate and that the deficiency cannot be addressed by other means. The owner must demonstrate that all possible alternative water or wastewater systems are incapable of providing effective treatment to a level which mitigates risk to human health and the environment."

In addition to the above planning requirements, these properties are located within the Niagara Escarpment Plan Boundary and are subject to development control within the Niagara Escarpment Plan Area.

The Region's Drinking Water System By-Law also applies to the Mountain Brow Road West properties. In July 2019, Regional Council passed the Drinking Water System By-Law 71-19. By-Law 71-19, which updated By-Law 131-10 (the Waterworks By-law) and consolidated By-Law 61-11 (the Cross Connection Control By-law), includes a section on connecting to a drinking water system from an adjacent municipality. Section 6.2 states:

"Where an Owner of any Property located within the Region requests to connect to an adjacent municipality's Watermain that exists in a highway or public utility corridor located outside of the Regional Urban Service Area as defined in the Regional Official Plan, the Owner is responsible for obtaining consent from the adjacent municipality and Regional Council through a request Regional Official Plan Amendment to amend the Regional Official Plan. The Region shall not be responsible for the cost of the infrastructure or connection to the water supply from an adjacent municipality".

# Initial Requests from Mountain Brow Road Residents for a Municipal Connection to the City of Hamilton

In 2004, the resident at 768 Mountain Brow Road West approached the City of Hamilton to request a water main connection from the City and the NEC approached the Region with the same request in 2005. The City of Hamilton continued inquiries with Regional staff in 2008 and 2009 due to the resident's concerns of declining well water supply. In 2010, the residents of 768 and 780 Mountain Brow Road made similar requests to the City of Hamilton given declining well water supplies which they attributed to excavation related to industrial development occurring on the north side of their properties in the City of Hamilton.

In 2009, the resident at 768 Mountain Brow Road had discussions with Regional Public Works staff to discuss the extension of urban services through a City of Hamilton water service located to the north of this property. Through discussions with Regional Planning in early 2010 staff indicated that:

- Regional Official Plan policies did not permit extension of urban services beyond the boundaries of the Region's Urban Area and that the exceptions for urban services from an adjacent municipality, as listed in the Regional Official Plan, did not apply to their lands.
- A Regional Official Plan Amendment (ROPA) was needed to permit the extension of urban services from the City of Hamilton to their properties or demonstrated proof of "large scale failure" of their private wells indicating an un-rectifiable public health concern be provided.
- The Niagara Escarpment Commission (NEC) also prohibited connections outside of the urban boundary and as a result, a Niagara Escarpment Plan (NEP) Amendment and Development Permit were needed.

Subsequent discussions occurred between Regional and NEC staff to determine whether there was a public health concern that would satisfy a NEP exemption policy to permit the service extension. A well yield test was also conducted in April 2010 which indicated an unsustainable production rate (3 gallons per hour) for domestic uses as per the Regional Servicing Guidelines. As the well production rate (quantity) does not pertain to water quality, there was insufficient information to make a determination from a public health standpoint that the NEP exemption policy could be met. This information was used during review of the Development Permit application discussed below.

## Ministry of the Environment's (MOE's) Assessment and Director's Report

Around 2007, the resident at 768 Mountain Brow Road elevated concerns about water supply to the Ministry of the Environment (MOE). As a result of this inquiry, the MOE conducted a well assessment in 2008. The Ministry's hydrogeologist concluded that,

based on the hydraulic characteristics of the area, there was low potential for 768 Mountain Brow Road to obtain adequate and reliable well water supply and that the drainage system, installed for the development to the north, could have had an effect on well water quantity. The MOE's hydrogeologist also noted that the detected bacteria and murky tap water in the summer of 2006 was coincident with the mounding of excavated soil on the property to the north. The Ministry's hydrogeologist recommended that inquires about alternative water supply, including municipal servicing, be made. Installation of a new well or the deepening of the existing well were not recommended given the hydrogeology and performance of wells in the area. A copy of the MOE's hydrogeologist's report is included as Attachment #3.

In July 2010, based on conclusions from its 2008 well assessment, the resident's concerns, and correspondence with the City of Hamilton and Halton Region, the MOE issued a Notice of Director's Report under the Ontario Water Resources Act (OWRA) requiring the municipalities to provide sustainable drinking water supply to the property. As part of the public review process, the Region did not object to the Director's Order. The City of Hamilton however objected to it, citing that the Director did not have the jurisdiction to issue an order in one municipality for the benefit of another and that it was not the public interest to do so. The City's objection letter is included as Attachment #4.

In an effort to resolve the resident's water supply issues Halton Region drilled a new well at 768 Mountain Brow Road in July 2011. In January 2012, the MOE notified of its decision to not issue a Director's Report as a solution was reached which did not involve a municipal supply (<u>https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTEwNzQw&statusId=MTcwNzM0&languag e=en</u>).

#### Niagara Escarpment - Development Permit Application and Plan Amendment

In August 2010, the resident at 768 Mountain Brow Road submitted a Development Permit application to the NEC to permit the extension of a 250 metre City of Hamilton water line to connect the property. Regional staff did not object to the permit application given the MOE's Notice of Director's Report which would have precluded the policy requirements of the ROP. Regional staff continued to work with and support Ministry and City staff on the extension of the proposed water line for the applicant.

Prior to the Development Permit application, the Region's Medical Officer of Health (RMOH) wrote a letter to the NEC stating that the well yield test results, from April 2010, were inadequate to sustain a single family dwelling as indicated by the Region's Urban Servicing Guidelines. The RMOH advised that a municipal water connection would be the safest and most secure option from a public health perspective. The letter did not comment on well failure and did not conclude that there was a public health issue. The MOE's Director for the West Central Region strongly supported the Development Permit application. The City of Hamilton objected to the application citing the same jurisdictional argument from their objection to the MOE's Director's Order. In January 2011, the staff report on the NEC Development Permit recommended refusal of the application given the

City of Hamilton's objection. However, upon the applicant's request, the NEC Chair deferred the matter without specifying a time line.

Through the Coordinated Provincial Plan Review, the resident at 768 Mountain Brow Road was successful in obtaining a site-specific amendment to the Niagara Escarpment Plan to permit a municipal water servicing connection due to a failure of the private onsite well, outside the City of Burlington's Urban Area. The site-specific amendment, which was approved by Cabinet in May 2017, does not apply to the720 or 780 Mountain Brow Road West properties. However, there are provisions in the current NEP which support servicing to neighbouring properties, based on existing connections in the area, that may allow a municipal water servicing connection to 720 and 780 Mountain Brow Road West.

In September 2020, the Region was circulated Niagara Escarpment Development Permit applications for 720 and 780 Mountain Brow Road West properties and was re-circulated the application for 768 Mountain Brow Road West for a municipal waterline extension along the Mountain Brow Road right of way to connect to the properties with the water service from the City of Hamilton.

## Current Requests for a Servicing Connection from the City of Hamilton

First Gulf is currently developing lands on the north side of Mountain Brow Road West. In July 2019, all 3 residents contacted Halton Planning staff to explore opportunities to connect to a City of Hamilton water supply due to well water supply impacts from First Gulf's development in the City of Hamilton.

Aware of the residents' on-going well water concerns, and as part of the City of Hamilton's development approval requirements, First Gulf commissioned 3 reports by Terraprobe which included study of their properties: *Well Review and Private Well Survey, Proposed Commercial Development Southeast Quadrant – Intersection of Highway 5 & Highway 6, Hamilton, Ontario* (April 10, 2019); *Hydrogeological Review, Proposed Commercial Development Southeast Quadrant – Intersection of Highway 5 & Highway 6, Hamilton, Ontario* (April 10, 2019); *Hydrogeological Review, Proposed Commercial Development Southeast Quadrant – Intersection of Highway 5 & Highway 6, Hamilton, Ontario* (May 21, 2019); and, *Results of Private Well Monitoring 780 Mountain Brow Road* (July 26, 2019).

Only residents of 768 and 780 Mountain Brow Road responded to the private well survey, neither gave permission to inspect and sample operational wells, and the resident at 780 Mountain Brow Road was unable to provide details of its operational well. Terraprobe made recommendations for First Gulf during its construction activities including construction notification, well interference contact information, temporary water supply, and well inspection and monitoring, as well as developer intervention (such as deepened or re-drilled wells) if impacted wells cannot recover. Terraprobe's findings recognized the low permeability soils limiting infiltration, and the inability to determine impacts to the ground water system given that ground water discharge was neither observed nor expected. The study for 780 Mountain Brow Road, detected low flows and noted the exceedance of organic carbon which indicate a possible deterioration of water supply.

Coliform bacteria and e-coli were not detected. Halton Region Public Health advises that there is no evidence of a large scale failure of the private wells.

## Potential Municipal Servicing Solutions

On February 4, 2020, in an effort to advance consideration of the residents' requests, the Region's Chief Planning Official met with the residents, the NEC, and First Gulf, and identified 4 potential pathways/options:

- Option 1 A proponent-led Regional Official Plan Amendment (ROPA) to permit the extension of urban services beyond the Urban Area and to the three properties, notwithstanding the existing policy framework.
- Option 2 A determination of a large scale failure of private water or wastewater systems. Information to substantiate large scale failure indicating a significant risk to public health or the natural environment is required.
- Option 3 (Related to Option 2) Issuance of a Ministry of the Environment, Conservation and Parks (MECP) Order to the City of Hamilton to provide servicing.
- Option 4 Potential annexation of these 3 properties to the City of Hamilton. This option would require approval from the Province, and support from the Cities of Burlington and Hamilton.

A description of each option is elaborated upon in Attachment #5. There is an additional and recommended option which had not initially been communicated with the residents, but, is elaborated upon below and speaks to the purpose of this report.

Subsequent to the February 2020 meeting, First Gulf advised of its intent to apply for the ROPA on the residents' behalf and to pay for the servicing connection. To facilitate the ROPA, a pre-consultation meeting was held on March 31, 2020 with agency staff to identify the application requirements for both a ROPA and a Local Official Plan Amendment (LOPA). On June 12<sup>th</sup> First Gulf convened a meeting with municipal (Cities of Burlington and Hamilton, and Halton Region) and Conservation Halton, and Ministry of Transportation staff to advise that they would no longer advance a ROPA on the residents' behalf. The reasons cited include First Gulf's inability to obtain well records and site access for all properties, the removal of well pumping equipment at 768 Mountain Brow Road, and the history of well water complaints which predate their development. At the time of writing this report, staff understand that the residents have no interest in initiating a ROPA and LOPA given the cost and uncertainty.

Regional staff understand that the residents approached the MECP in March 2020 to inquire about a Notice of Director's Report, similar to the request in 2010. MECP staff are cognizant of the municipal effort to date, the history of servicing requests and agency responses, and have expressed reservations with circumventing due municipal processes.

#### Recommended Option

Given the passage of time, the residents' increasing anxiety and frustration about their water condition, the absence of a ROPA application, and the unviability of options 2 to 4, Regional staff are proffering an additional and recommended option which is the primary purpose of this staff report. Under its authority, Regional Council can amend the Region's Urban Services Guidelines to permit cross municipal service connections. Such an amendment would enable the three Mountain Brow Road West properties to obtain a cross municipal connection, while still maintaining integrity, purpose and intent of the ROP and Guidelines. The proposed amendments to Section 2.6.2 of the Urban Services Guidelines, as indicated in Attachment #6, would only permit cross municipal connections under the following conditions:

- where an existing or planned municipal water service is located along the frontage of the properties requiring only a service connection;
- where the municipal water connection is for an existing approved land use, and can be provided without financial impact to Halton Region;
- where the abutting municipality assumes the Halton residents receiving the water connection will become customers for the municipal water service of that municipality to the satisfaction of the Commissioner of Public Works; and,
- Where there is no plan to comprehensively service the area from the Halton system to the satisfaction of the Chief Planning Official.

The Regional Official Plan and Urban Services Guidelines provide clear direction and conditions in which urban services can be extended outside of the Urban Area. Section 89(1) states that it is the policy of the Region "to provide urban services only within the Urban Area, unless otherwise permitted by specific policies of this Plan". Section 89(21) recognizes a very limited set of exceptions, largely historical in nature, where urban services have been or may be extended outside of the Urban Area. The Mountain Brow Road West residents are not subject to these exceptions. Essentially, these properties which are outside the Urban Area are not permitted to connect to, or be serviced by, municipal water or wastewater services regardless of the availability of these services nearby.

The Region does not have any infrastructure in the area and has no plans for infrastructure to service this area given that these properties are well outside of Halton's Urban Area. Information to date indicates declining well water supplies to the Mountain Brow Road residents since the early 2000s, and there is neither information nor evidence to suggest that the water quantities will rebound particularly given the hydrogeology of the area, the hydraulic characteristics of the shale formation in the area, and impacts from developments on the north side of Mountain Brow Road.

As noted, staff identified a ROPA as a potential option for the residents to pursue in particular given the cooperation of the developer of lands to the north. The residents are concerned about the application fees and studies required in support of a ROPA and

LOPA, without the surety of a successful outcome. The only other alternative is for the residents to install and/ or use cisterns replenished by an on-going supply of trucked water. While cisterns are used in many rural areas across the Province, the residents are opposed to this option given the close proximity of a water service in the front of their properties. Also, the treatment and trucking-in of water would not be a sustainable solution as directed by the Regional Official Plan.

The recommendation to only amend the Urban Services Guidelines, as noted above, provides a tangible solution to assist the residents in obtaining a stable and predictable water supply and further provides clarity for implementation of the Guidelines. The recommendation does not conflict with the ROP, and instead maintains the integrity and intent of the Region's longstanding approach.

Section 89(17) of the ROP states that it is the policy of the Region to "consider and permit, based on individual merit and in accordance with goals and objectives of this Plan, new urban service system interconnections between the Region of Halton and abutting municipalities". Regional Council approval of cross border servicing is required. This section of the ROP and the proposed amendment to the Urban Services Guidelines provide Regional Council with an opportunity to consider the cross municipal connection for these three properties without an amendment to the ROP.

Also under its authority, Regional Council can amend the Drinking Water System By-Law No. 71-19 to remove the requirement for a ROPA where the specific provisions of the Urban Service Guidelines can be met. The Urban Services Guidelines is the primary implementation and guidance document for urban services policies of the Regional Official Plan. As a part of this report, staff are recommending that Section 6.2 of the Drinking Water System By-Law No. 71-19 be amended to ensure that water servicing connection requests to an adjacent municipality to comply with the Urban Services Guidelines. The proposed amendment to Regional By-Law No. 71-19, included as Attachment #7, is limited to Section 6.2 and is proposed to read as follows:

• Where an Owner of any Property located within the Region requests to connect to an adjacent municipality's Watermain that exists in a highway or public utility corridor located outside of the Regional Urban Service Area, such connections are only permitted in accordance with the Urban Services Guideline. Where such a connection is permitted, the Region shall not be responsible for the cost of the infrastructure or connection to the water supply from an adjacent municipality. Further, the Owner shall be responsible for obtaining consent from the adjacent municipality.

The recommendation to amend the Region's Urban Services Guidelines and amend the Drinking Water System By-Law No. 71-19, as described in this Report, are sufficiently restricted to situations where there will be little or no impacts from a financial or community planning perspective. For example, based on a review of candidate lands meeting the

provisions in the amended Guideline, there would be very few properties in Halton that could meet the proposed criteria. This eliminates any concerns about setting a precedent for several similar requests to extend urban services beyond the Urban Area as identified in the ROP. From a planning perspective, the intent of the urban services policies in the ROP remains intact and the policy permissions are not being amended prior to completion of the Municipal Comprehensive Review which is currently underway. Similarly, amendments to the Urban Services Guidelines do not change the Region's intent or policy direction, but, instead provides clarity for situations and circumstances not fully contemplated during the last update in 2014. The potential requests for servicing connections of other properties, under similar conditions, is very limited.

# Initial Concerns identified by the City of Hamilton related to the Preferred Option

The City of Hamilton is the owner and operator of the municipal water system that is planned for and being constructed along this section of Mountain Brow Road. In this regard, and despite the approval of the recommendations of this report, the ultimate decision whether to permit the connection to the water system rests with the City of Hamilton. Regional staff have had several meetings with City of Hamilton staff related to this matter and understand that the City has concerns that have not been fully resolved that may require some further dialogue. These initial concerns are described below:

- <u>Capital costs</u>: The City does not support a water connection unless all capital costs can be accommodated by others. Similarly, as recommended in this report, a connection can only be supported by Halton Region if there is no financial impact to the Region. The residents have indicated a willingness to bear all costs to enable the connection. In this regard, this issue can likely be resolved.
- <u>Halton Region as the City's Customer vs. a Direct Customer Relationship with the Landowners</u>: The City has expressed its preference to provide water to a metered valve chamber to be owned and operated by Halton Region before being distributed to the houses on Mountain Brow. This arrangement could mean potential cost, maintenance and responsibility for the Region. This will need to be explored further with the City and landowners to ensure it can be provided without financial impact to Halton Region in accordance with the proposed amended Urban Services Guidelines. The Region's preference is for the City to enter into a direct relationship with these owners, where the Region would work with the City to satisfy the concerns identified.
- <u>Complaints</u>: The City has expressed some reservation with responding to complaints from customers outside of Hamilton directly. As a part of next steps it is recommended that Regional staff explore an arrangement related to complaints that the City can be comfortable with.
- <u>Default on water bill payment</u>: The City has expressed some concerns with the ability to collect from customers outside of its borders that are in default of a water bill payment. This is an issue that needs to be explored further and could possibly be satisfied through a letter of credit or other means.

- <u>Future development (land severances) and additional connections</u>: City staff have expressed some concern that, if these 3 lots are serviced by water, there could be applications for severances to create additional lots requiring additional connections. This concern is not valid as the severance policies of the Regional Official Plan prohibit lot creation for these lands. Further, under the regulations of the Planning Act, the City of Hamilton would be circulated on any proposal for severance or land use change. The City would have due process rights to comment and appeal a planning decision if necessary.
- <u>Support from City Council</u>: City of Hamilton staff have been very clear that the connections to Halton residents must satisfy some of the outstanding concerns and must be tabled with and approved by City Council. In this regard, the support of the recommendations of this report does not imply or guarantee that the connections will proceed.

In order to explore a remedy to all of the above concerns, it is proposed that staff from the Region, and the Cities of Hamilton and Burlington and the Ministry of the Environment, Conservation and Parks meet to discuss possible arrangements that satisfy the concerns while maintaining the purpose and intent of the recommendations outlined in this report.

#### Conclusion and Next Steps

The residents at 720, 768, and 780 Mountain Brow Road West in North Aldershot in the City of Burlington have long had concerns with the quality and quantity of their private well water supply. The residents have been seeking a suitable remedy to this issue for more than a decade. In response to the residents' concerns, this report recommends that Regional Council amend the Regional Urban Services Guidelines and amend the Drinking Water System By-Law No, 71-19 to support municipal water servicing connections that cross municipal boundaries, outside of Halton Region's Urban Areas, without the need for a Regional Official Plan Amendment (ROPA) provided that they meet specific conditions outlined in this report. It also recommends that connections to 720, 768, and 780 Mountain Brow Road West be approved so long as they are in keeping with the revised requirements of the Urban Services Guidelines as outlined in this report.

Upon Regional Council's approval of LPS94-20/PW-31-20, staff will continue discussions with the City of Hamilton to identify and secure the requisite permissions and agreements to connect municipal water services from the City of Hamilton to 720, 768, and 780 Mountain Brow Road West for Regional Council's approval. Regional staff will also meet with the residents to assist with satisfying requirements to proceed with the municipal water connection. Staff will provide updates to Council on the progress of these implementation activities through future reports to Council.

## FINANCIAL/PROGRAM IMPLICATIONS

There are no financial implications at this time.

Respectfully submitted,

**Curt Benson** Director, Planning Services and Chief Planning Official

Bob Gray Commissioner, Legislative and Planning Services and Corporate Counsel

Eric Boere Acting Director, Water and Wastewater Acting Commissioner, Public Works System Services

Kiyoshi Oka P. Eng.

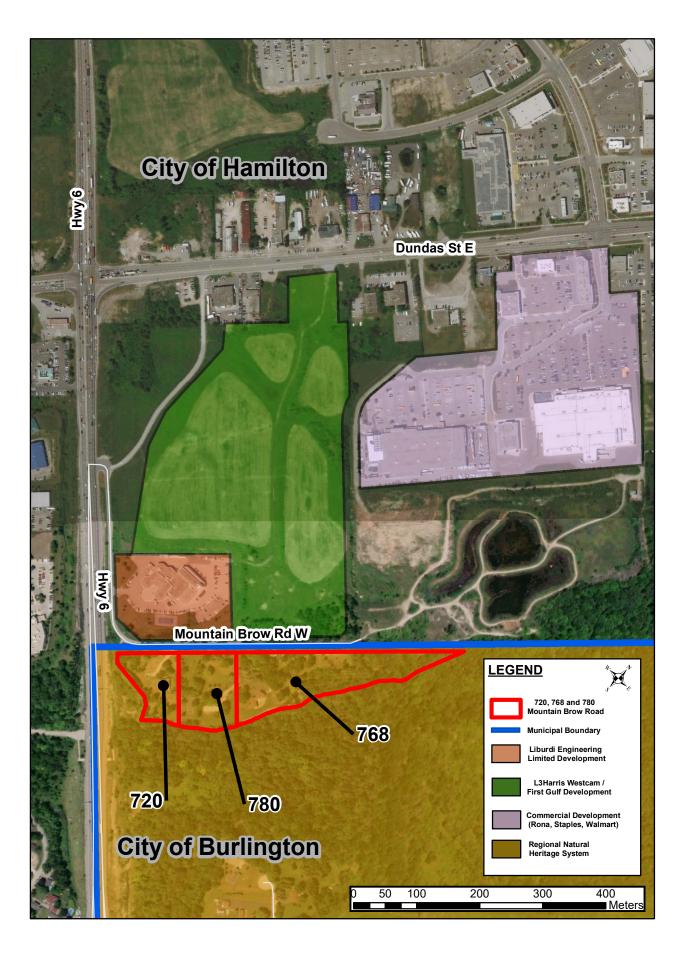
Approved by

Jane Mar Cashell

Jane MacCaskill Chief Administrative Officer

If you have any questions on the content of this report,	Curt Benson	Tel. #7181
please contact:		

Attachments:	Attachment #1 – Locational Map of Mountain Brow Road West Properties Attachment #2 – Chronology of Residents' Concerns and Requests for a Municipal Water Connection and Agency Activities and Decisions (2004 to September 2020) Attachment #3 – MOE's Hydrogeologist's Report (February. 25. 2008) Attachment #4 – City of Hamilton's Objection Letter (October 1. 2010) Attachment #5 – Options for Extension of Municipal Services to Mountain Brow Road West Properties
	Attachment #6 – Proposed Amendments to the Urban Services Guidelines (November 2020) Attachment #7 – Proposed Amendment to the Drinking Water System By-Law No, 71-19



#### Chronology of Residents' Concerns and Requests for a Municipal Water Connection & Agency Activities and Decisions: 720, 768, and 780 Mountain Brow Road West, Burlington (Highlights from 2004 to September 2020)

Date	Communications, Agency Activities, and Decisions
2004	Resident at 768 Mountain Brow Road West requested a connection to a
	City of Hamilton water main located across from said property on the
	north side of Mountain Brow Road that serviced an industrial use. City of
	Hamilton staff contacted Regional staff.
2005	Resident at 768 Mountain Brow Road West approached the NEC to
	extend water line to property. NEC staff discussed with Regional staff.
	Regional staff advised that a Regional Official Plan Amendment (ROPA)
	was required.
November 2005	During house construction, the owner of 720 Mountain Brow Road West
	was referred to Halton Region (Planning and Public Works Department)
	by the City of Hamilton inquiring about the possibility of hooking-up to
	the Hamilton water main
November 2005	Resident at 768 Mountain Brow Road West notified the City of Hamilton
	about the disruption of private water supply
November 2006	Well yield test conducted at 768 Mountain Brow Road West
January 2008	MOE's hydrogeology investigation commenced due to compliant from
	resident at 768 Mountain Brow Road West about water supply
	interference from drainage works associated with development and
	grading of lands immediately north of property.
February 2008	MOE's Hydrogeologist from the West Central Region provided
	assessment of water supply interference complaint to MOE's Senior
	Environmental Officer in the Hamilton District Office
March 2008	Martin Well Drilling provided a letter to resident at 768 Mountain Brow
	Road West indicating the well was only producing 3.3 gallons per hour,
	a change from the previous test which showed 3 gallons per minute in
-	2006.
September 2009	Resident at 768 Mountain Brow Road West approached Councillor
	Craven to extend water line to property.
July 2009	City of Hamilton advised resident at 768 Mountain Brow Road West
	about the servicing requirements to service that property.
	Regional staff advise the MOE that a ROPA is required, as well as proof
	of unrectifiable well failure.
August 2009	Internal Regional discussions (Planning, Public Works, and Public
	Health) on the request for a water service connection for 768 Mountain
	Brow Road West. Planning staff advised that a ROPA is required,
	Regional meeting with City of Hamilton and MOE regarding investigation
	of a water service for 768 Mountain Brow Road West
February 2010	Regional planning staff advised resident at 768 Mountain Brow Road
	West that a ROPA is needed, as well as a Niagara Escarpment
	Development Permit and a Niagara Escarpment Plan Amendment.
March 2010	Meeting held with Regional, City of Burlington, and MOE staff.

Date	Communications, Agency Activities, and Decisions
April 2010	Internal Regional discussions (Planning, Public Works, and Public Health) on the request for a water service connection for 768 Mountain Brow Road
	Letter to the NEC from the Region's Medical Officer of Health indicated results of the well yield test results for 768 Mountain Brow Road West and the inadequacy to meet domestic needs based on the Region's Guidelines and indicated that connection to the municipal water supply would be the safest and most secure option from a public health perspective.
	Meeting held with Regional, NEC, and MOE staff, and with City of Burlington Councillor to discuss well water concerns at 768 Mountain Brow Road West.
May 2010	Residents at 768 and 780 Mountain Brow Road West wrote letters to the City of Hamilton about their well water supply issues due to adjacent development in the City of Hamilton.
June 2010	Meeting with Engineering staff from the City of Hamilton and Halton Region
July 2010	The MOE issued a Notice of Director's Report under the Ontario Water Resources Act (OWRA). The Draft Director's Order under Section 62(1) of the OWRA was provided to direct the City of Hamilton and the Region of Halton to "jointly and severally establish a water works for" 768 Mountain Brow Road.
August 2010	The MOE posted a proposed instrument on the Environmental Bill of Rights (EBR) on the "Direction on a report respecting sewage works or water works for municipalities – OWRA s. 62(1)". The purpose of the Director Report was to require the City of Hamilton and the Regional Municipality of Halton to provide a sustainable drinking water supply to a private residence in the Regional Municipality of Halton whose well supply quantity had been impacted by Commercial Development in the City of Hamilton.
	Regional staff held an internal meeting to discuss the MOE's Director's Order
	Regional staff and City of Hamilton staff work cooperatively to find a solution to deliver a potable water source to 768 Mountain Brow Road West
	Resident at 768 Mountain Brow Road West applied for a NEC Development Permit to permit the extension of a 250 metre waterline to connect to the property from the City of Hamilton.
September 2010	Regional Planning staff assisted the resident at 768 Mountain Brow Road West in providing more detail (as per NEC requirements) on the NEC Development Permit Application to permit the extension of a 250 metre waterline to connect to the property from the City of Hamilton.
October 2010	Letter from MOE West Central Region indicating strong support for the NEC Development Permit for 768 Mountain Brow Road West
	City of Hamilton submitted a Letter of Objection to the MOE objecting to the Draft Director's Order

Date	Communications, Agency Activities, and Decisions
November 2010	Letter of thanks to the Region's Medical Officer of Health from resident
	at 768 Mountain Brow Road for supporting the NEC Development
	Permit application
	NEC Development Permit application was taken to the Commission for
	768 Mountain Brow Road West with a staff recommendation of refusal.
	This report was deferred to January 2011 Commission meeting to allow
	further municipal input respecting solutions to the water situation,
	discussion with the Hamilton Medical Officer of Health in order to
	determine if there are health concerns from Hamilton's perspective
	associated with the current well. Additionally, staff is to determine if
	there are any agreements respecting the developments to the north in
	the urban area of Hamilton which will provide compensation or
	restitution to adjacent landowners affected by such developments.
	The staff report noted NEC staff's mindfulness of the issues facing the
	residents and also the willingness of the Region and the MOE to assist in
	finding a permanent sustainable solution. NEC staff was also aware that
	the City of Hamilton had expressed a willingness to continue to voluntarily
	explore with the Region and the MOE ways in which to resolve the well
	quantity issue but made it clear that any servicing option involving the City
	of Hamilton must be approved by the City prior to the issuance of a
	Development Permit.
December 2010	The Region's Chief Planning Official advised NEC that the Region does
20001112010	not object to the issuance of the Development Permit to extend servicing
	to 768 Mountain Brow Road West
January 2011	NEC staff took an Addendum Report to the Commission. Similar to the
	November 2010 report, it also recommended refusal.
	Reasons cited included: "Continued deferral of the application would not
	directly assist the applicants, but, may allow opportunities for continued
	dialogue between the City of Hamilton and Halton Region to seek a
	solution if not an alternative solution that would benefit all. The MOE
	could issue the Order which may not be challenged by Halton Region,
	but, would be appealed by the City. The City continued to feel that a
	solution could be available through cross-municipal co-operation through
	voluntary discussions as opposed to the issuance of an Order".
	"Approval of the Development Permit would not solve the situation in the
	absence of other approvals and accomplishes little. It cannot compel
	the construction of the water line, resolve who pays for the line, change
	an official plan policy nor cause the MOE to issue the Order. It also
	does not address the technical issue of whether or not nearby
	development caused the problem nor does it deal with other remedies
	that may be more cost effective in addressing the situation for an
	individual property".
July 2011	Halton Region drilled a new well at 768 Mountain Brow Road West.
January 2012	The MOE decided not to issue a Director's Report requiring the
0411041 y 2012	municipalities to provide sustainable drinking water supply to a private

Date	Communications, Agency Activities, and Decisions
	residence as a water supply solution was reached which did not involve
	a municipal supply.
January 2017	Through the Co-ordinated Provincial Plan Review, the resident at 768
	applied for a site specific amendment (UA22) to permit a municipal
	water servicing connection to that lot outside the City of Burlington's
	Urban Area due to failure of the private well on-site. The NEC approved
	the amendment request.
May 2017	Provincial Cabinet approved the site-specific amendment (UA22).
	The Ministry of Natural Resources and Forestry (MNRF) advised the
	resident at 768 Mountain Brow Road West of the approval of their site-
	specific amendment to the Niagara Escarpment Plan.
April 2019	As per the City of Hamilton's development approval requirements, First
	Gulf submitted the Well Review and Private Well Survey, Proposed
	Commercial Development Southeast Quadrant – Intersection of
	Highway 5 & Highway 6, Hamilton, Ontario report by Terraprobe
May 2019	As per the City of Hamilton's development approval requirements, First
	Gulf submitted the Hydrogeological Review, Proposed Commercial
	Development Southeast Quadrant – Intersection of Highway 5 &
	Highway 6, Hamilton, Ontario report by Terraprobe
June 2019	Agency staff (Halton Region, NEC, City of Hamilton) met to discuss
	First Gulf's development to the north of their properties in the City of
	Hamilton and the well water concerns of residents at 720, 768, and 780
	Mountain Brow Road West.
huhu 0040	Martin Well Drilling well yield test showed 9 gallons per hour.
July 2019	Residents at 720, 768, and 780 Mountain Brow Road met with agency
	(Halton Region, City of Hamilton, City of Burlington, and NEC) staff to
	explore opportunities to connect to a City of Hamilton water supply given concerns about permanent impacts to their well water from First Gulf's
	development to the north of their properties in the City of Hamilton.
July 2019	As per the City of Hamilton's development approval requirements, First
July 2019	Gulf submitted the Results of Private Well Monitoring 780 Mountain Brow
	Road report by Terraprobe
	City of Burlington (staff and Councillor) and Halton Region staff met to
	discuss the servicing concerns of the residents at 720, 768, and 780
	Mountain Brow Road West
February 2020	The Region's Chief Planning Official met with the residents at 720, 768,
	and 780 Mountain Brow Road West, the NEC, and First Gulf to identify
	4 potential pathways/options for municipal servicing to the properties
	First Gulf advised Regional staff that they would initiate a ROPA for 720,
	768, and 780 Mountain Brow Road West
March 2020	Residents 720, 768, and 780 Mountain Brow Road West met with the
	MECP to inquire about a Notice of Director's Report similar to the one in
	2010.
March 2020	A pre-consultation meeting was held with agency staff to identify the
	requirements for both the ROPA and the Local Official Plan Amendment
	(LÓPA).
June 2020	First Gulf advised that they would no longer advance a ROPA
	application on the residents' behalf.

Date	Communications, Agency Activities, and Decisions
	Technical meeting with Regional and City of Hamilton staff held to
	discuss the feasibility of servicing options
July 2020	Regional, City of Hamilton, and MECP staff met to identify potential
	pathways for servicing the Mountain Brow Road West residents from a
	regulatory drinking water standpoint.
August 2020	Regional, City of Hamilton, and MECP staff continued servicing
-	discussions.
September 2020	Regional and City of Hamilton staff discussed servicing matters on
	Mountain Brow Road West.

# File Copy Original in HamiltonDo File Attachment #3 to LPS94-20/PW-31-20



Ministry of Environment

Mininstère de l'Environnement

119 King Street West 12<sup>th</sup> Floor Hamilton, Ontario L&P 4Y7 Tel: 905 521-7640 Fax: 905 521-7820

119 rue King ouest 12e étage Hamilton (Ontario) L8P 4Y7 Tél : 905 521-7640 Téléc : 905 521-7820

Memorandum

February 25, 2008

To: Dana Mohammed Senior Environmental Officer Hamilton District Office

From: Isabelle Drouin-Brisebois Hydrogeologist Technical Support, West Central Region

Re: Dr. Denis Callaghan Well Interference Complaint – 768 Mountain Brow Rd.

524 9779 office.

As requested, I have conducted an assessment of the well interference complaint from Dr. Denis. Callaghan. In addition to information available to me in West Central Region files, incident reports (IDS Reference Numbers: 6366-78ZLNX and 5813-79LLLY), and emails provided to me by the Hamilton District Office, I conducted a site visit and obtained information from the complainant and the well technician who performed a casing extension on Dr. Callaghan's well. Information from Dr. Callaghan was obtained as follows:

- During telephone conversations on January 7/08 and January 31/08
- During a site visit conducted on January 9/08
- From a fax received on January 15/08

# Background

The complainant's property is located at 768 Mountain Brow Road in Burlington. The property is just south of the Hamilton/Burlington town line. Dr. Callaghan's complaint contends that drainage works associated with the development and grading of lands immediately north of his property, and installed by the City of Hamilton, have interfered with his water supply.

The review of this complaint was done from the perspective of offering a technical opinion to the Hamilton District Office and the complainant.

#### Comments

#### Geology and hydrogeology of the area

The property is located on the brow of the Niagara Escarpment. According to a Quaternary geology map of the area, the overburden in the area consists of Halton Till, a clay silt till (OGS, 1986). The bedrock consists of Silurian-age dolostones (Amabel) underlain by the Upper Ordivician-age Queenston Formation consisting of red shale (mudstone). The dolostone formation is not present south of the escarpment toward Lake Ontario. (ODM, 1976; Karrow, P.F., 1987).

I performed a search of the Water Well Information System (WWIS) and the Geological Information System (GIS) shapes, for well records in the area of Mountain Brow Road. The well records found indicate:

- 1) Water wells obtain water from the Queenston shale formation in the vicinity of Dr. Callaghan's property.
- 2) Bedrock is very close to surface with depths of overburden ranging from 0.3 to 1.2 metres on the properties of Dr. Callaghan and, his neighbour, Mr. Garwood-Jones.
- 3) An attempt to increase water supply by deepening a well in the area met with little success.
- 4) Typically, the response during well yield tests is that water is drawn down to the bottom of the well within one hour or pumping at a rate of only 1 Imperial Gallon per minute (IGPM), or less, and that recovery occurs slowly.
- 5) The water in some wells is described as salty.
- 6) Multiple well records appear with the same owner names, on several properties in the area. This is an indication that previous wells did not produce an adequate supply.
- 7) Some wells were abandoned immediately upon construction due to the fact that they were dry holes.
- 8) Under the name of Dr. Little, who previously owned the Callaghan property, I found four well records, three of which were dry and abandoned immediately upon construction. The other well seemed to produce an adequate supply, but the water quality is described as slightly salty.
- 9) Under the name of Mr. Garwood-Jones, I found four well records, one of which was dry and abandoned immediately upon construction. The other three wells reportedly performed poorly upon yield testing, drawing down to the bottom of the well after one hour or less of pumping at a rate of only 1 (IGPM) or less. Two of these wells also displayed a slow recovery rate.

The Hydrogeology of Southern Ontario (Singer, et al., 2003) describes the Queeston Hydrogeologic Unit as compact and dense shales with relatively low effective porosity due to the limited potential for fractures, dissolution features and interconnections.

Dr. Callaghan has stated that his well had met his domestic water supply needs for 25 years. A cistern system was set up by the previous property owner and has been used on the property to provide water for garden and lawn irrigation.

#### Site visit and well assessment

I was not able to confirm if there is a well record for Dr. Callaghan's well. He has indicated that the well is in a location consistent with well record number 2805036. This owner of this well is listed as Mr. Garwood-Jones, the complainant's neighbour. Dr. Callaghan stated that his well is 84 feet deep quoting a letter written by Len Martin, the well technician who performed a casing extension on his well, and this would be inconsistent with the depth of 90 feet on the well record. The copy of this letter dated January 14, 2007 that I received in the faxed material from Dr. Callaghan has a hand-written number for the well depth measured which could be 84 or 89 feet.

Dr. Callaghan's well is located in a wet area where surface water ponds in the vicinity of the well. A new domestic well with surface water ponding in the vicinity of the well, would be in violation of section 12.3 of Regulation 903 (amended by 372/07). The well casing was covered with a vermin-proof well cap and extended above the top of a well pit. The well pit was covered with circular piece of plywood that was sealed with spray-foam insulation around the well casing. I asked Dr. Callaghan if he had ever noticed water in the well pit and he said that he had observed some wetness but had not seen ponding of water in the well pit. I did not remove the sealant at the top of the well pit, or ask Dr. Callaghan to do so, because I did not want to further compromise the well. Dr. Callaghan removed the well cap and I had intended to take a water level measurement but decided not to insert the equipment because I could see something that looked like a smaller diameter casing inside the well casing and I did not want to get the equipment caught in the well.

According to Dr. Callaghan, the well casing was extended after several adverse water quality results for bacteria in the summer of 2006. Test results showing significant total coliform and/or E. coli contamination in June, July and August of 2006 were provided in the Jan 15/08 fax from Dr. Callaghan. According to Dr. Callaghan, the contamination in his well started when excavated soil was mounded on the property to the north and, at that time, the water coming out of the taps in his home was murky. I asked him to describe the water that was ponding around the well when this occurred and he said that it looked dirty or muddy. This supports the existence of a direct connection between surface water and the Callaghan well.

Dr. Callaghan has described changes to the developed lands north of his property, in particular, the drainage/removal of a sizeable pond and the creation of a drainage system for which a large concrete culvert was installed underground during the summer of 2006, which Dr. Callaghan believes has cut off recharge to his well.

According to a January 14, 2007 letter, Len Martin, a licensed well technician, of Martin Well Drilling, licensed well contractor (MOE well contractor number: 7146), performed a casing extension and tested the yield of the well in November 2006. On February 6, 2008, I called Mr. Martin to obtain additional information about any observations that he may have made or notes that he may have taken while working on the well. Mr. Martin indicated that, from what he remembered, he had been hired after the pump had failed. He stated that he removed the pump and cleaned out the well to try to increase the well yield. He also installed a liner inside the well casing and extended the casing above the top of the well pit to prevent surface water from

entering the well. Mr. Martin tested the well yield and concluded that the well was a very low producer. This is consistent with well records for wells in the area.

I asked Dr. Callaghan when he started to experience repeated occurrences of his well being dry and he responded in January 2007. Dr. Callaghan has also stated that his neighbour's water supply has not been affected.

#### Conclusions

- 1) Given the location of the property at the brow of the Niagara Escarpment and the hydraulic characteristics of the shale formation, the potential to obtain an adequate and reliable well water supply in this environment appears to be low.
- 2) The information provided indicates that the Callaghan well is or was subjected to a direct connection with surface water.
- 3) The change in surficial drainage or any drilling or blasting that may have been required to install the drainage system could have had an effect on the quantity of water in the Callaghan well by reducing the amount of surface water entering the well or affecting the water bearing features in the shale formation.
- 4) Given that the water supply from the well used by Dr. Callaghan's neighbour has not been reduced, effects appear to have been localized. This would not support extensive impacts to the water bearing formation from the construction of the drainage works. It is noted that nothing is known about the Garwood-Jones well specifically, but all well records found for this well owner indicate that the wells constructed on his property terminated and obtained water from the shale formation
- 5) Based on the available information and the timeline, the Callaghan well appears to have allowed the ingress of surface water, which could have been reduced by the construction work performed by Martin Well Drilling in November 2006.
- 6) There is no information to indicate that the construction of the drainage system either required a Permit to Take Water or has caused a flowing or leaking condition within the shale water bearing unit, and as such, the MOE will proceed no further with this complaint under section 34 of the *Ontario Water Resources Act, R.S.O. 1990, c.* 0.40.

#### Recommendations

The following recommendations are provided should the water level in the Callaghan well not recover adequately in the future:

1) Dr. Callaghan could inquire about alternate water supply options, including municipal servicing, if available.

2) The installation of a new well or the deepening of the existing well are not necessarily recommended, given the hydrogeology and performance of wells constructed in the area

In addition, any well on the property, including the well in question, is required to be abandoned in accordance with *R.R.O 1990, Regulation 903* if it is not used, properly maintained for future use or useable as a well.

#### References

- Ontario Division of Mines, 1976, Paleozoic Geology (Hamilton) Southern Ontario, Map 2336, Scale 1:50,000.
- Ontario Geological Survey, 1986, Quaternary Geology Hamilton Area, Southern Ontario, NTS Reference 30M15, Scale 1:50,000.
- Karrow, P.F., 1987, Report 255 Quaternary Geology of the Hamilton-Cambridge Area, Southern Ontario, Ontario Geological Survey.
- Singer, S.N., Cheng, C.K. and Scafe, M.G., 2003, The hydrogeology of Southern Ontario, Ontario Ministry of the Environment.

#### Limitations

The purpose of the preceding review is to provide advice to the Ministry of the Environment regarding subsurface conditions based on a review of the information provided in the above referenced sources. The conclusions, opinions and recommendations of the reviewer are based on information provided by others. The Ministry cannot guarantee that the information that has been provided by others is accurate or complete.

Ísabelle Drouin-Brisebois, P. Geo. Hydrogeologist



сс

P. Odom, Water Resources Supervisor, WCR J. Connelly, Senior Hydrogeologist, WCR

# DR.D.J.CALLAGHAN BACH SC., BACH ED. M.D. C.C.F.P. ASSITANT CLINICAL PROFESSOR MCMASTER UNIVERSITY 700 MAIN STREET EAST HAMILTON ON. L8M1K7

Date: 20/03/08

TO: Ms. Isabelle Drouin-Brisbois P. Geo. Hydrologist Ministry of the Environment 119 King St. West, 12 Floor Hamilton On. L8P4Y7

## **Re: Response to Assessment of Well Interference**

Dear Isabelle:

Thank you for your letter dated February 28/08. Before replying to your conclusions I should up date you on new developments in terms of our well. On March 13/08 I had Martin Well Drilling come out to review our situation. They inspected the pump and found that this and the pressure system were in order. However they found that there was a faulty safety switch and this was the reason the pump was not working. They re measured the well and found it to be 94 ft deep with the pump at the 92-foot level. There was water up to the 54-foot level. This was pumped out and they then measured the recovery rate and found that to be 3.3 gallons per hour. This was drastically reduced from the test in Nov. /06 which showed a rate of 3 gallons per minute.

In terms of your conclusions I would like to review each separately. #1 I agree with you that it is difficult to obtain water in this environment. However we did have a fully functional well for 25 years. This ended in 2007 with the construction of a massive drainage system.

#2 having a functional well producing non-contaminated water for 25 years does not support a direct connection to surface water. In the summer of 2007 we did have contamination. The organisms involved suggested sewage contamination. The Ministry of Health came and did a ENVIRONMEN HAMILTOS

ß

MAR

28

21: 6V

site inspection. Since our well cap was old and low to the ground I was told that this had to be corrected. There was and still is now no pooling of water at the well. Since this field has not had livestock on it for at least 25 years I was perplexed as to how we were getting sewage contamination. Now that I think back during this period of time we had multiple episodes were we ran out of water and had to switch our system over to the cistern side. This cistern captures its water from the roof. Since it is exposed to bird droppings I am sure this is were the coliform bacteria came from. We were in fact sampling the cistern water. This well was not contaminated by surface water. It has and is still producing non-contaminated drinking water albeit in a very reduced quantity.

#3 I agree fully that this extensive drainage system could have had an impact on the quantity of water in the well.

#4 Mr. Garwood Jones well is approximately 100 yards from my well. He has not to his knowledge lost water. However this has never been tested. He now lives by himself with the other 4 members of his family living else were. As such he could have markedly reduced water and not know it as his demand has drastically decreased. Since this well is over 100 yds from my well I suspect that the aqueduct feeding his well is probably different than ours. Comparison is most likely futile.

#5 Martin well Drilling extended our well because the Ministry of Health recommended this. This well is 94 feet deep drilled through bedrock. It has and still is producing clean drinkable water albeit it at a drastically reduced quantity. There is no way we could have surface water contamination. The proof being that the contamination was with sewage organisms and the only source is the cistern. Also if there is a problem with surface water entering the well why then with this Hugh meltdown of snow is our well water presently non-contaminated.

#6 when I reviewed this document I find it quite confusing however it is my understanding that no one has the right to take someone's water. Also why was SoilMat Engineers hired to review all the wells in this area if they felt that there was no way this Hugh drainage system could effect the surrounding wells. The Ministry of the Environment in my understanding mandate is to protect the environment and help maintain the safety of those that function with in it. I request that this situation be re-evaluated in light of the new information we have.

In terms of your recommendations I fully agree that we need to inquire about obtaining Municipal water. In terms of our present well we are able to function now that the switch has been fixed. In conclusion I believe that our water supply has been drastically limited by this very extensive drainage system. My ignorance and poor sampling created the contamination issue. There is no surface water contamination now or in the past. Thus the construction has impacted on the shale water-bearing unit diverting water from my well. In light of this new information I am requesting a further review of the data by Mr.J Connelly Senior Hydrologist of the Ministry of the Environment.

Sincerely

#### MAY.25.2009 10:53 9055449189

DR CALLAGHAN

Close

Print

# RE: H2O

From: **Morgante, John** (John.Morgante@hamilton.ca) Sent: May 22, 2009 3:38:17 PM To: Denis Caliaghan (callaghandoc@hotmail.com)

Good Morning Dr. Callaghan,

The agreement which both Charlie Unelli and Mark Rebinson refer to is a standard "Special Service Agreement". Staff has authority to enter into such agreement but the purpose of the agreement is only to provide a service to a homeowner where the watermain is near but not fronting the property and there are no plans to extent the watermain. The owner basically agrees to install a private service at his own cost, he agrees not to object when the watermain is petitioned for, and he agrees to disconnect his private service, connect to the new main when it is available and pay his share for the cost of the new watermain.

This agreement resolves the problem that your property does not front an existing watermain. Unfortunately your property is located outside of the City of Hamilton and the City has by-law R84-026. Section 2 of the by-law says the following which to us it prohibits this type of extension taking place unless the City of Hamilton agrees in writing which points to getting Committee and Council approval:

#### APPLICATION OF BY-LAW

2. The provisions of the By-law do not authorize the introduction of any watermain or service connection into any lands or premises outside the limits of the City of Hamilton (Substituted: 02-377), and no watermain or service connection is to be introduced into any lands or premises outside the City of Hamilton (Substituted: 02-377), except by written agreement with the City of Hamilton (Substituted: 02-377).

I also spoke with Ms. Shane Bonsteel who confirmed that her Municipality does not require an agreement. I also asked her how the Region of Halton deals with this sort of situation and she confirmed that they have several similar instances on boundary roads with other municipalities. They simply treat these homeowners as any other customer and they do not require anything special. In their case, however they do not have the same by-law restricting servicing as that of Hamilton by-law R84-026.

-----Original Message-----From: Denis Callaghan [mailto:callaghandoc@hotmail.com] Sent: Thursday, May 21, 2009 10:37 AM To: Morgante, John Subject: RE: H2O

Good morning John : Thanks for the update and sorry to here you are ill . Hopefully it is nothing serious.Mr. Carl Slater from the Ministry of Natural Resources had reviewed our situation with Mr. Charlie Unelli and Mr. Mark Robinson from the city. Mr Unelli stated the current administration fee was \$2410.00 per agreement required per property . He also stated that they have the signing authority so this does not have to go to Council . This was also reviewed byMs. Jane Bonsteel Acting Manager , Regulatory Compliance with

of 2

.

#### DR CALLAGHAN

Enviromental Services ,Halton Region and she has stated that this does not require an agreement between municipalities. I have these E mails and can fax them to you if this helps . Again John our situation is desperate and potentially unhealthy Dr C

Subject: Re: H2O Date: Fri, 15 May 2009 09:08:50 -0400 From: John.Morgante@hamilton.ca To: callaghandoc@hotmail.com

Good Morning Dr. Callaghan,

I believe I owe you an update. I am going by memory as I am home sick. This is what I am up against: Your property is outside of the urban boundary, in a different municipality and the watermain is not fronting your property.

Our standard special service agreement covers a temporary private service since the main is nearby however the City of Hamilton has a by-law which prevents servicing outside of the city without approval by Council.

I asked the Region of Halton how they handle this situation as they have similar cases. They simply treat it like all others but they do not have the same by-law.

It appears we will need a report to council and then an agreement.

I would like to meet again and I would like bring in a planner.

Unfortunately I am in court next week. It will have to be the following week.

Sent from my Wireless Handheld Device

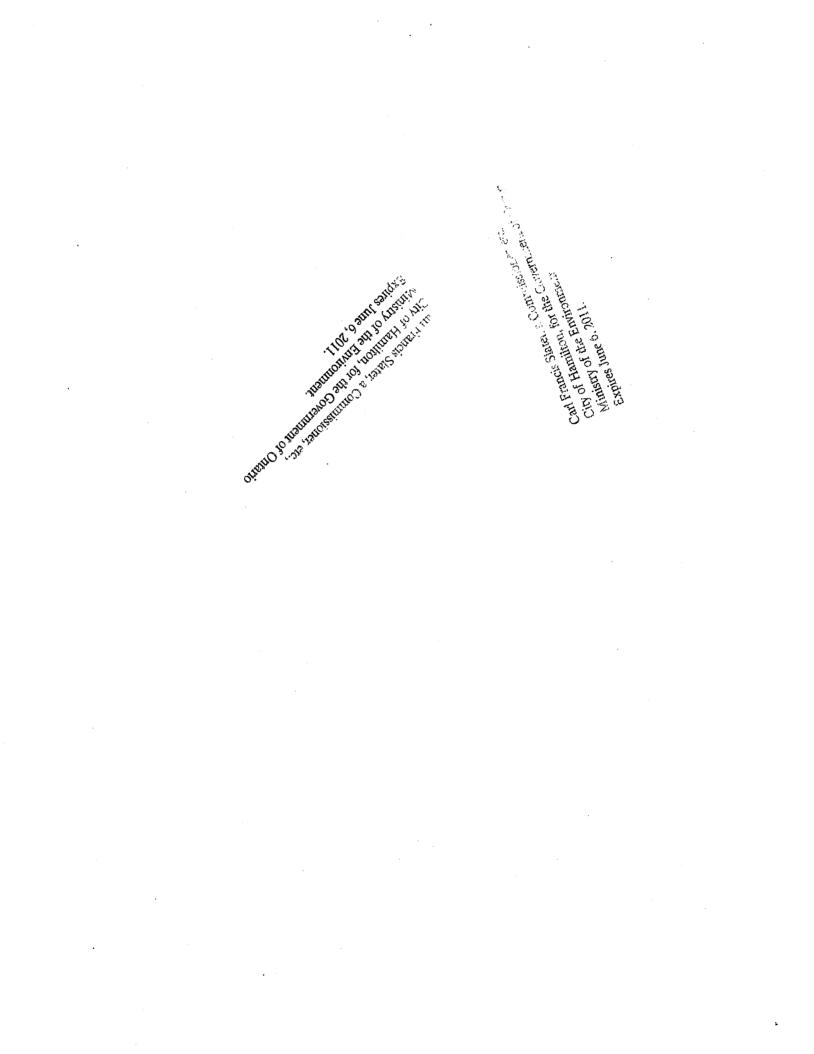
From: Denis Callaghan <callaghandoc@hotmail.com>

**To:** Morgante, John **Sent:** Fri May 15 07:55;48 2009 **Subject:** H2O

Good morning John: are you getting my E mails DrC

Help keep personal info safe. Get Internet Explorer 8 today!

Windows Live helps you keep up with all your friends, in one place.



#### Attachment #4 to LPS94-20/PW-31-20



55 John St. N., 6<sup>th</sup> Floor Hamilton, ON Canada L8R 3M8 www.hamilton.ca

Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) ~ 905-546-4435(Facsimile)

1 October, 2010

Director, OWRA s.62 Ministry of the Environment 119 King Street West, 12<sup>th</sup> floor Hamilton , Ontario. L8P 4Y7, HAND DELIVERED

ATTENTION: Carl Slater

RE: Notice of Proposed Report dated July 30, 2010 ("Notice of Proposed Report")
 Subsection 62(1) of the Ontario Water Resources Act
 SITE LOCATION: 768 Mountain Brow Road, PT LT 12, CON 2, PT LT 25, RCP PF1333, PT 1, 20R6939; Burlington, Ontario ("Property")

Thank you for your letter dated August 19, 2010 in which you agreed to allow the City of Hamilton until October 1, 2010 to provide written submissions with respect to the Notice of Proposed Report and the Draft Director's Order attached to that Notice.

The City of Hamilton submits that the Draft Director's Report attached to the Notice of Proposed Report should not be finalized and issued for the reasons set out in this letter.

#### 1. Jurisdiction of the Director

The City of Hamilton submits that the Director does not have the jurisdiction to issue an order under subsection 62(1) of the *Ontario Water Resources Act* ("OWRA") which requires a municipality to take an action within and for the benefit of a property located outside the geographical limits of the municipality. In this case, in paragraph 8 of your Draft Director's Report, you are proposing to order the City of Hamilton to provide a municipal water supply from the City of Hamilton to a property located in the City of Burlington and The Regional Municipality of Halton. As you may be aware, Mountain Brow Road is a boundary road and the Property abuts the portion of the road that is owned by the City of Burlington, which municipality is <u>not</u> named in the Director's Report. The City of Hamilton does not have any legal jurisdiction within the City of Burlington, over the supply of water in The Regional Municipality of Halton, nor over the Property in question.



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) ~ 905-546-4435(Facsimile)

### 2. <u>Not Necessary in the Public Interest</u>

The City of Hamilton submits that it is not necessary in the public interest for the Director to compel the City to construct water works to the Property pursuant to subsection 62(1) of the OWRA. In particular:

(a) The subject of the Draft Director's Report is related to water servicing for only one individual home located outside the jurisdiction of the City of Hamilton. Therefore this is a private interest matter and not one of the broader public interest.

A review of the cases decided by the Environmental Review Tribunal ("ERT") regarding reports under section 62 suggests that the Director ordinarily invokes the section to remedy safety or supply issues only in cases where more than one residence is affected. Private communal wells are typically at issue. The City is not aware of any ruling by the ERT or any instrument listed in the Environmental Registry in which a section 62 report was issued to compel a municipality to construct services to a single residence.

"Private interests" in water are explicitly referred to in other provisions of the OWRA, but they are conspicuously absent in section 62. In our view, the legislature considered a truly public interest to be a precondition to the exercise of a mandatory order to a municipality, and it deliberately omitted private interests from the purview of section 62.

(b) Any water supply problems being experienced at the Property were <u>not</u> caused by the City of Hamilton. This is significant as the Draft Director's Report appears to be based on the opinion that the development that has been allowed to take place in Hamilton to the north of the Property has led to the water supply problems.

City of Hamilton staff has undertaken a thorough review of available documents and data relating to the alleged water supply problems at the Property. The conclusion reached in that review was that the development, and any activities related to that development, allowed to take place in Hamilton are in no scientific way related to the diminishing water supply to the residence located on the Property. In support of this conclusion, we offer the following technical analysis.

## The first sentence of paragraph 5 of the Draft Director's Report states as follows: "A well was installed on the site in 1968 that provided a reported yield of 6 gallons per minute."



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) ~ 905-546-4435(Facsimile)

The Water Well Record received from Mr Carl Slater on August 30<sup>th</sup>, 2010 and presumably representing the well referred to in the Draft Director's Report (MOE WR # 6806967) was tested at 6 GPM but recommended for only 5 GPM upon completion of a 2hr pump test. The static level of this well was 35', the casing was 4' long, rock was encountered at 1' below ground, water was found at 88' below ground in a "blue shale" unit.

- Ms Isabelle Drouin-Brisebois, Hydrogeologist for the West Central of the Ontario Ministry of the Environment ("MOE") prepared a February 25, 2008 memorandum in response to a well interference complaint received from the owner of the Property. That memorandum will be referred to as an "Inspection Report" in this letter. The Inspection Report states that the resident's supply well was completed in a well pit. Though a pit may have been dug into the shale rock surrounding the well head, there is no indication that a well pit was established at the time of drilling. Given the investigation did not include photographs or details of the well pit, the correlation between the Water Well Record received from Mr. Slater and the "Callaghan well" is in doubt.
- The Water Well Record indicates that the well is 0.4 miles (643m) from Highway 6, while the home located on the Property is roughly 230 m from Highway 6. This also raises casts doubt on the supposition that the above noted Water Well Record pertains to the "Callaghan well".
- The well referred to in the Water Well Record was drilled in 1968. Three additional wells (MOE WR#2804033, #2804034, and #2804035) were drilled for a previous owner, Dr Little, on the same property, in June/July 1972, suggesting that the earlier drilled well was not adequate for a domestic water supply.
- The water quality was reported by the driller as "slightly salty". There is no mention of brackish waters included in the documentation to date, however the water quality is consistent with waters residing in Shale formations.

Therefore City of Hamilton staff are concerned about whether the first sentence of paragraph 5 of the Draft Director's Report is accurate and whether the Water Well Record provided to City of Hamilton staff is, in fact, the actual well record for the Callaghan well.

#### The second sentence of paragraph 5 of the Draft Director's Report states as follows: "This well has served the residents of the property for their domestic supply until a diminishing yield in 2006."

According to the Inspection Report, the "Callaghan well" was likely receiving surface water contributions until the casing was extended. Furthermore, the discussion in the Inspection Report regarding the site visit indicates that the well appeared to have a smaller diameter casing inside the 6" casing, such that Ms Drouin-Brisebois opted not to insert a water level tape for fear it may get stuck in the well.



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) = 905-546-4435(Facsimile)

- The Inspection Report indicated that the well construction and location support the existence of a direct interaction between surface water and the Callaghan well.
- The Water Well Record provided by Mr. Slater supports the circumstance described by Ms. Drouin-Brisebois pertaining to surface water entering the well directly as it identifies only 4 feet of casing installed, and there was no mention of grouting which would have prevented the interaction. Indeed, grouting was not a requirement until regulated in the early 1990's.
- The extension of the well would have left one six-inch casing exposed above grade. The existence of a second smaller diameter casing usually indicates the well has been lined. Lining generally involves the use of a rubber seal (K-Packer) and riser pipe that enables one to essentially extend the casing below the bottom of the original casing, and effectively shut off suspect waters entering the well around and below the casing.
- This well upgrade work was reportedly done in November 2006, and involved a "flow test" indicating that the flow was decreased, as would be expected should any waters entering through the well bore annulus be effectively shut-off. There was no mention of a liner in the letter from Martin Well Drilling that was provided to City staff by the MOE.
- There is no indication of a well yield or pump test being completed on the well prior to the upgrade, casing extension or possible well liner being installed, other than the drillers log from 1968, which has no information about the pumping process (air development / pumping, etc). As such, the ability to quantify flows in as accurate a manner as the standard processes used by drillers and well technicians today was not available.
- There is some question as to whether the Water Well Record #6806967 is in fact the record for the "Callaghan well". Further there is question as to the anomalous yield determination of 5 GPM given that all other wells in the area, completed in the shale bedrock were reported at 1 or less GPM, and a shale aquitard is generally uniform in hydraulic characteristics.
- The response to the Inspection Report from the current owner of the Property, Dr Callaghan, indicates that in 2006 prior to sampling for bacterial analysis that they had experienced several episodes of a dry well. This was prior to the development and impervious surfaces being laid north east of the Property but rather around the time of the drainage trench being installed. However as noted below, the construction of the drainage trench could have only enhanced, and not decreased, flow to the deeper shale units if it had any impact at all.

# The third sentence of paragraph 5 of the Draft Director's Report states as follows: "In the fall of 2007, through contact with the City of Hamilton and Halton Region the ministry became aware of the quantity interference complaint."

In 2007, from the first of May to the end of August the recorded rainfall at the Royal Botanical Gardens, the most proximal climate station to the Mountain Brow



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) ~ 905-546-4435(Facsimile)

residence, received a total of 141mm of rainfall, compared to 371 mm in 2004, 276mm in 2005, 318 mm in 2006, 428mm in 2008, and 500 mm in 2009. 2007 was a dry year.

- The City of Hamilton received several dry well complaints in 2007, particularly in the fall.
- Dr Callaghan, in response to Ms Drouin-Brisebois's investigation, indicated his system had to be "switched over to the Cistern", a process that would likely supply adequate water quantity under average climate conditions. The fact that the cistern existed prior to purchasing the home suggests that the cistern has always been used to supplement flows where needed. In 2007, the lack of rainfall would have limited the effectiveness of the cistern to supplement well supply.

The fifth sentence of paragraph 5 of the Draft Director's Report states as follows: "One of the conclusions was that the change in surficial drainage as a result of a commercial development to the North of the site or any drilling or blasting that may have been required to install the drainage system for the commercial development to the North of the site <u>could</u> have had an effect on the quantity of water in the residential well by reducing surface water recharge or affecting the aquifer characteristics."

The Inspection Report states in conclusion 3, that; "The change in surficial drainage or any drilling or blasting that may have been required to install the drainage system could have had an effect on the quantity of water in the Callaghan well by reducing the amount of surface water entering the well or affecting the water bearing features in the shale formation." The significance of the difference between the Draft Director's Report and the actual Inspection Report findings is twofold. Firstly, the Draft Director's Report suggests that the works have reduced surface water recharge while the Inspection Report refers to surface water entering the Callaghan well directly, and secondly the Draft Director's Report simplifies the conclusion of affecting aquifer properties as opposed to the Inspection Report which discusses possible affects to the water bearing features in the shale formation.

- The surface water drainage to the north immediately adjacent to the Property has remained unchanged. There remains a drainage course that flows to the northeast corner of the Liburdi Engineering property where it ponds and flows southerly to the southeast corner of the Liburdi Engineering property and from there flows generally southwest towards a culvert at Highway 6 and under high flows southeast towards Mountain Brow Road. This drainage course has remained unchanged since at least 2002 (earliest available digital aerial photography) and is at most 100 m from the home located on the Property.
- The drainage course to the northeast of the Property, and roughly 375 m from the home located on the Property, was not altered in the upstream portion of the stream closest to the Property. Rather, a historic tributary to this stream from the existing RONA / Walmart properties was converted to impervious



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) ~ 905-546-4435(Facsimile)

surfaces and piped to the old Sheppard's Quarry. The drainage has remained from this area to the old quarry, where prior to development it flowed overland or through shallow groundwater flow, ultimately discharging to the old quarry. The predevelopment surface water flows in the upper northeast historic tributary would not have provided recharge to the well since the quarry was established and if altered would not have an impact on the well at issue.

- The "Hydrogeological Investigation, Flamborough Business Park, Flamborough, ON" prepared by Golder and Associates Ltd. in September 1993 indicates groundwater flow (Figure 8) inferred from shallow groundwater elevations that flow towards the Property are from the undisturbed area immediately northwest of the Property. This would be expected given that the old Sheppard's Quarry (which was maintained dry due to gravity draining from the southwest portion of the quarry) would create a cone of depression around the quarry intercepting any flows originating from the areas now developed. The Golder report also indicated that maintaining higher water levels, and longer retention time in the Quarry storm water management ponds would in fact increase infiltration to deeper rock units, namely the Irondeqout / Rockway / Fossil Hill formations which lie above the Cabot Head Shales. The Golder Hydrogeological Investigation will be forwarded by email (note that although it is marked draft, the document is the final version).
- The shale aquifer as discussed in the 2008 Inspection Report, is more likely that of the Cabot Head Shales of the lower Silurian rather than the Queenston Shales of the Upper Ordovician. The Cabot Head Shales are considered the regional aquitard (Brunton, F.R, 2009, Update of Revisions to the Early Silurian Stratigraphy of the Niagara Escarpment: Integration of Sequence Stratigraphy, Sedimentology and Hydrogeology to Delineate Hydrogeological Units) that "hold" water in the Goat Island / Gasport Formation above, creating the major aquifer system historically referred to as the Amabel Production Zone. The drillers' logs refer to shale rock above red shale above blue shale to roughly 30m depth, and as such would align more with Cabot Head Shales than Queenston Shales.
- Of all the four well records received from the MOE referring to Dr Little (one in 1968, and the remaining three in 1972) by two separate drill contractors (2933 and 1620) all of the geological descriptions refer to encountering shale rock at the bedrock surface within 0.3 to 1.2 m below the ground surface.
- None of the records indicate a limestone / dolostone rock, nor do any of the records indicate water found in anything less than 65' deep (in the "blue shale"). This is consistent with observations from the quarry, and the Highway 6 road cut, where upper formations that generally produce good water are eroded away close to the escarpment.
- The trench dug between the developed properties and the quarry are situated in the upper Gasport / Goat Island Formation, and was constructed parallel to shallow flow. The trench originates in the Ancaster Chert beds of the Goat Island Formation and descends down to the mid-Gasport Formation about 3m above the old Sheppard's Quarry floor. These rock units are thin and well drained if not gone as you approach the Mountain Brow Road, particularly close to the Property as the escarpment is closer to the Mountain Brow Road at its east end. These rock units, being close to surface and proximal to the



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) ~ 905-546-4435(Facsimile)

quarry would have been significantly de-watered in this area due to their proximity to the quarry face (0 to 120m away). Likewise these units would discharge to surface as they subcrop between Highway 5 and the Escarpment, providing baseflow to the many watercourse that drain the escarprment as opposed to recharging deeper shale aquitard units.

- If blasting and trenching impacted the shale aquifers below, which are in fact regional aquitards enabling the upper dolostone aquifers, it would <u>enhance</u> <u>flow</u> towards the deeper shale as the static level of waters encountered in the shale are all reported below the top of the shale units, indicating any waters available in the upper units, if they exist, would possess a downwards gradient. As such any blasting could only compromise the confining affect of the shale aquitard and the vertical downward gradient would actually influence flow into the shale aquitard.
- Notwithstanding the comment above, City of Hamilton Development Engineering staff confirmed the drainage system was not blasted, but rather excavated using a significantly less disruptive hydraulic impact hammer (hoe ram).

City staff are therefore of the opinion, as is Ms Drouin-Brisebois in her final conclusion from the Inspection Report, that there is <u>no information</u> to indicate that the construction of the drainage system has caused a flowing or leaking condition within the shale water bearing unit. As such, it is submitted that contrary to the statement made in paragraph 6 of the Draft Director's Report, there is no reason to believe that it is in the public interest to require the City of Hamilton to provide a municipal water supply to the Property.

- (c) Even if the water supply problems were caused by the City of Hamilton, which the City of Hamilton denies is the case, it is submitted that it is not necessary in the public interest for the Ontario Ministry of the Environment to address the matter through a Director's Report under subsection 62(1) of the OWRA but rather it is a private matter for the individual property owner to address as the problem is with a <u>private water supply</u>.
- (d) A municipal water supply is not necessary in the public interest as it is not the only alternative water supply option for a single residential property. Further, the capital and operating costs of doing so are significantly higher than other safe and sustainable alternatives.

One of the recommendations from the Inspection Report was that the Property owner could inquire about an alternate water supply, including a municipal supply, if available.

The Draft Director's Report does not reference other water supply options are available when dealing with only one residential property. There are several water delivery companies operating throughout the City of Hamilton that fill private *Ontario Building Code* approved holding tanks.



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) – 905-546-4435(Facsimile)

These drinking water providers are regulated and monitored by Public Health officials and as such provide a safe and sustainable domestic supply alternative to groundwater.

A new residence was recently built on Mountain Brow Road. It appears that a new well was drilled or an old well fitted with a new vermin proof cap located roughly 8m south of Mountain Brow Road. A broader investigation of water supplies among the neighbours could also be undertaken, with an option of sharing a supply, should any of the properties, particularly those with a greater setback from the escarpment which may encounter a grainstone water bearing unit, be able to provide domestic water to the neighbouring residents.

In the available documentation reviewed to date, City of Hamilton staff have not seen any evidence that a comprehensive hydrogeological and mechanical assessment of the Callaghan well has been conducted. Until this is done, it cannot be known if the drilling of another well(s) on the Property might be another water supply option.

A municipal supply could be made available through cross-municipal <u>cooperation</u>, as opposed to being required by a Director's Report issued under subsection 62(1) of the OWRA. However, preliminary estimated costs for such an extension for a single property are \$130,000. Therefore it is submitted that a cost comparison or feasibility study with economic, social and environmental considerations should be undertaken by the well owner or The Regional Municipality of Halton to evaluate other options of safe and sustainable drinking water provisions.

#### CONCLUSION

The City of Hamilton requests that the Draft Director's Report <u>not</u> be finalized and issued based on the aforementioned reasons.

Please note that at its meeting of September 29, 2010, the Council of the City of Hamilton passed the following resolutions:

(a) That the City Solicitor and General Manager of Public Works be authorized if and when they deem appropriate to enter into discussions with the Ministry of the Environment and The Regional Municipality of Halton to attempt to resolve the issues related to the proposed Director's Report and any issued Director's Report, including the issues under appeal, respecting the private water supply at 768 Mountain Brow Road, Burlington, and to inform City Council on the outcome of any such resolution.



Public Works Department Environment & Sustainable Infrastructure Division 905-546-2424 ext. 2499(Telephone) ~ 905-546-4435(Facsimile)

- (b) That the City Solicitor be authorized and directed to take all necessary actions to appeal any Director's Report issued pursuant to section 62(1) of the Ontario Water Resources Act respecting the private water supply at 768 Mountain Brow Road, Burlington, including but not limited to the application for a stay of the terms/conditions of said Director's Report, all as described in Report LS10014/PW10090, if such an appeal is deemed to be appropriate by the City Solicitor and the General Manager of Public Works.
- (C) That Report LS10014/PW10090 respecting the proposed Director's Report under section 62(1) of the Ontario Water Resources Act - 768 Mountain Brow Road. Burlington, Ontario not be released as a public document as the information relates to potential litigation and advice that is subject to solicitor-client privilege. including communications necessary for that purpose.

As such, even in the absence of a finalized Director's report, City of Hamilton staff are willing to continue its discussions with officials from The Regional Municipality of Halton and with the MOE, on a voluntary basis, to attempt to resolve the issues related to the private water supply problems at the Property.

If, despite the foregoing, the Director decides to finalize and issue the Director's Report, the City of Hamilton respectfully requests that the dates set out in Part 3 of the Report allow sufficient time for the actions to be taken. In particular, given that the proposed water works are unscheduled and not budgeted, it is submitted that at least a full year would be necessary to allow for budgetary approvals. design, construction and commissioning.

We look forward to your response to these submissions.

Sincerely.

do Chienburg

Gerry Davis. General Manager, Public Works Department, City Of Hamilton

CC:

Tim McCabe, General Manager, Planning and Economic Development Department, City of Hamilton Geoff Rae, Senior Director, Environment and Sustainable Infrastructure Division, Hamilton

Kiyoshi Oka, Director, Regional Municipality of Halton (by fax only)

## Options for Extension of Municipal Services to Mountain Brow Road West Properties

Options to Extend/Connect Water Services to 720, 768, & 780 Mountain Brow Road West, Burlington	Rationale	Comment
Option 1 – A proponent-led Regional Official Plan Amendment (ROPA)	<ul> <li>An amendment is required to recognize the extension of urban services for lands beyond the settlement area boundary. The Region's Urban Services Guidelines (<u>https://www.halton.ca/Repository/Urban-Services-Guidelines</u>) explain the circumstances connections can be considered.</li> <li>Section 2.6.2 of the Urban Services Guidelines are relevant in this circumstance and state: "Where an abutting municipality (e.g. Region of Peel or City of Hamilton) constructs a water or wastewater main on a boundary road for the purposes of servicing lands within that municipality, the Region will not permit connections to those mains by properties outside the Urban Area.</li> <li>A property owner is entitled to make an application requesting permission for connection. The process is as follows: <ul> <li>i. The Region must receive confirmation, in writing, from the abutting municipality that they are willing and able to provide service to properties located within the Region of Halton;</li> <li>ii. The property owner must formally submit an application to amend the Regional Official Plan to permit the connection of the property to the abutting municipality's system;</li> <li>iii. Halton Regional Council must approve the amendment to the Regional Official Plan to extend service outside of the urban boundary;</li> <li>iv. The Council of the abutting municipality must approve the connection of the owner's property to their system; and,</li> <li>v. An agreement must be executed between the Region of Halton, the abutting municipality and the property owner. This agreement will be registered on title to the owner's lands.</li> </ul> </li> </ul>	This is a viable option for the residents to consider.

Options to Extend/Connect Water Services to 720, 768, & 780 Mountain Brow Road West, Burlington	Rationale	Comment
	Connections will only be supported if the owner can demonstrate that the private services are inadequate and that the deficiency cannot be addressed by other means. The owner must demonstrate that all possible alternative water or wastewater systems are incapable of providing effective treatment to a level which mitigates risk to human health and the environment."	
	Option 1 can be advanced as a single amendment application for all 3 properties. ROPAs could take 4-8 months, once a complete application is received.	
Option 2 - Determination of Large Scale Failure of Private Water Systems	<ul> <li>Section 2.6.1.1 of the Urban Services Guidelines indicates that a connection may be permitted "where there has been a large scale failure of private water or wastewater systems that pose a significant risk to human health or the natural environment, the extension of municipal services may be permitted without a Regional Official Plan Amendment. Large scale failures are defined as: <ul> <li>Situations that result in an Order from the Ministry of the Environment;</li> <li>Failures that affect fifty percent (50%) or more of the units in a community; or</li> <li>Failures that affect less than fifty percent (50%) of the units in a community but that have a significant environmental impact as determined by the Region."</li> </ul> </li> <li>Reports to Regional and Hamilton City Council would be needed, seeking authorization to execute an agreement which profiles the nature of the servicing arrangement between the Region and the City, if the water connection were to advance.</li> </ul>	Sufficient technical evidence that the failure can be considered "large scale" or that there is a "significant risk to human health or the natural environment" is required.
Option 3 - Issuance of a Ministry of the Environment,	Related to Option 2, this Provincial order requires evidence of large scale failure.	Discussions with the MECP need to occur.

Options to Extend/Connect Water Services to 720, 768, & 780 Mountain Brow Road West, Burlington	Rationale	Comment
Conservation and Parks (MECP) Order to the City of Hamilton to provide servicing	Based on the 2010 MOE Notice of Director's Report and the 2012 decision of refusal, it would be preferable for all public agencies to be supportive of an order to connect to the City of Hamilton water line.	
Option 4 - Potential Annexation by the City of Hamilton	This option would require approval from the Province, likely with full support from the Cities of Hamilton and Burlington.	This is not a practical or reasonable option to pursue.

## **Urban Services Guidelines**

**Regional Official Plan Guidelines** 





## Halton Region Official Plan Guidelines

The **Regional Official Plan (ROP)** is Halton's guiding document for land use planning. It contains policies that guide decisions related to, among other things, managing growth and its effects on Halton's social, economic and natural environment.

The **ROP Guidelines** are a set of documents that clarify, inform, and aid in the implementation of the Plan's policies.

"This Plan calls for the preparation of certain guidelines or protocols to provide more detailed directions in the implementation of its *policies.*"

Halton Region Official Plan – Section 192 as adopted by Regional Council, December 16, 2009

The Guidelines have been prepared in accordance with Section 192 of the ROP. They provide direction and outline approaches that can be used to satisfy the relevant policies of the Plan. They do not introduce additional policy requirements, and, in the event of a conflict between the Guidelines and the Regional Official Plan, the Plan shall prevail.

The Guidelines may be updated from time to time as required through a report to Regional Council.

For more information, visit halton.ca/ROP or halton.ca/ROPguidelines or call 311.

## **Urban Services Guidelines**

ĺ

The **Urban Services Guidelines** is intended to provide guidance regarding the Region's policies on the provision of municipal water and wastewater services.

Purpose	The purpose of the Urban Services Guidelines is to:
	<ul> <li>provide specific direction on implementing Regional Official Plan policies concerning water supply and sewage disposal for proposed development;</li> <li>outline the conditions, circumstances and authority under which Halton Region can grant various servicing approvals regarding the supply of water and the disposal of sewage for proposed development within Halton; and</li> <li>explain the processes to be undertaken by all proponents before the Region can consider the granting of any necessary approvals.</li> </ul>
Application & Use	Sections 87, 88, and 89 of the Regional Official Plan outline the Region's policies with respect to the provision of urban services – water supply and wastewater treatment. The Urban Services Guidelines are provided to assist in the implementation of these policies and should be used for this purpose by a variety of users, including:
	<ul> <li>Regional, local and external agency staff: as a reference to guide the process to approve servicing requests to new development within the Halton Urban Area;</li> <li>the development industry: for clarity on the development process and requests for the provision of water supply and sewage disposal services in Halton; and</li> <li>the public: to understand the process and the criteria involved before servicing is provided.</li> </ul>
Supporting Documents	<ul> <li>In addition to the policy direction provided by the Regional Official Plan, the following documents should be considered alongside this Guideline, as appropriate:</li> <li>Applicable Provincial Legislation</li> <li>Provincial Policy Statement, 20142020</li> <li>Applicable Halton Region By-laws</li> </ul>
	<ul> <li>Applicable Halton Region Manuals &amp; Documents</li> <li>Local Official Plan &amp; Zoning By-law</li> </ul>
Version	<b>Version 1.10</b> This VV ersion 1.0 of the Urban Services Guidelines was brought before the Inter-Municipal Liaison Committee on June, 18 2014 through Report No. IMLC01-14. This version 1.1 is an amendment to version 1.0 was approved by Regional Council on November 25. 2020 through Report No. LPS94-20 and contains selected criteria for permitting municipal water connections that cross municipal boundaries. It replaces all previous guidelines pertaining to water and wastewater services in Halton's Urban Area.

This version of the Guidelines is consistent with the Provincial Policy Statement, 2005. A review and update, if necessary, to ensure consistency the Provincial Policy Statement, <u>2014, 2020</u> is forthcoming.

I

## **Table of Contents**

1.0	Introduction 1
1.1	Purpose1
1.2	Legislative & Policy Context1
1.3	Application and Use1
2.0	Urban Services
2.1	General Servicing Guidelines
2.2	Services on Municipal Roads
2.3	Municipal Services on Private Lands5
2.4	Services on Private Property 5
2.5	Municipal Service Extensions within Urban Areas
2.6	Municipal Service Extensions Outside Urban Areas 6
2.7	Financial Requirements
2.8	Well Survey and Monitoring
3.0	Private Services 10
3.1	Private Services within the Urban Area 10
3.2	Water Storage and Sewage Holding Tanks 12
Apper	dix A – Well Survey and Monitoring Program

## 1.0 Introduction

#### 1.1 Purpose

The purpose of the Urban Services Guidelines is to:

- 1. provide specific and detailed direction on the implementation of Regional Official Plan policies concerning water supply and sewage disposal for new development within the Urban Area;
- outline the conditions, circumstances and authority under which Halton Region can grant servicing approvals regarding the supply of water and the disposal of sewage for proposed development within Halton; and
- 3. explain the processes to be undertaken by all developers before the Region will consider granting any necessary approvals.

#### 1.2 Legislative & Policy Context

The Regional Municipality of Halton (the "Region") is responsible for the administration and provision of a wide range of government approvals and services within Halton Region. These approvals and services are often prescribed by specific Provincial Statutes and/or Requirements, and in some cases, the Province has delegated its authority to the Region. These Guidelines have been prepared in accordance with the Regional Official Plan, Provincial Requirements and the authority vested or delegated to Regional Council and/or staff under:

- 1. The Municipal Act, 2001;
- 2. The Planning Act, R.S.O. 1990;
- 3. The Environmental Protection Act, R.S.O. 1990;
- 4. The Environmental Assessment Act, R.S.O. 1990;
- 5. The Ontario Water Resources Act, R.S.O. 1990;
- 6. The Clean Water Act, 2006;
- 7. Safe Drinking Water Act, 2002;
- 8. The Greenbelt Act, 2005; and
- 9. The Development Charges Act, 1997;
- 10. Health Protection and Promotion Act, R.S.O. 1990;
- 11. Ontario Building Code Act, 1992;

Section 3 of the Planning Act requires that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act. These Guidelines are consistent with the Provincial Policy Statement, 2005.

The above noted Provincial legislation and their implementing Regulations, Policies and Guidelines, establish a Provincial standard to which the Region is directed to adhere. The Urban Services Guidelines incorporate the Provincial standards and in some instances outline additional requirements.

#### 1.3 Application and Use

This Guideline primarily details the Region's servicing criteria relating to the provision of full municipal water and wastewater services for development approvals within the Urban Area. In addition, the Guideline provides direction for servicing by way of partial or private servicing where this type of servicing is permitted by policies within the Regional Official Plan. Detailed technical and/or procedural criteria are outlined in various Halton Region Department Policies and Procedures Manuals and various Provincial Documents. These Manuals and Documents cover certain servicing matters not specifically identified in the Regional Official Plan and are intended to help the general public and the development industry to better understand additional Halton and/or Provincial requirements.

Where new development is serviced using private water supply and/or private sewage disposal systems, the *Guidelines for Hydrogeological Studies and Best Management Practices for Groundwater Protection* should be used.

2

## 2.0 Urban Services

#### 2.1 General Servicing Guidelines

Under the Municipal Act, 2001 (section 11(11)), the Region has been assigned exclusive jurisdiction for the provision of water and wastewater servicing within Halton Region. This applies to both treatment and distribution/collection. Further provisions of the Act authorize the Region to pass by-laws respecting the provision of water and wastewater servicing and the collection of fees.

It is the policy of the Region, through the Regional Official Plan, to provide *urban services* only within the Urban Area (s. 89(1)), and, to require that approvals for all new *development* within the Urban Area be on the basis of connection to Halton's municipal water and wastewater systems (s. 89(3)). The Regional Official Plan provides some exceptions to these requirements within certain geographic areas and under specific conditions. The exceptions are detailed under Part 3.0 of these Guidelines.

#### 2.1.1 Planning Approvals

That it may be possible to service a particular property does not guarantee approval of the proposed use. It is strongly recommended that the proponent first consult both the Regional Official Plan and the local municipality's Official Plan and Zoning By-law to confirm the permitted uses and any servicing policies that may be applicable. Where the subject lands are located within either the Niagara Escarpment Plan Area or Parkway Belt West Plan Area, the proponent should also consult the appropriate Provincial approval authority.

#### 2.1.2 Servicing Allocation

In Halton Region, planning approvals are only granted where sufficient water and wastewater capacity exists to accommodate the development or where there is a reasonable expectation that the capacity can be obtained within the time of conditional approval. Certain planning applications may be approved prior to the availability of servicing capacity at the discretion of the Region and the Chief Planning Official for Halton Region.

Where Allocation Programs have been approved by Regional Council, the owner is required to enter into an Allocation Agreement(s) and provide all monies, as determined by the specific Allocation Program, prior to the granting of draft approval. Draft Approvals cannot be granted for any units that have not received servicing allocation.

Allocation may be transferred between owners provided that all requirements of the Region and the applicable local municipality are met.

#### 2.2 Services on Municipal Roads

#### 2.2.1 Manuals and Documents

The technical design of municipal services is governed by standards and criteria adopted by Regional and Local Councils and through the guidelines issued by the Ministry of the Environment (MOE) including:

- 1. Halton Region Design Criteria, Contract Specifications and Standard Drawings
- 2. Halton Region Development Engineering Review Manual
- 3. Halton Region Water Works By Jaw No. 131 10 Drinking Water System By-Jaw No. 79-19, as amended
- 4. Halton Region Wastewater System By-law No. 184-95
- 5. Halton Region Sewer Discharge By-law No. 2-03
- Halton Region Cross Connection Control By law No. 61 11

Commented [BC1]: By-Law No. 79-19 replaces Water Works By-Law No. 131-10

Commented [BC2]: By-Law No. 79-19 replaces Cross Connection Control By-Law No. 61-11

3

 7-6.
 Local Municipal Standards and Criteria

 8-7.
 MOE Design Guidelines for Sewage Works, 2008

 9-8.
 MOE Design Guidelines for Drinking Water Systems, 2008

 10-9.
 MOE Stormwater Management Planning and Design Manual, 2003

 11-10.
 Ontario Provincial Standard Drawings and Specifications

 12-11.
 Ontario Building Code

 13-12.
 Fire Underwriters Survey – Water Supply For Public Fire Protection

#### 2.2.2 Design Guidelines

Prior to receiving an approval for connection to municipal water and wastewater services, an owner wishing to develop land in Halton must satisfy all the Region's requirements, financial or otherwise.

Construction of municipal watermains or wastewater mains cannot commence until the appropriate engineering approvals have been received, agreements/permits have been entered into, and all securities and fees have been posted.

Engineering requirements will be specific to the lands being developed. However, in general, the Region will review the following:

- 1. Implementation of the recommendations of an approved Master Plan prepared in support of a Regional Official Plan Amendment, Secondary Plan or Development Charges By-law;
- The design and construction of the wastewater mains to take into account drainage from upstream developments. The cost of oversizing the mains is at the expense of the owner unless the services meet the criteria approved in the Development Charges By-law. Regional staff will determine if the wastewater mains are designed at a sufficient depth to accommodate drainage from the upstream development;
- 3. Design and construction of the water system to provide sufficient looping for security and adequate fire flows to accommodate the development. The costs of any oversizing is at the expense of the owner, unless the services meet the criteria approved in the Development Charges By-law;
- 4. The extension of municipal watermains and wastewater mains to the limits of the subject property to facilitate the extension of services to future development lands; and,
- 5. For developments adjacent to a Regional Road, the design of storm sewer systems and storm water management ponds to accommodate storm flows from the Regional Road at no cost to the Region. At no time shall the Region contribute to the cost of land required to construct a storm water management pond or the oversizing of the storm sewer service to accommodate regional or municipal flows.

#### 2.2.3 Multiple Unit Servicing Guidelines

The purpose of the Multiple Unit Servicing Guidelines is to ensure that all multiple unit horizontal buildings and/or complexes are provided with individual water services, water meters and shut off valves in order to permit the repair of an individual property owner's service while minimizing disruption to other owners. The Multiple Unit Servicing Guidelines apply to all proposed new multiple unit residential, commercial, industrial or institutional <u>horizontal</u> buildings and/or complexes; rental, freehold or condominium. The following servicing requirements will be reviewed for compliance before approvals and permits are granted by the Region:

- The servicing requirements consist of individual water meters and individual water shut off valves for each unit with individual water laterals for each unit going directly to the unit from the watermain without passing in front of, behind or through any other units unless the piping is located in a tunnel pipe, corridor, common basement or parking garage;
- The mains and shut off valves are to be located external to the units in common areas such as roads, driveways, front yards or parking lots, but must not be located in back yards, patio areas, service roads or entrances behind the building; and,
- In stacked multiple residential buildings and/or complexes all water meters must be located in a common area of the basement or on the ground floor levels.

#### 2.2.4 Cross Connection Control and Backflow Prevention

Regional Council approved the Cross Connection Control By-law 61-11 in order to safeguard the municipal water distribution system. Approvals for connection to the Region's municipal water system will not be granted unless the property owner has complied with the requirements as set out in By-law 61-11.

#### 2.3 Municipal Services on Private Lands

All municipal services shall be located on municipal rights-of-way. Proposals to locate municipal services on private lands will not be approved unless it can be demonstrated that there is no alternative, that it is in the public interest (e.g. required for watermain looping) and that the proposal has received the approval of the Commissioner of Legislative and Planning Services.

Municipal services on private lands must be located on an easement in favour of the Region. The size of the easement will be determined based on the specifics of the service being constructed but in no case shall be less than 8.0 m as set out in the Halton Region Water and Wastewater Linear Design Manual.

#### 2.4 Services on Private Property

Water and wastewater services that are located on private property and are intended to connect a building to the Region's municipal services are the responsibility of the private property owner. The design and construction inspection of such private services must conform to the requirements of the Ontario Building Code and are the responsibility of the local municipality in which the property is located. The local municipality must certify to the Region that the installation and inspection of private services are satisfactory before connection to Halton's municipal system will be permitted.

Under no circumstances may a private water or wastewater connection be used to service more than one lot unless that lot is a Parcel of Tied Land affiliated with a Common Element Condominium or a Vacant Land Condominium under the Condominium Act, 1998.

#### 2.5 Municipal Service Extensions within Urban Areas

Where properties located within the Urban Area are not serviced by municipal watermains, wastewater mains, or both, service may be extended by the following processes:

- The owner of the property may arrange for a contractor to construct the service entirely at their own expense. The owner will retain a Professional Engineer to prepare drawings in accordance with sections 2.2.1 and 2.2.2 of these Guidelines and enter into an agreement with the Region prior to constructing the service;
- 2. Should there be a number of properties that would benefit from the extension of a service, the owners of the properties may enter into a private cost sharing arrangement to finance the cost of the design and construction. The owner(s) would retain a Professional Engineer to prepare drawings in accordance with sections 2.2.1 and 2.2.2 of these Guidelines and enter into an agreement with the Region prior to constructing the service; and,
- 3. The owners could petition the Region to construct the service under the Service Extension Policy (Report No. CS-62-o6). Should there be sufficient interest from the benefitting owners, the Region would consider the request and, following approval, include the project in a future Capital Budget. The cost to construct the service would be allocated to all benefitting owners.

#### 2.6 Municipal Service Extensions Outside Urban Areas

The Regional Official Plan generally prohibits the establishment of urban services outside of the Urban Areas. There are a number of exceptions to this general prohibition set out in section 89(21) of the Regional Official Plan that include:

- The provision of water infrastructure may be permitted from remote water supply sources such as wells
  or reservoirs and, where in accordance with other policies of the Regional Official Plan, from
  municipalities adjacent to Halton Region;
- The Hamlets of Norval and Glen Williams when the Region, in consultation with the Town of Halton Hills, considers it prudent and feasible to provide such services;
- Existing connections to the watermain on Jessie Avenue and Glenda Jane Drive in the Hamlet of Campbellville;
- Designated locations within the North Aldershot Policy Area as shown on Map 1 and in accordance with s. 139(3);
- 5. The Beaufort Heights Subdivision in the City of Burlington;
- 6. Servicing for Public uses that are located outside of Urban areas as approved by Regional Official Plan Amendment (ROPA) No. 40:
  - a) The Halton Waste Management Site, municipally known as 5400 Regional Road 25 in the Town of Milton;
  - b) The Biosolids Management Centre, municipally known as 4449 Regional Road 25 in the Town of Oakville;
  - c) The Milton Works Yard, municipally known as 5600 Regional Road 25 in the Town of Milton; and
  - d) The Robert C. Austin Operations Centre, municipally known as 11618 Trafalgar Road and including the Trafalgar Sports Park, municipally known as 11494 Trafalgar Road in the Town of Halton Hills; and,
- 7. Connections existing and approved by Council on the day of adoption of the Regional Official Plan.

#### 2.6.1 Requests for Connection or Extension of Municipal Services

From time to time the Region is requested to permit either the connection to or extension of municipal water and/or wastewater mains outside the Region's Urban Areas and/or across the Region's borders. Such requests are usually made by residents who own property located on or close to a municipal system and who are experiencing problems with their private services.

For the purposes of these Guidelines, a "connection request" means a request to connect a property which is located on (fronts on) an existing municipal system. An "extension request" means a request for the extension of a municipal service main to service one or more properties not presently located on (fronting on) the municipal system.

All connection and extension requests must comply with the applicable Regional Official Plan policies and Provincial policies and legislation, including the Health Protection and Promotion Act and The Environmental Protection Act.

Requests for connection or extension of municipal services will be evaluated based on three principles as approved by Regional Council through Report No. LPS27-10/PW-18-10.

#### 1. Large Scale Failure of Private Water or Wastewater Systems

Where there has been a large scale failure of private water or wastewater systems that pose a significant risk to human health or the natural environment, the extension of municipal services may be permitted without a Regional Official Plan Amendment. Large scale failures are defined as:

- Situations that result in an Order from the Ministry of the Environment;
- Failures that affect fifty percent (50%) or more of the units in a community; or
- Failures that affect less than fifty percent (50%) of the units in a community but that have a significant environmental impact as determined by the Region.

#### 2. Public Uses Fronting on Existing Municipal Services

For public uses that are not appropriate in an Urban Area and that front on existing municipal services, the use may connect to the existing municipal services as outlined in Regional Official Plan Amendment No. 40. Approval of a site specific Regional Official Plan Amendment is required.

#### 3. Public Uses Not Abutting Municipal Services

For public uses that are not appropriate in an Urban Area and that do not front on existing municipal services, the use may connect to municipal services upon approval of a site specific Regional Official Plan Amendment.

#### 2.6.2 Connection to Other Municipalities' Systems

Section 89(17) of the Regional Official Plan permits urban service system interconnections between Halton and its abutting municipalities. The Commissioner will authorize cross border service connections on behalf of Regional Council where a cross border servicing agreement has been entered into between Halton and the appropriate abutting municipality.

Under agreement with the Region, the City of Hamilton has agreed to supply water to the following areas in the City of Burlington:

- 1. The Bridgeview Community;
- 2. Waterdown Road, Old Waterdown Road, Horning Road, Rennick Road, Ireson Road in the North Aldershot Policy Area; and
- 3. Snake Road from the Hamilton-Halton boundary to approximately 450m southerly.

Where an abutting municipality (e.g. Region of Peel or City of Hamilton) constructs a water or wastewater main on a boundary road for the purposes of servicing lands within that municipality, the Region will not permit connections to those mains by properties outside the Urban Area. <u>The Region may permit a connection to a</u> <u>water main within a boundary road without a Regional Official Plan Amendment only in the following</u> <u>circumstances:</u>

- a. Where an existing or planned municipal water service is located along the frontage of the properties requiring only a service connection;
- b. Where the municipal water connection is for an existing approved land use, and can be provided without financial impact to Halton Region;
- c. Where the abutting municipality assumes the Halton residents receiving the water connection will become customers for the municipal water service of that municipality to the satisfaction of the Commissioner of Public Works; and,
- d. Where there is no plan to comprehensively service the area from the Halton system to the satisfaction of the Chief Planning Official.

A property owner is entitled to make an application requesting permission for connection. For those connection requests that do not satisfy the tests above, tThe process is as follows:

- i. The Region must receive confirmation, in writing, from the abutting municipality that they are willing and able to provide service to properties located within the Region of Halton;
- ii. The property owner must formally submit an application to amend the Regional Official Plan to permit the connection of the property to the abutting municipality's system;
- iii. Halton Regional Council must approve the amendment to the Regional Official Plan to extend service outside of the urban boundary;
- iv. The Council of the abutting municipality must approve the connection of the owner's property to their system; and,
- v. An agreement must be executed between the Region of Halton, the abutting municipality and the property owner. This agreement will be registered on title to the owner's lands.

Connections will only be supported if the owner can demonstrate that the private services are inadequate and that the deficiency cannot be addressed by other means. The owner must demonstrate that all possible alternative water or wastewater systems are incapable of providing effective treatment to a level which mitigates risk to human health and the environment.

#### 2.7 Financial Requirements

The Region has a variety of financial charges concerning its municipal services, most of which are based on a user pay philosophy. These financial charges for the Region's municipal service are prescribed by Regional Council By-laws and are updated on an annual basis.

In addition, the Region has specific processing fees for consideration of various approvals. These fees include, but are not limited to:

- 1. Planning Application fees specific to the application submitted;
- 2. Engineering and Inspection fee based on the cost of works being constructed;
- 3. Legal Service fees specific to the type of agreement;
- 4. General Administration fee per unit fee;
- 5. Development Charges as per the current Development Charges By-law;
- 6. Water meter fee;
- 7. Connection charges;
- 8. Service Permit fees; and,
- 9. Backflow prevention survey, infrastructure and annual testing costs.

A complete listing of all municipal services financial charges, including development charges can be obtained from the Region's Corporate Service Department.

Applicants are advised to consult those Regional departments involved in the processing of the application in question i.e. Corporate Services, Legislative and Planning Services, Public Works, and where appropriate, the Health Department.

#### 2.8 Well Survey and Monitoring

Where a development is proposed in close proximity to properties serviced by private wells, the developer must ensure that their construction activities do not adversely impact the neighbours' water supply.

Halton Region staff will ensure the following is complete by the owner as a condition of approval:

- Prior to construction, a survey of all wells within 500m of the site or within the area of influence as determined by a hydrogeologist
- Monitoring of the wells during construction and for a minimum of one year after all construction ceases

An outline of a typical Well Survey and Monitoring Program is provided under Appendix A to these Guidelines.

Should there be any complaints of interruption to the neighbouring well supply, the developer must immediately supply the complainant with an alternate supply of water which must continue until the matter is resolved. The developer's hydrogeologist must investigate the complaint and provide the Region with a report indicating whether, in their professional opinion, the complaint is valid.

If it is determined that the complaint is valid the developer must either construct a new private well or, if permitted under the Regional Official Plan, provide a connection to the municipal water system.

## 3.0 Private Services

#### 3.1 Private Services within the Urban Area

All new development within the Urban Area designation is to proceed on the basis of connection to full municipal services. Exceptions to the policy may be permitted in order to allow development on private or partial servicing under circumstances as outlined in section 3.1.1 and 3.1.2, provided that the development is in conformity with both the Regional Official Plan and Local Official Plan.

The Region's Legislative and Planning Services Department is responsible for authorizing, in principal, such permission after consultation with the Region's Health Department. Such permission will only be granted where it is in the public interest that the development should proceed without delay. The formal approval and permit process for private sewage disposal system installations is the responsibility of the Region's Health Department and the Building Department of the local municipality. Permits may only be issued where previously authorized in principle as per the above process.

With some minor exceptions, all private servicing in the Urban Area are subject to a condition of approval that requires the applicant to enter into a standard agreement with the Region to the effect that when municipal services become available, connections will be made and the appropriate charges and fees paid. This standard agreement is to be registered on title to the property and specify that the required municipal service connections must be made within two years from the date when the services become available. The Legislative and Planning Services Department will monitor and enforce all such agreements.

Exceptions where an agreement may not be required can include private services for: municipal uses, temporary uses or structures, and non-domestic uses of water such as irrigation. The use of private services for cooling may be permitted provided that the requirements of the Region's Health Department and Legislative and Planning Services Department are satisfied.

Hydrogeological studies, in accordance with the Region's *Guidelines for Hydrogeological Studies and Best Management Practices for Groundwater Protection*, are required as part of the information necessary to consider the merits of the application of private services and to determine if any adverse impact on water quantity or quality in the surrounding area may occur.

#### 3.1.1 Wells and Private Sewage Disposal Systems

Pursuant to the requirements of the Environmental Protection Act and subject to any terms and conditions outlined in 3.1 above, private wells and private sewage disposal systems may be permitted in the Urban Area where the Region determines that such development complies with at least one of the following provisions:

- For minor residential development which is permitted under existing Zoning or Parkway Belt Regulations and where the respective municipal services are determined by the Region to be unavailable or available but at extreme expense as determined by the Chief Planning Official.
- 2. For a proposed development which is considered by both the local municipality and the Region to be temporary.
- 3. For an open space use, such as a golf course or a campground, where the Region determines that the municipal services are unavailable or is available but at extreme expense. Such uses will be considered on a case by case basis and only permitted where the physical servicing capability of the site is not exceeded.

- 4. For individual non-residential uses where the municipal services will be available within five years and where all terms and conditions of the Region be met, including the submission of hydrogeological studies. The Region's Health Department requirements may limit water volumes extracted from wells or set out conditions or restrictions regarding changes in uses on the site and will stipulate that only domestic sewage and absolutely no industrial processing effluent may enter the private sewage disposal systems.
- 5. For farm dwellings as defined in the Regional Official Plan, where the Region determines that respective municipal service is unavailable or is available but at extreme expense, or is for water supplies for other non-domestic farm uses.
- 6. For minor commercial or minor institutional uses such as a church or a convenience store where the Region determines the respective municipal service is unavailable or is available but at extreme expense and where the use will be primarily serving local residents.
- 7. For the repair or replacement of an existing private service where, in the opinion of the Region the respective municipal service is unavailable or is available but at extreme expense.
- 8. Private wells or water storage tanks are permitted to augment water supplies for existing development or for new non-residential development where domestic supply requirements will be met by a municipal supply and the private water supply is for primarily non-domestic uses such as irrigation, heating/cooling, provided that the proposal is supported by a hydrogeological report that confirms that the ground and surface water system will not be adversely affected.
- 9. For the interim servicing of municipal uses where the respective municipal service is not available or is available only at extreme expense, provided that service connections are made within two years of the respective municipal service becoming available.
- 10. For those properties already subject to an agreement with the Region or the Ministry of the Environment outlining the conditions under which private servicing is to be permitted.

The availability of services is determined by their inclusion within either the Region's Current Budget or the 9 year Capital Forecast. Approval will also be on the condition that the owner enters into an agreement with the Region specifying that:

- i. connection be made within two years of the municipal services becoming available,
- ii. the appropriate charges and fees be paid, and,
- iii. the requirements and criteria of the Region's Health Department regarding the activities or operations associated with the proposed use are set out and met.

For the purposes of these Guidelines, "extreme expense" shall be determined to be a construction cost that is greater than or equal to twenty five percent (25%) of the assessed value of the fully developed property.

#### 3.1.2 Partial Servicing

Where both water and wastewater services are available, partial servicing will not be permitted. In accordance with the Provincial Policy Statement, 2005, partial services, being the provision of municipal water or wastewater but not both, shall only be permitted in the following circumstances:

- a) where they are necessary to address failed individual on-site sewage services and individual on-site water services in existing development; or
- b) within settlement areas, to allow for infilling and minor rounding out of existing development on partial services provided that site conditions are suitable for the long-term provision of such services with no negative impacts.

Where municipal wastewater service is not available and an owner is permitted to connect to a municipal watermain, an assessment of the existing private sewage disposal system must be undertaken to ensure its adequacy.

#### 3.2 Water Storage and Sewage Holding Tanks

Water storage tanks, intended to be used for holding water which is trucked in for domestic uses, and/or sewage holding tanks, are not permitted by the Region to service new development.

Under the following circumstances, and subject to such terms and conditions as the Region may require, the use of water storage tanks and/or sewage holding tanks may be permitted for existing uses:

- Where a well or septic system has failed and repair is not feasible in the opinion of the Medical Officer of Health and where no other acceptable well can be developed or septic tile field system can be installed, a water storage or sewage holding tank may be permitted. Such permission can be given by the Medical Officer of Health only as a last resort and where it is the only reasonable means of solving the problem.
- 2. For seasonal uses for periods of time not exceeding three months during any twelve month period where the Region's Health Department is satisfied that the use of water storage and/or sewage holding tank is in the public interest. Regional approvals will be given for a maximum of two years as enforced through agreement with the Region or through Conditions of Approval. Extensions to such approvals will only be considered if past performance has been satisfactory as determined by the Region's Health Department. The property owner may be required to guarantee the future maintenance of the system (including pump out of sewage holding tanks) to the satisfaction of the local municipality.

Sections 3.2(1) and 3.2(2) also apply in the rural areas of the Region.

Where the property is located within the Urban Area and where municipal servicing is permitted under policies of the Regional Official Plan, the property owner must enter into an agreement with the Region to require the property to connect to municipal services within two years of the service becoming available.

## Appendix A – Well Survey and Monitoring Program

#### 1. Identify study area

All properties within the greater of 500m of development area or within the expected zone of influence as determined by the hydrogeologist.

#### 2. Preconstruction Survey

- a. Obtain all MOE well records
- b. Prepare a complete well inventory of all wells in study area
- c. Conduct door-to-door surveys
- d. Leave questionnaires with homeowners
- e. Sample all accessible wells for water quality and monitor static water level
- f. Prepare inventory to include the following information:
  - Address
  - Owner / tenant
  - Location of well
  - Whether well is in use, abandoned, or decommissioned
  - Type of well drilled or bored
  - Size
  - Depth of well
  - Depth of pump
  - Static water level
  - Water quality (Ontario Drinking Water Quality Standards)
  - Pump capacity
  - Assess susceptibility to contamination
  - Record of complaints quality or quantity
- g. Identify wells to be decommissioned (O.Reg. 903, as amended)

#### 3. Well Monitoring During and Post Construction

A number of wells in study area are to be identified for monitoring of static water levels monthly for a minimum of one year. Wells must be:

- Must be accessible and have owner's permission to monitor
- Preferably not in use
- Wells to be monitored to include at least one well completed in each aquifer represented.

#### 4. Reporting

The hydrogeologist must submit a report prior to the start of construction and again at the end of the monitoring period. The report shall include:

- a. Table of well inventory;
- b. Copies of all surveys;
- c. Map showing location of wells identified;
- d. Potentiometric Map of appropriate scale, showing water level contours in the study area; and,
- e. Assessment of impact of development on well.



Halton.ca **(** 311

#### THE REGIONAL MUNICIPALITY OF HALTON

#### BY-LAW NO. XX-20

A BY-LAW TO AMEND BY-LAW NO. 71-19, BEING A BY-LAW TO REPEAL AND REPLACE BY-LAW NO. 131-10, AS AMENDED, BEING A BY-LAW RESPECTING THE SUPPLY OF WATER, THE ESTABLISHMENT, CONSTRUCTION, MAINTENANCE, OPERATION, IMPROVEMENT AND EXTENSION OF DRINKING WATER SYSTEMS FOR THE REGIONAL MUNICIPALITY OF HALTON AND THE ESTABLISHMENT OF WATER RATES AND CHARGES AND, BY-LAW NO. 61-11 BEING A BY-LAW RESPECTING THE PREVENTION OF BACKFLOW INTO THE WATER SYSTEM OF THE REGIONAL MUNICIPALITY OF HALTON.

WHEREAS Section 11 of the *Municipal Act, 2001*, provides that The Regional Municipality of Halton has the exclusive responsibility for public utilities, including water distribution, production, treatment and storage within the Regional boundaries and all the provisions of any general act relating to such collection, production and treatment of such water and the financing thereof by a municipal corporation apply, with the necessary changes being made;

AND WHEREAS Section 80 of the *Municipal Act, 2001* provides that a municipality may at reasonable times enter on land to which it supplies a public utility: to inspect, repair, alter or disconnect the service pipe, wire, machinery, equipment and other works; to inspect, install, repair, replace or alter a public utility meter; to shut off or reduce the supply of the public utility to the land; and, if a customer discontinues the use of a public utility on land or the municipality lawfully decides to cease supplying the public utility to land, to shut off the supply of the public utility; to remove any property of the municipality; or to determine whether the public utility has been or is being unlawfully used;

AND WHEREAS Section 23.1 of the *Municipal Act, 2001* provides that a municipality may delegate its powers and duties under the *Municipal Act, 2001* or any other act to a person or body subject to legislated restrictions;

AND WHEREAS Section 20(1) of the Safe Drinking Water Act, 2002 provides that it is an offence to cause or permit anything to enter a drinking water system if it could result in, a drinking-water health hazard, a contravention of a prescribed standard or the interference with the normal operation of the system;

AND WHEREAS Sections 78, 79 and 80 of the *Municipal Act, 2001* provide rights of entry for the municipality onto Property in relation to the supply of a public utility and water supply is a public utility;

AND WHEREAS Part XIV of the *Municipal Act, 2001* provides for the enforcement of municipal by-laws;

AND WHEREAS Regional Council passed Drinking Water System By-law No. 71-19 on July 10, 2019.

AND WHEREAS pursuant to Report LPS94-20/PW-31-20 and the recommendations thereof, it has been determined that it is desirable to amend By-law No. 71-19 to remove the requirement for a Regional Official Plan Amendment in circumstances where an owner of a property located within the Region requests a water connection to an adjacent municipality's watermain, and replace it with the requirement that such connections only be permitted in accordance with the Region's Urban Services Guidelines.

NOW THEREFORE THE COUNCIL OF THE REGIONAL MUNICIPALITY OF HALTON HEREBY ENACTS AS FOLLOWS:

- 1. THAT Subsection 6.2 of By-law No. 71-19 in Section 6 Application for Connection to the Drinking Water System be deleted and replaced with the following Subsection:
  - 6.2 Where an Owner of any Property located within the Region requests to connect to an adjacent municipality's Watermain that exists in a highway or public utility corridor located outside of the Regional Urban Service Area, such connections are only permitted in accordance with the Region's Urban Services Guidelines. Where such a connection is permitted, the Region shall not be responsible for the cost of the infrastructure or connection to the water supply from an adjacent municipality. Further, the Owner shall be responsible for obtaining consent from the adjacent municipality.
- 3. THAT all other provisions of By-law No. 71-19 remain in force and effect.
- 4. THAT this By-law comes into force on the day it is passed.

READ and PASSED this 25<sup>th</sup> day of November, 2020.

**REGIONAL CHAIR** 

**REGIONAL CLERK** 

Report No. LPS94-20/PW-31-20