

## THE CORPORATION OF THE TOWNSHIP OF PUSLINCH 2016 COUNCIL MEETING

### **A G E N D A**

**DATE:** Wednesday, June, 15, 2016

**REGULAR MEETING:** 7:00 P.M.

**# Denotes resolution prepared**

1. Call the Meeting to Order
2. Disclosure of Pecuniary Interest & the General Nature Thereof.
3. Adoption and Receipt of Minutes of the Previous Meeting.#

(a) Council Meeting – June 1, 2016

(b) Closed Council Meeting – June 1, 2016

4. Business Arising Out of the Minutes.

#### 5. **PUBLIC MEETINGS**

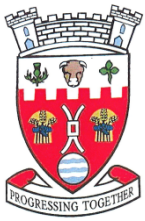
1. **Public Information Meeting – Rezoning Application D14/HAY – Gerry Hayden, Concession 3, Part Lots 24 & 25, municipally known as 7128 Smith Road.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Public Meeting

(b) Report PD-2016-019 Public Meeting - Rezoning Application, File D14/HAY Gerry Hayden, Concession 3, Part Lots 24 & 25, municipally known as 7128 Smith Road.

**\*to be distributed under separate cover on Monday, June 13, 2016.**



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH  
June 15, 2016 MEETING

2. **Public Information Meeting - Rezoning Application File D14/ONT – 2435953 Ontario Inc (ASR Transportation), Concession 7, Rear Part Lot 25, municipally known as 7456 McLean Road W.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Complete Application & Public Meeting

(b) Report PD-2016-020 – Public Meeting - Rezoning Application File D14/ONT – 2435953 Ontario Inc (ASR Transportation), Concession 7, Rear Part Lot 25, municipally known as 7456 McLean Road W.

**\*to be distributed under separate cover on Monday, June 13, 2016.**

3. **Public Information Meeting - Rezoning Application File D14/J2K – J2K Capital Inc., Concession 7, Rear Part Lot 26, RP 61R863, Brock Road S.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Revised Application & Public Meeting

(b) Report PD-2016-021 – Public Meeting- Rezoning Application File D14/J2K – J2K Capital Inc., Concession 7, Rear Part Lot 26, RP 61R863, Brock Road S.

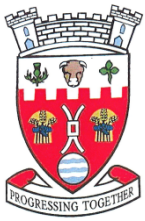
**\* to be distributed under separate cover on Monday, June 13, 2016.**

6. **COMMUNICATIONS**

1. **University of Guelph /Dufferin Aggregates  
Mill Creek Pit, Licence 5738  
7115 Concession 2**

(a) LRG Environmental Mill Creek Coordinated Monitoring Report – January 1 to December 31, 2015.≠

(b) Correspondence from Dufferin Aggregates regarding Mill Creek Property Annual Monitoring Reports dated March 29, 2016.≠



## THE CORPORATION OF THE TOWNSHIP OF PUSLINCH June 15, 2016 MEETING

- (c) Correspondence from Harden Environmental Services Ltd. regarding Mill Creek Pit – Review of 2015 Monitoring data dated May 26, 2016.≠

### 2. **CBM/St. Mary's Cement Roszell Pit - Licence No. 625189 6618 and 6524 Roszell Rd.**

- (a) Correspondence from Harden Environmental regarding temperature changes in groundwater and surface water, CBM, Roszell Road Pit with attachments dated June 7, 2016. ≠

### 3. **Intergovernmental Affairs≠**

- (a) Various correspondence for review.

### 7. **DELEGATIONS / PRESENTATIONS ≠**

**7:05 p.m.** – Mr. Rory McAlpine, Morriston By-Pass Coalition, presentation to Mr. Ted Arnott, MPP Wellington Halton-Hills.

**7:15 p.m.** - Mr. Robert McFarlane, Presentation of 2016 Ontario Senior of the Year.

**7:30 p.m.** - Ms. Tamara Hetherington regarding Black Bridge Cultural Heritage Landscape Official Plan Amendment.

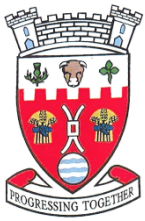
### 8. **REPORTS**

#### 1. **Puslinch Fire and Rescue Services**

- (a) Puslinch Fire and Rescue Services – April/May, 2016 Report ≠
- (b) 2016 Municipal/NFPP Fire Protection Profile – Township of Puslinch ≠

#### 2. **Finance Department**

- (a) Report FIN-2016-016 – 2015 Commodity Price Hedging Agreements.≠



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH  
June 15, 2016 MEETING

3. **Administration Department**

(a) ADM-2016-010 – Vacancy on Council ≠

4. **Planning and Building**

(a) Chief Building Official Report – May 2016 ≠

(b) Report – County of Wellington Planning and Development Department – 2016 Housekeeping Amendment to Zoning By-Law 19/85 Township-wide Zoning By-Law Amendment.≠

5. **Roads & Parks Department**

None.

6. **Recreation Department**

None.

7. **Mayor's Updates**

(a) Report – County of Wellington Planning Committee – Comments on Proposed Changes to Provincial Plans dated June 9, 2016.≠

(b) Wellington Dufferin Guelph Public Health Board of Health Report – 2015 Tick and Lyme Disease Program Report dated June 1, 2016.

9. **NOTICES OF MOTION**

None.

10. **COMMITTEE MINUTES**

None.

11. **MUNICIPAL ANNOUNCEMENTS**

12. **UNFINISHED BUSINESS**





THE CORPORATION OF THE TOWNSHIP OF PUSLINCH  
June 15, 2016 MEETING

13. **CLOSED ITEMS ≠**

None.

14. **BY-LAWS ≠**

(a) A By-law to authorize the Mayor and Clerk to execute a Licence Agreement with John Hamilton for use of Township Storm Water Management Lands – Block 6, Plan 847 - **Resolution No. 2016-230**

(b) A by-law to repeal By-law No. 37/13 – Deputy Clerk for the Township of Puslinch.

15. **CONFIRMING BY-LAW ≠**

(a) By-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch.

16. **ADJOURNMENT ≠**



## **MINUTES**

**DATE:** Wednesday, June 1, 2016

**TIME:** 6:45 p.m.

The June 1, 2016 Regular Council Meeting was held on the above date and called to order at 12:30 p.m. in the Council Chambers, Aberfoyle.

### **1. ATTENDANCE:**

Mayor Dennis Lever  
Councillor Matthew Bulmer  
Councillor Susan Fielding  
Councillor Ken Roth

### **STAFF IN ATTENDANCE:**

1. Karen Landry, CAO/Clerk
2. Donna Tremblay, Deputy Clerk
3. Paul Creamer, Director of Finance/Treasurer
4. Don Creed, Director of Public Works and Parks

### **OTHERS IN ATTENDANCE**

1. Doug Smith
2. K. Lever
3. Kevin Johnson
4. Kathy White
5. Kyle Davis

Mayor Lever expressed the shock and grief of Council at the passing of Councillor Wayne Stokley on Sunday, May 29, 2016. Mayor Lever requested that a moment of silence in honour of Councillor Stokley.

### **2. DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:**

None.

### **3. ADOPTION OF THE MINUTES:**

- (a) Council Meeting – May 18, 2016
- (b) Closed Council Meeting – May 18, 2016

**Resolution No. 2016-227:** Moved by Councillor Roth and  
Seconded by Councillor Fielding

That the minutes of the following meetings be adopted as written and distributed:

- (a) Council Meeting – May 18, 2016
- (b) Closed Council Meeting – May 18, 2016

**CARRIED**

### **4. BUSINESS ARISING OUT OF THE MINUTES:**

None.



**5. PUBLIC MEETINGS:**

1. **Public Information Meeting – Rezoning Application D14/HAY – Gerry Hayden, Concession 3, Part Lots 24 & 25, municipally known as 7128 Smith Road,.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Public Meeting

2. **Public Information Meeting - Rezoning Application File D14/ONT – 2435953 Ontario Inc (ASR Transportation), Concession 7, Rear Part Lot 25, municipally known as 7456 McLean Road W.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Complete Application & Public Meeting

3. **Public Information Meeting - Rezoning Application File D14/J2K – J2K Capital Inc., Concession 7, Rear Part Lot 26, RP 61R863, Brock Road S.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Revised Application & Public Meeting

**6. COMMUNICATIONS:**

1. **City of Guelph Tier 3 Water Quantity Risk Assessment Peer Review**

(a) Peer Review Package.≠

**See Agenda Item 7.1**

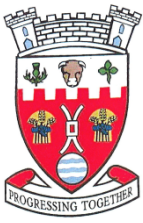
2. **University of Guelph /Dufferin Aggregates  
Mill Creek Pit, Licence 5738  
7115 Concession 2**

(a) Correspondence from Dufferin Aggregates regarding Monthly Monitoring Report, Mill Creek Pit, License #5738, (May 2016), Township of Puslinch, Wellington County dated May 12, 2016.

**Mr. Stan Denhoed, Harden Environmental Services Ltd. has advised that he has reviewed the monthly report and he is satisfied that there are no exceedences.**

3. **Environmental Registry**

- (a) Victoria Park Villages Inc. – 1159 Victoria Rd. South, Lot 5, Concession 8 – Puslinch – Permit to Take Water- OWRA s. 34.
- (b) Royal Canin Canada Company – 100 Beiber Road – Lot 28, Concession 8 – Permit to Take Water – OWRA s. 34.



#### 4. Intergovernmental Affairs

**Resolution No. 2016-228:**

Moved by Councillor Roth and  
Seconded by Councillor Bulmer

That the correspondence items listed on the Council Agenda for June 1, 2016 Council meeting be received.

**CARRIED**

#### 7. **DELEGATIONS/PRESENTATIONS**

1. Mr. Kyle Davis, Risk Management Official regarding City of Guelph – Tier 3.

**\*See Agenda Items 6.1.**

**Resolution No. 2016-229:**

Moved by Councillor Fielding and  
Seconded by Councillor Roth

That Council receive the presentation by Kyle Davis, Risk Management Official regarding City of Guelph – Tier 3 Water Quantity Risk Assessment Peer Review; and

That Council receive the City of Guelph – Tier 3 Water Quantity Risk Assessment Peer Review – Peer Review Package.

**CARRIED**

#### 8. **REPORTS:**

1. **Puslinch Fire and Rescue Services**

None.

2. **Finance Department**

None.

3. **Administration Department**

- (a) Report ADM-2016-009 –John Hamilton - Request for Temporary Use of Lands - Storm Water Management Lands - Block 6, Plan 847.≠

**Resolution No. 2016-230:**

Moved by Councillor Roth and  
Seconded by Councillor Fielding

That Report ADM-2016-009 regarding John Hamilton – Request for Temporary Use of Lands – Storm Water Management Lands – Block 6, Plan 847 be received; and

That Council grant permission to John Hamilton for the use of the lands; and

That Council enact a By-law to authorize the Mayor and Clerk to execute a Licence Agreement with John Hamilton for the purpose of permitting the use of Township lands as outlined in Report ADM-2016-009.

**CARRIED**



4. **Planning and Building Department**

None.

5. **Roads & Parks Department**

None.

6. **Recreation Department**

None.

7. **Mayor's Updates**

None.

9. **NOTICE OF MOTION:**

None.

10. **COMMITTEE MINUTES**

None.

11. **MUNICIPAL ANNOUNCEMENTS**

None.

12. **UNFINISHED BUSINESS**

None.

13. **CLOSED MEETING**

**Council was in closed session from 12:31 p.m. to 12:40 p.m.**

**Council recessed from 12:41 p.m. to 1:00 p.m.**

- (a) Confidential Verbal Report from Karen Landry CAO/Clerk, regarding personal matters about an identifiable individual, including municipal or local board employees - Employee Matters.

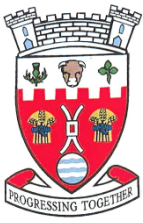
**Resolution No. 2016-231:**

Moved by Councillor Fielding and  
Seconded by Councillor Roth

That Council shall go into closed session under Section 239 of the Municipal Act for the purpose of:

- (a) Confidential Verbal Report from Karen Landry CAO/Clerk, regarding personal matters about an identifiable individual, including municipal or local board employees - Employee Matters

**CARRIED**



**Resolution No. 2016-232** Moved by Councillor Roth and  
Seconded by Councillor Fielding

That Council move into open session.

**CARRIED**

- (a) Confidential Verbal Report from Karen Landry CAO/Clerk, regarding personal matters about an identifiable individual, including municipal or local board employees - Employee Matters.

**Resolution No. 2016-233** Moved by Councillor Bulmer and  
Seconded by Councillor Roth

That Council receive the confidential verbal report from Karen Landry, CAO/Clerk, regarding personal matters about an identifiable individual, including municipal or local board employees - Employee Matters; and

That Staff proceed as directed.

**CARRIED**

14. **BY-LAWS:**

- (a) A by-law to authorize the entering into of a Site Plan Agreement with G S Bunny Investments Inc. – **Resolution No. 2016-217**
- (b) A by-law to authorize the entering into of a Subdivision Agreement with 1719303 Ontario Inc. – **Resolution No. 2016-218**

**Resolution 2016-234** Moved by Councillor Fielding and  
Seconded by Councillor Roth

That the following By-laws be taken as read three times and finally passed in open Council:

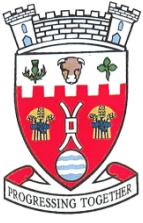
That the following By-laws be taken as read three times and finally passed in open Council:

- (a) By-law **033/16** a by-law to authorize the entering into of a Site Plan Agreement with G S Bunny Investments Inc.
- (b) By-law **034/16** a by-law to authorize the entering into of a Subdivision Agreement with 1719303 Ontario Inc.

**CARRIED**

15. **CONFIRMING BY-LAW**

- (a) By-Law to confirm the proceedings of Council for the Corporation of the Township of Puslinch



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH  
June 1, 2016 COUNCIL MEETING

**Resolution 2016-235:** Moved by Councillor Roth and  
Seconded by Councillor Fielding

That the following By-law be taken as read three times and finally passed in open Council:

(a) By-Law **035/16** being a by-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch at its meeting held on the 1st day of June, 2016.

**CARRIED**

16. **ADJOURNMENT:**

**Resolution No. 2016-236:** Moved by Councillor Fielding and  
Seconded by Councillor Roth

That Council hereby adjourns at 1:41 p.m.

**CARRIED**

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Dennis Lever, Mayor

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Karen Landry, CAO/Clerk



## THE TOWNSHIP OF PUSLINCH

### NOTICE OF PUBLIC MEETING

**TAKE NOTICE** that the Council of the Township of Puslinch will hold a public meeting on **Thursday the 23<sup>rd</sup> of June 2016, at 7:00 pm** in the Council Chambers at 7404 Wellington Road 34, to consider the proposed Zoning By-law Amendment, pursuant to the requirements of Section 34 of the Planning Act, R.S.O., 1990, as amended. The file number assigned to this application is **D14/HAY**.

**THE LAND SUBJECT** to the application is municipally known as 7128 Smith Road and legally known as Part Lots 24 & 25, Concession 3, 61R11766, Township of Puslinch. The subject lands are shown on the map below.

**THE PURPOSE AND EFFECT** of the application is to amend the Township of Puslinch's Zoning By-law 19/85 from an Agricultural (A) Zone to a Site Specific Agricultural Zone to permit a landscape contractor's yard with an office and outdoor storage of equipment and materials.

**ORAL OR WRITTEN SUBMISSIONS** may be made by the public either in support or in opposition to the proposed Zoning By-law Amendment. Any person may attend the public meeting and make an oral submission or direct a written submission to the Township Clerk at the address below. All those present at the public meeting will be given the opportunity to make an oral submission, however; it is requested that those who wish to address Council notify the Township Clerk in advance of the public meeting.

**TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body is not entitled to appeal the decision of the Council of the Township of Puslinch to the Ontario Municipal Board.

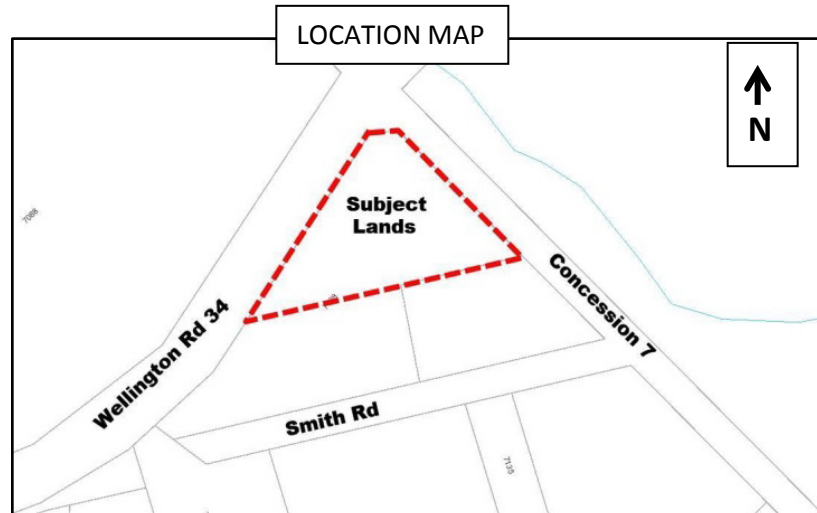
**AND TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so.

**REQUEST FOR NOTICE OF DECISION** regarding the Zoning By-law amendment must be made in written format to the Township Clerk at the address shown below.

**ADDITIONAL INFORMATION** regarding the proposed amendment is available for review between 9:00 a.m. and 4:30 p.m. at the Township of Puslinch Municipal Office as of the date of this notice. If you wish to express your views with respect to this application, please forward your comments to Kelly Patzer, Development Coordinator, [kpatzer@puslinch.ca](mailto:kpatzer@puslinch.ca).

Dated at the  
Township of Puslinch  
on this 20<sup>th</sup> day of May 2016.

Karen Landry  
CAO/Clerk  
Township of Puslinch  
7404 Wellington Road 34  
Guelph, Ontario N1H 6H9  
Phone (519) 763-1226  
[admin@puslinch.ca](mailto:admin@puslinch.ca)







## THE TOWNSHIP OF PUSLINCH

### NOTICE OF COMPLETE APPLICATION & PUBLIC MEETING

(revised key map)

**TAKE NOTICE** that pursuant to the requirements of the Planning Act, R.S.O., 1990, as amended, the Township of Puslinch has received a revised application to amend Zoning By-law 19/85. The file number assigned to this application is **D14/ONT**

**TAKE NOTICE** that the Council of the Township of Puslinch will hold a public meeting on **Thursday the 23<sup>rd</sup> of June 2016, at 7:00 pm** in the Council Chambers at 7404 Wellington Road 34, to consider the proposed Zoning By-law Amendment, pursuant to the requirements of Section 34 of the Planning Act, R.S.O., 1990, as amended.

**THE LAND SUBJECT** to the application is municipally known as 7456 McLean Road West and legally known as Rear Part Lot 25, Concession 7, RP 61R4472, Part 2, Township of Puslinch. The subject lands are shown on the inset map.

**THE PURPOSE AND EFFECT** of the application is to amend the Township of Puslinch's Zoning By-law 19/85 from Agricultural (A) Zone to Industrial (IND) Zone, to permit the development of an industrial mall including offices, truck repair shop and trailer parking. A definition for "Truck Repair Shop" is proposed to be added to the zoning applicable to the property.

**ORAL OR WRITTEN SUBMISSIONS** may be made by the public either in support or in opposition to the proposed Zoning By-law Amendment. Any person may attend the public meeting and make an oral submission or direct a written submission to the Township Clerk at the address below. All those present at the public meeting will be given the opportunity to make an oral submission, however; it is requested that those who wish to address Council notify the Township Clerk in advance of the public meeting.

**TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body is not entitled to appeal the decision of the Council of the Township of Puslinch to the Ontario Municipal Board.

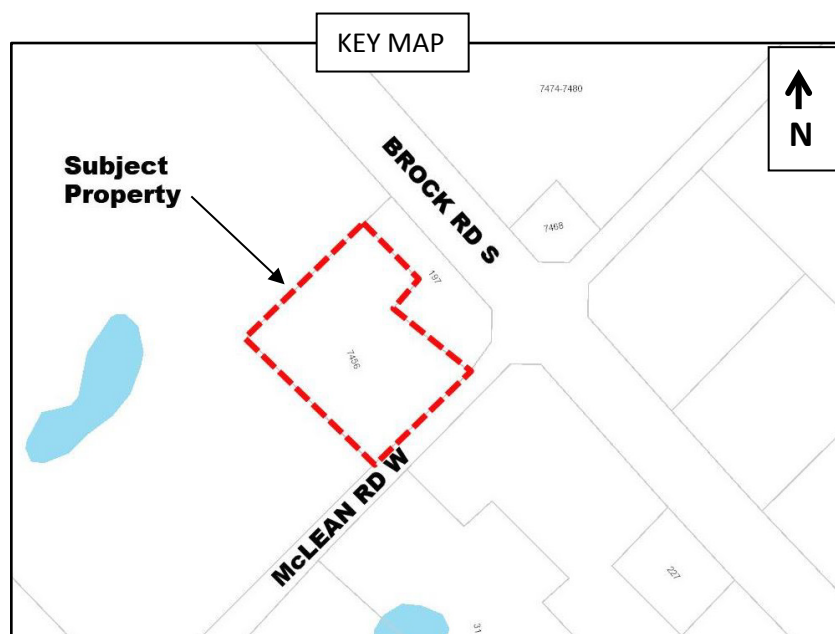
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**REQUEST FOR NOTICE OF DECISION** regarding the Zoning By-law amendment must be made in written format to the Township Clerk at the address shown below.

**ADDITIONAL INFORMATION** regarding the proposed amendment is available for review between 9:00 a.m. and 4:30 p.m. at the Township of Puslinch Municipal Office as of the date of this notice. If you wish to express your views with respect to this application, please forward your comments to Kelly Patzer, Development Coordinator, [kpatzer@puslinch.ca](mailto:kpatzer@puslinch.ca).

Dated at the  
Township of Puslinch  
on this 20<sup>th</sup> day of May 2016.

Karen Landry  
CAO/Clerk  
Township of Puslinch  
7404 Wellington Road 34  
Guelph, Ontario N1H 6H9  
Phone (519) 763-1226  
[admin@puslinch.ca](mailto:admin@puslinch.ca)





## THE TOWNSHIP OF PUSLINCH

### NOTICE OF REVISED APPLICATION & PUBLIC MEETING

**TAKE NOTICE** that pursuant to the requirements of the Planning Act, R.S.O., 1990, as amended, the Township of Puslinch has received a revised application to amend Zoning By-law 19/85. The file number assigned to this application is **D14/J2K**

**TAKE NOTICE** that the Council of the Township of Puslinch will hold a public meeting on **Thursday the 23<sup>rd</sup> of June 2016, at 7:00 pm** in the Council Chambers at 7404 Wellington Road 34, to consider the proposed Zoning By-law Amendment, pursuant to the requirements of Section 34 of the Planning Act, R.S.O., 1990, as amended.

**THE LAND SUBJECT** to the application is municipally known as 0 Brock Road and legally known as Part Lot 26, Concession 7, RP 61R863, Parts 2, 3 & 4 Township of Puslinch. The subject lands are shown on the map below.

**THE PURPOSE AND EFFECT** of the application is to amend the Township of Puslinch's Zoning By-law 19/85 to rezone the lands from Agricultural (A) Zone to Highway Commercial (C2) Zone. There are no specific development plans associated with this zoning by-law amendment.

**ORAL OR WRITTEN SUBMISSIONS** may be made by the public either in support or in opposition to the proposed Zoning By-law Amendment. Any person may attend the public meeting and make an oral submission or direct a written submission to the Township Clerk at the address below. All those present at the public meeting will be given the opportunity to make an oral submission, however; it is requested that those who wish to address Council notify the Township Clerk in advance of the public meeting.

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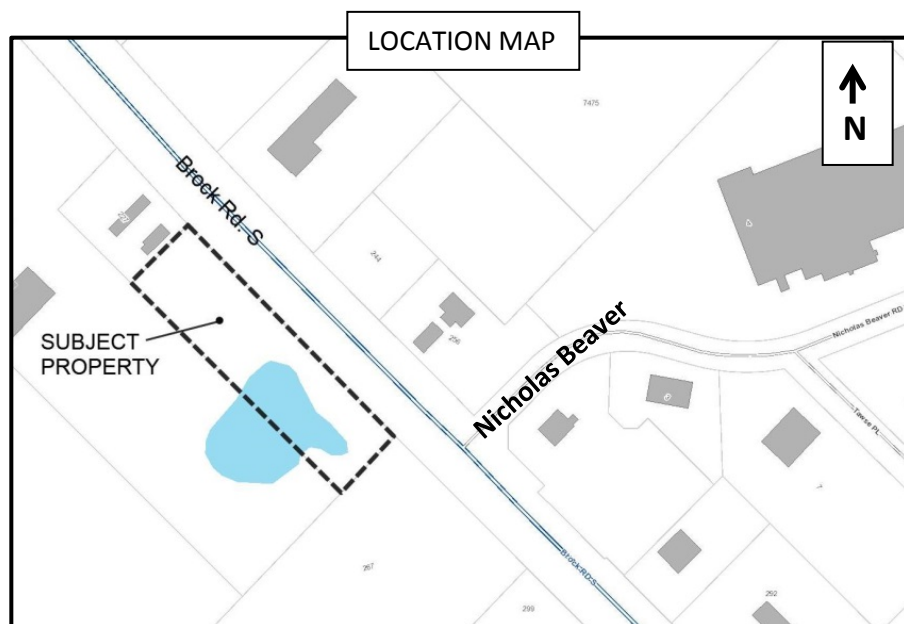
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Dated at the  
Township of Puslinch  
on this 20<sup>th</sup> day of May 2016.

Karen Landry  
CAO/Clerk  
Township of Puslinch  
7404 Wellington Road 34  
Guelph, Ontario N1H 6H9  
Phone (519) 763-1226  
[admin@puslinch.ca](mailto:admin@puslinch.ca)





**Dufferin Aggregates, a division of CRH Canada Group Inc.**  
**Mill Creek Coordinated Monitoring Report**  
**January 1 to December 31, 2015**

Date:

March 28, 2016

Prepared by:

**LRG Environmental**

RR 1, Markdale, ON, Canada N0C 1H0  
T 519.986.2970 F 519.986.3127

in association with



**Hims GeoEnvironmental Ltd.**



**Stantec**

## Distribution List

# of Copies	Association / Company Name	PDF	Hard Copy
2	Dufferin Aggregates	✓	✓
1	Ministry of Natural Resources and Forestry	✓	✓
1	University of Guelph	✓	✓
1	Fisheries and Oceans Canada	✓	✓
1	Grand River Conservations Authority	✓	✓
1	WSP Group	✓	✓
1	Township of Puslinch	✓	✓
1	Stantec	✓	✓
1	Hims GeoEnvironmental Ltd	✓	✓
2	LRG Environmental	✓	✓

## Signature Page

Report Prepared By:



Lisa Guenther-Wren, M.Sc.  
Aquatic Biologist

Report Reviewed By:



Christopher Wren, Ph.D.  
Senior Scientist

## **Forward**

This report provides an overview of the operations and results of environmental monitoring programs for the period January 1 to December 31, 2015 for the University of Guelph Mill Creek pit, operated by Dufferin Aggregates, a division of CRH Canada Group Inc. A discussion of compliance with the groundwater threshold values is also provided. Detailed monitoring data for hydrology, hydrogeology and fisheries are provided in separate Appendices.

Terrestrial biology and wetland monitoring is undertaken annually but only reported prior to the start of each new extraction phase. A Pre-Phase 3 terrestrial report was prepared and submitted to the Ministry of Natural Resources (MNR) in 2005 (Paul F.J. Eagles Planning Ltd. 2005). In addition, a comprehensive Pre-Phase 3 Monitoring Plan was submitted in January 2006 (C. Wren & Associates Inc. and Jagger Hims Ltd. 2006). A Pre-Phase 4 terrestrial report was prepared and submitted to the MNR July 6 2011 (Paul F.J. Eagles Planning Ltd. 2011).

This is the twenty first annual coordinated monitoring report for the Mill Creek program.

Data, text and figures have been integrated into this coordinated report from the following separate Technical Appendices which can be found on compact disc at the back of this report:

Appendix A - Surface Water (prepared by Stantec)

Appendix B - Hydrogeology (prepared by WSP Canada Inc.)

Appendix C - Fisheries (prepared by LRG Environmental)

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# Executive Summary

## *Site Conditions and Operations*

- Extraction in 2015 occurred in Phase 4 above and below the water table;
- Silt Pond 3 (SP3) extension was used to deposit silt in 2015;
- Silt Pond (SP3) operated within the minimum/maximum water level thresholds.

## *Climate*

- 2015 had warmer air temperatures than normal, with eight of twelve months averaging warmer temperatures when compared to the 30 year normal;
- The highest levels of precipitation occurred in June (160 mm), which was 90% greater than the 30 year average (84 mm) for that month;
- Total precipitation in 2015 was 841 mm, which was 8% below the 30-year average of 912 mm.

## *Hydrology*

- The water flow monitoring results show that minimum discharge at SWM1 was within historical range since 1999, while the maximum discharge at SWM1 was a record low since 1999;
- The water flow monitoring results show that minimum and maximum discharge in Mill Creek at the downstream (SWM2) station were within historical ranges since 1999;
- The 2015 minimum and maximum instantaneous flow rates at SWM2 were 0.2046 and 1.7877 m<sup>3</sup>/sec, respectively;
- The 7 day low flow period coincided with a period of reduced precipitation from May 23 – May 29;
- Stream flow in Mill Creek responded to climatic conditions including precipitation events, and periods of snow melt ; and
- There is no indication that aggregate extraction has affected stream flow in Mill Creek.

## *Groundwater*

- Interim groundwater thresholds were developed in 2001 after extensive agency discussions and are routinely updated as conditions change or monitoring points become no longer available; the groundwater monitoring program was revised in 2002, 2004, and 2006;
- The early warning value was exceeded on June 5, 10, 18, and 23, 2015 for the monitoring pair DP6 to DP3, and are attributed to a lag in groundwater level response at DP6 compared to DP3 following rain events which occurred on May 31 to June 1 (75 mm), June 8 to June 16 (100 mm), and June 23 (10 mm). Similar exceedances of early warning values occurred at this threshold pair in 2014;
- There were no exceedances in 2015 of the Action Threshold Values established for the monitoring pairs located adjacent to Mill Creek around the site. Water levels in the Phase 1 pond, Phase 2 pond, Phase 3 pond, and Phase 4 pond did not exceed their respective low-water level threshold values in 2015;
- The estimated groundwater contribution from the Mill Creek Aggregates Pit property located north of Township Road 2 was similar in 2015 compared to 2014;
- The hydraulic gradient in drive points north of Highway 401 (DP18, DP19, and DP20) displayed upward vertical gradients (discharge) for most of 2015, with the exception of downward gradients at DP19 from August to November. These downward gradients likely reflect the lower than normal precipitation received at the site during those months;



- Groundwater temperatures at the monitoring stations closest to the Phase 1 and 3 Extraction Ponds were influenced by temperatures in the ponds; however, temperatures rapidly decreased away from the ponds; and close attention is given to the temperature monitoring data down gradient of these ponds,
- Groundwater patterns in Mill Creek have been influenced by climatic conditions in recent years; and
- Groundwater quality has generally remained consistent over the years. Some Ontario Drinking Water Quality Standards are exceeded due to natural conditions in the area.

#### ***Mill Creek Water Quality and Temperature***

- Surface water quality data indicate some loading of total coliform bacteria from upstream sources as observed in previous years;
- Surface water quality has remained stable over the past decade, although in recent years there have been signs of increasing conductivity and chloride levels which may be attributed to road salting activities;
- The maximum stream temperature in the main channel of Mill Creek in 2015 (23.53°C) was recorded at SWM1 on July 29<sup>th</sup> which is well within the tolerable temperature for brown trout and
- During the spring, summer and fall months, stream temperatures decrease across the University property due to a combination of inflowing coldwater tributaries, ground water input, and shading which continue to enhance the coldwater fish habitat attributes of the stream.

#### ***Fisheries***

- There is no indication that aggregate extraction has affected the local brown trout population;
- The upper tolerable temperature for brook trout or brown trout was not exceeded in the main channel of Mill Creek during the summer of 2015;
- The semi-annual trout electrofishing survey was conducted in 2015 and the estimated Brown trout population adjacent to the aggregate operation remained within historic ranges;
- Trout numbers and biomass continue to be higher in the University reach compared with the Hanlon reach due to better habitat conditions;
- In 2015, brown trout spawning activity remained high in both the University and Hanlon reaches similar to recent years; and
- Significant beaver activity is changing the creek and the riparian corridor, particularly along the Hanlon Reach. A beaver dam at the upper end of the University reach was removed by the Mill Creek Rangers in July 2015. Additional stream restoration work in the vicinity of the lower Hanlon reach should be considered to improve the in-stream habitat in this area.

#### ***General Conclusions***

- Based on the extensive monitoring data there is no indication that aggregate extraction on the Mill Creek Property has negatively affected water flow in Mill Creek or trout populations in the study area; trout populations have been consistent and/or increased since below-water table extraction began in 1995;
- No operational mitigation actions are required or recommended at this time;
- The current interim ground water thresholds can be maintained; and
- The environmental monitoring program will continue in 2016 with amendments described in this report as outlined by the Ontario Ministry of Natural Resources and Forestry in their letter of March 15<sup>th</sup>, 2013 to the University of Guelph (licence holder). The 2016 monitoring will not include the trout population survey.

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# **1. Introduction**

## **1.1 The Site**

The Mill Creek Property is owned by the University of Guelph and encompasses approximately 189 ha, situated on Part Lot 24 Concession 1 and Part Lots 21-24 Concession 2, Township of Puslinch, in the County of Wellington (Figure 1-1). The land includes agricultural fields that were historically used by the University of Guelph, and abutting wetlands that are part of the provincially significant Mill Creek Wetland Complex.

The northwest corner of the property is traversed by Mill Creek and by two tributaries, Galt Creek and Pond Creek. These waters support a naturally sustaining brown trout (*Salmo trutta*) and brook trout (*Salvelinus fontinalis*) population. The aggregate extraction operation is designed to limit the impacts on both Mill Creek and its tributaries, and the wetland area adjacent to the creek.

The aggregate extraction is operated by Dufferin Aggregates. Extraction is occurring above and below the water table, and will eventually create a number of small lakes. The operation is licensed to extract aggregate from 96 ha of the property.

## **1.2 Monitoring Requirements**

Approval for aggregate extraction on this property followed an Ontario Municipal Board Hearing in 1988 and 1989, with a decision in 1990. The Ministry of Natural Resources (MNR) issued a licence to the University of Guelph under the Aggregate Resources Act in September, 1991. The licence (#P726077) has 42 conditions.

The original monitoring programs and specific licence conditions were included in the Coordinated Report on Monitoring Programs (Planning Initiatives 1993). The monitoring program was revised in 2006 as part of the Pre-Phase 3 application (C. Wren & Associates Inc. and Jagger Hims Ltd. 2006). That program was followed up to 2012 when additional program changes were recommended and implemented beginning in 2013. These recent changes to the monitoring program are discussed in Section 1.4 below.

Licence conditions 19 to 23, and 25 required the development of approved monitoring plans before extraction could proceed. This included: surface water (including Mill Creek and its tributaries), ground water, fisheries and ecology of the wetland (vegetation). The vegetation monitoring plan was approved in 1992 and the others in December 1993. Licence conditions 19 - 25 are provided in Table 1.1. Threshold values for groundwater were first developed in 2001 and are periodically updated or revised as discussed in detail in Section 3 of this report.

**Table 1.1 Conditions of License**

Conditions Of Licence	Related Discipline (1993 Document)
19. The licensee shall, prior to the start of excavation operations, provide the District Manager, Ministry of Natural Resources, with a comprehensive groundwater monitoring report which shall include a description of monitoring equipment, monitoring locations, methods of data collection and recording, action, thresholds, calculations to be carried out (e.g. base flow calculations), frequency of data collection, a proposed reporting schedule, and any other details required by the District Manager. The reporting schedule shall include the requirement to provide a comprehensive interim monitoring report for review and District Manager approval prior to commencement of excavation in each phase of the pit operation. The licensee shall maintain the monitoring programs described above, throughout the operating life of the extraction and during the site rehabilitation period and beyond, until such time that the Ministry of Natural Resources agrees to the termination of, or reduction in, the monitoring program.	Hydrogeology – refer to Appendix B, Groundwater Monitoring Program – Jagger Hims Limited (November, 1993)
20. The licensee shall, prior to the start of excavation operations, provide the District Manager, Ministry of Natural Resources, with a detailed wetland habitat monitoring report which will outline a program designed to measure ecological changes in those parts of the Mill Creek wetland adjacent to extraction operations carried out under this licence. The reporting schedule shall include the requirement to provide a comprehensive interim monitoring report for review and District Manager approval prior to commencement of excavation in each phase of the pit operation.	Terrestrial Ecology – refer to Appendix D, Habitat Monitoring Manual, Paul F.J. Eagles Planning Ltd. (November, 1992)
21. (a) The licensee shall, prior to the start of excavation operations, provide the District Manager, Ministry of Natural Resources, with a comprehensive hydrological and biological monitoring report for Mill Creek and its tributaries, and this report shall include a description of monitoring equipment, monitoring locations, methods of data collection and reporting, action thresholds, a proposed reporting schedule, and any other details required by the District Manager. The reporting schedule shall include the requirement to provide a comprehensive interim monitoring report for review and District Manager approval prior to commencement of excavation in each phase of the pit operation.	Surface Water and Fisheries – refer to Appendices A and C, Surface Water Monitoring Program and Fish Habitat Monitoring Program. M.M. Dillon Limited and ESG International Inc. respectively (November, 1993).
(b) The licensee shall provide the District Manager, Ministry of Natural Resources, with a detailed surface water drainage plan which will describe the existing surface water in and surrounding the site and the proposed water diversion, storage, and drainage facilities on the site, and points of discharge to surface waters.	Refer to Drainage Plan prepared by Planning Initiatives Ltd. in conjunction with M.M. Dillon. (November, 1992)
(c) The monitoring report described in this licence condition shall include a description of those tests and analytical methods to be used to determine whether there is or is likely to be either a net gain or a net loss in fish habitat as a consequence of pit operations.	Fisheries, Surface Water and Ground Water – refer to Appendix C, Fish Habitat Monitoring Program. (November, 1993)
22. The licensee shall, prior to the start of excavation operations obtain the written approval of the District Manager, Ministry of Natural Resources, for the reports required under licence condition nos. 19, 20, and 21 and, upon approval of the reports, the licensee shall carry out the monitoring programs as described in the monitoring reports.	
23. Pit operations shall not result in a net loss of the productive capacity of fish habitat in Mill Creek or its tributaries.	Fisheries, Surface Water and Ground Water - refer to Appendix C, Fish Habitat Monitoring Program. (November, 1993).
25. Prior to the start of excavation operations, the licensee shall provide, to the satisfaction of the District Manager, Ministry of Natural Resources, a contingency plan that will describe the actions proposed to be taken by the licensee to ensure compliance to condition of 23 of this licence.	Fisheries, Surface Water and Ground Water – refer to Section 5.0 of original program.

### 1.3 Coordinated Monitoring Report

The first coordinated monitoring report filed for the Mill Creek Property was submitted March 31, 1995 (ESP *et al.* 1995). That report included background information and monitoring data collected in 1994. The purpose of the Coordinated Report is to summarize and integrate monitoring data collected for the previous year from the three different, but inter-related, disciplines: hydrology, hydrogeology and fisheries. This year represents the twenty-first coordinated report and summarizes the monitoring data collected in 2015. Details of individual monitoring programs are included in the separate Technical Appendices to this report.

The current monitoring program includes an annual report for each monitoring component, except for terrestrial vegetation monitoring which is filed prior to the start of each new phase of extraction. The Pre-Phase Two Biological Monitoring Report was submitted to the MNR in February of 2002 (Eagles Planning 2002). The Pre-Phase Three Environmental Monitoring Report was submitted to the MNR in January 2006 (C. Wren & Associates Inc. and Jagger Hims Limited, 2006). Both reports were approved by the MNR. In March 2002, Fisheries and Oceans Canada (DFO) released a report that reviewed the fisheries, hydrology and hydrogeology data collected to date for the Mill Creek Property and the Reid Heritage Pit (Blackport and Portt 2002). In addition to the data analysis and review, that report also evaluated the adequacy of the monitoring programs, and an assessment of impacts of the two gravel pits on the local water table, surface flow and the fisheries of Mill Creek. That report supported our conclusions that there had been no “sustained or significant changes in brown trout abundance” since aggregate extraction began at the University of Guelph property.

In mid-2004, the MNR, supported by the aggregate operators, the Grand River Conservation Authority (GRCA) and the Township of Puslinch, initiated a cumulative impact assessment of the Mill Creek aggregate extraction area by Golder Associates Ltd. The first (of two) reports was finalized in November 2005. A draft of the second report was issued in November 2006 though it is our understanding that this report was never finalized. Both external peer reviews agreed that the Mill Creek Aggregates Pit operation had no discernible effect on the fisheries or water flow of Mill Creek.

The specific objectives of this report are as follows:

1. Summarize 2015 data collected on hydrogeology and surface water hydrology, and integrate it with fisheries biology data;
2. Compare 2015 groundwater levels with action thresholds to evaluate compliance;
3. Review monitoring results and make recommendations to revise the monitoring program if necessary; and
4. Review monitoring results and determine if mitigation or other actions are required.



## 1.4 Updates to the Mill Creek Pit Annual Monitoring Program in 2013

After consultation with the MNR in April 2012, several changes were incorporated into the monitoring program beginning in 2013. Changes to the monitoring program were limited to surface water (hydrology) and the fisheries components of the program as outlined in Table 1.2. However, Table 1.2 also describes the current status of the hydrogeology monitoring program which has undergone modifications in recent years to adjust for operations and changes to the extraction areas.

Measurement of water levels, and hence estimates of flow, has ceased in the two small tributaries at SWM3 and SWM4. The original intent of trying to estimate flow in these tributaries was to contribute to a groundwater budget for the property. However, it was determined that these measurements were not sufficiently accurate to be useful and the direct hydrogeology monitoring program was more reliable. However, stream temperatures continue to be recorded hourly in these two coldwater tributaries.

Two components that were dropped from the annual fisheries program included *in-situ* temperature monitoring of trout redds, and the qualitative survey of the presence of young of the year trout (emergent) survey. The trout population survey was also reduced to every other year which does not jeopardize the integrity of the program. The annual redd count survey remains unchanged to assess the level of fall spawning activity.

The brown trout population (electrofishing) survey was conducted in 2015, therefore, it will not be conducted in 2016.

**Table 1.2 Summary of the Environmental Monitoring Plan for Mill Creek Aggregates Property commencing in the 2013 Monitoring Year**

Monitoring Tasks	Monitoring Plan/Frequency	Approved Changes 2013
<b>A. HYDROLOGY</b>		
Flow and Temperature at Four Surface Water Monitoring Stations (SWM1-4).	Hourly. at 4 stations	Flow data will continue to be collected from two stations (SWM1 and SWM2), but not SWM3 and SWM4.
Climate		Temperature will continue to be recorded at all four stations. Use of on-site rain gauge to be discontinued and data to be obtained from GRCA weather stations at Turfgrass Institute and Shades Mills Conservation Area. Data downloaded monthly. Two on-site air temperature stations to continue.
<b>B. HYDROGEOLOGY</b>		
i) General Aquifer Monitors		
a) BH1 to BH9 monitors, TW16-78, TW16-79, OW1-84, OW2-84,	Monthly - part of original 1993 program.	Monitor BH8 removed by Phase 3 extraction. Monitor BH9 I and II removed by Phase 3 extraction.

OW4-84, OW5-84, OW16A-78		
b) Well #4794, South Farmhouse, Smith well	Monthly - part of original 1993 program.	South Farmhouse well removed from program.
c) Monitors 92-1, 92-5, 92-8, 92-12, 92-13, 92-14, 92-15, 92-15A, 92-25, 92-26, 92-27, 92-28, 92-29, 92-30, 92-31, 92-32, 92-33	Monthly - part of original 1993 program.	Monitor 92-12 replaced by 92-12A. Monitors 92-25, 92-26, 92-30 and 92-31 removed by Phase 3 extraction or no longer accessible.
d) Monitors BH10, BH11 and BH12	Added when Phase 2 approved.	Installed in Phase 2 July 2002; Monthly monitoring. BH 10 removed by extraction.
e) Monitor BH13	Added when threshold pairs established in 2002.	Installed north of Phase 5b July 2002; Monthly monitoring.
f) On-site ponds in Phase 1, Silt Pond SP1, SP2 and SP3, Phase 2	Added progressively as extraction has proceeded.	Daily monitoring of water level; Monthly reporting. Phase 3 pond added to program. Silt Pond SP1 and SP2 full of silt and removed from program.
ii) Wetland Drivepoint Monitors DP6 to DP16	Monthly – part of original 1993 program.	DP13 and DP14 removed by extraction. DP15 removed by extraction. Reid Heritage Pit DP 113 incorporated into program.
iii) Mill Creek In-Stream Drivepoint Monitors DP1 to DP5, DP17 to DP22 (water levels and temperatures)	Monthly – part of original 1993 program.	No change except DP5 relocated several times due to creek access restrictions and/or vandalism issues.
iv) Mill Creek Surface Waters SW1 and SW2 (levels and temperatures)	Monthly – part of original 1993 program.	No change.
v) Multi-level Data Logger Monitor Nests 92-13, 92-14, 92-15, 92-31, 92-27, 92-33 (electronic water levels and temperatures) - Additional Multi-level Data Logger Monitor Nests 92-25, 92-26, 92-28, 92-29, 92-30 and 92-32 added in 2006	Daily by data logger. Part of original 1993 program.	Monitors 92-14, 92-25, 92-26, 92-30 and 92-31 removed by extraction or no longer accessible / functional.
vi) Groundwater Sampling Monitors BH1-1, BH6, and 92-8. On-site pond in Phase 1	April & December. Part of original 1993 program.	March and November including Phase 1 pond. BH 6 sampling removed from program. Monitor 92-32-III (standpipe) added to program.
vii) Monitor pairs Early Warning Values and Action Thresholds for BH13 to DP21, 92-12 to DP17, DP6 to DP3, 92-30 to 92-28, 92-25 to 92-26 and OW5-84 to DP5A	Criteria established in 2001 and 2002.	Monthly monitoring and reporting; more frequent monitoring as required under the Action Response Protocol. Monitors 92-25, 92-26, 92-30 and 92-31 removed by extraction or no longer accessible. Monitor Pairs are now: BH13 to DP21in; DP6 to DP3, 92-12 to DP17in; 92-29 to DP1in; 92-27 to DP2in; OW5-84 to DP5Cin.

		Early Warning and Action Thresholds set for: Phase 1 Pond; Phase 2 Pond; Phase 3 Pond; Silt Pond SP3. Silt Pond SP1 and SP2 removed from program.
viii) Action Response Protocol	Established in 2001.	As laid out in the Action Response Protocol table in text of report.
ix) Regional monitoring wells in Mill Creek watershed Groundwater Monitoring Program.	Added to Program in 2003	Monitoring data to be obtained from Township or it's consultant, and incorporated into the annual assessment.

### C. FISHERIES

Redd surveys	Annually	No change.
Trout population surveys (Electrofishing)	Annually	This component was changed to every two years starting in 2013.
Surface Water Chemistry	Once per year (as approved in 1996)	No change.
Habitat Mapping	Twice (1993 and 2000)	No new mapping proposed at this time.
Redd temperature	Added to program in 2000.	This component was removed from program beginning in 2013.
Emergent YOY	Annually April/May. Conducted 2001-2012.	This component was removed from program beginning in 2013.
Surface water temperature	Monthly- see Hydrology section above.	No change. Data are collected as part of the Surface Water Monitoring Program at hourly intervals

### D. TERRESTRIAL

Permanent Vegetation Plots	Annually	Plot 3 and Plot 18 removed from program (1996). Methodology to be reviewed with MNR.
Breeding Birds and Waterfowl	Annually	Breeding Birds dropped from program in 1996.
Vegetation Communities	Every 5 years	Prior to new extraction Phase.
Significant Species	Annually	No change.

## 1.5 Watershed Activities

### 1.5.1 Mill Creek Extraction Operations

The Mill Creek Pit is surrounded by other aggregate operations (Figure 1-1). Significant aggregate extraction has occurred within the properties immediately to the north and east of this site, and until recently at the property to the north of Highway 401. The design of the Mill Creek Aggregates pit and the associated monitoring program were developed and approved prior to other operations north of the site.

#### *Pit Operation*

Figure 1-2 shows the site details based on the most current approved extraction areas. The Phase 1 extraction area is located in the extreme eastern portion of the north section of the property. Aggregate extraction in the southern portion of Phase 1 began in 1994, and below-

water table extraction started in the spring of 1995. Stripping operations and perimeter berm construction in Phase 2 were undertaken in 2001. Above-water table extraction started in Phase 2 in October 2002. Below-water table extraction occurred in the southwest corner of Phase 2 starting in the fall of 2003, and continued in the northern section of Phase 3 through to the end of 2012. In 2007, the opening cut in Phase 3 was extracted.

From 2008 to 2012, extraction continued in Phases 2 and 3. In 2013, extraction in Phase 3 was completed and extraction in Phase 4 began, as well as the construction of a silt barrier separating the Phase 3 pond from the Phase 4 pond. In 2015, extraction in Phase 4 and the construction of the silt barrier continued. The silt barrier is now in place and is effective in creating a head difference between Phases 3 and 4 ponds, but will continue to be developed in 2016 as per the site plan.

### ***Silt Ponds***

As part of routine operations, water is taken from the on-site pond in Phase 1 and used for aggregate washing (Figure 1-2). The wash water is directed to a silt pond where the suspended solids settle. This process is carried out under a Permit To Take Water (PTTW) issued by The Ministry of the Environment and Climate Change (MOECC). The current PTTW (#8520-A48LDY) was issued on Nov 16, 2015 which was an amendment to reflect the company name change from Holcim Canada to CRH Canada Group Inc. The PTTW allows for the taking of water from both the Phase 1 and Phase 4 ponds.

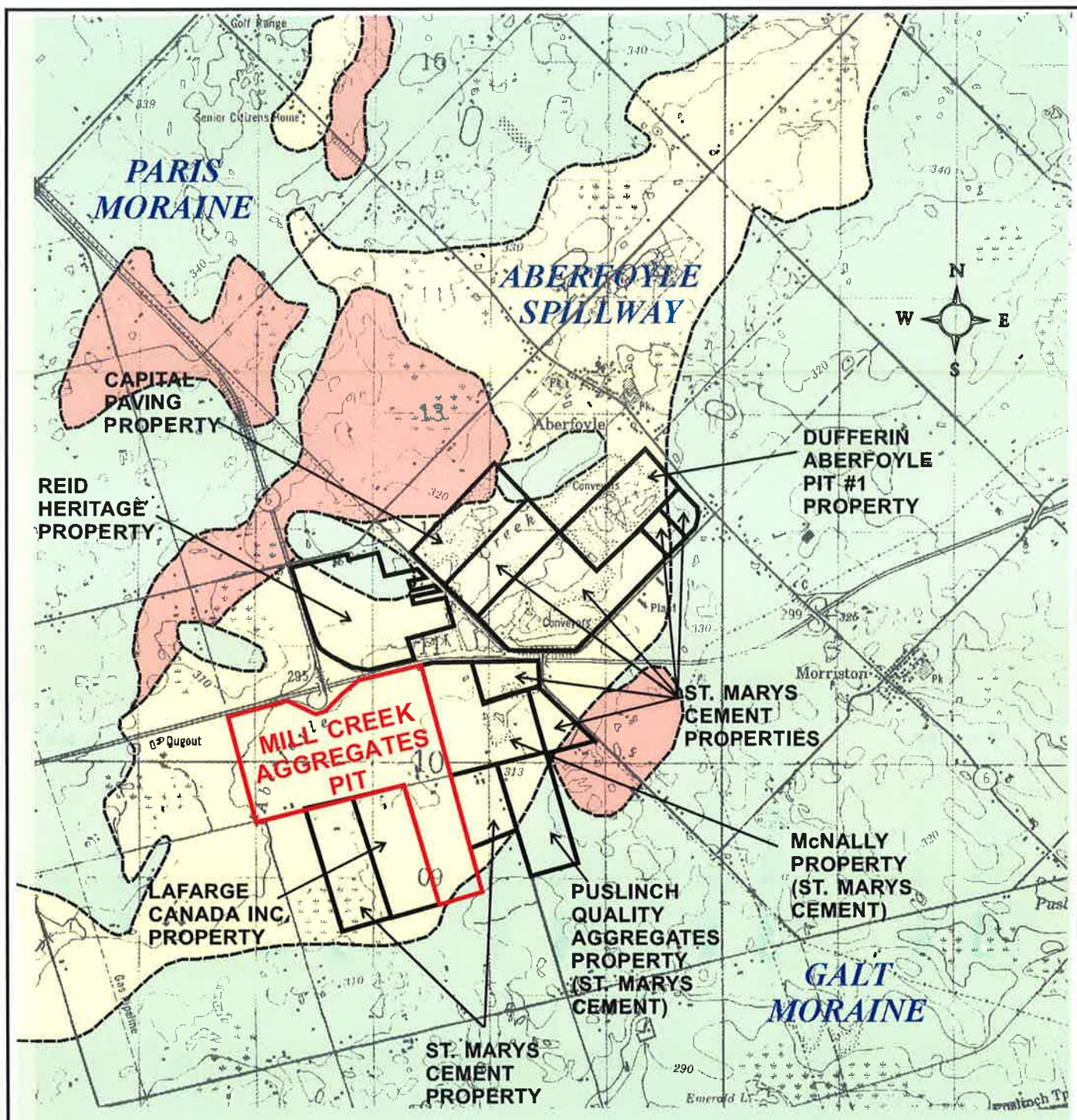
Similar to previous years, water was taken from the Phase 1 pond for aggregate washing during 2015. The silty wash water was pumped into the extension of silt pond SP3/Phase 4 pond for settlement of the suspended silt. From a separate location in the Phase 4 pond, clean water was pumped back into the Phase 1 pond. Pumping is adjusted between the ponds to maintain water levels within threshold values.

In order to maintain water levels between the threshold values, it was necessary to recirculate a considerably larger volume of clean water (52% more water) back into the Phase 1 pond in 2015 than the volume discharged into silt pond SP3/Phase 4 pond from the processing plant. The presence of the silt barrier between the Phase 3 and Phase 4 ponds helps to sustain a higher pond level in Phase 4 (relative to the Phase 3 pond) which results in the need to recirculate this additional water. These calculations allowed for 5% water loss (water retained in the washed product stockpiles and evaporation loss) during aggregate processing. Details regarding pumping volumes are included in Technical Appendix B (Hydrogeology).




Minimum/maximum water levels were established for silt pond SP3/Phase 4 pond and they were operated within these limits in 2015.

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#### Legend

-  SANDY SILT TILL
-  ICE-CONTACT STRATIFIED DRIFT SAND, SILT, GRAVEL
-  OUTWASH SAND AND GRAVEL

SOURCE:  
GENERALIZED AFTER KARROW, 1987.

500 0 1000 metres

#### LOCATION AND PHYSICAL SETTING

2015 ANNUAL GROUNDWATER  
MONITORING REPORT  
MILL CREEK AGGREGATES PIT  
Township of Puslinch  
for Dufferin Aggregates



DATE: MARCH 2016

SCALE: 1:50000

PROJECT: 111-52958-00 105A

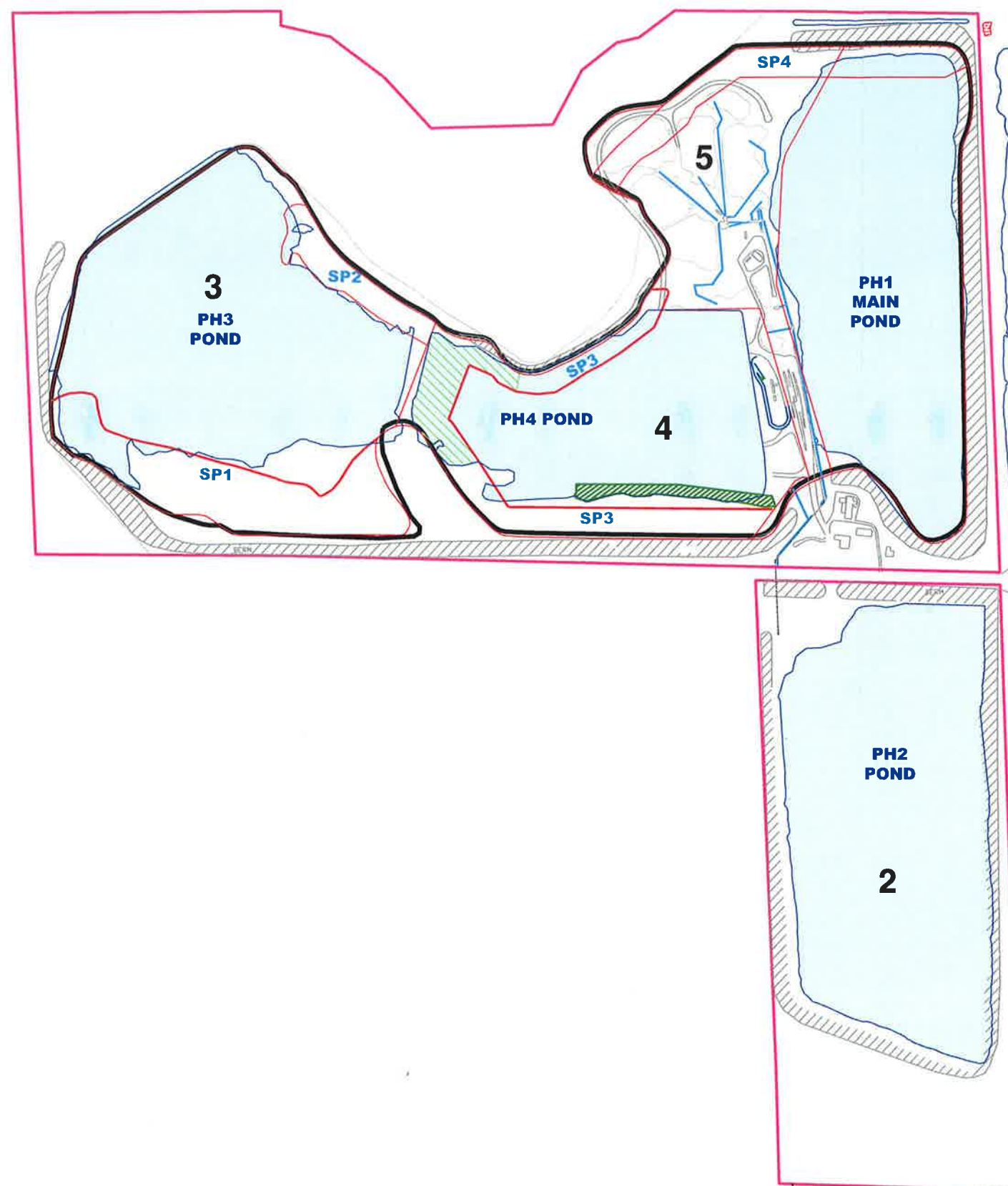
REF. NO.: 111-52958-00 105-2 F1-1 G15



FIGURE

1-1





**McNALLY  
(St. Marys Cement)**

# LEGEND

- BOUNDARY OF LICENSED PROPERTY
- LICENCED LIMIT OF EXTRACTION PER SITE PLANS
- BOUNDARY OF EXTRACTION AREA PER G.R.C.A. FILL PERMIT APPLICATION
- 3 PHASE DESIGNATION
- SP3 SILT POND DESIGNATION
- BERM
- INFILLED SILT POND
- PARTIALLY INFILLED SILT POND
- EXTRACTED AREA TO BE SLOPED

## SITE PLAN SEQUENCING

2015 ANNUAL GROUNDWATER  
MONITORING REPORT  
MILL CREEK AGGREGATES PIT  
Township Of Puslinch  
for Dufferin Aggregates



SCALE: NOT TO SCALE  
PROJECT: 111-52958-00 105  
DATE: MARCH 2016  
REF. NO.: 111-52958-00 105-2 F1-2 G15

FIGURE  
**1-2**

### 1.5.2 Other Extraction Operations

Other aggregate operators within the Mill Creek watershed near the Dufferin Aggregates Mill Creek pit include:

- CBM (St. Marys Cement Inc. (Canada)) Main Pit (Upstream);
- Reid's Heritage Homes (Upstream) (no extraction since 2007, depleted);
- CBM McNally Pit (Upstream);
- CBM (formerly Puslinch Quality Aggregates) Mast Pit;
- Warren Pit (Lafarge Canada Inc.);
- CBM McMillan Pit (no extraction since 2007, depleted);
- CBM Lanci Pit; and
- CBM Hohle Pit.

### 1.6 Program Contact Names

The names and addresses of the primary contact people involved with the Mill Creek monitoring program are provided in the following table:

List of Personnel		
	Names	Role
Licence Holder	P. Wong, Director of Real Estate University of Guelph 25 University Avenue, Guelph, Ontario Phone: (519) 767-5051 Fax: (519) 763-4974	Licence Holder
Aggregate Operator	Mr. Ron Van Ooteghem Dufferin Aggregates 2300 Steeles Avenue West, 4 <sup>th</sup> Floor Concord Ontario L4K 5X6 Phone: (905) 761-7500 Fax: (905) 761-7505	Project Coordination
Ground Water Monitoring Program	Mr. Andy Hims Hims GeoEnvironmental 155 Ontario Street, Collingwood, ON L9T 4M4  Phone: (705)-446-9997 and Mr. Greg Siiskonen WSP Canada Inc. (formerly Genivar) 55 King Street, Suite 600   St. Catharines, ON L2R 3H5 Phone: (905) 687-1771 ext. 245	– Ground Water (Technical Appendix B) – Input to Coordinated Report
– Surface Water Monitoring Program	Mr. Mike Johns Stantec Southgate Drive, Guelph, Ontario Phone: (519) 836-6050 Fax: (519) 836-2493	– Surface Water (Technical Appendix A)
– Fisheries Monitoring Program	Dr. Chris Wren and Lisa Wren, LRG Environmental R.R. #1, Markdale, Ont. N0C 1H0 Phone: (519) 986-3233, Fax: (519) 986-3127	– Fisheries Monitoring (Technical Appendix C)
– Coordinated Report		– Preparation of Annual Coordinated Report
Terrestrial Monitoring	Dr. Paul F.J. Eagles Paul F.J. Eagles Planning Ltd. 37 Hughson Street, Branchton, Ontario N0B 1L0 Phone: (519) 740-1590 or (519) 885-1211 ex.2716 Fax: (519) 746-6776	Terrestrial Biology Investigations Report submitted in August 2005.



## **1.7 Friends of Mill Creek**

A group called the Friends of Mill Creek (FOMC) was established in the fall of 1997. The FOMC is a working group with the primary objective of habitat rehabilitation and protection of the fisheries in Mill Creek. The focus of the group is directed toward improving the health of the Mill Creek watershed through action. It is a unique partnership including representatives from industry, various levels of government including the Township of Puslinch, the GRCA, MNR, University of Guelph, Wellington County Stewardship Council, as well as residents and interest groups. Dufferin Aggregates personnel are active in the FOMC.

Funding for the FOMC has been derived from a combination of donations from residents and local industry, government support and funds from the Trillium Foundation in partnership with the Puslinch Optimist Club. The FOMC established a Stewardship Ranger program in 2003 with the purpose of hiring summer students to carry out the stream rehabilitation under the supervision of a trained fisheries biologist.

During the past twelve summers the Mill Creek Stewardship Rangers have carried out numerous projects in the watershed ranging from habitat improvement to stream temperature monitoring. General habitat enhancement and tree planting at various locations along Mill Creek were completed by the crew in 2015, including removal of a beaver dam within the boundaries of the Dufferin Aggregates Mill Creek Pit. It is expected that the Stewardship Rangers will again be active in 2016.

## **1.8 Other Activities in Mill Creek**

Habitat restoration in the University of Guelph and Hanlon stream reaches was undertaken in the mid- to late-1980's by the agencies before the Mill Creek property was licensed. The trout population in the University reach responded favourably to these initiatives. However, restoration within the Hanlon reach was less successful, and the physical works have now largely disappeared or fallen into disrepair.

Trout productivity and carrying capacity remains much higher in the University reach compared with the Hanlon reach (also see Section 5.0). Some years ago Dufferin Aggregates and their biologists recommended that fish habitat restoration again be undertaken within the Hanlon reach. Monitoring of the trout population has now gone on for over 21 years since below-water aggregate extraction began and there has been no impact on the fisheries of Mill Creek. It is now appropriate to consider getting the Stewardship Rangers involved with habitat restoration in the Hanlon Reach.

A temperature survey was again conducted in 2015 by the MNRF, upstream of the Dufferin Aggregates Property, near the confluence of Aberfoyle Creek and Mill Creek, as part of their annual temperature monitoring in Mill Creek.

A prominent beaver dam was observed in the upper portion of the University section in 2014. The beaver(s) had felled numerous poplar trees and the dam was blocking water flow and possibly interfering with fish movement. This dam was removed in July 2015 by the Mill Creek Rangers.

## **2. Surface Water Hydrology**

### **2.1 Methods**

Surface water hydrology is monitored to assess potential impacts on Mill creek and involves the collection of water level data, stream discharge data, water temperature data and climactic data. Most of the surface water flow in Mill Creek within the Study Area originates upstream of the site. However, within the Study Area, additional water contributions include: a) ground water discharge, b) local surface runoff and c) input from two tributaries (Galt Creek, Pond Creek).

Station SWM1 is located where Mill Creek flows onto Dufferin's Mill Creek Property and SWM2 is located where Mill Creek flows off of Dufferin's Mill Creek Property (Figure 2-1). Stations SWM3 and SWM4 are located in Pond Creek and Galt Creek respectively. A summary of the 2015 monitoring methods is as follows.

- Water level data were logged hourly at stations SWM1 and SWM2, using model 3001 Solinst Levelloggers.
- Stream discharge was measured manually at stations SWM1 and SWM2 monthly, provided that wading conditions were safe to do so.
- Water temperature data were logged hourly at stations SWM1, SWM2, SWM3 and SWM4 using model 3001 Solinst Levelloggers.
- Air temperature and atmospheric pressure data were logged hourly at stations Air 1 and Air 2 using Solinst Barologgers.
- Climate data (air temperature and precipitation) were obtained from the Grand River Conservation Authority (GRCA) Climate Station at Shade's Mills Conservation Area in Cambridge, Ontario (located in the lower Mill Creek watershed, approximately 10 km southwest of the Mill Creek property).






Atmospheric pressure data were used to correct the data from the in-stream loggers for changes in atmospheric pressure. All on-site data loggers were pre-programmed to record data 'on the hour', at the same time.

To estimate a continuous stream discharge at each station, water levels (m) were converted to flow ( $\text{m}^3/\text{sec}$ ) through the use of rating curves. The equation of the best fitting stage-discharge curve at SWM1 and SWM2 was used to convert water level data (m above logger) into stream discharge rates ( $\text{m}^3/\text{s}$ ).

Greater details on monitoring methods and rating curves development are provided in Technical Appendix A (Surface Water).



**Legend**

-  Mill Creek Pit Property Limits
-  Watercourse
-  Surface Water Monitoring (SWM) Station
-  Air Temperature Station
-  Area Excavated in 2015



**Notes**

1. Coordinate System: NAD 1983 Ontario MNR Lambert
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2016.
3. Primary orthoimagery provided by © Dufferin Aggregates, 2016. Imagery taken on July 2, 2015. Secondary orthoimagery: © 2010 DigitalGlobe Image courtesy of USGS Earthstar Geographics. SIG © 2016 Microsoft Corporation



Project Location  
Wellington County

160960549 REVA  
Prepared by PW on 2016-03-24

Client/Project  
**DUFFERIN AGGREGATES**  
**MILL CREEK SURFACE WATER MONITORING**  
**PROGRAM**

Figure No.  
**2-1**

Title  
**Location of Surface Water Monitoring**  
**Stations in Mill Creek**



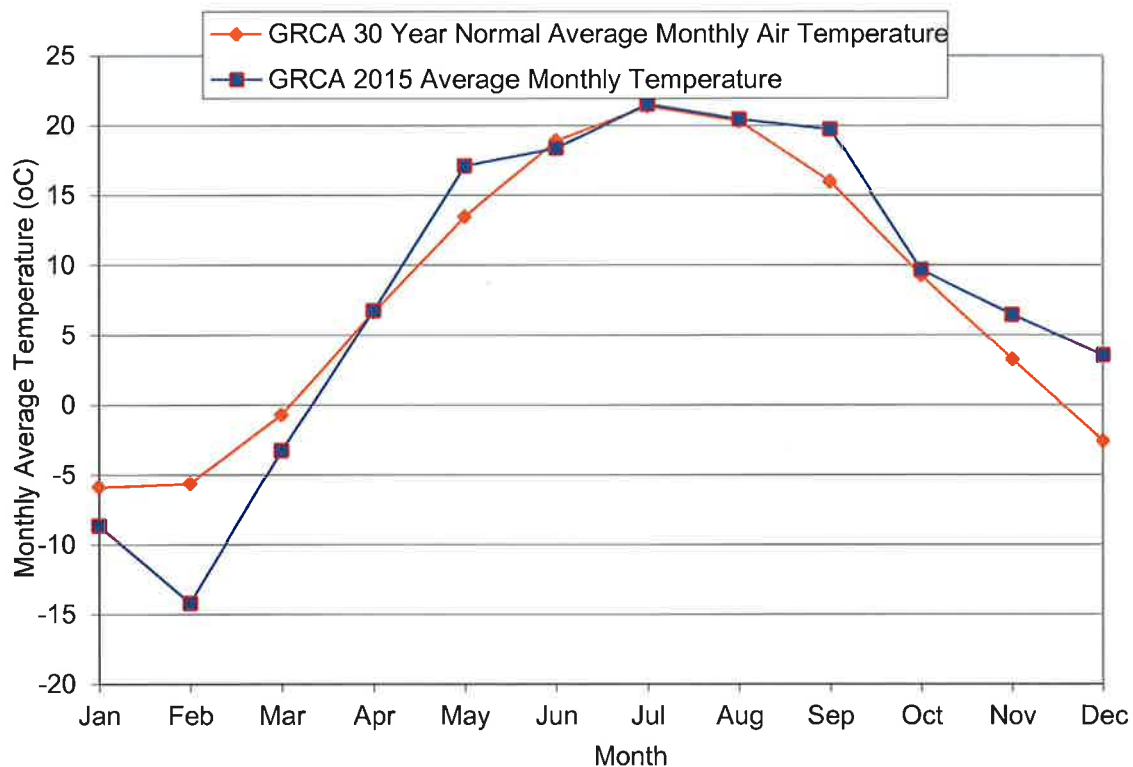


## 2.2 Surface Hydrology Results

### 2.2.1 Climate Data

#### ***Air Temperature***

Figure 2-2 shows the air temperatures observed in 2015 compared to the 30 year normal. In 2015, the mean monthly air temperature was warmer than the 30-year average for 8 of the 12 months.



**Figure 2-2 2015 GRCA Mean Monthly Air Temperatures Compared to 30-year Normal Temperatures**

**Precipitation**

Monthly precipitation data are summarized in Table 2.1. Precipitation in 2015 was 8% less than the 30-year average, with 841 mm in 2015 compared with the 30-year average of 912 mm. Precipitation in January, February, March, May, July, August, September, November and December was below the long term average. April, June and October had 30%, 90%, and 6% more precipitation than the normal for that month, respectively.

**Table 2.1 Total Monthly Precipitation for 2000 to 2015**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2000	39	48	45	75	145	150	98	53	95	21	70	91	933
2001	43	110	42	45	88	53	20	57	87	131	70	62	814
2002	64	66	64	110	105	95	69	10	80	44	59	37	808
2003	40	52	44	62	97	39	65	123	105	89	146	79	945
2004	37	22	84	63	116	60	86	45	27	70	66	79	758
2005	59	59	17	50	27	36	190	109	80	36	103	33	801
2006	93	85	62	69	93	18	182	38	141	45	105	85	1020
2007	44	11	38	48	46	33	28	13	23	24	76	77	464
2008	64	49	52	46	62	81	203	84	112	38	89	89	969
2009	31	68	59	114	79	84	115	108	32	73	33	59	853
2010	21	15	47	58	67	131	129	28	113	76	33	14	731
2011	48	58	86	101	113	87	32	62	76	129	91	86	1064
2012	47	42	31	30	28	65	30	63	106	127	40	80	679
2013	101	82	41	120	72	120	133	38	111	149	61	81	1109
2014	91	71	45	87	79	52	128	25	144	72	78	27	899
2015	37	56	14	99	69	160	70	66	73	84	54	59	841
30 year average	68	57	59	76	82	84	96	73	89	79	79	70	912

Note: Highlighting indicates precipitation below the 30-year Normal

### **2.2.2 Quality Assurance and Quality Control of Monitoring Data**

Flow measurements for each site were graphed to identify any outliers and obvious outliers were removed from the dataset. Only data that were clearly erroneous were removed, such as unexplained or anomalous spikes or dips in depth. This may occur occasionally when loggers record readings while a download is in progress, or when the loggers are removed for maintenance.

Water level was successfully collected from SWM1 and SWM2 every 60 minutes over the 2015 calendar year. In total (both stations), 100% of the 17,520 water level data points were successfully recorded in 2015.

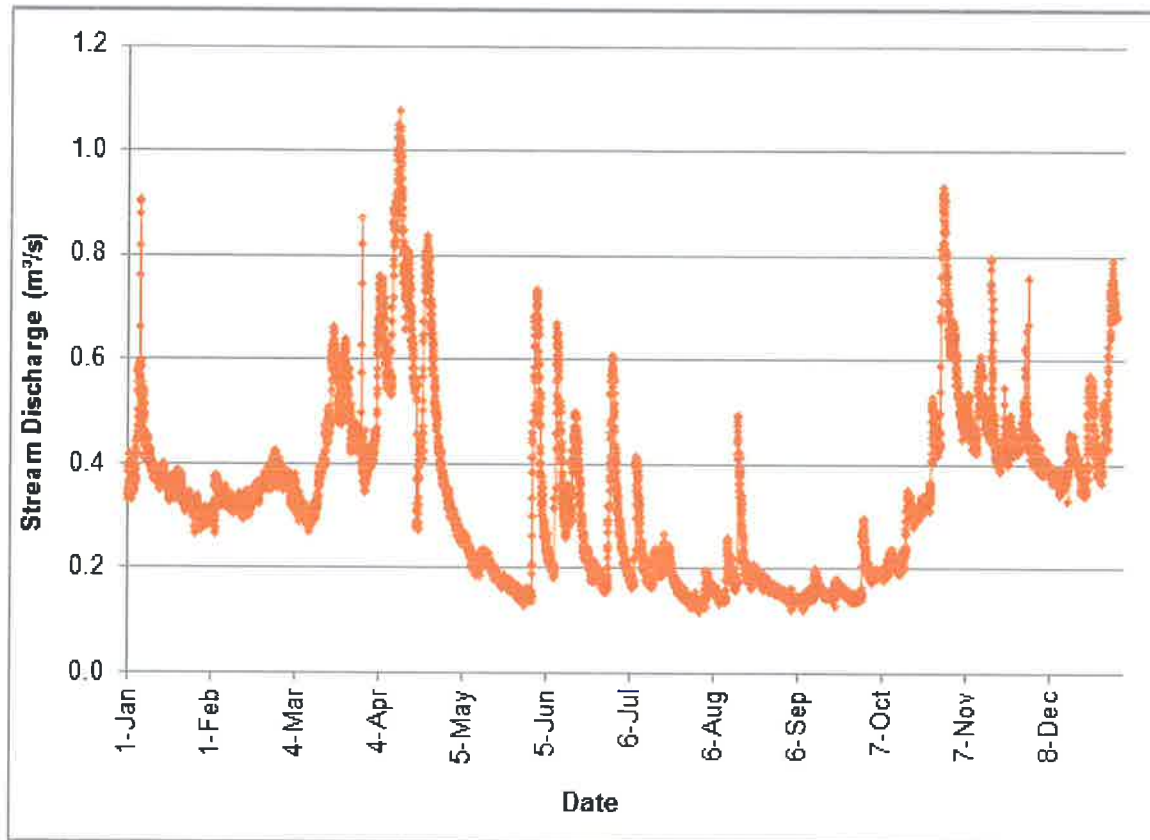
Water temperature was logged successfully every 60 minutes over the 2015 calendar year at all four stations (SWM1, SWM2, SWM3, and SWM4). In total, 97% of the 35,040 data points were successfully downloaded. This data was used to show water temperature trends during the 2015 calendar year.

Air temperature was logged successfully from Air Temperature 1 and Air Temperature 2 every 60 minutes over the 2015 calendar year. In total, 100% of the 17,520 air temperature data points were successfully downloaded.

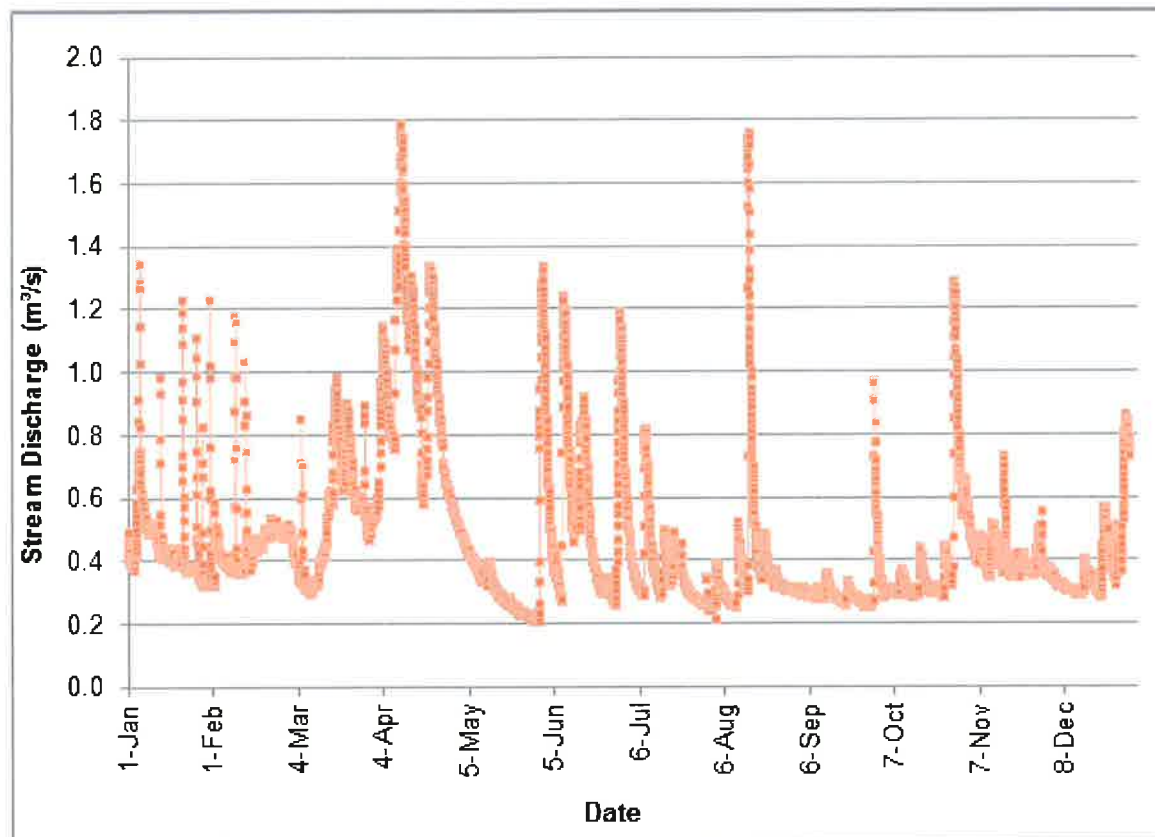
### **2.2.3 Annual Stream Flow Trends**

Detailed stream flow data are presented in Technical Appendix A and summarized below. Calculated flows at station SWM1 and SWM2 are presented in Figures 2-3 and 2-4. The calculated discharge data show there were several high flow events in early-January, late-March, early and late-April, late-May, early and late-June, mid-August, late-October, mid-November, and late-December 2015.

Stream discharge appears to be well correlated with precipitation events and periods of snow melt. The low flow period extended from early May to late September, but was interspersed with periods of increased flow due to rain events.



**Figure 2-3 2015 Mill Creek Discharge at Surface Water Monitoring Station SWM1**



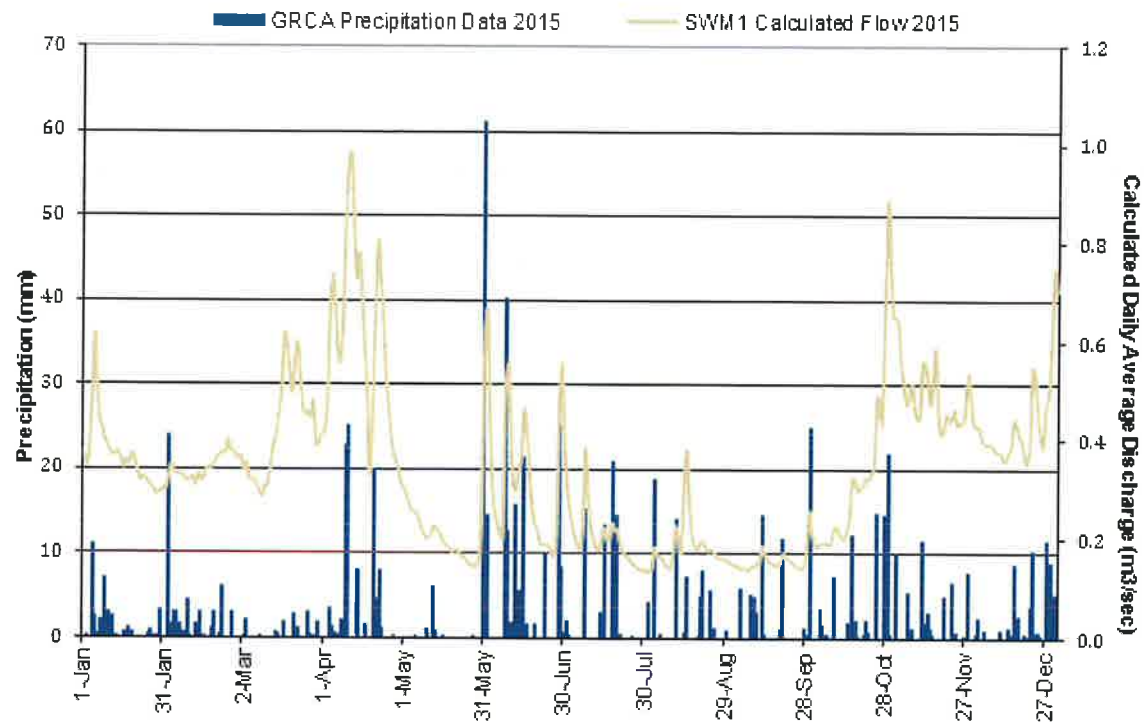
**Figure 2-4 2015 Mill Creek Discharge at Surface Water Monitoring Station SWM2**

#### ***Relationship between Precipitation and Stream Flow***

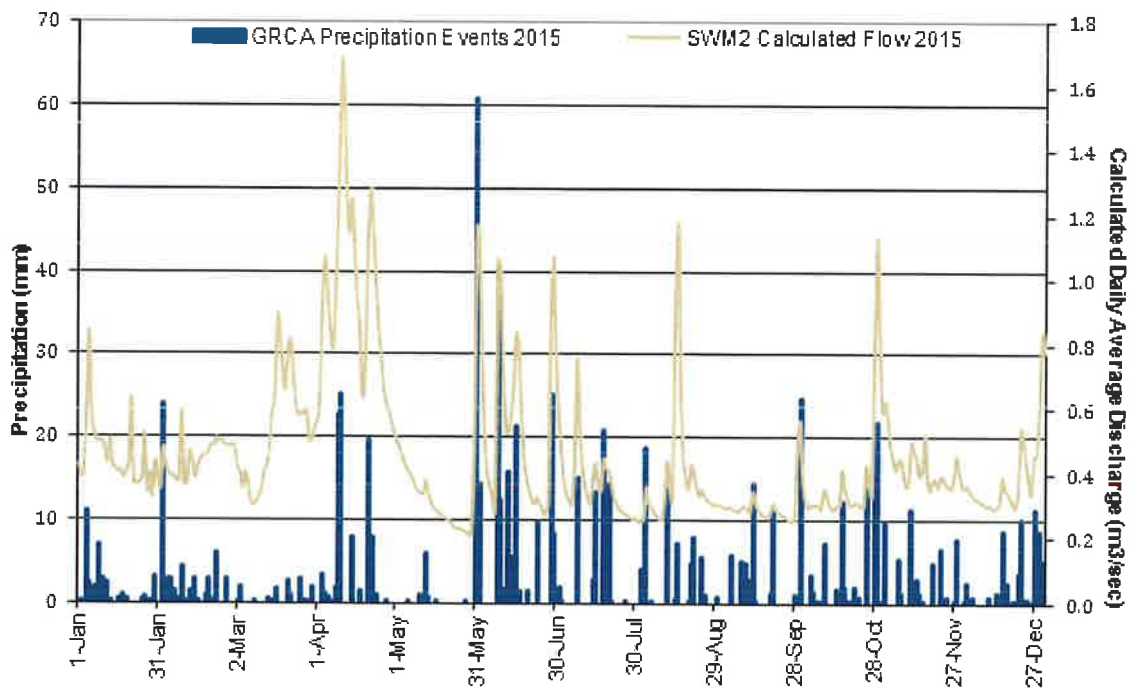
Figures 2-5 and 2-6 compare precipitation events recorded at the GRCA climate station with stream discharge at SWM1 and SWM2, respectively. The data show that stream flow patterns observed in Mill Creek generally reflect responses to precipitation patterns. Increased flows are observed shortly after precipitation events or during periods of snow melt. During the drier months, rainfall events were not always followed by peaks in stream flow, likely due to higher infiltration, resulting in less runoff during that period.

In 2015, the maximum daily average flow at SWM2 was estimated to be 1.687 m<sup>3</sup>/s which occurred on April 10, 2015. This flow rate coincided with a rainfall of 22.8 mm on April 9 and 25.2 mm on April 10, 2015. Flow at SWM1 during the same peak event was estimated to be 0.984 m<sup>3</sup>/s.





**Figure 2-5 Daily Average Flow in 2015 at SMW1 Compared to Precipitation Events**



**Figure 2-6 Daily Average Flow in 2015 at SMW2 Compared to Precipitation Events**

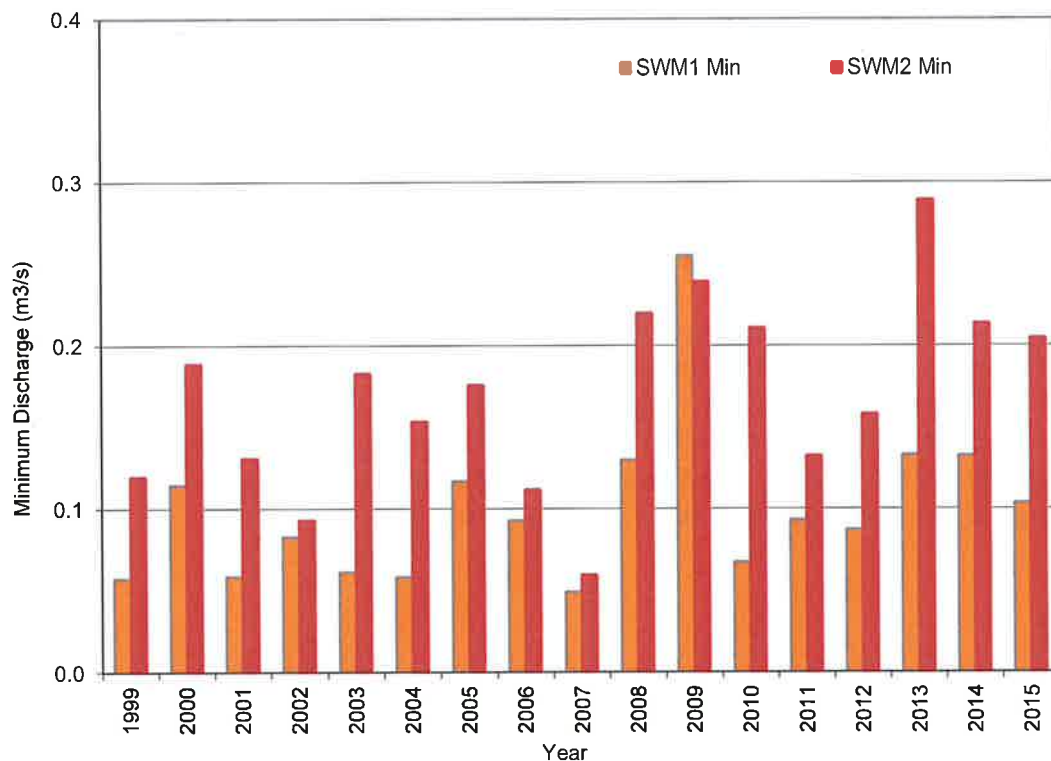
### Maximum and Minimum Flows

The minimum and maximum instantaneous flows recorded at stations SWM1 and SWM2, as well as corresponding dates when these flow events occurred are provided in Table 2.2.

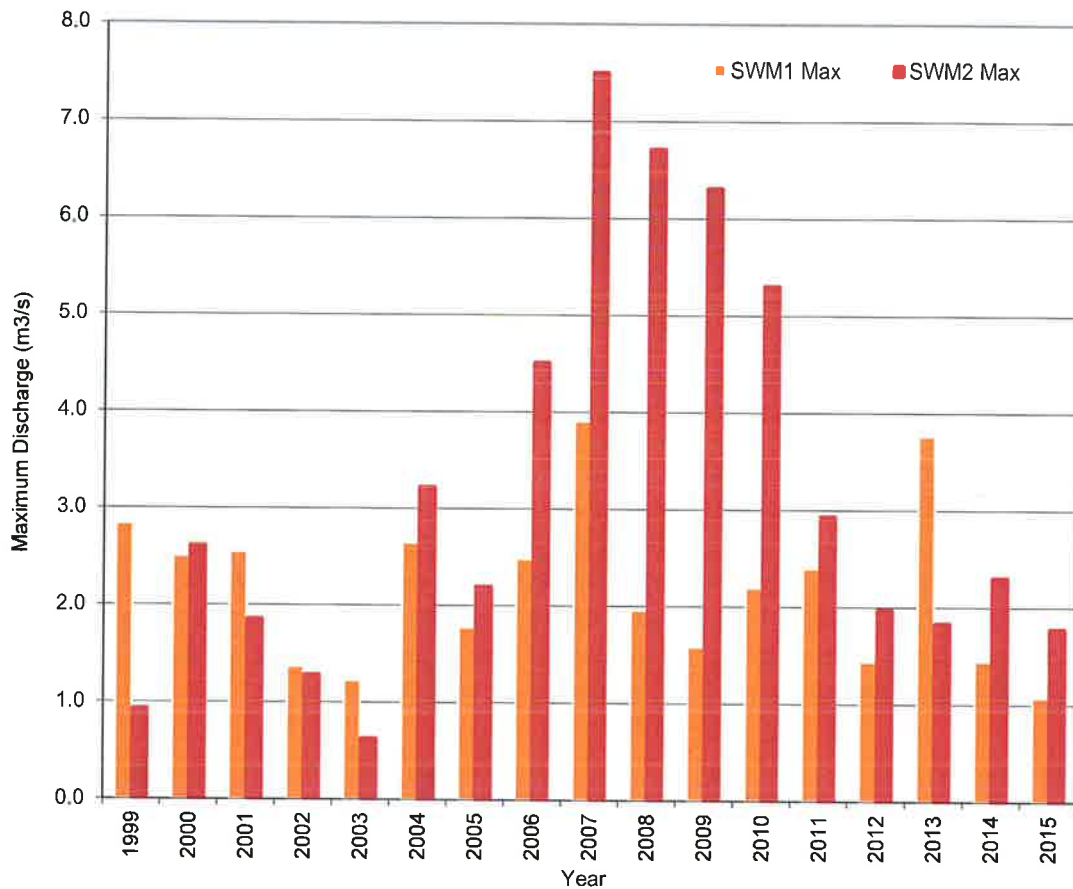
**Table 2.2 2015 Minimum and Maximum Instantaneous Discharge Flows at Station SWM1 and SWM2**

	SWM1		SWM2	
	Discharge (m <sup>3</sup> /s)	Date	Discharge (m <sup>3</sup> /s)	Date
Minimum Stream Discharge	0.1035	31-Jul	0.2046	30-May
Maximum Stream Discharge	1.0748	10-Apr	1.7877	10-Apr

Maximum and minimum flows (instantaneous data) from 1999 to 2015 are presented for stations SWM1 and SWM2 in Figures 2-7 and 2-8 to provide a visual comparison of data from the past sixteen years. Minimum flows at SWM1 and SWM2 in 2015 are within historical ranges. Minimum flow at SWM2 (0.2046 m<sup>3</sup>/s) was considerably greater than SWM1 (0.1035 m<sup>3</sup>/s), as would be expected. Unlike peak flow measurements, low flow estimates are expected to more accurately represent actual conditions, because low flow water levels are within (or close to) the range of flows that are measured manually to develop the rating curve.



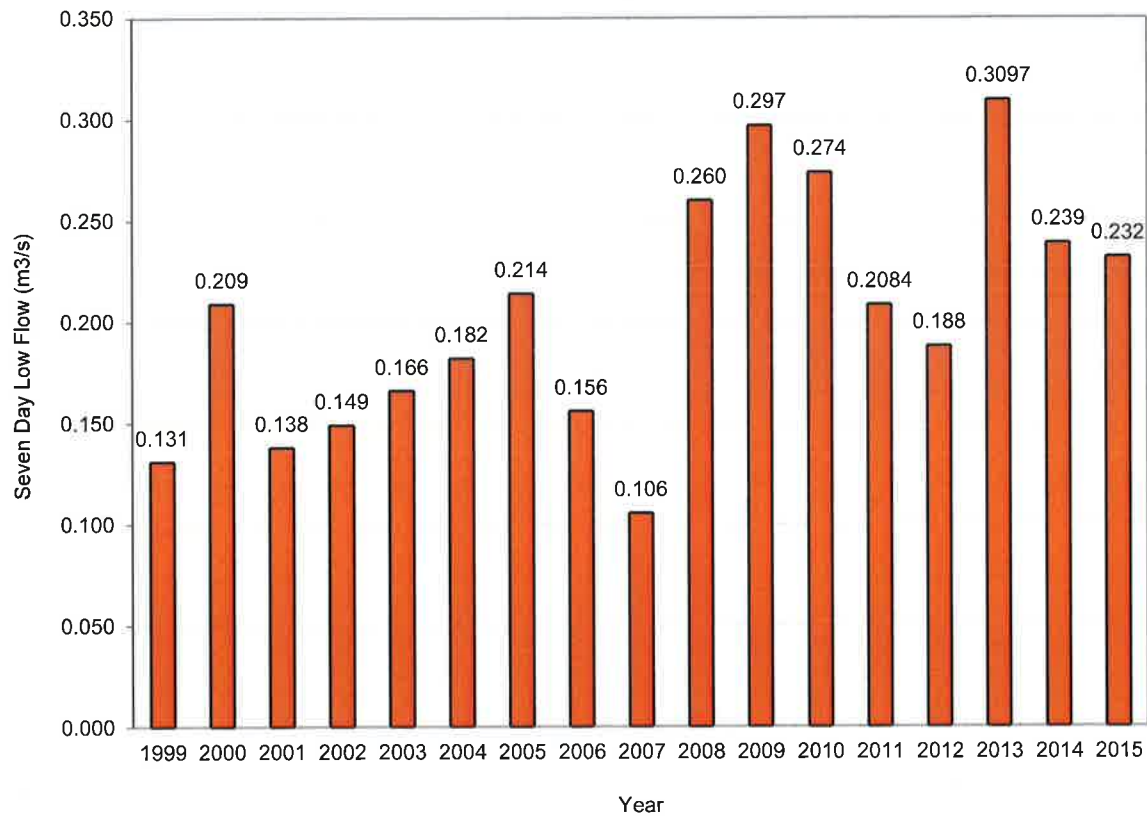
**Figure 2-7 Minimum Stream Discharge at SWM1 and SWM2, 1999 through 2015**



**Figure 2-8 Maximum Stream Discharge at SWM1 and SWM2, 1999 through 2015**

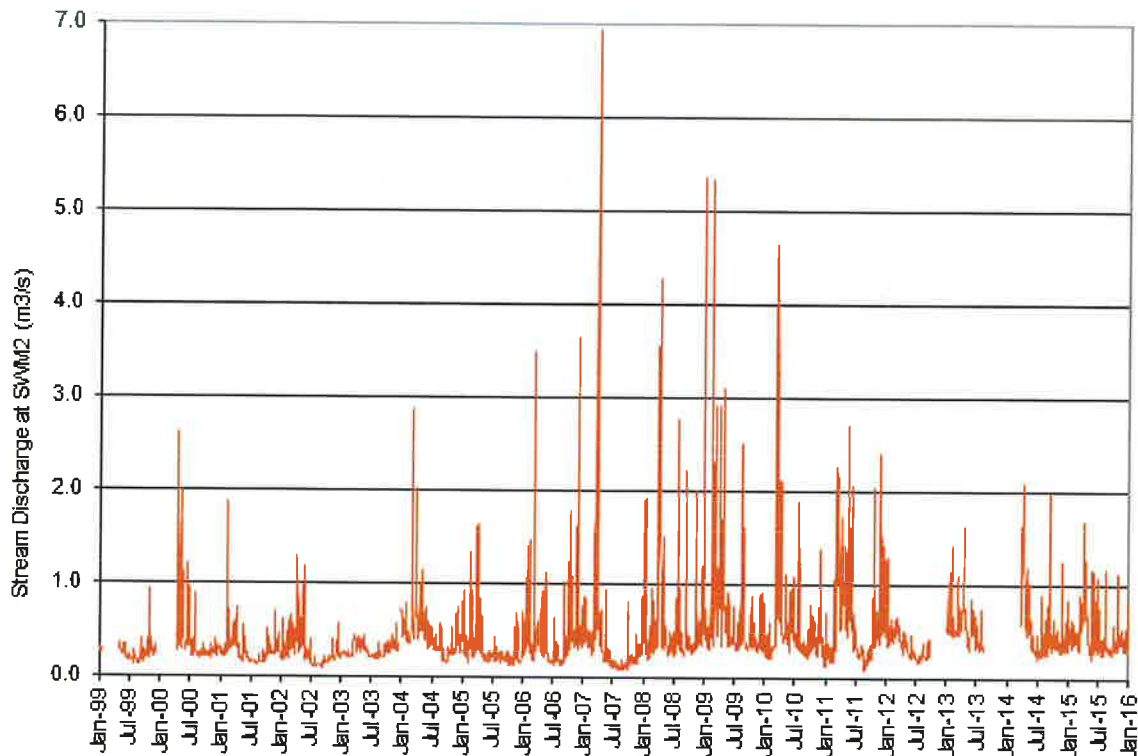
#### 2.2.4 Historical Stream Flow Trends

The 7-day low flow is a standard hydrological measurement representing the average flow rate over the 7-day period of lowest flow for each year. In 2015, the 7-day low flow of 0.232 m³/s occurred at SWM2 from May 23 to May 29. Precipitation data show that only 0.2 mm of precipitation fell during this 7-day period. The seven day low flow period generally occurs in July or August and May is not typical. The 7-day low flow observed in 2015 at SWM2 was within the historical range of low flows recorded since 1999 (Figure 2-9).



**Figure 2-9 Seven Day Annual Low Flow Values at SWM2, 1999 through 2015**

To gain perspective on the long term flow trends within Mill Creek, daily average historical flow data at SWM2 were assembled for the period 1999-2015 (Figure 2-10). The estimated flows in 2015 were within historical ranges, although without some of the extreme peak flows observed in previous years, which is most likely attributed to the limited number of data points used to generate the SWM2 rating curve (see Technical Appendix A for data and details).



**Figure 2-10 Mean Daily Average Stream Flow at SWM2, 1999-2015**

## 2.3 Surface Hydrology Summary

2015 climate data (air temperature and precipitation) were collected from the GRCA Climate Station.

Mean monthly temperatures were warmer than the 30 year normal for eight of twelve months.

Precipitation levels were below the 30 year normal for nine of twelve months in 2015. Total annual precipitation was similar to the 30 year (8% less) average annual precipitation.

Rating curves were updated in 2015 and used to estimate stream discharge for the 2015 monitoring period. Overall, discharge in the stream increased in response to precipitation events or snow melt periods. Calculated flows at SWM2 ranged from 0.2046 to 1.7877 m<sup>3</sup>/s for the calendar year.

The 7-day low flow observed in 2015 at SWM2 fell within the historical range of flows recorded since 1999.

Based on the available data, there is no indication that stream flow in Mill Creek has been impacted by aggregate extraction on the University of Guelph property.

### **3. Hydrogeology**

Groundwater monitoring has been conducted at the Mill Creek Property since late-1986. The principal objectives of the 2015 Annual Monitoring Program were as follows.

- To assess compliance with the pertinent terms of the 2015 groundwater monitoring program including triggers and threshold values;
- To provide an assessment of the effects of on-site aggregate extraction activities on the local groundwater and surface water setting;
- To determine and assess any changes in the groundwater quality;
- To document results in an annual monitoring report as part of a coordinated report; and
- To recommend any changes to the monitoring program for implementation in 2016.

Detailed results of the groundwater monitoring program are provided in Technical Appendix B (WSP, 2016).

#### **3.1 Methods**

The methods and results of the hydrogeology program have been separated into a) Routine or historical procedures, and b) Groundwater thresholds, which were first introduced in 2001.

The Ministry of Natural Resources and Forestry (MNRF) requires that Dufferin Aggregates submit a monthly summary checklist report, which is to be issued within 10 business days of the last day of the preceding month. The summary includes groundwater level data corresponding to threshold monitoring pairs, threshold values, and pond levels. Below-water table extraction (wet tonnes extracted/day), water pumped from the Phase 1 pond, water pumped from the Phase 4 pond, and monthly precipitation totals are also reported in the summary report. In the event that a threshold value/level is exceeded for any period, this would be included in the summary with appropriate comments attached. The monthly reports are included with the correspondence in Technical Appendix B.

##### **3.1.1 Routine Monitoring**

A drive point (DP113) located on the Reid property north of Highway 401 was added to the monitoring program in 2000. Four additional borehole monitors (BH10 to BH13) were established in July, 2002, in preparation for extraction in Phase 2 and as part of the threshold monitoring program. At the request of the MNRF, a new monitor, designated BH14, was installed in June 2015 between monitor 92-12 and Mill Creek. A data logger was installed in BH14 to record automatic groundwater level and temperature data. The purpose of monitor BH14 is to detect any groundwater temperature increases caused by future extraction activities in Phase 5. It is noted that it is not anticipated that extraction activities in Phase 5 will impact the water temperature in Mill Creek.

There are various types of groundwater monitoring stations established on, and adjacent to, the property. Monitor types are described below and summarized in Table 3.1. Locations of the groundwater monitoring stations are shown in Figure 3-1.

**Table 3.1 Groundwater Monitor Groupings at the Mill Creek Property**

Bedrock	Sand and Gravel		Wetland	Creek
TW16-78 Well 4794	Boreholes	Multi-level	Drive points	Drive Points
	1	92-13	DP6	DP1
	2	92-28	DP7	DP2
	3	92-29	DP8	DP3
	4	92-32	DP9	DP4
	5	92-33	DP10	DP5C/DP5D
	6		DP11	DP17
	7-I		DP12	DP18
	7-II		DP16	DP19
	11	Observation and Test Wells		DP20
	12	TW16-79		DP21
	13	OW1-84		DP22
	14	OW2-84		
	92-1	OW4-84		
	92-5	OW5-84		
	92-8	OW16A-78	DP113	
	92-12			
	92-27			

1. Drilled stratigraphic boreholes within the property. These are instrumented with standpipes to measure the elevation of the water table in the shallow soil sequence.

*Monitors (manual):*

- Borehole Monitors at BH1 to BH7, and BH11 to BH14
- the OW (observation well) and TW (test well) monitors adjacent to Mill Creek near the southwest corner of the site
- monitors that were installed at selected locations in the 1992 resource boreholes across the property (92- series of stations)

*Frequency:*

- monthly
- more frequently at BH13, OW5-84, 92-12, 92-27, and 92-29, which are included in a threshold pair

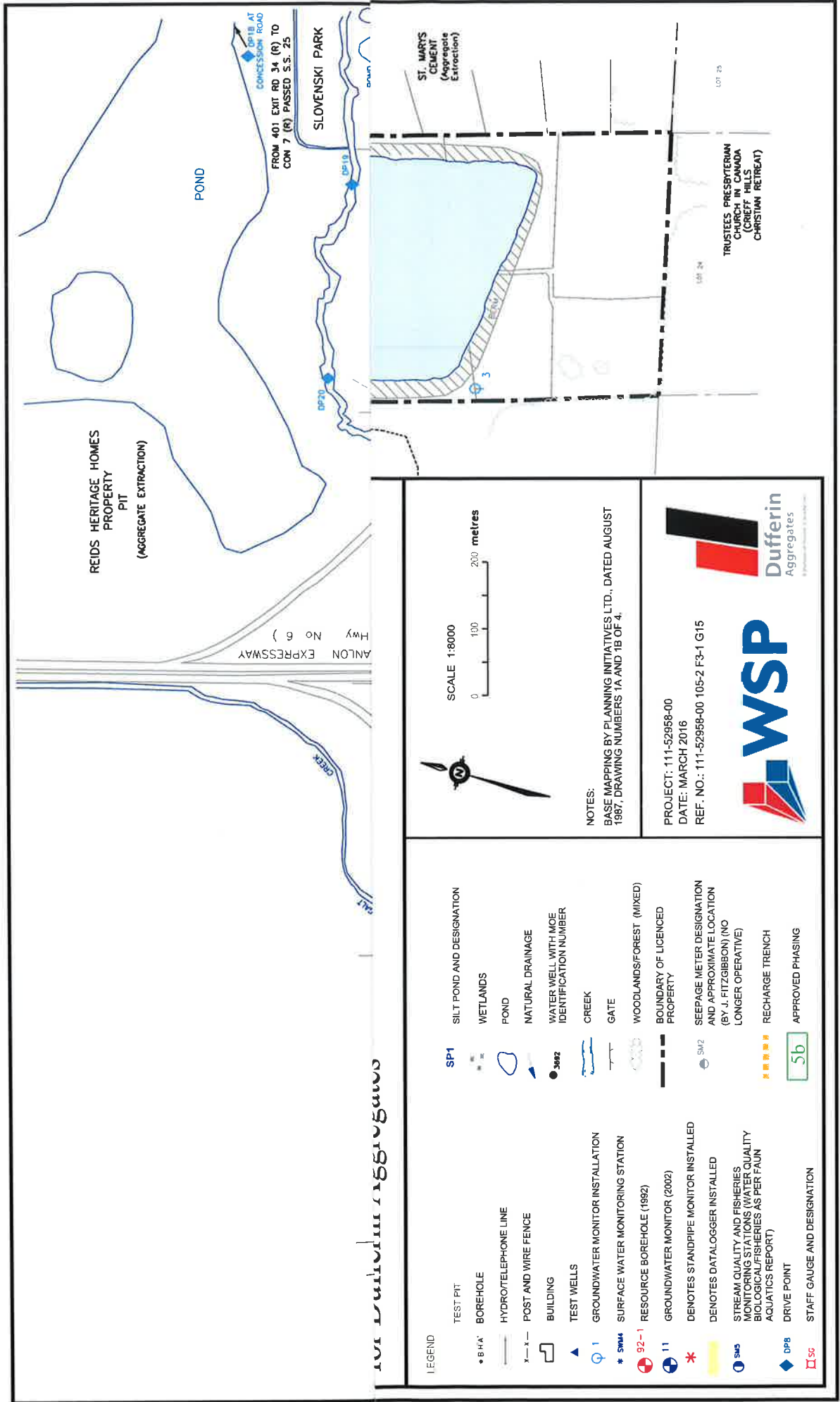
2. Shallow water table drive point monitors

*Monitors (manual):*

- DP6 to DP12 and DP16 in the wetland areas (Mill Creek Property)
- DP113 north of Highway 401 (Reid Heritage Property)

*Frequency:*

- monthly
- more frequently at DP6, which is included in a threshold pair





### In-stream drive point monitors.

#### *Monitors (manual):*

- In-stream drive point monitors DP1 to DP5C/D, and DP17 to DP22. Measurements at the Mill Creek drive point monitors included groundwater levels and temperatures, and surface water levels and temperatures. Monitoring at DP5A was terminated in September 2011 due to landowner access permission withdrawal, and that monitor was replaced with DP5B, located just south of the bridge at Township Road 2. DP5B was vandalized in the summer of 2012, and was replaced in August 2012 by DP5C, located upstream slightly closer to the bridge. Based on hydraulic conductivity testing, it is interpreted that DP5C was installed in lower-conductivity soil that is not reflective of the sand/gravel aquifer in which DP5A and 5B were developed. In August 2013, a replacement drive point, DP5D, was installed slightly downstream of DP5C in an effort to screen the drive point in soils more representative of the hydraulic conductivity expected for the base of Mill Creek. In addition, surface water levels are monitored at stations SW1 and SW2, both of which are located in Mill Creek.

#### *Frequency:*

- Monthly
- More frequently at DP1, DP2, DP3, DP5C/D, DP17, DP21, which are included in a threshold pair

3. Multi-level nests equipped with data loggers. These monitors have combination water level pressure transducers and temperature probes (installed in Nov. 2006).

#### *Monitors:*

- 92-28, 92-29, and 92-32 – west side of property adjacent to Mill Creek – installed in November 2006 as part of extraction monitoring in Phase 3.
- 92-27 (a data logger was installed in December 2011 for the purpose of collecting groundwater level and temperature data from the shallow part of the aquifer) - west side of property adjacent to Mill Creek.
- 92-33 (a data logger was installed in March 2012 for the purpose of collecting groundwater level and temperature data from the shallow part of the aquifer) - west side of property adjacent to Mill Creek.
- 92-12 (a data logger was installed in June 2012 for the purpose of collecting groundwater level and temperature data from the shallow part of the aquifer) – centre of property adjacent to Phase 4 operations
- 92-13 (a data logger was installed in May 2013 for the purpose of collecting groundwater level and temperature data from the shallow part of the aquifer) – east side of property adjacent to Phase 1.
- BH4, DP7, DP8, DP9 and DP16 – centre of property adjacent to Phase 4 operations. These are single level data logger installations.

- A data logger was installed in BH14, located between Monitor 92-12 and Mill Creek, in June 2015.

*Frequency:*

- Readings of water level (pressure) and temperature were recorded by data loggers once per day. The data were downloaded monthly for review.

4. Water Wells

- As in previous years, and although not part of the 1993 “official” monitoring program, water wells located on the property, and a well supplying a local resident in the vicinity of the property, were monitored monthly. Water level monitoring began in the summer of 1994 at select locations.

5. Pond Staff Gauges

- Surveyed staff gauges were maintained in the Phase 1 pond, Phase 2 pond, Phase 3 pond, and silt pond SP3/Phase 4 pond. The staff gauge was removed from silt pond SP3 in April 2011 due to the absence of surface water at that location. A new staff gauge was installed at the east end of the silt pond SP3 northerly extension in 2013, which represents water levels in both silt pond SP3 and the Phase 4 pond, since they are hydraulically connected. Measurements of pond water levels were completed daily during the ice free period through 2015. Pond temperatures were measured monthly during the ice-free period.

The results of the routine ground water monitoring program are summarized in Section 3.2 in the following order.

- Bedrock Aquifer (Section 3.2.1)
- Sand and Gravel Aquifer (Section 3.2.2)
- Wetland Monitors (Section 3.2.3)
- Mill Creek Drive Points (Section 3.2.4)

### 3.1.2 Threshold Monitoring

On June 27, 2001, and following detailed negotiations with MNR and other regulatory agencies, Dufferin Aggregates issued a document entitled Mill Creek Aggregates Interim Groundwater Threshold and Action Response Plan. Interim thresholds and early warning values were set at six locations across the site, and each location includes a pair of groundwater monitors. The thresholds are based on maintaining positive seasonal hydraulic head differences on the water table between the monitor pairs, such that a hydraulic gradient will continue to exist from the site toward Mill Creek. The thresholds and early warning values have been developed to ensure that the quantity of groundwater that discharges to Mill Creek does not decline below a minimum level, and they are based on seasonal historic low water level data. A summary of thresholds for groundwater monitoring pairs and the on-site ponds is provided in Table 3.2.

Modifications were incorporated into the monitoring program in July 2002. Following further review and consultation with MNR, the July 2002 document was revised and re-issued in October 2004, and revised again in October 2006 and it now forms the basis of the environmental monitoring program that is undertaken at the Mill Creek Aggregates Pit.

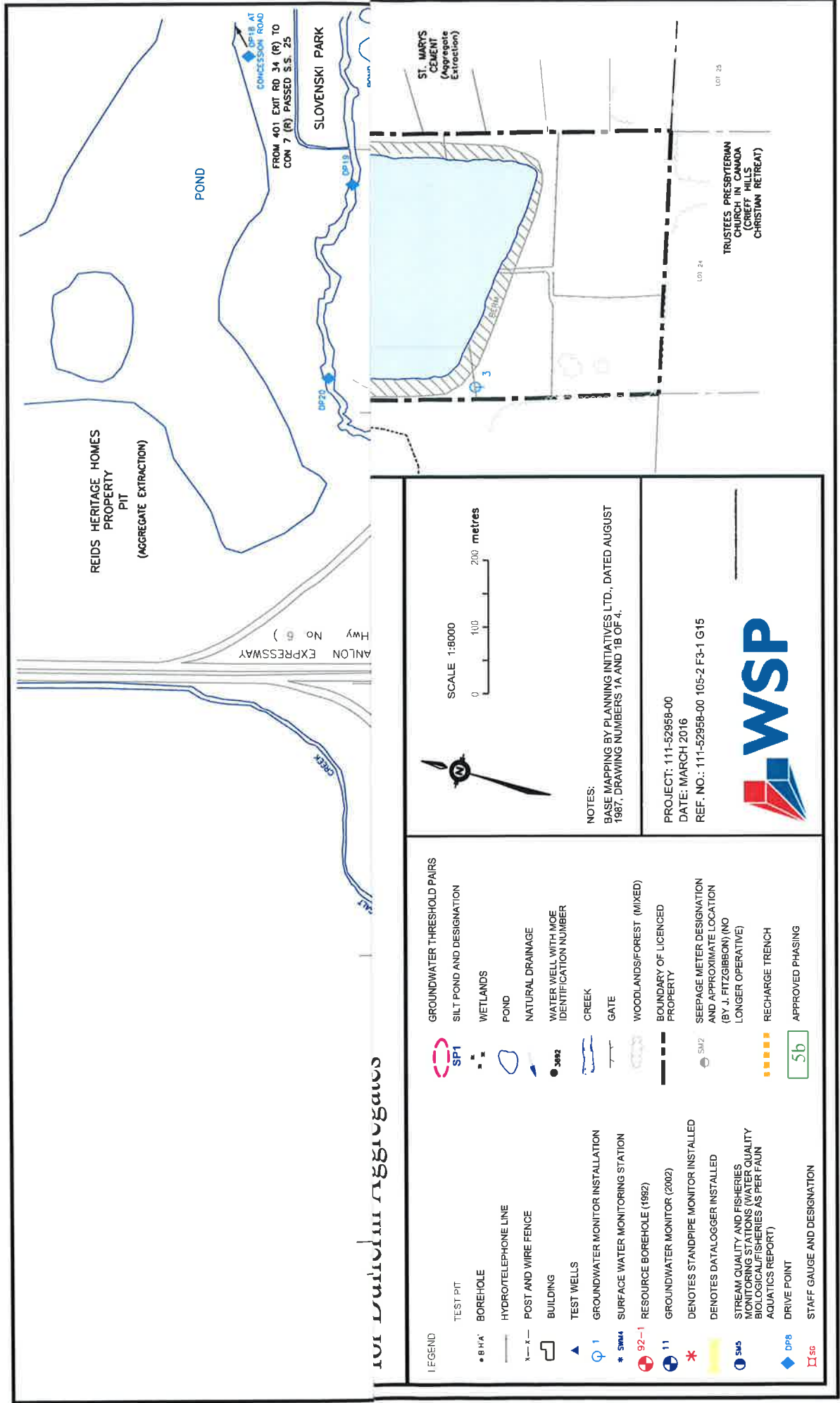
In 2003, a new pair of groundwater monitors was added to the threshold monitoring in the northern part of the site. Monitors BH13 and DP21 are now monitored routinely with the other threshold monitor pairs. Also included in 2003 threshold monitoring were the Phase 1 pond and silt ponds SP1 and SP2. In 2004, the Phase 2 pond and silt pond SP3 were included with the threshold monitoring. In 2006, additional monitoring for the Phase 3 operations was initiated, which included the installation of 18 levelloggers. In 2008, a threshold value was established for the Phase 3 pond and has been added to the threshold monitoring program, and that program was continued through 2015.

In 2011, BH92-25 was decommissioned due to Phase 3 extraction operations. The threshold pair BH92 25 and BH92-26 was replaced with BH92-26 to DP2(in) in April 2011. Access to BH92-26 was lost due to extraction operations in November 2011. The threshold pair BH92-26 to DP2(in) was replaced with BH92-27 to DP2(in) in December 2011.

Monitor BH92-30 was decommissioned in April 2012 due to Phase 3 extraction operations. The BH92-30 to BH92-28 threshold pair was replaced with BH92-29 to DP1 in May 2012. Drive point monitor DP5B was vandalized in the summer of 2012, and a replacement monitor, DP5C, was installed slightly upstream of DP5B in August 2012, as shown on Figure 3-2. New preliminary seasonal threshold values were established for the OW5-84 to DP5C threshold pair in the fall of 2012 based on the limited data available for DP5C. In August 2013, a replacement drive point, DP5D was installed slightly downstream of DP5C in an effort to screen the drive point in soils more representative of the hydraulic conductivity expected for the base of Mill Creek. Monitoring continues at DP5D for comparison purposes in order to establish new threshold pair values for the future OW5-84 to DP5D threshold pair. Monitoring at DP5C will only be terminated once DP5C is officially removed from the monitoring program.

**Table 3.2 Summary of Thresholds for Groundwater Monitoring Pairs and the On-Site Ponds**

Monitor Pair/Location	Threshold Values	Early Warning Values
(1) BH13 to DP21 <sub>in</sub> – East of Hanlon Interchange to Creek	Spring: 0.11 m head difference (305.60mASL) Summer: 0.10 m head difference (305.49mASL) Fall: 0.09 m head difference (305.58mASL) Winter: 0.11 m head difference (305.66mASL)	0.13 m head difference 0.12 m head difference 0.11 m head difference 0.13 m head difference
(2) BH92-12 to DP17 <sub>in</sub> – East of Hanlon interchange to Creek	Spring: 0.14m head difference (305.17mASL) Summer: 0.06 head difference (305.17mASL) Fall: 0.04 m head difference (305.17mASL) Winter: 0.07 m head difference (305.17mASL)	0.19 m head difference 0.12 m head difference 0.09 m head difference 0.13 m head difference
(3) DP6 <sub>in</sub> to DP3 <sub>in</sub> – South of Hanlon Interchange to Creek	Spring: 0.73 m head difference (304.54mASL) Summer: 0.58 m head difference (304.54mASL) Fall: 0.55 m head difference (304.54mASL) Winter: 0.57 m head difference (304.54mASL)	0.84 m head difference 0.76 m head difference 0.73 m head difference 0.69 m head difference
(4) BH92-29 to DP1 <sub>in</sub> – Northwest corner of site; west of approved Phase 3 extraction area	Spring: 0.17 m head difference (303.97mASL) Summer: 0.23 m head difference (303.91mASL) Fall: 0.19 m head difference (303.96mASL) Winter: 0.29 m head difference (303.88mASL)	0.22 m head difference 0.28 m head difference 0.24 m head difference 0.34 m head difference
(5) BH92-27 to DP2 <sub>in</sub> – West of approved Phase 3 extraction area	Spring: 0.34 m head difference (303.69 mASL) Summer: 0.32 m head difference (303.50 mASL) Fall: 0.34 m head difference (303.55 mASL) Winter: 0.43 m head difference (304.65 mASL)	0.39 m head difference 0.37 m head difference 0.39 m head difference 0.48 m head difference
(6) OW5-84 to DP5C <sub>in</sub> – Southwest corner of site downgradient from SP1 to Creek	Spring: 0.30 m head difference (302.86mASL) Summer: 0.25 m head difference (302.79mASL) Fall: 0.25 m head difference (302.84mASL) Winter: 0.30 m head difference (302.88mASL)	0.34 m head difference 0.28 m head difference 0.28 m head difference 0.34 m head difference
(7) Phase 1 Pond	305.5 mASL – All seasons	305.75 mASL – All seasons
(8) Phase 2 Pond	305.0 mASL – All seasons	305.30 mASL – All seasons
(9) Phase 3 Pond	303.85 mASL – All seasons	304.10 mASL – All seasons
(10) Phase 4 Pond	304.50 mASL – All seasons	305.10 mASL – All seasons
(11) Silt Pond SP3	Maximum: 307.1 mASL Minimum: 304.85 mASL	Maximum: 306.85 mASL Minimum: 305.10 mASL
<p>Thresholds and action response plan came into effect on June 30, 2001.</p> <p>Values in brackets refer to minimum water level elevations at monitors DP21, DP17, DP1, DP2, DP3, DP5C.</p> <p>Seasons are as follows: WINTER = Jan. to Mar. inclusive, SPRING = Apr. to Jun. inclusive SUMMER = Jul. to Sep. inclusive, FALL = Oct. to Dec. inclusive</p>		



## 3.2 Results of Groundwater Monitoring

### 3.2.1 Bedrock Aquifer

As noted in Table 3.1, there are two water wells on the property that were developed within the bedrock aquifer: TW16-78 and North Farmhouse Well 4794. Water level data for these wells are provided in Technical Appendix B.

The water levels recorded in the bedrock aquifer wells exhibited normal seasonal trends that reflected prevailing climatic conditions and were not affected by pit operations.

### 3.2.2 Sand and Gravel Aquifer

The following section describes both groundwater levels and temperature.

#### **Groundwater Levels**

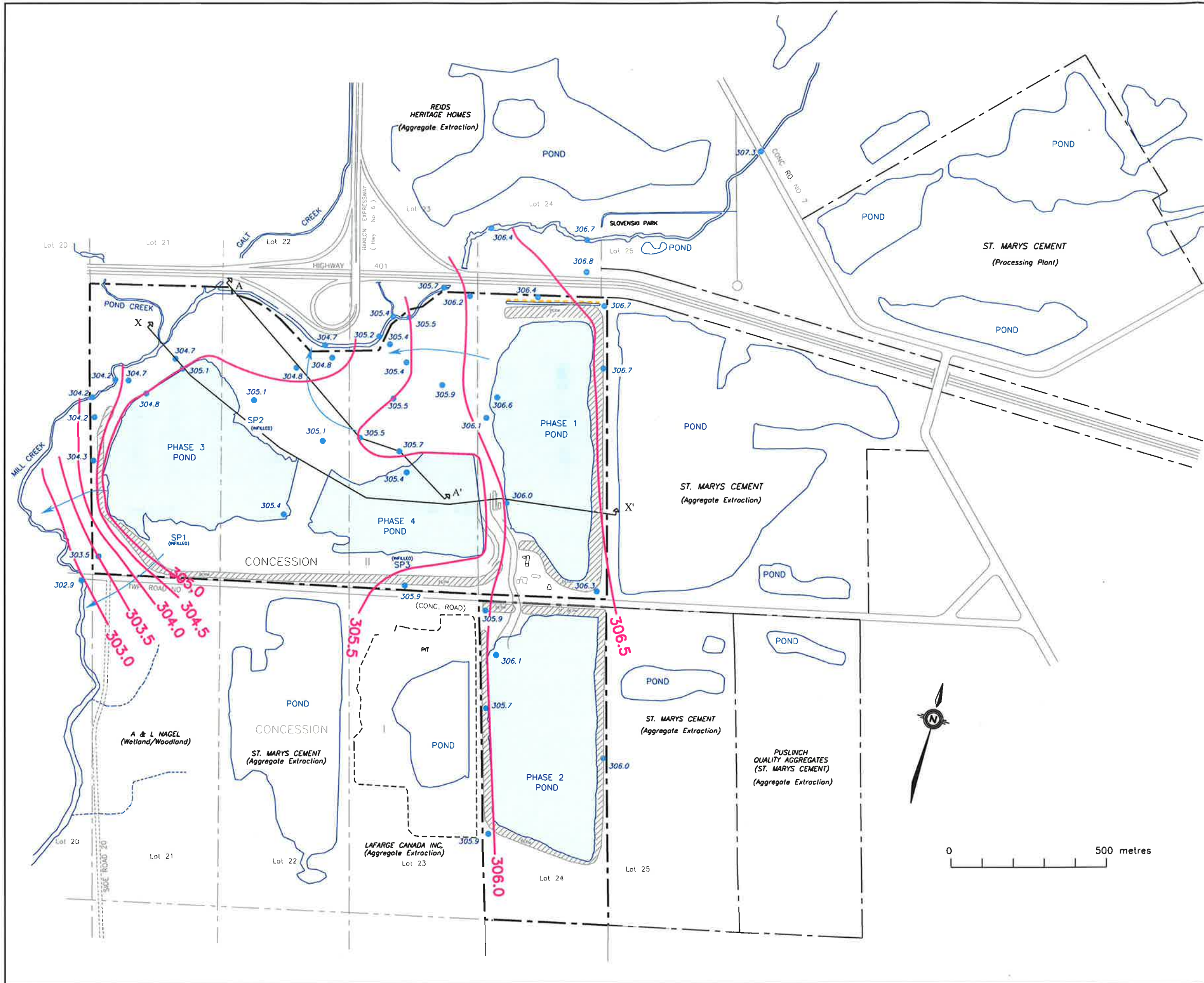
The monitors that are screened in the sand and gravel aquifer are noted in Table 3.1.

Compared to 2014, water levels in the representative monitors in 2015 were generally lower. At Monitor 1-I, the 2015 water levels were lower in each month except January to March and September. At Monitor 4-I, water levels were lower in each month except March, and at Monitor 92-32, water levels were lower during each month. At Monitor 7-II, both the January and February water levels, the only months during which monitoring was completed at the well prior to its removal, were higher in 2015 compared to 2014. The lower levels observed throughout most of 2015 compared to 2014 are attributed to the lower than normal water surplus (lower precipitation) that occurred during the majority of 2015.

In 2015 the average water levels at the individual monitors ranged from approximately 0.2 m above ground surface to 8.0 m below ground surface across the site, and fluctuations ranging from 0.2 m to 0.8 m occurred during 2015. The 2015 average water levels in each monitor were lower compared to 2014 values, and is attributed to the lower than normal water surplus that occurred during the majority of 2015, as noted above. In 2015, the maximum and minimum water levels at the monitors were within their historic ranges except for a historic high water level at BH92-33 in April.

The interpreted water table configuration for low flow conditions is illustrated on Figure 3-3. The interpreted water table configuration indicates that groundwater continues to move from east to west across the northern property. The water table contours south of Highway 401 tend to "bend back" towards the creek, indicating that the creek receives groundwater discharge from the subject property along the reach south of Highway 401. Typically, water table contours bend back further (i.e. more strongly) under high flow water table conditions, indicating an increased component of flow northwestward toward the creek near the Hanlon interchange and to the west, although this trend was not so evident in 2015 compared to previous years.





- LEGEND
- BOUNDARY OF LICENCED PROPERTY
  - 306.6 WATER TABLE ELEVATION (mASL) SEPT. 24, 2015
  - 306.0 INTERPRETED WATER TABLE CONTOUR (mASL)
  - INFERRED DIRECTION OF GROUNDWATER FLOW
  - A  GEOLOGIC CROSS SECTION LOCATION

## 2015 'LOW FLOW' WATER TABLE CONFIGURATION (SEPTEMBER)

2015 ANNUAL GROUNDWATER MONITORING REPORT  
MILL CREEK AGGREGATES PIT  
Township of Puslinch  
for Dufferin Aggregates



DATE: MARCH 2016

SCALE: 1:12500

PROJECT: 111-52958-00 105

FILE NO.: 111-52958-00 105-2 F3-3 G15



FIGURE

3-3

### **Groundwater Temperature**

Shallow groundwater temperatures immediately to the west of the Phase 1 pond are affected by up to 10°C as recorded historically in the multi-level monitor 92-13, located just downgradient from the pond. Intermediate level and deeper groundwater temperatures were also affected, but to a lesser degree. Shallow groundwater temperatures at Monitors 92-26 and 92-29 have increased up to 14°C, but these increases are attributed to the monitors now being located in close proximity to the Phase 3 pond (less than 25 m); Monitor 92-26 has become inaccessible in recent years due to the presence of pond water at this monitor. Monitor 92-32 is located approximately 65 m downgradient of the Phase 3 pond and it shows an increase of 3°C. The presence of the perimeter berm between the Phase 3 pond and Monitor 92-32 has reduced the thermal effect at this location. Monitor 92-28, located approximately 50 m downgradient from the northwest limit of extraction of the Phase 3 pond, and 60 m east (upgradient) of Mill Creek, may be subject to a subtle thermal influence from the Phase 3 pond that was completed in that area in 2012.

### **3.2.3 Wetland Water Levels**

The drive point monitors that are located in the wetland are noted in Table 3.1. Monitors DP6 to DP12 are located in the large wetland area in the north-central part of the property. DP15 was located in a wetland pocket in the northwestern part of the property and was removed due to extraction after August 2011, and DP16 is located in the wetland along the western side of the property. A groundwater hydrograph of three representative drive points in the wetland is presented in Figure 3-4. As shown in the hydrograph, of the three representative drive points the groundwater elevation at DP7 is typically highest, and the lowest elevations occur at DP11. This is expected, as DP7 is located furthest from Mill Creek and DP11 is closest, and groundwater flow is toward Mill Creek at the site. Hydrographs for all wetland drive points are provided in Technical Appendix B.

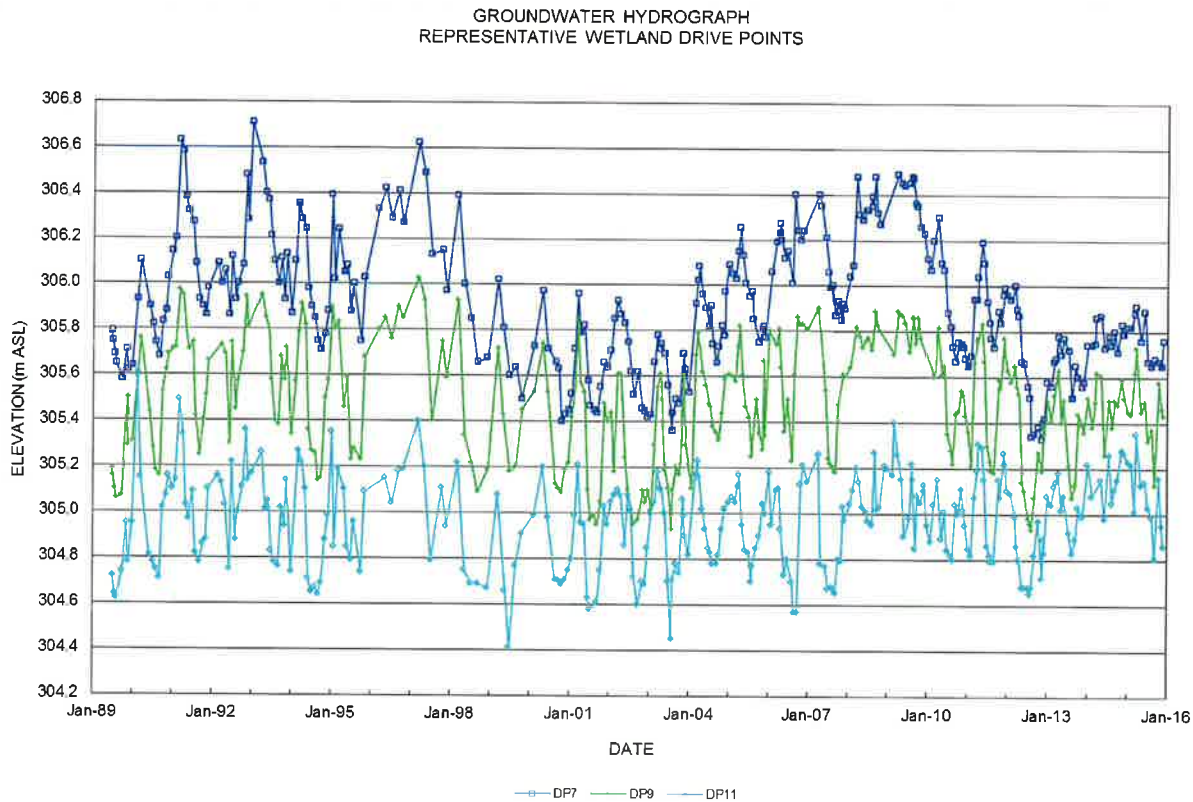
Monitoring of wetland drive points on the Reid Heritage property adjacent to Mill Creek north of Highway 401 commenced in August 2000, and those monitors were incorporated into the routine monitoring program. Each of these drive points has been removed except for DP113, located immediately north of Hwy 401.

Historically, the groundwater levels within the wetland remained reasonably close to ground surface throughout the year. The water levels are nearest to ground surface, and in some instances above ground surface, mostly during the spring melt. The groundwater levels then show a progressive decline to their maximum depth below ground surface during the summer to early fall months. The fluctuations between the spring high water levels to the summer low water levels usually range from 0.1 m to 1.0 m, depending on location.

The groundwater levels recorded within the wetland in 2015 averaged about 0.04 m above the historical average, and about 0.07 m below the 2014 average for the site. The lower levels compared to 2014 are attributed to the lower precipitation that occurred at the site in 2015 compared to 2014. The decrease in water levels within the wetland areas generally is less than



the decrease experienced at other locations across the site. This is primarily due to the proximity of the wetland areas to Mill Creek, which acts as a buffer, or hinge point, for the water table that reduces the magnitude of seasonal variations. The wetland groundwater levels recorded in 2015 were within the historical maximum and minimum groundwater levels.



**Figure 3-4** Groundwater hydrograph of three representative drive points in the wetland.

### 3.2.4 Mill Creek Drive Points

#### *Groundwater Level*

The drive point monitors in the creek bed were listed in Table 3.1 with their locations shown on Figure 3-1. Monitors DP18 to DP20 are located north of Highway 401, upstream from the property. Drive points DP3, DP4, DP17, DP21, and DP22 are located in the northeast section of the creek from south of the Hanlon Expressway interchange upstream to Highway 401. Drive points DP1 and DP2 are located in the northwest section of the creek, downstream from the Galt Creek and Pond Creek tributaries, and DP5D (formerly DP5A, DP5B and DP5C which is still being actively monitored) is located just beyond the southwest corner of the site, where Mill Creek flows beneath the bridge at Concession Road 2. Detailed data for hydraulic head and groundwater flux for the in-stream drive points are provided in Technical Appendix B.

The yearly average vertical hydraulic gradients for the in-stream drive points from 2015 to 2005, and historically from the start of data collection up to 2005, are shown in Table 3.3.

**Table 3.3 Average Vertical Hydraulic Gradient**

Drive Point	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	Historic Average (up to 2005)
DP5A/B/C/D	0.21	0.28	0.18	0.40	0.19	0.18	0.12	0.12	0.09	0.09	0.11	0.09
DP2	0.34	0.29	0.33	0.32	0.30	0.30	0.24	0.22	0.22	0.21	0.14	0.17
DP1	0.33	0.37	0.37	0.30	0.31	0.27	0.21	0.22	0.19	0.21	0.23	0.22
DP3	0.05	0.05	0.05	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.05	0.04
DP17	0.05	0.03	0.03	0.03	0.04	0.06	0.05	0.06	0.04	0.04	0.04	0.02
DP22	0.05	0.08	0.05	0.04	0.06	0.06	0.09	0.09	0.06	0.07	0.06	0.03
DP4	0.14	0.17	0.11	0.08	0.12	0.15	0.22	0.20	0.12	0.12	0.09	0.04
DP21	0.06	0.08	0.07	0.05	0.09	0.10	0.14	0.16	0.11	0.11	0.08	0.06
DP20	0.12	0.12	0.14	0.08	0.10	0.11	0.19	0.15	0.14	0.14	0.12	0.00
DP19	-0.01	0.06	0.03	0.00	0.04	0.04	0.12	0.09	0.04	0.05	0.07	-0.06
DP18	0.11	0.09	0.10	0.07	0.08	0.07	0.13	0.12	0.06	0.07	0.08	0.03

NOTES:

- 1) (-) = downward vertical gradient
- 2) 2012 and 2013 gradient at DP5C interpreted with caution.

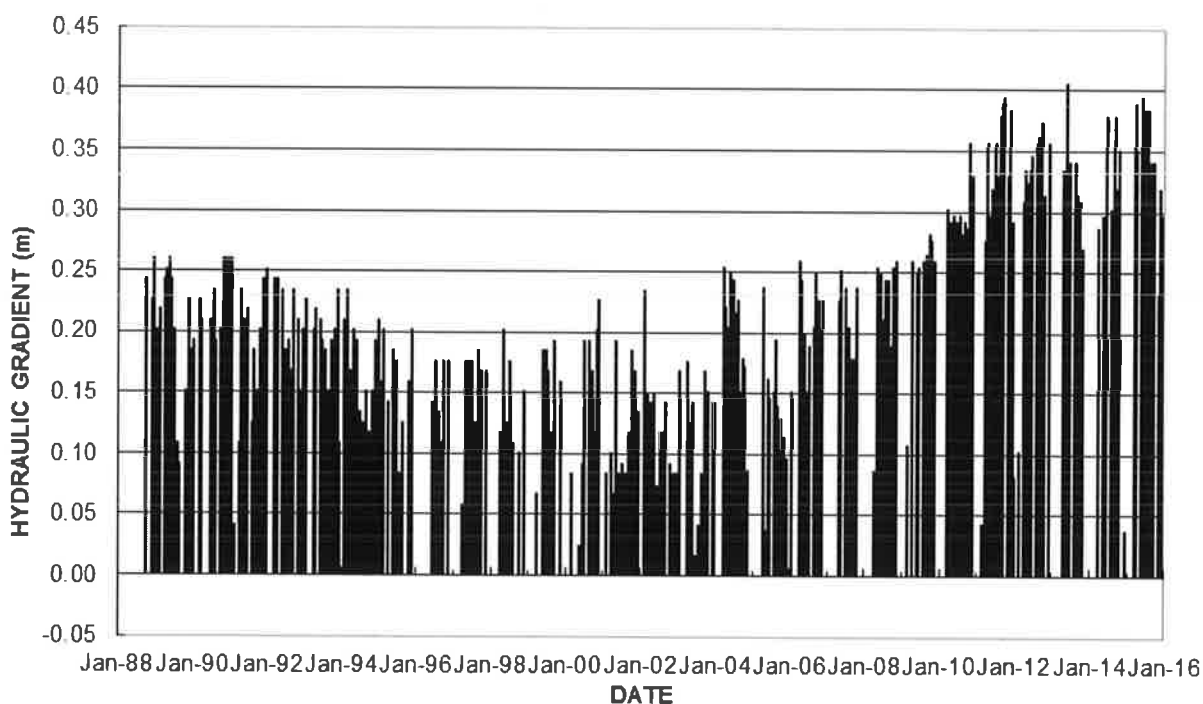
The hydrographs for the drive point monitors show the seasonal changes in elevation of the groundwater at each monitor, together with the surface water elevation data for the creek. Hydraulic gradients for select drive points (DP2, DP3, DP17, and DP21) are shown in Figures 3-5 to 3-8. The following patterns and trends were observed in 2015:

- Based on the average condition through 2015, upward gradients between the groundwater and the creek occurred from DP18 downstream to DP5D. Groundwater discharge continues to provide base flow to these reaches of Mill Creek. The exception was at drive point DP19, located north of Pond 1, at which a slightly downward average vertical gradient occurred in 2015. Downward gradients occurred at DP19 from August to November, with increasing magnitudes, and were likely caused by the lower than normal precipitation received at the site during those months. It is noted that downward gradients were observed at DP19 as recently as December 2014, and the average vertical gradient at DP19 in 2012 was neutral, only 0.01 greater than in 2015. The historic average (up to 2005) gradient at DP19 is also downward (-0.06).
- As shown in the preceding table, the magnitude of the average vertical hydraulic gradient is variable from DP18 downstream to DP5A/B/C/D, with the strongest upward gradients being observed at DP1, DP2, and DP5A/B/C/D, and the weakest upward gradients in the creek between DP3 and DP22, and between DP19 and DP18.
- Between 1998 and 2003, downward vertical gradients persisted in the reach north of Highway 401, from DP18 down to about DP20, for much of each year. From 2005 to 2015, the vertical gradients at these drive points have remained upward, with the exception of the aforementioned neutral and downward vertical gradient conditions on

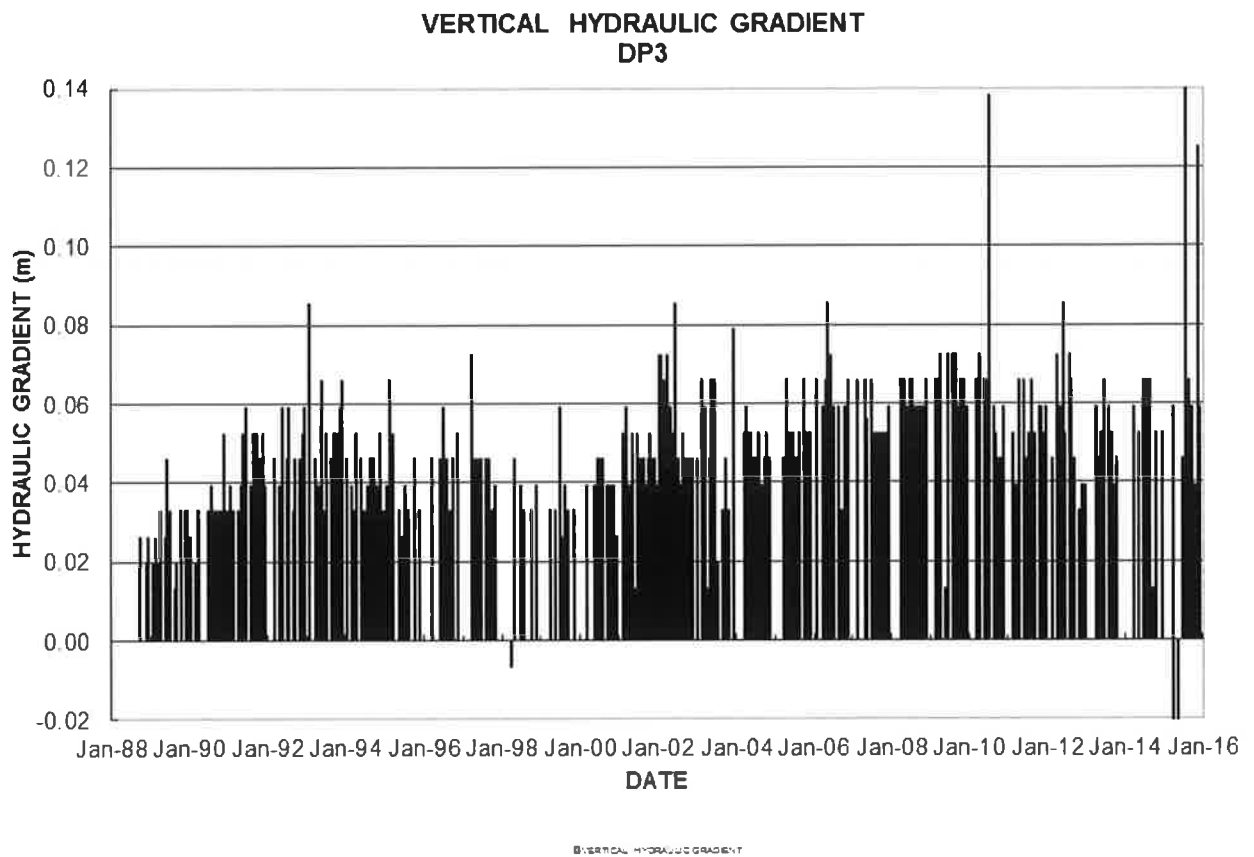
average over the course of the year at DP19 in 2012 and 2015, respectively (varied between downward and upward gradient conditions). A downward vertical gradient, however, was observed at DP3 in March and May, DP5D in October, DP19 from August to November, DP20 in March, and DP22 in March and April.

- In 2015, the average vertical hydraulic gradients were lower than the 2014 values at the in-stream drive points DP1, DP4, DP5D, DP19, DP21, and DP22; were equal to the 2014 values at DP3 and DP20; and were higher than the 2014 values at DP2, DP17, and DP18. The difference between the 2015 average and the 2014 average ranged between -0.07 at DP5D and DP19 to 0.05 at DP2. The lower average vertical hydraulic gradients observed at several drive points are attributed to the lower water surplus at the site in 2015 compared to 2014.
- The 2015 average vertical hydraulic gradients at the creek drive points were generally higher than the pre-2005 historical averages. This overall increase in hydraulic gradients likely reflects a buffering effect due to the presence of the Phase 1, Phase 3, and Phase 4 ponds, and translates into a proportional increase in the groundwater discharge to Mill Creek. This is discussed in further detail later in this section.
- Generally, the seasonal fluctuation of the surface water elevation in Mill Creek at the drive point monitors was similar to the variation of the groundwater elevation in 2015. Historically, greater seasonal groundwater fluctuations have been observed compared to surface water fluctuations.

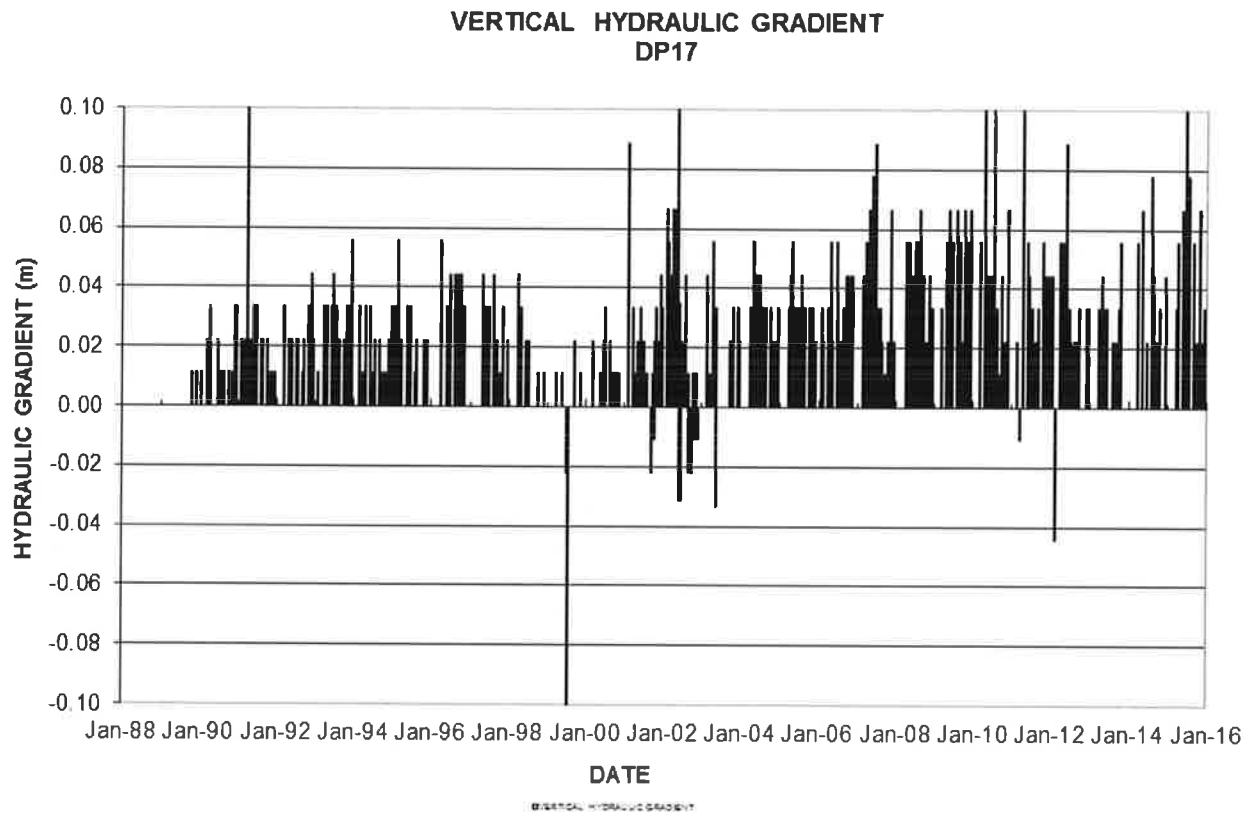
#### VERTICAL HYDRAULIC GRADIENT DP2



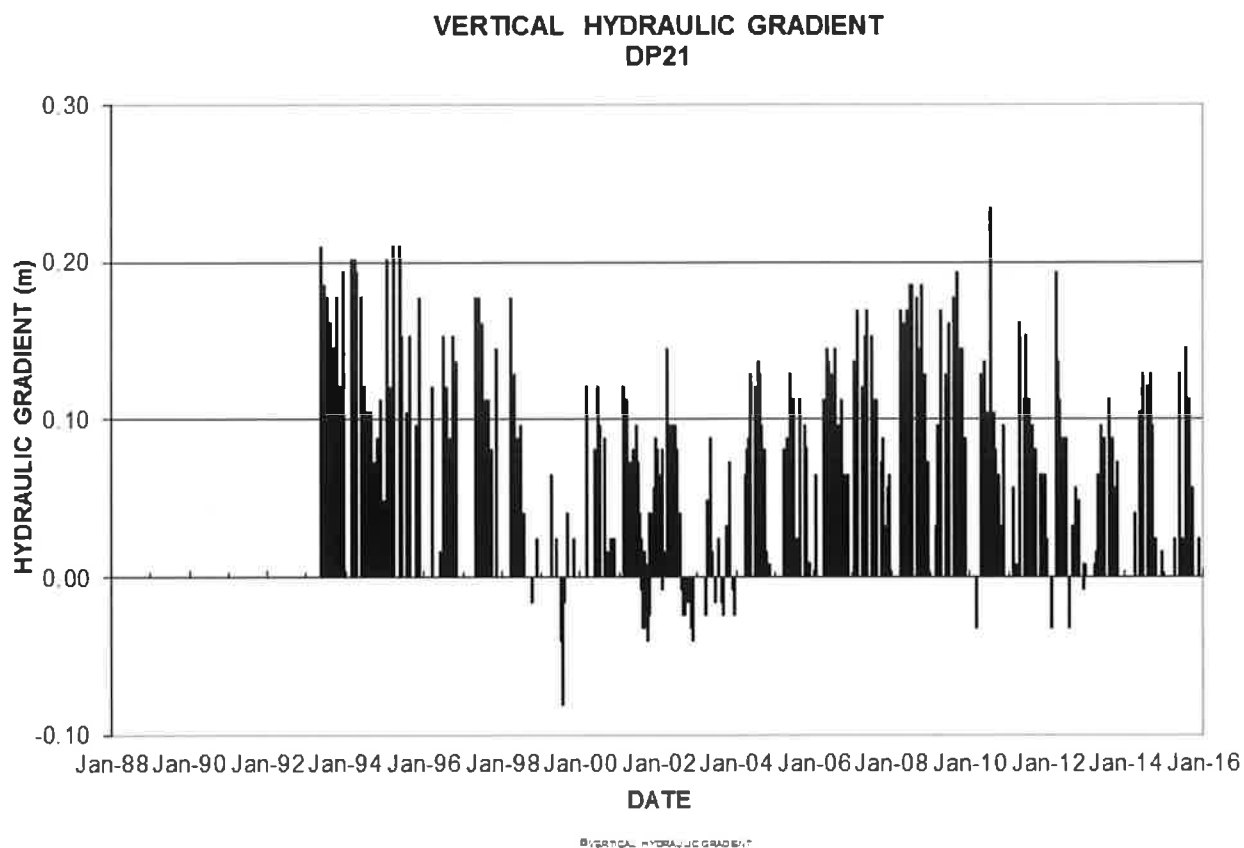
**Figure 3-5 Hydraulic gradient at stream drive point station DP2.**



**Figure 3-6 Hydraulic gradient at stream drive point station DP3.**



**Figure 3-7 Hydraulic gradient at stream drive point station DP17.**



**Figure 3-8 Hydraulic gradient at stream drive point station DP21.**

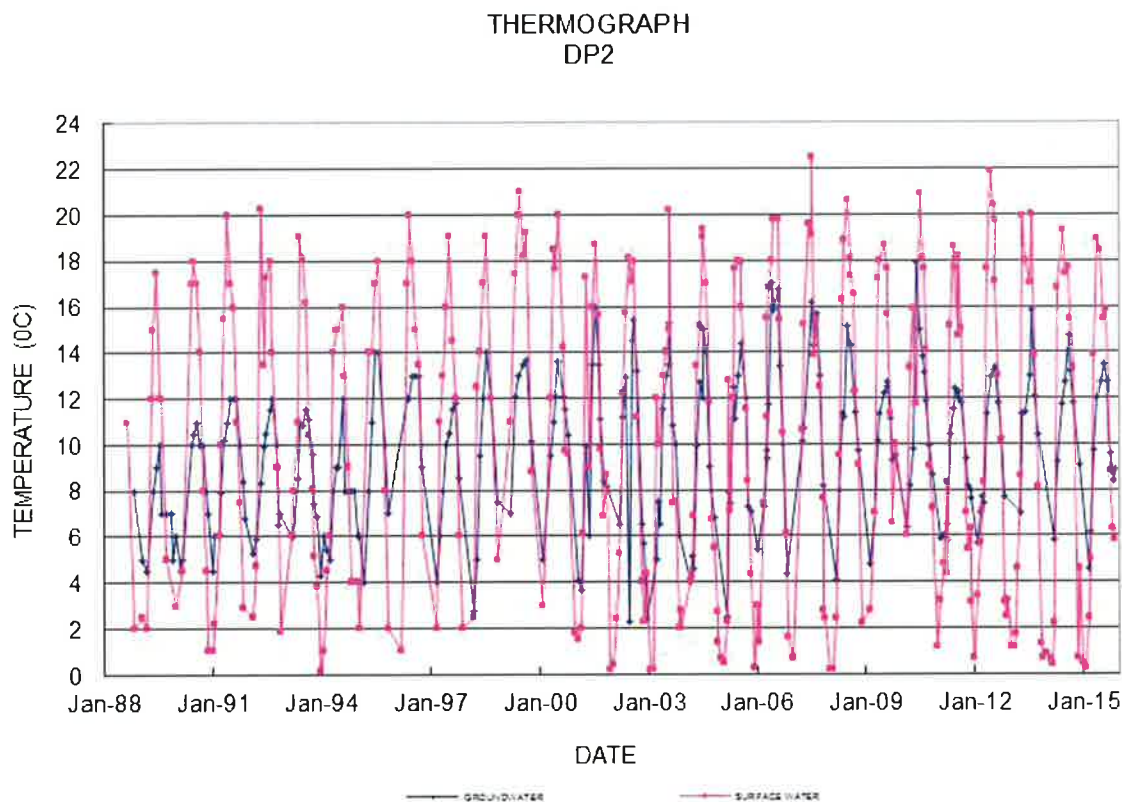
#### *Groundwater Temperature for In-stream Drive Points*

An example of a thermograph from one in-stream drive point (DP2) is provided in Figure 3-9. This figure illustrates the relationship between surface water and groundwater temperatures. The water temperatures at the Mill Creek drive points show the following general seasonal patterns:

- A wide seasonal variation in the surface water temperatures, which are low in the winter and high in the summer. In 2015, the surface water temperature at DP2 ranged from 0.3°C to 18.9°C.

- Whereas there is a somewhat smaller seasonal variation in groundwater temperatures as recorded (historically between 2°C and 21°C when all drive point monitors are considered), this is still considered to be a wide seasonal variation for “normal” groundwater. It is noted, however, that thermal transfer from the creek surface water will affect the shallow groundwater temperatures at the drive points. In addition, the amount of monitor development that is completed before a groundwater temperature reading is taken can affect the value. The groundwater temperature in 2015 ranged from 2.5°C to 18.3°C.
- Along Mill Creek in 2015, vertical gradients were upward, and groundwater discharge provided a cooling influence on creek temperatures during the warm summer months, and a warming influence during the cold winter months. A downward vertical gradient, however, was observed at DP3 in March and May, DP5D in October, DP19 from August to November, DP20 in March, and DP22 in March and April. The lower than normal amount of precipitation received at the site in January and March likely contributed to the downward vertical gradients at DP3, DP20, and DP22. Downward gradients are often observed historically at DP19, and were observed at DP5C twice in 2013.
- The temperature patterns for 2015 shown on the thermographs are generally consistent with historic patterns. At the Mill Creek drive points, average 2015 groundwater temperatures varied between slightly higher and slightly lower than the historic averages, while the average temperatures at DP2 and DP22 were equal to the historic average. Average 2015 surface water temperatures were generally slightly lower than the historic averages, with a few exceptions where average temperatures were equal to, or slightly higher than, the historic averages. Compared to the historic averages, the 2015 groundwater temperature averages differed by between -1.3°C to 1.1°C, and the surface water temperature averages differed by between -1.2°C to 0.4°C. It is noted that the average groundwater temperature at drive point DP18, located north of Highway 401, upstream of Slovenski Park at Concession Road 25, was also slightly elevated (by 0.2°C) compared to the historic average at DP18.
- As such, the slightly elevated groundwater temperatures which occurred at several drive points in 2015 are attributed to natural conditions, not the pit operations. One exception is drive point DP1, the only creek drive point at which the average groundwater temperature in 2015 was greater than 0.4°C higher than the historic average; the temperature was 1.1°C higher than the historic average. The monitoring data generated from this location will continue to be closely evaluated to examine any trends and possible influence of the Phase 3 pond.

Thermographs for all creek drive points are included in Technical Appendix B.



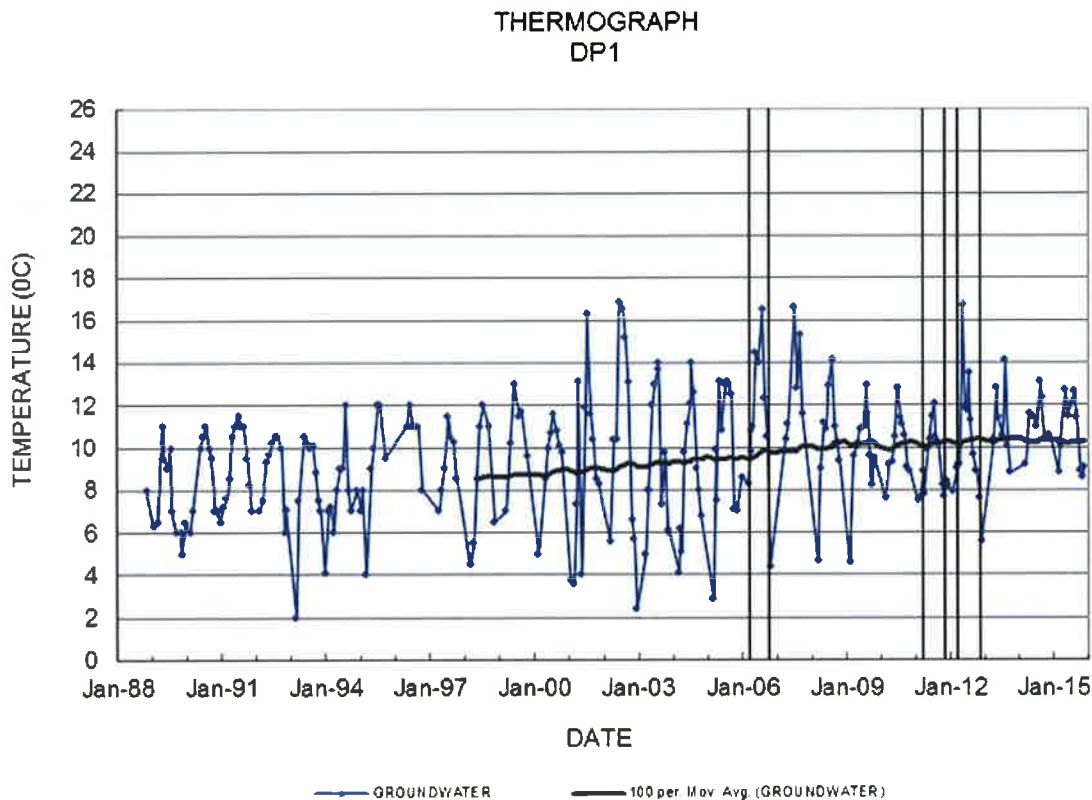
**Figure 3-9 Thermograph for DP2**

Long-term groundwater temperature trend analyses were completed for the Mill Creek drive points using 100-period moving average trendlines, an example of which is provided for DP1 in Figure 3-10. The moving average trendlines serve to smooth out the temperature data to enable long-term trend analyses. The following observations are noted regarding the thermographs:

- An increasing long-term trend is observed at each of the drive points, ranging from approximately 1°C to 2°C since about 2003. Greater temperature increases occurred between DP18 and DP17 (upstream of the site to the Hanlon interchange) (2°C) than between DP17 and DP5A/B/C/D (Hanlon interchange to downstream of site) (1°C). At DP1 and DP2, at which temperature data were first recorded in 1988, increasing trends are observed along the entire length of the moving average trendline, which begins in 1998.



- Temperatures have stabilized at each of the Mill Creek drive points since between 2011 and 2013. One exception is DP17, at which temperatures appear to continue to be marginally increasing.
- On the thermographs for DP1, DP2, and DP5A/B/C/D, the periods during which extraction occurred in the west and northwest areas of Phase 3 were assessed (2006, 2011, and 2012), as any influence of the Phase 3 extraction activities on groundwater temperatures at these three drive points, such as warming effects, would have likely occurred during these periods. The extension of silt pond SP1 toward the west in 2006 would have had the potential of affecting temperatures at nearby drive point DP5A, but evidence of any thermal effects of the extraction are not observed. The extraction in the northwest area of Phase 3 in 2011 and 2012 would have had the potential to affect temperatures at drive point DP1 and DP2. At both DP1 and DP2, cooler than normal temperatures were recorded in 2011, and in 2012 cooler than normal temperatures were also recorded at DP2. At DP1 in 2012, temperatures increased notably compared to 2011, but were similar to temperatures observed in 2001, 2002, 2006, and 2007.
- The timing of maximum and minimum temperatures at DP1, DP2, and DP5A/B/C/D during and following extraction activities in the vicinity of the drive points also generally remained similar to the pre-extraction patterns.
- If pit extraction activities have affected groundwater temperatures at drive points DP1, DP2, and DP5A/B/C/D, the effect has been subtle. As a long-term increasing temperature trend is observed at upstream drive point DP18, regional groundwater temperature increases, i.e. increases not attributable to the pit operations are evident.



**Figure 3-10 Groundwater Thermograph for DP1.**

### 3.2.5 Compliance with Interim Threshold Values

The early warning and interim threshold values, which came into effect on June 30, 2001, are based on maintaining positive seasonal hydraulic head gradients across the water table between specific monitor pairs, such that a positive hydraulic gradient continues to exist from the site toward Mill Creek. In other words, the groundwater levels should be lower at locations closer to Mill Creek. The thresholds were developed to ensure that the quantity of groundwater discharging to Mill Creek does not decline below a minimum level. The creek drive point monitors tie the thresholds to groundwater level/discharge at the creek. Surface water elevations in the Phase 1, Phase 2, Phase 3, and Phase 4 ponds are also included with the compliance monitoring. Maximum and minimum elevations with associated early warning values are defined for each pond. The interim threshold and early warning values generally are based on a review of historic pre-extraction low water level data (where available) and are defined seasonally; pond threshold water level values do not change seasonally. Where necessary, threshold pairs have been modified over time to reflect current extraction conditions.

and the removal of individual monitor locations, after discussions with and approval by the MNRF.

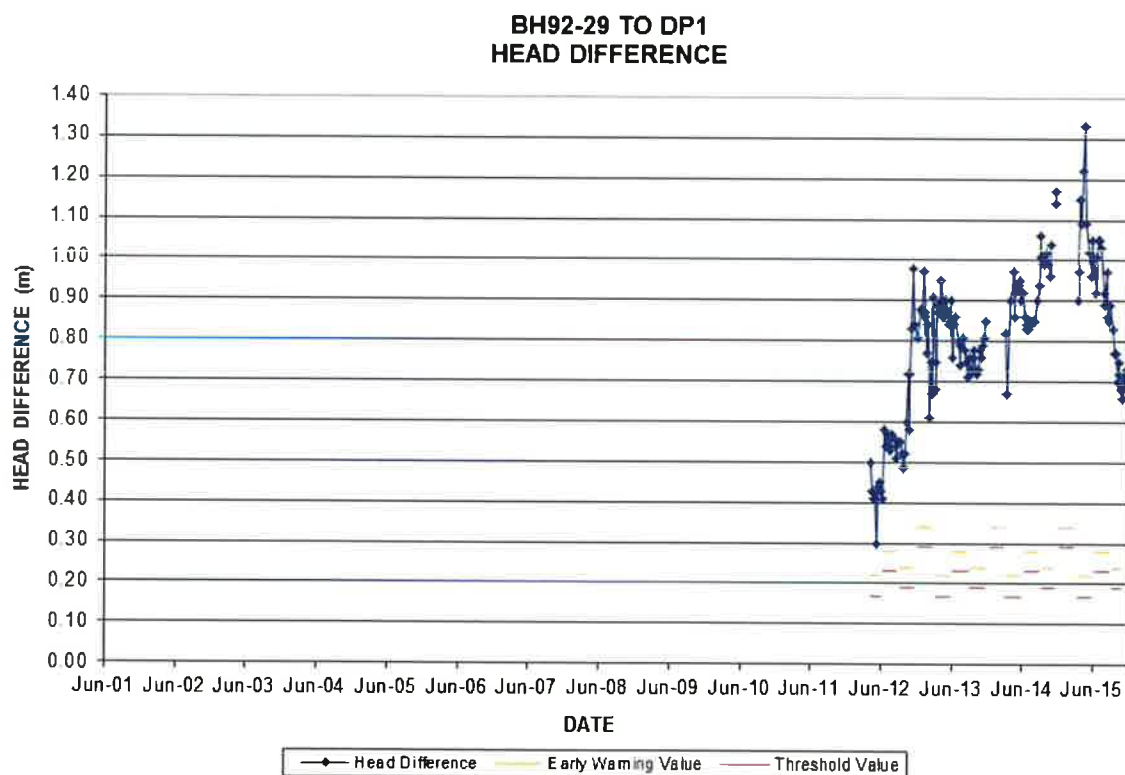
It is noted that the groundwater levels in the in-stream drive points typically respond more rapidly to precipitation and snowmelt events than the deeper groundwater monitors. As such, occasionally, early warning and threshold value exceedances can occur due to these natural events.

A summary of the head differences for the monitor pair locations and pond elevations are illustrated in the following Figures 3-11 to 3-20. Where available, historical data are shown in the figures for comparison purposes. The seven monitor pairs and the six ponds are briefly described below.

Overall, groundwater conditions remained within threshold limits, although there were occasional exceedances of early warning levels.

#### BH92-29 to DP1 (Figure 3-11)

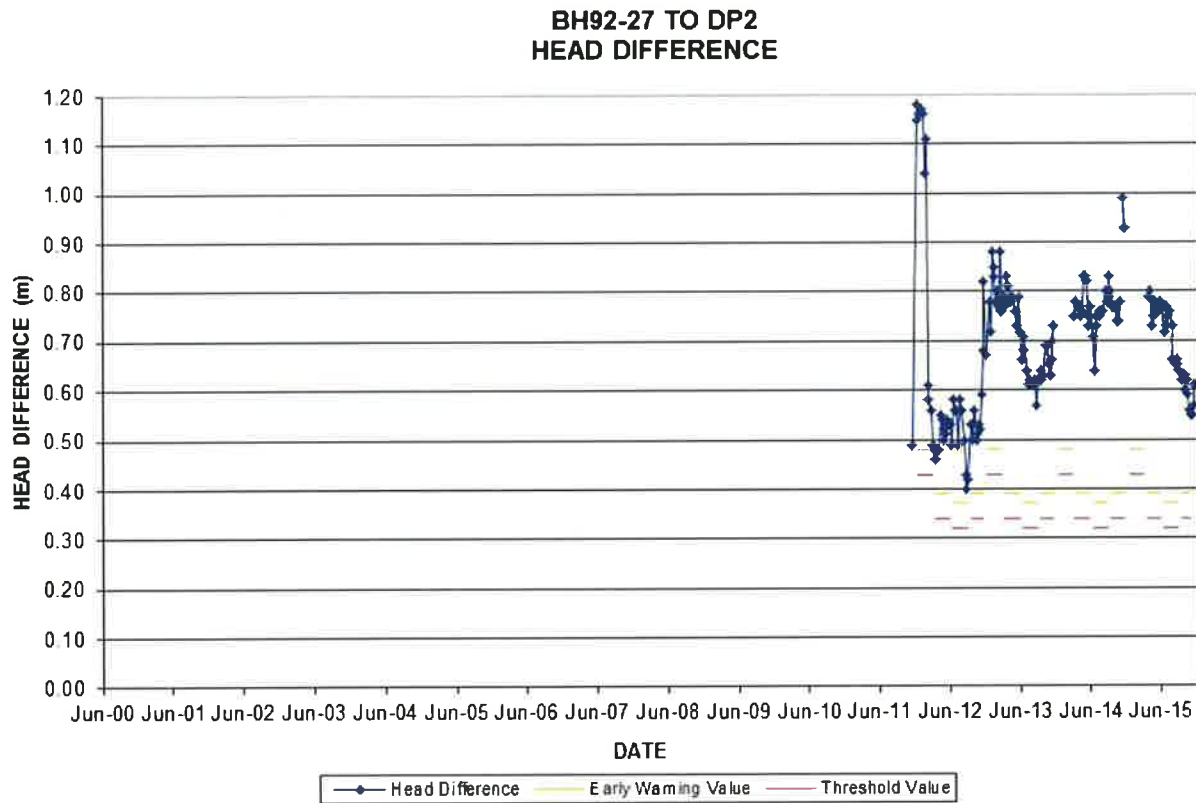
This monitor pair replaced the BH92-30 to BH92-28 threshold pair in May 2012, as BH92-30 was removed during extraction activities in April 2012. This pair is located in the northwest corner of the site, south of the confluence between the Pond Creek tributary and Mill Creek. The early warning and threshold values were not exceeded in 2015.



**Figure 3-11 Hydraulic head difference for monitoring pair BH92-29/DP1; May 2012 to December 2015**

**BH92-27 to DP2 (Figure 3-12)**

This pair of monitors is located in the western part of the site, west of the Phase 3 extraction area, and replaced BH92-26 to DP2 after November 2011 when BH92-26 became inaccessible due to its proximity to the extraction area. DP2 is an in-creek drive point located in Mill Creek at the western property boundary. The early warning values and threshold values were not exceeded in 2015.

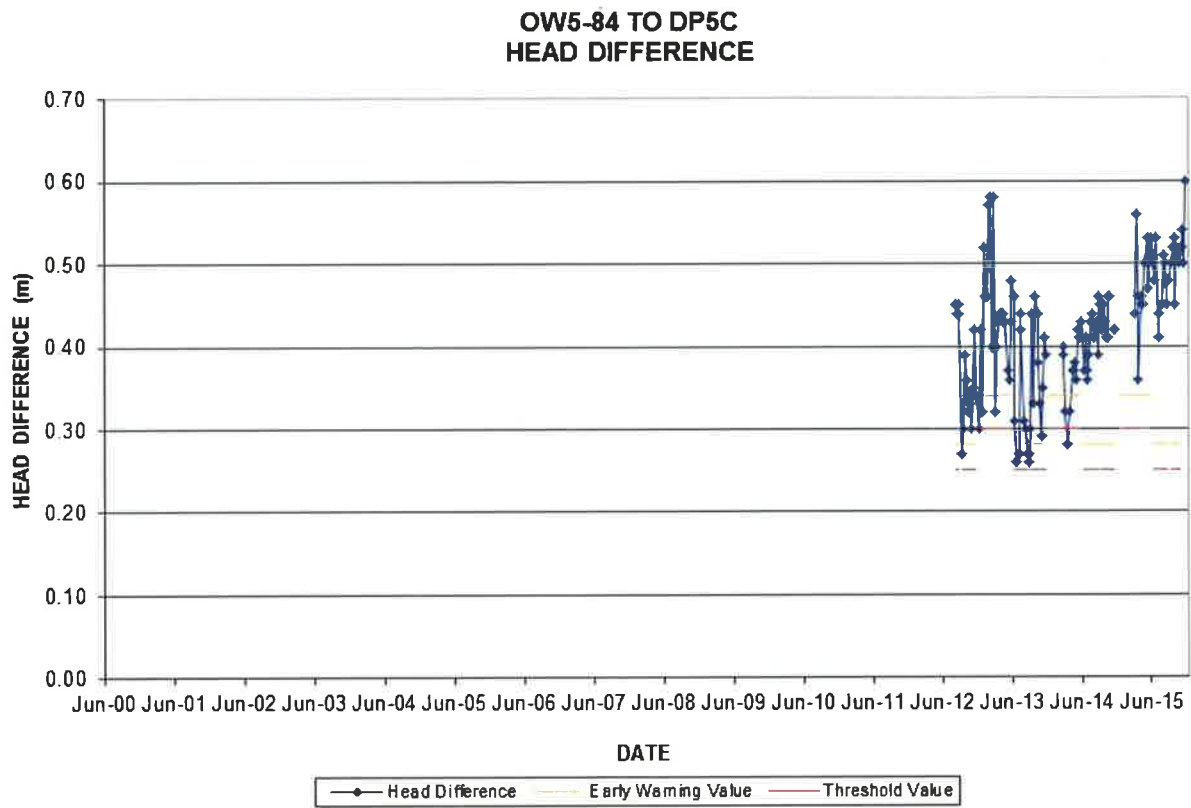


**Figure 3-12 Hydraulic head difference for monitoring pair BH92-27/DP2; December 2011 to December 2015**

**OW5-84 to DP5C (Figure 3-13)**

This pair of monitors is located in the southwest corner of the site, adjacent to Mill Creek. OW5-84 is a groundwater monitor screened to about full depth in the aquifer, and is situated just inside the property line. DP5A was an in-creek drive point situated in Mill Creek just north of the bridge at Township Road 2. DP5B replaced DP5A in this threshold pair in December 2011 when DP5A became inaccessible due to landowner permission being withdrawn. DP5B, located south of the bridge, was vandalized in July 2012, and replaced with DP5C, which was installed slightly upstream from DP5B, but still south of the bridge. New (preliminary) threshold values were implemented for the OW5-84 to DP5C pair in September 2012. The early warning and threshold values were exceeded in April 2014 due to elevated water levels at DP5C, which are attributed to the spring snowmelt. Based on hydraulic conductivity testing, it was interpreted that DP5C was installed in lower-conductivity soil that is not reflective of the sand/gravel aquifer in which DP5A and 5B were developed. This condition would result in groundwater levels that do not respond to climatic conditions as quickly as nearby drive points screened in more representative soils with higher hydraulic conductivities. The early warning and threshold values were not exceeded in 2015.

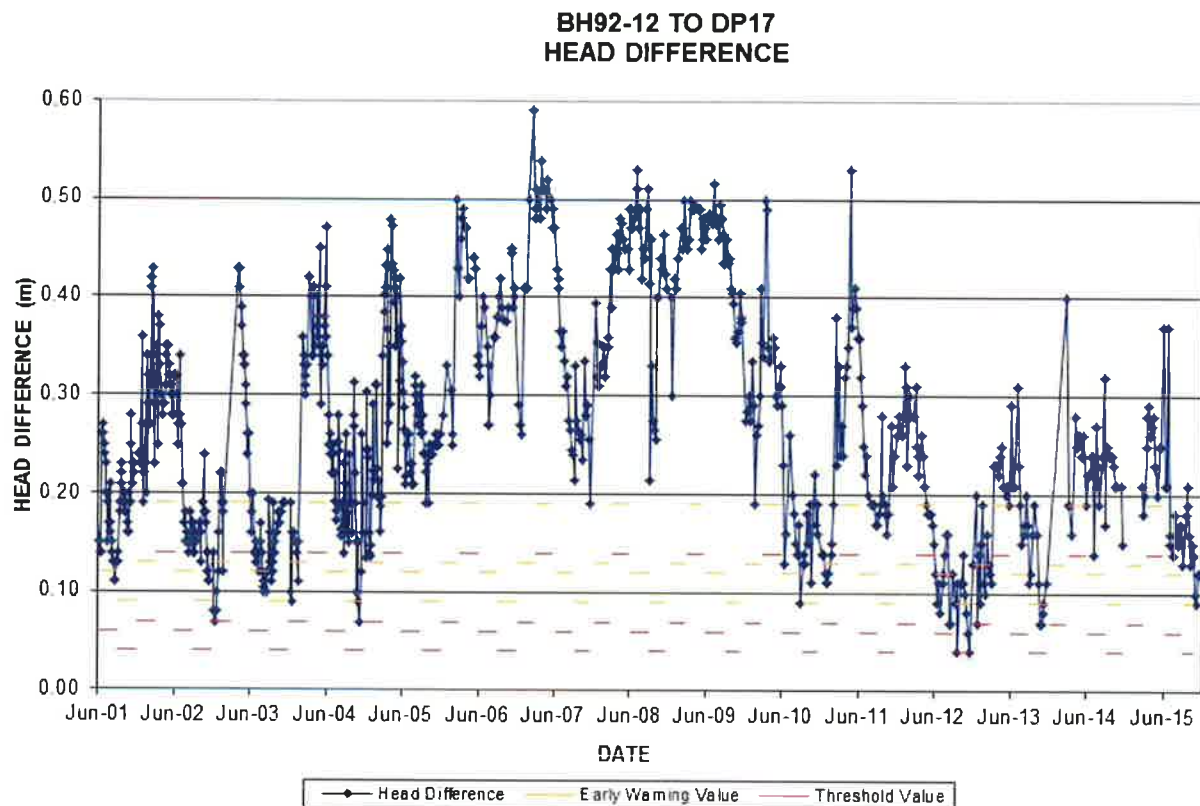
In August 2013, a replacement drive point, DP5D was installed slightly downstream of DP5C in an effort to screen the drive point in soils more representative of the hydraulic conductivity expected for the base of Mill Creek. Monitoring continues at DP5D for comparison purposes in order to establish new threshold pair values for the future OW5-84 to DP5D threshold pair. Monitoring at DP5C will only be terminated once DP5C is officially removed from the monitoring program.



**Figure 3-13 Hydraulic head difference for monitoring pair OW5-84/DP5C;  
September 2012 to December 2015**

**BH92-12 to DP17 (Figure 3-14)**

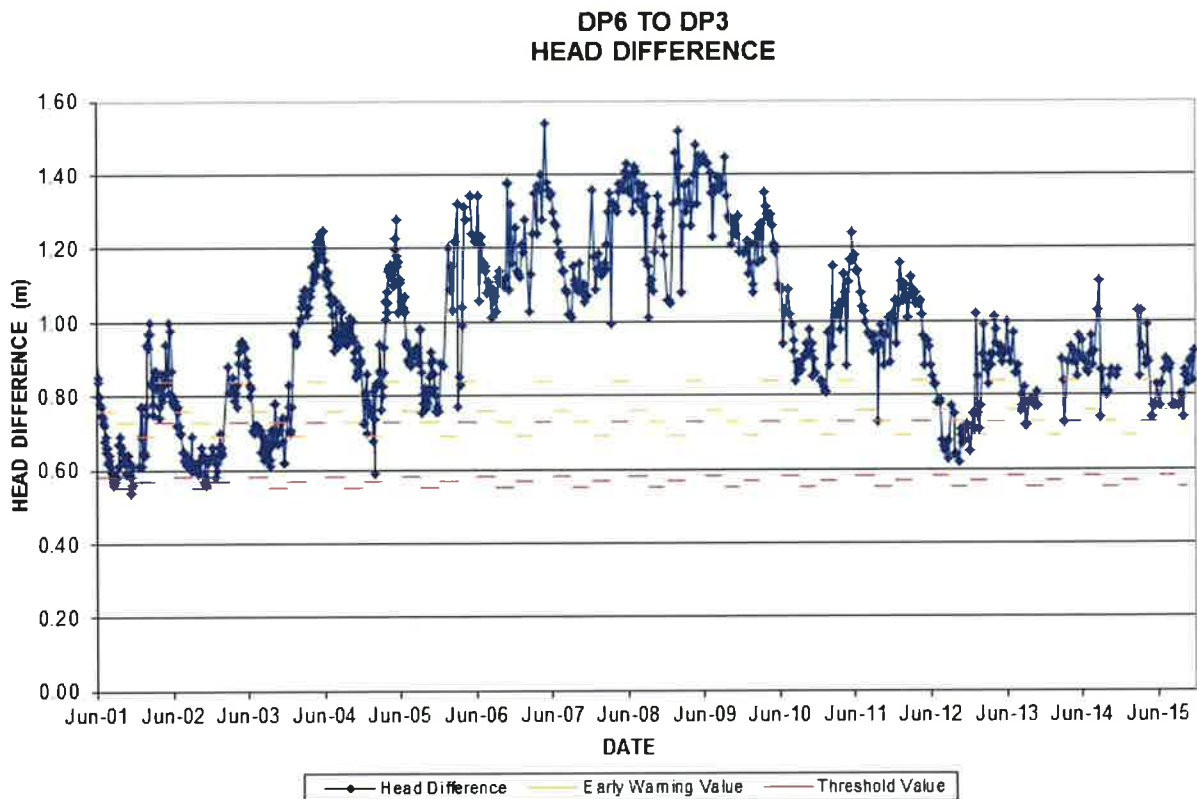
BH92-12 was established in 2001 just outside the licensed area of extraction, west of Phase 5b. Monitor DP17 is an in-creek drive point located at the Hanlon interchange upstream from DP3. The threshold value has not been exceeded since the implementation on June 30, 2001. The early warning values were not exceeded in 2015.



**Figure 3-14 Hydraulic head difference for monitoring pair BH92-12/DP17; July 2000 to December 2015**

**DP6 to DP3 (Figure 3-15)**

DP6 is located at the eastern limit of the central wetland area, adjacent to Phase 5, and DP3 is an in-creek drive point monitor location directly south of the Hanlon interchange. The threshold values were not exceeded in 2015. The early warning values were exceeded on June 5, 10, 18, and 23, 2015. The June exceedances are attributed to a lag in groundwater level response at DP6 compared to DP3 following rain events which occurred on May 31 to June 1 (75 mm), June 8 to June 16 (100 mm), and June 23 (10 mm). Similar exceedances of early warning values occurred at this threshold pair in 2014.

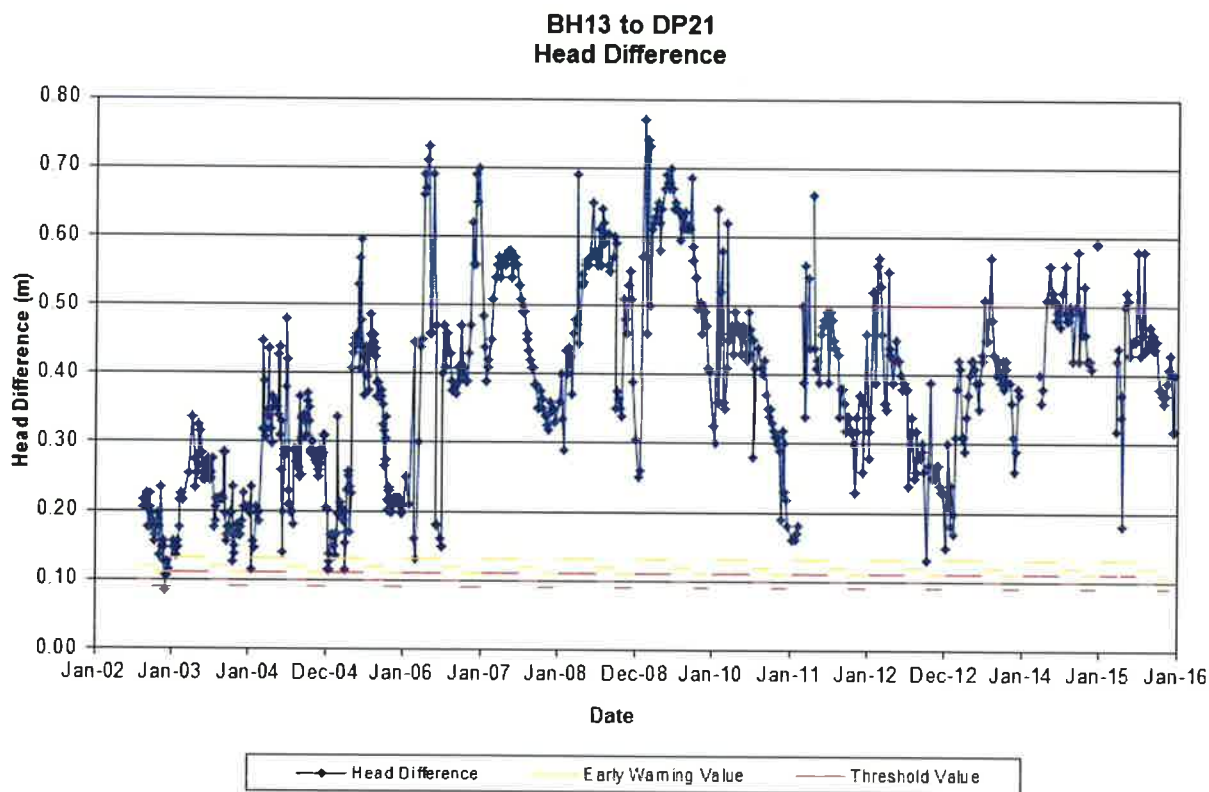


**Figure 3-15 Hydraulic head difference for monitoring pair DP6/DP3; July 2000 to December 2015**



**BH13 to DP21 (Figure 3-16)**

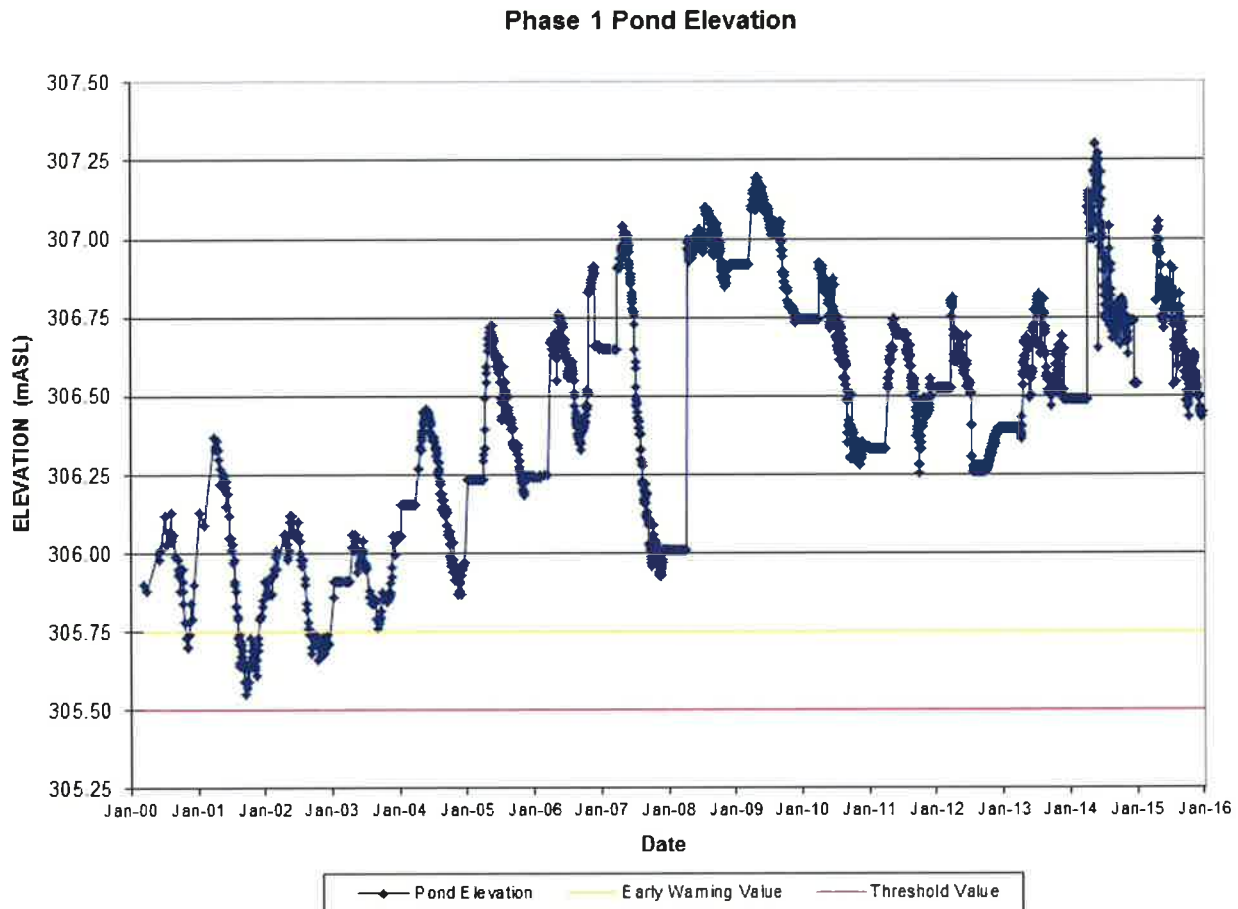
BH13 is located adjacent to the northern boundary of the property (north of Phase 5) and to the east of DP21. DP21 is an in-creek drive point monitor located immediately downstream of the property line, south of Highway 401. There were no exceedances of the threshold values or the early warning values at this pair in 2015.



**Figure 3-16 Hydraulic head difference for monitoring pair BH13/DP21; August 2002 to December 2015**

### Phase 1 Pond (Figure 3-17)

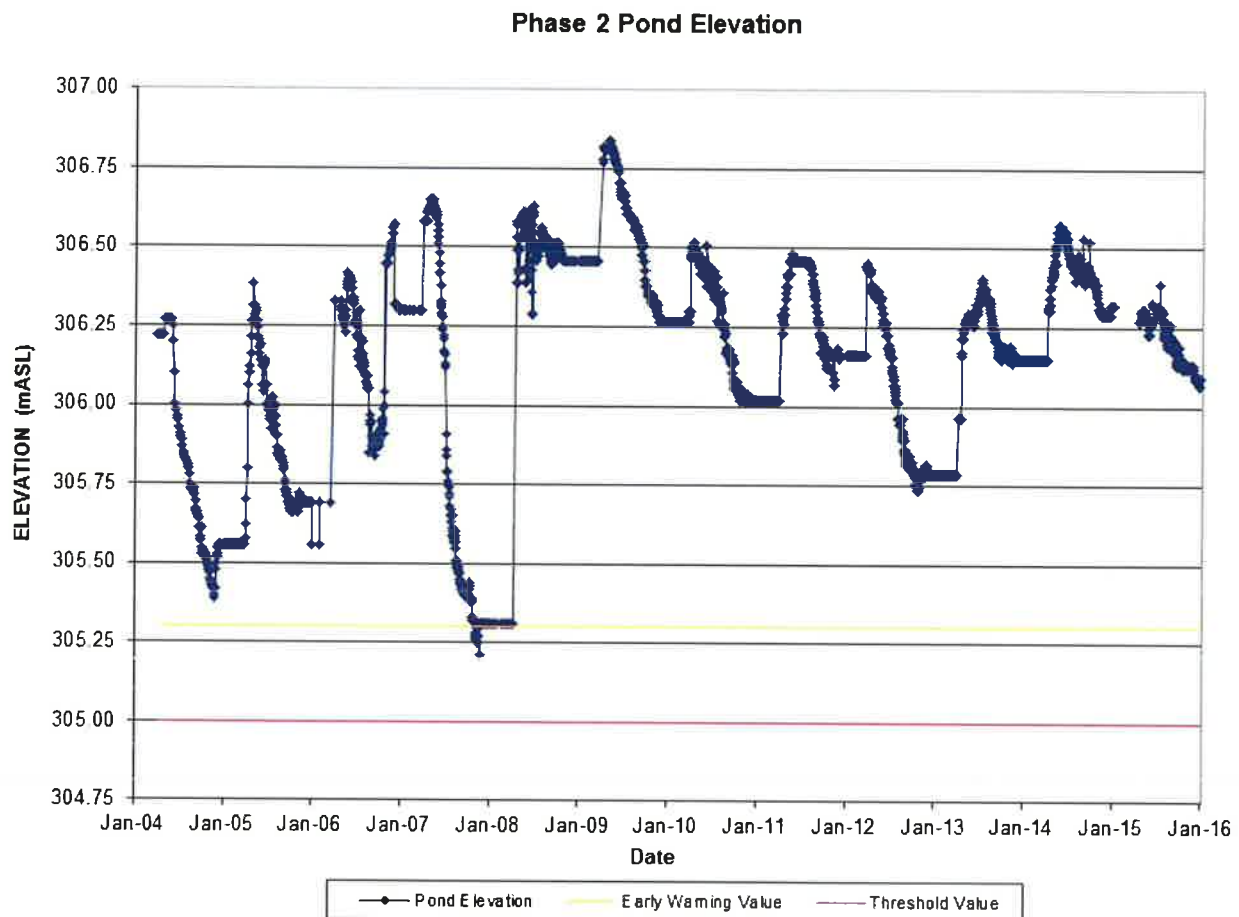
This pond is located in Phase 1, along the east side of the north property. Sub-aqueous extraction started in 1995 and was completed in 2002. A low-water level threshold value of 305.5 mASL was established for the Phase 1 pond in 2002. Neither the early warning value of 305.75 mASL nor the low-water level threshold value was exceeded in 2015. As predicted, during dry periods the presence of the Phase 1 pond buffers against decreases in groundwater levels adjacent to the pond. It is noted that when an extraction pond or silt pond is frozen, it is shown on the graph as a constant water level. As of 2015, frozen periods are identified by data gaps.



**Figure 3-17 Phase 1 Pond Elevation; January 2000 to December 2015**

### Phase 2 Pond (Figure 3-18)

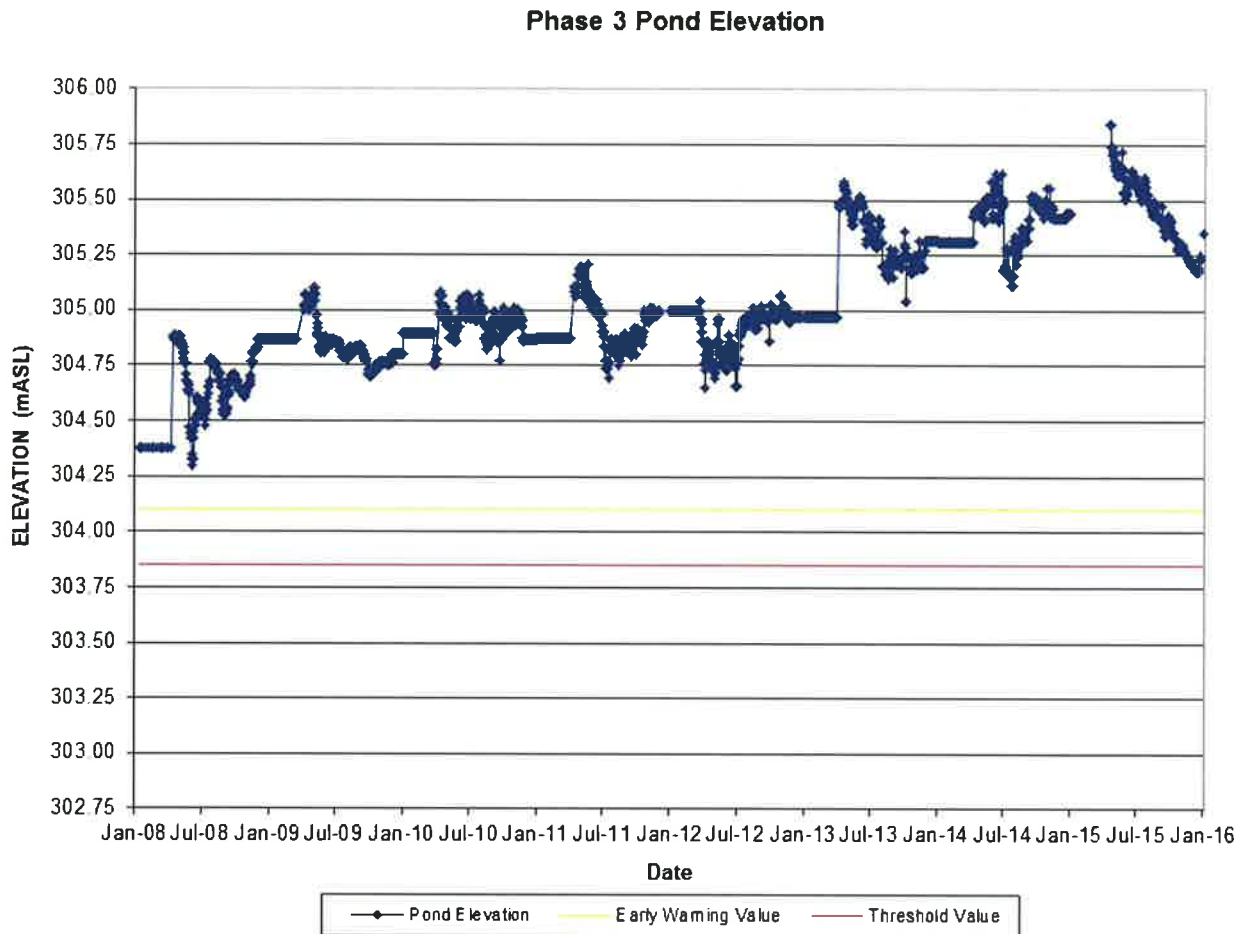
This pond is located in the south end of Phase 2, on the south property. Sub-aqueous extraction started on September 23, 2003 and continued into 2012. A low-water level threshold value of 305.0 mASL was established in 2004, with an early warning value of 305.30 mASL. The low-water level threshold and early warning values were not exceeded in 2015. As of 2015, frozen periods are identified by data gaps.



**Figure 3-18 Phase 2 Pond Elevation; January 2004 to December 2015**

### Phase 3 Pond (Figure 3-19)

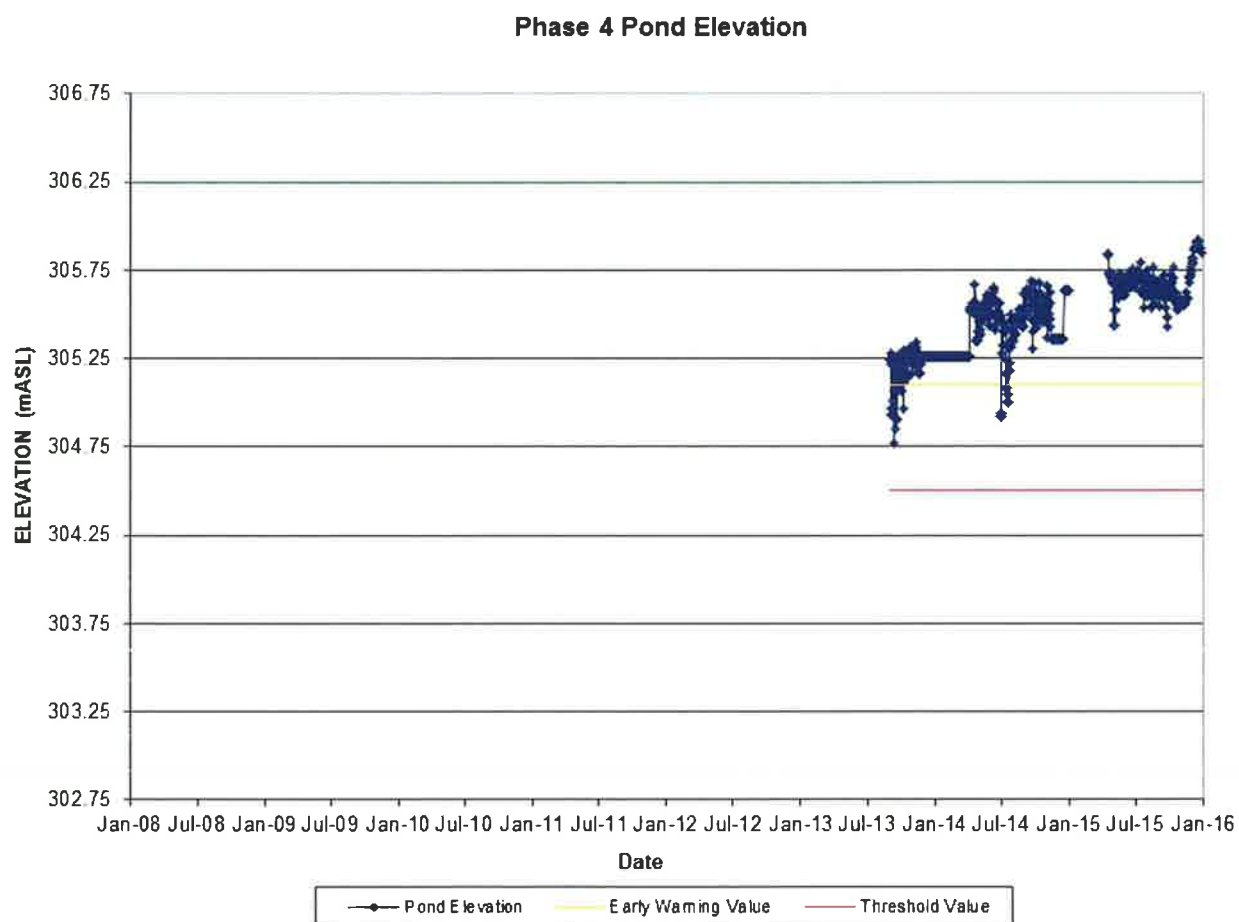
This pond is located in Phase 3, immediately north and adjacent to silt pond SP1. Sub-aqueous extraction started in 2007 and continued to the end of 2013. A low-water level threshold value of 303.85 mASL was established in 2006, with an early warning value of 304.10 mASL. The low-water level threshold and early warning values were not exceeded in 2015. As of 2015, frozen periods are identified by data gaps.



**Figure 3-19 Phase 3 Pond Elevation; January 2008 to December 2015**

### Phase 4 Pond (Figure 3-20)

This pond is located in Phase 4, in the central section of the north property, immediately north and adjacent to silt pond SP3. Sub-aqueous extraction began in September 2013. A low-water level threshold value of 304.50 mASL and an early warning value of 305.10 mASL were established prior to extraction commencing in Phase 4. The low-water level threshold and early warning values were not exceeded in 2015. As of 2015, frozen periods are identified by data gaps.



**Figure 3-20 Phase 4 Pond Elevation; September to December 2015**

**Silt Pond SP1**

Silt pond SP1 is located south of Phase 3, in the southwest corner of the north property. The original footprint of silt pond SP1 was nearly full of fines over most of the area, and wash water sedimentation operations were moved into silt pond SP2 after July 2003 and later to silt pond SP3. Maximum and minimum threshold values were established for SP1 to ensure that the water contained in the pond does not breach over the perimeter berm, nor become too low whereby it might reduce groundwater discharge to Mill Creek. The filling of silt pond SP1 was completed in 2012 and water level monitoring was, therefore, terminated at this location.

**Silt Pond SP2**

Silt pond SP2 is located directly north of Phase 3, in the middle of the north property. Washing sedimentation operations were moved into SP2 after July 2003 and remained there until September 4, 2004, at which time the pond was full of fines over most of its area. Discharge to the eastern end of silt pond SP2/barrier wall silt pond (SP3 extension) resumed in June 2012 and continued until November. The filling of silt pond SP2 was completed in 2012 and water level monitoring was, therefore, terminated at this location.

**Silt Pond SP3**

The original silt pond SP3 is located south of Phase 4, along the southern edge of the north property. Washing sedimentation operations were moved into SP3 after September 4, 2004 and this silt pond was used until April 2010. The staff gauge was removed from SP3 in April 2011 due to the lack of surface water at this location. Approval to extend SP3 north to the central wetland and east along the wetland boundary, which includes the construction of a silt barrier between Phases 3 and 4, was received in 2010. This extension of silt pond SP3 has since been completed, and silt pond SP3 and the Phase 4 pond are now hydraulically connected. As such, it is recommended that the Phase 4 pond threshold values be applied to silt pond SP3 in 2016.

### 3.3 Summary of Ground Water Conditions

In 2015, the winter (January to March), summer (July to September) and fall (October to December) months were generally drier than normal, while the spring (April to June) months were generally wetter than normal.

Monitoring results adjacent to the pond in Phase 1 indicate an effect on the pond levels and local groundwater levels resulting from seasonal climatic variation, the pumping of water from the pond for aggregate processing, and the recirculation discharge of clean water from Phase 4 pond in 2015 back into the Phase 1 pond. The pumping of water from the Phase 4 back to the Phase 1 extraction pond is adjusted to maintain a balance between water taken and water returned, and to maintain water levels within threshold values. To maintain water levels between the threshold values, it was necessary to recirculate a considerably larger volume of clean water (52% more water) back into the Phase 1 pond in 2015 than the volume discharged into silt pond SP3/Phase 4 pond from the processing plant (see Table E-2, sub-appendix E, Technical Appendix B). The presence of the silt barrier between the Phase 3 and Phase 4 ponds helps to sustain a higher pond level in Phase 4 (relative to the Phase 3 pond) which results in the need to recirculate this additional water. These calculations allowed for 5% water loss (water retained in the washed product stockpiles and evaporation loss) during aggregate processing.

The water table in the wetland areas adjacent to Mill Creek continues to be at or near ground surface during the spring melt high groundwater conditions, with seasonal decreases in the order of 0.5 m over the course of the year.

In 2015, most water levels in monitors were lower compared to those recorded in 2014. Given the precipitation patterns described above, the lower groundwater levels experienced across the site are not unexpected. The groundwater levels were generally similar in 2015 compared to historical averages, although there were some exceptions.

At DP20, located in Mill Creek, north of Highway 401, except for an occasional downward gradient condition, an upward discharge gradient has been present consistently since 2004 through to 2015. The upward gradient condition coincided with higher water levels in the Phase 1 pond being maintained throughout the year, and may also be affected by pond levels and groundwater conditions to the north of the creek (Reid Heritage property) since extraction ceased at that location several years ago.

In the reach of Mill Creek between Highway 401 and the Hanlon interchange, downward vertical gradients were observed periodically at some of the monitors during dry periods between 1998 and 2003. Vertical discharge (upward) gradient conditions have prevailed since 2004, excluding occasional downward gradients, and a similar trend continued through 2015.

At DP18, which is located north of Highway 401, upstream of Slovenski Park at Concession Road 25, upward vertical gradients have been present for the most part between 2005 and 2015. Prior to 2005, vertical gradients at DP18 were downward for several years. DP18 is far-removed from the site and is not affected by extraction operations at Mill Creek Aggregates Pit. The reason for this return to upward (discharge) gradients at DP18 has not been confirmed, but



is likely related to other extraction activities (or absence thereof) between 2005 and 2015 in the area.

Water levels were recorded at two bedrock aquifer wells in 2015. Water levels remained within the historic range at the North Farmhouse Well in 2015. As in previous years, flowing artesian conditions were recorded in bedrock well TW16-78, located adjacent to Mill Creek at the southwest corner of the property.

The multi-level monitors within the sand and gravel aquifer continued to exhibit the general pattern of upward to neutral gradients, which is consistent with historic trends. Several observations of downward gradients also occurred in 2015, which is also consistent with historic trends. The groundwater temperatures at the multi-level monitors showed a pattern similar to historic trends, with the shallow water temperatures exhibiting the greatest, and the deep temperatures showing the least, seasonal fluctuations. The multi-level monitor temperatures also show a time lag response pattern between the shallow, intermediate and deep profiles, which also is consistent with historic patterns.

At Monitor 92-13, located just west of the Phase 1 pond, the presence of the pond itself, the pumping of water from the pond, and the discharge of return-water back into the Phase 1 pond affects local groundwater temperatures. Historically, the groundwater temperatures were affected up to a maximum of 10°C at 92-13.

Historically, the recorded peak temperature in the Phase 1 pond occurs in August. At 92-13, the peak groundwater temperature now occurs in September or October. A time lag of about one to two months, therefore, exists between maximum shallow surface water temperatures in the pond and maximum groundwater temperatures at Monitor 92-13. There is a decline from the surface water peak temperature of approximately 2°C to 5°C in the shallow groundwater over the 20 m separation distance, confirming that considerable dissipation of the thermal plume from the Phase 1 pond does occur in the groundwater flow system within a short distance downgradient from the pond.

There were no exceedances in 2015 of the Action Threshold Values established for the monitoring pairs located adjacent to Mill Creek around the site. Water levels in the Phase 1 pond, Phase 2 pond, Phase 3 pond, and Phase 4 pond did not exceed their respective low-water level threshold values in 2015.

### **3.4 Ground Water Contribution**

Seasonal variation in stream flow is a reflection of normal long-term climatic seasonal variation, as well as specific climatic events. The high flows, which typically occur in the spring, are the result of the annual spring melt and rainfall events. The low flows, which typically occur during the latter part of the summer season, and to a lesser extent during mid-winter, are the result of moderately lower rainfall, and in the case of the summer, increased temperatures and evapotranspiration losses. In the mid-winter period, precipitation is generally bound up in the snow pack, except when thaws occur periodically.

During low flow periods, and in the absence of rainfall, stream flow is sustained by groundwater discharge to the creek. The groundwater discharge component of stream flow is termed base flow. Since base flow is derived from the groundwater flow system, which shows subdued seasonal changes compared to surface waters, the magnitude of the seasonal variation under base flow conditions will be less than that of the surface runoff component. In addition, since the temperature of groundwater, and particularly the deeper groundwater, does not fluctuate seasonally to anywhere near the same degree as does the surface water, the temperature of the groundwater discharge to the creek remains relatively more consistent.

Thus, groundwater discharge to the creek provides two important functions:

- a) It provides base flow to maintain stream flow during low flow periods, and
- b) It provides a cooling effect on the creek temperatures during the warm summer season, and a warming effect during the cold winter season.

Given the diffuse nature of groundwater movement, it is not possible to directly measure the magnitude of the groundwater discharge component to Mill Creek from the Mill Creek Aggregates property. Groundwater influx to Mill Creek is estimated at each drive point location for different flow conditions and the measurement interpolated for the stream sections between drive points. These calculations are presented in Technical Appendix B. The results of these calculations are summarized below in Table 3.4.

The summer low flow groundwater influx values have fluctuated from 2004 to 2015. The calculated 2015 summer low flow groundwater influx (29.2 L/s) was about 14% lower than the 2014 value of 33.9 L/s, and about 54% higher than the historic average yearly summer low flow influx (18.9 L/s), which is based on the average of the yearly summer low flow data for each drive point for the period 1989 to 1999.

The winter low flow groundwater influx values increased from 2003 to 2010, decreased to 2012, and fluctuated from 2013 to 2015. The calculated 2015 winter low flow groundwater influx (26.3 L/s) was about 18% higher than the historic average yearly winter low flow influx (22.2 L/s), which is based on the average of the yearly winter low flow data for each drive point for the period 1989 to 1999.

The 2015 annual average influx (29.0 L/s) was about 4% lower than the 2014 average value of 30.3 L/s, and about 27% higher than the pre-1999 historic long-term average influx (22.8 L/s). The higher values of groundwater discharge from 2004 to 2015 compared to the pre-1999 historic average are attributed to the consistently higher water level in the Phase 1 pond since 2004, and the resulting higher groundwater levels across the site.

### **3.5 Thermal Budget**

The thermal effects on Mill Creek temperatures from the two tributaries, as well as the groundwater discharge component, are relatively significant during much of the year, based on the observed temperature differences between SWM1 (upstream) and SWM2 (downstream). Generally, during the summer low flow, those three sources of input water provide a cooling

effect on Mill Creek. It is noted that canopy cover along some reaches also provides a cooling effect in Mill Creek during the summer months.

In 2015, the largest summer temperature difference between SWM1 and SWM2 (using average daily temperatures from data loggers) during routine monitoring events was noted on July 22, 2015. The mean temperature of the water entering the Mill Creek Aggregates Pit property at Highway 401 (SWM1) on July 22 was 19.5°C. The mean water temperature in the creek leaving the property at SWM2 on July 22 was 17.4°C, which is 2.1°C lower than at SWM1. On July 22, the mean water temperature of Galt Creek (SWM4) and Pond Creek (SWM3) was 12.6°C and 12.4°C, respectively, which is strongly indicative of groundwater discharge into those tributaries. The temperature of the groundwater discharge component was estimated to be about 13.2°C, based on average temperatures recorded at the in-stream drive points. Historically (from 2005 to 2012), approximately 33% to 66% of the total temperature differential has been estimated to be attributed to the two tributaries, whereas approximately 34% to 67% has been attributed to the combined groundwater discharge from both sides of Mill Creek. As noted above, it is recognized that the vegetation canopy and riparian cover will also serve to reduce surface water temperatures across the property.

**Table 3.4 Groundwater Influx (L/s) from the Mill Creek Aggregates Pit Property**

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	Historic Average (1989 - 1999)	Historic Range (1989 - 1999)
Summer Low flow Conditions (L/s) (May to Oct.)	29.2 L/s (Sept)	33.9 L/s (Aug)	24.1 L/s (Oct)	27.2 L/s (Aug)	33.0 L/s (July)	30.6 L/s (Aug)	26.4 L/s (Sept)	29.5 L/s (June)	22.1 L/s (Sept)	24.7 L/s (Aug)	22.0 L/s (Oct.)	23.8 L/s (Sept)	12.5 L/s (Aug.)	16.1 L/s (Sept)	17.0 L/s (Aug)	21.7 L/s (May)	18.9 L/s	15 - 24 L/s
Winter Low flow Conditions (L/s) (Nov. to April)	26.3 L/s (Dec)	25.2 L/s (Dec)	28.5 L/s (Apr)	21.6 L/s (Nov)	26.7 L/s (Mar)	35.1 L/s (Nov)	32.5 L/s (Nov)	31.7 L/s (Mar)	N/A	25.2 L/s (Jan)	23.6 L/s (Nov)	22.1 L/s (Nov)	22.1 L/s (April)	24.5 L/s (Nov)	22.4 L/s (April)	26.5 L/s (Nov)	22.2 L/s	18 - 28 L/s
Average (L/s)	29.0 L/s	30.3 L/s	28.3 L/s	25.6 L/s	34.6 L/s	35.7 L/s	33.0 L/s	31.5 L/s	26.9 L/s	27.6 L/s	26.7 L/s	27.3 L/s	19.9 L/s	22.6 L/s	24.1 L/s	25.5 L/s	22.8 L/s	

## 4. Stream Water Quality and Water Temperature

### 4.1 Surface Water Quality

#### 4.1.1 Surface Water Quality Methods

For this report, water samples were collected on December 14, 2015 at the four surface water sampling stations (SWM1, SWM2, SWM3, and SWM4). Station locations were shown on Figure 2-1. Water samples were analyzed for the following parameters:

- pH, conductivity, hardness
- alkalinity: total, carbonate, bicarbonate
- nitrate, nitrite, ammonia
- total phosphorus, orthophosphate
- total organic carbon
- suspended solids
- chloride
- coliforms: fecal, total
- biological oxygen demand, chemical oxygen demand

#### 4.1.2 Surface Water Quality Results

The water quality data for this report are provided in Table 4.1.

Water quality data for Mill Creek are available from the early 1970's (see ESP *et al.* 1995). From the 1980 analysis it was concluded that there were seasonal inputs of nutrients (as indicated by phosphorus, nitrate, ammonia and chlorophyll *a* levels) (FaunaAquatics 1981). This was attributed to seasonal differences in surface water runoff and land-use patterns.

Total coliform bacteria counts were >2000 CFU/100 mL at one station (SWM1) in 2015. Historically there have been some high total coliform counts at different stations though no trend has been observed and there is no apparent explanation (see Sub-Appendix A of Technical Appendix C). The fecal coliform count ranged from 2 - 120 CFU/100 mL with results exceeding the Provincial Water Quality Objective (PWQO) of 100 CFU/100 mL at three stations (SWM1, SWM2 and SWM4). Historically, one or more sites have had fecal coliform levels exceeding the PWQO.

The concentrations of most of the water quality parameters are similar between the upstream (SWM1) and downstream (SWM2) limits of the Mill Creek Property. Chloride and conductivity are typically higher in Galt Creek relative to the other three stations (Table 5.1). This may be due to road salt draining off the Hanlon Expressway into Galt Creek.

Nitrate in the two tributaries can be attributed to agricultural runoff in the watershed. In 2015, the highest nitrate level was observed at SWM3 (Pond Creek) with a value of 4.5 mg/L. For nitrate, there is no PWQO for the protection of freshwater biota, as it is relatively non-toxic to fish. The Ontario Drinking Water Objective for nitrate is 10mg/L. Nitrite was below detection limits (0.01 mg/L) at all four stations.

**Table 4.1 Mill Creek Water Quality December, 2015**

	SWM1 Hwy. 401	SWM4 Galt Ck.	SWM3 Pond Ck.	SWM2 (boundary)	PWQ0 <sup>1</sup>	LOQ <sup>2</sup>
<i>All units are mg/L, unless otherwise indicated.</i>						
pH (units)	8.26	8.22	8.22	8.26	6.5 – 8.5	N/A
Conductivity (µmhos/cm)	688	833	668	747	-	1
Hardness (mg/L as CaCO <sub>3</sub> )	310	330	330	320	-	1
Alkalinity (Total)	250	260	270	260	-	1
Chloride	46	88	28	66	-	1
Nitrate	0.42	3.69	4.50	1.37	See <sup>3</sup>	0.1
Nitrite	<0.01	<0.01	<0.01	<0.01	<0.1 <sup>4</sup>	0.01
Ammonia	<0.050	<0.050	<0.050	<0.050	1.2 (0.02) <sup>5</sup>	0.05
Orthophosphate	<0.01	<0.01	<0.01	0.012	-	0.01
Total Phosphorus	<0.020	<0.020	<0.020	<0.020	0.03	0.020
Total Organic Carbon	3.6	3.2	2.0	3.5	-	0.2
BOD5	<2	<2	<2	<2	-	2
Chemical Oxygen Demand	11	9.3	<4.0	14	-	4
Total Suspended Solids	<10	<10	<10	<10	-	10
Fecal Coliforms (CFU/100ml)	32	2	2	120	100	N/A
Total Coliforms (CFU/100ml)	>2000	49	92	120	-	N/A
<sup>1</sup> PWQO = Provincial Quality Guideline for the Protection of Aquatic Life (- denotes no guideline) <sup>2</sup> LOQ = Limit of Quantitation (Reportable Detection Limit) <sup>3</sup> concentrations that stimulate prolific weed growth should be avoided <sup>4</sup> federal guideline (CCREM) <sup>5</sup> value in brackets is calculated un-ionized ammonia at pH 8.0 and 20°C ND = not detected n/a = not applicable						

Total phosphorus was below detection limits (<0.020 mg/L) at all sites. Historically phosphorus levels have fluctuated from below detection to just over the PWQO. Spikes in phosphorus may be due to agricultural runoff and/or septic systems in the watershed and are unrelated to gravel extraction activities at the Mill Creek pit.

Biological Oxygen Demand (BOD), which is a measure of general organic loading to a watercourse, remained at or below detection limits at all stations.

The basic water chemistry of Mill Creek and its tributaries appears relatively unchanged over the past 40 years. In recent years, chloride and conductivity levels seemed to be trending upwards. Levels of both parameters were lower in 2014 with the lowest conductivity since 1995, but were higher again in 2015. Conductivity and chloride levels may be a reflection of road salt entering the environment (see Section 3.1 in Fisheries Technical App. C).

These data provide a documentation of basic water quality conditions in Mill Creek. The monitoring program is not designed to detect short term changes in surface water quality but rather looks at long term changes from annual water samples.

## 4.2 Ground Water Quality

### 4.2.1 Ground Water Quality Methods

In April and December 2015, groundwater samples were collected from Monitors BH1, 92-8, and 92-32-III, and a surface water sample was collected from the Phase 1 pond. Samples were tested in the field for temperature, pH, and conductivity and submitted to Maxxam Analytics Inc. for analysis. Groundwater samples were analysed for major cations and anions, metals, alkalinity, conductivity, pH, hardness, and oil and grease.

### 4.2.2 Groundwater Quality Results

The 2015 chemical analysis results are generally similar to historic values, with some exceptions. Based on the 2015 chemical data, which are provided in Appendix B, the following observations are made.

- Groundwater quality generally complies with the Ontario Drinking Water Quality Standards (ODWQS) for the parameters tested, except as outlined below.
  - BH1 – hardness (April and December)
  - 92-8 – hardness (April and December), manganese (April and December)
  - 92-32-III – hardness (April and December), manganese (April and December), total dissolved solids (April)
  - Exceedances for hardness, manganese, and total dissolved solids also occurred in 2014.

Hardness, manganese, and total dissolved solids are not considered to be health-related parameters. The standard for hardness is a guideline, which is established for parameters that need to be controlled to ensure efficient treatment of water supplies. The standards for manganese and total dissolved solids are aesthetic objectives, which are established for parameters that may impair the taste, odour, or colour of water. Hardness and manganese exceedances were observed historically at the property, both before and after extraction commenced. The total dissolved solids concentration was only marginally elevated compared to the standard, and total dissolved solids exceedances have also been previously detected at Monitors 8-I and 92-8. The elevated concentrations of hardness, manganese, and total dissolved solids are attributed to natural conditions at the site.
- Over the short-term, in 2015 the parameter concentrations were generally similar to the 2014 concentrations.
- The concentrations of most parameters have been fluctuating slightly or have been relatively consistent over the long-term. Exceptions are sodium and chloride concentrations at (a) Monitor BH1, which have increased over the long-term, but have been stable in recent years, and (b) Monitor BH8-I/92-32-III, which have increased since 2009, but have been stable in recent years. This may reflect road salting activities along Highway 401 and/or along the Township roads.



- Historically, and in 2015, with increasing distance downgradient across the site (from Monitor BH1 to 92-8 to BH8/92-32-III), detected parameter concentrations generally tend to either increase or fluctuate. Exceptions include sodium and chloride, which decreased across the site in 2015.
- Parameter concentrations in the Phase 1 pond are generally similar to values detected at Monitor BH1. In April 2015, however, several parameter concentrations were notably lower in the Phase 1 pond compared to Monitor BH1 and compared to historic Phase 1 pond results, which may be attributed to recent snowmelt. The surface water quality complies with the Provincial Water Quality Objectives for the parameters tested in 2015. The iron and zinc exceedances observed in 2014 did not occur in 2015.
- Trace concentrations of total oil and grease were detected at Monitors BH1, 92-8, and 92-32-III and the Phase 1 pond in April 2015, but there were no detections in December. Detections of total oil and grease concentrations have occurred at various monitors and the Phase 1 pond historically. The detection of an oil and grease concentration at upgradient Monitor BH1 suggests an off-site source.

## 4.3 Surface Water Temperature

### 4.3.1 Methods

Surface water temperatures were logged hourly at stations SWM1, SWM2, SWM3 and SWM4 using model 3001 Solinst Levelloggers.

Surface water temperatures are also recorded manually each month at all in-stream drive points during routine monthly monitoring at these locations.

### 4.3.2 Results

The maximum hourly summer water temperature measured in 2015 was 23.53°C at SWM1 on July 29 at 21:00 hrs. The highest water temperature ever recorded in the Study Area was 27.9°C in 2002. Detailed water temperature data are presented in Technical Appendix A.

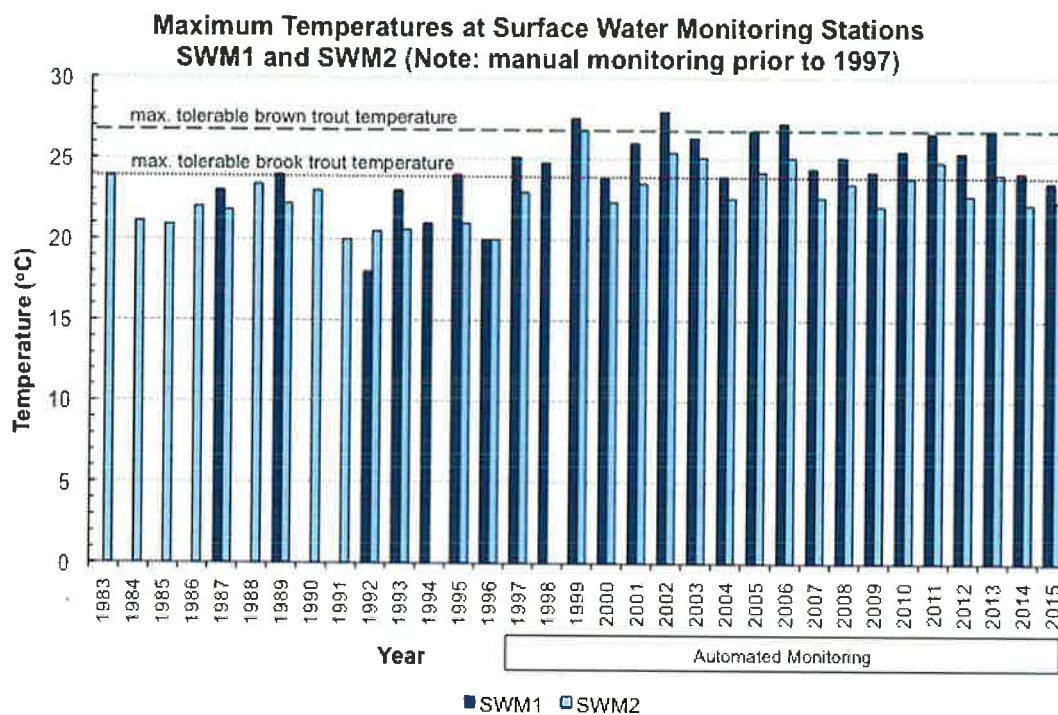
Annual maximum surface water temperatures observed at each monitoring location are illustrated in Figures 4-1 and 4-2 for the period 1983-2015. Prior to 1997, stream temperatures were collected manually, typically manually between noon and 3:00 pm but maximum temperatures are usually observed after 4:00 pm. Therefore, while water temperatures appear higher in recent years, temperatures prior to 1997 may actually have been greater than those presented in Figure 4-1 and 4-2.

The maximum tolerable temperatures for brown trout and brook trout are 26.8°C and 23.9°C respectively (Raleigh *et al.* 1986; Raleigh 1982). In 2015, water temperatures in Mill Creek remained below the maximum tolerable temperatures for brown trout and brook trout (Figure 4-1).

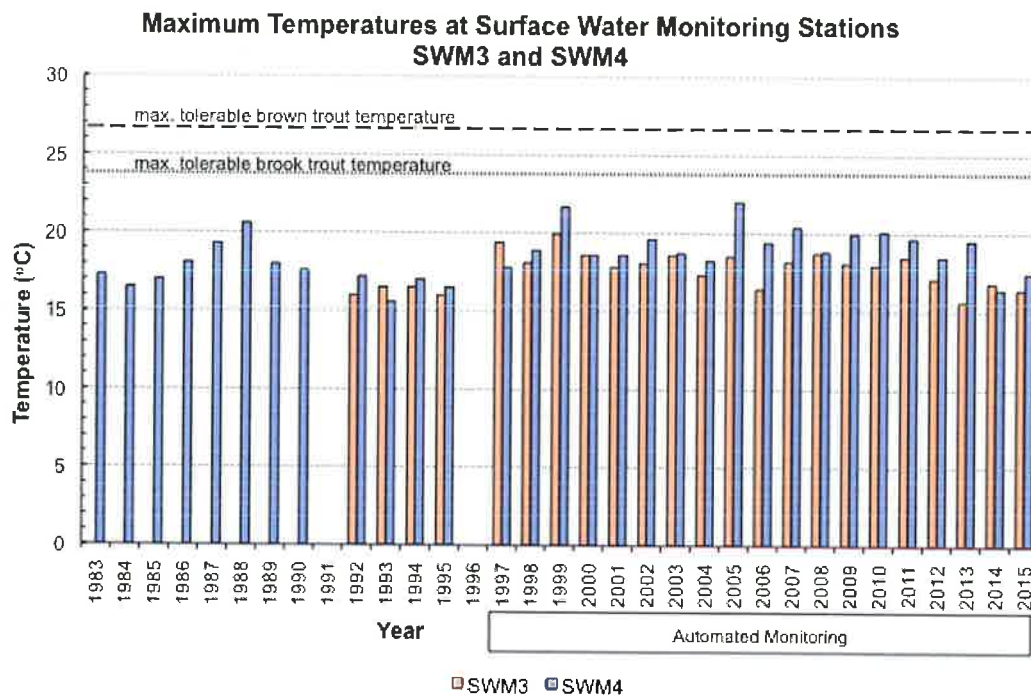
The maximum temperature in the two tributaries (SWM3 and SWM4) was well below the upper tolerable temperature for either species (Figure 4-2).

Stream water temperatures traditionally have been cooler at the downstream SWM2 station compared with SWM1. This trend continued in 2015. When the maximum water temperature occurred at SWM1 (23.5°C: July 29 21:00), the temperature at SWM2 was 2.96°C lower (Figure 4-3). The maximum summer temperature at SWM2 in 2015 was 22.38 C on July 30. The greatest temperature difference between SWM1 and SWM2 during the summer of 2015 occurred on July 29 at 00:00 hrs when SWM2 was 3.91°C cooler than SWM1.

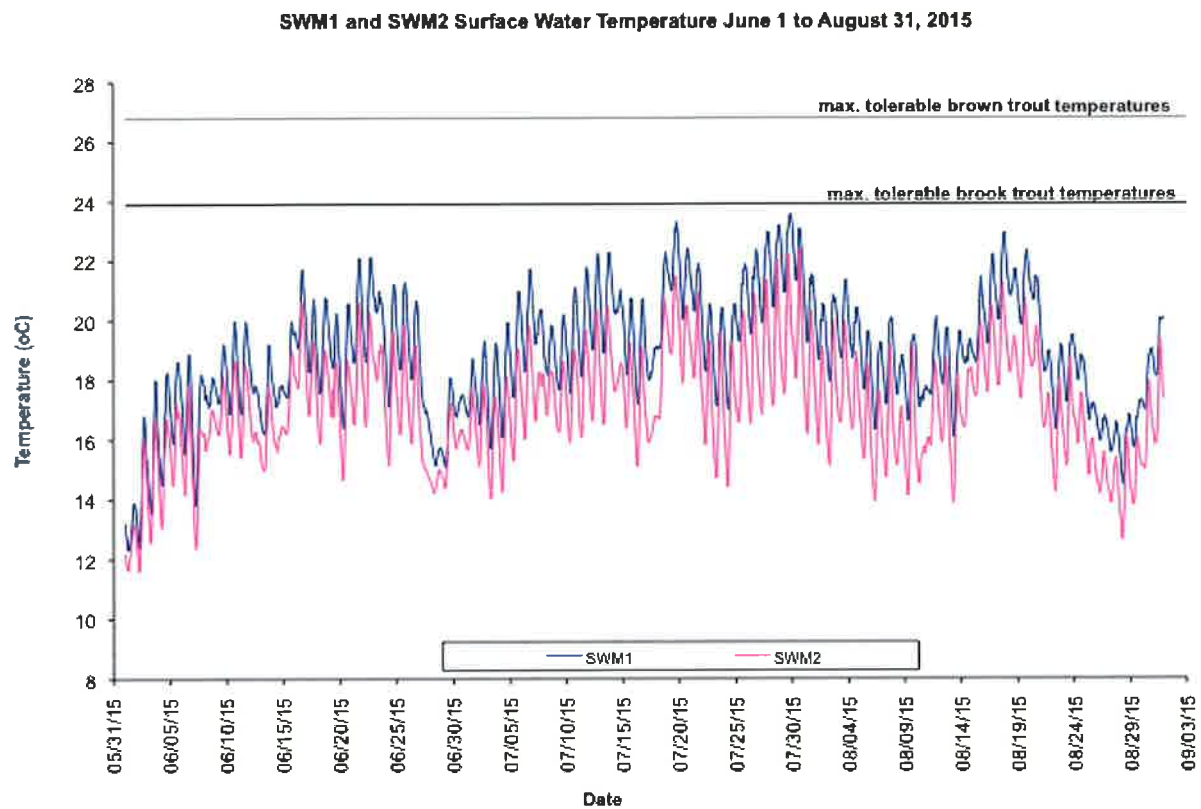
Surface water temperatures are cooler at SWM2 than SWM1 due to ground water input, inflow of the two coldwater tributaries and good shade from riparian vegetation within the University reach down to Concession Rd. 2 (also refer to discussion Section 4.2). The stream temperature data collected at the surface water monitoring stations provide an excellent method to determine the availability of trout habitat in the Study Area, particularly during the summer months.



**Figure 4-1 Maximum observed mid-summer temperatures at Mill Creek stations SWM1 and SWM2; 1983 to 2015**



**Figure 4-2 Maximum observed mid-summer temperatures at Mill Creek stations SWM3 and SWM4; 1983 to 2015**



**Figure 4-3 Summer thermographs for SWM1 and SWM2 for June 1 to August 31, 2015 (data from Stantec 2016).**

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## 5. Fisheries

### 5.1 Methods

Monitoring conducted and reported as part of the fisheries monitoring program includes:

- Fish electrofishing survey and trout population estimates, and
- Trout spawning survey,

#### 5.1.1 Trout Population Survey

The basic survey approach has not changed since the studies began, although the equipment used has changed. In all cases, the basic method is a single pass electrofishing assessment. The stream reaches were not blocked at either end. This method is considered appropriate to estimate trout populations in Southern Ontario streams (Jones and Stockwell 1995). Mark and recapture runs were generally separated by a one-week period. The time to conduct the mark run has been approximately 4-6 hours for each reach. The recapture run time is about 3-5 hours per reach. The shorter time for the recapture run is due to the quicker processing time for fish. The field surveys involved 7-8 staff on each day. Each mark/recapture survey involves three days each; a day for each study reach.

The 2015 mark runs were conducted during the period of August 25 - 27, and the recapture runs were conducted during September 1-3, inclusive. A description of electrofishing effort, weather conditions, conductivity, survey dates and times, and fin clip location is provided in Technical Appendix C.

#### 5.1.2 Redd Surveys

The 2015 survey was conducted on December 8<sup>th</sup>. The location of each redd was identified by experienced fisheries biologists, who are familiar with the study area. All redds were mapped on large-scale maps and compared to historical data.

## 5.2 Fisheries Results

### 5.2.1 Trout Population Surveys

#### ***Brown Trout***

Brown trout population estimates for young of the year (YOY) and adult (age 1+ and older) fish from 1989 to 2015 are summarized in Figures 5-1 to 5-3 for the University of Guelph, Hanlon Bypass and Bond Tract (reference) reaches, respectively. For the purpose of this report, all fish aged 1+ or greater are considered adults. Fish surveys were not conducted in 1996, 2002, 2008, 2012 or 2014 for reasons as described in Technical Appendix C.

### **University of Guelph Reach**

During the initial mark run a total of 277 brown trout (121 adult and 156 young of the year (YOY)) were captured and marked (fin-clipped).

During the second recapture run a total of 280 brown trout were captured (108 adults and 172 YOY). Of these, 69 were recaptured fish (54 adult, 15 YOY) providing a high degree (24.9%) of recaptured fish from the mark run. The relative proportion of adult (39-44%) and YOY (56-61%) remained very similar between the mark and recapture events which provides further confidence in the numbers and survey technique. In 2015, the YOY and adult combined recapture rate for this reach was almost 24.9% (Technical Appendix C).

The data gathered from the mark and recapture surveys were then used to estimate trout population numbers which are expressed as the number of fish per ha (Figure 5-1).

The estimated number of YOY trout declined from almost 3,000 fish/ha in 2011 to 1457 fish/ha in 2013, but rebounded to 4,517 per ha in 2015 (Figure 5-1A). This fluctuation may be due to real population changes as well as a function of survey efficiency related to fluctuating recapture rates (see Technical App C for further explanation). The changes in YOY density may also be a function of the spawning activity (number of redds) observed in the preceding year (see Section 5.2.3 below).

The number of adults per hectare (611 fish/ha) remained well within historic ranges but was lower than the previous 5 surveys (Figure 5-1B). The recapture rate greatly influences the formulae that estimates fish population density (fish/ha). As the proportion of recaptures increases the estimated fish density decreases. Having a high proportion of recaptures increases confidence in the population estimate but does tend to skew the estimates downward.

### **Hanlon By-Pass Reach**

The estimated number of fish for YOY (892 fish/ha) is lower than recent years but within the range observed since 2005, as was the estimate for adults (163 fish/ha). (Figure 5-2).

A total of 220 Brown Trout were captured during the mark run comprised of 88 adults and 132 YOY. During the recapture run, 212 Brown Trout were captured (89 adults and 123 YOY). Of the 220 Brown Trout marked, 93 were recaptured (60 adult, 33 YOY). The combined recapture rate in this reach was high at 42.3%. While more fish were captured in 2015 than in 2013, the high recapture rate lowers the population estimate.

Due to physical habitat limitations, the number of trout has been consistently lower in the Hanlon reach compared with the University of Guelph reach, which has approximately four times more trout per hectare. This continued to be the case in 2015.

### **Bond Tract Reach**

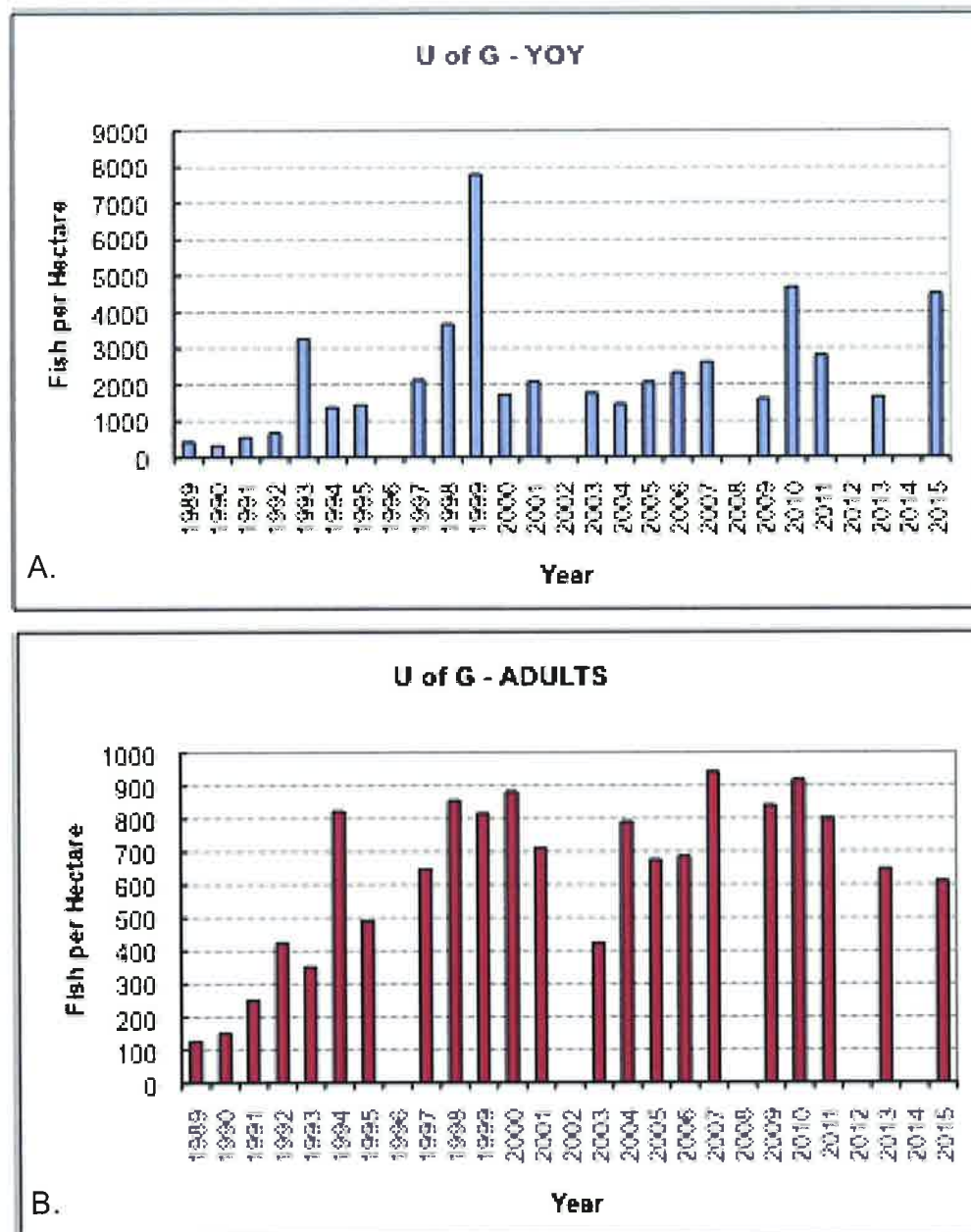
The Bond Tract is located several kilometres downstream of the Mill Creek aggregate operation and is used as a reference area for the Hanlon and University reaches despite significant differences in physical habitat between it and the Study Area.

In 2015, thirteen YOY were captured and marked during the mark run and 3 YOY were captured during the recapture run, one of which was a recapture.



This year 39 adult brown trout were captured on the mark run and a total of 29 adults were caught on the recapture run. Of these 29 adults, 10 were recaptured fish representing a recapture rate of 26%. The estimated number of adult trout per hectare is 220 fish/ha which is in keeping with past years. Note that the recapture rate of brown trout in 2009 was very low (only 5.6%) which skewed the population estimate upward despite the fact that the actual number of fish caught was relatively low (Figure 5-3).

The Bond Tract continues to provide a poor reference site for the University and Hanlon reaches due to the different nature of the habitat. The Bond Tract is much deeper and contains little or no spawning and nursery habitat like the other stream reaches.



**Figure 5-1 Brown trout population estimates in the University of Guelph station.**

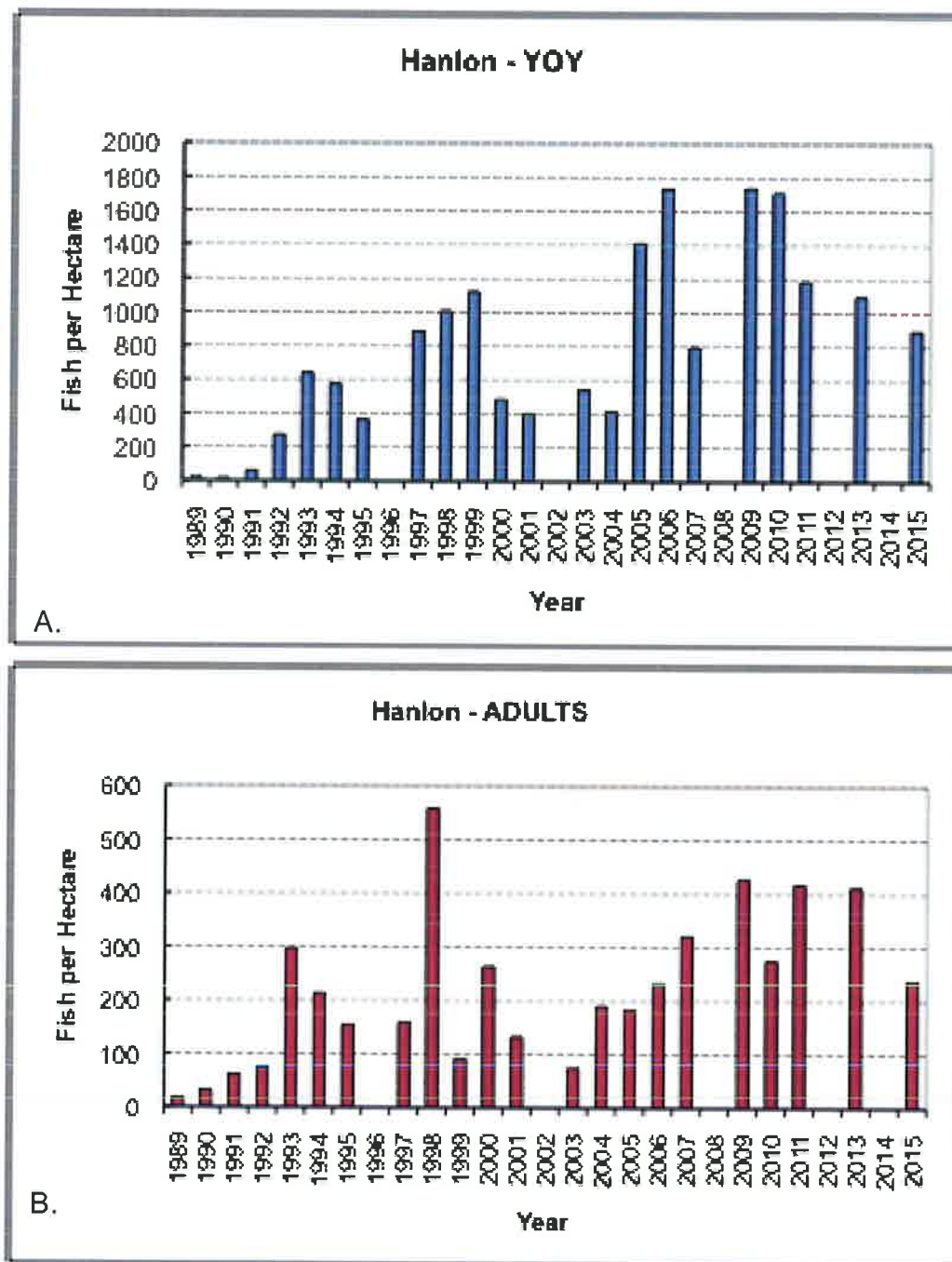
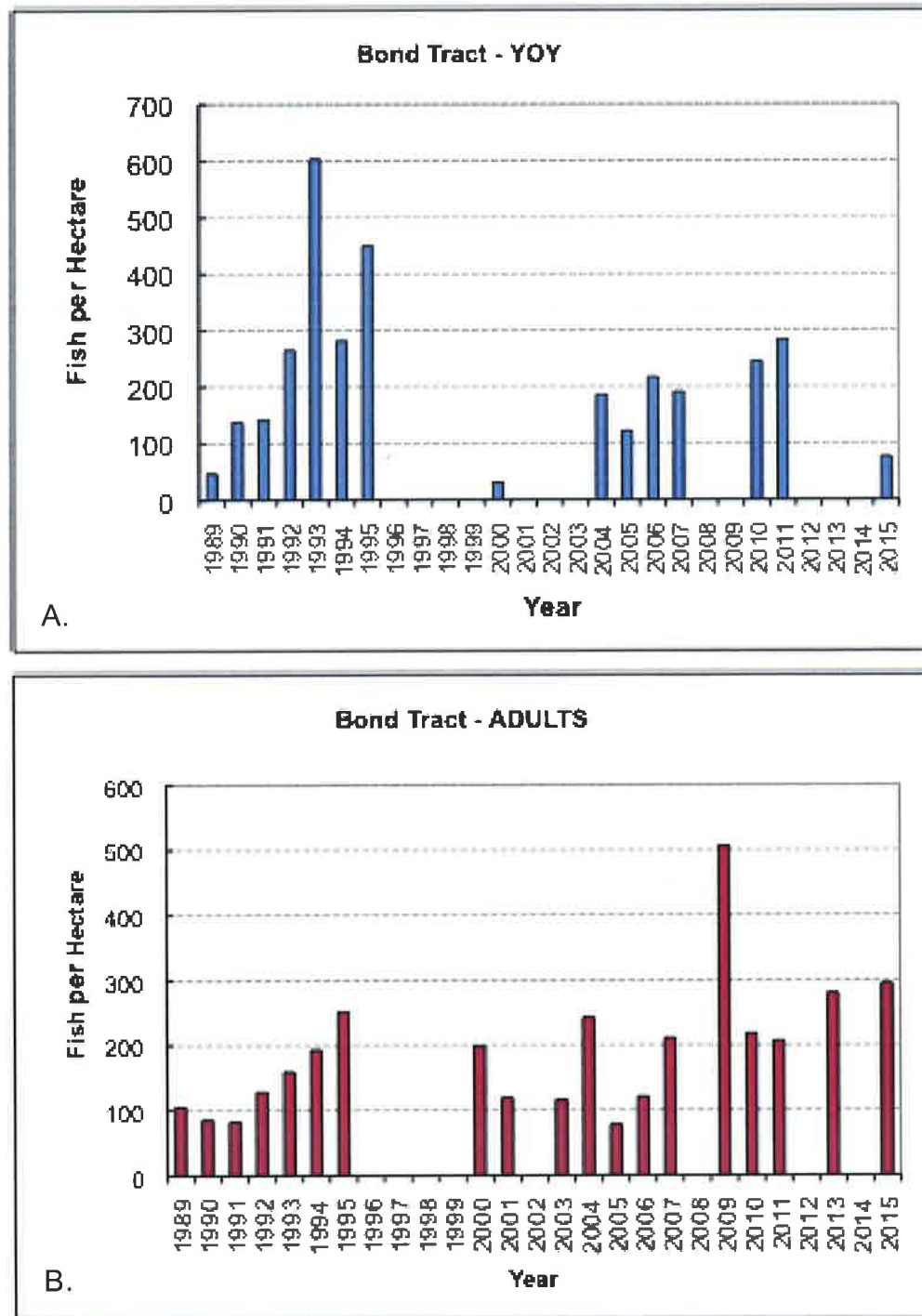


Figure 5-2 Brown trout population estimates in the Hanlon By-Pass station.



**Figure 5-3 Brown trout population estimates in the Bond Tract.**

### ***Post Versus Pre-extraction Population Estimates***

The number of YOY and adult brown trout are higher throughout the study area since extraction began compared to pre-operational (before 1995) population estimates. A statistical analysis of brown trout populations in the University of Guelph and Hanlon reaches was performed to compare population size prior to extraction below the water table to the population after extraction below the water table. Both young of the year (YOY) and adult (age 1+) populations in each reach were considered. The available database was divided into pre-operational (1989-94) and post-operational (1995-2013) periods. Although topsoil stripping began in 1993, extraction below the water table began in the spring of 1995. Therefore, 1995 was considered as the starting timeframe for evaluation of potential effects of extraction below the water table on fisheries' resources in the area.

Adult and YOY populations were significantly greater in the University of Guelph Reach during post-operational years (Table 5.1). The average number of adult fish (age 1+) increased from approximately 354 per ha during the pre-operational period to 733 per ha during the post-operational period. The average number of YOY also increased significantly during post-operational period (2758 per ha) compared with the pre-operational numbers (1104 per ha).

Similarly, the number of YOY in the Hanlon By-pass increased significantly ( $P < 0.05$ ) from an average of 264 individuals per ha to 987 individuals per ha (Table 5.1). Adult populations also increased significantly ( $P < 0.05$ ) between periods in this reach.

This analysis indicates there has been no decrease, and in fact, the brown trout population has generally increased since commencement of aggregate extraction below the water table.

**Table 5.1 Statistical Comparison of Brown Trout Population Size in Mill Creek Before and After Aggregate Extraction**

Statistic	Pre-Operational Mean (SE)	Post-Operational Mean (SE)	P Value
<b>University of Guelph</b>			
YOY per ha	1104.0 (457.2)	2757.8 (423.6)	<b>0.0095<sup>a</sup></b>
Age 1+ per ha	354.0 (104.7)	732.6 (37.3)	<b>0.0067<sup>a</sup></b>
<b>Hanlon By-Pass</b>			
YOY per ha	264.3 (115.7)	986.5 (119.9)	<b>0.0003<sup>a</sup></b>
Age 1+ per ha	116.3 (46.0)	257.9 (34.2)	<b>0.0156<sup>a</sup></b>
SE = Standard Error			
<sup>a</sup> Significantly greater during post-operational period at the 0.05 level.			

### **5.2.2 Other Species**

In 2015, 2 adult and 1 YOY brook trout were captured during the mark run survey in the University reach, and 3 adult brook trout were captured in this reach during the recapture run (2 were recaptures), for a total of 3 adult and 1 YOY brook trout.

One adult brook trout was captured in the Hanlon Reach during the mark run, but none were captured during the recapture run.

For the first time one rainbow trout was captured in the Hanlon Reach during the recapture run. This is likely an escapee or was released from stocked gravel pit ponds south of the Mill Creek Pit.

No brook trout were captured in the Bond Tract reach in 2015.

Since 1998 the number of other fish species caught in the study area has been recorded as this provides an indication of general habitat quality and represent possible competition with the trout. During the 2015 survey, 10 non-trout species were observed in the University reach, while 11 non-trout species were captured in the Hanlon reach. This is consistent with previous years.

### **5.2.3 Redd Surveys**

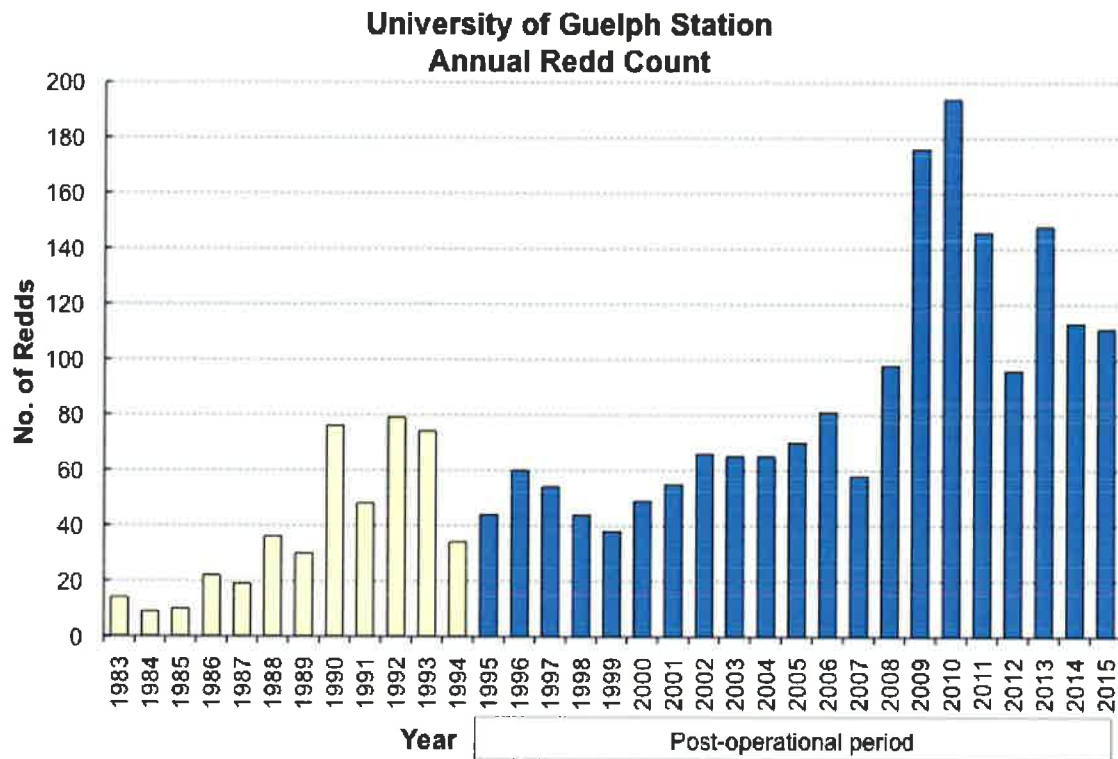
In 2015, the number of redds remained high in both stream reaches. The number of redds in the University of Guelph reach was 111 (Figure 5-4). This is in keeping with the strong redd numbers recorded since 2008. The highest number of redds recorded to date in this reach was 176 in 2009.

The number of redds recorded in the Hanlon reach was 87 (Figure 5-5) and is consistent with the high number of redds observed in recent years.

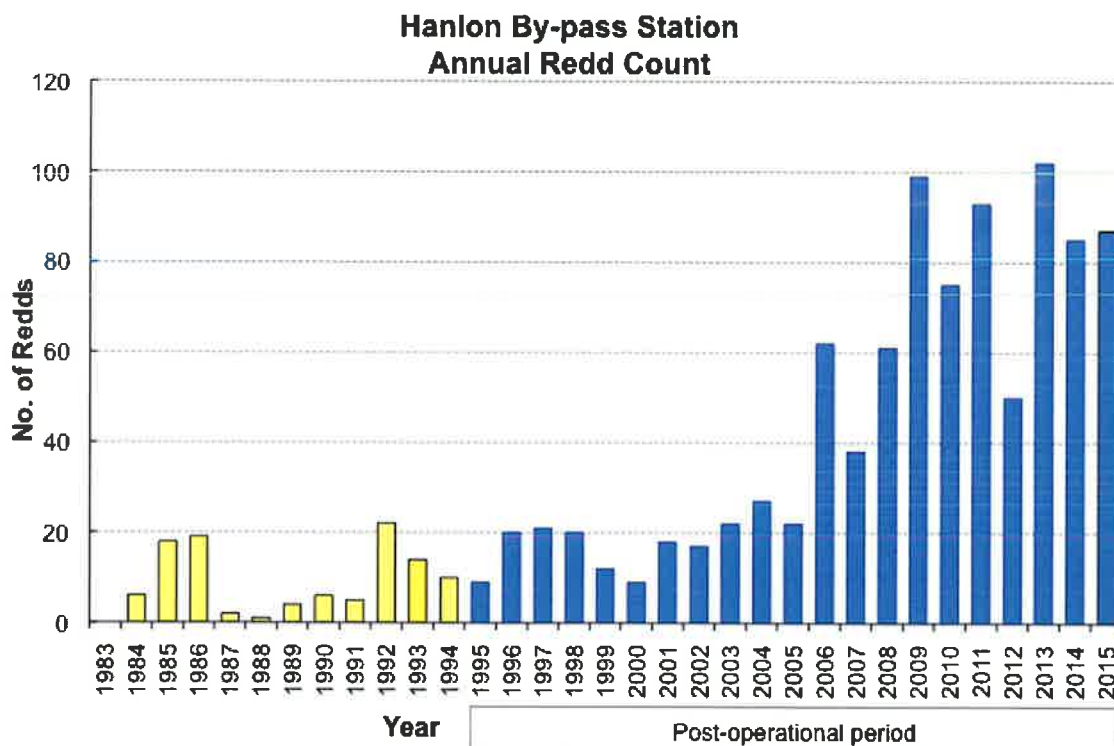
Redd survey dates and results are summarized in Sub-Appendix B of Technical Appendix C.

Due to the nature of the habitat, spawning surveys are not conducted at the Bond Tract Station as a part of this monitoring program.

In summary, the level of trout spawning activity remains high in both reaches of the study area. In the last nine years, the number of redds in the Hanlon reach were the highest they have been since monitoring began in 1983.



**Figure 5-4** Number of brown trout redds in the University of Guelph Station (1983 to 2015)



**Figure 5-5** Number of brown trout redds in the Hanlon By-pass Station (1983 to 2015)

### **5.3 Summary of Fisheries Monitoring**

The fisheries monitoring program again demonstrate that the brown trout population remained healthy in the study area in 2015.

The data indicate that aggregate extraction below the water table (beginning in 1995) has had no measurable impact on the brown trout population. Significant natural fluctuations in population and spawning activity unrelated to aggregate extraction occurred for the period 1983-94 (see Technical Appendix C). The fisheries monitoring program again demonstrate that the brown trout population remained healthy in the study area in 2015. The number of young of the year brown trout which is a direct indication of successful reproduction and recruitment was lower in the Hanlon reach than previous years but within historical ranges.

Spawning activity as indicated by the observed number of redds remained high in both the University and Hanlon reaches in 2015, although it is higher in the University reach due to better habitat conditions. The number of redds present in the stream is a direct measure of successful trout reproduction and use of the available fish habitat.

Higher trout numbers and spawning activity in the University reach compared with the Hanlon reach is directly related to available habitat. Despite recent natural improvements in the productivity of the Hanlon reach, consideration should be given to conducting habitat restoration in the Hanlon reach (particularly the downstream half) to improve habitat conditions and enhance trout productivity.



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## 6. Summary

### *Hydrology and Climate*

Mean monthly air temperatures in 2015 were above the 30 year average for eight months of the year. Water temperature in Mill Creek was highly correlated to air temperature, but within historical norms. Overall precipitation in 2015 was 8% below the 30-year average.

In 2015, the maximum daily average flow at SWM2 was estimated to be 1.687 m<sup>3</sup>/s which occurred on April 10, 2015 (Figure 5). This flow rate coincided with a rainfall of 22.8 mm on April 9 and 25.2 mm on April 10, 2015, along with spring snow melt. Flow at SWM1 during the same peak event was estimated to be 0.984 m<sup>3</sup>/s (Figure 5).

The 7-day low flow period coincided with a period of reduced precipitation from May 23 – May 29; which is earlier than normal as the low flow period generally occurs in July-August.

Stream flow in Mill Creek responded to climatic conditions including precipitation events, and periods of snow melt.

The beaver dam that was constructed in 2014 approximately 70 m downstream of SWM4 was removed in July 2015. Water levels were affected by the impoundment of water but returned to normal conditions when the dam was removed.

Based on the data collected in 2015, there is no indication that aggregate extraction has affected stream flow in Mill Creek.

### *Hydrogeology*

Monitoring results adjacent to the pond in Phase 1 indicate an effect on the pond levels and local groundwater levels resulting from seasonal climatic variation, the pumping of water from the pond for aggregate processing, and the recirculation discharge of clean water from Phase 4 pond in 2015 back into the Phase 1 pond. The pumping of water from Phase 4 pond back to the Phase 1 extraction pond is adjusted to maintain a balance between water taken and water returned, and to maintain water levels within threshold values. As shown in Technical Appendix B (Table E-2 in SubAppendix E), in order to maintain water levels between the threshold values, it was necessary to recirculate a considerably larger volume of clean water (52% more water) back into the Phase 1 pond in 2015 than the volume discharged into silt pond SP3/Phase 4 pond from the processing plant. The presence of the silt barrier between the Phase 3 and Phase 4 ponds helps to sustain a higher pond level in Phase 4 (relative to the Phase 3 pond) which results in the need to recirculate this additional water. These calculations allowed for 5% water loss (water retained in the washed product stockpiles and evaporation loss) during aggregate processing.

There were no exceedances in 2015 of the Action Threshold Values established for the monitoring pairs located adjacent to Mill Creek around the site. Water levels in the Phase 1 pond, Phase 2 pond, Phase 3 pond, and Phase 4 pond did not exceed their respective low-water level threshold values in 2015.

The estimated groundwater contribution from the Mill Creek Aggregates Pit property was higher in 2015 compared to the historic average, and lower than the 2014 value. The lower value is

attributed to the lower than normal precipitation received at the site during the majority of 2015 compared to 2014.

Shallow groundwater temperatures near the Phase 1 and 3 ponds were elevated relative to pre-extraction conditions; however, the groundwater temperature dissipates quickly with distance away from the ponds.

The hydraulic gradients in drive points north of Highway 401 (DP18, DP19, and DP20) displayed upward vertical gradients (discharge) throughout most of 2015, with the exception of downward gradients at DP19 from August to November. These downward gradients likely reflect the lower than normal precipitation received at the site during those months.

Groundwater discharge continues to provide a relatively constant base flow component to Mill Creek, from Highway 401 downstream to Concession Road 2, resulting in a cooling influence on creek temperatures during the warm and dry summer months, and a warming influence during the late fall, winter, and early spring period.

### ***Water Quality and Water Temperature***

Results of the water quality chemical analyses for both surface water and groundwater are generally similar to those reported historically with some fluctuations observed. Some inorganic parameters (i.e. iron) are naturally elevated in groundwater in the region. Chloride and conductivity levels seem to be trending upwards in the surface water which may be a reflection of road salt entering the environment.

Surface water temperatures did not exceed the maximum temperatures tolerable for brook trout or brown trout at any of the stations in 2015.

During the summer months the surface water temperature of Mill Creek declines from SWM1 to SWM2 as it traverses the University property due to a combination of inflow from the two coldwater tributaries, groundwater input and shading from riparian vegetation.

### ***Fisheries***

The 2015 estimated adult brown trout population for the University reach was lower than recent years but within historical ranges, similar to the Hanlon reach.

The next population survey will be undertaken in 2017.

Trout spawning activity as indicated by the observed number of redds remained high in both the University and Hanlon reaches in 2015, although it remained higher in the University reach due to better habitat conditions.

The monitoring data clearly show that brown trout population estimates or spawning activity in the Study Area has not been negatively affected by aggregate extraction activities or altered groundwater patterns, and that redd density has actually increased over the past several years.

The physical habitat (in the Hanlon reach) remains a key factor limiting trout spawning, nursery and adult production. Trout population and spawning data have now been collected for 21 years since extraction below the water table commenced in 1995.

In summary, there has been no consistent reduction in any biological or habitat variable that would suggest that any negative impact has occurred on fisheries production or fisheries habitat. Therefore, Dufferin Aggregates and the University of Guelph continue to be in compliance with Licence Condition #23, which states there must be no "net loss of the productive capacity of fish habitat in Mill Creek or its tributaries."

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## **7. Threshold and Required Actions**

### **7.1 Thresholds**

The action thresholds for the threshold pairs/locations, as proposed in the Monitoring Program, are presented in Table 3.2.

### **7.2 Action Response for Ground Water Threshold Pairs**

#### ***Early Warning Value Exceedance***

Included in Table 3.2 is a summary of the early warning head difference values at each threshold pair. In the event of an exceedance of an early warning value, the following internal response protocol would be followed.

- Verify the water level data at the subject monitor pair within two days.
- If the head difference is confirmed to be less than the early warning value, the monitoring frequency will be increased to twice per week in the general vicinity of the monitoring pair.
- Concurrent with the intensified monitoring frequency, the extraction and processing operations will be reviewed with Dufferin Aggregates to determine if there is an obvious cause for the decline in head difference between the monitors. If such a cause is identified, it will be rectified as quickly as possible.
- Monitoring will continue at the intensified frequency to establish a trend in the water levels, and to determine the cause of the problem (e.g. low stream flow upstream of the threshold pair, high rate of extraction, interruption of pumping cycle, abnormally dry season, etc.), and the degree of impact likely to ensue from an exceedance of the threshold. Groundwater discharge gradient conditions at the drive point monitors will be reviewed as part of the assessment.

In the event that the trend in the water levels indicates that the threshold value could be exceeded, Dufferin Aggregates will prepare and, if necessary, implement mitigation measures to prevent an exceedance of the threshold. Potential mitigation measures include the following.

- Relocation of extraction operations to another phase.
- Recharge injection wells or trench.
- Ground water barrier wall (silt pond extensions).
- Pumping water from one of the on-site ponds to flood a particular area.
- Suspend extraction activities.
- Develop a ground water source in the bedrock aquifer.
- Divert a portion of the peak flows from Mill Creek into the on-site pond(s) to raise water levels. This approach is to be reviewed with agency staff to determine if it is feasible/appropriate.

Some mitigation measures will require approval by MNRF by way of an amendment to the site plans.

MNRF will be contacted prior to the implementation of any additional mitigation measures. The initial results of the mitigation will be documented and submitted to MNRF within one month of implementation. Any additional actions that may be required will be agreed to with MNRF at that time.

#### ***Groundwater Threshold Exceedance***

In the event that mitigation measures are not successful while extraction is occurring, and a threshold is exceeded for more than seven consecutive days, then below water table extraction will cease at that location and not begin again until that threshold shows recovery for seven consecutive days. Dufferin Aggregates will notify MNRF immediately if a threshold has been exceeded for more than seven consecutive days.

### **7.3 Pond Level Thresholds**

Low-water level threshold values and early warning values have been established for the Phase 1, Phase 2, Phase 3, and Phase 4 extraction ponds, as well as silt pond SP3, to ensure that water levels do not become so low that groundwater discharge to Mill Creek would be affected. The threshold values and early warning values are presented in Table 3.2.



## **8. Monitoring Programs and Recommendations**

### ***Surface Water Monitoring***

- Manual flow measurement should continue throughout 2016 to further refine and update existing rating curves, with an effort to sample multiple high flow events so that rating curves better predict flow for a greater range of flow conditions.
- In addition to targeting high flow events for discharge measurement, additional data points are required for the full range of flow conditions at SWM2.

### ***Groundwater Monitoring***

- Groundwater monitoring will continue at the established stations.
- Water management practices should continue to be used to maintain pond levels within threshold values. In 2015, in order to maintain water levels between the threshold values, it was necessary to recirculate a considerably larger volume of clean water (52% higher volume) back into the Phase 1 pond than the volume discharged into silt pond SP3/Phase 4 pond from the processing plant. Given the presence of the silt barrier between the Phase 3 and Phase 4 ponds, similar pumping volumes are expected to be required in 2016 in order to maintain pond levels within threshold values.

### ***Fisheries Monitoring***

- The brown trout population estimate now takes place every other year. Therefore, the electrofishing survey will occur next in 2017 and will continue to be conducted every second year thereafter.
- The annual redd survey will continue annually again in 2016.
- Surface water quality data will continue to be collected once in the fall, as in past years.
- Increased sediment was deposited at the upper end of the University reach, and lower Hanlon reach due to a beaver dam which was removed in July 2015. This increased sediment provides additional rationale to re-visit the need for stream restoration work in the vicinity of the lower Hanlon reach. This reach is unproductive and cannot be surveyed due to the depth of soft sediment.

## **9. References**

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MAR 30 2016

Township of Puslinch

March 29, 2016

Aggregates Technical Specialist, Guelph District  
Ontario Ministry of Natural Resources and Forestry  
1 Stone Road W.  
Guelph, ON  
N1G 4Y2

Attn: Ms. Seana Richardson

CLERK'S DEPARTMENT	
SD	
Case Handle	
Case Information	
Agenda	May 2016

**Re: Mill Creek Property Annual Monitoring Reports**

I am pleased to enclose copies of the annual monitoring reports for the University of Guelph Mill Creek Pit for 2015 in compliance with the conditions of the License.

The report consists of four documents; the summary, called the Coordinated Monitoring Report, and the three technical appendices that describe the results of the three detailed monitoring programs conducted at the site including surface water (Hydrology), ground water (Hydrogeology) and fisheries. We have provided a hard copy of the Coordinated Report only, with the Technical Appendices provided on CD inside the back cover.

In addition, in a letter dated January 25, 2016, the Township of Puslinch requested responses to recommendations from Harden Environmental Services in a letter to the Township dated December 3, 2015. The recommendations (in bold) and our responses are provided below.

- 1. There should be confirmation that the health of the Provincially Significant Wetland is not being compromised by the rising groundwater levels.**

The health of the wetland including plant species, diversity, etc. is monitored and evaluated each year by Dr. Paul Eagles as part of the detailed environmental monitoring program undertaken at the Mill Creek aggregate site. Results of the annual wetland and terrestrial monitoring program are evaluated on an ongoing basis but only reported prior to the beginning of the next extraction as outlined in the monitoring program requirements. To date no significant changes in wetland health have been noted. Any significant changes in wetland health would be brought to the attention of the Ministry of Natural Resources and Forestry (MNR) if observed.

- 2. An analysis should be completed on groundwater temperatures in drive points found with Mill Creek (DP1, DP2, DP5) to determine if there is a statistically significant increase in temperature. If so, it will be necessary to comment on whether or not there is potential to affect the flora and fauna in Mill Creek.**

The groundwater temperatures at the above drive points are analyzed in detail annually and the results are provided in the Coordinated Monitoring Report and in the more detailed Technical Appendix B, the Hydrogeology report. As outlined in the Coordinated Report and the Fisheries Technical Appendix the brown trout population and spawning activity remain healthy in Mill Creek since commencement of aggregate extraction below the water table in 1995.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ron VanOoteghem', with a stylized flourish at the end.

Ron VanOoteghem  
Site Manager

Cc: Maria Topalovic – Dufferin Aggregates  
Philip Wong – University of Guelph  
Karen Landry – Township of Puslinch  
Crystal Allan - Grand River Conservation Authority  
Cindy Mitton-Wilkie - Fisheries and Oceans Canada  
Andy Hims - Hims GeoEnvironmental  
Greg Siiskonen – WSP Group  
Mike Johns/Mitch Ellah - Stantec  
Chris Wren/Lisa Guenther-Wren – LRG Environmental



Harden Environmental Services Ltd.  
4622 Nassagaweya-Puslinch Townline Road  
R.R. 1, Moffat, Ontario, L0P 1J0  
Phone: (519) 826-0099 Fax: (519) 826-9099

Groundwater Studies

Geochemistry

Phase I / II

Regional Flow Studies

Contaminant Investigations

OMB Hearings

Water Quality Sampling

Monitoring

Groundwater Protection  
Studies

Groundwater Modeling

Groundwater Mapping

Permits to Take Water

Environmental Compliance  
Approvals

Our File: 0004

May 26, 2016

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON, N1H 6H9

Attention: Ms. Karen Landry  
CAO

Dear Ms. Landry;

**Re: Mill Creek Pit  
Review of 2015 Monitoring Data**

We are pleased to provide a review of the 2015 groundwater monitoring report prepared by WSP Canada Inc. dated March 2016.

### **1) Pumping**

It is mentioned that a significantly greater volume of water was pumped from Silt Pond 4 back to the Phase 1 pond. This is done to maintain water levels within threshold limits since the Phase 1 pond is the source of water for the wash operation. **We would like it confirmed that in the absence of any pumping, water levels in the Phase 1 pond would likely be above the threshold elevation.**

### **2) Groundwater Elevations**

Groundwater elevations in the area west of the Phase 3 pond were notably lower in 2015. The water levels have been rising as a response to the development of the Phase 3 pond since 2012. Drier conditions throughout 2015 resulted in returning water levels to those observed in early 2013. In general we do not have any concerns with the observed water levels.

### **3) Groundwater Temperatures**

There is an identified thermal impact on groundwater temperatures downgradient of both Phase 1 and Phase 3 ponds. Mill Creek is located within 100 metres of the Phase 3 pond and thermal plumes from gravel

pit ponds are known to persist for greater than 100 metres. Two monitors are located approximately half-way between Mill Creek and the Phase 3 pond and the measured temperatures are not indicative of a significant thermal impact to the shallow groundwater.

**The replacement data logger in 92-33 is measuring lower temperatures than the former logger. Is there an explanation for this shift since 2012?**

In our review of the 2014 monitoring report we requested that a statistical analysis be conducted on groundwater temperatures measured in drive points located within and beside Mill Creek. This analysis was provided on Figure B103. A subtle increase in the 100-day moving groundwater temperature average is observed in each drive point including DP18 located several hundred metres upstream of this site. There is no indication that the pit activities are having an impact on the temperature of groundwater discharging to Mill Creek.

#### **4) Groundwater Discharge to Mill Creek**

The volume of groundwater discharge to Mill Creek has, in general, been improving since 2002. The upward hydraulic gradient at DP2 for example, suggests significantly more groundwater discharge to Mill Creek since 2008 and at DP5 since 2012.

At DP19 there was reversal in groundwater flow in 2015. Similar conditions were observed 1998 to 2004. There is no obvious explanation for this reversal considering that the water level in the Phase 1 pond is above its threshold and there is no extraction occurring in Heritage Lake. All contributing factors should be evaluated if this condition persists in 2016.

#### **Summary**

In summary, we are satisfied with the groundwater and surface water conditions within and adjacent to Mill Creek Aggregates Pit. The Phase 3 pond (located nearest Mill Creek) has been developed to its fullest extent and therefore the greatest thermal and hydraulic potential impacts from the licensed area will have been occurring since 2013. There is no obvious thermal impact on groundwater midway to Mill Creek. Groundwater discharge to Mill Creek has increased downgradient of the site and is generally occurring at pre-development rates elsewhere. The one notable location of decreased recharge occurring in 2015 is DP19 located between this site and Heritage Lake.

May 26, 2016  
Page 3

Sincerely,

Harden Environmental Services Ltd.

A handwritten signature in black ink, appearing to be 'SD' followed by a long horizontal line.

Stan Denhoed, P.Eng., M.Sc.  
Senior Hydrogeologist





# Harden Environmental

4622 Nassagaweya-Puslinch Townline R.R. 1 Moffat Ontario Canada L0P 1J0  
Phone: 519.826.0099 fax: 519.826.9099 www.hardenv.com

Groundwater Studies  
Geochemistry  
Phase I / II  
Regional Flow Studies  
Contaminant Investigations  
OMB Hearings  
Water Quality Sampling  
Monitoring  
Groundwater Protection  
Studies  
Groundwater Modelling  
Groundwater Mapping

Our File: 0521

June 7, 2016

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON, N1H 6H9

Attention: Karen Landry  
CAO

Dear Mrs. Landry:

**Regarding: Temperature Changes in Groundwater and Surface  
Water, CBM, Roszell Road Pit**

Extractive activities at the Roszell Road Pit are causing a thermal impact to groundwater and surface water as evident in monitoring data provided by the operator CBM Aggregates. Recent correspondence regarding this issue in the form of a Harden Environmental letter (May 2, 2016) reviewing the Site 2015 Groundwater Monitoring Report and a memo response (May 16, 2016) from Groundwater Science Corp. are provided in Appendix A.

The May 16, 2016 memo from Groundwater Science Corp. raises some issues in regards to the interpretation of the timing and location of below-water-table extraction, interpretation of the natural range of groundwater temperatures and the interpretation of initiation of mitigation.

**Below-Water-Table Extraction**

In 2009 the Township and Preston Sand and Gravel participated in a process to resolve outstanding groundwater issues related to the proposed Roszell Pit. This was a formal process as part of OMB Hearing PL090122. I have attached the Statement of Agreed Facts arising from the process (Appendix B). The statement was signed by Stan Denhoed, Andrew Pentney and Ray Blackport. This statement affirms the importance that the Township placed on minimizing the impact to temperature of groundwater discharging to nearby cold water

fisheries.

Two references to below water table extraction relative to the western license boundary are copied below.

3. *As noted in the Hydrogeologic Recommendations, no below water table extraction should occur within 120 m of the west licence boundary, as shown on the Operational Phasing Plan, until the thermal monitoring program recommendations regarding final setback distances are approved by MNR in consultation with other agencies*

It was confirmed that the thermal monitoring program recommendations would need to meet the approval of MNR, in consultation with other agencies, before any below water table extraction could occur within the 120 m setback.

I have reviewed the Township of Puslinch files and confirm that there has not been consultation with the Township in this regard. According to the Ministry of Natural Resources and Forestry, no thermal study has been completed or reviewed. Therefore, below-water-table extraction cannot occur within 120 metres of the western license boundary.

The May 16, 2016 GSC letter states that below water table extraction commenced in 2014 and shows this to occur in the area outside of the 120 m setback. It is our opinion that in contravention to the site plan, below-water-table extraction has occurred in Part A of the phased operation within 120 metres of the western property line prior to 2014. Our opinion is based on the following:

- 1) The site plans (page 4 of 6) stipulate that Part A (Figure 1) is to have a pit floor minimum elevation of  $\pm 299$  m AMSL. The Compliance Assessment Report (CAR) for 2013 records that the lowest floor elevation is  $\pm 296$  m AMSL.
- 2) The Google Earth images for November 7 2012, January 20 2013, September 4 2013 and September 27 2013 (Figures 2 to 5) show the presence of water in the extraction area of Area A within 120 metres of the west licence boundary.
- 3) The water table as measured in BH7S (location shown on Figure 6) has an elevation of approximately 297 m AMSL in November 2012, 296.8 in January 2013 and 296.7 in September 2013. This would suggest that the lowest floor elevation of approximately 296 would be below the water table and result in standing water in Part A in 2012 and 2013. Ground water levels were very low during the summer of 2012 and this below water table extraction may have been inadvertent, however, impacts to groundwater temperatures appear to have occurred.

Area A is directly upgradient of surface water station SW6 and given the time line of extraction commencing in the summer/fall of 2012 and the thermal impact commencing late 2012/early 2013 it is reasonable to assume that the observed temperature change at SW6 is caused by the extractive activity including extraction below the water table.

The 2015 air photo (Figure 7) shows that the area extracted below the water table within 120 metres of the west licence boundary has been filled in. This is reflected in lower temperatures recorded at SW6. Nonetheless, the range of temperatures in 2014 was 6.8 to 11°C and in 2015 was 8 to 12°C. It is our interpretation that since 2013, the temperatures at SW6 represent a breach in the threshold and mitigative measures need to be enacted.

### **Natural Range of Temperatures**

There are seven years of background temperature monitoring data collected between 2005 and 2012. The natural range of temperatures at SW6 is 7.9 to 9.7°C (Figure 8). In 2013 the range increased to 5.8 to 12.6°C. The suggestion made in the Groundwater Science Corp. memo that the 2013 data represents background conditions is not supported by the seven years of monitoring data prior to 2012. The only change that occurred in 2013 to cause the temperature variation is the stripping of soil and excavation of overburden. This allows solar energy and cold atmospheric temperatures to conduct through the unsaturated zone and/or to directly affect temperatures of groundwater as exposed in the excavation shown on the accompanying figures for November 2012 and January 2013. On behalf of the Township of Puslinch we reject the suggestion that the increased temperatures in 2013 represent natural background conditions. It is clear to us that the 2013 data of elevated temperatures at SW6 is caused by extractive activities, including below water table activities and cannot be construed as the 'new normal' for operations going forward.

### **Initiation of Mitigative Measures**

The license condition agreed to by the licensee, the MNRF and the Township of Puslinch is that a 1°C change in temperature is required to initiate additional investigation and/or mitigation measures. The 1°C trigger is a recommendation from the original hydrogeology study in support of the pit application. We understand that some additional monitoring has taken place and that an ecologist has been retained to further evaluate the increase in temperature and impact on aquatic life. We support this measure, however, there has been a reduction in redds already recorded in Tributary 7 and the ecologist's 2015 report implicates water temperature to a delay in spawning in late 2016. Therefore it seems prudent to move to the next step.

It is our opinion that discussions with the MNRF, The Township of Puslinch and CBM are warranted to discuss the compliance issues as well as mitigation, if necessary to prevent further thermal impact to adjacent streams.

Sincerely,  
Harden Environmental Services Ltd.



Stan Denhoed, M.Sc., P.Eng.  
Senior Hydrogeologist

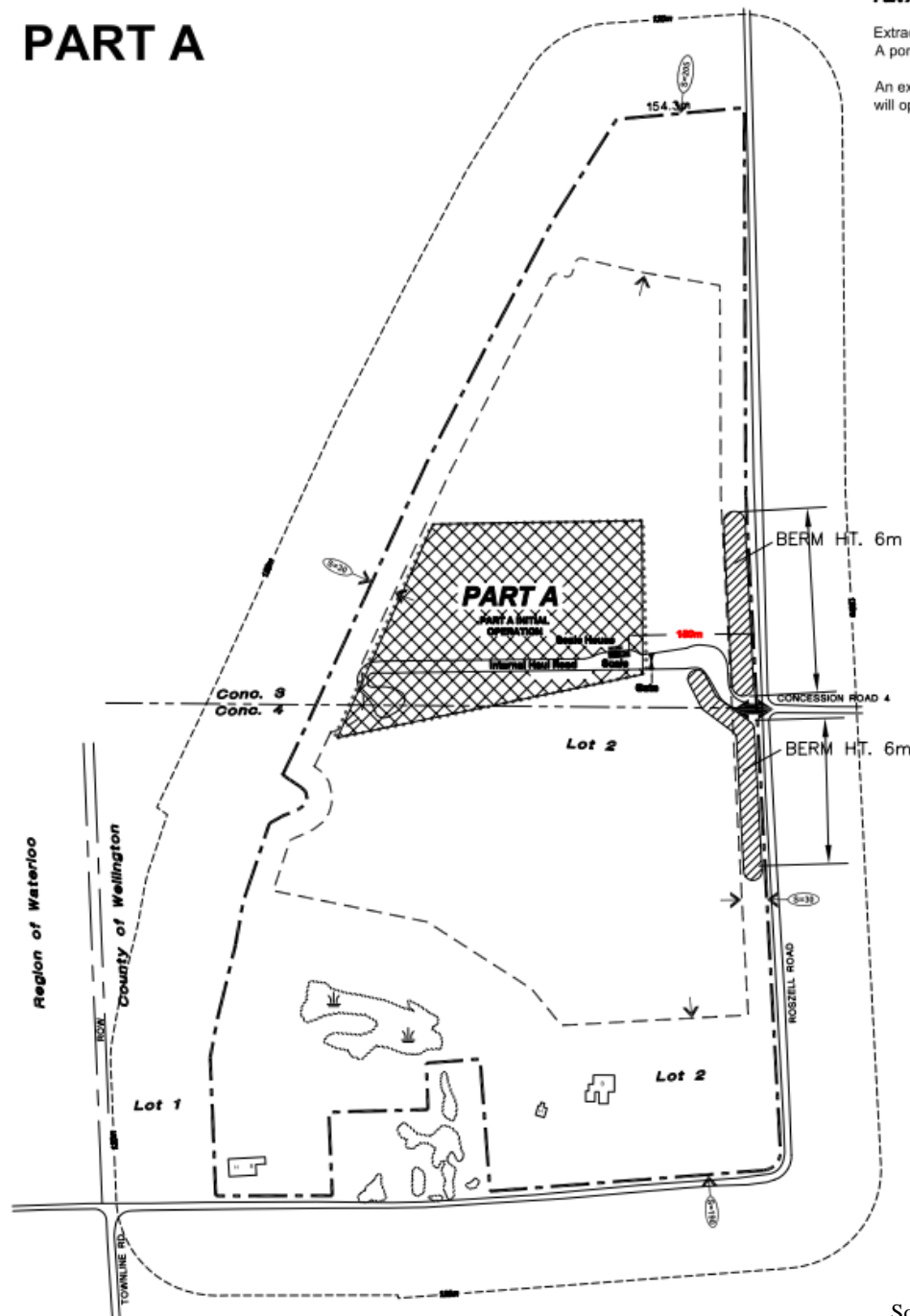


# PART A

## Part A - Initial Operation

Extraction will commence on the east side of the Part A lands and proceed to the westerly direction with a nominal pit floor at an elevation of 299m. A portable processing plant, crushing and screening, will operate near the working face and travel with it.

An extraction loader will operate at the working face. It will be used for extraction and used to supply the portable processing plant. A second loader will operate in and around the processing plant. This second loader will also be used to load highway trucks, for haulage off site.



Source: Site Plans Page 4 of 6 Operational Phasing and Acoustic Recommendations (December 10, 2009)



Harden  
Environmental  
Services Ltd.

Project No: 0521

Date: May 2016

Drawn By: AR

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

**Figure 1: Operational Phasing Part A**





Harden  
Environmental  
Services Ltd.

Project No: 0521

Date: May 2016

Drawn By: AR

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

**Figure 2: Imagery November 7, 2012**





Harden  
Environmental  
Services Ltd.

Project No: 0521

Date: May 2016

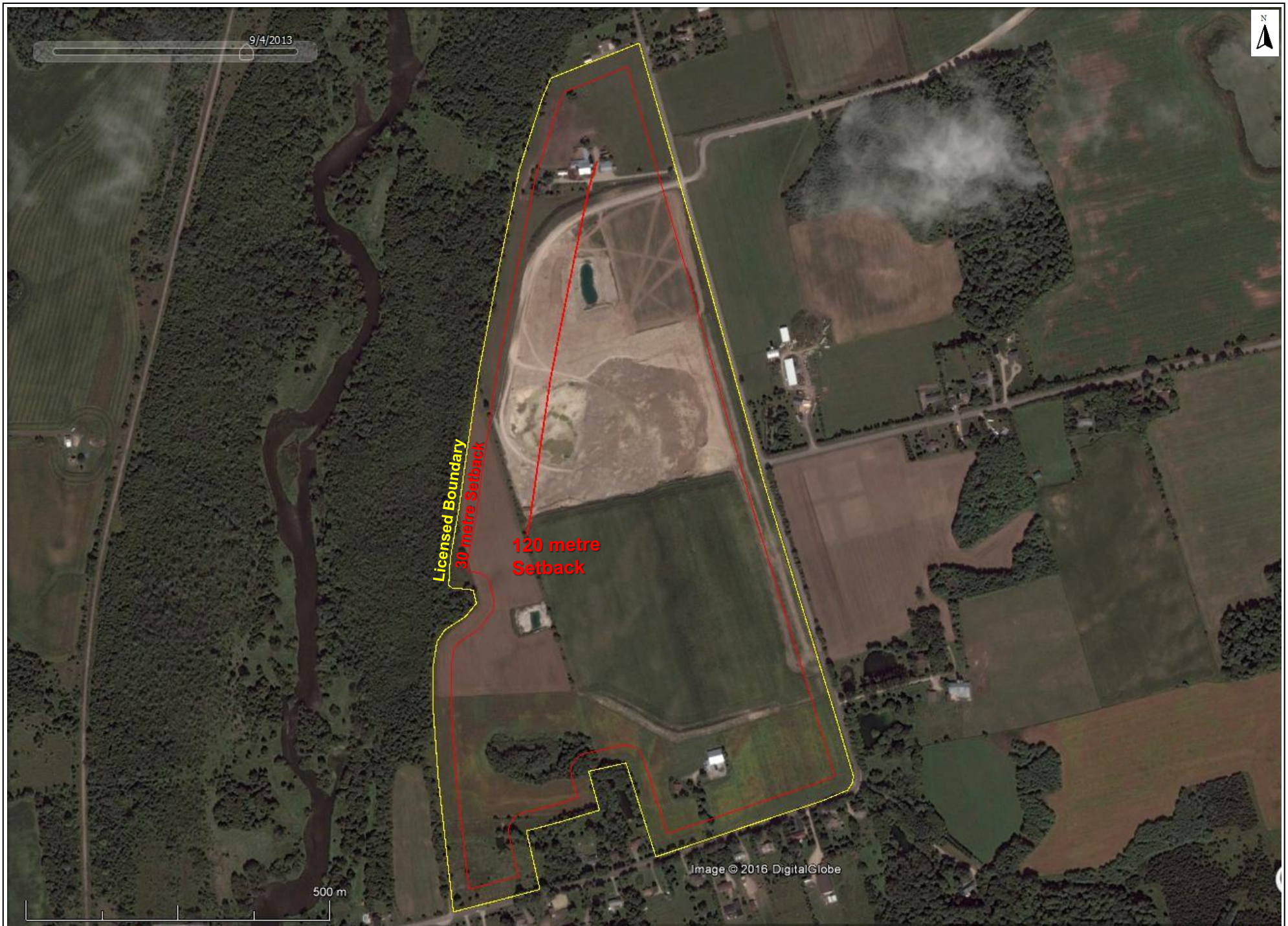
Drawn By: AR

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

**Figure 3: Imagery January 20, 2013**





Harden  
Environmental  
Services Ltd.

Project No: 0521

Date: May 2016

Drawn By: AR

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

**Figure 4: Imagery September 4, 2013**





Harden  
Environmental  
Services Ltd.

Project No: 0521

Date: May 2016

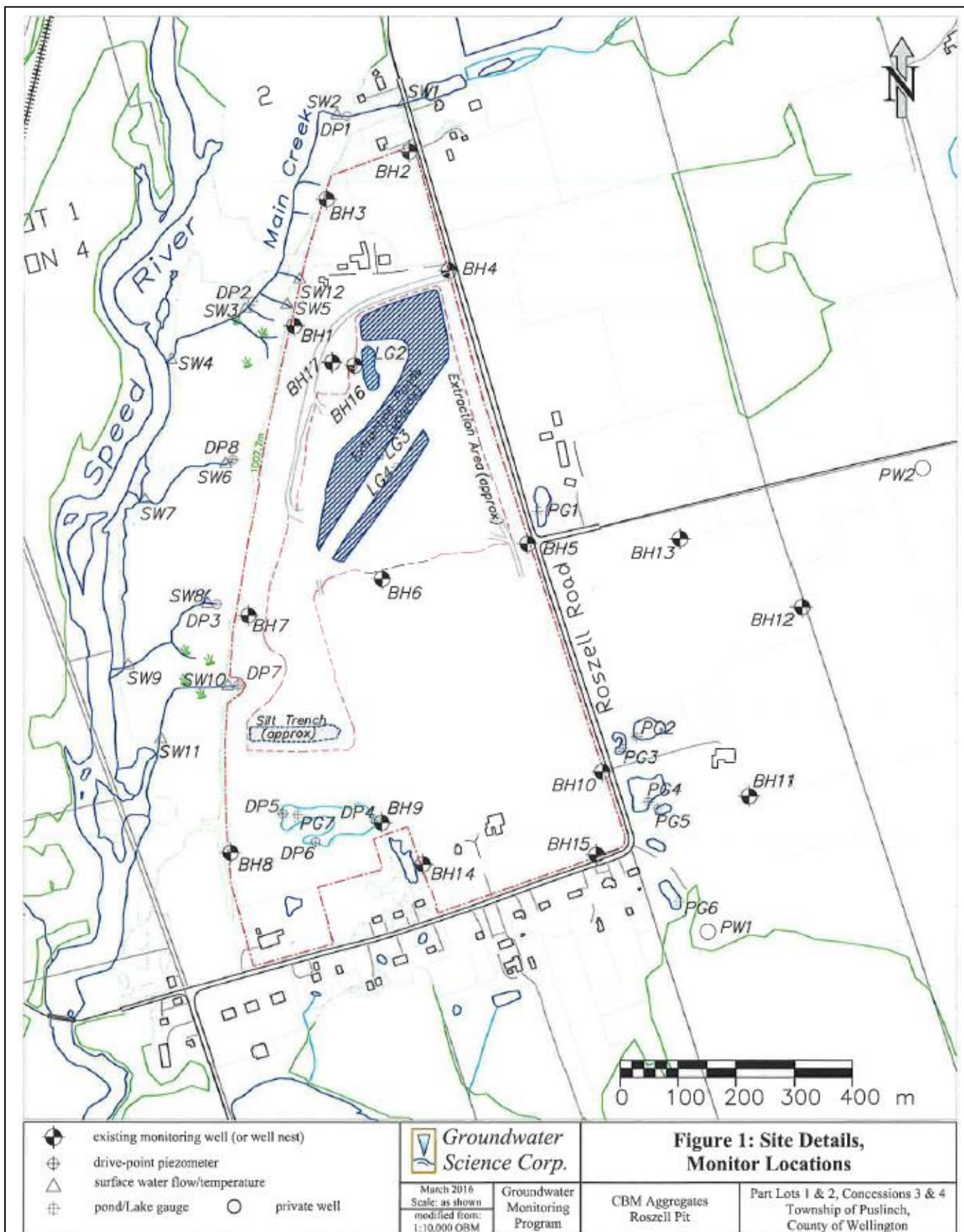
Drawn By: AR

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

Figure 5: Imagery September 27, 2013





**Harden  
Environmental  
Services  
Ltd.**

**Project No:** 0521

**Date:** May 2016

**Drawn By:** GSC

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

**Figure 6:**

**Monitor Locations**



Aerial Imagery Source: County of Wellington



**Harden  
Environmental  
Services Ltd.**

**Project No:** 0521

**Date:** May 2016

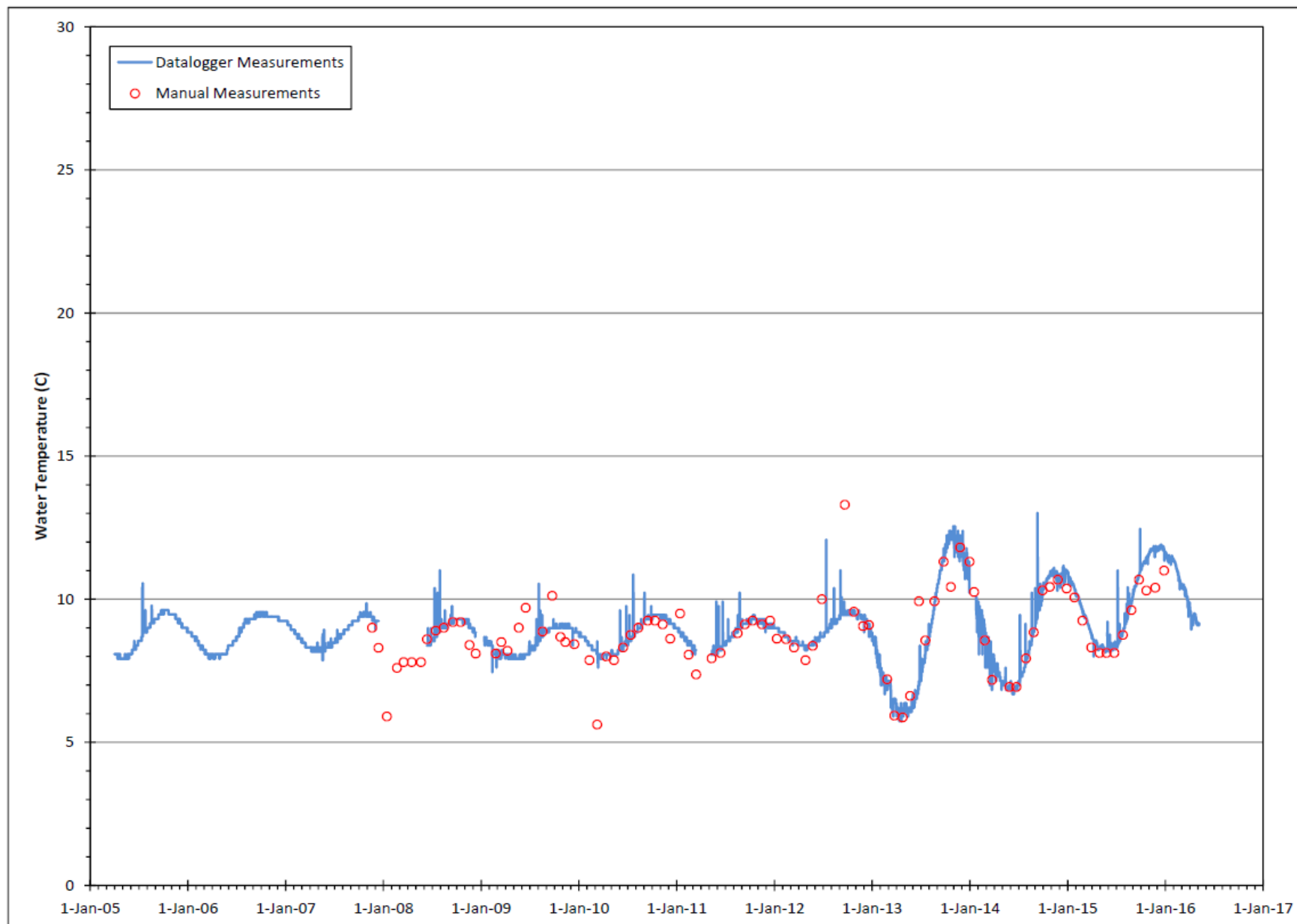
**Drawn By:** AR

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

**Figure 7: Imagery 2015**





CBM Aggregates  
Roszell Road Pit

**SW6 Temperature Plot**  
update May 16, 2016

Groundwater Science Corp.  
Monitoring Program



**Harden**  
Environmental  
Services Ltd.

**Project No:** 0521

**Date:** May 2016

**Drawn By:** GSC

Roszell Road Pit

Concessions 3 and 4 Part Lots 1, 2 and 3  
Township Puslinch, County of Wellington

**Figure 8: SW6 Temperature Data**

# Appendix A

2015 Groundwater Monitoring Report Review  
Harden Environmental Services Ltd. May 2, 2016

Temperature Monitoring Memo  
Groundwater Science Corp. May 16, 2016





# Harden Environmental

4622 Nassagaweya-Puslinch Townline R.R. 1 Moffat Ontario Canada L0P 1J0  
Phone: 519.826.0099 fax: 519.826.9099 www.hardenv.com

Groundwater Studies  
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Regional Flow Studies  
Contaminant Investigations  
OMB Hearings  
Water Quality Sampling  
Monitoring  
Groundwater Protection  
Studies  
Groundwater Modelling  
Groundwater Mapping

Our File: 0521

May 2, 2016

Township of Puslinch  
7404 Wellington Road 34  
Guelph, ON, N1H 6H9

Attention: Karen Landry  
CAO

Dear Mrs. Landry:

**Regarding: 2015 Groundwater Monitoring Report, CBM, Roszell Road Pit**

We have conducted a review of the 2015 Groundwater Monitoring Report for the Roszell Pit operated by Canadian Building Materials (CBM). There is a distinct temperature change observed in groundwater discharging to three streams. It is our opinion the temperature change is caused by land use changes resulting from the extractive operations. It is also our opinion that the temperature change exceeds the threshold of the allowable 1° C change. The impact that the temperature change has on the overall stream temperature and the trout habitat has not been fully explored, however, the ecological survey conducted by Dance Environmental Inc. found that there were fewer trout spawning beds (redds) in Tributary 7 in 2015/2016 than in previous years. Dance had to return to complete the spawning survey due to uncharacteristically warm weather in December 2105. On review of the amended Dance report, GWS Ecological And Forestry Services comments as follows; “*however, there appears to be a decline in spawning activity in Tributary #7 from 2012 to 2016 ( i.e. 5 redds in 2012 + 2013 to 2 redds in 2016). This tributary has more potential to be impacted by aggregate extraction than the Main Creek.*”

## Groundwater Levels

We have compared the hydrographs of the Roszell Road monitoring wells with those of the Puslinch Groundwater Monitoring Network and two other licensed pits on Puslinch Township (Neubauer and Mill Creek Aggregates). We observe that groundwater elevations in these examples are low in 2012 and the 2015 seasonal low is somewhat above that 2012 value. In comparison, there are several wells at the Roszell Site that have historical lows in 2015 including BH4, BH5, BH6, BH10, DP5, BH16 and BH1. This groundwater basin may behave different during droughty conditions than others and the observation of these lows may not be related to the aggregate extraction. However, extraction did occur during the same time period as the water level decline and as noted by Groundwater Science, may have influenced water levels. There have not been any groundwater elevation threshold exceedences in 2015.

## Groundwater Temperatures

The impact on groundwater temperatures is difficult to interpret as thermographs are not prepared. It also remains our opinion that temperature monitoring in the open hole introduces a high degree of uncertainty to the accuracy of the data. The temperature measurements in BH16, located closest to the Test Pond have the greatest range (2.6 °C – 19.5 °C) for all groundwater stations reported. This is the best indicator of thermal changes to groundwater downgradient of a body of open water.

## Surface Water Temperatures

Three surface water stations are exhibiting increased temperatures. The graphs for stations SW6, SW8 and SW12 have been attached and upon inspection it can be readily recognized that a change in temperature range has occurred.

Surface Water Station	Month of Maximum Temp	Month of Minimum Temp	Pre Extraction Range (° C)	Post Extraction Range (° C)
SW6	October	April	8 – 9.5	6 -13
SW8	January	July	8.5 – 9.5	8.5 – 11
SW12	September	April	7.5 – 10.5	6.2 -12

Note: Dates and temperatures are estimated from graphs.



The locations of the surface water stations relative to pit activities are shown on Figure 1. The minimum and maximum temperatures at these stations do not coincide with minimum and maximum air temperatures which generally occur in July/August and January/February. The temperatures therefore are reflective of other thermal processes upgradient of the monitoring station. This is likely a response to thermal convection through the unsaturated zone somewhat upgradient of the monitoring station. Given the timing offset, the heating and cooling cycle is likely a response to conductive heating and cooling occurring on the plateau above the monitoring station.

The observed increase in temperature range indicates greater exposure to atmospheric temperatures and/or solar radiation. This exposure will occur where the water table is either in direct contact with atmospheric temperatures or when the unsaturated zone thickness is decreased. Both of these conditions have occurred at the site.

The threshold for the initiation of mitigation is a 1°C increase as measured any of the following stations: SW5, SW6, SW8 and SW10 (Blackport Hydrogeology 2009, Groundwater Monitoring Program, Roszell Pit, Preston Sand and Gravel Ltd.). The data presented clearly shows a thermal impact of at least 1°C at station SW6 and potentially at SW8.

The Ecological and Aquatic Monitoring Report prepared by Dance Environmental Inc. (2015) did not find redds in Tributary 7 in the fall of 2015. This is not consistent with previous years and was attributed to warmer atmospheric temperatures in December 2015. A return to Tributary 7 by Dance Environmental in January 2016 yielded 2 redds, down from five observed in both 2012 and 2014.

## **Summary**

The groundwater levels in several groundwater monitors were lower in 2015 than observed historically. Although below-water-table extraction commenced in 2015 the distribution of the observed low water levels (occurring upgradient, downgradient and cross gradient to the pit ponds) does not readily point to extractive activities as having a significant role, but cannot be discounted entirely.

Surface water temperatures at three surface water stations are exhibiting a temperature increase that is likely caused by the pit activities. The increased range in temperature exceeds that allowable by the approved thresholds. The Ministry of Natural Resources and Forestry should be made aware that this has been noted by the Township and discussions regarding the implication and potential mitigation should be initiated.

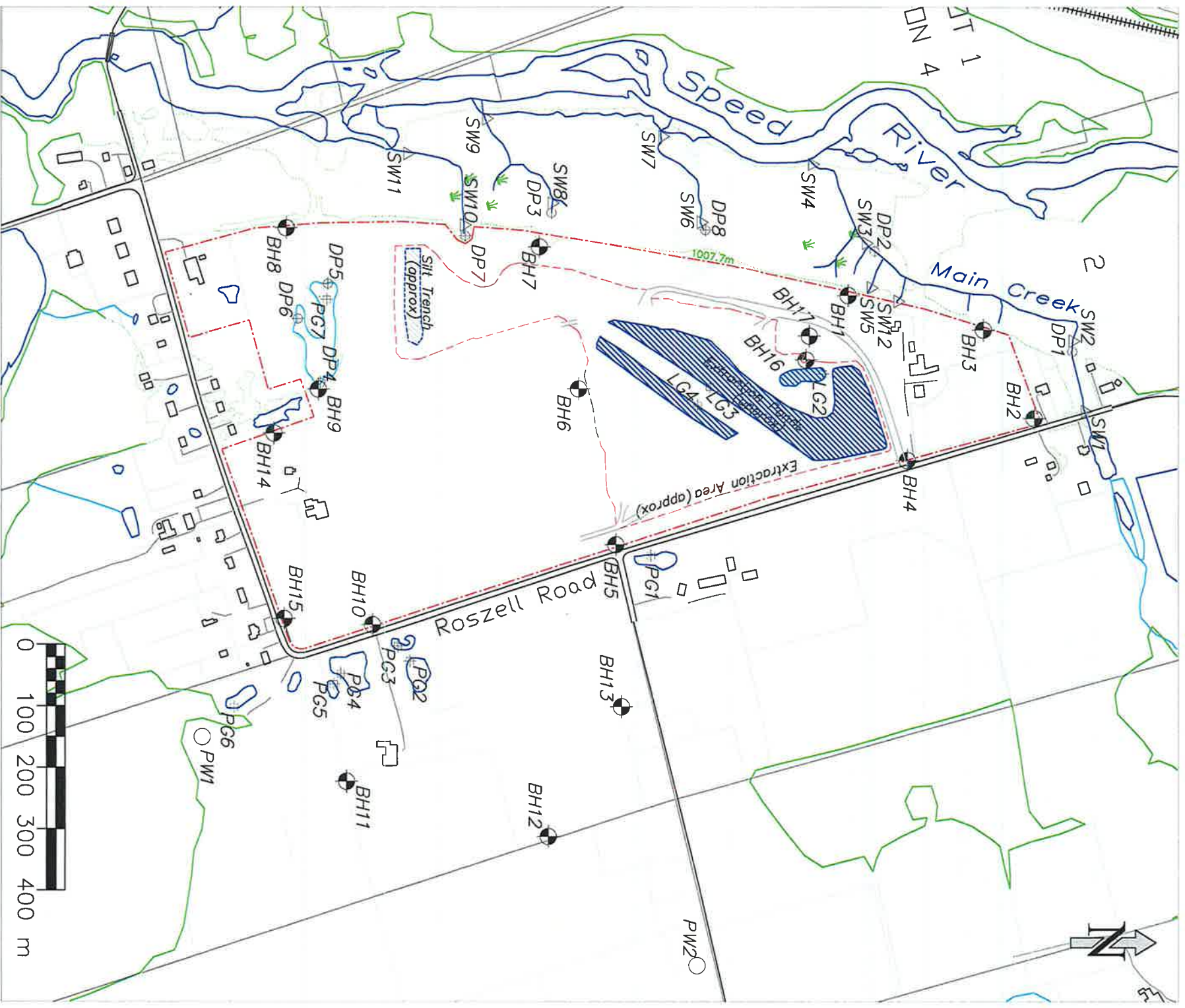
Sincerely,

Harden Environmental Services Ltd.



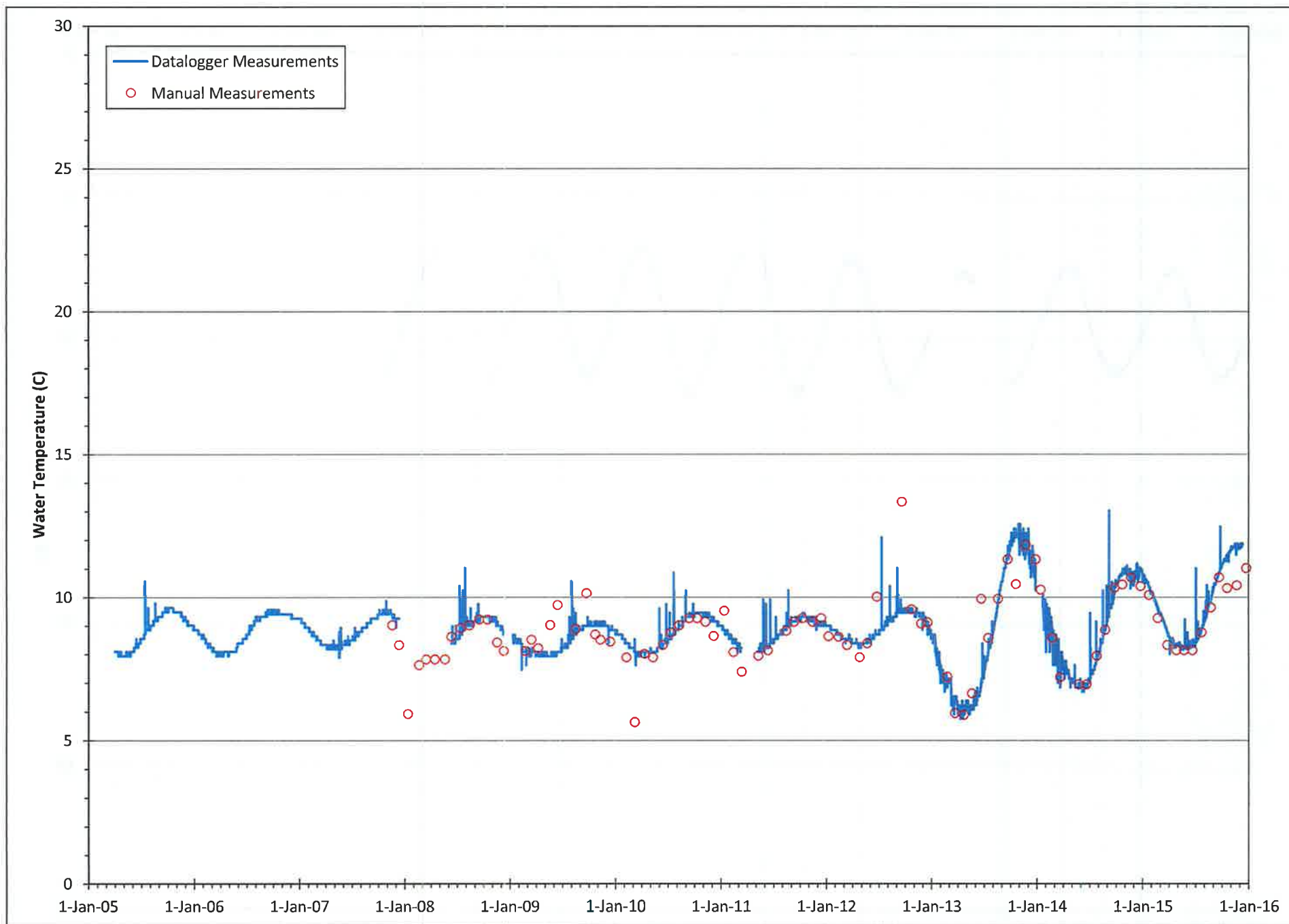
Stan Denhoed, M.Sc.,P.Eng.

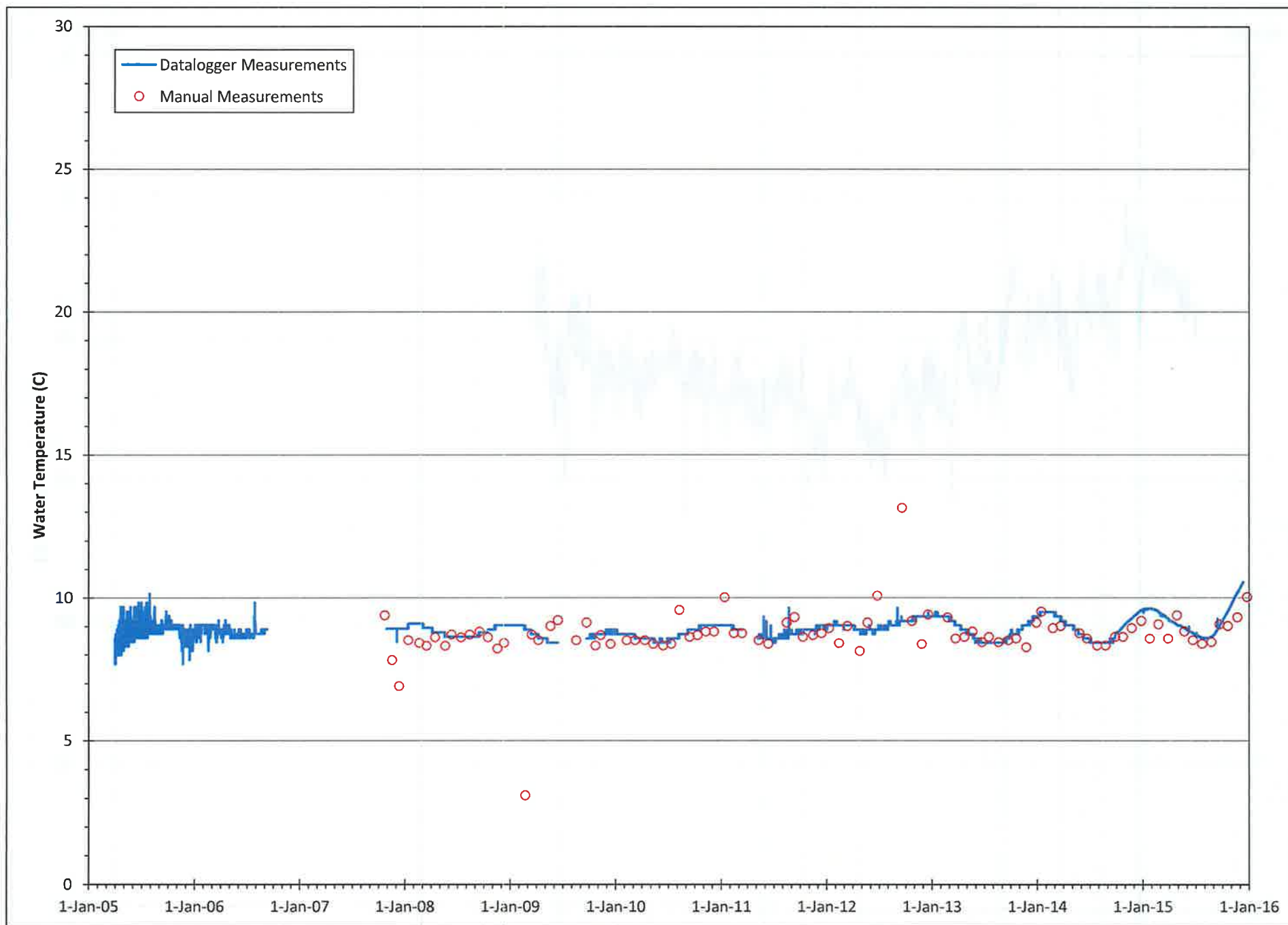
Senior Hydrogeologist

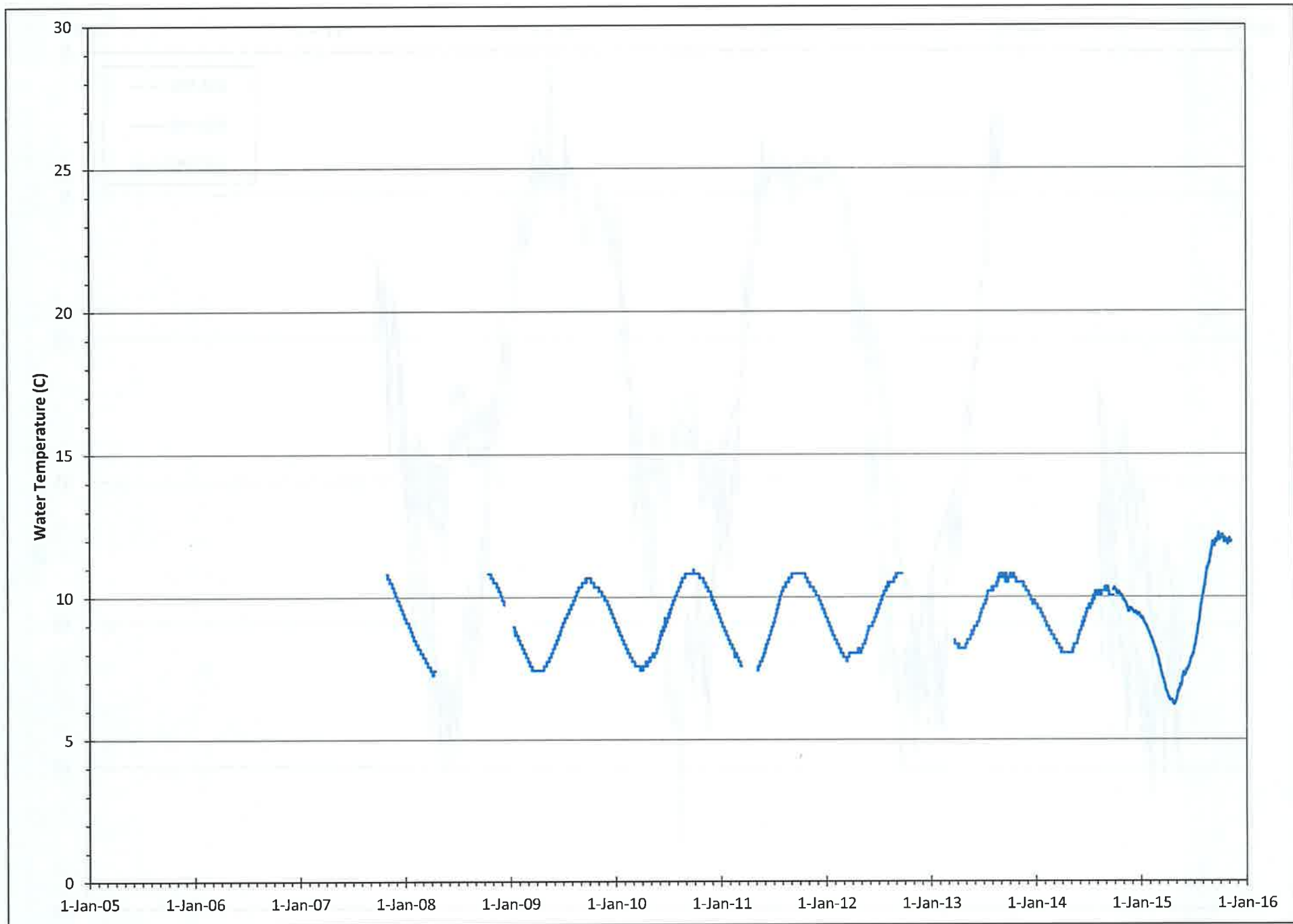


- existing monitoring well (or well nest)
- drive-point piezometer
- surface water flow/temperature
- pond/lake gauge
- private well

<div>  <b>Groundwater Science Corp.</b> </div>		<div> <b>Figure 1: Site Details, Monitor Locations</b> </div>	
March 2016 Scale: as shown modified from: 1:10,000 OBM	Groundwater Monitoring Program	CBM Aggregates Roszell Pit	Part Lots 1 & 2, Concessions 3 & 4 Township of Puslinch, County of Wellington











# Memo

To : Colin Evans	Date : May 16, 2016
CBM Aggregates.	Re. : Temperature Monitoring Results
From : Andrew Pentney	2015 Monitoring Program
CC :	Project : Roszell Road Pit

As requested, we are providing information and discussion in response to the review comments provided by Harden Environmental Services Ltd. (Harden) in a letter dated May 2, 2016, and, the associated cover letter provided by the Township of Puslinch dated May 5, 2016.

In the review Harden notes that, as discussed in the 2013, 2014 and 2015 annual reports, surface water temperature increases at stations SW6 and SW8 have been observed. The Harden review states *“The threshold for the initiation of mitigation is a 1° C increase as measured any of the following stations: SW5, SW6, SW8 and SW10 (Blackport Hydrogeology 2009, Groundwater Monitoring Program, Roszell Pit, Preston Sand and Gravel Ltd.)”*. Further, the review states that (presumably based on that threshold interpretation) *“It is also our opinion that the temperature change exceeds the allowable 1° C change”*. This is reflected in the Township of Puslinch cover letter, which states *“There is an apparent breach of a temperature threshold”*.

The Harden interpretation and conclusions with regard to temperature thresholds at SW6 and SW8 contradict the discussions and conclusions presented in the 2013, 2014 and 2015 annual monitoring reports. Although we agree some changes have occurred and are open to discussing the monitoring results and most appropriate path forward to determine if there are any ecological concerns and to ensure no significant impacts occur to ecological features; we disagree with Harden’s statements regarding the defined thresholds, threshold response and threshold exceedance.

As reported in the annual monitoring reports provided for the last 3 years, surface water temperature changes have been noted at SW6 (beginning in 2013) and most recently at SW8 (beginning in 2015). Both of these locations represent spot upwelling areas at the base of the river valley slope, and which form part of the source of 2 tributary systems which flow toward the Speed River.

The issue of temperature change at location SW6 was first noted in 2013 and discussed in the 2013 annual monitoring report (dated April 2014). As stated in that report (page 9) *The trigger mechanisms developed for the site include the following: Surface water temperature increase at SW5, SW6, SW8 or SW10 of 1 degree Celsius beyond the natural range (defined as the maximum 7-day average temperature observed prior to below*

*water table extraction*). Below water table extraction operations at the site began in March 2014. According to a strict interpretation of the trigger mechanisms, the temperature increase noted in 2013 became part of the “background” data set. A download was completed in early May 2016, an updated temperature graph is attached for reference. Temperatures at SW6 have moderated somewhat since 2013 and currently remain below 11.9 degrees Celsius. It is our understanding that the temperatures at SW6 remain well within the range considered suitable for trout habitat.

The 2013 annual monitoring report also states “*Although the temperature at SW6 measured in 2013 appears to be more than 1 degree Celsius beyond that previously observed at that location, it remains well within the natural range of other surface water locations within this area. In addition, extraction in 2013 was above the water table. We also note that SW6 is not downgradient of the test pond. Although the change noted at SW6 does not meet all of the criteria for a Threshold Response (e.g. occurrence relative to below water extraction), the general response implemented at this time follows the Action Response Protocol. To date some corrective action has been taken at the installation location, Dance Environmental Inc. has been consulted regarding potential for related ecological issues; and, data is being verified*”.

As stated in the 2009 monitoring program summary “...groundwater or surface water related Trigger Mechanisms are proposed as indicators that additional investigation and/or mitigation measures may be needed to ensure impacts to potential sensitive receptors remains insignificant”. Contrary to the Harden assertion, a threshold exceedance does not necessarily initiate mitigation measures. In response to the temperature change at SW6 we have investigated the monitoring station further to confirm data, installed additional monitoring stations (SW7 and SW9), reviewed the data with Dance Environmental Inc. to determine the potential impact to the environment, and, provided notification and discussion in the annual reports.

With regard to temperatures observed at SW8, the 2015 annual report states the following:

*A similar trend may be beginning at location SW8, with an increase in temperature noted at the end of 2015. Historical manual temperature measurements have at times indicated a larger temperature range than the datalogger data. Previous high temperatures recorded by the datalogger range in the 9.5 to 9.6 degree Celsius range, and excluding two potential extraneous data points, the manual measurements indicate a high in the 10 degree Celsius range. The last temperature data available in 2015 indicates a temperature of 10.5 degrees Celsius. Therefore this location may be approaching the “trigger” level identified for this location. Downstream temperatures at SW9 are similar to SW7 and also indicate a tighter “range” and lower maximum than observed within the main tributary at SW3 and SW4. Continued temperature monitoring and examination is appropriate.*

*Dance Environmental Inc., continues to review the temperature monitoring results at SW6, and SW8 and has indicated that there is no imminent ecological impact suggested by the potential change in temperature noted.*

As stated in the 2015 annual report, it is our interpretation that the temperatures observed in 2015 approached but did not exceed the temperature threshold. An updated temperature graph for SW8 is also attached for reference. The temperatures observed remain below 10.8 degrees Celsius, again within the threshold limit of 11 degrees Celsius and well within the range considered suitable for trout habitat.

Similar to the situation at SW8 we have proactively dealt with the situation in a way consistent with the prescribed trigger response. This includes investigating the monitoring station further to confirm data, installed additional monitoring stations, reviewed the data with Dance Environmental Inc. to determine the potential impact to the environment, and, provided notification and discussion in the annual reports.

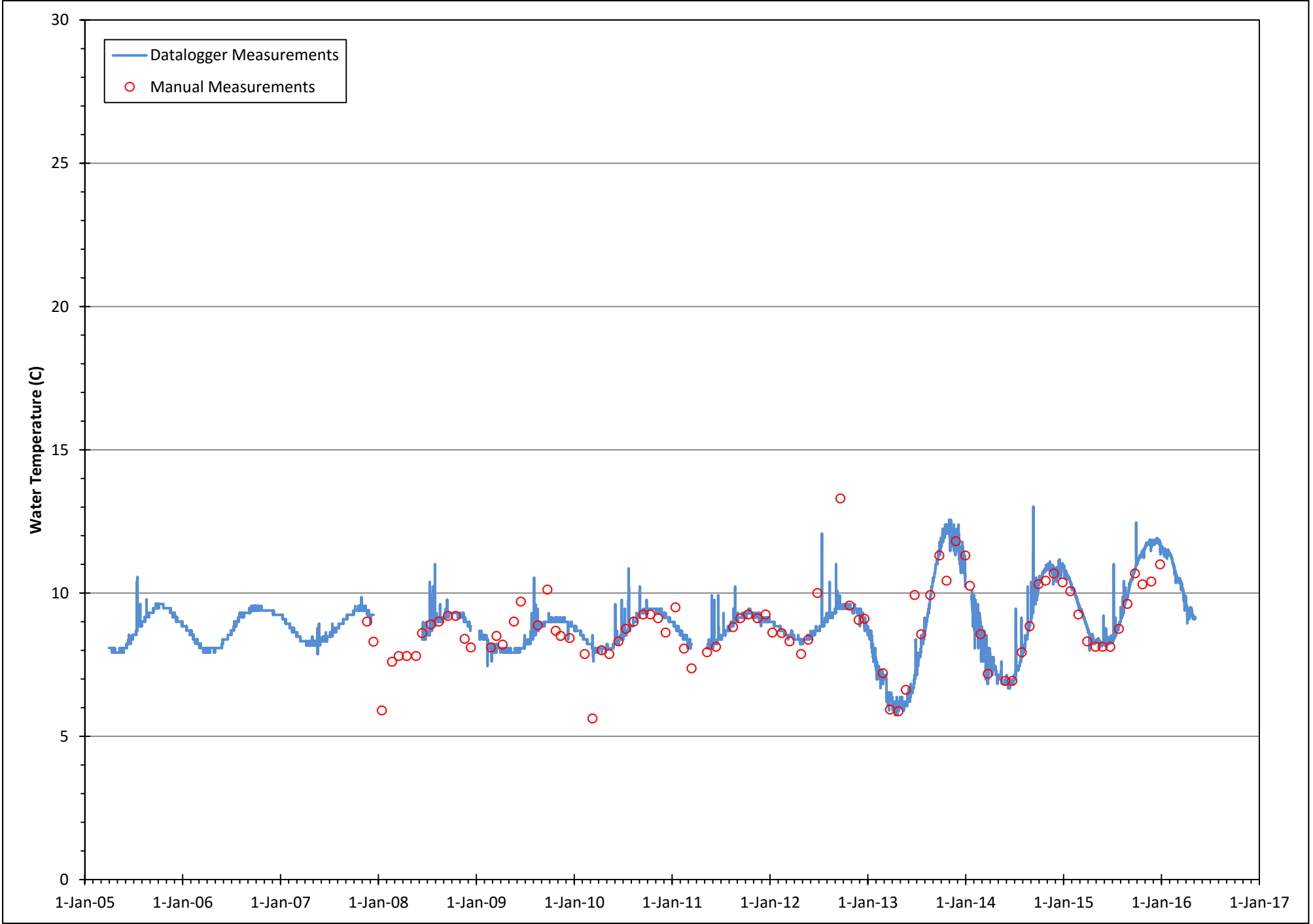
We note that the threshold of 1 degree Celsius was set based on, and may be more appropriate for, a typical approach for a cold water stream such as the main creek, where surface water temperatures vary naturally much closer to the limits associated with trout habitat. We suggest that the threshold limit for the spot discharges be further discussed with review agencies to ensure the environmental response and protection is appropriate for this site.

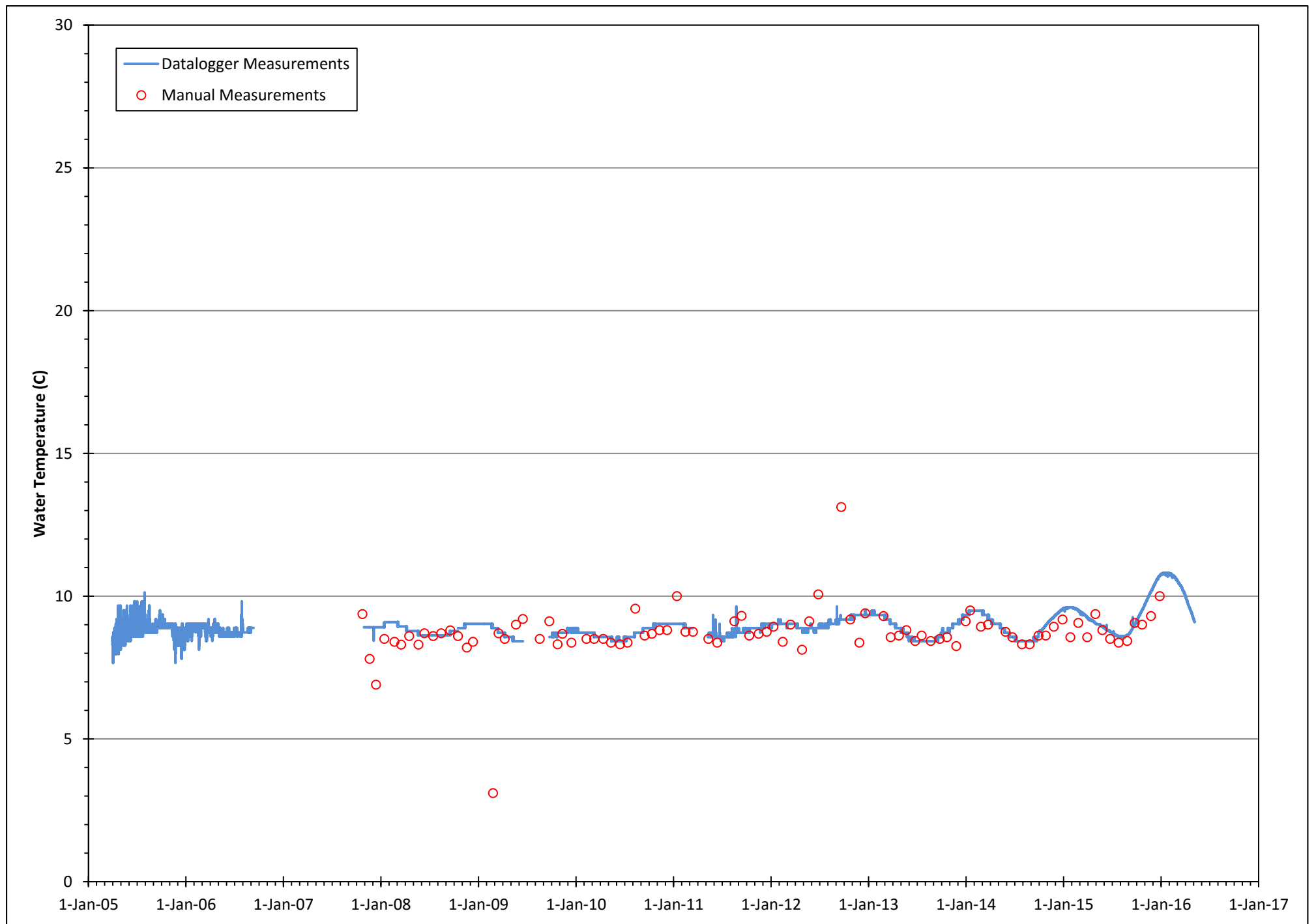
Sincerely,

A handwritten signature in black ink, reading "Andrew Pentney". The signature is fluid and cursive, with the first name "Andrew" and last name "Pentney" clearly distinguishable.

Andrew Pentney, P.Geo.  
Senior Hydrogeologist  
Groundwater Science Corp.

Attached: SW6 Temperature Plot (update May 16, 2016)  
SW8 Temperature Plot (update May 16, 2016)





# Appendix B

OMB Case No. PL090122 - Statement of Agreed Facts  
November 30, 2009





## **Ontario Municipal Board Case No. PL090122**

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**HYDROGEOLOGY EXPERTS MEETING  
STATEMENT OF AGREED FACTS  
PRESTON SAND & GRAVEL COMPANY LIMITED  
PROPOSED ROSZELL PIT  
OMB Case No. PL090122  
November 30, 2009**

HYDROGEOLOGY EXPERTS MEETING  
STATEMENT OF AGREED FACTS  
PRESTON SAND & GRAVEL COMPANY LIMITED  
PROPOSED ROSZELL PIT  
OMB CASE NO. PL090122  
NOVEMBER 30, 2009

---

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Meeting Date / Time: November 27, 2009 / 9:00am

---

Location: Preston Sand & Gravel Company Limited  
669 Charles Street East  
Kitchener, ON N2H 6S9

---

Attendees: *PRESTON SAND & GRAVEL COMPANY LIMITED  
REPRESENTATIVES:*  
Ray Blackport (Blackport Hydrogeology Inc.)  
Andrew Pentney (Groundwater Science Corp.)  
Jim Graham (Waterloo Numerical Modelling Corp.)  
  
*TOWNSHIP OF PUSLINCH REPRESENTATIVE:*  
Stan Denhoed (Harden Environmental Services Ltd.)

---

Absentees: None

---

Distribution: Signatories  
  
c.c. Jeffrey J. Wilker, Thomson, Rogers  
Rob Stovel, Stovel and Associates

---

A meeting of hydrogeology expert witnesses was held on Friday, November 27, 2009 with respect to the above-listed Ontario Municipal Board (OMB) hearing issue (Case No. PL090122).

The objective of the hydrogeology expert witnesses meeting was to identify and discuss specific groundwater issues as related to the Issues List and thereby determine the scope of issues to be presented before the Board.

The Issues List identified the following question for the Board regarding hydrogeology and groundwater resources (with two alternate wordings provided):

Schedule "B": *Do the proposed aggregate site plans adequately provide and secure protection of groundwater resources, wetlands, and the Speed River system?*

Schedule "D": *Do the proposed aggregate site plans adequately provide and secure protection of groundwater resources, Provincially Significant Wetlands, and the Speed River?*

Following are statements on matters discussed, and agreements reached, at the hydrogeology expert witnesses meeting.

## AGREED FACTS AND OPINION

---

Mr. Denhoed stated that in his opinion the last remaining issue can be summarized as:

*Is there a way to adjust extraction phasing and Site Plan notes, specific to the 120 m initial setback area between Lake 1 and the west Licence boundary, to provide some additional protection to natural environment features regarding thermal impacts?*

The specific issue was discussed, including aspects of the proposed extraction phasing, monitoring program requirements, potential for thermal impacts, and, the Site Plan notes.

Mr. Graham attended the meeting to answer any specific modelling questions, however no modelling questions arose during the discussions.

The following four points agreement was reached as a resolution to the stated issue:

1. The 120 m below water table setback area referenced on the Site Plan (Page 3 of 6, General Controls, Part D below water extraction, No. 3), and, within the Groundwater Monitoring Program (Section 1.1, item No. 14), be shown as a "hatched" area on the Operational Phasing Plan (page 3 of 6). The Site Plan note should also state that no below water table extraction should occur in this "hatched" area until the thermal monitoring program recommendations regarding final setback distances are approved by MNR in consultation with other agencies.

Figure A1, included with this Statement of Agreed Facts, shows the general area to be denoted on the Site Plan.

The recommended wording for the Site Plan Note (replaces note Page 3 of 6, General Controls, Part D below water extraction, No. 3) is:

3. *As noted in the Hydrogeologic Recommendations, no below water table extraction should occur within 120 m of the west licence boundary, as shown on the Operational Phasing Plan, until the thermal monitoring program recommendations regarding final setback distances are approved by MNR in consultation with other agencies*
2. During Phase B or C and prior to below water table extraction (Phase D), a rectangular "test pond" should be dug in the northwest portion of Lake 1 to allow the thermal monitoring

program to commence. Additional mitigation measures should also be considered at this time to implement in the unexpected situation where thermal monitoring indicates impacts approach the west licence boundary, or, thermal trigger thresholds are triggered. Mitigation measures are discussed in more detail in Item No. 4 of this Statement of Agreed Facts.

The "test pond" would be dug with the long axis perpendicular to the groundwater flow system, approximately 30 m wide, 160 m long and to the full depth of the resource. The concept is to establish a pond, measure the impact and if needed, implement mitigation measures while the pond is still within an initial stage so that controls, if needed, would be more effective. The "test pond" is also shown on the attached Figure A1, this "test pond" location should be denoted on the Site Plan (e.g. on the Operational Plan, Page 2 of 6).

This "test pond" would also be the starting point for below water table extraction within the Lake 1 area of Phase D, and would be in place for over 1 year prior to Phase D. The "test pond" would also be over 200 m from any upgradient natural environment features, therefore establishing the "test pond" eliminates the need for the reference to distance and timing in Note 2, Page 3 of 6, General Controls, Part D below water extraction. In addition, a Site Plan note to allow the pond to be established in Phase A, B or C is needed.

The following Site Plan Note changes are recommended as a result of the agreement to establish the "test pond":

Page 2 of 6, Operational Plan (above water extraction):

2. *Extraction will proceed in two lifts. The first lift will be above the water table. The second lift will be below the water table. The "test pond" will be established during Phase A, B or C, and, at least 1 year prior to Phase D.*

Page 3 of 6, Operational Phasing (below water extraction):

General Controls, Part D below water extraction:

1. *Initial extraction of the "test pond" will occur during wet seasonal conditions (e.g. spring or fall).*
  2. *Subsequent below water table extraction will proceed from the test pond.*
- 
3. The thermal monitoring plan specific to the 120 m setback area, and associated with the "test pond" was confirmed to include groundwater monitors aligned along the flow system and downgradient of the "test pond", surface water locations at the springs, and, DP2. Figure A2, included with this summary, shows the conceptual monitoring program that could be implemented, depending on conditions in the field and that may arise due to operations.

It was confirmed that the thermal monitoring program recommendations would need to meet the approval of MNR, in consultation with other agencies, before any below water table extraction could occur within the 120 m setback.

No changes to the Site Plan are needed as a result of this agreement. The monitoring program (which is a separate document) will be updated, along with provisions noted in item number 4 (below).

It is noted that the Hydrogeological Recommendations are to be included under the general heading of Technical Recommendations on the Site Plan.

4. Mitigation measures that should be considered in the unexpected case that thermal impacts from the "test pond" are observed approaching the licence boundary such that thermal trigger thresholds are reached, include the following:

- Placing silt along the west (downgradient) pond edge in an incremental manner to slow the velocity of water flow from the pond to the groundwater system. This would create greater travel times and thereby reduce thermal impact. This mitigation measure would be implemented on an incremental basis in coordination with water level monitoring to ensure water levels and hydraulic gradients are maintained within seasonal ranges, and, therefore that groundwater flow volumes toward discharge areas are not changed significantly (i.e. beyond seasonal ranges as observed at the site).
- Backfill "test pond" with sand and gravel from on-site.

These measures should be incorporated into Section 1.3 of the Groundwater Monitoring Program document, with specific reference to the "test pond".

No changes to the Site Plan are needed as a result of this agreement.

Based on the discussions, the proposed resolutions outlined above in items 1 to 4 fully resolve the hydrogeology and groundwater resources issues relate to this Board Hearing, including both alternative versions provided on the Issues List in Schedule B and D.

The signatories agree, with respect to hydrogeology or groundwater resources, that there are no remaining issues to be addressed at the hearing.

## AREAS of DISAGREEMENT

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There are no areas of disagreement.

## SIGNATORIES

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The following signatories confirm their agreement with the foregoing statement on issues.

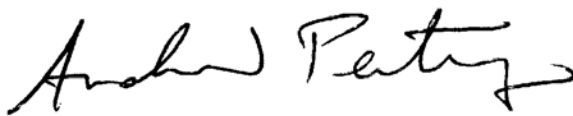


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Ray Blackport, M.Sc., P.Geo.  
Blackport Hydrogeology Inc.

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09-11-30  
Date (YY-MM-DD)



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Andrew Pentney, P.Geo.  
Groundwater Science Corp.

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09-11-30  
Date (YY-MM-DD)

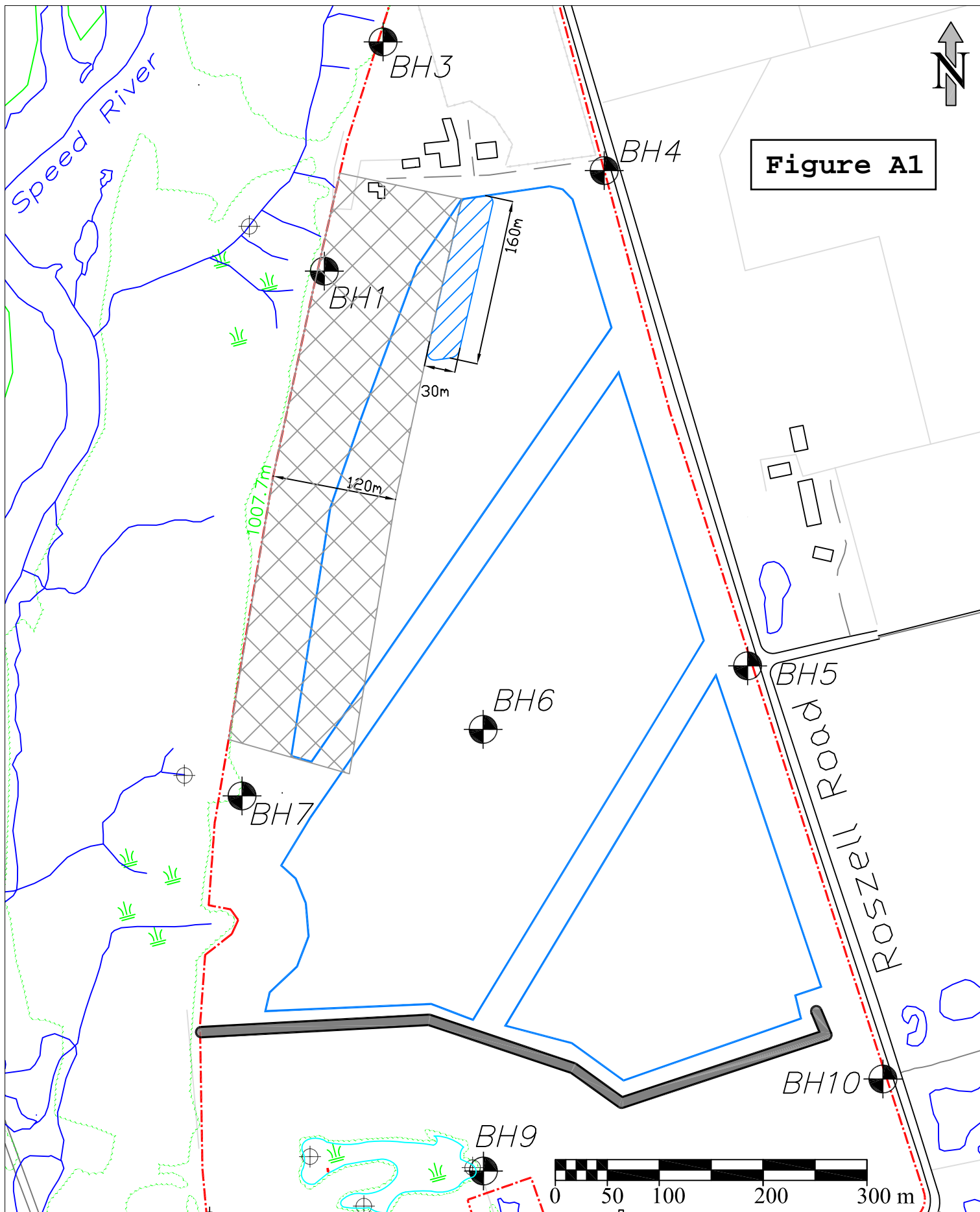


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Stan Denhoed, P.Eng. M.Sc.  
Harden Environmental Services.

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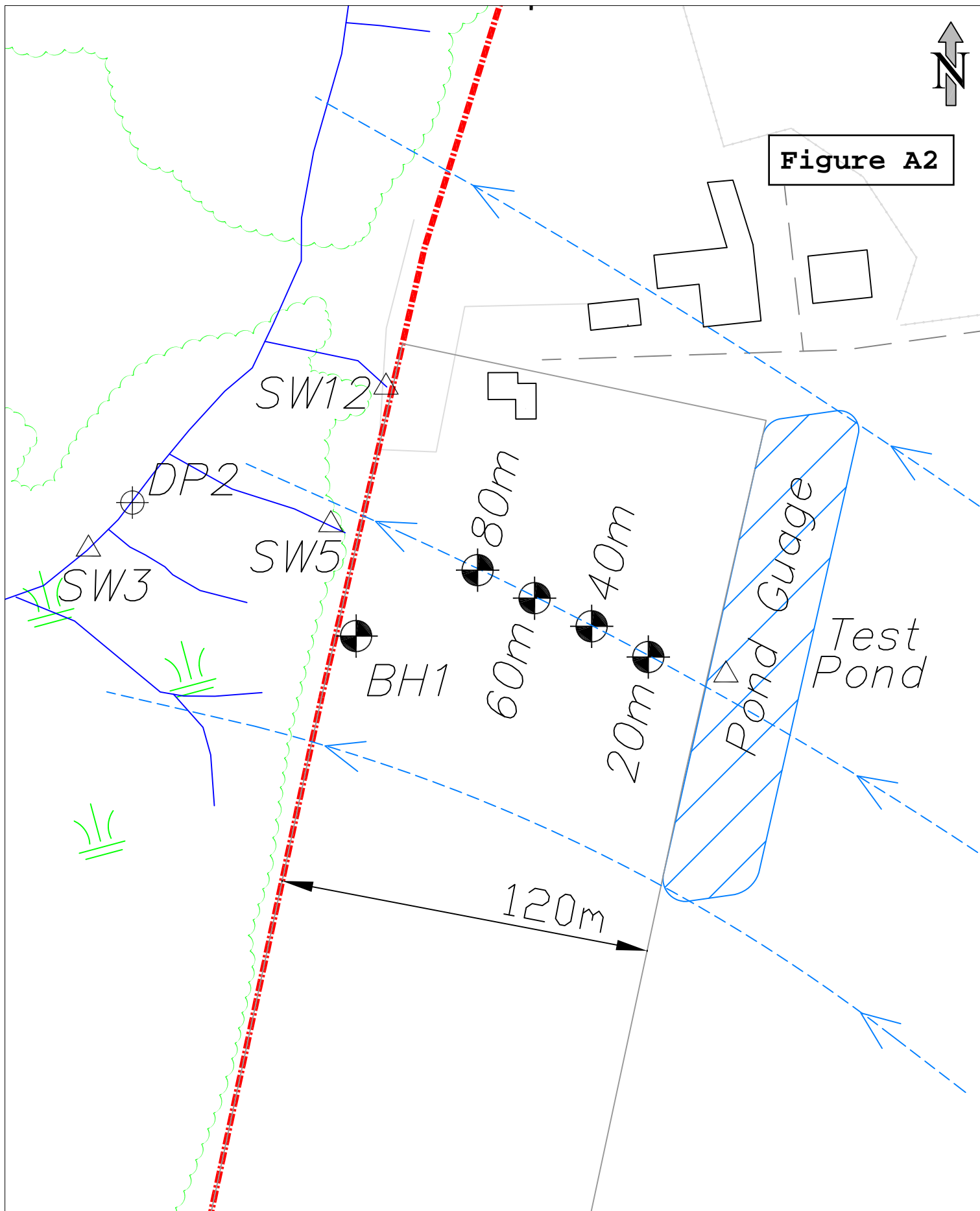
09-12-01  
Date (YY-MM-DD)






**Figure A1**

<p>— proposed final maximum lake outlines</p> <p> 120 m below water table set-back area to be shown on Site-Plan, related note specifying conditions to also be included</p> <p> test pond to be established and monitored during above water table extraction phase</p>	<p>Hydrogeologic Impact Assessment Proposed Aggregate Extraction</p> <p>November 2009 Scale: as shown modified from: 1:10,000 OBM</p> <p></p>	<p><b>Below Water Extraction Set-Back Area</b></p> <p>Preston Sand and Gravel Company Limited Proposed Roszell Pit</p> <p>Part Lots 1 &amp; 2, Concessions 3 &amp; 4 Township of Puslinch, County of Wellington</p>	
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**Figure A2**

<p> test pond to be established during above water table extraction</p> <p> groundwater flow direction under both high and low water table conditions</p> <p> monitoring location (groundwater, drive-point piezometer, surface water)</p>	<p>Hydrogeologic Impact Assessment Proposed Aggregate Extraction</p> <p>November 2009 Scale: as shown modified from: 1:10,000 OBM</p>	<p><b>Thermal Monitoring Conceptual Plan</b></p> <p>Preston Sand and Gravel Company Limited Proposed Roszell Pit</p> <p>Part Lots 1 &amp; 2, Concessions 3 &amp; 4 Township of Puslinch, County of Wellington</p>	
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**PUSLINCH HISTORICAL SOCIETY**

**CORDIALLY INVITES YOU TO OUR**

**SIXTH**

**SPIRIT WALK**

**WHICH WILL BE HELD AT THE**

**CRIEFF CEMETERY**

**ON**

**SUNDAY JUNE 26, AT 2 PM.**

**HEAR STORIES ABOUT THE PIONEERS WHO ARE  
BURIED HERE.**

**FRASERS.....MCPHERSONS...MACROBBIES...**

**STEWARTS.....MACDONALDS**

**&**

**REV. MCLEAN - FIRST MINISTER HERE**

I.G.#

/

**Jessie Beauclaire**

**From:** Wellington County Economic Development <ecdev@wellington.ca>  
**Sent:** Tuesday, May 31, 2016 2:55 PM  
**To:** Rentals  
**Subject:** Guelph Wellington Job Fair Opportunity



I.G.# 2

*The County of Wellington  
invites local employers to the:*

## **Guelph Wellington Job Fair**

In response to our employers' challenges finding talent, the County of Wellington is partnering with the Workforce Planning Board, City of Guelph, Randstad, Career Education Council and 2nd Chance Employment to host this job fair.

**Sector focus:**  
**Manufacturing, Finance and Tourism**

This event is being promoted regionally, to students at local universities and colleges, and to job seekers in Alberta.

**TUESDAY JUNE 28, 2016**  
**1:00pm to 5:00pm**  
Hanlon Convention Centre  
340 Woodlawn Rd West, #26,  
Guelph, N1H 7K6

**To register your employer booth:**

[Register](#)



The County of Wellington, 74 Woolwich Street , Guelph, N1H 3T9 Canada

[SafeUnsubscribe™ rentals@puslinch.ca](#)

[Forward this email](#) | [Update Profile](#) | [About our service provider](#)

Sent by [ecdev@wellington.ca](mailto:ecdev@wellington.ca) in collaboration with

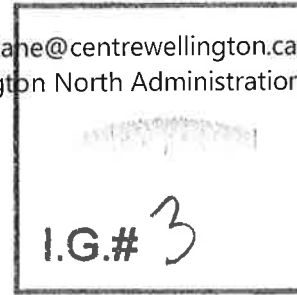


Try It free today

## Donna Tremblay

---

**From:** Cathy Wiebe <cathyw@wellington.ca>  
**Sent:** May-24-16 12:36 PM  
**To:** Bill White; Brad McRoberts; Kerri O'Kane (kokane@centrewellington.ca); Admin; Town of Erin; Township of Guelph Eramosa; Wellington North Administration  
**Cc:** Das Soligo  
**Subject:** rural curbside collection expansion



Hello all,

I'm sure you've all heard that Solid Waste Services (SWS) will be expanding the rural curbside collection to all municipalities starting the week of July 5. We have posters and postcards going out to all of the municipal offices for you to help communicate the changes to your residents. We are sending them to the municipal offices in Erin and Guelph/Eramosa as well. Although there is no change to the collection in those two municipalities, there is a change in price of the user pay garbage bags, which is noted on the postcard, so thought it might be helpful for you to also have the information available.

These posters and postcards will also be at all 14 County library branches, our six waste facilities, and all of the user pay garbage bag distributors. If you would like a few more posters to go up in other common areas such as arenas or community centres, please let me know. I have a few extra copies and would be happy to send some to you.

We did a Q&A on rural collection in our spring/summer newsletter which was published in the April 29 issue of the Wellington Advertiser. It is also available on our website at this link, if you haven't had a chance to read it yet - <http://www.wellington.ca/en/residentservices/resources/SWS/SWS-Spring-2016-Newsletter-for-web.pdf>

If you have questions about any of the changes, please let me know. Thanks!

Cathy

**Cathy Wiebe, CMMIII Infrastructure Specialist**  
Administration Supervisor  
Solid Waste Services (SWS) Division

County of Wellington  
74 Woolwich Street Guelph ON N1H 3T9  
T 519.837.2601 x2310  
F 519.837.8138  
E [cathyw@wellington.ca](mailto:cathyw@wellington.ca)  
W [www.wellington.ca/sws](http://www.wellington.ca/sws)

Please consider the environment before printing this email.

## Donna Tremblay

---

**From:** Cathy Wiebe <cathyw@wellington.ca>  
**Sent:** May-27-16 2:38 PM  
**To:** Admin  
**Cc:** Don McKay; Dennis Lever - Wellington  
**Subject:** rural curbside collection information - update  
**Attachments:** Introductory Letter.pdf; Rural Collection Schedule 2016 - side 1.pdf; Rural Collection Schedule 2016 - side 2.pdf; map - Puslinch.pdf; User Pay Garbage Bags Distributors in Puslinch and Guelph.pdf

Hi there,

We wanted to update you on the next steps regarding the expansion of rural waste and recycling collection in the County. SWS staff will be delivering two blue boxes to each household in the new collection areas, beginning next week. Included in the blue boxes will be an information package that consists of:

- an introduction letter which includes information on how to participate in the curbside collection programme (same to all municipalities)
- a curbside collection schedule with participation information on the reverse side (same to all municipalities)
- a curbside collection map (specific to each municipality)
- a list of local user pay bag distributors (specific to each municipality, printed on the back of the map)

I have attached these documents for your information.

We also wanted to clarify the use of garbage cans in curbside collection areas. Rural residents **do not** need prior approval to use a garbage can. For urban residents, they must go through our approval process to use a garbage can and obtain a sticker to identify that the container is approved. This "no can" policy is part of the terms of our 2008 curbside collection tender and contract in order to speed up the process of collecting garbage, and reduce the cost of this service. In the tender, we specified the use of garbage cans would be on an exception basis only. When the County decided to provide rural curbside collection in Guelph/Eramosa, and later to Erin residents, it was recognized that rural residents are more likely to experience wildlife issues. Through discussions with our collection contractor, the County has allowed rural residents to use containers without going through the approval process as long as the cans meet the size restrictions as outlined in our policy.

Please feel free to share this information with your staff and council members. I have copied your County Council representatives on this email so they also have this same information.

I'm sure your residents may have questions about waste services given the recent changes. Please direct any calls or email inquiries to SWS staff. Our direct line is 519.837.2601 or toll-free at 1.866.899.0248, and the general email is [wasteinfo@wellington.ca](mailto:wasteinfo@wellington.ca). We appreciate fielding the inquiries as we log all questions and calls in a database. This helps us identify opportunities to improve our promotion and education to better inform our residents.

Please feel free to call or email me directly should you have any questions.

Cathy

**Cathy Wiebe, CMMIII Infrastructure Specialist**  
Administration Supervisor

I.G.#

4

**Solid Waste Services (SWS) Division**

**County of Wellington**

**74 Woolwich Street Guelph ON N1H 3T9**

**T 519.837.2601 x2310**

**F 519.837.8138**

**E [cathyw@wellington.ca](mailto:cathyw@wellington.ca)**

**W [www.wellington.ca/sws](http://www.wellington.ca/sws)**

**Please consider the environment before printing this email.**





**County of Wellington  
Solid Waste Services Division**

74 Woolwich Street  
Guelph ON N1H 3T9  
T 519.837.2601  
T 1.866.899.0248  
F 519.837.8138



Dear Rural Resident of the County of Wellington:

The Solid Waste Service (SWS) Division is pleased to announce that bi-weekly curbside blue box and garbage collection will be provided to all rural residents in the County of Wellington beginning the week of July 5<sup>th</sup>.

To get you started on this expanded rural curbside collection service, SWS has provided your household with two blue boxes and this information package. In this information package, you will find:

- information on how to participate in this service
- a curbside collection schedule
- a curbside collection map for your municipality
- a list of user pay bag distributors in your municipality.

### **Collection Days**

Rural curbside collection will be provided on a bi-weekly basis, please see the enclosed schedule for your collection week. The day of collection is the same as in the urban areas, as listed below:

Tuesday – Mapleton and Minto  
Wednesday – Centre Wellington  
Thursday – Erin and Wellington North  
Friday – Guelph/Eramosa and Puslinch

### **Garbage Collection**

Curbside garbage collection in Wellington County is provided through a **yellow user pay garbage bag system**. Garbage bags are available in two sizes, large bags are 30"x38", and small are 24"x28", and both are sold in packages of 10. As of July 1, 2016, large bags will be \$2.00 each (\$20.00 per package) and small bags will be \$1.50 (\$15.00 per package). There is no HST on the garbage bags.

A list of distributors in your municipality is provided in this information package. A full list of distributors is available on our website at [www.wellington.ca/sws](http://www.wellington.ca/sws).

please turn over.....

## Blue Box Collection

The use of blue boxes is required to receive curbside recycling collection. Each household has been delivered two blue boxes at no charge. Additional Blue Boxes may be purchased at any County Waste Facility at a cost of \$5.00 each.

## General Set-Out Instructions

- To ensure your material is collected, blue boxes and user pay garbage bags must be placed within 1 metre (3 ft) of the curb/roadside on the morning of collection by **7:00 a.m.**
- Place your user pay garbage bag(s) and blue box(es) in a highly visible location.
- Do not place your material on or behind snow banks, behind a tree, or in a ditch.
- All garbage must be placed within the user pay garbage bag.
- Each user pay garbage bag or blue box must weigh less than 18 kg (40 lbs).
- There is no bag limit.
- Rural residents may use a garbage can if desired. Please ensure that:
  - the container is rigid, with a removable lid and has handles that are attached or molded to the exterior of the container;
  - the container is no larger than 135L volume (36g), 60cm wide, or 95cm in height;
  - please note you may only place one yellow County user pay garbage bag in each container.

## Collection “News”

Collection “news”, such as holiday schedule changes, is advertised in local papers, on the Wellington County website, through the SWS eNews notices (sign up on our website), and on our SWS semi-automated 24-hour phone system.

We look forward to providing curbside garbage and blue box collection service to you. If you have any questions, please refer to the enclosed information sheets, visit our website at [www.wellington.ca/sws](http://www.wellington.ca/sws), or call Solid Waste Services at 519.837.2601 or toll-free at 1.866.899.0248.

Sincerely,

Solid Waste Services



Alternate formats available upon request.

# Rural Curb/Roadside Collection

## 2016 Garbage and Blue Box Schedule



### CURBSIDE COLLECTION DAYS



**Week 1**



**Week 2**

Blue boxes and user pay garbage bags are picked up every other week. Place materials at the roadside by 7:00 am. Materials may be collected up until 6:00 pm.

### Week 1 Collection

**Tuesday – Mapleton**  
**Wednesday – Centre Wellington**  
**West of Hwy 6**  
**Thursday – Erin**  
**Friday – Guelph/Eramosa**

### Week 2 Collection

**Tuesday – Minto**  
**Wednesday – Centre Wellington**  
**East of Hwy 6**  
**Thursday – Wellington North**  
**Friday – Puslinch**

### July

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24 31	25	26	27	28	29	30

### August

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

### September

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

### October

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23 30	24 31	25	26	27	28	29

### November

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

### December

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



ALTERNATE FORMATS AVAILABLE UPON REQUEST.

**QUESTIONS? Contact Solid Waste Services**

W [wellington.ca/sws](http://wellington.ca/sws) T 519.837.2601 T 1.866.899.0248

Wellington County has a full user pay system for **garbage**. There is a fee for every bag of garbage picked up at curbside or dropped off at a waste facility. This system encourages people to practice the 3Rs (Reduce, Reuse, Recycle) and gives them some control over how much they spend on their garbage each week.

- Tie bags securely closed
- Sharp objects will not be collected at curbside
- There is no limit to the number of bags that can be set out
- Each bag must weigh less than 18 kg (40 lb)
- Any item which does not fit within a user pay bag will not be collected
- Larger items may be taken to any County waste facility (fees apply)
- Garbage bags can be purchased at the distributor locations found under the Garbage tab on our website [www.wellington.ca/sws](http://www.wellington.ca/sws)



In Wellington County **recyclables** are collected in two streams. All paper products are collected in one blue box and all containers are collected in the other blue box. There is no charge to participate in the Blue Box Recycling Programme.

- Each blue box must weigh less than 18 kg (40 lb)
- Check our website under the Recycling tab for details of what items are accepted in our blue box recycling programme
- The County will provide each household with two free blue boxes. Additional blue boxes may be purchased for \$5 each at any one of our waste facilities



## Hints to Reduce Wildlife Issues:

1. Rural residents may use a garbage can:
  - Place lid on top of can
  - Put mothballs in bottom of can
  - Place only one user pay garbage bag in each can
2. Compost organics:
  - Composters available at all County Waste facilities for \$30 each
3. Use your freezer:
  - Freeze meat, bones and dairy products before placing in your garbage bag on collection day (do not compost)



## Winter Collection Reminders:

1. Please ensure that your blue boxes and user pay garbage bags are:
  - At street level (not on or behind snowbanks)
  - In a visible location at the roadside
  - Accessible to the collectors
2. Collection may be delayed or cancelled if roads are:
  - Closed due to winter road conditions
  - Deemed unsafe for travel by County officials
3. If your blue boxes or user pay garbage bags are not collected:
  - Hold onto them until your next collection day
  - Take them to any County waste facility at no charge





**Please ensure materials are placed at the curb/roadside by 7:00 am on your collection day.**








# TOWNSHIP OF PUSLINCH FRIDAY COLLECTION AREA MAP



## LEGEND

-  COUNTY OF WELLINGTON ROAD
-  PROVINCIAL HIGHWAY
-  RURAL COLLECTION ON FRIDAY EVERY OTHER WEEK
-  "URBAN" WEEKLY COLLECTION AREAS

-  COLLECTION ON TOWNSHIP OF PUSLINCH SIDE OF ROAD ONLY
-  COLLECTION ON ODD CIVIC ADDRESS SIDE
-  COLLECTION ON EVEN CIVIC ADDRESS SIDE
-  COLLECTION ON BOTH SIDES OF ROAD
-  CONTACT SWS FOR SPECIFIC DETAILS

## QUESTIONS ?

CONTACT SOLID WASTE SERVICES (SWS)  
T 519.837.2601 OR 1.866.899.0248  
W [www.wellington.ca/sws](http://www.wellington.ca/sws)



## User Pay Garbage Bag Distributors in the Township of Puslinch and the City of Guelph

Residents and businesses must use yellow County user pay garbage bags to receive collection. Please note this list of distributors is subject to change and only shows the retailers in your local area. For a full list of user pay garbage bag distributors visit our website at [www.wellington.ca/sws](http://www.wellington.ca/sws).

Town	Name	Address
ABERFOYLE	Aberfoyle Waste Facility	6922 Concession 4
	Lincoln Mushrooms at Aberfoyle Farmers' Market (seasonal)	23 Brock Rd. S.
	Township of Puslinch Municipal Office	7404 Wellington Rd. 34
GUELPH	Canadian Tire	10 Woodlawn Rd. E.
	County of Wellington, Solid Waste Services	74 Woolwich St., 3 <sup>rd</sup> Floor
	Domenic's No Frills	35 Harvard Rd., Unit 9
	TSC Stores	545 Silvercreek Pkwy N.
	Zehrs Markets, Clairfield	124 Clair Rd. E.
	Zehrs Markets, Eramosa Road	297 Eramosa Rd.
	Zehrs Markets, Hartsland Market Square	160 Kortright Rd.
	Zehrs Markets, Imperial Road	1045 Paisley Rd.

### COST as of July 1, 2016:

- Large bags (30" x 38") are \$2.00 each, sold 10 per package for \$20.00, no HST
- Small bags (24" x 28") are \$1.50 each, sold 10 per package for \$15.00, no HST

Note, by paying only for the waste you produce, your household has the ability to control your costs by reducing waste.

### Hints to Reduce Wildlife Issues:

1. Rural residents may use a garbage can:
  - Place lid on top of can
  - Put mothballs in bottom of can
  - Place only one user pay garbage bag in each can
  - Can must be no larger than 135L volume (36 gal), 60cm wide, or 95cm in height
2. Compost organics:
  - Composters available at all County Waste facilities for \$30 each
3. Use your freezer:
  - Freeze meat, bones and dairy products before placing in your garbage bag on collection day (do not compost)

Questions? Please call the Solid Waste Services office at 519.837.2601 or 1.866.899.0248. Or visit our website at [www.wellington.ca/sws](http://www.wellington.ca/sws).



Alternate formats available upon request.

**Donna Tremblay**

---

**From:** Minister (MAH) <minister.mah@ontario.ca>  
**Sent:** May-18-16 4:15 PM  
**Subject:** Inclusionary Zoning / Zonage d'inclusion

I.G.# 5

Dear Head of Council,

I am pleased to announce that the government introduced Bill 204 – the Promoting Affordable Housing Act, 2016 in the Legislature today. As part of our Long-Term Affordable Housing Strategy Update commitments, these proposed changes focus on transforming Ontario's housing system by facilitating a greater range of housing choices and increasing the supply of affordable housing.

Schedule 4 of the Bill would, if passed, support land-use planning decision makers in their efforts to increase affordable housing choices in their communities, by enabling municipalities to require the inclusion of affordable housing units in new residential development projects through inclusionary zoning.

You can obtain a copy of Bill 204 – the Promoting Affordable Housing Act, 2016 and monitor the status of the Bill through the legislative process on the Legislative Assembly of Ontario website.

Comments on Schedule 4 of the Bill can be made through the Environmental Bill of Rights Registry (EBR Posting #: 012-7616).

The government is looking for your input on matters that may be considered for possible regulatory proposals to support the proposed inclusionary zoning legislation. Feedback can be provided through the Environmental Bill of Rights Registry (EBR Posting #: 012-7617), through our Consultation Discussion Guide or by email to [inclusionaryzoning@ontario.ca](mailto:inclusionaryzoning@ontario.ca).

I would also like to draw your attention to Schedule 5 of the proposed Bill that would, if passed, create consistent local enforcement of residential rental maintenance standards across all Ontario municipalities. This would not affect municipalities that currently enforce standards that are included in local property standards by-laws. Further details of these proposed amendments will be provided to affected municipalities in the near future.

We look forward to working with you in the coming months on this exciting work.

Best regards,

Ted McMeekin  
Minister

---

Aux présidentes et présidents des conseils,

Je suis heureux d'annoncer que le gouvernement a déposé le projet de loi 204 – *Loi de 2016 sur la promotion du logement abordable*, à l'Assemblée législative aujourd'hui. Dans le cadre des engagements pris dans notre mise à jour de la Stratégie à long terme de logement abordable, les



modifications proposées portent sur la transformation du système de logement de l'Ontario en facilitant un plus large éventail de choix en matière de logement et en augmentant l'offre de logements abordables.

L'annexe 4 du projet de loi, si elle est adoptée, appuierait les efforts déployés par les décideurs responsables de l'aménagement du territoire pour accroître les options en matière de logements abordables dans leur collectivité en permettant aux municipalités d'exiger l'inclusion de logements abordables dans les nouveaux ensembles domiciliaires grâce au zonage d'inclusion.

Vous pouvez consulter le projet de loi 204 – *Loi de 2016 sur la promotion du logement abordable* et suivre l'avancement du projet dans le processus législatif sur le site Web de l'Assemblée législative de l'Ontario.

Des commentaires sur l'annexe 4 du projet de loi peuvent être formulés sur le Registre environnemental (numéro d'avis 012-7616).

Le gouvernement désire obtenir votre avis sur des questions qui pourraient être prises en considération pour des projets de règlement renforçant le projet de loi sur le zonage d'inclusion. Vous pouvez faire part de votre avis sur le Registre environnemental (numéro d'avis 012-7617), grâce à notre Guide de discussion aux fins de la consultation ou par courriel à [inclusionaryzoning@ontario.ca](mailto:inclusionaryzoning@ontario.ca).

J'aimerais attirer votre attention sur l'annexe 5 du projet de loi qui, si elle est adoptée, assurerait l'application uniforme au niveau local des normes d'entretien visant les ensembles d'habitation locatifs dans toutes les municipalités de l'Ontario. Cela n'aurait pas d'incidence sur les municipalités qui font appliquer actuellement les normes prévues dans un règlement municipal sur les normes foncières. Des précisions sur ces modifications proposées seront fournies aux municipalités touchées à une date ultérieure.

Nous avons hâte de collaborer avec vous à ce sujet au cours des prochains mois.

Veuillez agréer mes sentiments distingués.

Le ministre,

Ted McMeekin



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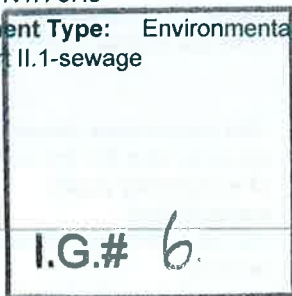
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#### Instrument Decision Notice:

**Proponent:** Mini Lakes Residents Association  
7541 Wellington County Road 34 Road  
Puslinch Ontario  
Canada N1H 6H9

**Instrument Type:** Environmental Compliance Approval (project type: sewage) -  
EPA Part II.1-sewage



**Keyword(s):** Sewage

**EBR Registry Number:** 012-2009

**Ministry Reference Number:** 5194-92USCL

**Ministry:**  
Ministry of the Environment and  
Climate Change

**Date Proposal loaded to the Registry:**

June 23, 2014

**Date Decision loaded to the Registry:**

June 07, 2016

#### Decision on Instrument:

An approval for Environmental Compliance Approval (Sewage) No. 2113-7M8RBP has been granted for upgrades to the Mini Lakes Wastewater Treatment Plant's primary clarifier.

In addition, this approval is for revisions to condition 1.1 to reflect the revised average daily flow to 158 cubic metres per day, condition 2.1(d) remove stations SW2 and SW7 from the monitoring program, condition 3.1 to reflect revised nitrate limit to 8.0 mg/L and change the statement "during any 12 consecutive calendar months" to "during any calendar year" to prevent ongoing non-compliance incidences.

The attached Certificate document is intended for posting on the Environmental Registry in order to provide the reader with the substantive content of the issued instrument. Please note the official version may be differently formatted or otherwise contain minor variations from this version.

#### Comment(s) Received on the Proposal: 0

Public Consultation on the proposal for this decision was provided for 45 Days, from June 23, 2014 to August 07, 2014.

As a result of public consultation on the proposal, the Ministry received a total of 0 comments.

#### Leave to Appeal Provisions:

Any resident of Ontario may seek leave to appeal this decision, by serving written Notice, within 15 days of June 07, 2016 upon all of the following:

#### Appellate Body:

Secretary  
Environmental Review Tribunal  
655 Bay Street  
Floor 15

#### Contact:

Application Assessment Officer  
Ministry of the Environment and  
Climate Change  
Operations Division  
Environmental Approvals  
Access and Service Integration  
Branch  
Application Verification Unit  
135 St. Clair Avenue West  
Floor 1  
Toronto Ontario  
M4V 1P5  
Phone: (416) 314-8001  
Fax: (416) 314-8452  
Toll Free Phone: (800) 461-6290

#### Location(s) Related to this Instrument:

7541 Wellington County Road  
34  
Puslinch, County of Wellington  
N1H 6H9

TOWNSHIP OF PUSLINCH

#### Additional Information:

The following government offices have additional information regarding this Decision. To arrange a viewing of these documents please call the Ministry Contact or the Office listed below.

Toronto  
M5G 1E5  
Phone: (416) 212-6349  
Fax: (416) 326-5370  
Toll Free Phone: (866) 448-2248

**Environmental Commissioner of Ontario:**

Environmental Commissioner of Ontario  
1075 Bay Street  
Suite 605  
Toronto Ontario  
M5S 2B1  
Phone: (416) 325-3377  
Toll Free Phone: (800) 701-6454

**Issuing Authority:**

Fariha Pannu  
Supervisor  
Environmental Approvals Branch  
135 St. Clair Avenue West  
Floor 1  
Toronto Ontario  
M4V 1P5  
Phone: (416) 314-7092  
Toll Free Phone: (800) 461-6290

**Proponent:**

Mini Lakes Residents Association  
7541 Wellington County Road 34 Road  
Puslinch Ontario  
Canada N1H 6H9

Guelph District Office  
1 Stone Road West  
Floor 4  
Guelph Ontario  
N1G 4Y2  
Phone: (519) 826-4255  
Toll Free Phone: (800) 265-8658

Environmental Approvals  
Access and Service Integration  
Branch  
135 St. Clair Avenue West  
Floor 1  
Toronto Ontario  
M4V1P5  
Phone: (416) 314-8001  
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**The documents linked below  
are provided for the purposes  
of enhancing public  
consultation.**

All links will open in a new  
window

**1. [Copy Of Environmental  
Compliance Approva  
I # 5194-92USCL](#)**

The Notice must be signed and dated and include all of the following information:

1. The EBR Registry Number, the Ministry Reference Number, the Proponent's name and address to whom the instrument was issued and the location of Activity. (All available from this Registry posting)
2. A copy of any comments that were submitted on the original proposal, if comments were not submitted, an explanation of your interest in seeking leave to appeal the decision is required.
3. A description of the grounds for the application for leave to appeal including information that demonstrates that:
  - (a) there is a good reason to believe that no reasonable person, having regard to the relevant law and any government policies developed to guide decisions of that kind, could have made the decision; and
  - (b) the decision in respect of which an appeal is sought could result in significant harm to the environment.
4. The portion of the instrument or each term or condition in the instrument in respect of which the leave to appeal is applied for.
5. The grounds on which you intend to reply at the hearing, in the event that the leave to appeal is granted, in relation to each portion that you are seeking leave to appeal.

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Ministry of the Environment  
Ministère de l'Environnement

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**AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 2391-9KCJUS

Issue Date: June 1, 2016

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Wellington Common Elements Condominium  
Corporation No.214  
c/o MF Property Management Limited  
28 Bett Court  
Guelph, Ontario  
N1C 0A5

Location: 7541 Wellington County Road 34  
Puslinch Township, County of Wellington  
N1H 6H9

*You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

Upgrades to the existing sewage works comprising of a sanitary collection system, pumping stations and forcemains, a sewage treatment and subsurface disposal system re-rated at approx. 158 m<sup>3</sup>/d average daily flow serving the Mini Lakes Subdivision and Common Elements Condominium comprising of a maximum of 292 units (from the original 400 units) for year round use in the Township of Puslinch as follows:

**Proposed Works**

Modifications to the existing wastewater treatment plant as follows:

- upgrades to primary clarifier as follows:
  - installation of a partition wall separating the chamber in two compartments; an inlet and sludge storage compartment having a working volume of 73m<sup>3</sup> and a primary effluent compartment having a working volume of 23m<sup>3</sup>.

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- an influent baffle plate at the tank inlet
  - an outlet weir box and baffle plate at the tank outlet
  - sludge recirculation piping to the inlet chamber and sludge removal piping.
  - modifications to the inlet of the denitrification tank to allow for crossover between trains for redundancy and option to operate on one (1) RBC train and two (2) tertiary treatment trains.
  - one (1) new effluent pump and discharge piping to be located in the effluent pump chamber to recirculate treated effluent back to the inlet of the primary clarifier.
  - a 3.5m x 4.12m chemical storage building housing the following:
    - a 600L capacity chemical storage tank to provide a carbon source and three (3) chemical metering pumps (one (1) spare), all located within secondary containment facilities.
    - a 2,300 L capacity bulk chemical storage tank for phosphorus removal and three (3) chemical metering pumps (one (1) spare), all located within secondary containment facilities.
    - an eyewash/shower system
- all other controls, electrical equipment, instrumentation, pumps, piping, valves and appurtenances essential for the proper operation of the aforementioned sewage works;

all in accordance with the documents listed in Schedule 'B.

### **Existing Works**

#### **Sanitary Collection System**

All existing and proposed sewage collection system gravity mains, forcemains, and services as generally indicated on Drawing 1 - Site Servicing Plan dated February 25, 2008 as submitted by Stantec Consulting Ltd.

#### **Pumping Stations and Forcemain**

1. Sewage Pumping Station PS-1 (UTM NAD83: Zone 17, 569553 mE, 4814393 mN)

One (1) 1,200 mm diameter fibreglass package duplex sewage pumping station (located at the intersection of Ash Avenue, Cross Street and Pine Street servicing approximately 77 units), equipped with two (2) submersible pumps, each pump rated at 1.8 L/s at 28.98 m TDH and having a working volume of  $0.405 \text{ m}^3$ , and a forcemain, approx. 29 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-2 and PS-3, where the common forcemain continues approximately 621 m to discharge directly to the Wastewater Treatment Plant (WWTP) described below.

2. Sewage Pumping Station PS-2 (UTM NAD83: Zone 17, 569203 mE, 4814540 mN)

One (1) 1,200 mm diameter fibreglass package duplex sewage pumping station (located on Jasper Heights Drive approximately 110 m northeast of Garden Parkway servicing approximately 132 units), equipped with two (2) submersible pumps, each pump rated at 2.225 L/s at 33.82 m TDH and having a working volume of  $0.501 \text{ m}^3$ , and a forcemain, approx. 224 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-3, where the common forcemain continues approximately 215 m to the junction with PS-1 and a further 621 m to discharge directly to the Wastewater Treatment Plant (WWTP) described below.

3. Sewage Pumping Station PS-3 (UTM NAD83: Zone 17, 569349 mE, 4814559 mN)

One (1) 1,200 mm diameter fibreglass package duplex sewage pumping station (located on Lot 62 Hemlock, servicing approximately 42 units), equipped with two (2) submersible pumps, each pump rated at 1.075 L/s at 32.2 m TDH and having a working volume of  $0.242 \text{ m}^3$ , and a forcemain, approx. 229 m long, extending from the pump station before discharging into the common 75 mm forcemain from PS-3, where the common forcemain continues approximately 215 m to the junction with PS-1 and a further 621 m to discharge directly to the Wastewater Treatment Plant (WWTP) described below.

4. Sewage Pumping Station PS-4 (UTM NAD83: Zone 17, 569491 mE, 4814533 mN)

One (1) 1,200 mm diameter fibreglass package duplex sewage pumping



station (located adjacent and on the north corner of Lot 227 on Cedarbush Crescent, servicing approximately 53 units and a community centre), equipped with two (2) submersible pumps, each pump rated at 1.35 L/s at 7.27 m TDH and having a working volume of 0.304 m<sup>3</sup>, and a forcemain, approx. 358 m long, extending from the pump station before discharging directly to the Wastewater Treatment Plant (WWTP) described below.

5. Sewage Pumping Station PS-5 (UTM NAD83: Zone 17, 569720 mE, 4814755 mN)

One (1) 1,200 mm diameter precast concrete duplex sewage pumping station (located at the intersection of Water Street and Basswood to service Phase 2 and 3 development, and will ultimately service approximately 79 units), equipped with two (2) submersible pumps, each pump rated at 2.55 L/s at 14.75 m TDH and having a working volume of 0.469 m<sup>3</sup>, and a forcemain, approx. 207 m long, discharging into the 75 mm diameter forcemain from PS-4, where the common forcemain continues for approx 29 m before discharging directly to the Wastewater Treatment Plant (WWTP) described below.

#### Wastewater Treatment Plant

A sewage treatment plant (with dual trains operating in parallel) to be located within a building housing a primary settlement tank, rotating biological contactors, intermediate clarifier, a denitrification tank and final clarifiers and effluent pump chamber as follows:

- a concrete common primary settlement tank with cover, approx. 8.1m wide x 8.5m long x 1.73m liquid depth discharging (via an outlet pipe to each treatment train) to the rotating biological contactors, complete with gear motor and drive mechanism;
- two (2) rotating biological contactors (RBCs) with 2.35m diameter rotor, each equipped with low profile fixed baffles and establish four (4) zones per rotor, and providing approx. 4,179 m<sup>2</sup> of bio-support media area;
- two (2) hopper bottom 3m x 3.6m intermediate clarifiers per treatment train, complete with inlet and outlet weir, sludge and scum transfer equipment and pumping systems;
- two (2) denitrification tanks, approx. 5.06m x 3.6m, each consisting with 4,704m<sup>2</sup> of submerged rigid media, complete with an adjustable flow

distribution box;

- one (1) 900 L capacity chemical tank and chemical metering pump capable of feeding a carbon source to the denitrification tanks, complete with spill containment facilities;
- chemical feed system comprising of one (1) 2,300 L capacity polyethylene chemical storage tank and metering pump (with standby pump) capable of feeding approx. 1.5 L/hr of alum into the last stage of the rotating biological contactor rotor, complete with spill containment facilities;
- two (2) hopper bottom 3m x 3.6m final clarifiers per treatment train, complete with inlet and outlet weirs and sludge transfer equipment and pumping systems;
- a 50,000 L capacity effluent pump chamber equipped with five (5) submersible pumps (with one additional standby pump), each rated at 2.7 L/s at 11m TDH (max.), to discharge treated effluent via a splitter valve and five (5) 75mm diameter forcemains, one forcemain to each absorption cell of the subsurface disposal system.

#### Subsurface Disposal System

A subsurface disposal system comprising of five (5) shallow buried trench absorption cells, each cell comprising of six (6) zones with eight (8) laterals (each lateral located within a trench 18m long and 0.6m wide, with a hollow inverted semi-circular chamber housing a 25mm PVC pressurized pipe with 3.2mm holes spaced at 1m c/c) per zone, for a total of approx. 864m of piping per cell (total of approx. 4,320m of piping), and distribution valve assembly and manifold together with a relocation area (alternate subsurface disposal area) and the use of the existing leaching bed areas as contingencies for a period of three (3) years of operation of the sewage works,

all in accordance with the final plans and specifications prepared by P. J. Hannah Equipment Sales Corp. and Stantec Consulting Ltd., Consulting Engineers.

*For the purpose of this environmental compliance approval, the following definitions apply:*

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"Annual Average Concentration" means the arithmetic mean of the Monthly Average Concentrations of a contaminant in the effluent calculated for any particular calendar year;

"Approval" means this entire document and any Schedules attached to it, and the application;

"Average Daily Flow" means the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year;

"BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

"CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"Daily Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"District Manager" means the District Manager of the Guelph District Office;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;

"Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Notice of Modifications" means the form entitled "Notice of Modifications to Sewage Works";

"Monthly Average Concentration" means the arithmetic mean of all Daily Concentrations of a contaminant in the effluent sampled or measured, or both, during a calendar month;

"Owner" means Wellington Common Elements Condominium Corporation No.214 and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"Rated Capacity" means the Average Daily Flow for which the Works are approved to handle;

"Regional Director" means the Regional Director of the West Central Region of the Ministry;

"Substantial Completion" has the same meaning as "substantial performance" in the Construction Lien Act; and

"Works" means the sewage works described in the Owner's application, and this Approval, and includes Proposed Works, Previous Works, and modifications made under Limited Operational Flexibility.

*You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:*

## **TERMS AND CONDITIONS**

### **1. GENERAL PROVISIONS**

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the

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Works.

(3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in the Schedule B submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

### 2. EXPIRY OF APPROVAL

This Approval will cease to apply to those parts of the Proposed Works which have not been constructed within five (5) years of the date of this Approval.

### 3. CHANGE OF OWNER

(1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of Owner;

(b) change of address of the Owner;

(c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act*, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager;

(d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current

information filed under the *Corporations Information Act*, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager;

(2) In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

#### 4. CONSTRUCTION

(1) The Owner shall ensure that the construction of the works is supervised by a licensed installer or a Professional Engineer, as defined in the *Professional Engineers Act*.

(2) Upon construction of the works, the Owner shall prepare a statement, certified by a licensed installer or a Professional Engineer, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff and staff of the local municipality.

#### 5. MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the Works, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples of **treated effluent** (ahead of subsurface disposal system) shall be collected at the effluent pump chamber and analyzed for at least the following parameters at the indicated minimum frequencies:

Table 1 - Treated Effluent Sampling		
Parameter	Type of Sample	Minimum Frequency
CBOD5	grab	monthly
Total Suspended Solids	grab	monthly
Total Phosphorus	grab	monthly
Total Ammonia Nitrogen	grab	monthly
Nitrate Nitrogen	grab	monthly
Nitrite Nitrogen	grab	monthly
Total Kjeldahl Nitrogen	grab	monthly
E. coli		
Dissolved Oxygen		
pH		

(3) Samples of **groundwater** shall be collected from the nine (9) monitoring wells MW-1, MW-2, MW-4 to MW-10 inclusive, located upgradient of the subsurface disposal beds, immediately downgradient of the subsurface disposal beds and at the property boundary in the downgradient flow path from the subsurface disposal beds, and two (2) additional monitoring wells to intercept the plume close to the water's edge, and analyzed for at least the following parameters at the indicated **minimum** frequencies:



Table 2 - Groundwater Sampling		
Parameter	Type of Sample	Minimum Frequency
CBOD5	grab	quarterly
Total Suspended Solids	grab	quarterly
Total Phosphorus	grab	quarterly
Total Ammonia Nitrogen	grab	quarterly
Nitrate Nitrogen	grab	quarterly
Nitrite Nitrogen	grab	quarterly
Total Kjeldahl Nitrogen	grab	quarterly
E. coli		
Dissolved Organic Carbon		

In addition, groundwater depths for each of the monitoring wells shall also be recorded to assess groundwater elevation and flow paths through the site.

(4) Samples of **surface water** shall be collected at the following five (5) locations and analyzed for at least the following parameters at the indicated **minimum** frequencies:

Surface water monitoring locations

- upgradient background (SW1)
- one location within the main pond (SW3)
- outlet from the main pond (SW4)
- outlet from the property (SW6)
- upgradient tributaries (SW5, located at County Road No. 34, approximately 50m upstream of the confluence of Mill Creek with the downstream location of the Mini Lakes outlet).

Table 3 - Surface Water Sampling		
Parameter	Type of Sample	Minimum Frequency
Total Phosphorus	grab	quarterly
Total Ammonia	grab	quarterly
Nitrogen	grab	quarterly
Nitrate Nitrogen	grab	quarterly
Nitrite Nitrogen	grab	quarterly
Total Kjeldahl	grab	quarterly
Nitrogen		
E. coli		

(5) The monitoring outlined pursuant to subsections (3) and (4) shall be undertaken for a period of at least three (3) years following the start up of the Proposed Works.

(6) Prior to the startup of the Works, background groundwater quality must be established by collecting groundwater samples and having them analyzed for the parameters outlined in Table 2.

(7) The Owner shall measure and record the daily volume of effluent being discharged to subsurface disposal system.

(8) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

(a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;

(b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and

(c) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.

(9) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

(10) Following completion of two (2) full years of operation of the sewage system, if the quality of effluent discharged to the subsurface disposal system satisfies the objectives stipulated in Condition 6 as evidenced by the results of the monitoring program required by this condition, the monitoring requirements may be revised by the District Manager if he/she is of the opinion that such a reduction is appropriate in the circumstances.

## 6. EFFLUENT LIMITS

(1) The Owner shall operate and maintain the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 4 - Effluent Limits	
Effluent Parameters	Annual Average Concentration
CBOD5	20 mg/L
Total Suspended Solids	20 mg/L
Nitrate Nitrogen	8 mg/L
Total Phosphorus	1 mg/L

(2) For the purposes of determining compliance with and enforcing subsection (1):

(a) Non-compliance with respect to the effluent parameters is deemed to have occurred when the annual average concentration of any of the effluent parameters (treated effluent discharge to the subsurface disposal system) named in subsection (1) above, based on all grab samples taken in accordance with Condition 5(2) above, supplemented by spot sampling by Ministry staff as necessary, during any calendar year, exceeds its corresponding stipulated effluent concentration indicated above.

(3) Paragraph (a) of subsection (2) shall apply upon the issuance of this

Approval.

(4) The effluent limit set out in subsection (1) shall apply upon the issuance of this Approval.

(5) Only those monitoring results collected during the corresponding time period shall be used in calculating the Annual Average Concentration.

#### 7. OPERATIONS AND MAINTENANCE

(1) The Owner shall prepare an operations manual within six (6) months of the introduction of sewage to the Works, that includes, but not necessarily limited to, the following information:

(a) operating procedures for routine operation of the Works; and

(b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary.

(2) The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.

(3) The Owner shall prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings within one (1) year of Substantial Completion of the Works. The maintenance agreement and drawings must be retained at the site and kept current.

(4) The Owner shall employ for the overall operation of the Works a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.

#### 8. REPORTING

(1) One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date of the Proposed Works.

(2) The Owner shall prepare, and submit upon request, a performance

report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 6, including an overview of the success and adequacy of the Works;

(b) a tabulation of the daily volumes of effluent disposed through the subsurface disposal system during the reporting period;

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;

(d) a description of any operating problems encountered and corrective actions taken.

(f) a copy of all Notice of Modifications submitted to the District Manager as a result of Schedule A, Section 1, with a status report on the implementation of each modification;

(g) a report summarizing all modifications completed as a result of Schedule A, Section 3;

(h) any other information the District Manager requires from time to time.

## 9. LIMITED OPERATIONAL FLEXIBILITY

(1) The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works", included under Schedule A of this Approval, as amended.

(2) Sewage works under Limited Operational Flexibility shall adhere to the

design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.

(3) The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.

(4) For greater certainty, the following are not permitted as part of Limited Operational Flexibility:

(a) Modifications to the Works that result in an increase of the approved Rated Capacity of the Works;

(b) Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;

(c) Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;

(d) Modifications to the Works approved under s.9 of the EPA, and

(e) Modifications to the Works pursuant to an order issued by the Ministry.

(5) Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.

(6) If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, provide a revised copy of this plan to the local fire services authority prior to implementing Limited Operational Flexibility.

(7) For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the *Environmental Protection Act*, *Niagara Escarpment Planning and Development Act*, *Oak Ridges Moraine Conservation Act*, *Lake Simcoe Protection Act* and *Greenbelt Act*.

(8) At least thirty (30) days prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing

any proposed modifications to the Works and submit it to the District Manager.

(9) The Owner shall not proceed with implementation of Limited Operational Flexibility until the District Manager has provided written acceptance of the Notice of Modifications or a minimum of thirty (30) days have passed since the day the District Manager acknowledged the receipt of the Notice of Modifications.

#### **SCHEDULE 'A'**

### **Limited Operational Flexibility Criteria for Modifications to Industrial Sewage Works**

1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.

#### **1.1 Sewage Pumping Stations**

- a. Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.
- b. Forcemain relining and replacement with similar pipe size where the nominal diameter is not greater than 1,200mm.

#### **1.2 Sewage Treatment Process**

- a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
- b. Expanding the buffer zone between a sanitary sewage lagoon



facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.

c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.

d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the approved Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.

e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same. For clarity purposes, the following equipment can be considered under this provision: pumps, screens, grit separators, blowers, aeration equipment, sludge thickeners, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

### 1.3 Sanitary Sewers

a. Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant site, where the nominal diameter is not greater than 1,200mm.

### 1.4 Pilot Systems

a. Installation of pilot systems for new or existing technologies provided that:

i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,

- ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/ concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
- iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and District Manager three months after completion of the pilot project.

2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.

3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.

4. The modifications noted in section (3) above are not required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.

#### **SCHEDULE 'B'**

Environmental Compliance Approval (ECA) supporting documents:

1. Application for Environmental Compliance Approval (ECA) dated June 7, 2012 signed by Tom Boyd, President, Mini Lakes Residents Association, and supporting documents prepared by Stantec Consulting Ltd., Consulting Engineers.

**Notice of Modification to**

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SY)

**Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility**

(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consequent number)

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
ECA Owner		Municipality

**Part 2: Description of the modifications as part of the Limited Operational Flexibility**

(Attach a detailed description of the sewage works)

Description shall include:

1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modification. If the submission of documentation is not required, but the listing of updated documents is (design brief, drawings, etc.)

**Part 3 – Declaration by Professional Engineer**

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other applicable regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is true and correct.

Name (Print)	PEO License Number
Signature	Date (mm/dd/yy)
Name of Employer or	

**Part 4 – Declaration by Owner**

I hereby declare that:

1. I am authorized by the Owner to complete this Declaration;
  2. The Owner consents to the modification; and
  3. This modification to the sewage works is proposed in accordance with the Limited Operational Flexibility as described in the ECA;
  4. The Owner has fulfilled all applicable requirements of the Environmental Assessment Act.
- I hereby declare that to the best of my knowledge, information and belief the information contained in this form is true and correct.

Name of Owner Representative (Print)	Owner representative's title (Print)
Owner Representative's Signature	Date (mm/dd/yy)

*The reasons for the imposition of these terms and conditions are as follows:*

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives specified in the Approval.
6. Condition 6 is imposed to ensure that the effluent discharged from the Works to the subsurface disposal system meets the Ministry's effluent quality requirements thus minimizing environmental impact.
7. Condition 7 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such a information is an integral part of the operation of the Works. Its compilation and use should assist the

## CONTENT COPY OF ORIGINAL

Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the work.

8. Condition 8 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

9. Condition 9 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These Conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the Terms and Conditions of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 2113-7M8RBP issued on February 18, 2009.**

*In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:*

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are*

*substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.*

*The Notice should also include:*

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. The municipality or municipalities within which the project is to be engaged in.

*And the Notice should be signed and dated by the appellant.*

*This Notice must be served upon:*

The Secretary\*  
Environmental Review Tribunal  
655 Bay Street, Suite 1500  
Toronto, Ontario  
M5G 1E5

AND

The Director appointed for the  
purposes of Part II.1 of the  
Environmental Protection Act  
Ministry of the Environment  
2 St. Clair Avenue West, Floor 12A  
Toronto, Ontario  
M4V 1L5

**\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 314-4506 or [www.ert.gov.on.ca](http://www.ert.gov.on.ca)**

*The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.*



DATED AT TORONTO this 1st day of June, 2016

Fariha Pannu, P.Eng.  
Director  
appointed for the purposes of Part  
II.1 of the *Environmental  
Protection Act*

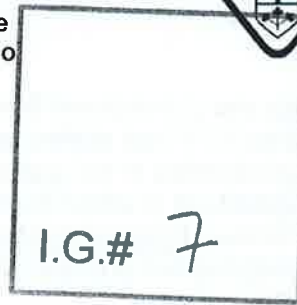
HV/

c: District Manager, MOE Guelph

Anne Egan, P. Eng., R.J. Burnside & Associates Ltd.

Ontario  
Provincial  
Police

Police  
provinciale  
de l'Ontario



Municipal Policing Bureau  
Bureau des services policiers des municipalités

777 Memorial Ave.  
Orillia ON L3V 7V3

777, ave Memorial  
Orillia (ON) L3V 7V3

Tel: (705) 329-6200

Fax: (705) 330-4191

File number/Référence: 612-20

June 01, 2016

Mayor/CAO,

It has been a pleasure for us to help you accomplish your policing responsibilities and keeping your community safe over the years, and we look forward to providing you high value policing service in 2016 and beyond.

In this letter, I would like to highlight for you some of the 2016 initiatives we are undertaking and inform you of some of the projects Municipal Policing Bureau (MPB) will be focusing on this year.

#### **New MPB Twitter account [@OPP\\_Mun\\_Pol](#)**

In 2016, MPB's commitment is to enhance our communication with your municipality using effective, innovative means of communication. The Bureau recently launched a Twitter account ([@OPP\\_Mun\\_Pol](#)) to provide municipalities like yours with an opportunity to stay up-to-date with the MPB initiatives and announcements. At the same time, our Bureau will be using Twitter to post additional information/materials and answer questions you might have. If your municipality does not have a Twitter account, it is recommended to set up one up on your desktop or your mobile device and start following us at [@OPP\\_Mun\\_Pol](#). For additional information on how to sign up with Twitter, please visit [Twitter Support Page](#). Alternatively, you may enter [@OPP\\_Mun\\_Pol](#) in your search browser (i.e. Google Chrome, Firefox or Internet Explorer).

#### **Redesign of the [www.OPP.ca](#)**

With the recent redesign of the OPP website, our Bureau will continue to upload materials which will help in providing detailed explanation on the billing model, contract proposal process and policing costs in general. Please take the time to review the MPB page of the website ([www.OPP.ca/Who we are/Municipal Policing Bureau](#)). In addition, the MPB will notify all our Twitter followers once new materials are uploaded on our website.

#### **Posting of the 2015-2016 municipal policing costs on [www.OPP.ca](#)**

Based on feedback received from many municipalities, and in keeping with our renewed commitment to educate, inform, and be transparent on OPP municipal policing billing practices, the OPP will be posting the 2015 and 2016 policing costs for all OPP policed municipalities on [www.OPP.ca/Who we are/Municipal Policing Bureau](#).

#### **Municipal portal initiative**

We are currently at the design stage for creating a communication portal with all 323 municipalities policed by the OPP. The ability to communicate regularly and in a timely manner with such a large number of clients using conventional means, like regular mail, has its limitations. In keeping with the OPP's drive to innovate and be more efficient, my intention is to develop an online correspondence delivery system that allows all of us to communicate with you in a more efficient and effective way.



This online portal will have individual municipal access and serve as a delivery mechanism for all the correspondence with municipalities like yours going forward. i.e. annual billing statements, letters, reminders etc.

### **The OPP Contract Proposal Process**

As you are aware, the Ministry of Community Safety and Correctional Services lifted the moratorium on costings on November 1, 2015 and the OPP has started providing contract proposals as requested. There are currently 10 municipalities in the queue for costing proposals. The contract proposal process was designed not to affect the municipal policing cost of the existing OPP-policed municipalities. A detailed [Information Manual](#) that provides more information on the OPP contract proposal/amalgamation process can be found at [www.OPP.ca/Who we are/Municipal Policing Bureau](http://www.OPP.ca/Who we are/Municipal Policing Bureau).

### **New CFS Billing Summary Report**

In addition to the OPP launching the Polices Services Board reporting tool earlier in 2015, MPB recently launched the Calls for Service (CFS) Billing Summary Report. If you haven't seen it by now your local civilian governance body likely has. The report, available from your local OPP detachment Commander, ensures timely information to municipalities pertaining to the 'billable' CFS in their municipality. Please discuss with your Detachment Commander and your civilian governance body (if any) for the possibility of reviewing the report.

Please send us your feedback on these new initiatives by email at [OPP.MunicipalPolicing@opp.ca](mailto:OPP.MunicipalPolicing@opp.ca). We look forward to hearing from your municipality on these initiatives and our fruitful collaboration in the future.

The OPP is committed to work diligently with municipal stakeholders to ensure effective, efficient and sustainable police service delivery in Ontario.

Thank you again.

Sincerely,

M.M.(Marc) Bedard  
Superintendent  
Commander,  
Municipal Policing Bureau

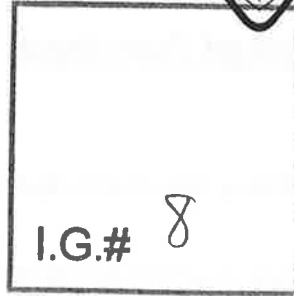
Email [OPP.MunicipalPolicing@opp.ca](mailto:OPP.MunicipalPolicing@opp.ca)

Twitter [@OPP\\_Mun\\_Pol](https://twitter.com/OPP_Mun_Pol)

/nv

Ontario  
Provincial  
Police

Police  
provinciale  
de l'Ontario



**Municipal Policing Bureau**  
**Bureau des services policiers des municipalités**

777 Memorial Ave.  
Orillia ON L3V 7V3

777, avenue Memorial  
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Tel: 705 329-6200  
Fax: 705 330-4191

Tél. : 705 329-6200  
Télec.: 705 330-4191

File Reference: 612-20

June 7, 2016

Attn: Municipal CAOs and Mayors

**RE: New Report Available Related to Current Billable Calls for Service (CFS)**

In follow-up to the 2016 initiatives letter dated June 1<sup>st</sup>, 2016, the Ontario Provincial Police (OPP) Municipal Policing Bureau has rolled out a new report called the Calls for Service (CFS) Billing Summary Report. Under the OPP billing model, the number of billable occurrences has an impact on the amount a municipality pays on the CFS portion of their annual billing statement.

Police officers perform a variety of duties and respond to many different types of situations. Only a portion of these duties, deemed to be reactive in nature, are included in the CFS portion of a municipality's annual billing statement.

The CFS Billing Summary Report captures current activity for billable occurrences grouped and weighted by their respective time standard in a manner similar to the annual statement. With the CFS Billing Summary Report, Detachment Commanders are able to view current activity, comparing it to the same period in the previous year to take a quick snapshot of "billable" CFS in the municipality.

This report is meant to be shared by detachment representatives with OPP-policed municipalities through their Police Services Boards (PSB), Community Policing Advisory Committees (CPAC) and/or municipal councils. It must be recognized that this is only one of several tools and/or reports available to understand policing activity in a municipality. On the back side of this memo you will find some *Frequently Asked Questions* about the CFS Billing Summary Report.

This report, combined with other tools and/or reports, can assist detachment commanders in identifying the types of calls that may be contributing to reactive CFS and impacting policing costs. The development of this report supports the OPP's commitment to provide clear and transparent information to municipalities about the delivery of OPP municipal policing services.

Yours truly,

M.M. (Marc) Bedard  
Superintendent  
Commander,  
Municipal Policing Bureau

ald/

## **Frequently Asked Questions**

### **Q. What is the difference between the CFS Billing Summary report and the Police Services Board report?**

The PSB report consists of four components, one of which being crime data from Niche RMS. The crime report is similar to the CFS Billing summary but different. Billable occurrence reporting has unique characteristics unlike any of the OPP's other statistical methods including:

- Count of *reported* occurrences instead of *actual* occurrences (reported in the Police Services Board Crime report).
- Excludes occurrences reported through on-line reporting methods.
- Offences included in the billing categories vary from traditional reporting categories (originating from Statistics Canada) despite similar naming conventions.
- Does not include ALL occurrences municipal officers attend.
- Does not include occurrences in First Nations, provincial areas or unorganized territories.
- The PSB Report is managed and supported by Business Management Bureau. The CFS Billing Summary Report is managed and supported by Municipal Policing Bureau.

### **Q. Why are reported occurrences used instead of actual occurrences?**

Reported occurrences are the sum of all actual and unfounded occurrences reported to police. Reported occurrences invoke police resources, whether the reported offence was actually committed or not. As police are still required to investigate 'unfounded' occurrences and still invoke a police response, they are counted for billing purposes.

### **Q. Where can I get this report from?**

CFS Billing Summary reports can be requested from your Detachment Commander.

### **Q. Are calls for service in First Nation or provincial areas (Provincial parks, highways) included in the counts?**

The CFS Billing Summary report counts only occurrences that occur in one of the 323 municipalities policed by the OPP. It does not include occurrences in provincial areas (including First Nation, unincorporated territories or provincial park areas) that OPP members are mandated to police. Location of the occurrence is determined by the occurrence address.

## Donna Tremblay

---

**From:** Boyd, Lindsay <LBoyd@uniongas.com>  
**Sent:** May-20-16 9:19 AM  
**Subject:** Union Gas Update – Provincial Climate Change Plan and the Impacts on Natural Gas  
**Attachments:** Premier Wynne Letter Natural Gas.docx

Dear Mayor/Reeve/Warden,

As you may have heard, on Monday morning there was an article featured in the *Globe and Mail* that covered the details of a draft copy of the Ontario government's proposed Climate Change Action Plan (CCAP), which is anticipated to be released in June. The CCAP details the actions that the Ontario government will take to achieve its emission reduction targets to 15 per cent below 1990 levels by 2020, 37 per cent by 2030 and 80 per cent by 2050.

Most concerning for us in this proposed plan was a commitment to eliminate the use of natural gas for home heating in newly built homes by 2030 and all others by 2050. This policy would force homeowners to move to more expensive forms of energy such as electricity which would cost an additional \$3,000 per year on average, not including up front capital costs.

Natural gas is a critical partner fuel in a lower-carbon future. We have worked very hard with the government to identify natural gas technologies (in particular Renewable Natural Gas, Compressed Natural Gas/Liquefied Natural Gas for trucks) to help reduce Ontario's carbon emissions, while growing Ontario's economy. We have also been working hard to expand our infrastructure to reach more rural and Aboriginal communities and this plan could now be in jeopardy due to the provincial governments draft plans.

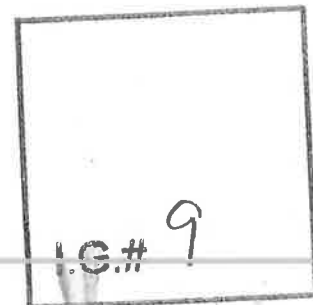
Based on the *Globe and Mail* article we are very concerned with the prescriptive nature and potential impacts to your municipality.

We are looking for your help in letting Premier Wynne know the importance of continued access to natural gas for your residents and businesses. We are hopeful that you are able to send the attached letter to the Premier expressing your dissatisfaction with this flawed policy.

If you have any questions please do not hesitate to contact your local Union Gas representative or myself at any time.

Sincerely,

**Lindsay Boyd**  
Director Aboriginal and Municipal Affairs  
Union Gas Limited  
50 Keil Drive  
Chatham, Ontario  
**519 436-4541** direct



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30/05/2016

Attention:

Hon. Kathleen Wynne, Premier of Ontario  
Legislative Building  
Queen's Park  
Toronto ON M7A 1A1

Premier,

As the Mayor of [insert municipality], I urge you and your government to reconsider any policy or strategy within the forthcoming "Climate Change Action Plan" that would have my residents and business replace the most affordable – and at the same time clean – energy option we have, natural gas. Electricity costs in Ontario are already high enough and they are scheduled to rise significantly more in the coming years. By contrast, natural gas prices are lower now than they were 10 years ago and we simply cannot afford to ignore that fact.

Natural gas is a critical partner fuel in a lower-carbon future. My residents should continue to be able to choose natural gas without negative consequences. We value the reliability, affordability and sustainability of natural gas to my community and we should not be put in a position where we are being asked or forced to replace it with more expensive electricity driven options. That dynamic would be bad for my community, our municipality and our greater economy.

I also worry about the obvious pressure this policy would place on existing electricity bills. I struggle to understand where the power generation and transmission needed to power electrified homes will come from and how much will inevitably be needed to satisfy that demand. More power plants and more wires mean more costs for the average Ontarian. We are already paying a heavy price for our electricity and we can't afford to simply pile new cost after new cost on consumers.

Again, I urge you and your government to reconsider this ill-advised policy. Thank you.

<Name>

<Address>

Cc:

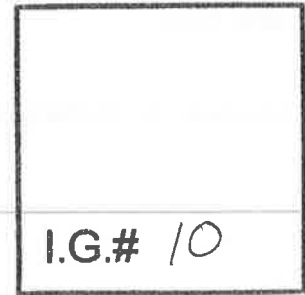
Hon. Glenn Murray, Minister of Environment and Climate Change  
[Insert name], MPP, [Insert riding]

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## Donna Tremblay

---

**From:** Michelle Cassar  
**Sent:** June-02-16 9:41 AM  
**To:** Donna Tremblay  
**Subject:** FW: Climate Change Action Plan Update



---

**From:** Boyd, Lindsay [<mailto:LBoyd@uniongas.com>]  
**Sent:** June-01-16 8:47 AM  
**Subject:** Climate Change Action Plan Update

Dear Mayor/Reeve/Warden,

At this time of uncertainty, I want to thank you, on behalf of Union Gas and our customers, to those of you who have sent letters to the Premier, made phone calls to your local MPP's or have otherwise helped support our efforts to ensure Ontarians are allowed to choose their energy options. I am writing today to keep you informed of our ongoing efforts to ensure natural gas continues to play a key role in your communities to meet your economic and environmental goals.

There is no doubt that the leaked Climate Change Action Plan (CCAP) document has resulted in considerable consumer and business uncertainty. We continue to hear about local examples of development investment being put on hold or re-evaluated as a result of this uncertainty.

For several years we have been supporting and leading the government's initiative to expand rural access to natural gas, while also planning investments to bolster our infrastructure to meet the growing demand for affordable natural gas. As a matter of fact, we are in the midst of the largest investment in Ontario in our 100 year history: we have plans to invest over \$1.5 billion in new infrastructure. Given the leaked CCAP and related uncertainty this has caused, we are re-evaluating our investments in several of those important projects. At a minimum, the timeframe for recovering the costs of asset investments will need to be much shorter than is used currently, which will significantly increase costs for Ontario homes and businesses.

Although Premier Wynne has stated the government will not "ban" natural gas, she has not addressed the reported proposal to change building codes to eliminate natural gas for new homes and buildings in 2030, and all homes and buildings by 2050. For these reasons, we ask you to continue to push the government for further clarity. We will be doing the same.

Again, thank you for your support and we will continue to keep you updated as more information becomes available.

Sincerely,

**Lindsay Boyd**  
Director Aboriginal and Municipal Affairs  
Union Gas Limited | A Spectra Energy Company  
50 Keil Drive



Chatham, Ontario

[uniongas.com](http://uniongas.com)

[lboyd@uniongas.com](mailto:lboyd@uniongas.com)

519 436-4541 direct

**One of Canada's Top 100 Employers**



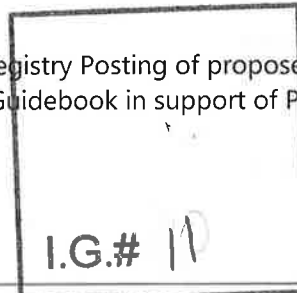
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## Donna Tremblay

---

**From:** Clancy, Anne (MNRF) <anne.clancy@ontario.ca> on behalf of Travers, Jason (MNRF) <Jason.Travers@ontario.ca>  
**Sent:** June-08-16 9:55 AM  
**To:** Travers, Jason (MNRF)  
**Cc:** Novacek, Katie (MNRF)  
**Subject:** Notification of Environmental Registry Posting of proposed Wildland Fire Risk Assessment and Mitigation: A Guidebook in support of Provincial Policy Statement, 2014

*This email is being sent on behalf of Jason Travers.*



I am pleased to inform you that the document entitled *Wildland Fire Risk Assessment and Mitigation: A Guidebook in support of the Provincial Policy Statement, 2014 - DRAFT* (draft *Wildland Fire Risk Assessment and Mitigation Guidebook*) has been prepared by the Ministry of Natural Resources and Forestry (MNRF), to support the implementation of the wildland fire policy in the Provincial Policy Statement, 2014 (PPS, 2014).

The document is posted on the Environmental Registry ([www.ebr.gov.on.ca](http://www.ebr.gov.on.ca), ER posting number 012-7075) for a 45 day period, which extends until July 22, 2016.

The PPS, 2014 includes a new natural hazards policy regarding wildland fire. Policy 3.1.8 of the PPS, 2014 requires that development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire, however it may be permitted on these lands where the risk is mitigated in accordance with wildland fire assessment and mitigation standards identified by MNRF.

The draft *Wildland Fire Risk Assessment and Mitigation Guidebook* outlines MNRF's proposed wildland fire risk assessment and mitigation standards that support the PPS, 2014, and promotes decisions that are consistent with it. It provides the policy context, background information, and approaches to wildland fire risk assessment and mitigation.

I invite you to review and provide comments on the draft *Wildland Fire Risk Assessment and Mitigation Guidebook* by July 22, 2016 in order for your input to be considered prior to the finalization of this guidance document.

In support of the review of the draft *Wildland Fire Risk Assessment and Mitigation Guidebook*, we are offering two webcast sessions in the coming weeks which will provide an overview of the draft *Wildland Fire Risk Assessment and Mitigation Guidebook*, (both sessions will cover the same content).

We encourage you and/or your planning staff, emergency management staff, and Chief Building Officials, as applicable, to participate in one of these sessions.

The following links (one link for each session) offer further details regarding the webinar sessions, including registration information:

<http://www1.webcastcanada.ca/events/registration/5161mnrf.php>

<http://www1.webcastcanada.ca/events/registration/5162mnrf.php>

We would also like to take this opportunity to make you aware that MNRF has produced province-wide generalized data for the identification of potential hazardous forest types for wildland fire to support implementation of policy 3.1.8 of the PPS, 2014. The data set, called "Fire - Potential Hazardous Forest Types for Wildland Fire" is intended to indicate areas with the greatest potential for risks associated with high to extreme wildland fire. The geospatial data set is available to download from Land Information Ontario (LIO) for use in GIS mapping applications. The draft *Wildland Fire Risk Assessment and Mitigation Guidebook* includes a description of the data and its intended use.

For further information regarding the Environmental Registry posting of the draft *Wildland Fire Risk Assessment and Mitigation Guidebook* please contact me or Katie Novacek at [katie.novacek@ontario.ca](mailto:katie.novacek@ontario.ca) or 705-755-5628.

Sincerely,

*Jason Travers*

*Director*

*Natural Resources Conservation Policy Branch*

*Ministry of Natural Resources and Forestry*

*300 Water Street, 2 South Tower*

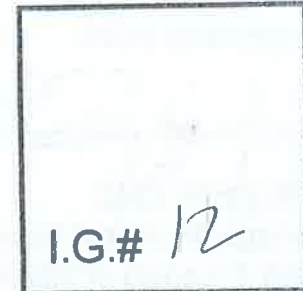
*Peterborough, ON K9J 8M5*

*Telephone: 705-755-1241*

*Email: [jason.travers@ontario.ca](mailto:jason.travers@ontario.ca)*

May 31, 2016

The Honourable Kathleen O. Wynne  
Queen's Park  
Main Legislative Building, Room 281  
Toronto, Ontario M7A 1A1



Re: Climate Change Action Plan

Please be advised the Council of the Municipality of Chatham-Kent at its regular meeting held on May 30, 2016 endorsed the following resolution:

WHEREAS any policy to move Ontario residents from affordable natural gas to more expensive energy sources would create an unmanageable burden on household and municipal budgets;

AND WHEREAS the rising costs of electricity in Ontario are already forcing families and local governments to choose between electricity bills and other basic necessities / services. A move to electric heat would add an additional \$3,000 annually to home heating costs and the impacts on municipal buildings would be even greater;

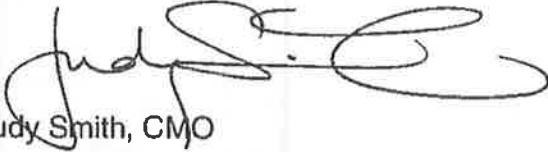
AND FURTHER any move by the provincial government to force Ontario industry and business away from natural gas to more expensive electric power options will have devastating consequences on the local economy as employers will relocate to other jurisdictions with more competitive energy choices;

THEREFORE BE IT RESOLVED THAT the Municipality of Chatham-Kent strongly urges the Government of Ontario to reconsider any policy or strategy within the forthcoming "Climate Change Action Plan" that would force rural residents and businesses to replace the most affordable energy option available, natural gas, with more expensive options;

AND FURTHER THAT this resolution be circulated to all other municipalities in Ontario asking for their support by passing a similar resolution.

If you have any questions or comments, please contact Judy Smith at 519-360-1998 Ext # 3200.

Respectfully yours,



Judy Smith, CMO  
Manager Municipal Governance  
Clerk /Freedom of Information Coordinator

C

Hon Glen R. Murray, MPP  
Ministry of the Environment and Climate Change  
11th Floor, Ferguson Block  
77 Wellesley Street West  
Toronto, Ontario M7A 2T5

Rick Nicholls, MPP  
100 -111 Heritage Rd.  
Chatham, ON N7M 5W7

Monte McNaughton, MPP  
360 James Street.  
Wallaceburg, ON N8A 2N5

Association of Municipalities of Ontario  
200 University Ave., Suite 801  
Toronto, ON M5H 3C6



## TOWNSHIP OF SOUTH - WEST OXFORD

R. R. # 1, Mount Elgin, On. N0J 1N0  
312915 Dereham Line

Phone: (519) 877-2702; (519) 485-0477; Fax: (519) 485-2932

Thursday, June 2, 2016

Rural Ontario Municipal Association  
Attn: Chairperson Ronald Holdman  
200 University Avenue  
Suite 801  
Toronto, ON  
M5H 3C6



Dear Board of Directors:

The Council of the Township of South-West Oxford duly moved and carried the following resolution at the regular council meeting held on May 17, 2016:

Resolved that staff be directed to write a letter to ROMA indicating the Township's opposition to the division of the Conferences and that this be sent to all municipalities in Ontario, AMO and Oxford MPP Ernie Hardeman.

Council has expressed concern that two separate conferences...only weeks apart...will have a negative impact on resources without a significant improvement in results. Provincial Ministers and support staff, Members of Provincial Parliament, Council members, municipal staff, vendors as well those sponsoring the conferences will see a doubling of costs as there is now an expectation to appear at two separate events.

The previous partnership provided diversity of content while streamlining costs between two important groups. Council does not see what efficiencies are to be gained by splitting the conferences. There has always been the opportunity to address Rural Ontario issues at the combined conference. It is questionable whether a separate conference will offer rural municipalities a clearer voice when dealing with the Province or other agencies or provide better educational opportunities to members. Diversity in a conference offers a great deal to the participants to bring back to their communities.

Council is hopeful that the ROMA Board of Directors will reconsider and reunite with OGRA for future conferences.

Yours truly,

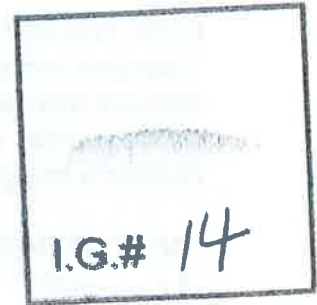
Mary Ellen Greb, CAO



# Tay Valley Township

May 20<sup>th</sup>, 2016

The Honourable Marc Garneau, P.C., M.P.  
Minister of Transport  
House of Commons  
Ottawa, ON K1A 0A6



Dear Honourable Marc Garneau:

**RE: Enforcement of "No Wake" Restriction Legislation.**

The Council of the Corporation of Tay Valley Township at its Council meeting on May 10<sup>th</sup>, 2016 adopted the following resolution:

**RESOLUTION #C-2016-04-35**

**"WHEREAS**, the Office of Boating Safety, which administers the Vessel Operation Restriction Regulations (VORRS) pursuant to the Canada Shipping Act, 2001, has advised that the issue of "No Wake" is currently addressed by limiting the speed or power of a vessel;

**AND WHEREAS**, the Office of Boating Safety has advised that "No Wake" is not a restriction found in the Canada Shipping Act, 2001, or its regulations, and therefore is not an enforceable restriction;

**AND WHEREAS**, a boat's wake can do a great deal of damage, including:

- the erosion of shorelines
- the swamping of nests of loons and other waterfowls
- the damaging of docks and vessels moored at docks and at marina that has pumps
- the danger to swimmers
- the interference with safe navigation
- the disruption of wetland habitat
- the upsetting of canoes and small boats, especially in narrow channels,





# Tay Valley Township

**NOW THEREFORE BE IT RESOLVED THAT**, the Council of Tay Valley Township requests the Honourable Marc Gameau, Minister of Transport, to address this dangerous and harmful situation, by implementing legislation that would provide authorities with the ability to enforce a "No Wake" restriction in Ontario's navigable waters;

**AND FURTHER THAT**, a copy of this resolution be forwarded to Scott Reid, M.P., Lanark – Frontenac – Kingston, and to all Municipalities in Ontario with a request for endorsement."

If you require any further information, please do not hesitate to contact the undersigned at (613) 267-5353 ext. 130 or [clerk@tayvalleytwp.ca](mailto:clerk@tayvalleytwp.ca).

Sincerely,

Janie Laidlaw, Acting Clerk

cc: Scott Reid, MP, Lanark-Frontenac-Lennox & Addington  
All Municipalities in Ontario



# The Corporation of The Town of Amherstburg

June 2, 2016

VIA EMAIL

The Honourable Dr. Jane Philpotts  
Health Canada  
70 Colombine Driveway  
Tunney's Pasture  
Ottawa, ON K1A-0K9

The Honourable Dr. Eric Hoskins  
Ministry of Health and Long Term Care  
10<sup>th</sup> Floor, Hepburn Block  
80 Grosvenor Street  
Toronto, ON M7A-2C4

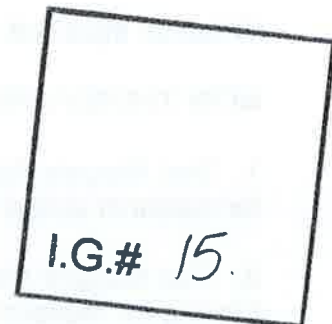
Dear Ministers,

Please be advised that at its meeting held on May 24<sup>th</sup>, 2016, Amherstburg Town Council passed the following motion:

**Resolution # 20160524-236** - That Council SUPPORT Niagara Region's resolution regarding their request for increased funding for enhanced Lyme disease testing.

Regards,

Tammy Fowkes  
Deputy Clerk



cc: Taras Natyshak – MPP, Essex  
Tracey Ramsey, MP, Essex  
Association of Municipalities of Ontario (AMO)  
Ontario Municipalities

Attached: Niagara Region letter re: Lyme Disease

**Administration**

Office of the Regional Clerk

1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON L2V 4T7

Telephone: 905-685-4225 Toll-free: 1-800-263-7215 Fax: 905-687-4977

[www.niagararegion.ca](http://www.niagararegion.ca)

May 9, 2016

The Honourable Dr. Jane Philpotts  
Health Canada  
70 Colombyne Driveway  
Tunney's Pasture  
Ottawa, ON K1A 0K9

*Sent via email:*

[hon.jane.philpott@canada.ca](mailto:hon.jane.philpott@canada.ca)

The Honourable Dr. Eric Hoskins  
Ministry of Health and Long Term Care  
10<sup>th</sup> Floor, Hepburn Block  
80 Grosvenor Street  
Toronto, ON M7A 2C4

*Sent via email:*

[ehoskins.mpp@liberal.ola.org](mailto:ehoskins.mpp@liberal.ola.org)

**RE: Lyme Disease  
Minute Item 9.3, CL 6-2016, April 28, 2016**

Dear Ministers:

Regional Council at its meeting held on April 28, 2016, passed the following resolution:

Whereas the number of cases of ticks positive for Lyme disease is increasing throughout Ontario and specifically in Niagara Region;

Whereas the laboratory testing for and diagnosis of Lyme disease is sub-optimal;  
and

Whereas there are chronic sufferers of long term consequences of this disease.

**NOW THEREFORE BE IT RESOLVED:**

1. That Niagara Region **REQUEST** the Province of Ontario to increase funding for research aimed to enhance the testing for Lyme disease;
2. That Niagara Region **REQUEST** the Government of Canada to increase funding for research aimed to enhance the testing for Lyme disease and determine better treatment for long term outcomes of Lyme disease;
3. That this resolution **BE FORWARDED** to all Municipalities in Ontario for their endorsement; and
4. That this resolution **BE FORWARDED** to the Premier of Ontario, the Minister of Health and local Members of Provincial Parliament.

Please do not hesitate to contact me should you have any questions.

Yours truly,

A handwritten signature in blue ink, appearing to read 'RWalton', with a stylized, cursive script.

Ralph Walton  
Regional Clerk

cc: The Honourable K. Wynne, Premier of Ontario *Sent via email: kwynne.mpp@liberal.ola.org*  
W. Gates, MPP (Niagara Falls) *Sent via email: wgates-co@ndp.on.ca*  
The Honourable R. Nicholson, MP (Niagara Falls) *Sent via email: rob.nicholson@parl.gc.ca*  
T. Hudak, MPP (Niagara West) *Sent via email: tim.hudakco@pc.ola.org*  
D. Allison, MP (Niagara West) *Sent via email: dean.allison@parl.gc.ca*  
The Honourable J. Bradley, MPP (St. Catharines) *Sent via email: jbradley.mpp.co@liberal.ola.org*  
C. Bittle, MP (St. Catharines) *Sent via email: chris.bittle@parl.gc.ca*  
C. Forster, MPP (Welland) *Sent via email: cforster-op@ndp.on.ca*  
V. Badawey, MP (Niagara Centre) *Sent via email: vance.badawey@parl.gc.ca*  
All Ontario Municipalities *Sent via email*



Vibrant · Creative · Caring

May 31, 2016

The Honourable Dr. Jane Philpotts  
Health Canada  
70 Colombyne Driveway  
Tunney's Pasture  
Ottawa, ON K1A 0K9

Sent via email:  
Hon.jane.philpott@canada.ca

The Honourable Dr. Eric Hoskins  
Minister of Health and Long Term Care  
10<sup>th</sup> Floor, Hepburn Block  
80 Grosvenor Street  
Toronto, ON M7A 2C4

Sent via email:  
ehoskins.mpp@liberal . ola.org

**Re: Lyme Disease  
Minute Item 9.3, CL 6-2016, April 28, 2016**

Dear Ministers:

At their regular meeting of May 16<sup>th</sup>, 2016, the Council of the Town of Pelham endorsed the following:

**BE IT RESOLVED THAT the Council receives correspondence from the Regional Municipality of Niagara, dated May 9, 2016, regarding Lyme Disease; and**

**THAT Council endorse and support the resolution therein contained.**

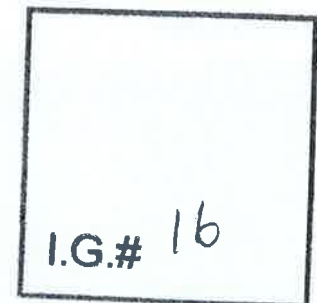
On behalf of Council, thank you for your attention to this matter.

Yours very truly,

A handwritten signature in blue ink, appearing to read "Nancy J. Bozzato", is written over a faint, larger version of the same signature.

(Mrs.) Nancy J. Bozzato, *Dipl.M.M., AMCT*  
Town Clerk

/js  
encl



From the Clerk's Department





Vibrant • Creative • Caring

**Cc:** The Honourable K. Wynne, Premier of Ontario *Sent via email: kwynne.mpp@liberal.ola.org*  
W. Gates, MPP (Niagara Falls) *Sent via email: wgates-co@ndp.on.ca*  
The Honourable R. Nicholson, MP (Niagara Falls) *Sent via email: rob.nicholson@parl.gc.ca*  
T. Hudak, MPP (Niagara West ) *Sent via email: tim.hudakco@pc.ola.org*  
D. Allison, MP (Niagara West) *Sent via email: dean.allison@parl.gc.ca*  
The Honourable J. Bradley, MPP (St. Catharines) *Sent via email: jbradley.mpp.co@liberal.ola.org*  
C. Bittle, MP (St. Catharines) *Sent via email: chris.bittle@parl.gc.ca*  
C. Forster, MPP (Welland) *Sent via email: cforster-op@ndp.on.ca*  
V. Badawey, MP (Niagara Centre) *Sent via email: vance.badawey@parl.gc.ca*  
All Ontario Municipalities *Sent via email*

From the Clerk's Department



20 Pelham Town Square P.O. Box 400 • Fonthill, ON L0S 1E0 p: 905.892.2607 f: 905.892.5055

pelham.ca

**Administration**

Office of the Regional Clerk

1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON L2V 4T7

Telephone: 905-685-4225 Toll-free: 1-800-263-7215 Fax: 905-687-4977

[www.niagararegion.ca](http://www.niagararegion.ca)

May 9, 2016

The Honourable Dr. Jane Philpotts  
Health Canada  
70 Colombine Driveway  
Tunney's Pasture  
Ottawa, ON K1A 0K9

*Sent via email:*

[hon.jane.philpott@canada.ca](mailto:hon.jane.philpott@canada.ca)

The Honourable Dr. Eric Hoskins  
Ministry of Health and Long Term Care  
10<sup>th</sup> Floor, Hepburn Block  
80 Grosvenor Street  
Toronto, ON M7A 2C4

*Sent via email:*

[ehoskins.mpp@liberal.ola.org](mailto:ehoskins.mpp@liberal.ola.org)

**RE: Lyme Disease  
Minute Item 9.3, CL 6-2016, April 28, 2016**

Dear Ministers:

Regional Council at its meeting held on April 28, 2016, passed the following resolution:

Whereas the number of cases of ticks positive for Lyme disease is increasing throughout Ontario and specifically in Niagara Region;

Whereas the laboratory testing for and diagnosis of Lyme disease is sub-optimal; and

Whereas there are chronic sufferers of long term consequences of this disease.

**NOW THEREFORE BE IT RESOLVED:**

1. That Niagara Region **REQUEST** the Province of Ontario to increase funding for research aimed to enhance the testing for Lyme disease;
2. That Niagara Region **REQUEST** the Government of Canada to increase funding for research aimed to enhance the testing for Lyme disease and determine better treatment for long term outcomes of Lyme disease;
3. That this resolution **BE FORWARDED** to all Municipalities in Ontario for their endorsement; and
4. That this resolution **BE FORWARDED** to the Premier of Ontario, the Minister of Health and local Members of Provincial Parliament.



Please do not hesitate to contact me should you have any questions.

Yours truly,



Ralph Walton  
Regional Clerk

cc: The Honourable K. Wynne, Premier of Ontario *Sent via email: kwynne.mpp@liberal.ola.org*  
W. Gates, MPP (Niagara Falls) *Sent via email: wgates-co@ndp.on.ca*  
The Honourable R. Nicholson, MP (Niagara Falls) *Sent via email: rob.nicholson@parl.gc.ca*  
T. Hudak, MPP (Niagara West) *Sent via email: tim.hudakco@pc.ola.org*  
D. Allison, MP (Niagara West) *Sent via email: dean.allison@parl.gc.ca*  
The Honourable J. Bradley, MPP (St. Catharines) *Sent via email: jbradley.mpp.co@liberal.ola.org*  
C. Bittle, MP (St. Catharines) *Sent via email: chris.bittle@parl.gc.ca*  
C. Forster, MPP (Welland) *Sent via email: cforster-op@ndp.on.ca*  
V. Badawey, MP (Niagara Centre) *Sent via email: vance.badawey@parl.gc.ca*  
All Ontario Municipalities *Sent via email*

## Donna Tremblay

---

**From:** Karen Constant <administration@calvintownship.ca>  
**Sent:** May-26-16 10:52 AM  
**To:** Karen Constant  
**Subject:** RESOLUTION #2016-083      SUPPORT REQUEST TO RECONSIDER SUSPENSION OF THE RURAL ECONOMIC DEVELOPMENT PROGRAM INTO THE JOBS AND PROSPERITY FUND

Below please find the above referenced resolution approved by the Council of the Corporation of the Municipality of Calvin at their regular meeting on Tuesday May 24th:

**2016-083      SUPPORT REQUEST TO RECONSIDER SUSPENSION OF THE RURAL ECONOMIC DEVELOPMENT PROGRAM INTO THE JOBS AND PROSPERITY FUND**

*Moved by Coun Pennell and seconded by Coun Edwards*

*WHEREAS the Council of the Corporation of the Municipality of Calvin supports the following resolution by the Municipality of South Dundas passed at their regular meeting held on April 19, 2016 which states:*

*WHEREAS in the 2016 Ontario Budget, the government of Ontario has suspended current intake of applications to the Rural Economic Development Program and has indicated that it plans to integrate the Program into the Jobs and Prosperity Fund; and*

*WHEREAS the Jobs and Prosperity Fund is narrowly focused and is restricted to private sector organizations and industry partners, which prevents access to funding for rural municipalities and others who formerly benefitted from the Rural Economic Development Program. The emphasis on large projects that meet either of minimum \$5 million or \$10 million in eligible project costs thresholds, will significantly restrict benefits from this fund; and*

*WHEREAS in contrast, the Rural Economic Development Program supported a number of capacity building projects including but not limited to 'Business Retention and Expansion' and 'Downtown Revitalization' projects and 'Economic Development Strategic Planning' projects for small rural municipalities who were looking to improve their local economy. Also of note is that because the Jobs and Prosperity Fund is not specifically designated for rural areas, that funds from this program will likely favour more urban areas of the province.*

*NOW THEREFORE BE IT resolved that the Municipality of South Dundas asks the government of Ontario to reconsider the suspension of and the integration of the Rural Economic Development Program into the Jobs and Prosperity Fund with the view to ensuring that the Rural Economic Development Program stays as an intricate funding program of the province that will support capacity building and foster economic growth in rural municipalities in Ontario.*

*BE IT FURTHER resolved that this resolution be circulated to all municipal and regional councils in Ontario requesting that they endorse and support this resolution and communicate their support to the Premier and the Minister of Agriculture, Food and Rural Affairs.*

*Carried*

I.G.# 17

Have a great day!

Karen Constant  
Administrative Assistant  
Municipality of Calvin  
1355 Peddlers Dr.  
R.R. #2  
Mattawa, ON P0H 1V0  
705-744-2700 phone  
705-744-0309 fax



TOWNSHIP OF /  
MUNICIPALITÉ DE

**RUSSELL**

**RESOLUTION/RÉSOLUTION**

**Date:** May 16 mai 2016

**Item(s) no.:** 10 (a)

I.G.# 18

**Subject/Objet:** Resolution to Support Rural Economic Development Program  
Résolution de support au programme de développement économique des collectivités rurales

**Moved by/ Proposé par :** Councillor/conseiller André Brisson

**Seconded by/ Appuyé par:** Councillor/conseillère Cindy Saucier

Whereas in the 2016 Ontario Budget, the government of Ontario has suspended current intake of applications to the Rural Economic Development Program and has indicated that it plans to integrate the program into the Jobs and Prosperity Fund; and

Attendu que dans le budget de l'Ontario 2016, le gouvernement de l'Ontario a suspendu la consommation actuelle des demandes au programme de développement économique des collectivités rurales et a indiqué qu'il prévoit intégrer le programme dans le fonds pour l'emploi et la prospérité; et

Whereas the Jobs and Prosperity Fund is narrowly focused and is restricted to private sector organizations and industry partners, which prevents access to funding for rural municipalities and others who formerly benefitted from the Rural Economic Development Program. The emphasis on large projects that meet either of minimum \$5 million or \$10 million in eligible project costs thresholds, will significantly restrict benefits from this fund; and

Attendu que le fonds pour l'emploi et la prospérité est étroitement ciblé et est limité aux organisations du secteur privé et aux partenaires de l'industrie, ce qui empêche l'accès au financement pour les municipalités rurales et d'autres qui autrefois ont bénéficié du programme de développement économique des collectivités rurales. L'emphasis sur les grands projets qui répondent soit d'un minimum de 5 M\$ ou 10 M\$ en coûts admissibles pour le commencement des projets, limitera considérablement les avantages de ce fonds; et

Whereas in contrast, the Rural Economic Development Program supported a number of capacity building projects including but not limited "Business Retention and Expansion" and "Downtown Revitalization" projects and Economic Development Strategic Planning projects for small rural municipalities who were looking to improve their local economy. Also of note is that because the Jobs and Prosperity Fund is not specifically designated for rural areas, that funds from this program will likely favour more urban areas of the province; now therefore be it

Attendu que le programme de développement économique des collectivités rurales a appuyé un certain nombre de projets de renforcement des capacités, y compris, mais sans s'y limiter, les projets « Maintien et expansion des entreprises » et « Revitalisation des centres villes » et les projets de planification stratégique de développement économique pour les petites municipalités rurales qui cherchent à améliorer leur économie locale. À noter également, le fonds pour l'emploi et la prospérité n'est pas particulièrement désigné

pour les zones rurales donc les fonds de ce programme vont probablement favoriser les zones plus urbaines de la province; il est résolu

RESOLVED that the Council of the Municipality of Russell asks the government of Ontario to reconsider the suspension and the integration of the Rural Economic Development Program into the Jobs and Prosperity Fund with the view to ensuring that the Rural Economic Development Program stays as an intricate funding program of the Province that will support capacity building and foster economic growth in rural municipalities in Ontario; and

QUE le conseil du canton de Russell demande au gouvernement de l'Ontario de reconsidérer la suspension et l'intégration du programme de développement économique des collectivités rurales dans le fonds pour l'emploi et la prospérité en vue d'assurer que le programme de développement économique des collectivités rurales demeure à titre de programme de financement complexe de la province qui appuiera le renforcement des capacités et de favoriser la croissance économique dans les municipalités rurales de l'Ontario; et

RESOLVED that this resolution be circulated to all municipal and regional councils in Ontario requesting that they endorse and support this resolution and communicate their support to the Premier and the Minister of Agriculture, Food and Rural Affairs.

QUE cette résolution soit distribuée à tous les conseils municipaux et régionaux en Ontario demandant qu'ils approuvent et appuient cette résolution et communique leur soutien au ministre et au ministère de l'Agriculture, de l'Alimentation et des Affaires rurales.

MOTION APPROVED

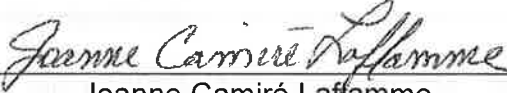
MOTION ADOPTÉE

CERTIFIED TRUE COPY

COPIE CERTIFIÉE CONFORME

I, Joanne Camiré Laflamme, Clerk of the Corporation of the Township of Russell, hereby certify that the foregoing is a true copy of the resolution adopted by the Council of the Corporation of the Township of Russell on the 16<sup>th</sup> day of May, 2016.

Je, Joanne Camiré Laflamme, greffière de la corporation de canton de Russell, atteste que la présente est une copie certifiée de la résolution adoptée par le conseil de la municipalité de Russell le 16<sup>e</sup> jour de mai 2016.

  
Joanne Camiré Laflamme  
Clerk / greffière

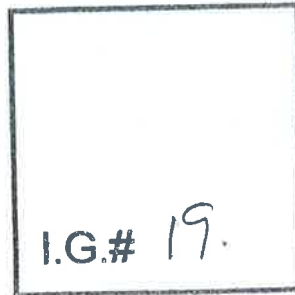


# The Corporation of The Town of Amherstburg

June 2, 2016

VIA EMAIL

Hon. Steven Del Duca, MPP  
Minister of Transportation  
3<sup>rd</sup> Floor, Ferguson Block  
77 Wellesley Street West  
Toronto, ON  
M7A-1Z8



Dear Hon. Steven Del Duca,

Please be advised that at its meeting held on May 24<sup>th</sup>, 2016, Amherstburg Town Council passed the following motion:

**Resolution # 20160524-239** - That Council SUPPORT Taras Natyshak's letter to the Minister of Transportation urging the Liberal government to complete the widening of Highway 3 to allow for a safer and more effective roadway.

Regards,

A handwritten signature in black ink, appearing to read "T. Fowkes".

Tammy Fowkes  
Deputy Clerk

cc: Taras Natyshak – MPP, Essex  
Tracey Ramsey, MP, Essex  
Association of Municipalities of Ontario (AMO)  
Ontario Municipalities

Attached: Open letter from Taras Natyshak – May 24, 2016



# Taras Natyshak

MPP | député Essex



## Open Letter

May 24, 2016

Hon. Steven Del Duca, MPP  
Minister of Transportation  
3rd Floor, Ferguson Block  
77 Wellesley Street West  
Toronto, Ontario  
M7A 1Z8

Dear Minister Del Duca,

Commuters, industry, and local municipalities can no longer tolerate continued inaction and delay on the completion of Phase 3 of the widening of Highway 3 in Essex County. People continue to be killed or seriously injured as a result of crashes on this road.

Recently several Essex County municipalities have again passed resolutions calling on your government to act now.

Essex County believes that much of this carnage could be prevented by your government fulfilling your promise to complete the widening and improvements to allow for a safer and more efficient roadway.

Minister, as you know, the late Bruce Crozier MPP fought for this project throughout his political career dating back to his days in municipal politics. In 2006, it was announced that this project was approved. The people of my riding were told that it would be completed by 2014. Now its completion sits stalled in your Southern Highways Program identified as "future planning" beyond 2019 with absolutely no commitment to the completion of the final phase.

I am calling on you to:

- immediately investigate and compare fatal and serious injury crashes between the sections of Highway 3 which were completed as Phases 1 and 2 and the remaining section referred to in the plan as Phase 3, and make the results of that investigation public
- increase enforcement by the OPP of all current Highway Traffic Act violations
- improve signage and public awareness of the dangers of distracted driving and safe passing targeted to the drivers in this region and specifically to the section of Highway 3 from the Town of Essex to the Town of Leamington
- commit to an accelerated timeline and allocate the funds required to complete this project

### Essex Office

316 Talbot St. North  
Essex, Ontario N8M 2E1  
Tel 519-776-6420  
Fax 519-776-6980  
T.Natyshak-CO@ndp.on.ca

### Queen's Park Office

Room 370, Main Legislative Building, Queen's Park  
Toronto, Ontario M7A 1A5  
Tel 416-325-0714  
Fax 416-325-0980  
T.Natyshak-QP@ndp.on.ca



This Liberal Government was able to find \$1 billion to buy their way out of poorly located gas plants in order to save Liberal seats in the GTHA. Why can you not find the money to save the lives and livelihoods of the people of Essex County?

Dithering is deadly Mr. Minister. We demand that you act now.

Sincerely,



Taras Natyshak  
Member of Provincial Parliament - Essex

---

---

**Essex Office**

316 Talbot St. North  
Essex, Ontario N8M 2E1  
Tel 519-776-6420  
Fax 519-776-6980  
TNatyshak-CO@ndp.on.ca

**Queen's Park Office**

Room 370, Main Legislative Building, Queen's Park  
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Tel 416-325-0714  
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TNatyshak-QP@ndp.on.ca



# The Corporation of The Town of Amherstburg

May 27, 2016

VIA EMAIL

Hon. Steven Del Duca, MPP  
Minister of Transportation  
3<sup>rd</sup> Floor, Ferguson Block  
77 Wellesley Street West  
Toronto, ON  
M7A-1Z8

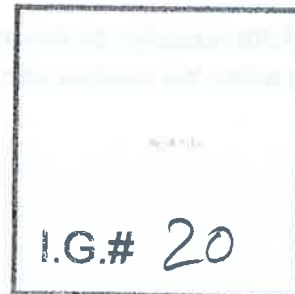
Dear Hon. Steven Del Duca,

Please be advised that at its meeting held on May 9<sup>th</sup>, 2016, Amherstburg Town Council passed the following motion:

**Resolution # 20160509-208** - That Administration BE DIRECTED to send a letter to the Liberal government in support of the Town of Essex's resolution to the Ontario government to improve public safety by completing the Highway 3 widening project.

Regards,

Tammy Fowkes  
Deputy Clerk



cc: Ron McDermott – Mayor, Town of Essex  
Taras Natyshak – MPP, Essex  
Tracey Ramsey, MP, Essex  
Association of Municipalities of Ontario (AMO)  
Ontario Municipalities

Attached: Town of Essex Resolution – Widening Highway 3 to Improve Public Safety

**Corporation of the Town of Essex**

**Municipal Resolution on Widening Highway 3 to Improve Public Safety**

**MOVED BY: Councillor Snively**

**RESOLUTION NO. R16-05-180**

**SECONDED BY: Deputy Mayor Meloche**

**DATE: May 2, 2016**

**WHEREAS** the late Bruce Crozier, as Member of Provincial Parliament for Essex from 1993 to 2011, successfully advocated for the widening of Highway 3 (Bruce Crozier Way) from Windsor to Leamington to address public safety concerns with this stretch of Highway 3.

**AND WHEREAS** two phases of the three-phase Highway 3 Road Widening project were completed by the Ministry of Transportation but the third phase of the Project (covering the stretch of Highway 3 from the Town of Essex to the Town of Leamington) is, based on our understanding, not currently in their short term planning;

**AND WHEREAS** a number of traffic accidents have since occurred on the current two-lane stretch of Highway 3 between Essex and Leamington, with the most recent fatal accident having occurred on April 27, 2016 just east of County Road 23;

**AND WHEREAS** public safety concerns persist today as it relates to this heavily travelled section of Highway 3 which is a major transportation corridor for industrial, agricultural and commercial trade in Southwestern Ontario;

**THEREFORE BE IT RESOLVED** that the Government of Ontario be called upon to make it a top priority to complete the final phase of the Highway 3 Widening Project (between Essex and Leamington); and

That a copy of this resolution be forwarded to the Ministry of Transportation, the AMO and to all municipalities within the Province with a request for support.

**"CARRIED"**



**Mayor McDermott**



Region of Waterloo

TRANSPORTATION AND  
ENVIRONMENTAL SERVICES  
Water Services

150 Frederick Street 7th Floor  
Kitchener Ontario N2G 4J3 Canada  
Telephone: 519-575-4400  
TTY: 519-575-4608  
Fax: 519-575-4452  
www.regionofwaterloo.ca

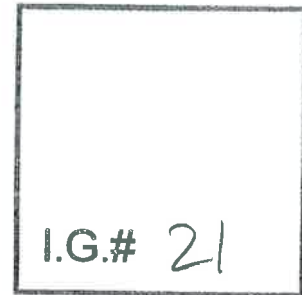
RECEIVED

JUN 07 2016

Township of Puslinch

June 3, 2016

**Ms. Karen Landry**  
**Township of Puslinch**  
**CAO/Clerk - Treasurer**  
**7404 Wellington Road 34**  
**Guelph**  
**ON N1H 6H9**



**Dear Ms. Karen Landry**

**Re: Region of Waterloo Biosolids Strategy – Project Update and Upcoming Events**

The Biosolids Strategy is now entering Phase 2 of the Project schedule. Our team has been busy since our last notice so we wanted to update you and inform you of some events we have lined up in the coming months.

**Webinar - Follow the Drain: Biosolids in Waterloo Region**

To share the work we have done over the past few months we have scheduled a webinar that anyone can access from the internet. They will learn how biosolids are created and managed in the Region today. This live webinar will be shown online on the following dates:

**Evening:** Wednesday, June 15<sup>th</sup>, 6:30pm – 7:30pm

**Afternoon:** Thursday, June 16<sup>th</sup>, 12:00pm – 1:00pm

### How to Join the Webinar:

Anyone can visit the Project website at **[www.regionofwaterloo.ca/biosolids](http://www.regionofwaterloo.ca/biosolids)**, and follow directions to join the webinar, just prior to the scheduled time.

Advertisements for the webinar will also be made through the local newspapers, the notification list and social media.

In case anyone can't make the times above, the webinar will be recorded and posted to the Biosolids Strategy website afterwards.

### Take the Survey!

Feedback is important to us and so we will be asking members of the public to fill out a brief survey, which will be available on the Project website until the end of June 2016. The survey will ask what issues that matter to them when it comes to biosolids management in the community. The survey can be accessed from the Project website.

### Community Pop-up Events

Over the next few months, our team is going to be out in the community, looking to engage with the public on the issues that matter related to the Biosolids Strategy and provide the public with an opportunity to learn more about this Project. Locations will be posted on the Project website.

### Project Charter

The Biosolids Strategy Project Charter is now available and can be freely shared from the Project website! The Charter is a guiding document that describes the need for a Biosolids Strategy in the Region and the scope and intent of the Project, among other useful facts about the Project. The Charter can be downloaded from the Project website.

### Getting Technical: Progress to Date

Our team has been busy this year working on two technical reports that will help us develop the Strategy: the first report covers the Environmental Assessment Process that the Project is following, and the second report is a detailed Existing Conditions Background Study that explores how the Region manages biosolids today. Both of these reports will be made available on the Project website soon.

## Next Steps

Over the summer and fall, our team will be working on three new technical reports:

- Draft Evaluation Criteria for Assessing Strategy Alternatives – Summer 2016
- Draft Biosolids Technology & Disposal Options – Fall 2016
- Draft Biosolids Management Strategies for Consideration – Fall 2016

These three reports will be discussed in the fall.

If you have any questions about the Biosolids Strategy project or comments and suggestions you wish to provide, please feel free to get in touch with me.

Also, as mentioned in this letter, please visit the Project website for more information and for regular updates on the project:

**[www.regionofwaterloo.ca/biosolids](http://www.regionofwaterloo.ca/biosolids)**

We look forward to your participation in the development of the Biosolids Strategy.

Sincerely,



Kaoru Yajima

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JUN 07 2016

Township of Puslinch

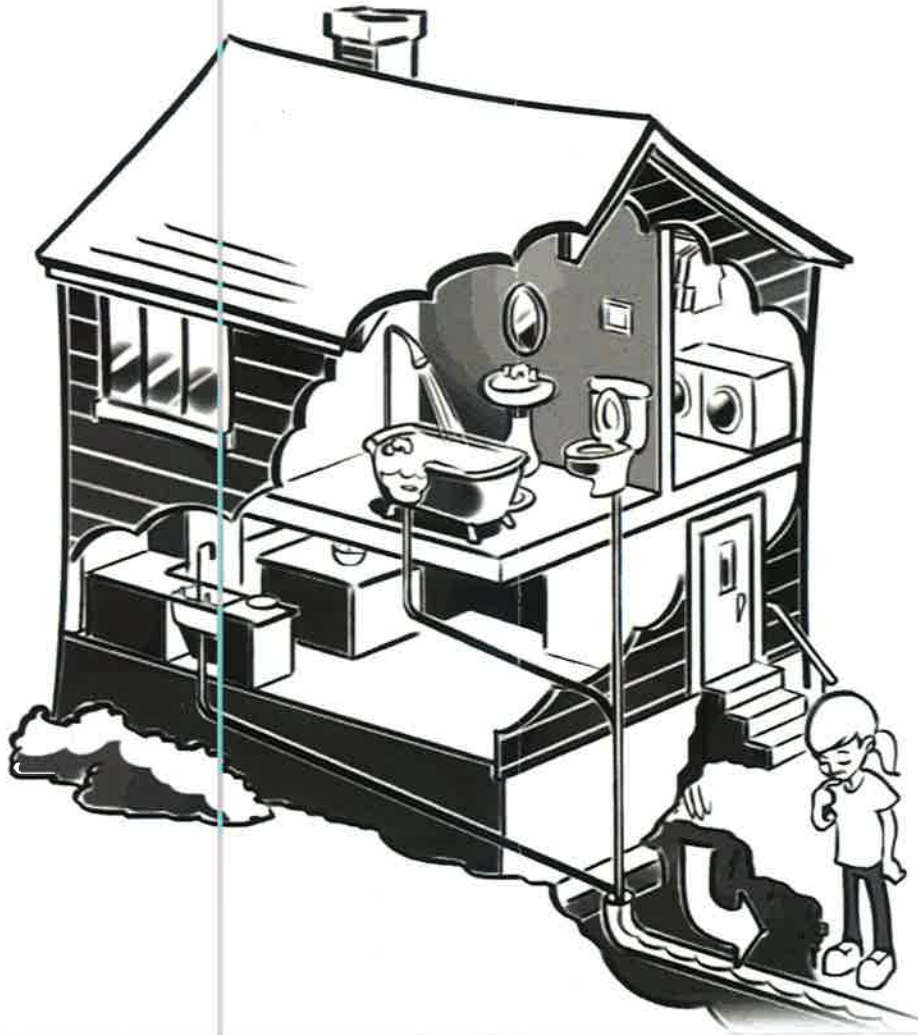
Attachment: Webinar and Survey Notice

All comments and information received from individuals, stakeholder groups and agencies regarding this Study are being collected by the Region of Waterloo in making a decision. Under the Municipal Act, personal information such as name, address, telephone number, and property location may be included if a submission becomes part of the public record. Questions regarding the collection of this information should be referred to the Region's Project Manager.

# Follow the Drain: Biosolids in Waterloo Region



**BIOSOLIDS**  
Strategy



## Webinar

Discover how biosolids are made  
and managed in the Region today.

**June 15**

**6:30 p.m. – 7:30 p.m.**

**June 16**

**12:00 p.m. – 1:00 p.m.**

Webinar instructions:  
[regionofwaterloo.ca/biosolids](http://regionofwaterloo.ca/biosolids)

**Take the Survey!**

Visit the Project Website to participate: [regionofwaterloo.ca/biosolids](http://regionofwaterloo.ca/biosolids)



RECEIVED  
JUN 06 2016  
Township of Puslinch

CITY OF  
**Guelph**

Making a Difference

June 2, 2016

**NOTICE OF COMPLETE APPLICATION AND PUBLIC MEETING**

# 22

**ZONING BY-LAW AMENDMENT APPLICATION**

A complete application has been received by the City of Guelph's Planning Services to amend the City's Zoning By-law for the lands municipally known as 745 Stone Road East and 58 Glenholm Drive in accordance with the provisions of the *Planning Act*, as amended. The application was received by the City on April 18, 2016 and deemed to be complete on May 18, 2016.

**PUBLIC MEETING**

City Council will hold a Public Meeting in accordance with the Planning Act for the Zoning By-law Amendment application from Black, Shoemaker, Robinson and Donaldson Limited on behalf of the owners of the lands municipally known as 745 Stone Road East and 58 Glenholm Drive.

Meeting Date: **July 11, 2016**

Location: **Council Chambers, City Hall, 1 Carden Street**

Time: **7:00 p.m.**

CLERK'S DEPARTMENT	
TO	
Copy	
Please Handle	
For Your Information	
Council Agenda	Jan 15/16
File	

**SUBJECT LANDS**

The subject lands are located on the south side of Stone Road East, west of Watson Road South and west of Glenholm Drive (see Location Map). 745 Stone Road East is approximately 9.9 hectares (24.4 acres) in size and has frontage on Stone Road East. It is currently developed with a detached residential dwelling, detached garage and accessory building. A large portion of the property consists of environmental features. 58 Glenholm Drive is approximately 3.4 hectares (8.4 acres) and has frontage along Glenholm Drive. It is currently developed with a detached residential dwelling, a workshop, and two storage buildings. The property also contains remnants of an old horse race track and environmental features.

Surrounding land uses include:

- To the north: Stone Road East, beyond which are lands that make up the Guelph Innovation District and the vacant recycling facility;
- To the south: lands designated in the Official Plan as "Significant Natural Areas and Natural Areas" and zoned for "Agricultural" (A) and "Hazard" (H) uses in the Township of Puslinch Zoning By-law 19/85;
- To the east: existing detached residential dwellings, beyond which is Watson Road South;
- To the west: lands designated as "Significant Natural Areas and Natural Areas" in the Official Plan.

# Notice of Complete Application and Public Meeting

File: ZC1608

## **PURPOSE AND EFFECT OF APPLICATION**

The purpose of the application is change the zoning on the subject lands to a “Specialized Residential Single Detached” (R.1A-?) zone and “Conservation” (P.1) zone to allow the development of single detached residential dwellings and to protect the significant natural areas on the subject lands. The portion of the subject lands that will provide for driveway access to Stone Road East is proposed to be zoned “Specialized Urban Reserve” (UR-?). Future severance applications will be submitted to the Committee of Adjustment to create the additional lots (see details of proposal below for further information).

The subject lands are not subject to any other application under the Planning Act.

## **Supporting Documents**

The following reports and material have been submitted in support of this application:

- Planning Justification Report, prepared by Black, Shoemaker, Robinson and Donaldson Limited, dated April 2016
- Development Concept Plan, prepared by Black, Shoemaker, Robinson and Donaldson Limited, dated May 30, 2016
- Environmental Impact Study for 745 Stone Road East, prepared by North-South Environmental Inc., dated April 2016
- Environmental Impact Study for 58 Glenholm Drive, prepared by North-South Environmental Inc., dated April 2016
- Archaeological Stage 1 and 2 Assessments for 745 Stone Road East, prepared by Fisher Archaeological Consulting, dated March 26, 2016
- Archaeological Stage 1 and 2 Assessments for 58 Glenholm Drive, prepared by Fisher Archaeological Consulting, dated March 26, 2016

## **TO SPEAK AT COUNCIL OR PROVIDE WRITTEN COMMENTS**

Any person may attend the meeting and/or provide written or verbal representation on the proposal.

- 1a. If you wish to speak to Council on the application you may register as a delegation by contacting the City Clerk's Office, City Hall, **no later than July 8, 2016 at 9:00 a.m. in any of the following ways:**
  - By Phone at **519-837-5603** or TTY **519-826-9771**
  - By Email at [clerks@guelph.ca](mailto:clerks@guelph.ca)
  - By Fax at 519-763-1269
  - In person at the ServiceGuelph Counter at City Hall, 1 Carden Street, Guelph
  - By regular mail or courier to Guelph City Clerk, 1 Carden Street, Guelph ON N1H 3A1
- 1b. You may attend the meeting and request to speak at the meeting.
2. If you wish to submit written comments to Council on the application you must submit the written comments to the City Clerk's Office, City Hall, **no later than July 8, 2016 at 9:00 a.m. in any of the following ways:**
  - By Email at [clerks@guelph.ca](mailto:clerks@guelph.ca)
  - By Fax at 519-763-1269

# Notice of Complete Application and Public Meeting

File: ZC1608

- In person at the ServiceGuelph Counter at City Hall, 1 Carden Street, Guelph
- By regular mail or courier to Guelph City Clerk, 1 Carden Street, Guelph ON N1H 3A1

**Personal information:** as defined by the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) is collected under the authority of the Municipal Act, 2001, and in accordance with the provisions of MFIPPA. Personal information collected in relation to materials submitted for an agenda will be used to acknowledge receipt, however, please be aware that your name is subject to disclosure by way of publication of the agenda. If you have questions about this collection; use, and disclosure of this information, contact the City of Guelph's Access, Privacy and Records Specialist at 519-822-1260 ext. 2605.

**Recording Notification:** as defined by the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) is collected under the authority of the Municipal Act, 2001, and in accordance with the provisions of MFIPPA. As public meetings of Council and Standing Committees may be recorded by Cable TV network and broadcast on a local channel, your image may be seen as part of this broadcast. If you have questions about this collection; use, and disclosure of this information, contact the City of Guelph's Access, Privacy and Records Specialist at 519-822-1260 ext. 2605.

**The purpose of the meeting is to provide more information about the application and an opportunity for public input. No recommendations are provided at the Public Meeting and City Council will not be making any decision at this meeting. A recommendation report will be prepared and presented at a subsequent meeting of City Council following a full review of the application.**

If you would like to be notified of the date when City Council will consider staff's recommendation on this application you must submit your full name and mailing address in writing or fill in the Public Meeting sign-in sheet at the Public Meeting.

## **IMPORTANT INFORMATION ABOUT MAKING A SUBMISSION**

If a person or public body does not make oral submissions at a public meeting or make written submissions to Guelph City Council before the by-law is passed, the person or public body is not entitled to appeal the decision to the Ontario Municipal Board.

If a person or public body does not make oral submissions at a public meeting, or make written submissions to Guelph City Council before the by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so.

## **FOR MORE INFORMATION**

Details of the Zoning By-law Amendment Application can be found on the City's website under '**Active Development Files**'. City staff reports and public notices will be added to this site as they become available.

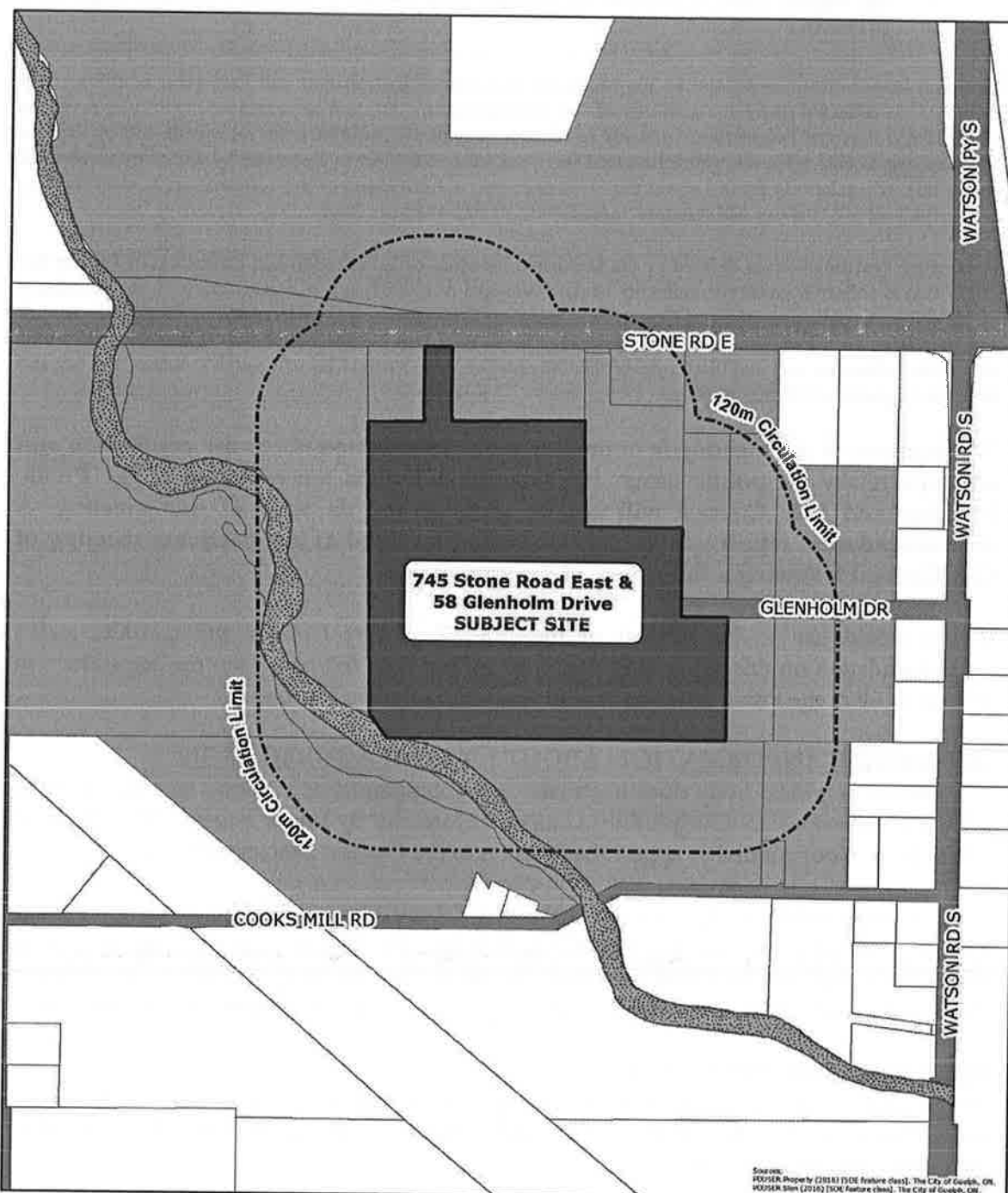
Additional information including copies of the staff report and related background information will be available for review by visiting 1 Carden Street, 3<sup>rd</sup> Floor or contacting **Lindsay Sulatycki, Senior Development Planner at 519-837-5616, ext. 3313** during regular office hours.

Please note that copies of the staff report will be available on **July 4, 2016** and may be picked up at Infrastructure, Development and Enterprise (1 Carden Street, 3<sup>rd</sup> Floor) on, or after this date.

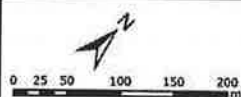
# Notice of Complete Application and Public Meeting

File: ZC1608

## LOCATION MAP



Sources:  
KOSPER Property (2016) (POE feature class), The City of Guelph, ON.  
KOSPER Sites (2016) (POE feature class), The City of Guelph, ON.  
Aerials



### LOCATION MAP & 120m CIRCULATION 745 Stone Road East & 58 Glenholm Drive



Produced by the City of Guelph  
Planning, Urban Design and Building Services - Development Planning  
June 2016

# Notice of Complete Application and Public Meeting

File: ZC1608

## DETAILS OF PROPOSAL

<b>Applicant:</b>	Black, Shoemaker, Robinson and Donaldson Limited on behalf of the owners: John Drolc and Helen Drolc (745 Stone Road East) and Kenneth William Spira and Carol Spira (58 Glenholm Drive)
<b>Address:</b>	745 Stone Road East and 58 Glenholm Drive
<b>Property Size:</b>	745 Stone Road East is approximately 9.9 hectares (24.4 acres) 58 Glenholm Drive is approximately 3.4 hectares (8.4 acres)
<b>Existing Land Use:</b>	745 Stone Road East is currently developed with a detached residential dwelling, detached garage and accessory building. A large portion of the property consists of environmental features.  58 Glenholm Drive is currently developed with a detached residential dwelling, a workshop, and two storage buildings. The property also contains remnants of an old horse race track and environmental features.
<b>Official Plan:</b>	745 Stone Road East is designated "Glenholme Estate Residential" in the Guelph Innovation District (GID) Secondary Plan. The GID Secondary Plan proposes to designate the northern portion of the property as "Employment Mixed-use 2", however, since this portion of the GID Secondary Plan is currently under appeal at the Ontario Municipal Board, the land use designation that applies to the northern portion of 745 Stone Road East is the land use designation of the Official Plan, being "Special Study Area". A portion of this property is also designated "Significant Natural Areas and Natural Areas" in the Official Plan.  58 Glenholm Drive is designated "Glenholme Estate Residential" in the Guelph Innovation District Secondary Plan and "Significant Natural Areas and Natural Areas" in the Official Plan.
<b>Existing Zoning:</b>	745 Stone Road East is zoned, "Urban Reserve" (UR) according to the City of Guelph Zoning By-law (1995)-14864, as amended and "Agricultural" (A) and Hazard Zone (H) according to the Township of Puslinch Zoning By-law 19/85.  58 Glenholm Drive is zoned "Agricultural" (A) and Hazard Zone (H) according to the Township of Puslinch Zoning By-law 19/85.
<b>Proposal Description:</b>	The owners of 745 Stone Road East are proposing to create two (2) new residential lots with access and frontage along Stone Road. Each of the proposed lots will only have a portion of developable area due to environmental features. The environmental features are undevelopable and are proposed to be zoned "Conservation" (P.1).  The owners of 58 Glenholm Drive are proposing to create three (3) new residential lots with access and frontage along Glenholm Drive.

# Notice of Complete Application and Public Meeting

File: ZC1608

	Each of the new lots created will only have a portion of developable area due to environmental features. The environmental features are undevelopable and these areas are proposed to be zoned "Conservation" (P.1) (see attached Conceptual Development Plan).
<b>Ward 1:</b>	<p>Councillor Dan Gibson 519-822-1260 ex. 2502 <a href="mailto:dan.gibson@guelph.ca">dan.gibson@guelph.ca</a></p> <p>Councillor Bob Bell 519-822-1260 ex. 2501 <a href="mailto:bob.bell@guelph.ca">bob.bell@guelph.ca</a></p>

## PROPOSED ZONING

### **"Specialized Residential Single Detached" (R.1A-?) Zone**

#### **Permitted Uses:**

- Single Detached Dwellings
- Accessory apartment; and
- Home occupation

#### Specialized Regulations

- Minimum Lot Area of 0.4 hectares including any zoned natural heritage features located in the P.1 zone, whereas the Zoning By-law requires a minimum Lot Area of 555 square metres in the R.1A zone.
- Minimum Lot Frontage of 6.0 metres, whereas the Zoning By-law requires a minimum Lot Frontage of 18 metres.
- No Landscaped Open Space shall be required between the driveway and the lot line of the newly created lots at the westerly limit of Glenholm Drive, whereas the Zoning By-law requires a minimum area of 0.5 metres between the driveway and nearest lot line to be landscaped.
- The development of detached residential dwellings shall be permitted with private individual on-site water and wastewater services as an interim measure until full municipal services are available, whereas the Zoning By-law prohibits development within the City that is not on full municipal services.
- Accessory buildings (garages) shall be permitted to exceed 55% of the lot width, whereas the Zoning By-law permits a maximum garage width of 55% where lots have less than 12 metres of frontage.

### **"Conservation Land" (P.1) Zone**

#### **Permitted Uses:**

- Conservation Area
- Flood Control Facility
- Recreation Trail

# Notice of Complete Application and Public Meeting

File: ZC1608

- Wildlife Management Area

## Regulations

Within a Conservation Land (P.1) Zone, lands are to remain in their natural condition.

No construction of Buildings or Structures, removal or placement of fill, or any other development shall be permitted which could disrupt the ecology or natural features of a Wetland, and area of scientific and natural interest (ANSI's) or a significant woodlot and wildlife area.

Despite the above, Buildings or Structures existing at the time of the passing of this By-law within the P.1 Zone shall be recognized. However, any expansion, reconstruction, or extension of any existing Use shall be subject to the Floodproofing requirements of the Grand River Conservation Authority and shall require consultation with the Ministry of Natural Resources.

## **"Specialized Urban Reserve" (UR-?) Zone**

### **Permitted Uses:**

- Driveway to access R.1A zoned lots



**File: ZC1608**

**PROPOSED ZONING**  
**745 STONE ROAD EAST**  
**& 58 GLENHOLM DRIVE**

STONE ROAD  
 233.92

60.96 15.00 15.00 142.56

RETAINED 0.50 ha  
 (TO REMAIN AGRICULTURAL UNDER TRP. OF PULINCH BY-LAW)

UR UR  
 0.12 ha 0.12 ha

PARCEL 3 1.16 ha.  
 (TO REMAIN AGRICULTURAL UNDER TRP. OF PULINCH BY-LAW)

60.96 15.00 15.00 142.56

PARCEL 1  
 TOTAL AREA = 5.75 ha  
 0.60 ha DEVELOPABLE  
 R.I.A-?

0.55 ha DEVELOPABLE

PARCEL 2  
 TOTAL AREA = 2.31 ha

LINE OF CULTURAL PLANTATION

GLENHOLM DRIVE

R.I.A-?  
 LAND TO BE SEVERED  
 AREA=0.163 ha

LAND TO BE SEVERED  
 AREA=0.332 ha

PARCEL 3 FOUNDATION AREA=0.219 ha DEVELOPABLE

P.I.

LOT 5 LOT 4

REGISTERED PLAN 151

SCALE 1 : 1000

0 10 20 30 40 METERS

BLACK, SHOEMAKER, ROBINSON & DONALDSON LIMITED  
**BSR&D**  
 Ontario Land Surveyors  
 Urban and Rural Planners

351 Speedvale Avenue West  
 South, Ontario M1W 1C6  
 TEL: (516) 822-1231  
 FAX: (516) 822-1220  
 WWW.BSR&D.COM

DATED MAY 30, 2006  
 DRAWN BY: KS  
 PROJECT 14-9763-2

# Notice of Complete Application and Public Meeting

File: ZC1608

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## To: Agencies and Departments

The City of Guelph is initiating the review of the e Zoning By-law Amendment application from Black, Shoemaker, Robinson and Donaldson Limited for lands municipally known as 745 Stone Road East and 58 Glenholm Drive.

Please submit your comments by **July 15, 2016**. If you have any questions or require further information, please call **Lindsay Sulatycki** at 519-837-5616 Extension #3313, or email at [lindsay.sulatycki@guelph.ca](mailto:lindsay.sulatycki@guelph.ca).

---

If you have no comments or concerns regarding this application for **745 Stone Road East and 58 Glenholm Drive (File #ZC1608)**, please sign and submit this form to:

**Lindsay Sulatycki, Senior Development Planner**  
**Planning Services**  
**Infrastructure, Development and Enterprise**  
**City of Guelph**  
**1 Carden Street**  
**Guelph, ON N1H 3A1**

**Email: [lindsay.sulatycki@guelph.ca](mailto:lindsay.sulatycki@guelph.ca)**

---

Agency

Representative (Please Print)

Representative (Signature)

---

Date



**Development and Infrastructure Department**  
The City of Cambridge  
50 Dickson Street, P.O. Box 669  
Cambridge ON N1R 5W8  
Tel: (519) 621-0740 ext 4577 Fax: (519) 740-9545  
TTY: (519) 623-6691  
www.cambridge.ca  
brombergh@cambridge.ca  
File: D08(2).04.06

May 25, 2016

Dear Sir/Madam:

**16-047(PLN), D08(2).04.06, Public Meeting, Official Plan Commercial Policies (City Wide)**

The above noted item is scheduled before the Cambridge Planning and Development Committee on **June 7, 2016 in the Council Chambers, 3<sup>rd</sup> floor, Historic City Hall, 46 Dickson Street, Cambridge**. The meeting is scheduled to begin at **7:00 p.m.**

The staff report will be available online the Thursday afternoon prior to the Planning and Development Committee meeting at [www.cambridge.ca](http://www.cambridge.ca). Agendas and reports can be found by following the path:

[http://www.cambridge.ca/city\\_clerk/council\\_committee\\_agendas\\_and\\_minutes](http://www.cambridge.ca/city_clerk/council_committee_agendas_and_minutes). If an accessible format or accommodation is required please contact [accessibility@cambridge.ca](mailto:accessibility@cambridge.ca).

If you have any questions in respect of this item, please do not hesitate to contact Paul Smithson, Senior Policy Planner at (519) 621-0740, ext. 4575 or e-mail at [smithsonp@cambridge.ca](mailto:smithsonp@cambridge.ca). Thank you.

Yours truly,

Hardy W. Bromberg, B.Comm., P.Eng., C.B.C.O.  
Deputy City Manager

HWB/jb

CLERK'S DEPARTMENT	
TO	
Copy	
Please Handle	
For Your Information	
Council Agenda	June 15/16
File	

I.G.# 23

Note: Please contact our office at (519) 621-0740, Ext. 4648 if you no longer wish to remain on the mailing list for the above noted matter. We would also appreciate notification of any change of address or incorrect information as it pertains to you (incorrect spelling, duplication, etc.). If you require information in an accessible format or accommodation to access municipal services, please contact [accessibility@cambridge.ca](mailto:accessibility@cambridge.ca). Thank you.

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**VISION**

A place for people to prosper -  
alive with opportunity

**MISSION**

Working together  
Committed to our values  
Serving our community

**VALUES**

INTEGRITY  
RESPECT  
INCLUSIVENESS  
SERVICE



**Meeting Date: 06/07/2016**

**Report #: 16-047(D&I)**

**To: Planning & Development Committee**

**Report Date: 05/09/2016**

**Report Author: Paul Smithson, Senior Planner - Policy**

**Department: Development and Infrastructure**

**Division: Planning**

**Report Title: Public Meeting – Official Plan Commercial Policies**

**File No: D08(2).04.06**

**Ward No: All**

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**RECOMMENDATION(S)**

**THAT** the New Commercial Policies Official Plan Amendment (Attachment No. 1) be referred back to staff for a subsequent report and recommendation.

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**SUMMARY**

The draft Official Plan Amendment (OPA) is designed to streamline and update the existing commercial policies in order to promote commercial development and mixed-use development. In particular the Draft OPA will:

- Permit high density mixed use development in Hespeler Road corridor without the need for a site specific OPA;
- Consolidate the “Regional Shopping Centre” and “Regional Power Centre” Official Plan designations, while retaining existing site specific policies;
- Modify the size limits of other commercial designations to better reflect industry standards and best practices used in other areas of Ontario;

- Base commercial size limits on “gross floor area”, versus “gross commercial floor area”; and
- Delete the “Commercial Strip” designation.

## **BACKGROUND**

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The 2012 Cambridge Official Plan (OP), essentially carried forward the commercial policies from the previous 1999 OP. In 2013, the City started a Comprehensive Commercial Review with the assistance of an outside consultant (Malone, Given, Parsons Ltd.). This study was approved by Council on December 15, 2014.

The next step, the Commercial Implementation Study, was undertaken on behalf of the City by a consortium of planning consultants (Curtis Planning, Alison Luoma Planning and Malone, Given, Parsons Ltd.). The purpose was to identify ways to implement the recommendations of the Cambridge Comprehensive Commercial Review. On April 19, 2016 Council approved Report 16-026(PLN), regarding the Commercial Implementation Study.

One of the recommendations was that City staff bring forward an amendment to the Cambridge Official Plan to revise the current commercial policies. Council directed that proposed Zoning By-law changes for commercial areas be dealt with through the Zoning By-law update, which is underway. Council also approved terms of reference for use in all site specific market impact studies required by the City.

## **ANALYSIS**

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### **Strategic Alignment:**

**PEOPLE** To actively engage, inform and create opportunities for people to participate in community building – making Cambridge a better place to live, work, play and learn for all.

**Goal #2 - Governance and Leadership**

**Objective 2.1** Provide a wide range of ways that people can become involved in city decision making.

A statutory public meeting as required by the Planning Act to provide an opportunity for the public to provide input on the proposal.

## **Existing Policy/By-Law:**

### **City of Cambridge Official Plan (2012)**

Commercial Policies are found in Section 8.6. The current commercial designations include:

- Class 1 (Regional Shopping Centre) Commercial
- Class 2 (Community Shopping Centre) Commercial
- Class 3 (Neighbourhood Shopping Centre) Commercial
- Class 4 (Hespeler Road) Commercial
- Class 5 (Regional Power Centre) Commercial
- Unclassified Commercial Uses:
  - Local Shopping Centre
  - Commercial Strips
  - Existing Commercial Uses
  - Home Occupations
  - Service Stations

### **Cambridge Zoning By-law No. 150-85, as amended:**

A wide range of commercial uses are provided for in the commercial zones.

## **Financial Impact:**

The \$50,000 cost of the Commercial Implementation Study was funded by the Region of Waterloo, through the Transit Supportive Strategy, because increasing opportunities for commercial and residential development in strategic locations, including along bus routes, can increase transit ridership. The proposed Official Plan amendment is intended to promote mixed-use development within the Hespeler Road corridor and streamline the commercial policies for other areas of the City. This should reduce staff time costs for the City as well as development financing costs for those proposing development.

## **Public Input:**

Two public open houses were held as part of the Commercial Implementation Study (August 17, 2015 and November 30, 2015) to present information and obtain input from interested parties. The public input received was carefully considered in finalizing the recommendations of the Commercial Implementation Study. All those who had indicated an interest were on the mailing list were kept advised and notified of the Planning and Development Committee meeting of April 12, 2016 where the Commercial Implementation Study Final Report was presented.

The mailing list used for the Commercial Implementation Study, along with a notice in the May 12, 2016 edition of the Cambridge Times, in accordance with the provisions of



the Planning Act, was used to inform people of the public meeting regarding this proposed amendment to the Official Plan.

### **Internal/External Consultation:**

A Technical Advisory Committee (TAC) was established for the Commercial Implementation Study, consisting of staff from the Economic Development Division, Development and Infrastructure Department and the Region of Waterloo. Those City Departments and outside agencies listed in Attachment No. 2 were circulated a copy of the Draft Official Plan Amendment for their review.

### **Comments/Analysis:**

The Draft Official Plan Amendment (OPA) is intended to update and streamline the commercial policies within the Official Plan. **Attachment No. 1** provides the detailed planning analysis for the OPA and **Attachment No. 2** is the actual draft OPA.

Removal of the requirement for a site specific OPA for every development containing residential uses along the Hespeler Road corridor is intended to promote mixed-use, transit supportive development in this area.

Combining the “Regional Shopping Centre” and “Regional Power Centre” designations will streamline and simplify the OP commercial policies. Realigning the definitions of commercial designations, in terms of size and function will provide greater clarity and be in keeping with industry standards.

The determination of what is convenience commercial (maximum 5,000 m<sup>2</sup> (53,821 ft<sup>2</sup>)) eliminates the need for the “Commercial Strip” designation. This will streamline and make the OP policies easier to interpret. The revised convenience commercial policy will expand the size of convenience commercial developments previously allowed in residential neighbourhoods. This will help to create more complete communities and assist in meeting the future commercial space demands identified in the Council-approved Cambridge Comprehensive Commercial Review.

### **SIGNATURE**

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**Prepared by:**



**Departmental Approval:**

Am Ry

## ATTACHMENTS

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1. Detailed Planning Analysis
2. Draft Official Plan amendment
3. Internal / External Consultation

### Attachment 1 - Detailed Planning Analysis

The Draft Commercial Policies Official Plan Amendment (OPA) is intended to update and streamline the commercial policies within the Official Plan.

Removal of the requirement for a site specific OPA for every development containing residential uses along the Hespeler Road corridor is intended to promote mixed-use, transit supportive development in this area. This change is in keeping with the intent of the Provincial Growth Plan and the Region of Waterloo Official Plan.

The “Regional Shopping Centre” and “Regional Power Centre” both serve a similar commercial function, namely providing goods and services to all residents within Cambridge and beyond, as a result of their size and mix of commercial uses. Consolidation of these two designations will streamline and simplify the OP commercial policies. Retention of site specific policies, established through Ontario Municipal Board decisions, will remain in place for the two sites involved and any changes to these would require a site specific OPA based on provision of appropriate justification through technical studies.

Realigning the definitions of commercial designations, in terms of size and function will provide greater clarity and be in keeping with industry standards. Similarly the use of “gross floor area” as a measure of size compared with the current “gross leasable commercial area” will be in keeping with industry standards and best practices used in many other Ontario municipalities.

Based on this amendment the resultant commercial structure in the Official Plan would be:

- Regional Shopping Centre greater than 46,450 m<sup>2</sup> (499,983 sq. ft.)
- Community Shopping Centre 13,935 m<sup>2</sup> to 46,450 m<sup>2</sup> (149,995 sq. ft. – 499,983 sq. ft.)
- Neighbourhood Shopping Centre less than 13,935 m<sup>2</sup> (149,995 sq. ft.)
- Convenience commercial uses of less than 5,000 m<sup>2</sup> (53,820 sq. ft.) would be permitted within residential and employment designations;

The determination of what constitutes convenience commercial (maximum 5,000 m<sup>2</sup> (53,821 ft<sup>2</sup>)) eliminates the need for the “Commercial Strip” designation. Since small scale commercial developments (maximum 5,000 m<sup>2</sup> (53,821 ft<sup>2</sup>)) would be permitted in residential and employment designations, the site specific permissions provided by the “Strip Commercial” designation will no longer be required. This will streamline and potentially make the OP policies easier to interpret.

Allowing “convenience commercial” uses within employment areas helps to deal with Policy 2.2.6.5 of the Provincial Growth Plan, which indicates “major retail uses are not considered employment uses”. By allowing convenience type commercial uses with a maximum size of 5,000 m<sup>2</sup> (53,821 ft<sup>2</sup>), provides some definition as to what the City of Cambridge considers to be a major retail use. This may resolve the outstanding Ontario Municipal Board appeal by Loblaw Properties to OP Policy 2.7.2.3, “Conversion of Employment Lands”, and Policy 8.5.2.6.1 “Retail Uses in Employment Areas” by allowing a reasonable amount of convenience commercial in employment areas to serve businesses and employees. In addition, the appeal by Loblaw Properties to Policies 8.6.3.3.1 and 8.6.3.3.2 “Existing Commercial Uses” may be resolved. The draft OP policies should resolve OP non-conformity issues for many of the existing commercial uses located in non-commercial designations, since they would now be permitted subject to a gross floor area limit. The revised policy will expand the size of convenience commercial developments previously allowed in residential neighbourhoods. This will help to create more complete communities and assist in meeting the future commercial space demands identified in the Council approved Cambridge Comprehensive Commercial Review.

Market impact studies would be required for new convenience commercial developments or expansions of existing ones over 5,000 m<sup>2</sup> (53,821 ft<sup>2</sup>). For convenience commercial developments in employment or residential areas a market impact study would be needed if the proposal to amend the Zoning By-law exceeds 1,860 m<sup>2</sup> (20,022 ft<sup>2</sup>).

## Attachment No. 2 –Proposed Official Plan Amendment

### Amendment No. \_\_ to the City of Cambridge Official Plan

#### Basis of the Amendment

The 2012 Cambridge Official Plan that was approved on November 21, 2012 carried over commercial land use policies from the 1999 Cambridge Official Plan because of a lack of updated information about commercial development, trends and projections for the City of Cambridge. The City subsequently engaged Malone Given Parsons Limited to prepare a Comprehensive Commercial Review to provide a market analysis of current commercial space and future commercial needs and general recommendations for a strategic commercial framework for the Official Plan. The Comprehensive Commercial Review was approved by City of Cambridge Council on December 15, 2014. The purpose of this proposed amendment is to introduce updated commercial policies into the 2012 Cambridge Official Plan based on the findings and recommendations of the Comprehensive Commercial Review (2014), and address the term “Major Retail”.

#### The Amendment

- a) Revise Policy 2.7.2.3 to read:

For the purposes of implementing Policy 2.7.2.1 of this Plan, non-employment uses shall include *major retail* uses.

- b) Revise Policy 8.4.6.14. c) to read:

convenience commercial uses as specified in Section 8.6.1.5 of this Plan; and

- c) Delete Policy 8.4.7.3 and renumber 8.4.7.4 as 8.4.7.3.

- d) Revise Policy 8.5.2.6.1 to read:

*Major retail* uses are not permitted within the employment designations of this Plan.

- e) Delete Table of Contents, 8.6.1 Hespeler Road Retail Centre a), b), c), 8.6.2 Commercial Areas - Classification of Commercial Designations 8.6.2.1 through to and including 8.6.2.5, and 8.6.3 Unclassified Commercial Uses, 8.6.3.1 Local Shopping Centres, and 8.6.3.2 Commercial Strips and replace with the following:

8.6.1 Commercial Designations

8.6.1.1 Regional Commercial

#### 8.6.1.2 Community Commercial

#### 8.6.1.3 Neighbourhood Commercial

#### 8.6.1.4 Hespeler Road Mixed-Use Corridor

#### 8.6.1.5 Convenience Commercial Uses in Residential and Employment Land Use Designations

#### 8.6.2 General Commercial Policies

- f) Renumber 8.6.3.3 Existing Commercial Uses, 8.6.3.4 Home Occupations and 8.6.3.5 Service Stations as 8.6.3, 8.6.4 and 8.6.5 respectively.
- g) Revise Table of Contents, Chapter 16: Figures, as follows:
  - 1. Re-name Figure 5 – Policy 8.6.2.5 – Class 5 (Regional Power Centre) as Figure 5 – 8.6.1.1.3 – Regional Commercial: Hespeler Road and Pinebush Road
  - 2. Delete Figure 6 – Strip Commercial Areas
- h) Delete – text box regarding Potential Future Review of Commercial Policies and all of the existing policies contained in Section 8.6 Commercial, except: 8.6.3.3 Existing Commercial Uses which is renumbered 8.6.3; 8.6.3.4 Home Occupations which is re-numbered 8.6.4; and 8.6.3.5 Service Stations which is re-numbered 8.6.5, and replace with the following:

## 8.6 Commercial

Commercial uses generally consist of retail uses such as: department stores; food stores; drug stores; home improvement stores; warehouse membership clubs; specialty retail stores; service uses such as restaurants, banks, entertainment facilities; and offices.

The main areas in Cambridge's commercial structure are: Hespeler Road south of Highway 401; the Galt City Centre, Preston Towne Centre, and Hespeler Village Community Core Areas; and the Queen Street, Goebel Avenue and Holiday Inn Drive, and Main Street and Dundas Street South Community Nodes. These large primarily commercial areas are complemented by smaller sites located throughout the city in areas designated primarily for residential uses.

This Plan recognizes that the type and format of commercial uses is constantly evolving in response to market demands and technological change. Accordingly, the policies in this Plan focus on planned functions for the main areas of Cambridge's commercial

structure as a means to clarify how each area is expected to evolve over time in the context of Cambridge becoming a more *complete community with transit-oriented development*. Consistent with this approach, the policies for all commercial land use designations make provision for the consideration of some non-commercial development.

The commercial land use designations used in this Plan include Regional Commercial, Community Commercial, Neighbourhood Commercial, and Hespeler Road Mixed-Use Corridor. Each of these designations, and the policy framework for convenience commercial uses in residential and employment designations is described in greater detail in the following sections.

## **8.6.1 Commercial Designations**

### **8.6.1.1 Regional Commercial**

1. The Regional Commercial designation applies to large-scale commercial *development* whose planned function is to provide a diverse range of retail, comparison shopping, and service uses that serve the shopping and service needs of residents in the Cambridge market area and surrounding regional market area. Lands designated Regional Commercial are generally anchored by one or more department stores, home improvement stores, warehouse membership clubs or food stores. The majority of the retailers in an area designated Regional Commercial are typically national or international brand name retailers.
2. Lands designated Regional Commercial require excellent accessibility to serve the Cambridge and regional market areas. Therefore, such lands must be located at the intersection of two Arterial Roads shown on Map 7A that are also part of the Existing or Planned Regional Transit Network shown on Map 7B. In addition, one of these two Arterial Roads must provide direct access to a Provincial Highway.
3. In addition to the uses described in 8.6.1.1.1 that typically support the planned function of lands designated Regional Commercial, the lands on the northeast quadrant of the intersection of Hespeler Road and Pinebush Road (see Map 2 and Figure 5) may also have the following permitted uses: service commercial uses including business or professional offices and commercial-recreational uses; a wholesale showroom and warehouse; a gas bar and automobile repair establishment, but not an auto body repair shop; an integrated multi-use commercial *development* including recreational facilities, a hotel and trade centre, and office uses permitted in the Employment Corridor designation; and



any purpose considered by Council as accessory to the Regional Commercial designation.

The lands on the northeast quadrant of the intersection of Hespeler Road and Pinebush Road shall not have more than 66,749 m<sup>2</sup> of *gross leasable area*, except that minor expansions to the permitted *gross leasable area* may be permitted by amendment to the Zoning By-law or by minor variance, subject to the review and approval by the *City* of: 1) a market impact study which demonstrates that such expansion shall not have an unacceptable adverse impact on the planned function of the Galt City Centre, Hespeler Village, Preston Towne Centre, other traditional commercial centres and existing and approved shopping centres; and 2) a transportation impact study which demonstrates that such minor expansion shall not have unacceptable adverse impact on the capacity of roads and intersections to accommodate the vehicular traffic likely to be generated by the proposed minor expansion.

The 66,749 m<sup>2</sup> *gross leasable area* shall be allocated as follows: Site A – 63,193 m<sup>2</sup>; Site B – 3,556 m<sup>2</sup>; Site C – 0 m<sup>2</sup>.

The lands may have more than one owner, must have one or more retail commercial establishments with a minimum *gross retail commercial floor area* of 3,716 m<sup>2</sup> and must not be developed as an enclosed shopping mall.

For Site A at full build out: (i) a minimum of 60% of the permitted *gross retail commercial floor area* occupied by retail commercial establishments must include establishments with not less than 1,858 m<sup>2</sup> *gross retail commercial floor area*; and (ii) a maximum of 40% of the permitted *gross retail commercial floor area* occupied by retail commercial establishments with a minimum *gross retail commercial floor area* of 627 m<sup>2</sup> subject to the exception that a maximum of ten stores shall be permitted to have a minimum *gross retail commercial floor area* of 488 m<sup>2</sup>.

For Site B, a maximum of 3,556 m<sup>2</sup> *gross leasable area* shall be permitted and contained in only one store.

4. *Development* on the northeast quadrant of the intersection of Hespeler Road and Dunbar Road that is shown as Regional Commercial on Map 2 is limited to a *gross leasable area* of not more than 67,562 m<sup>2</sup> of *gross leasable area*.

#### **8.6.1.2 Community Commercial**

1. The Community Commercial designation applies to commercial *developments* with a maximum *gross leasable area* of 46,450 m<sup>2</sup>. The planned function of these *developments* is to provide a range of retail, specialty shopping, and service uses

that serve the daily and weekly needs of residents living in the Cambridge market area. Lands designated Community Commercial are generally anchored by a supermarket and/or drug store or a discount department store.

2. Lands designated Community Commercial require excellent accessibility to serve the Cambridge market area. Therefore, such lands must be located on a minimum of one Arterial Road or Collector Road as shown on Map 7A that is also part of the Existing or Planned Regional Transit Network shown on Map 7B, or be located on an Arterial Road or Collector Road immediately adjacent to a full Provincial Highway interchange.

#### **8.6.1.3 Neighbourhood Commercial**

1. The Neighbourhood Commercial designation applies to commercial *developments* with a maximum *gross leasable area* of 13,935 m<sup>2</sup>. The planned function of these *developments* is to provide retail and service uses that serve the daily and weekly needs of residents living in the surrounding neighbourhoods. Lands designated Neighbourhood Commercial are generally anchored by a supermarket, grocery store or drug store.
2. Lands designated Neighborhood Commercial must be located on an Arterial Road or Collector Road as shown on Map 7A.

#### **8.6.1.4 Hespeler Road Mixed-Use Corridor**

1. The Hespeler Road Mixed-Use Corridor designation applies to lands located along Hespeler Road. The planned function of lands designated Mixed-Use Corridor is to provide opportunities for *transit-oriented development* supportive of the Region of Waterloo's rapid transit initiative that will help the *City* achieve the growth management objectives set out in Policy 2.2. Lands designated Hespeler Road Mixed-Use Corridor may be developed for one or more of commercial, residential, office, and institutional uses.
2. The policies of, and lands within, the Mixed-Use Corridor designation will be refined through the completion of the Hespeler Road Corridor Secondary Plan. The Secondary Plan may specify additional details regarding the location, mix, density, scale, size, height, design, land use compatibility, and staging of development on these lands, as appropriate.
3. Until such time as the Hespeler Road Corridor Secondary Plan is in force and effect, new *development* is encouraged to be of a mixed-use format, either by mixing uses within a building or by introducing new uses on the site through

infilling. New *development* shall comply with the following minimum and maximum densities and heights:

**Non-Residential Developments**

Minimum FSI - 0.4 FSI

Maximum FSI - 2.0 FSI

Maximum Height - 8 storeys

**Residential or Mixed-Use Developments**

Minimum FSI - 0.5 FSI

Maximum FSI - 2.0 FSI

Minimum Height - 4 storeys

Maximum Height - 12 storeys

**8.6.1.5 Convenience Commercial Uses in Residential & Employment Designations**

1. Lands designated for residential or employment uses as shown on Map 2 may be zoned to permit convenience commercial uses with a maximum of 5,000 m<sup>2</sup> *gross leasable area*. The planned function of convenience commercial uses is to provide retail and service uses that serve the day-to-day shopping needs of residents living in the surrounding neighbourhood.
2. The maximum *Floor Space Index* of any new or redeveloped buildings constructed on lands zoned convenience commercial shall be 1.0.
3. The maximum *gross leasable area* of any individual retail/commercial store shall not be greater than 1,860 m<sup>2</sup> *gross leasable area* unless supported by a site-specific Market Impact Study.
4. *Development* applications for the purpose of intensifying *development* (i.e. increasing the *gross leasable area* of the existing commercial uses or adding new residential uses) on lands that are currently developed with convenience commercial uses may be considered provided that:
  - a) there would be no increase in the size of the area zoned commercial;
  - b) the *gross leasable area* of commercial uses on the lands would not exceed 5,000 m<sup>2</sup> *gross leasable area*;

- c) the addition of residential uses would not result in a reduction in the existing *gross leasable area* of commercial uses on the lands;
- d) residential uses would not be located on the ground floor of a mixed-use building;
- e) the lands are located on an Arterial Road or Collector Road as shown on Map 7A; and
- f) the proposed *development* conforms with Policy 8.4.7.1 regarding the inclusion of *compatible*, non-residential community facilities and commercial uses in residential neighbourhoods.

### 8.6.2 General Commercial Policies

1. *Development* applications for the purpose of increasing the permitted *gross leasable area* of commercial uses on any site shown on Map 2 as Regional Commercial, Community Commercial, Neighbourhood Commercial, or Hespeler Road Mixed-Use Corridor will typically require the approval of a planning justification report, *infrastructure* and servicing study, site-specific market impact study, transportation impact study, and site plan by the *City* and/or the *Region*, as appropriate. The required information and studies will be determined by *City* staff through a pre-consultation meeting prior to the submission of a *development* application.
2. The purpose of a site-specific market impact study is to demonstrate to the satisfaction of the *City* that there is market demand and support for a proposed retail/commercial *development* and that it would not have a significant negative impact on the planned function of the Galt City Centre, Preston Towne Centre, Hespeler Village, and areas designated or proposed to be designated Regional Commercial, Community Commercial, Neighbourhood Commercial, or Hespeler Road Mixed-Use Corridor.

Submission of a site-specific market impact study prepared in accordance with the *City's* Terms of Reference for Site Specific Market Impact Studies will be required for:

- a. a proposed amendment to the Official Plan and/or Zoning By-law required to permit a new retail/commercial *development* of 5,000 m<sup>2</sup> *gross leasable area* or greater.

- b. a proposed amendment to the Official Plan and/or Zoning By-law required for expansion of an existing retail/commercial *development* of 5,000m<sup>2</sup> *gross leasable area* or greater; and /or
- c. in areas designated for residential or employment uses, a proposed Zoning By-law amendment to permit a new or expanded food store, food related store, department store, or drug store space of 1,860 m<sup>2</sup> *gross leasable area* or greater.

In accordance with Policy 10.14.3 of the Cambridge Official Plan, the Terms of Reference will also be used as a basis of any peer review of a submitted Market Impact Study requested at the discretion of the *City*. All peer reviews shall be completed by a qualified market professional who will be retained by the *City* at the proponent's expense.

- 3. Subject to the approval of a Zoning By-law amendment, consideration may be given to permitting medium or high-density residential *development* as appropriate on lands designated Regional Commercial, Community Commercial, or Neighbourhood Commercial. It must be demonstrated that the proposed residential use(s) will not compromise the planned function of the lands or result in a reduction in the existing *gross leasable area* of commercial uses on the lands. The proposed *development* must also conform to the residential compatibility policies and multi-unit residential *development* locational criteria contained in Policy 8.4.2 and 8.4.3 respectively.
  - 4. Until such time as Secondary Plans have been approved for the Regeneration Areas and Nodes shown on Map 6 and Figures 1 – 4 of this Plan, any *development* applications submitted within these areas will be reviewed in accordance with the *transit oriented development* provisions in Section 5.3 of this Plan. *Development* applications that do not fully meet the *transit oriented development* provisions may be permitted, provided the owner/applicant demonstrates to the satisfaction of the *City*, that the proposed *development* is designed in such a way that subsequent phases or infilling would meet the *transit oriented development* provisions of this Plan.
  - 5. In accordance with the Regional Official Plan, new or expanded *retail commercial centres* exceeding 42,000 m<sup>2</sup> *gross leasable area* shall be located in the Cambridge Urban Growth Centre, a Regional Scale Node, a Community Node, or a Major Transit Station Area.
- 
- i) Rename Section 8.5.2.6 as “Convenience Commercial Uses in Employment Areas” and delete Policy 8.5.2.6.1 and replace it with the following:

- j) Lands designated for employment as shown on Map 2 may be zoned to permit convenience commercial uses with a maximum of 5,000 m<sup>2</sup> *gross leasable area*, subject to being in conformity with the policies of the applicable employment designation.

- k) Delete Policy 8.6.3.3.2 in its entirety.

**l) Chapter 13: Glossary of Terms**

Delete the following Glossary definitions:

1. Gross leasable retail commercial floor area
2. Regional Power Centre
3. *Regional Power Centre* at the Southeast Intersection of Highway 401 and Hespeler Road

Add the following definition of Major Retail:

**major retail** - a new or expanded retail commercial *development* exceeding 5,000 m<sup>2</sup> *gross leasable area* located on an Arterial Road or Collector Road as shown on Map 7A.

Add the following definition of Retail Commercial Centres:

**retail commercial centres** – a group of stores planned and developed as a unit and having a minimum *gross leasable area* of 10,000m<sup>2</sup>.

**m) Chapter 14: Maps**

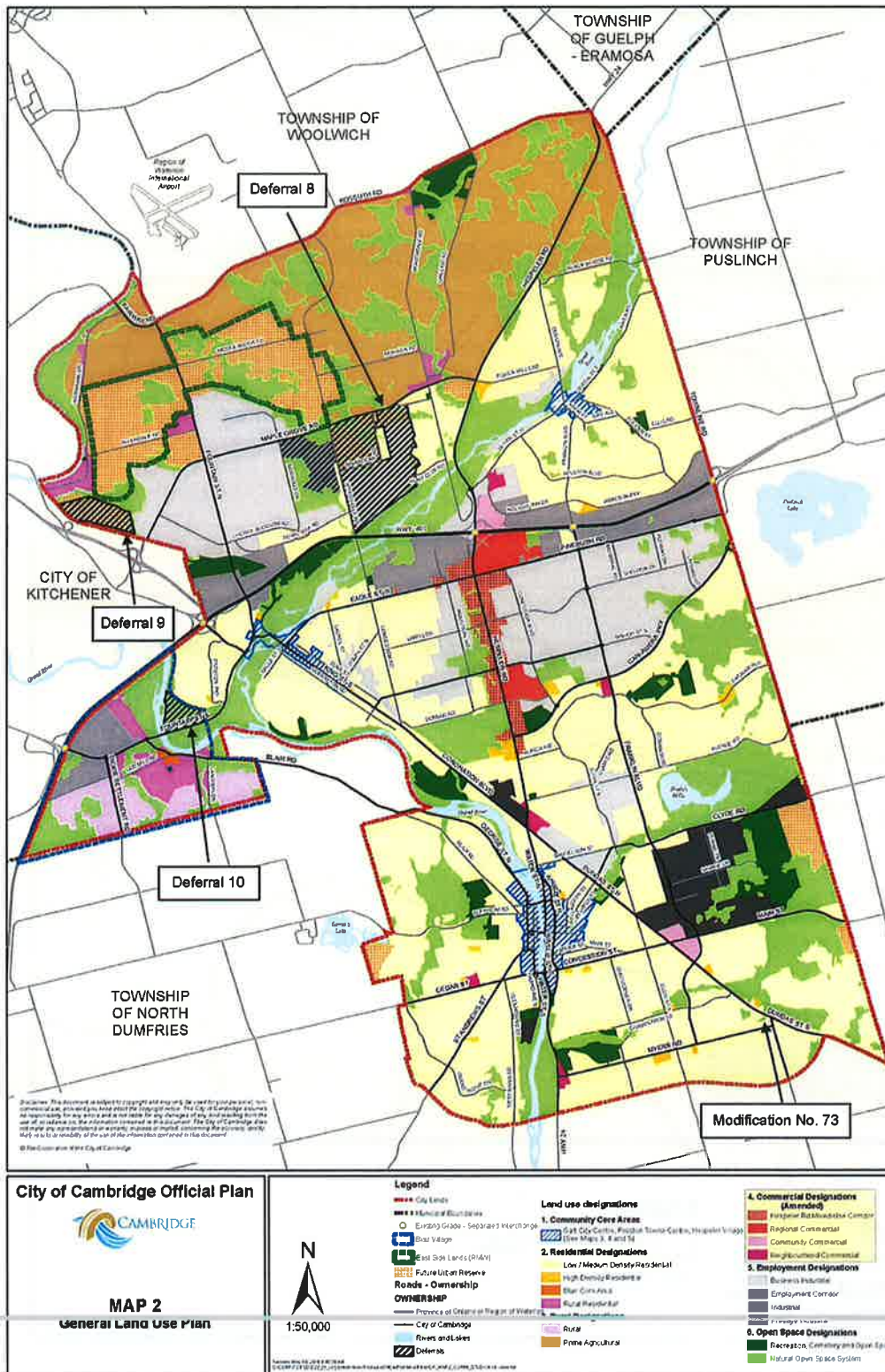
1. Replace Map 2 - General Land Use Plan with the revised Map 2 - General Land Use Plan to reflect the new commercial structure (Appendix 1).

**n) Chapter 16: Figures**

1. Re-name Figure 5 – Policy 8.6.2.5 – Class 5 (Regional Power Centre) as Figure 5 – Regional Commercial: Hespeler Road and Pinebush Road (Appendix 2).
2. Delete Figure 6 - Pages 1 and 2: Strip Commercial Areas (Appendix 3).

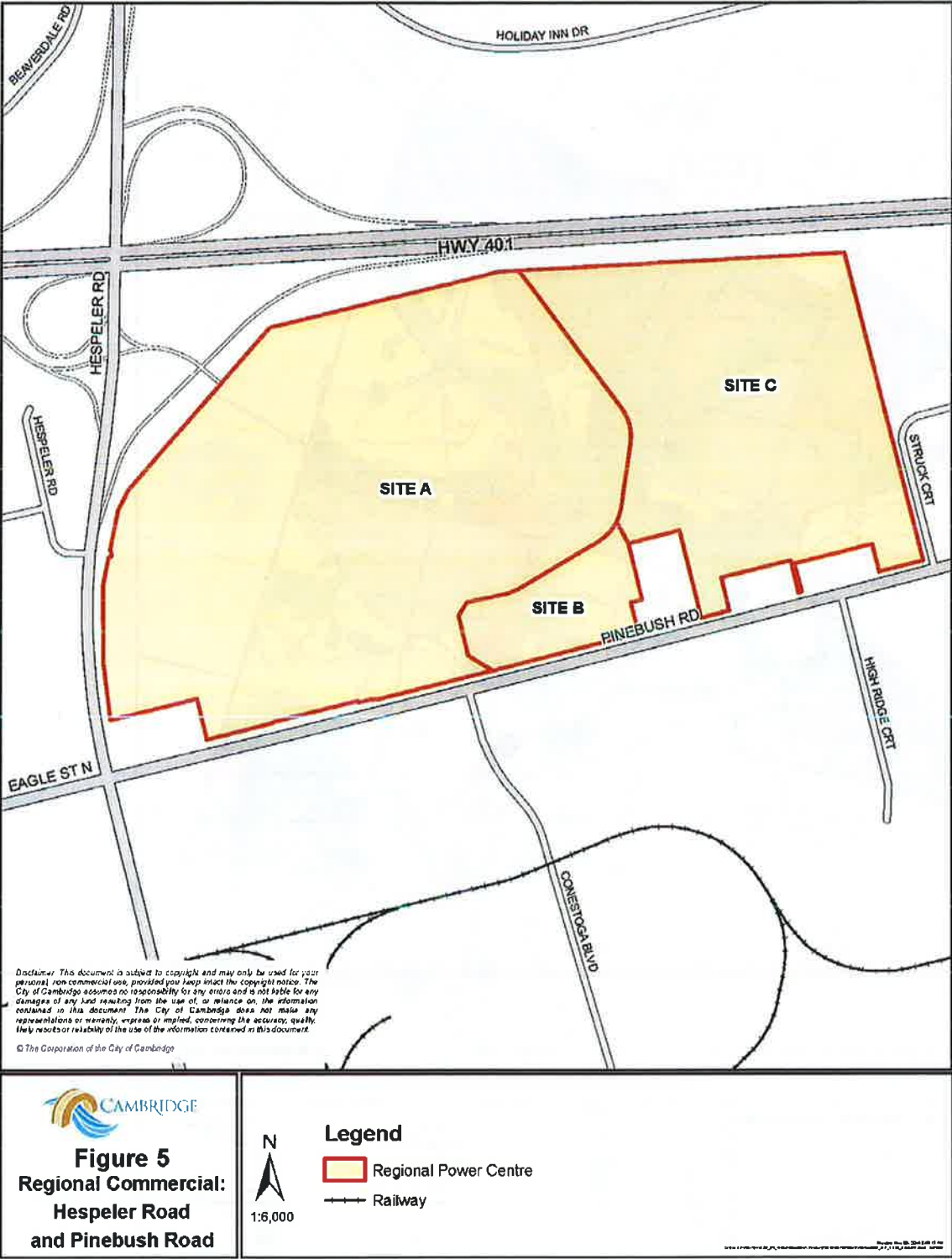


## Appendix 1: Map 2 General Land Use Plan revised commercial structure





Appendix 2: Figure 5 revised





**Figure 6 - Page 1**  
**Strip Commercial**  
**Areas**



**Legend**

Strip Commercial Areas



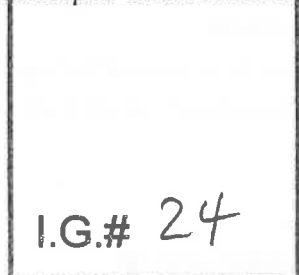


### **Attachment No. 3 – Internal/External Consultation**

- Regional Municipality of Waterloo
- Grand River Conservation Authority
- The Mississaugas of the New Credit First Nation
- Energy +
- City of Cambridge Development Planning Division
- City of Cambridge Development Engineering Division
- City of Cambridge Fire Department
- City of Cambridge Building and Enforcement Services Division
- Core Areas Revitalization Advisory Committee
- City of Cambridge Policy Planning Division
- Economic Development Advisory Committee



## Wellington County Municipal Economic Development Group



### Minutes

Economic Development Officers/Coordinators

Supporting Organizations

WWCFDC Boardroom,

May 3<sup>rd</sup>, 2016

9:30 a.m.

### Present:

Jana Burns (County of Wellington), Crystal Ellis (Township of Mapleton), Janet Harrop (Wellington Federation of Agriculture), Gerry Horst (Ontario Ministry of Agriculture, Food and Rural Affairs), Tom Lusi (County of Wellington), April Marshall (Township of Wellington North), Jenna Morris (WWCFDC), Robyn Mulder (Town of Erin), Kelly Patzer (Township of Puslinch), Jane Shaw (WWCFDC), Abigail Schenk (Wellington North Co-op), Dale Small (Township of Wellington North), Carol Simpson (WFPB), Steve Smith (MEDEI), Belinda Wick-Graham (Town of Minto), Christine Veit (Safe Communities)

### Regrets:

Rose Austin (Saugeen Economic Development), Harold Devries (Guelph Wellington Business Enterprise Centre), Jaclyn Dingwall (Township of Mapleton), Brad Dixon (GRCA), Andrea Ravensdale (County of Wellington), Patricia Rutter (Township of Centre Wellington), Ian Roger (CAO, Guelph/Eramosa Township), Scott Williams (GWBEC)

#### 1. Approval of Agenda

Motion to approve agenda as written.

**Moved by Robyn Mulder, seconded by Dale Small**

**Carried**

#### 2. Declaration of Pecuniary Interest

None

#### 3. Approval of Minutes

Motion to approve the minutes as written from the meeting held April 4<sup>th</sup>, 2016.

**Moved by Kelly Patzer, seconded by Crystal Ellis**

**Carried**

#### 4. BR&E Update

- Information has been collected and entered into the survey software
- Top 3 questions of concern from the survey...
  - Did you know about Taste Real Program? 37% yes, 63% no

- What are the most important things for your community to focus on during the next 5 years? 100 promote community; 61 said incentives for businesses; 55 said communication with businesses; 41 said unified signage
- What methods do you use to promote/market your business? Top 3 were:
  1. Word of mouth and networking
  2. Website
  3. Local papers & Social Media
- The BR+E Retreat will be scheduled in June to discuss findings of project
- A final report with the community snapshots will be created

## **5. Job Portal Update**

- Wellington.ca will be split into 3 areas
  - Site Selection ([wellingtonmeansbusiness.ca](http://wellingtonmeansbusiness.ca))
  - Live and Work ([liveandworkwellington.ca](http://liveandworkwellington.ca))
  - Festivals & Events ([experiencewellington.ca](http://experiencewellington.ca))
- New page – [liveandworkwellington.ca](http://liveandworkwellington.ca) (currently this page is owned by OSIM). The page will consist of real estate, jobs and settling in Wellington County. The IT Department is working with the other Municipalities (Wellington North, Minto and Erin) to confirm the information on the County site will match the Municipalities website.
- The County IT Department will provide an update and “walk through” of the updated County [liveandworkwellington.ca](http://liveandworkwellington.ca) section on the website at the June meeting.

## **6. IPM 2016 County Showcase: Careers in Agriculture Update & RFI**

- Careers in Agriculture day will be held on September 21<sup>st</sup>. This will be a full day at the IPM and employers will be requested to set up for 7:30/8am
- The day will start with Young Ag Heroes of Wellington County presenting for 5 minutes to the first bus of High School students which will arrive at 10am. The IPM is gathering information for local businesses and agriculture heroes, so please contact Jana or Crystal with any suggestions. The 2<sup>nd</sup> bus with University and College students will arrive at noon. There has been interest from the University of Waterloo, Conestoga College and Trios College to attend. Promotional material will be created and handed out.
- The Future Farmers Dinner will start at 5pm. Entertainment will be provided and the OPA has confirmed University students can purchase beverages for \$5.
- The committee is searching for volunteers for the event.
- A list of top businesses in the Municipality interested in speaking will present to the youth, with a possibility of University students connecting with the high school students on their education choices.
- The University of Guelph has agreed to sponsor a portion of the Taste Real Dinner which will be held on the Tuesday afternoon at 4pm.
- The CFDC offices (Saugeen & WWCFCDC) will be contacted with a Request to Sponsor the Careers in Agriculture Day.

## **7. Roundtable/Other Business**

**Centre Wellington:**

- No update

**County:**

- *Talent Attraction:* Meetings have taken place with Conestoga College with discussions about students working in Wellington County. The Newcomer Career Fair Tom attended in Toronto was a great success. Approximately 50 applicants/resumes were collected and included submissions from engineers, the financial industry, HR, retail management and IT.  
Please contact Tom with any employers looking for specialties as there have been many questions about investment and export opportunities.
- The 2016 Festivals & Events Guide is done. An e-blast will be distributed with an opportunity to win a prize from the Drayton Theatre and the lure piece will be completed for June.
- The County is updating the County Visitors Map.
- Plow day for the upcoming IPM is on May 14<sup>th</sup>.
- A Labour Mobility Workshop will be held at the Fergus Library on May 9<sup>th</sup> from 1-3pm.
- In partnership with the City of Guelph and the University of Guelph to participate in the food conference to be held in Paris this upcoming October.
- The Western Wardens Group first meeting was held at the County on April 20<sup>th</sup>. The group discussed priority areas including natural gas and the Swift Program. The Group would like to complete a Strategic Plan. The next meeting is scheduled for May 24<sup>th</sup> at the Wellington County Museum.

**Erin:**

- Celebrate Erin was a success with 120 present and 7 awards presented.
- 2 open houses were held for the Riverwalk study project. Approximately 20 people attended each event.
- 80 booths were set up and participated in this year's Home Show.
- Specific case studies were provided to the University of Waterloo as part of their economic/business program. On May 4<sup>th</sup>, students from the University will complete each case study and make a presentation on their findings.
- Doors Open will be held on June 11<sup>th</sup>.

**GBEC:**

- No update

**Guelph/Eramosa:**

- No update

**LIP:**

- No update

**Mapleton:**

- No update

**MEDI:**



- MEDI assists manufacturers in rural communities with over 10 employees.
- The government is developing a 'Cap and Trade Program', a program that reduces greenhouse gas pollution which is causing climate change, reward innovative businesses and create job opportunities and investment is now available online. For more information or concerns contact Steve.
- A new business growth initiative was just announced. If you know of manufacturers in the area wanting to grow and expand in the international markets, contact Steve.

#### **Minto:**

- There are five finalists for the 'Pitch It' competition to be held on June 6<sup>th</sup>.
- A past LaunchIt client has recently purchased a building and land.
- Field of Dreams Development, condo units in Clifford, was recently launched
- 'Come Home to Minto' videos are being completed.
- The Town of Minto has recently been approached by concerned parents for French Immersion. The program is being capped and parents have placed a request to advocate against the Upper Grand District School Board (UGDSB). The County/Municipalities do not enforce the procedures and regulations of the UGDSB, however the Minto Council made a motion to help recruit teachers to avoid capping the program. There are a number of families interested in the French Immersion program and with recruitment of 10%, or less, the main issue is there is no available space. A meeting on how the County can assist with recruitment fairs, possible assistance with live and work tours for French teachers, upcoming spaces available and better understand the issues of the program will be arranged.

#### **OMAFRA:**

- Municipal Economic Development Forum will be held in Caledon in the fall. Gerry will provide more details at an upcoming meeting.

#### **Puslinch:**

- No update

#### **Safe Communities:**

- The Lions Quest Workshop will be held in Palmerston on June 12<sup>th</sup>. This workshop teaches the tools that assist/help with kids that are having issues/concerns.
- On May 7<sup>th</sup> the Safe Talk Workshop will be held in Mount Forest. The Safe Talk provides techniques and information on assessing a person that may want to harm themselves.
- Safe Communities Day will be held on October 6<sup>th</sup> at the Royal Distributing Centre in Marden. Approximately 700 students will attend the event.

#### **Wellington North:**

- Partnered with Town of Minto to provide a Volunteer Recruitment Series in May, June, October and November.
- Meet and greets for the launching of the Youth Action Council will be held on May 5<sup>th</sup>.
- Butter Tarts and Buggies is working with Minto to launch soon. Currently there are 28 members.
- The Township is moving forward with the Municipal Solar program. Construction will hopefully start early next year.

- Council recently approved recommendations to move forward to stimulate investment. Development charges, bylaws, permit fees and purchasing land are areas that the process will be reviewed.
- Mayor George Bridge from the Town of Minto & Mayor Andy have partnered for the upcoming Mayors breakfast.

**WFA:**

- Gravel Pit radiation and the excessive soil (previously called fill) would like the needs assessment to be complete before it is added to agriculture land.
- The 4 year impact was recently released for farm land values. Residence land will increase 10-15% and agriculture land will increase 65-75%. This means costs and expenses will be higher.
- Working on involvement with IPM.
- Pizza perfect education forum for students was a great success.
- The WFA will have active participation in the upcoming local fairs.

**WFPB:**

- The Job Fair held in the Waterloo Region in December had approximately 900 people attended. There has been a request for a June Job Fair. Opportunities were recognized in Guelph & Wellington and therefore there is a possibility of a late June Job Fair (employers can participate in both Waterloo & Guelph).
- Approved for Skills Link (federally training and skills development) for 30 people. The program is for people in the communities that are unemployed, do not collect EI and are under the age of 30. WFPB has been speaking with Conestoga College to work with them in the fall, including education upgrade opportunities.
- Immigration in Peel received funding from Trillium to find employment in Peel area.

Minutes from the WCMEDG meetings are distributed to Council, Clerks, Economic Development Representatives and other members for information purposes.

**Next meeting is scheduled for June 7th, 2016 for staff and supporting organizations at 9:30am in the WWCFDC Boardroom.**

Meeting adjourned at 11:30am

---

Jana Burns, Chair

---

Jane Shaw, Recording Secretary



# **Puslinch Fire and Rescue Service**

## **Monthly Report**

### **April/May 2016**

#### ***Significant Events/ Incidents/Trends***

Do you have a person in your life who may be a hoarder? Hoarding is a condition where a person has persistent difficulty discarding personal possessions. The large amount of possessions fill a home and prevent the normal use of the space. Hoarding brings distress and emotional health concerns.

#### **Why hoarding increases fire risks**

- Cooking is unsafe if flammable items are close to the stove or oven
- Heating units may be placed on unstable surfaces. If heaters tip over into a pile, it can cause a fire.
- Electrical wiring (cords) may be worn from the weight of the piles. Pests chew on the wires. Damaged wires can catch fire.
- Open flames from smoking materials or candles in a home with excess clutter are very dangerous.
- Blocked pathways and exits may hinder escape from a fire.

#### **How hoarding impacts first responders**

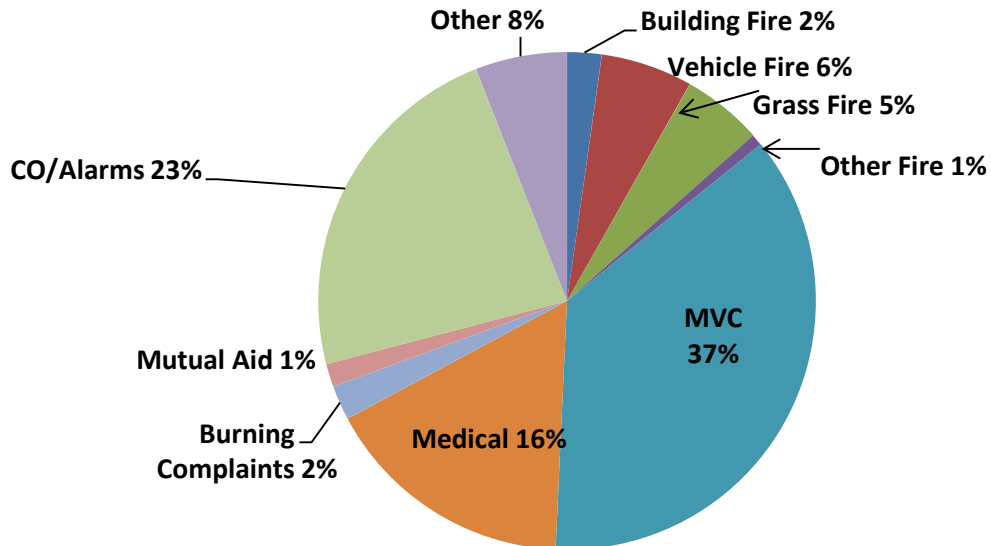
- Firefighters cannot move swiftly through a home filled with clutter.
- Responders can get trapped in a home with blocked exits. Objects falling from piles can trap and injure them.
- The weight of stored objects and the weight of water in a fire can cause collapse.
- Firefighters and EMS personnel have difficulty providing medical care. Clutter also impedes the search for residents and pets.

#### **How can you help?**

1. Talking with a hoarder focus on safety not clutter.
2. Help residents make a home safety and escape plan. Stress the importance of clear pathways and exits. Practise the plan often.
3. Ensure smoke alarms are working and test them monthly.
4. Reach out to community resources. Talk to your local fire department to alert them of your concerns. They will be able to connect you with a hoarding task force for additional help.

REPORT MONTH: 2016 April							
		April Monthly Total	April 2016 YTD	April 2015 YTD	April 2014 YTD	April \$ Loss Monthly	April 2016 \$ Loss YTD
FIRE:	Structure	0	3	6	4	\$0	\$3,123,000
	Vehicular	2	7	7	5	\$1000	\$66,000
	Grass and Bush	1	5	3	1	\$0	\$0
	Other	0	1	0	0	0	
		Monthly	2016 YTD	2015 YTD	2014 YTD		
Motor Vehicle Collisions		8	40	53	75		
Medical Assist		3	15	25	19		
Mutual Aid		1	2	6	4		
Carbon Monoxide		1	10	7	4		
Automatic Alarm		5	18	13	15		
Burning Complaints		1	2	2	6		
Incorrect Page		0	0	0	4		
Other		0	7	3	17		
TOTALS:		Monthly	2016 YTD	2015 YTD	2014 YTD		
		22	110	145	110		
Estimated Total Dollar Loss Due to Fire		\$1000	\$3,189,000	\$335,000	\$583,000		
REPORT MONTH: 2016 May							
		May Monthly Total	May 2016 YTD	May 2015 YTD	May 2014 YTD	May \$ Loss Monthly	May 2016 \$ Loss YTD
FIRE:	Structure	0	3	6	6	\$0	\$3,123,000
	Vehicular	1	8	8	6	\$2000	\$68,000
	Grass and Bush	2	7	6	1	\$0	\$0
	Other	0	1	0	0	0	
		Monthly	2016 YTD	2015 YTD	2014 YTD		
Motor Vehicle Collisions		9	49	64	84		
Medical Assist		7	22	32	23		
Mutual Aid		0	2	7	4		
Carbon Monoxide		0	10	7	6		
Automatic Alarm		3	21	13	16		
Burning Complaints		1	3	5	7		
Incorrect Page		0	0	0	4		
Other		1	8	3	8		
TOTALS:		Monthly	2016 YTD	2015 YTD	2014 YTD		
		24	134	151	165		
Estimated Total Dollar Loss Due to Fire		\$0	\$3,191,000	\$120,000	\$345,000		

## 2016 YTD Emergency Calls



## Prevention & Public Education

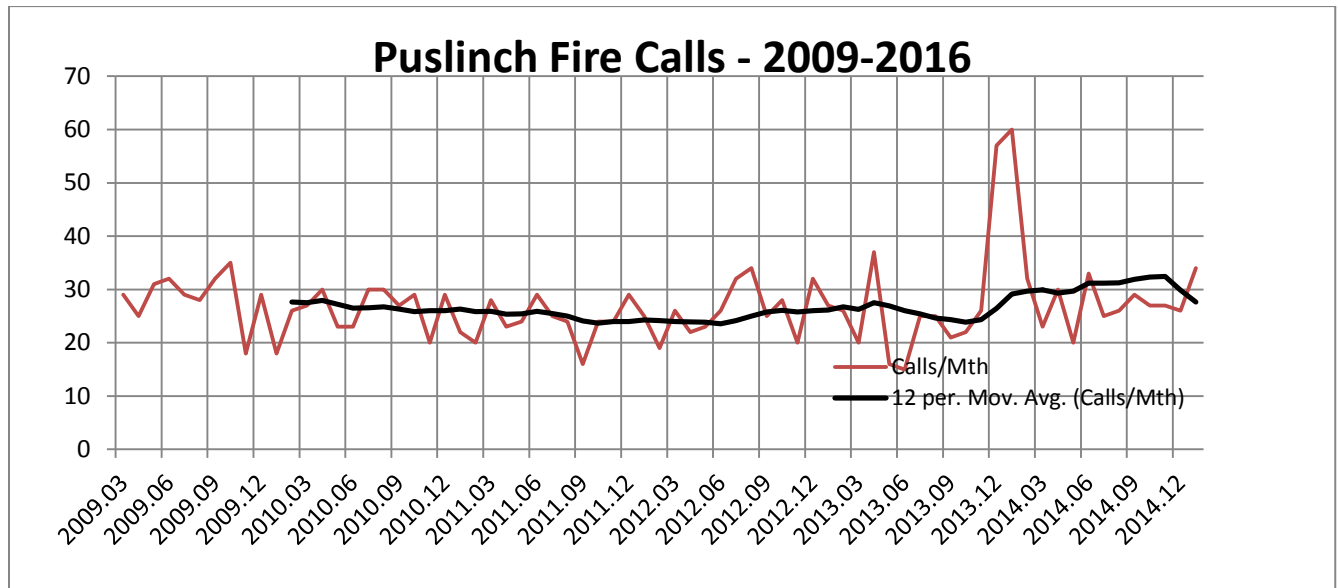
## 2016 April/May

Activity:	Monthly Total	2016 YTD
Inspections	2	8
Water Tank Inspection	6	31
Investigations	0	10
Emergency Planning	2	4
Public Education Volunteer	4	8
Public Education Paid	3	8
Meeting	11	16
Home Safe Home Campaign	0	0

# Puslinch Fire and Rescue Service

## Monthly Report

### April/May 2016



### Professional Development

Activity	Month	Day
Master Fire Plan Review	March	31
Master Fire Plan Review	June	01
Medical	June	09 & 10
Rural Water Shuttle	June	14 & 15
Truck Maintenance Mike Mobile	June	22
To be Determined	June	28 & 29
Rural Water Shuttle	July	05 & 06



# **Puslinch Fire and Rescue Service Monthly Report April/May 2016**

Sept



**Aberfoyle School Emergency Preparedness Day**





**April 30, 2016 Transport Truck Highway 401 Accident**



**Barn Fire Research – Laird Road**



**Transport Truck Rollover 401 Eastbound May 16, 2016**





# 2016 Municipal/NFPP Fire Protection Profile

Office of the Fire Marshal and Emergency Management

SUBMIT FORM

CLEAR FORM

SAVE FORM

Form must be submitted electronically; do not return via fax.

The Chief Administrative Officer or Municipal Clerk is required to electronically submit the completed form either by selecting the SUBMIT button or saving the form and sending to email address: [OFMFDM@ontario.ca](mailto:OFMFDM@ontario.ca)



For best results use Adobe Acrobat Reader (version 9.0 or above)

[Click here for further instructions and access to download.](#)

## Declaration of Annual Compliance

\* Indicates a **required** field

The declaration of Annual Compliance is intended to affirm that the municipality is meeting the requirements of the minimum acceptable model for compliance with clause 2.(1)(a) of the Fire Protection and Prevention Act, 1997. The minimum acceptable model is comprised of the following:

- Municipal Risk assessment – PFSG [04-40A-03](#) and [04-40A-12](#)
- [Carbon Monoxide](#) and Smoke alarm program, including home escape planning – PFSG [04-40B-03](#) and [04-40B-12](#)
- Distribution of public education information and implementation of public education programs – PFSG [04-40C-03](#) and [04-40C-12](#)
- Fire prevention inspections upon complaint or request, and [as directed by the Fire Marshal](#), and Ontario Fire Code enforcement - PFSG [04-40D-03](#) and [04-40D-12](#)

The prior declaration was signed by the Fire Chief and the Head of Council. This new electronic form must be authorized by the persons responsible for fire protection services and ensuring that Council is aware of the current level of compliance.

The Municipality/Community of **PUSLINCH** declares that it continues to maintain annual compliance with 2.(1)(a) of the Fire Protection and Prevention Act – 1997, by meeting or exceeding the requirements.

*This declaration has been authorized by:*

* Surname:	* First Name:	* Title:	* Date
Landry	Karen	CAO/Clerk	2016-06-16 (yyyy-mm-dd)
Surname:	First Name:	Title:	Date
Lever	Dennis	Mayor	2016-06-16 (yyyy-mm-dd)
Surname:	First Name:	Title:	Date
			(yyyy-mm-dd)
Surname:	First Name:	Title:	Date
			(yyyy-mm-dd)
Surname:	First Name:	Title:	Date
			(yyyy-mm-dd)
Surname:	First Name:	Title:	Date
			(yyyy-mm-dd)

# Community Information

Office of the Fire Marshal and Emergency Management

## Municipality/Community Submission Confirmation

\* Indicates a required field

Municipality/Community information confirmed by:

\* Surname:

Goode

\* First Name:

Steven

\* Title:

Fire Chief

\* Date

2016-06-06

(yyyy-mm-dd)

### 1) Contact Information

Mailing Address:	7404 Wellington Road 34	City/Town :	Guelph, ON	Prov: ON	Postal Code:	N1H 6H9
e-Mail Address:	sgoode@puslinch.ca					
Business #:	(519) 821-3010	Ext:				
Fax #:	(519) 836-6421					

### 2) Recovery of Post Fire Costs:

(Yes/No)

Does your community have a mechanism to recover post-fire costs such as demolition, fire investigation or scene security?	Yes
---	-----

### 3) Agreement Summary

(Yes/No)

*If Yes, update Agreement Details (last page)*

Does your municipality have a Mutual Aid Agreement?	Yes
Does your municipality have an Automatic Aid Agreement?	Yes
Does your municipality have a fire protection agreement for services purchased?	Yes
Does your municipality have a fire protection agreement for services provided?	No

### 4) Fire Suppression is provided to your municipality by:

% Land Area Covered	Fire Department Name	Jointly Operated <input checked="" type="checkbox"/>
100	Puslinch Fire Rescue	<input type="checkbox"/>
11	Cambridge City Fire Department	<input checked="" type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

# Community Information

## Office of the Fire Marshal and Emergency Management

### Agreement Details

\*Services: **R** = Received; **P** = Provided; **R/P** = Received and Provided

**R** = community receives services from the party identified in Column A

**P** = community provides services to the party identified in Column A

**R/P** = Services are exchanged between the community and the party identified in Column A

	Agreement with (Name of Party) <b>A</b>	Agreement Year <b>B</b>	Agreement Type <b>C</b>	*Services <b>D</b>	Bylaw # (if applicable) <b>E</b>	Date Passed (yyyy-mm-dd) <b>F</b>
1	CAMBRIDGE	2015	Automatic Aid	Received	74/15	2015-12-16
2	GUELPH	2015	Dispatch	Received	29/15	
3	GUELPH/ERAMOSA	2014	Automatic Aid	Received/Provided	68/14	2014-11-05
4	MILTON	2006	Mutual Aid	Received/Provided	Resolution 5	2006-03-01
5	WELLINGTON COUNTY	2010	Mutual Aid	Received/Provided	Resolution 2	2009-10-07
6						
7						
8						
9						
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34						



# Fire Department Information

Office of the Fire Marshal and Emergency Management

## Fire Department Submission Confirmation

\* Indicates a required field

Fire Department information confirmed by:

\* Surname:  
Goode

\* First Name:  
Steven

\* Title:  
Fire Chief

\* Date  
2016-06-04  
(yyyy-mm-dd)

1) Fire Department Information					
Fire Department Name:	Puslinch Fire Rescue			Fire Department Type: V	
	Puslinch Fire and Rescue Service Complete this field <b>only</b> if fire department name is different from above				
Mailing Address:	7404 Wellington Road 34	City/Town :	Guelph, ON	Prov: ON	Postal Code : N1H 6H9
e-Mail Address:	sgoode@puslinch.ca			Hi-Speed Internet:	Yes
Physical Address:	7404 Wellington Road 34			GPS Coordinates:	43.471367 80.158181
Courier Address:	7404 Wellington Road 34, Guelph, ON N1H 6H9				
Business #:	(519) 821-3010	Ext:			
Fax #:	(519) 836-6421				
Emergency #:	(911) 000-0000				
Satellite Phone #:	-				
Dispatch Contact #:	(519) 824-3232				
Computer Aided Dispatch Software:	Firehouse	CAD Provider Name and Address:	Symposium 1 Yonge St, Suite 1801, Toronto, ON		
Radio Frequencies:	Paging 0	Trunked (Yes/No) Yes	Operating Working 0 Talk Around 0 Other Tactical 0	Trunked (Yes/No) Yes Yes Yes	

## Fire Department Information

Office of the Fire Marshal and Emergency Management

### 2) Staffing breakdown (Count)

	# Full-time	# Part-time	# Volunteer	
Fire Chief	0.0	0.0	1.0	
Deputy/Assistant Chief	0.0	0.0	1.0	
Administration	0.0	0.0	1.0	
Suppression	0.0	0.0	32.0	
Prevention	0.0	0.0	1.0	
Training	0.0	0.0	2.0	
Communications	0	0.0	0.0	
Mechanical	0.0	0.0	0.0	

### 3) General Information

# Non-union Management Positions:	0	
Collective Agreement with FF (Yes/No):	No	
If Yes, specify Organization (full name):		Association Local #:
If Yes, Expiry Date:		
( 2014 ) # Emergency Responses: (Responses where lights & sirens activated)	331	(2014) # LODD (Emergency Responses):
		(2014) # LODD (Presumptive Legislation):

### 4) Vehicle Summary

Year Grouping	Pumper	Tanker	CAFS System	Elevating Device	Rescue Unit	HazMat	Mobile Command Post	Rehab
1950-1960	1	0	0	0	0	0	0	0
1961-1965	0	0	0	0	0	0	0	0
1966-1970	0	0	0	0	0	0	0	0
1971-1975	0	0	0	0	0	0	0	0
1976-1980	0	0	0	0	0	0	0	0
1981-1985	0	0	0	0	0	0	0	0
1986-1990	0	0	0	0	0	0	0	0
1991-1995	0	0	0	0	0	0	0	0
1996-2000	0	0	0	0	1	0	0	0
2001-2005	1	0	0	1	0	0	0	0
2006-2010	0	1	0	0	0	0	0	0
2011-2015	1	1	0	0	0	0	0	0
2016-2020	0	0	0	0	0	0	0	0



# Fire Department Information

Office of the Fire Marshal and Emergency Management

## 5) Resources and Equipment Summary

Resources (Count)						Equipment Yes/No		
		SCBA		Spare Cylinders		Extrication Equipment (hand)	Yes	
Fire Stations	1	MSA	22	2216 psi	4	Extrication Equipment (power)	Yes	
Mobile Light Unit	0	Draeger	0	4500 psi	38	Air bags	Yes	
Mobile Air Unit	0	Scott	0			Fixed Air Fill Station	Yes	
Fire Boats	0	Survivair	0			High Volume Water Supply	Yes	
Water Rescue Boats	1	Interspiro	0					
HazMat Trailer	0	Other	0					
Portable Generators	3	If Other, Specify:						
Portable Pumps	4							

## Tanker Shuttle Accreditation Details

Tanker Shuttle Accreditation (Yes/No)	Yes	Flow Rate (Accredited)	417	GPM	Was apparatus from other municipalities used to obtain the accredited flow rate?	No
				GPM or LPM		
If NO accreditation, what is the estimated continuous Flow Rate (with strictly your municipal apparatus)			0			
				GPM or LPM		
* Continuous flow rate is the minimum continuous flow rate that the fire department can sustain for a period of not less than 4 hours.						

## 6) Core Services (If YES, complete associated columns.)

	Yes/No	Level (select from list)	Services Provided Under Contract (Yes/No)
HazMat	Yes	Awareness	No
Water Rescue	Yes	Water	No
Ice Rescue	Yes	Water	No
Urban Search & Rescue (USAR)	No	n/a	No
Fire Suppression	Yes	Full interior attack & rescue	No
Confined Space Rescue	Yes		No
High Angle Rescue	Yes		No
Auto Extrication	Yes		No
Emergency Medical Responses	Yes		No



## REPORT FIN-2016-016

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TO: Mayor and Members of Council

FROM: Paul Creamer, Director of Finance/Treasurer

MEETING DATE: June 15, 2016

SUBJECT: 2015 Commodity Price Hedging Agreements Report  
File No. A09 HED

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### RECOMMENDATIONS

That Report FIN-2016-016 regarding 2015 Commodity Price Hedging Agreements Report be received.

### DISCUSSION

#### Purpose

The purpose of this report is to comply with the Treasurer's reporting requirements as set out by Ontario Regulation 653/05.

#### Background

Section 7(1) of Ontario Regulation 653/05, as amended states that if a municipality has commodity price hedging agreements in place, the Treasurer of the municipality must prepare and present to Council once every fiscal year a detailed report on all of those agreements. The report must contain the following information:

1. A statement about the status of the agreements during the period of the report, including a comparison of the expected and actual results of using the agreements.
2. A statement by the Treasurer that all of the agreements entered into during the period of the report are consistent with the municipality's statement of policies and goals related to the use of Commodity Price Hedging Agreements.
3. Such other information as Council may require.
4. Such other information as the Treasurer considers appropriate to include in the report.

The Township entered into hedging agreements for natural gas and electricity procurement through Local Authority Services Limited (LAS), a wholly owned subsidiary of the Association of Municipalities of Ontario (AMO). These agreements are as follows:

- The Electricity Agency Appointment and Retainer Agreement dated September 19, 2012
- The Agency Appointment Agreement for Natural Gas dated January 11, 2006 and revised on June 15, 2007

The Commodity Price Hedging Policy was approved by Council in accordance with By-law No. 56/12, attached as Schedule A to Report FIN-2016-016.

### **Natural Gas Procurement Program**

The LAS Natural Gas Procurement Program currently includes 170+ participating organizations. An annual price (per m<sup>3</sup>) for all natural gas consumption is determined by LAS and reflects LAS's completed gas purchases and expectations for spot market natural gas costs for the one-year period. LAS purchases physical natural gas and provides it to all enrolled municipalities based on their consumption requirements.

### **Electricity Procurement Program**

The LAS Electricity Procurement Program currently includes 130+ municipalities. LAS removes municipal accounts from government (default) pricing and instead purchases electricity forward price contracts for much of the municipality's consumption.

The Township has elected to continue with hedging 65% of the Township's electricity requirements while the remaining 35% is purchased at spot market prices. The 65% hedge level chosen by the Township is the most common hedge level for LAS members (approximately 90% of the member's hedge at this level) because it provides a sufficient amount of annual cost stability. The remaining 35% of Township consumption settles at spot market rates.

### **Benefits of Hedging**

The goal of hedging is not to speculate on the future price of a commodity, but rather to fix its price to an agreed amount. Volatile shifts in utility pricing create significant challenges in maintaining utility budgets. This uncertainty in energy pricing can impact decision making and cost controllability for the Township. The LAS programs provide stable energy pricing which assists in maintaining the Council approved utility budget every year.

## **Risks of Hedging**

As mentioned above, utility costs can be volatile and this volatility can also include price decreases. Therefore, in any given year there is the possibility that the hedged cost may be higher than current market cost which would result in the agreement costing the Township more than it otherwise would have.

## **FINANCIAL IMPLICATIONS**

### **Natural Gas**

The 2015 actual natural gas costs amounted to \$18,495 and the 2015 budgeted natural gas costs amount to \$19,240 as outlined below:

Account	Department	2015 Actuals	2015 Budget
01-0020-4202	Building	\$1,565	\$1,410
01-0030-4202	Public Works	\$4,264	\$5,640
01-0040-4202	Fire and Rescue	\$1,601	\$955
01-0070-4202	PCC	\$3,836	\$3,270
01-0080-4202	ORC	\$5,211	\$5,705
01-0100-4202	Finance	\$2,018	\$2,260
	Total	\$18,495	\$19,240

The Township utilized the LAS Natural Gas Procurement Program at the following commodity price rates:

- November 1, 2014 to October 31, 2015 at a price of 16.9 cents/m<sup>3</sup> (program fee of 0.0037 cents/m<sup>3</sup> included).
- November 1, 2015 to October 31, 2016 at a price of 14.9 cents/m<sup>3</sup> (program fee of 0.0037 cents/m<sup>3</sup> included).

Outlined below is the commodity price rates charged by Union Gas compared to LAS from 2014 to present:

Date	Union Gas Effective Commodity Price (cents/m <sup>3</sup> )	LAS Effective Commodity Price (cents/m <sup>3</sup> )	LAS Savings (Loss) (cents/m <sup>3</sup> )
<b>Jan-16</b>	9.4846	14.9	-7.4154
<b>Oct-15</b>	11.0742	16.9	-5.8258
<b>Jul-15</b>	11.1676	16.9	-5.7324
<b>Apr-15</b>	11.1365	16.9	-5.7635
<b>Jan-15</b>	18.9887	16.9	2.0887
<b>Oct-14</b>	19.2103	15.9	3.3103
<b>Jul-14</b>	22.5862	15.9	6.6862
<b>Apr-14</b>	22.3894	15.9	6.4894
<b>Jan-14</b>	13.3052	15.9	-2.5948

Reference: <http://www.ontarioenergyboard.ca/oeb/Consumers/Natural+Gas/Natural+Gas+Rates/Natural+Gas+Rates+-+Historical>

If LAS collects more revenue through the set program rate than is required to run the program, an amount is rebated back to members. The rebate provided is based on the quantity of natural gas consumed during the rebate period. There was a rebate of \$674.09 for the period of November 1, 2013 to October 31, 2014. The rebate for 2015 will be determined in 2016.

The following table shows the savings/(loss) the Township incurred by hedging 65% of the natural gas rates:

Month	LAS Saving (Loss)/m <sup>3</sup>	Usage (m <sup>3</sup> )	Hedged Share	Township Savings/ (Loss)
January	\$0.0208870	14,580	65%	\$197.95
February	\$0.0208870	15,493	65%	\$210.34
March	\$0.0208870	16,378	65%	\$222.36
April	-\$0.0576350	8,590	65%	-\$321.81
May	-\$0.0576350	2,042	65%	-\$76.50
June	-\$0.0576350	771	65%	-\$28.88
July	-\$0.0573240	577	65%	-\$21.50
August	-\$0.0573240	769	65%	-\$28.65
September	-\$0.0573240	824	65%	-\$30.70
October	-\$0.0582580	2,581	65%	-\$97.74
November	-\$0.0382580	5,154	65%	-\$128.17
December	-\$0.0382580	7,208	65%	-\$179.25
Total				-\$282.55
Rebate				\$674.09
Total Savings/(Loss)				\$391.54

The table above indicates that although the Township paid \$282.55 more than it would have had it not hedged with LAS the Township still saved \$391.54 by hedging the Natural Gas rates with LAS due to rebate issued by LAS.

## **Electricity**

The 2015 actual electricity costs amounted to \$66,456 and the 2015 budgeted electricity costs amount to \$61,940 as outlined below:

Account	Department	2015 Actuals	2015 Budget
01-0020-4201	Building	\$2,681	\$2,215
01-0030-4201	Public Works	\$6,780	\$5,600
01-0040-4201	Fire and Rescue	\$6,845	\$4,845
01-0070-4201	PCC	\$20,075	\$22,120
01-0080-4201	ORC	\$23,918	\$21,930
01-0100-4201	Finance	\$6,157	\$5,230
	Total	\$66,456	\$61,940

The Township utilized the LAS Electricity Procurement Program at the following rates for 65% of the Township's electricity:

- 2014 – 2.83 cents/kWh
- 2015 - 3.268 cents/kWh
- 2016 - 2.602 cents/kWh

The Township obtained an Electricity Commodity Savings Review completed by LAS for the July 2014 to June 2015 period as outlined in Schedule C. The total actual electricity savings for the program for the Township of Puslinch amounted to \$1,994 when compared to prevailing government TOU rates. The following table summarizes Schedule C – Hedge Accounts:

	July - Dec 2014	Jan - June 2015	Total
Total Usage (kWh)	195,861	208,414	
Hedge Price	\$0.0283	\$0.0326	
LAS Program Hedge (kWh)	134,333	121,825	
Cost of Hedge	\$3,801.62	\$3,971.50	
Weighted Avg Spot Market Price (\$/kWh)	\$0.0212	\$0.0250	
Cost of Spot Market Electricity	\$1,305.84	\$2,160.95	
Global Adjustment Market Charge (\$/kWh)	\$0.0757	\$0.0657	
Global Adjustment Market Charge	\$14,833.42	\$13,688.94	
Avg LAS Price per KWh (incl. GA)	\$0.1018	\$0.0951	
Total Cost of LAS Program	\$19,940.88	\$19,821.39	
Comparable Time-of-Use (RPP) Cost (\$/kWh)	\$0.0982	\$0.1018	
Comparable Time-of-Use (RPP) Cost – Note 1	\$19,237.00	\$21,223.00	
<b>Township Savings/(Loss)</b>	<b>-\$703.88</b>	<b>\$1,401.61</b>	<b>\$697.73</b>

Note 1 – Time-of-use rates used for each month are based on the rates for the month with the following split: 55% off-peak, 22.5% mid-peak, and 22.5% on-peak.



The next table summarizes the Townships Streetlight Accounts:

	July - Dec 2014	Jan - June 2015	Total
Total Usage (kWh)	115,246	113,750	
RPP Usage - 1st Tier Price (kWh)	45,000	45,000	
RPP Usage - 2st Tier Price (kWh)	70,246	68,750	
Avg Spot Market Price (\$/kWh)	\$0.0131	\$0.0203	
Cost of Spot Purchase	\$1,507.79	\$2,306.58	
LAS Program Fee	\$360.68	\$363.40	
Total Cost of Spot Purchase (incl. LAS Program Fee)	\$1,868.47	\$2,669.98	
Global Adjustment Market Charge (\$/kWh)	\$0.0749	\$0.0693	
Global Adjustment Market Charge	\$8,627.89	\$7,882.70	
Avg LAS Price per KWh (incl. GA)	\$0.0911	\$0.0928	
Total Cost of LAS Program	\$10,496.36	\$10,552.68	
Comparable Time-of-Use (RPP) Cost (\$/kWh)	\$0.0959	\$0.0994	
Comparable Time-of-Use (RPP) Cost	\$11,046.77	\$11,302.32	
<b>Township Savings/(Loss)*</b>	<b>\$550.41</b>	<b>\$749.64</b>	<b>\$1,300.05</b>

\*The difference between this figure and Schedule C is due to rounding

	Comparable RPP Cost	Total Cost LAS Program	Township Savings/(Loss)	% Savings
Hedge Accounts	\$40,460.00	\$39,762.27	\$697.73	1.7%
Streetlight Accounts	<u>\$22,349.09</u>	<u>\$21,049.04</u>	<u>\$1,300.05</u>	5.8%
Total	\$62,809.09	\$60,811.31	\$1,997.78	3.2%

The Township saved 3.2% in Electricity costs by hedging through LAS. In 2014 the Township saved \$7,287.

There are no rebates for the electricity program as LAS purchases a financial hedge for each participating municipality at a negotiated cost (per/kWh) and settles, as retailer, along with the spot market cost of power.

## **APPLICABLE LEGISLATION AND REQUIREMENTS**

Ontario Regulation 653/05, as amended of the Municipal Act, 2001

## **ATTACHMENTS**

Schedule A – By-law No. 56/12 - Commodity Price Hedging Policy

Schedule B – Treasurer's Statement

Schedule C – LAS Electricity Commodity Savings Review – July 2014 to June 2015

Schedule A to Report FIN-2016-016

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

**BY-LAW NUMBER 56/12**

Being a by-law to authorize the Township of Puslinch to establish a policy respecting Commodity Price Hedging for the Township of Puslinch.

WHEREAS Council for the Corporation of the Township of Puslinch considers it desirable to establish a Commodity Price Hedging policy.

NOW THEREFORE BE IT RESOLVED THAT Council does hereby enact the following as a By-law;

1. THAT the Corporation of the Township of Puslinch does hereby adopt a policy respecting Commodity Price Hedging as attached hereto and marked as Schedule "A" to this By-law.
2. THAT this By-law shall take effect upon the date of passage.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 19<sup>th</sup> DAY OF SEPTEMBER, 2012.

  
\_\_\_\_\_  
Mayor Dennis Lever

  
\_\_\_\_\_  
Brenda Law, CAO/Clerk-Treasurer

## APPENDIX A

### FINANCE POLICY

### SUBJECT: COMMODITY PRICE HEDGING POLICY

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#### 1. Interpretation

This policy is to be interpreted and applied in accordance with the requirements of the *Municipal Act, 2001* ("the Act") and any regulations passed thereunder ("the regulations"). Terms used in the policy have the meanings applicable to those terms in the corresponding sections of the Act and the regulations.

#### 2. Purpose

The purpose of this policy is to adopt a statement of the municipality's commodity price hedging policies and goals. Section 6(1) of O. Reg. 653/05 requires the adoption of such a statement before the municipality may enter into commodity price hedging agreements.

#### 3. Statement of Commodity Price Hedging Policies and Goals

- (a) The Township of Puslinch will consider commodity price hedging agreements as a means of fixing, directly or indirectly, or enabling the municipality to fix, the price or range of prices to be paid by the municipality for the future delivery of some or all of the commodity or the future cost to the municipality of an equivalent quantity of the commodity, where it is advantageous for the municipality to do so.
- (b) In determining whether a particular commodity price hedging agreement is advantageous for the municipality, the following considerations will be taken into account:
  - (i) Any and all projects of the municipality are projects for which commodity price hedging agreements will be appropriate;
  - (ii) If, at the time, it is the opinion that fixed costs and estimated costs of the municipality will be reduced by virtue of the use of such an agreement;

- (iii) If, at the time, it is the opinion that the future price or cost to the municipality of the applicable commodity will be lower or more stable than it would be without the agreement;
- (iv) If, at the time, the project includes a detailed estimate of the expected result of using such an agreement;
- (v) If, at the time, it is the opinion that the financial and other risks to the municipality that would exist with the use of such an agreement will be lower than the financial and other risks to the municipality that would exist without such an agreement;
- (vi) If, at the time, it is the opinion that the agreement contains adequate risk control measures relating to such an agreement, such as,
  - (1) Limited credit exposure based on credit ratings and/or on the degree of regulatory oversight and/or on the regulatory capital of the other party to the agreement,
  - (2) a standard agreement,
  - (3) ongoing monitoring with respect to the agreement.

## Schedule B to Report FIN-2016-016

### Treasurer's Statement

The objectives of the LAS Natural Gas and Electricity Procurement Programs align with the Township's objectives as these programs:

1. Facilitate effective budgeting as purchasing blocks of energy commodities produce stable prices for budgeting purposes;
2. Allow for competitive pricing through providing savings on required purchases; and
3. Maximize purchasing power through the pooling of energy requirements from several municipalities which can leverage better pricing than individual purchasing.

Annual price stabilization and price benefits from bulk procurement along with individualized support, advice and consumption data reports provide the Township with a means to monitor its usage and more accurately forecast its annual utility budgets.

In my opinion, all commodity price hedging agreements are consistent with the Township's statement of policies and goals related to the use of financial agreements to address commodity pricing and costs as per By-law No. 56/12.



Paul Creamer, CPA, CA  
Director of Finance/Treasurer



Date


**Puslinch LAS Electricity Commodity Cost Review (July 2014 - June 2015)**

September 2015

**Hedge Accounts**

	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
<b>Total Usage (kWh) * See Note 1</b>	<b>28,947</b>	<b>26,981</b>	<b>18,136</b>	<b>22,599</b>	<b>40,308</b>	<b>58,890</b>	<b>42,973</b>	<b>30,237</b>	<b>45,777</b>	<b>30,267</b>	<b>28,443</b>	<b>30,717</b>
Enrolled Accounts	14	14	14	14	14	14	14	14	14	14	14	14
Hedge Price Including Program Fees (\$/kWh)	\$0.0283	\$0.0283	\$0.0283	\$0.0283	\$0.0283	\$0.0283	\$0.0326	\$0.0326	\$0.0326	\$0.0326	\$0.0326	\$0.0326
<b>LAS Program Hedge (kWh)</b>	<b>24,106</b>	<b>22,320</b>	<b>22,896</b>	<b>22,171</b>	<b>22,752</b>	<b>20,088</b>	<b>23,267</b>	<b>22,896</b>	<b>18,618</b>	<b>21,564</b>	<b>22,259</b>	<b>13,221</b>
Cost of Hedge Including Program Fees	\$682.19	\$631.66	\$647.96	\$627.44	\$643.88	\$568.49	\$758.50	\$746.41	\$606.95	\$702.99	\$725.65	\$431.00
Weighted Avg. Spot Market Price (\$/kWh)	\$0.0237	\$0.0221	\$0.0155	\$0.0071	\$0.0165	\$0.0224	\$0.0296	\$0.0512	\$0.0256	\$0.0165	\$0.0154	\$0.0153
Cost of Spot Market Electricity	\$114.74	\$103.00	-\$73.79	\$3.04	\$289.67	\$869.17	\$583.30	\$375.84	\$695.27	\$143.59	\$95.23	\$267.69
Global Adjustment Market Charge (\$/kWh)	\$0.0598	\$0.0611	\$0.0805	\$0.0749	\$0.0990	\$0.0732	\$0.0555	\$0.0698	\$0.0360	\$0.0671	\$0.0942	\$0.0923
Total Cost LAS Program	\$2,528	\$2,383	\$2,034	\$2,323	\$4,924	\$5,748	\$3,727	\$3,233	\$2,950	\$2,877	\$3,500	\$3,534
<b>Avg LAS Price per kWh (incl. GA)</b>	<b>\$0.0873</b>	<b>\$0.0883</b>	<b>\$0.1122</b>	<b>\$0.1028</b>	<b>\$0.1222</b>	<b>\$0.0976</b>	<b>\$0.0867</b>	<b>\$0.1069</b>	<b>\$0.0644</b>	<b>\$0.0951</b>	<b>\$0.1231</b>	<b>\$0.1150</b>
Comparable Time-of-Use (RPP) Cost * See Note 2	\$2,805	\$2,614	\$1,757	\$2,190	\$4,011	\$5,860	\$4,276	\$3,009	\$4,555	\$3,012	\$3,063	\$3,308
<b>Monthly Savings / (Cost)</b>	<b>\$277</b>	<b>\$231</b>	<b>-\$277</b>	<b>-\$133</b>	<b>-\$913</b>	<b>\$111</b>	<b>\$549</b>	<b>-\$224</b>	<b>\$1,605</b>	<b>\$134</b>	<b>-\$437</b>	<b>-\$226</b>

404,273 Consumption (kWh)

256,158 Hedge (kWh)  
63%

\$0.100 Average cost per kWh

\$40,459.00 Total TOU Cost

\$696.88 Savings from LAS Enrollment

1.7% LAS Savings Compared to TOU

**Streetlight Accounts**

	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
<b>Total Usage (kWh)</b>	<b>19,481</b>	<b>18,685</b>	<b>18,884</b>	<b>18,733</b>	<b>19,741</b>	<b>19,722</b>	<b>17,786</b>	<b>18,425</b>	<b>20,091</b>	<b>18,010</b>	<b>19,807</b>	<b>19,631</b>
Enrolled Accounts	10	10	10	10	10	10	10	10	10	10	10	10
RPP Usage - 1st Tier Price (kWh)	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00
RPP Usage - 2nd Tier Price (kWh)	11,980.56	11,185.44	11,384.22	11,233.42	12,241.03	12,221.68	10,286.28	10,924.97	12,590.62	10,509.58	12,306.84	12,131.36
Average Spot Market Price - (\$/kWh) * See Note 3	\$0.0182	\$0.0148	\$0.0101	\$0.0046	\$0.0130	\$0.0174	\$0.0263	\$0.0432	\$0.0228	\$0.0131	\$0.0078	\$0.0099
Cost of Spot Purchase (Including LAS Program Fee)	\$414.52	\$335.65	\$251.07	\$146.50	\$317.50	\$403.23	\$528.64	\$856.71	\$518.29	\$295.80	\$215.41	\$255.13
Global Adjustment Market Charge (\$/kWh)	\$0.0598	\$0.0611	\$0.0805	\$0.0749	\$0.0990	\$0.0732	\$0.0555	\$0.0698	\$0.0360	\$0.0671	\$0.0942	\$0.0923
Total Cost LAS Program	\$1,579	\$1,477	\$1,771	\$1,550	\$2,272	\$1,847	\$1,516	\$2,143	\$1,242	\$1,504	\$2,081	\$2,067
<b>Avg LAS Price per kWh (incl. GA and LAS fee)</b>	<b>\$0.0811</b>	<b>\$0.0791</b>	<b>\$0.0938</b>	<b>\$0.0827</b>	<b>\$0.1151</b>	<b>\$0.0936</b>	<b>\$0.0852</b>	<b>\$0.1163</b>	<b>\$0.0618</b>	<b>\$0.0835</b>	<b>\$0.1051</b>	<b>\$0.1053</b>
Comparable RPP Cost * See Note 4	\$1,855	\$1,775	\$1,795	\$1,780	\$1,921	\$1,919	\$1,719	\$1,785	\$1,957	\$1,742	\$2,059	\$2,039
<b>Monthly Savings / (Cost)</b>	<b>\$276</b>	<b>\$297</b>	<b>\$24</b>	<b>\$230</b>	<b>-\$351</b>	<b>\$72</b>	<b>\$204</b>	<b>-\$357</b>	<b>\$715</b>	<b>\$238</b>	<b>-\$22</b>	<b>-\$28</b>

228,996 Consumption (kWh)

\$0.092 Average cost per kWh

\$22,346.09 Total RPP Cost

\$1,297.03 Savings from LAS Enrollment

5.8% LAS Savings Compared to RPP

**LAS - Total Monthly Savings / (Cost) \$553 \$529 -\$253 \$97 -\$1,264 \$183 \$753 -\$582 \$2,320 \$372 -\$459 -\$253**
**Annual Program Savings / (Cost) \$1,994**
**Notes**

- 1) We have assumed that all accounts are RPP/TOU eligible (i.e. under 250,000kWh/year consumption)
- 2) **Time-of-use (TOU)** rates used for each month are based on the rates for that month with the following split: 55% off-peak, 22.5% mid-peak., and 22.5% on-peak.
- 3) This price represents the average HOEP for the hours of operation of a typical streetlight account using an approved streetlight profile.
- 4) **RPP rates** for the period reviewed were: 8.6 / 10.1 cents/kWh - July to October 2014; 8.8/ 10.3 cents/kWh - November 2014 to April 2015, and 9.4 / 11 cents/kWh for May -July 2015.





## **REPORT ADM-2016-010**

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**TO:** Mayor and Members of Council

**FROM:** Karen Landry, CAO/Clerk

**MEETING DATE:** June 15, 2016

**SUBJECT:** Declaration of Vacancy - Councillor  
Our File: C07

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### **RECOMMENDATIONS**

That Report ADM-2016-010 regarding Declaration of Vacancy - Councillor be received; and

That the office of Township Councillor formerly held by Wayne Stokley be declared vacant in accordance with Section 262 (1) of the *Municipal Act, 2001*; and

That Council adopt the Council Vacancy Policy attached as Schedule B to Report ADM-2016-010; and

That Council provide direction on the method to be used to fill the vacancy; and

That staff report back to Council with a proposed Council Vacancy Policy for the position of Mayor.

### **DISCUSSION**

#### **Background**

The provisions regarding a vacancy on Council are outlined in Sections 259-263 of the *Municipal Act, 2001* (the Act). The Act stipulates that if the office of a member of Council becomes vacant as a result of death, the municipality must declare the seat to be vacant at one of its next two meetings. As a result of the death of Township Councillor Wayne Stokley on May 29, 2016, the office of Township Councillor must be declared vacant at the June 15, 2016 Council meeting.

#### **Purpose**

The purpose of this Report is to have Council declare the seat on Council vacant and to obtain direction from Council on the process to be followed to fill the vacancy.

Once Council has declared the seat to be vacant, the Act states that Council has 60 days to select one of two options for filling the vacancy. These options are:

- 1) Hold a by-election in accordance with the *Municipal Elections Act, 1996, as amended*
- 2) Appoint an eligible voter to fill the vacant seat

There are a number of different factors to consider when determining whether to fill a vacancy through appointment or by-election including:

- Proximity to the next regular election
- Cost
- Public interest
- Democratic process
- Time frames

### **Appointment**

Should Council wish to appoint an eligible voter to fill the vacant seat, it is recommended that Council adopt the Policy attached as Schedule B to provide for an accountable and transparent process for filling a vacancy on Township Council.

Please note that should Council proceed with appointing an eligible voter the appointment is required to be made within 60 days of declaring the seat vacant.

A notice regarding the vacancy on Council advising of Council's intention to appoint an eligible voter would be posted on the Township's website and in the local newspaper.

No sooner than fourteen (14) days after posting notice, staff would conduct an information session for potential nominees briefly outlining the roles and responsibilities of a Member of Council.

In accordance with the proposed policy, a nominee is required to complete and sign a "Council Vacancy - Consent of Nominee" Form and a "Declaration of Qualification".

The process of voting and selecting a nominee is detailed in the proposed policy attached as Schedule B to this Report.

As noted above, the process for making an appointment needs to be completed within sixty (60) days of declaring the seat vacant (Sunday, August 14, 2016). Should Council elect to proceed by way of appointment it is recommended that the selection of the nominee be completed at the Council meeting to be held on August 10, 2016. Council could also hold a Special Meeting on an earlier date to complete the appointment process, however this reduces the time provided for an eligible elector to consider their interest in the position and to submit the appropriate forms.

### **Pros**

- Earlier filling of vacancy
- Costs

- Less impact on staff resources
- Vacancy is filled prior to 2017 Budget deliberations

### Cons

- Summer is not the ideal time to invite interest from eligible nominees
- Vacancy is not filled through the democratic process of an election

### By-election

The process to fill a vacancy by a by-election is prescribed in the *Municipal Elections Act*, and a by-election is to be conducted as far as possible in the same way as a regular election.

By declaring the office vacant on June 15, 2016, the decision to pass a by-law to authorize a by-election can be made by Council as early as June 15, 2016 but no later than August 14, 2016 (Sunday). Sample dates for the conduct of a by-election are provided in this report along with some of the pros and cons for each selection.

The Clerk is responsible to establish nomination day to be on a day not more than 60 days after Council passes the by-law requiring the by-election. The nomination period for candidates to file nominations begins the day after Council passes the by-law and ends at 2:00 p.m. on nomination day. There is no prescribed minimum time frame for a nomination period for a by-election and voting day is 45 days after Nomination Day.

Sample dates for holding a by-election and suggested motions for each are as follows:

### **Sample 1 – Voting Day – Monday, September 26, 2016**

Wednesday, June 15, 2016	Declaration of Vacancy
Wednesday, June 15, 2016	Regular Council Meeting (Council to pass a by-law to conduct a by-election within 60 days of Declaring the Seat Vacant – same day)
Thursday, June 16, 2016	Nomination period begins
Friday, August 12, 2016	Nomination Day (no more than 60 days from passing By-law – 58 days)
Saturday, September 17, 2016	Advance Voting Day
Monday, September 26, 2016	Voting Day (45 Days after Nomination Day)

**Draft Motion**

That the office of Township Councillor formerly held by Wayne Stokley, be declared vacant in accordance with Section 262 (1) of the *Municipal Act, 2001*; and

That Council pass a By-law requiring that the Township Council vacancy be filled by way of a by-election; and

That September 26, 2016 be declared as Voting Day.

**Pros**

- Earlier filling of vacancy through the democratic process
- No conflict with a Provincial or Federal election
- Voting Day after summer
- Voting Day prior to commencement of 2017 Budget deliberations

**Cons**

- Candidates campaign period would occur primarily during the summer
- Costs
- Tight time frame

**Sample 2 – Voting Day – Monday, October 17, 2016**

Wednesday, June 15, 2016	Declaration of Vacancy
Wednesday, July 20, 2016	Regular Council Meeting (Council to pass a by-law to conduct a by-election within 60 days of Declaring the seat vacant - 35 days)
Thursday, July 21, 2016	Nomination period begins
Friday, September 2, 2016	Nomination Day (no more than 60 days from passing the by-law – 44 days)
Saturday, October 8, 2016	Advance Voting Day (Thanksgiving Weekend)
Monday, October 17, 2016	Voting Day (45 Days after Nomination Day)

**Draft Motion**

That the office of Township Councillor formerly held by Wayne Stokley, be declared vacant in accordance with Section 262 (1) of the *Municipal Act, 2001*; and

That Council pass a By-law requiring that the Township Council vacancy be filled by way of a by-election; and

That October 17, 2016 be declared as Voting Day.

**Pros**

- Filling of vacancy through the democratic process
- No conflict with a Provincial or Federal election
- Less restrictive time-frame
- Voting Day prior to completion of 2017 Budget deliberations
- Candidates could campaign from July to October

**Cons**

- Costs

**Sample 3 – Voting Day – Monday, November 21, 2016**

Wednesday, June 15, 2016	Declaration of Vacancy
Wednesday, August 10, 2016	Regular Council Meeting (Council to pass a by-law to conduct a by-election within 60 days of Declaring the seat vacant – 56 days)
Thursday, August 11, 2016	Nomination period begins
Friday, October 7, 2016	Nomination Day (no more than 60 days from passing the by-law – 58 days)
Saturday, November 12, 2016	Advance Voting
Monday, November 21, 2016	Voting Day (45 Days after Nomination Day)

**Draft Motion**

That the office of Township Councillor formerly held by Wayne Stokley, be declared vacant in accordance with Section 262 (1) of the *Municipal Act, 2001*; and

That Council pass a By-law requiring that the Township Council vacancy be filled by way of a by-election; and

That November 21, 2016 be declared as Voting Day.

**Pros**

- Filling of vacancy through the democratic process
- No conflict with a Provincial or Federal election
- Candidates could campaign from August to November

**Cons**

- The seat will remain vacant for a long period
- Costs
- Voting Day closer to the end of the 2017 Budget

**Timing of Decision**

If Council does not proceed with making a decision at its meeting to be held on June 15, 2016 with regard to filling the vacancy by appointment or through a by-election, it is recommended that a special meeting of Council be held on June 23, 2016 for this purpose.

**FINANCIAL IMPLICATIONS**

The costs of conducting a By-Election in the Township are similar to the costs for running an election as all positions on Council are elected at large.

The costs of conducting the 2014 Municipal election were \$52,000. In 2015, the Township entered into an agreement with Dominion Voting for the provision of the use of vote tabulators for the 2018 election. This agreement provides for the complimentary rental of tabulators for a by-election. This results in an approximate reduction in election expenses of \$5,000.00. The Township also has an agreement with Datafix for the on-going maintenance and production of its Voters' List which requires annual payments of \$1,200. It is estimated that the cost of a by-election will be \$40,000.00 as there will be some additional reduction in costs for office supplies, professional development, ballots (French – no school board ballots), forms (French) and advertising.

The Township's election reserve would be used to fund a 2016 By-Election. The election reserve has \$23,000 at December 31, 2015 and \$12,787 will be contributed in 2016 as per the Approved 2016 Operating Budget, this results in an available balance of \$35,787. The remaining \$4,213 would create an overrun in the Elections cost centre; depending on the year-end corporate wide surplus/deficit this overrun may be funded through the Legal Contingency reserve.

Should Council direct that a By-election be held and utilize funds from the election reserve it is recommended that the 2017 and 2018 Operating Budgets include a contribution in reserves in the amount of \$27,500 which assumes a total Election cost of \$55,000 in 2018. Therefore, the budget would increase by \$14,713 in 2017.

The administrative costs to fill the vacancy by appointment are estimated at \$2,500.00.

**APPLICABLE LEGISLATION AND REQUIREMENTS**

Municipal Act, 2001

Municipal Elections Act, 2006

## **SCHEDULES**

Schedule A

Schedule B

Sample By-law to require a By-Election

Council Vacancy Policy



**SCHEDULE A**

A By-law to require a By-Election to fill the vacancy for the Office  
of Township Councillor

**WHEREAS** Section 259 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended establishes that the office of a member of Council of a municipality becomes vacant upon the death of a member;

**AND WHEREAS** Section 262 (1) of the *Municipal Act, 2001*, as amended states that if the office of a member of Council becomes vacant upon the death of a member, that Council shall declare the office to be vacant, at either of its next two meetings;

**AND WHEREAS** in accordance with section 262 (1) of the *Municipal Act, 2001*, Puslinch Township Council declared the office of Township Councillor to be vacant on June 15, 2016;

**AND WHEREAS** Section 263 of the *Municipal Act, 2001*, as amended establishes that where a vacancy occurs in the office of a member of Council of a municipality, the Council may by by-law require that a by-election be held to fill the vacancy in the office of Township Councillor;

**NOW THEREFORE COUNCIL FOR THE TOWNSHIP OF PUSLINCH** hereby enacts as follows:

1. That a By-Election be held to fill the vacancy for the office of Township Councillor in the Township of Puslinch, and such by-election to be conducted in accordance with section 65 of the *Municipal Elections Act*.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS XXX DAY OF XXXX, 2016.**

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**Mayor – Dennis Lever**

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**Clerk – Karen Landry**



## SCHEDULE "B"

### Policy No. 2016- Council Vacancy Policy Corporate Policy

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#### **Purpose**

To establish an accountable and transparent process for filling a vacancy on Township Council.

#### **Scope**

This policy applies to any Office declared vacant on Township Council.

#### **Definition**

For the purpose of this policy:

Lot - means a method of determination by placing the names of the nominees on equal size pieces of paper in a container with one name being drawn by the Clerk, or his/her designate.

#### **GENERAL**

In accordance with the *Municipal Act*, if a vacancy occurs within ninety (90) days before voting day of a regular election, the municipality is not required to fill a vacancy on Council.

When a vacancy is declared and Council elects to proceed with the filling of the vacancy by appointment the following shall occur:

1. In accordance with the *Municipal Act*, Council shall declare the seat to be vacant.
2. In accordance with the *Municipal Act*, Council shall make the appointment to fill the vacancy within sixty (60) days of the Council declaring the vacancy.
3. The Township Clerk or his/her designate shall post a "Public Notice – Council Vacancy" on the Township's website and in the local newspaper. The "Public Notice – Council Vacancy" shall indicate Council's intention to appoint a person to the vacancy and outline the process for filing a nomination.
4. No sooner than fourteen (14) days after a "Public Notice – Council Vacancy" has been given, an information session shall be conducted by staff for potential nominees.
5. A nominee must complete and sign a Council Vacancy - Consent of Nominee form and a Declaration of Qualification, which will be available at the Information Session.



**Policy No. 2016-  
Council Vacancy Policy  
Corporate Policy**

- 
6. The last day for submitting a nomination will be 2:00 p.m. on the Thursday prior to the Council meeting at which the appointment is scheduled to be made.
  7. Nominations will be posted to the Township website upon being certified by the Clerk.
  8. The vote to appoint a nominee shall occur at a Council meeting.
  9. At the Council meeting, the following shall take place:
    - a) The Chair shall make a short statement of the purpose of the meeting and the general order of proceedings to be followed.
    - b) The Clerk will provide the Chair a list of the names of those certified nominees who have completed the Council Vacancy - Consent of Nominee and Declaration of Qualification Forms.
    - c) The Chair will call for a motion from Council in the following form:  
“That the following persons, who have indicated in writing that they are legally qualified to hold the office of councillor and consented to accept the office if they are appointed to fill the vacancy of councillor, be considered for appointment to fill such vacancy.”
    - d) Each nominee shall be afforded the opportunity to address Council for a period of not more than ten (10) minutes. The order of speaking will be determined by lot. The Clerk shall place the names of all nominees in a container and randomly draw the names.
    - e) All nominees shall be asked the same four (4) questions which will be pre-determined based on input by Council.
    - f) Nominees will be sequestered in an adjacent room until it is their time to answer the questions posed by Council. Once a nominee has answered the questions, they may remain in the Council Chambers.
    - g) Upon hearing all the submissions of the nominees, Council will proceed to vote as follows:
      - i) Members of Council will vote by way of public vote.
      - ii) The first round of voting will be to short list the nominees. In the case of four (4) or more nominees, members of Council will select no more than their top three (3) nominees of their preference. In the case of three (3) nominees, members of Council



## **Policy No. 2016- Council Vacancy Policy Corporate Policy**

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will select no more than their top two (2) candidates of their preference. In the case of two (2) nominees, second round voting procedures will apply.

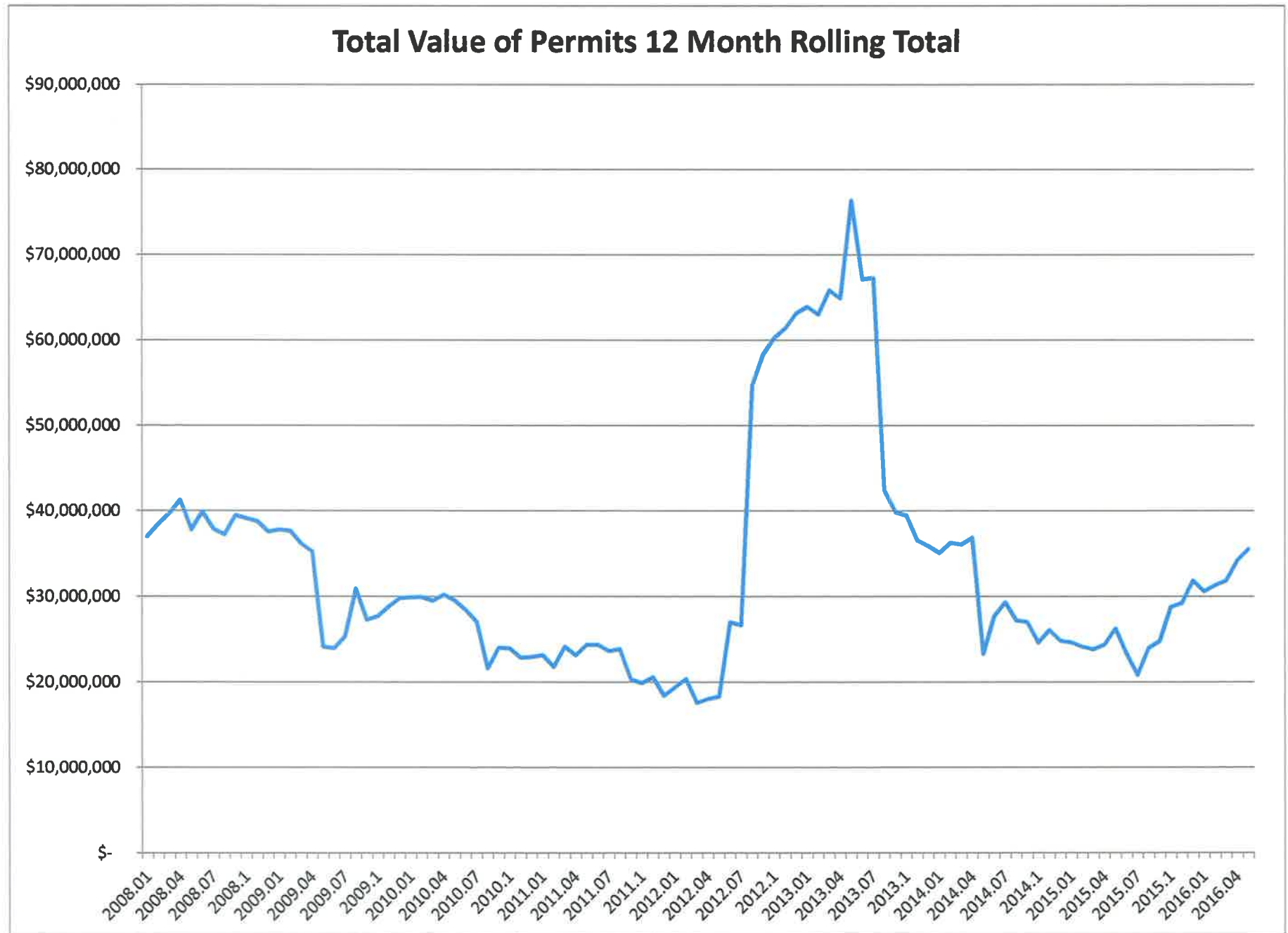
- iii) The top three (3) nominees, or top (2) nominees, as the case may be, who receive the most votes will continue to the next round of voting. All other nominees will be removed from further consideration.
- iv) The second round of voting, members of Council will select no more than one nominee of their preference. Where the nominee receiving the greatest number of votes cast does not receive more than one half the votes of all members of Council, the nominee or nominees who received the fewest number of votes shall be excluded from the voting and the vote will be taken again by the Clerk and, if necessary, more than once, excluding in each successive vote the nominee or nominees who receive the fewest number of votes in the preceding vote, until the nominee receiving the greatest number of votes has also received more than one-half of the votes of the members of Council present and voting.
- v) Where the votes cast are equal for all the nominees and if:
  - There are three (3) nominees remaining, the Clerk shall by lot select one such nominee to be excluded from the subsequent voting
  - Only two (2) nominees remain, the tie shall be broken and the vacancy shall be filled by the nominee selected by lot, as conducted by the Clerk
- vi) Where there are three (3) nominees remaining, and the votes cast are equal for two (2) nominees who received the fewest number of votes, the Clerk shall by lot select one such nominee to be excluded from the subsequent voting.
- vii) A nominee who does not receive a vote shall be removed from further consideration.
- h) Upon conclusion of the voting, the Clerk will declare to be elected the nominee receiving the votes of more than one-half of the number of the members of Council present and voting or by lot as outlined in 9 (g).
- i) A by-law confirming the appointment shall be enacted by Council appointing the successful nominee to the office for the remainder of the term of Council.

8.4(a)

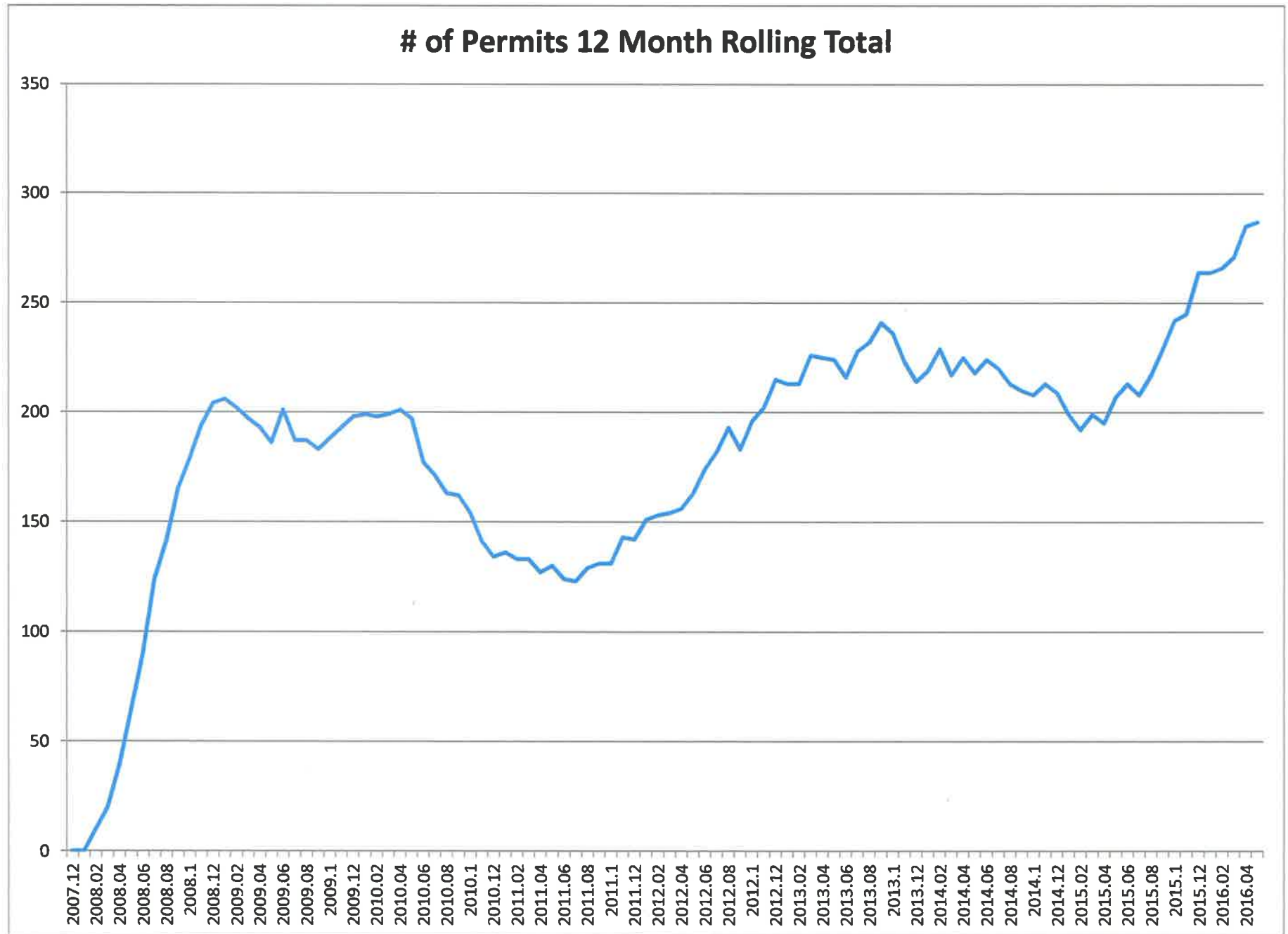
**2016 BUILDING REPORT**

	<u>VALUE OF CONSTRUCTION</u>		<u>PERMIT FEES COLLECTED</u>		<u>%</u>	<u>PERMITS</u>
	<u>2015</u>	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>CHANGE</u>	<u>ISSUED</u>
January	\$1,355,000.00	\$112,500.00	\$13,967.00	\$1,967.00	8%	7
February	\$1,069,000.00	\$1,775,000.00	\$12,381.00	\$23,927.64	166%	9
March	\$2,436,000.00	\$2,953,000.00	\$23,235.95	\$30,677.78	121%	20
April	\$2,188,000.00	\$4,590,000.00	\$31,680.20	\$52,316.00	210%	30
May	\$2,681,000.00	\$3,956,560.00	\$39,250.30	\$47,618.48	148%	30
June	\$0.00	\$0.00	\$0.00	\$0.00	0%	
July	\$0.00	\$0.00	\$0.00	\$0.00	0%	
August	\$0.00	\$0.00	\$0.00	\$0.00	0%	
September	\$0.00	\$0.00	\$0.00	\$0.00	0%	
October	\$0.00	\$0.00	\$0.00	\$0.00	0%	
November	\$0.00	\$0.00	\$0.00	\$0.00	0%	
December	\$0.00	\$0.00	\$0.00	\$0.00	0%	
TOTALS TO DATE		\$13,387,060.00		\$156,506.90		96
2015 COMPARISON		\$9,729,000.00		\$120,514.45		73
Total % CHANGE		138%		130%		132%

**Note: The Graphs Below only Include Septic Permits in 2012 and beyond**

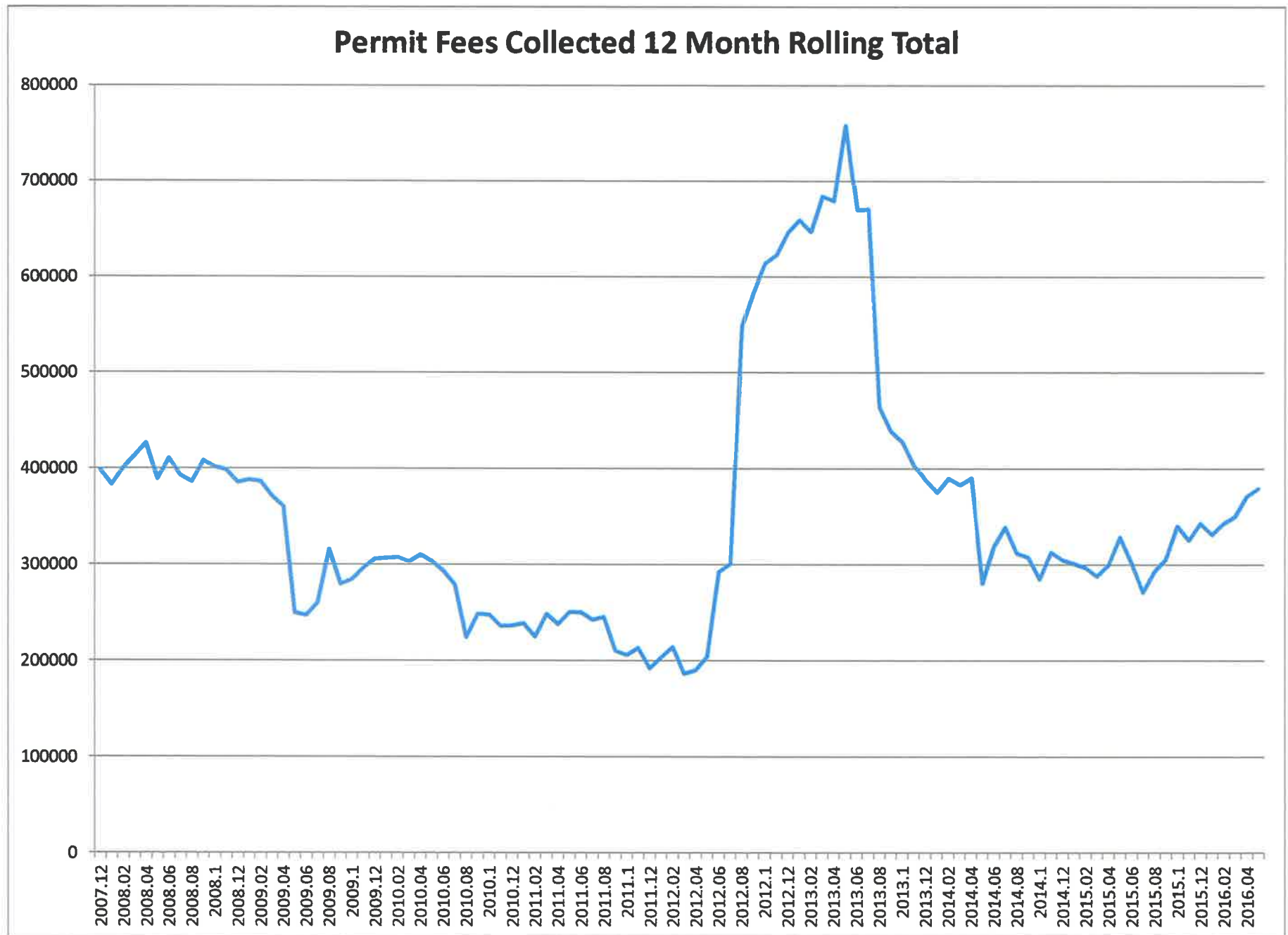


**Note: The Graphs Below only Include Septic Permits in 2012 and beyond**





**Note: The Graphs Below only Include Septic Permits in 2012 and beyond**





## **PLANNING REPORT for the TOWNSHIP OF PUSLINCH**

Prepared by the County of Wellington Planning and Development Department

**DATE:** June 3, 2016  
**TO:** Kelly Patzer, Development Coordinator  
Township of Puslinch  
**FROM:** Sarah Wilhelm, Senior Planner  
County of Wellington  
**SUBJECT:** **2016 HOUSEKEEPING AMENDMENT TO ZONING BY-LAW 19/85**  
**Township-wide Zoning By-law Amendment**  
**ATTACHMENTS:** Revised Table of Proposed Changes  
Amending By-law

### **SUMMARY**

The purpose of this report is to respond to comments on the housekeeping amendment to the Township's Zoning By-law. We are satisfied that the changes identified in the attached table appropriately address concerns raised during the circulation and at the public meeting. An amending by-law is enclosed for Council's consideration. We recommend approval of the housekeeping amendment.

Thank you for your request to prepare a Draft Amending By-law for the housekeeping amendment. This report offers our planning opinion and draft amending by-law.

### **INTRODUCTION**

The public meeting for the housekeeping amendment to the zoning by-law was held April 21, 2016. The meeting was well attended. We have received feedback on the amendment from members of the public, Planning and Development and Advisory Committee (PDAC) and Township Council. The purpose of this report is to provide our recommendations to address the comments raised for Council's consideration. The proposed revisions have been reviewed with Robert Kelly, Chief Building Official and Kelly Patzer, Development Coordinator.

### **COMMENTS**

The comments raised focus on the following topics:

- Grading
- Contractor's yards
- Mini Lakes
- Accessory apartments
- Farm help
- Natural Environment Zone setbacks

We have provided a response to each matter in the text which follows. For additional detail concerning we have attached a revised "Table of Proposed Changes" which details the original and post-public meeting changes to the housekeeping amendment.

## **Grading**

We heard concerns about the proposed removal of clause 3(6)(b) of the zoning by-law dealing with “DUMPING”. We are in agreement with the comment and propose to retain the clause without changes at this time. The matter can be more fully addressed at the time of the preparation of the new Comprehensive Zoning By-law for the Township.

## **Contractor’s Yard**

There were three comments related to Contractor’s Yards, including the need for:

- definition of “Contractor’s Yard”
- definition of “Contractor”
- definition of screening and outdoor storage for contractor’s yards

We agree that there is a need for a definition of “Contractor’s Yard” which is a permitted use in the Industrial Zone and recommend the following:

“BUILDING OR CONTRACTOR’S YARD” means the use of land, buildings and structures by a general contractor, excavation contractor, landscaping contractor, building contractor, well drilling contractor or similar where vehicles, equipment and supplies are parked, stored and maintained for use in the construction and/or renovation trades. It does not include retail or wholesale sales, a temporary job construction site or any other use as defined by this by-law. Office use, as well as minor maintenance and assembly work normally considered to be accessory to the trade are permitted.”

We do not find it necessary to define “Contractor” as the above definition builds in references to a range of contractors. We would note that a service trade is permitted as a home occupation provided it remains compatible with the surrounding areas as per Section 3(9) of the By-law.

With respect to PDAC comments about defining screening requirements and outdoor storage for contractor’s yards, the by-law currently provides the following performance standards:

- Industrial uses are subject to the requirements of Section 3(10)(b) planting strips where a 3 m area is required where an industrial use is adjacent to a residential zone
- A service trade as a home occupation will be subject to the amended open storage regulations of 3(15) which require screening by a planting strip with an opaque fence, wall or other opaque barrier not less than 2.0 metres in height

We do not recommend additional changes.

## **Mini Lakes Definition**

Concerns were raised at the public meeting regarding determination of front lot line for corner lots, which is different in the Mini Lakes Zone. We feel that additional clarification would be beneficial, including the following additional text:

“7B(5)(b) Site Width (Minimum)

Notwithstanding the “Lot Frontage” definition of Section 2 of this By-law, “Site Width” means the horizontal distance between the side site lines measured along the site front line, but where the front site line is not a straight line or where the side site lines are not parallel, the site width

is to be measured at the required minimum site front yard setback from and parallel to the chord of the site width, and for the purpose of this definition the chord of the site width is a straight line joining two points where the side site line intersections the site width.

**7B(6)(f) Front Lot Line**

“Front Lot Line” does not apply to “Site Width” which may be measured at either street line in the case of a corner lot.”

**Accessory Apartments**

Public and Council concerns with the new accessory apartment provisions related to the following:

- Need for more flexibility with minimum lot area for accessory apartments
- Impact of and small size of maximum allowable apartment area
- Limitation of main floor area for accessory apartments in Estate Residential zones

We were asked at the public meeting to give an indication of how many lots might be impacted by a 1 acre lot minimum for accessory apartments in the Agricultural Zone. There are approximately:

- 90 properties that have between 0.5 acres and 0.75 acres of Agricultural zoning on their lot
- 281 properties that have between 0.75 acres and 1 acre of Agricultural zoning on their lot
- 1, 066 properties that have 1 acre or more of Agricultural zoning on their lot

We are in agreement with the comments and have removed the minimum lot area requirement from the Agricultural and Estate Residential zones as septic requirements will dictate the ability to accommodate an accessory apartment, regardless of lot size.

The maximum apartment floor area of 1,076 sq. ft. (100 sq. m) has been removed and a 40% floor area maximum applied. The 592 sq. ft. (55 sq. m) floor area cap on the above grade portion of accessory apartments in the Estate Residential zones has been removed. Consistent with the Agricultural Zone provisions, a 40% floor area maximum has been applied.

At PDAC’s request we have made an editorial change to the text prohibiting accessory apartments in a detached building or structure.

**Farm Help**

In their comments on the amendment, PDAC requested that the term “traditionally constructed” be removed, so that the only type of residential dwelling permitted for farm help is prefabricated, modular or a mobile home. We have no concerns with the request and have removed the term and strengthened the language. If a land owner wishes to seek approval for permanent farm help in the Township, the owner would need to seek zoning relief.

**Natural Environment Zone Setback**

There have been a high volume of minor variances to reduce the setback from the Natural Environment (NE) Zone. PDAC has requested that the housekeeping amendment address the matter.

**"3(25)(c)**

Notwithstanding the above, the setback from the Natural Environment (NE) Zone may be reduced to a distance that is supported by the Conservation Authority having jurisdiction

pursuant to its authority provided under the Conservation Authorities Act, R.S.O. 1990. Where the Conservation Authority provides written approval for a reduced setback from the NE Zone an amendment to this By-law shall not be required."

We are in agreement and have added text underlined above to give the Conservation Authority the authority to reduce the setback without further amendment to the by-law. The By-law provides for Conservation Authority discretion to re-interpret the NE Zone boundary and this would extend such discretion to the setback from the limit of the NE Zone.

#### **PLANNING OPINION**

In our opinion, the proposed housekeeping amendment is consistent with the Provincial Policy Statement and generally conforms to the Provincial Growth Plan and the County Official Plan. Accordingly, we recommend the approval of the amending by-law.

#### **NEXT STEPS**

If the amending by-law is approved by Council, notification should be provided in accordance with the Planning Act.

Respectfully submitted  
County of Wellington Planning and Development Department



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Sarah Wilhelm, BES, MCIP, RPP  
Senior Planner

c. Robert Kelly, Chief Building Official

# Table of Proposed Changes

Township of Puslinch Housekeeping Amendment

Original Text additions  
Original text removals  
New text revisions

shown in red underlined ~~text~~  
shown in black strikeout ~~text~~  
post-public meeting shown  
in **black bold text**

## Definitions

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
1	<b>LOT FRONTAGE</b> <b>DEFINITION FOR CUL-DE-SACS OR CURVED FRONTAGES</b> <ul style="list-style-type: none"><li>for clarification</li></ul>	2(120) Definitions	(a) “LOT FRONTAGE” means <del>the horizontal distance between the side lot lines of a lot, such distance being measured along a line which is parallel to the front lot line of the lot at the minimum front yard depth required hereby on such lot.</del> <u>the horizontal distance between the side lot lines measured along the front lot line, but where the front lot line is not a straight line or where the side lot lines are not parallel, the lot frontage is to be measured by a line 6.0 m back from and parallel to the chord of the lot frontage, and for the purpose of this paragraph the chord of the lot frontage is a straight line joining the two points where the side lot lines intersect the front lot line.</u>  <u>“ILLUSTRATIONS OF DEFINITIONS AND PROVISIONS”</u> <u>Note: The diagrams and illustrations on the following pages are for the purposes of illustration only and do not form part of the zoning by-law.</u>	None required
2	<b>UNDERGROUND STRUCTURES</b> <ul style="list-style-type: none"><li>for clarification</li><li>new regulation for projections into required yards</li></ul>	2(182)  <u>3(23)(a)vii</u>	“STRUCTURE” means anything constructed or erected, the use of which requires location on or in the ground, or attached to something located on or in the ground, but does not include the permanent way of a railway, any paved surface located directly on the ground <u>or sewage systems.</u> <u>Underground service structures such as sewage systems and firefighting tank reservoirs which do not project more than 2.0 metres into a required interior side yard or rear yard, and which do not project more than 3.0 m into a required front yard or exterior side yard.</u>	None required
3	<b>FRONT LOT LINE</b> <b>DEFINITION FOR CORNER LOTS</b> <ul style="list-style-type: none"><li>clarifies that shortest lot line is front lot line</li></ul>	2(121) Definitions	(a) “FRONT LOT LINE” means: (i) in the case of an interior lot, <del>the street line of the lot</del> <u>the line dividing the lot from the street;</u> (ii) in the case of a corner lot, <del>either street line of the lot, whereas the other street line shall be deemed an exterior side lot line</del> <u>the shorter lot line abutting a street;</u> <u>or</u>	None required
4	<b>BUILDING HEIGHT ILLUSTRATIONS</b> <ul style="list-style-type: none"><li>for clarification</li></ul>		<u>“ILLUSTRATIONS OF DEFINITIONS AND PROVISIONS”</u> <u>Note: The diagrams and illustrations on the following pages are for the purposes of illustration only and do not form part of the zoning by-law.</u>	None required

General Provisions

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
5	<b>SITE ALTERATION “DUMPING”</b> <ul style="list-style-type: none"> <li>dumping is dealt with under Municipal Act, Site Plan Agreement or Site Plan Control</li> </ul>	3(6) General Provisions Grading Dumping	None	<ul style="list-style-type: none"> <li><b>Concerns raised about removal</b></li> <li><b>Recommend that Section be kept in By-law with no changes at this time</b></li> </ul>
6	<b>SEPARATION DISTANCE FOR GROUP HOMES</b> <ul style="list-style-type: none"> <li>removal of 10 km separation distance</li> </ul>	3(7) General Provisions	Notwithstanding any other provisions of this By-law to the contrary, a Group Home may be permitted in any single dwelling unit provided <del>there is no Group Home or similar facility within 10 kilometres of the proposed facility and</del> the dwelling unit <del>must have</del> <u>has</u> 20 square metres per person residing within the unit. Group Homes must be registered with the municipality as per <del>Section 236 of the Municipal Act, R.S.O. 1980, Chapter 302.</del>	None required
7	<b>OPEN STORAGE</b> <ul style="list-style-type: none"> <li>clarification of open storage requirements for home occupations</li> <li>increase in height for screening from 1.5 m to 2.0 m</li> </ul>	3(9) General Provisions  3(15) General Provisions	<div> <div>(f)</div> <div>No home occupation shall create or become a public nuisance, particularly with regard to noise, traffic, emissions, parking or radio or television interference; <del>nor shall any open storage be permitted in conjunction with a home occupation except in accordance with the provisions of Subsection 3(15) hereof.</del></div> </div> <div> <div>(h)</div> <div><u>Any open storage permitted in conjunction with a home occupation shall comply with the provisions of Section 3(15).</u></div> </div> <div> <div>(a)</div> <div>OPEN STORAGE REGULATIONS</div> </div> <div> <div>(iv)</div> <div>No open storage area shall be visible from any street or from any adjacent lot, where such adjacent lot is located in a zone other than a Commercial Zone or an Industrial Zone, and to this end any open storage area shall be screened, wherever necessary in order to comply with this provision, by a planting strip containing an opaque fence, wall or other opaque barrier not less than <del>1.5</del> <u>2.0</u> metres in height, except that this provision shall not apply to any open storage area accessory to an agricultural use or to the outside display and sale of goods and materials in conjunction with a permitted commercial use.</div> </div>	None required



General Provisions

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law		Recommended Response
8	<b>CONTRACTOR’S YARD NOT A HOME OCCUPATION</b>	3(9) General Provisions	(g)	None of the following uses shall be considered home occupations except where such uses are specifically permitted herein:  <u>(x) a contractor’s yard</u>	None required <ul style="list-style-type: none"> <li>We note that a service trade is a permitted as a home occupation provided it “remains compatible with the surrounding areas” per Section 3(9) of the By-law</li> <li><b>PDAC, public and Council raised concerns with lack of definition</b></li> <li><b>Recommend addition of new definition of building or contractor’s yard</b></li> </ul>
	<ul style="list-style-type: none"> <li>for clarification</li> <li><b>New definition of a building or contractor’s yard</b></li> </ul>	2 Definitions	( )	<b><u>“BUILDING OR CONTRACTOR’S YARD” means the use of land, buildings and structures by a general contractor, excavation contractor, landscaping contractor, building contractor, well drilling contractor or similar where vehicles, equipment and supplies are parked, stored and maintained for use in the construction and/or renovation trades. It does not include retail or wholesale sales, a temporary job construction site or any other use as defined by this by-law. Office use, as well as minor maintenance and assembly work normally considered to be accessory to the trade are permitted.</u></b>	
9	<b>ONE MAIN BUILDING PER LOT</b>	3 General Provisions	( )	<u>ONE MAIN BUILDING PER LOT</u>	None required
	<ul style="list-style-type: none"> <li>New provision to clarify no more than one main building per lot outside of identified zones</li> <li>Renaming of provision title</li> </ul>	3(13)	(13)	<del>LOTS WITH MORE THAN ONE USE OR ZONE</del> <u>( ) ONE OR MORE PERMITTED USES PER LOT OR ZONE</u>	
10	<b>SEPTIC</b>	3(22)(b) General Provisions	{xviii}	<b>RESTRICTED USES</b> Any use unable to obtain the approval of private water or sanitary treatment and disposal facilities from the Medical Officer or Health of the Wellington Dufferin Guelph Health Unit, owing either to the quantity of water required therefor which cannot be provided by a public water system, or to the quality of effluent produced thereby;	None required

## Preamble

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
11	<b>PREAMBLE TO PERMITTED USES</b> • for clarification	5 A Zone	(2) USES PERMITTED <del>No person shall, within any A Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following A uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within an Agricultural (A) Zone, except in accordance with the following provisions:</u>	None required
		6 HR Zone	(2) USES PERMITTED <del>No person shall, within any HR Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following HR uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Hamlet Residential (HR) Zone, except in accordance with the following provisions:</u>	None required
		7 RR Zone	(2) USES PERMITTED <del>No person shall, within any RR Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following RR uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Resort Residential (RR) Zone, except in accordance with the following provisions:</u>	None required
		7A MR Zone	(2) USES PERMITTED <del>No person shall, within any RR Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following RR uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Millcreek Residential Area (MR) Zone, except in accordance with the following provisions:</u>	None required
		7B ML Zone	(2) USES PERMITTED <del>No person shall, within any RR Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following RR uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Mini Lakes (ML) Zone, except in accordance with the following provisions:</u>	None required
		8 ER1 Zone	(2) USES PERMITTED <del>No person shall, within any ER1 Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following ER1 uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within an Estate Residential Type 1 (ER1) Zone, except in accordance with the following provisions:</u>	None required

### Table of Proposed Changes

Township of Puslinch Housekeeping Amendment  
June 2016 Version

## Preamble

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
11	<b>PREAMBLE TO PERMITTED USES</b> • for clarification	9 ER2 Zone	(2) USES PERMITTED <del>No person shall, within any ER2 Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following ER2 uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within an Estate Residential Type 2 (ER2) Zone, except in accordance with the following provisions:</u>	None required
		10 RUR Zone	(2) USES PERMITTED <del>No person shall, within any RUR Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following RUR uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Rural Residential (RUR) Zone, except in accordance with the following provisions:</u>	None required
		11 C1 Zone	(2) USES PERMITTED <del>No person shall, within any C1 Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following C1 uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Hamlet Commercial (C1) Zone, except in accordance with the following provisions:</u>	None required
		12 C2 Zone	(2) USES PERMITTED <del>No person shall, within any C2 Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following C2 uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Highway Commercial (C2) Zone, except in accordance with the following provisions:</u>	None required
		13 C3 Zone	(2) USES PERMITTED <del>No person shall, within any C3 Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following C3 uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Commercial (C3) Zone, except in accordance with the following provisions:</u>	None required
		14 C4 Zone	(2) USES PERMITTED <del>No person shall, within any C4 Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following C4 uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Resort Commercial (C4) Zone, except in accordance with the following provisions:</u>	None required

### Table of Proposed Changes

Township of Puslinch Housekeeping Amendment  
June 2016 Version

## Preamble

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
11	<b>PREAMBLE TO PERMITTED USES</b> • for clarification	15 IND Zone	(2) USES PERMITTED <del>No person shall, within any IND Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following IND uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within an Industrial (IND) Zone, except in accordance with the following provisions:</u>	None required
		16 EXI Zone	(2) USES PERMITTED <del>No person shall, within any EXI Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following EXI uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within an Extractive (EXI) Zone, except in accordance with the following provisions:</u>	None required
		17 DI Zone	(2) USES PERMITTED <del>No person shall, within any DI Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following DI uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Disposal Industrial (DI) Zone, except in accordance with the following provisions:</u>	None required
		18 I Zone	(2) USES PERMITTED <del>No person shall, within any I Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following I uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within an Institutional (I) Zone, except in accordance with the following provisions:</u>	None required
		19 OS Zone	(2) USES PERMITTED <del>No person shall, within any OS Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following OS uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within an Open Space (OS) Zone, except in accordance with the following provisions:</u>	None required
		20 NE Zone	(2) USES PERMITTED <del>No person shall, within any NE Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following NE uses, namely:</del> <u>No person shall use land or erect, alter or use any buildings or structures within a Natural Environment (NE) Zone, except in accordance with the following provisions:</u>	None required

### Table of Proposed Changes

Township of Puslinch Housekeeping Amendment  
June 2016 Version

Other Provisions

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
12	<b>FRONT YARD IN RESORT RESIDENTIAL ZONE</b> <ul style="list-style-type: none"> <li>Front yard depth regulation needed</li> </ul>	7(3) Zone Requirements	(c) FRONT YARD <u>DEPTH (MINIMUM)</u> <u>7.5 m</u>	None required
13	<b>MINI LAKES</b> <ul style="list-style-type: none"> <li>Add date of passing of By-law 9/13</li> </ul>	7B(5)(c) Site Front Yard (Minimum)	Fourth sentence of paragraph: Notwithstanding the above, this By-law recognizes those accessory buildings or structures which existed prior to <del>the date of passing of this By-law</del> <u>December 19, 2012</u> that are within the front yard or have a front yard less than 2.0 metres.	None required
		7B(5)(d) Site Side Yard (Minimum)	Third sentence of paragraph: Notwithstanding the above, this By-law recognizes those accessory buildings or structures which existed prior to <del>the date of passing of this By-law</del> <u>December 19, 2012</u> that have a side yard less than 0.6 metres.	None required
		7B(5)(e) Site Rear Yard (Minimum)	Third sentence of paragraph: Notwithstanding the above, this By-law recognizes those accessory buildings or structures which existed prior to <del>the date of passing of this By-law</del> <u>December 19, 2012</u> that have a rear yard less than 0.6 metres.	None required
	<ul style="list-style-type: none"> <li>for clarification of lot coverage</li> </ul>	7B(5)(h) Site Coverage (Maximum)	<del>The coverage of a site by all buildings and structures, including accessory buildings or structures, shall not exceed 35%, with the exception of open-sided carports and uncovered decks not exceeding 0.6 m in height. Notwithstanding the above, this By-law recognizes those buildings or structures including accessory buildings or structures, which existed prior to the date of passing of this By-law that have a coverage which exceeds 35%.</del>  <u>Notwithstanding any other provision of this By-law to the contrary, the coverage of all buildings or structures, including accessory buildings or structures, within each site or lot area shall not exceed 35%. Open sided carports and uncovered decks not exceeding 0.6 m in height are exempt from the site coverage maximum.</u> Notwithstanding the above, this By-law recognizes those buildings or structures including accessory buildings or structures, which existed prior to <u>December 19, 2012</u> that have a coverage which exceeds 35%.	None required

Other Provisions

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law		Recommended Response following Public Meeting
13	<b>MINI LAKES</b> <ul style="list-style-type: none"><li>increase in recreation building from 500 square metres to 1,100 square metres</li></ul>	7B(6)(e) Building Floor Area (Maximum)	laundromat variety store recreation building	100 square metres 150 square metres <del>500 square metres</del> <u>1,100 square metres</u>	None required
	<ul style="list-style-type: none"><li>for clarification of site width relative to new lot frontage definition and front lot line</li></ul>	7B(5)(b) Site Width (Minimum)	Each site shall have a minimum width of 9.0 metres measured at the required minimum front yard. <b>Notwithstanding the “Lot Frontage” definition of Section 2 of this By-law, “Site Width” means the horizontal distance between the side site lines measured along the site front line, but where the front site line is not a straight line or where the side site lines are not parallel, the site width is to be measured at the required minimum site front yard setback from and parallel to the chord of the site width, and for the purpose of this definition the chord of the site width is a straight line joining two points where the side site line intersections the site width.</b>		<ul style="list-style-type: none"><li><b>Additional provisions recommended to address concerns of Mini Lakes regarding determination of site width</b></li></ul>
	<ul style="list-style-type: none"><li>for clarification</li></ul>	7B(6)(f)	<b><u>Front Lot Line</u></b> <b>“Front Lot Line” does not apply to “Site Width” which may be measured at either street line in the case of a corner lot.</b>		

Minimum Distance Separation

Original Text additions  
Original text removals  
New text revisions

shown in red underlined ~~text~~  
shown in black ~~strikeout text~~  
post-public meeting shown  
in **black bold text**

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
14	<b>MINIMUM DISTANCE SEPARATION</b> <ul style="list-style-type: none"><li>Provincial Policy requires inclusion of MDS in zoning by-laws</li><li>Additional definitions have been added to support MDS implementation</li><li>Definitions are consistent with MDS Guidelines</li></ul>	3( ) General Provisions	<u><b>MINIMUM DISTANCE SEPARATION – MDS I AND II</b></u>  (a) <u><b>MDS I – NEW NON-FARM USES</b></u> <u>Notwithstanding any other yard or setback provisions of this By-law to the contrary, no residential, institutional, commercial, industrial or recreational use, located on a separate lot and permitted within the Agricultural (A) Zone or any other zone in which agricultural uses are permitted, shall be erected or altered unless it complies with the Minimum Distance Separation I (MDS I) setback from a livestock facility, calculated using the Formulas published by the Province of Ontario, as may be amended from time to time. The above provisions shall not apply to lots existing as of the date of passing of this By-law, which are less than 4 hectares in area.</u>  (b) <u><b>MDS II – NEW OR EXPANDING LIVESTOCK FACILITIES AND MANURE STORAGE FACILITIES</b></u> <u>Notwithstanding any other yard or setback provisions of this By-law to the contrary, no livestock facility or manure storage facility shall be erected or expanded unless it complies with the Minimum Distance Separation II (MDS II) setback, calculated using the Formulas published by the Province of Ontario, as may be amended from time to time. Notwithstanding the above, an existing manure storage system which does not meet MDS II requirements, may be replaced by a more compatible system which results in a reduction in the separation distance required, provided the livestock housing capacity is not increased.</u>	None required



Minimum Distance Separation

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
14	MINIMUM DISTANCE SEPARATION	2( ) Definitions	<u>“LIVESTOCK”, means farm animals kept for use, propagation, or for intended profit or gain and without limiting the generality of the foregoing includes: dairy, beef and veal cattle, horses, swine, sheep, goats, mink rabbits and fowl.</u>	None required
		2( ) Definitions	<u>“LIVESTOCK BARNS”, means one or more permanent structures located on a lot which are intended for keeping or housing livestock, and are structurally sound and reasonably capable of housing livestock.</u>	None required
		2( ) Definitions	<u>“LIVESTOCK FACILITIES”, include all livestock barns and manure storages, as well as all unoccupied barns and unused manure storages on a lot.</u>	None required
		2( ) Definitions	<u>“MANURE STORAGE”, means a permanent storage which is structurally sound and reasonably capable of storing manure and which contain liquid manure (less than 18% dry matter) or solid manure (greater than or equal to 18% dry matter), and may exist in a variety of: locations, materials, coverings, configurations and elevations as identified in the Minimum Distance Separation Implementation Guidelines issued by the Province of Ontario.</u>	None required
		Estate Residential 8(3) Zone Requirements	(i) <del>SEPARATION DISTANCE FROM ADJACENT BARNS No single detached dwelling shall be located closer than 180 metres to the barns of an intensive agricultural use on adjacent property.</del>	None required
		Estate Residential 9(3) Zone Requirements	(i) <del>SEPARATION DISTANCE FROM ADJACENT BARNS No single detached dwelling shall be located closer than 180 metres to the barns of an intensive agricultural use on adjacent property.</del>	None required
		Rural Residential 10(3) Zone Requirements	(i) <del>SEPARATION DISTANCE FROM ADJACENT BARNS No single detached dwelling shall be located closer than 180 metres to the barns of an intensive agricultural use on adjacent property.</del>	None required

Housing and Agricultural Regulations

#	DESCRIPTION	By-law Reference	Proposed Amendment to By-law	Recommended Response
15	<b>DWELLING SIZE</b> <ul style="list-style-type: none"><li>Removal of minimum dwelling unit size as it is not necessary to regulate</li></ul>	3(5)(e) Dwelling Unit Area (Minimal)	<del>(i) — A dwelling unit consisting of a single dwelling — 90 square metres.</del> <del>(ii) — Any other dwelling unit — 40 square metres for a bachelor dwelling unit plus an additional 10 square metres for each bedroom.</del>	None required
16	<b>TEMPORARY RESIDENCE DURING CONSTRUCTION</b> <ul style="list-style-type: none"><li>New provision would remove the need for minor variance approval for temporary residence during construction</li></ul>	3( ) General Provisions	<u><b>TEMPORARY RESIDENCE DURING CONSTRUCTION</b></u>  (a) <u>Where a new single detached dwelling is being constructed on a vacant lot in an Agricultural (A) Zone, a mobile home may be located and used as a temporary residence on the same lot during the construction of a new residence for a period of time not to exceed 12 months after the building permit for the new dwelling is issued, provided all requirements of the Chief Building Official are satisfied, including the provision of adequate sewage disposal and water supply, and the posting of sufficient securities to ensure the removal of the temporary dwelling.</u>  (b) <u>Where a new single detached dwelling is being constructed to replace an existing single detached dwelling on the same lot in an Agricultural (A) Zone, the existing dwelling may continue to be used as a temporary residence during the construction of the new residence for a period of time not to exceed 12 months after the building permit for the new dwelling is issued, provided all requirements of the Chief Building Official are satisfied, including the provision of adequate sewage disposal and water supply, and the posting of sufficient securities to ensure the removal of the temporary dwelling.</u>	None required

# Housing and Agricultural Regulations

Original Text additions  
Original text removals  
New text revisions

shown in red underlined text  
shown in black ~~strikeout text~~  
post-public meeting shown  
in **black bold text**

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law		Recommended Response
17	<b>SECOND UNITS</b> • definition expanded	2(66)(iv) Definitions	(a) “Accessory Dwelling Unit”	Means a dwelling unit accessory to a permitted non-residential use <u>or accessory to a permitted single detached dwelling in an Agricultural (A) Zone, Estate Residential Type 1 (ER1) Zone or Estate Residential Type 2 (ER2) Zone.</u>	None required
	• allows dwelling units in basement or cellar	3(5) Dwelling Units	(c) LOCATION WITHIN BASEMENT OR CELLAR	<del>(i) No dwelling unit shall be located in its entirety within a basement.</del> ( <u>  </u> ) No part of any dwelling unit shall be located within a basement of a non-residential building. ( <u>  </u> ) No habitable room shall be located within a cellar <u>unless it has a floor to ceiling height of at least 1.95 m.</u>	None required
	• allows accessory apartments in A Zone in a single detached dwelling	5(2) Permitted Uses Agricultural Zone  5(3)(e) REDUCED LOT REQUIREMENTS	<u>An accessory apartment in a single detached dwelling on a lot in accordance with Section 5(3).</u>  <u>Add “an accessory apartment within a single detached dwelling on a lot in accordance with Section <del>3(1.1) 5(3)</del>” as a permitted use to Section 5(3)(e)(ii) and 5(3)(e)(v)2.a)</u>		• <b>Editorial changes</b>
	• provides regulations for accessory apartments in main dwelling	5(3) Requirements Agricultural Zone	(g) <u>ACCESSORY APARTMENTS</u>  <del><u>LOT AREA</u></del> <u>0.4 ha</u> <del><u>(MAXIMUM)</u></del>  <u>FLOOR AREA</u> <u>(MAXIMUM)</u>  <u>SERVICING</u>  <u>ACCESSORY BUILDINGS</u>	<u>45% 40% of the Floor Area of the Principal Dwelling but no more than 100 m<sup>2</sup>. In this context “Floor Area” means the total Floor Area of the Building measured from the exterior face of outside walls, or centre line of common walls, including Cellars and Basements with a floor to ceiling height of at least 1.95 m. Floor Area does not include basements, stairs, landings, cold cellars, garages and carports.</u> <u>The accessory apartment must connect to the existing well and septic which services the main dwelling</u> <u>Accessory apartments are not permitted in, or as, a detached building or structure</u>	• <b>Public and Council concerns regarding minimum lot area and size restriction of apartment</b> • <b>Remove minimum lot area and allow septic requirements through building permit to dictate</b> • <b>Apartment size cap removed, 40% floor area of main dwelling to apply</b>  • <b>Edit addresses PDAC comments</b>

## Housing and Agricultural Regulations

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law	Recommended Response
17	<b>SECOND UNITS</b> <ul style="list-style-type: none"> <li>allows accessory apartment in ER1 Zone</li> </ul>	8(2) Permitted Uses Estate Residential Type 1 Zone	<u>An accessory apartment in a single detached dwelling on a lot in accordance with Section 8(3).</u>	None required
	<ul style="list-style-type: none"> <li>provides regulations for accessory apartment in main dwelling</li> </ul>	8(3) Requirements Estate Residential Type 1 Zone	<p><u>(j) ACCESSORY APARTMENTS</u></p> <p><del><u>LOT AREA (MINIMUM)</u></del>      <del><u>0.8 ha</u></del></p> <p><del><u>FLOOR AREA (MAXIMUM)</u></del>      <del><u>45%-40% of the total Floor Area of the Principal Dwelling but no more than 100 m<sup>2</sup>, with a maximum of 55 m<sup>2</sup> above grade.</u></del> In this context “Floor Area” means the total Floor Area of the Building measured from the exterior face of outside walls, or centre line of common walls, <del><u>including Cellars and Basements with a floor to ceiling height of at least 1.95 m.</u></del> Floor Area does not include <del><u>basements, stairs, landings, cold cellars, garages and carports.</u></del></p> <p><del><u>SERVICING</u></del>      <u>The accessory apartment must connect to the existing well and septic which services the main dwelling</u></p> <p><del><u>ACCESSORY BUILDINGS</u></del>      <u>Accessory apartments are not permitted in, or as, a detached building or structure</u></p>	<ul style="list-style-type: none"> <li>Removal of lot area minimum, consistent with Agricultural Zone changes</li> <li>Council concerns regarding size restriction of apartment above grade</li> <li>Apartment size caps removed, 40% floor area of main dwelling to apply</li> <li>Edit addresses PDAC comments</li> </ul>
	<ul style="list-style-type: none"> <li>allows accessory apartment in ER2 Zone</li> </ul>	9(2) Permitted Uses Estate Residential Type 2 Zone	<u>An accessory apartment in a single detached dwelling on a lot in accordance with Section 9(3).</u>	None required
	<ul style="list-style-type: none"> <li>provides regulations for accessory apartment in main dwelling</li> </ul>	9(3) Requirements Estate Residential Type 2 Zone	<p><u>(j) ACCESSORY APARTMENTS</u></p> <p><del><u>LOT AREA (MINIMUM)</u></del>      <del><u>0.4 ha</u></del></p>	<ul style="list-style-type: none"> <li>Removal of lot area minimum, consistent with Agricultural Zone changes</li> </ul>

## Housing and Agricultural Regulations

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law		Recommended Response	
17	SECOND UNITS	9(3) Requirements Estate Residential Type 2 Zone	<u>FLOOR AREA (MAXIMUM)</u>	<del>45% 40% of the total Floor Area of the Principal Dwelling but no more than 100 m<sup>2</sup>, with a maximum of 55 m<sup>2</sup> above grade.</del> In this context “Floor Area” means the total Floor Area of the Building measured from the exterior face of outside walls, or centre line of common walls, <del>including Cellars and Basements with a floor to ceiling height of at least 1.95 m.</del> Floor Area does not include <u>basements, stairs, landings, cold cellars, garages and carports.</u>	<ul style="list-style-type: none"><li>Addresses Council concerns regarding size restriction of apartment above grade</li><li>Apartment size caps removed, 40% floor area of main dwelling to apply</li></ul>	
			<u>SERVICING</u>	The accessory apartment must connect to the existing well and septic which services the main dwelling		
			<u>ACCESSORY BUILDINGS</u>	Accessory apartments are not permitted in, <del>or as,</del> a detached building or structure		<ul style="list-style-type: none"><li>Edit addresses PDAC comments</li></ul>
18	FARM HELP DWELLINGS <ul style="list-style-type: none"><li>new provisions would allow for a secondary dwelling accessory to a farm as-of-right if the farm is at least 35 ha in size</li></ul>	5(2) Permitted Uses Agricultural Zone	( )	<u>SECONDARY DWELLING ACCESSORY TO A FARM</u>	<ul style="list-style-type: none"><li>Addresses PDAC comments</li></ul>	
		5(3) New subsection	( )	<u>REGULATIONS FOR ESTABLISHMENT OF A SECONDARY DWELLING ACCESSORY TO A FARM</u>		
			<u>LOT AREA (MINIMUM)</u>	<u>35.0 ha</u>		
			<u>LOCATION</u>	<u>A second residential dwelling shall be located within the Farm Building Cluster. The second residential dwelling unit must be detached from the main residential dwelling, shall share a common driveway with the main farm residence, and shall be located within a 61.0 m radius of the main farm residence. A second residential dwelling shall be provided with a potable water supply and adequate private sewage treatment facility.</u>		
			<u>TYPE OF RESIDENTIAL DWELLING</u>	<u>A second residential dwelling unit <del>may shall be traditionally constructed,</del> prefabricated, modular or a mobile home.</u>		
		2(73.1) Definitions	<u>FARM</u>	<u>Means a parcel of land, which the predominant activity is agricultural and includes associated buildings and structures such as residential dwellings, livestock facilities, farm implement buildings, silos, granaries and similar buildings and structures.</u>		

Housing and Agricultural Regulations

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law		Recommended Response
18	<b>FARM HELP DWELLINGS</b> <ul style="list-style-type: none"><li>addition and removal of definitions to support new regulations</li></ul>	2(73.2) Definitions	<u>FARM BUILDING CLUSTER</u>	<u>Means the close grouping of the main buildings and structures on a farm contained within a limited area so that the remaining land is used for agriculture. Buildings and structures within the cluster shall share a common driveway.</u>	None required
		2(65) Definitions	(f) <del>“Agricultural Service Dwelling”</del>	<del>Means a temporary dwelling to provide sleeping accommodation and sanitary facilities for seasonal farm workers and such temporary dwelling may include facilities for cooking.</del>	
		2(65) Definitions	(f) <u>“Secondary Dwelling Accessory to a Farm”</u>	<u>Means a dwelling to provide for farm help.</u>	

Bed and Breakfast Establishments

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law		Recommended Response
19	<b>BED &amp; BREAKFAST ESTABLISHMENT</b> <ul style="list-style-type: none"><li>Use is currently not permitted in any zone</li><li>Would be permitted in the A Zone</li></ul>	5(2) Permitted Uses Agricultural Zone	<u>An accessory bed and breakfast establishment in accordance with Section 3.(1.1).</u>		None required
		2(23) Definitions	(23) <u>“BED AND BREAKFAST ESTABLISHMENT (B&amp;B)”</u>	<u>means a single detached residential dwelling in which the proprietor resides and supplies up to five furnished rooms and may serve breakfast on a temporary basis to overnight guests for monetary gain. It does not include a restaurant, hotel, motel, and boarding or rooming house or any other form of residential dwelling as defined by this By-law.</u>	None required

Bed and Breakfast Establishments

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law	Recommended Response
19	<b>BED &amp; BREAKFAST ESTABLISHMENT</b> <ul style="list-style-type: none"><li>General provisions added to regulate number of rooms and other requirements</li></ul>	3( <del>1.1</del> ) General Provisions	<u>ACCESSORY BED AND BREAKFAST ESTABLISHMENT (B&amp;B)</u>  <u>Within the Agricultural (A) Zone, where bed and breakfast establishments are permitted, such uses shall be in accordance with the provisions for such zones and shall also comply with the following regulations:</u> (a) <u>No more than 5 guest rooms shall be provided in a B&amp;B;</u> (b) <u>Any exterior stairways required for a B&amp;B shall be located in a side or rear yard; and</u> (c) <u>All new B&amp;B establishments shall comply with the requirements of this Zoning By-law, other local by-laws, and any applicable provincial regulations such as the Ontario Building Code and Fire Code, as amended.</u>	None required
	<ul style="list-style-type: none"><li>Addition of B&amp;B to list of uses not considered home occupations</li></ul>	3(9) Home Occupations	(g) None of the following uses shall be considered home occupations except where such uses are specifically permitted herein  (xi) <u>Bed and Breakfast Establishment</u>	None required
	<ul style="list-style-type: none"><li>Parking requirements added</li></ul>	3(16) General Provisions	(b) <b>PARKING SPACE REQUIREMENTS FOR RESIDENTIAL USES (MINIMA)</b>  (iii) <u>Bed and Breakfast Establishments</u>  <u>1 parking space for each room or suite used for the purposes of lodging for the travelling public, in addition to the required parking for the dwelling unit</u>	None required



Original Text additions  
Original text removals  
New text revisions

shown in red underlined ~~text~~  
shown in black ~~strikeout text~~  
post-public meeting shown  
in **black bold text**

Map Change

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law	Recommended Response
20	MAP CHANGE	Schedule 'A'	A map change to remove kennel zoning (A-2) from the severed lands of B47/15 (Watson) located at Part Lot 10, Concession 4.	None required

Natural Environment Zone Setback

#	DISCUSSION	By-law Reference	Proposed Amendment to By-law	Recommended Response
21	<p><b>NATURAL ENVIRONMENT ZONE SETBACK</b></p> <ul style="list-style-type: none"><li>General provision to allow the required setback from the zone to be reduced with Conservation Authority approval</li></ul>	3(25)(c) General Provisions	Notwithstanding the above, the setback from the Natural Environment (NE) Zone may be reduced to a distance that is supported by the Conservation Authority having jurisdiction pursuant to its authority provided under the Conservation Authorities Act, R.S.O. 1990. <b><u>Where the Conservation Authority provides written approval for a reduced setback from the NE Zone an amendment to this By-law shall not be required.</u></b>	Addresses PDAC comments

# **TOWNSHIP-WIDE ZONING BY-LAW AMENDMENT**

for

Township of Puslinch

Housekeeping Amendment

Prepared by the  
County of Wellington Planning Department

June 3, 2016

THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

BY-LAW NUMBER \_\_\_\_\_

**A BY-LAW TO AMEND BY-LAW NUMBER 19/85, AS AMENDED,  
BEING THE ZONING BY-LAW OF THE TOWNSHIP OF PUSLINCH**

**WHEREAS**, the Council of the Corporation of the Township of Puslinch deems it appropriate and in the public interest to amend By-Law Number 19/85 pursuant to Section 34 of the Planning Act, R.S.O. 1990 as amended;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE  
TOWNSHIP OF PUSLINCH ENACTS AS FOLLOWS:**

1. That Schedule 'A' to By-law 19/85 is hereby amended by rezoning Part Lot 10, Concession 4 from Agricultural Exception (A-2) Zone to **AGRICULTURAL (A) ZONE**, as shown on Schedule "A" of this By-law
2. That subsection 2(23) "**BED AND BREAKFAST ESTABLISHMENT**" definition is deleted in its entirety and replaced with the following:

**"BED AND BREAKFAST ESTABLISHMENT (B&B)**, means a single detached residential dwelling in which the proprietor resides and supplies up to five furnished rooms and may serve breakfast on a temporary basis to overnight guests for monetary gain. It does not include a restaurant, hotel, motel, and boarding or rooming house or any other form of residential dwelling as defined by this By-law."
3. That subsection 2(65)(f) "**Agricultural Service Dwelling**" definition is deleted in its entirety and replaced with the following:

"(f) **"Secondary Dwelling Accessory to a Farm"** means a dwelling to provide for farm help."
4. That subsection 2(66)(iv) "**DWELLING UNIT**" definition is amended as follows:

"(a) **"Accessory Dwelling Unit"** means a dwelling unit accessory to a permitted non-residential use or accessory to a permitted single detached dwelling in an Agricultural (A) Zone, Estate Residential Type 1 (ER1) Zone or Estate Residential Type 2 (ER2) Zone."
5. That **SECTION 2 – Definitions** is amended by adding the following definitions:

- “2(34.1) **“BUILDING OR CONTRACTOR’S YARD”** means the use of land, buildings and structures by a general contractor, excavation contractor, landscaping contractor, building contractor, well drilling contractor or similar where vehicles, equipment and supplies are parked, stored and maintained for use in the construction and/or renovation trades. It does not include retail or wholesale sales, a temporary job construction site or any other use as defined by this by-law. Office use, as well as minor maintenance and assembly work normally considered to be accessory to the trade are permitted.
- 2(73.1) **“FARM”** means a parcel of land, which the predominant activity is agricultural and includes associated buildings and structures such as residential dwellings, livestock facilities, farm implement buildings, silos, granaries and similar buildings and structures.
- 2(73.2) **“FARM BUILDING CLUSTER”** means the close grouping of the main buildings and structures on a farm contained within a limited area so that the remaining land is used for agriculture. Buildings and structures within the cluster shall share a common driveway.”
- 2(114.1) **“LIVESTOCK”** means farm animals kept for use, propagation, or for intended profit or gain and without limiting the generality of the foregoing includes: dairy, beef and veal cattle, horses, swine, sheep, goats, mink rabbits and fowl.
- 2(114.2) **“LIVESTOCK BARNs”** means one or more permanent structures located on a lot which are intended for keeping or housing livestock, and are structurally sound and reasonably capable of housing livestock.
- 2(114.3) **“LIVESTOCK FACILITIES”** include all livestock barns and manure storages, as well as all unoccupied barns and unused manure storages on a lot.
- 2(122.1) **“MANURE STORAGE”** means a permanent storage which is structurally sound and reasonably capable of storing manure and which contain liquid manure (less than 18% dry matter) or solid manure (greater than or equal to 18% dry matter), and may exist in a variety of: locations, materials, coverings, configurations and elevations as identified in the Minimum Distance Separation Implementation Guidelines issued by the Province of Ontario.”
6. That subsection 2(120) **“LOT FRONTAGE”** definition is amended by deleting it in its entirety and replacing it with the following:
- “LOT FRONTAGE”** means the horizontal distance between the side lot lines measured along the front lot line, but where the front lot line is not a straight line or where the side lot lines are not parallel, the lot frontage is to be measured by a line 6.0 m back from and parallel to the chord of the lot frontage, and for the purpose of this paragraph the chord of the lot frontage is a straight line joining the two points where the side lot lines intersect the front lot line.”
7. That subsection 2(121)(a) **“Front Lot Line”** definition is amended by deleting (i) and (ii) in their entirety and replacing them with the following:

- “(i) in the case of an interior lot, the line dividing the lot from the street;
- (ii) in the case of a corner lot, the shorter lot line abutting a street; or”
8. That subsection 2(182) **“STRUCTURE”** definition is amended to add the following text to the end of the sentence:
- “or sewage systems.”
9. That **SECTION 3 General Provisions** is amended by adding the following:
- “(1.1) ACCESSORY BED AND BREAKFAST ESTABLISHMENT (B&B)**
- Within the Agricultural (A) Zone, where bed and breakfast establishments are permitted, such uses shall be in accordance with the provisions for such zones and shall also comply with the following regulations:
- (a) No more than 5 guest rooms shall be provided in a B&B;
- (b) Any exterior stairways required for a B&B shall be located in a side or rear yard; and
- (c) All new B&B establishments shall comply with the requirements of this Zoning By-law, other local by-laws, and any applicable provincial regulations such as the Ontario Building Code and Fire Code, as amended.”
10. That subsection 3(5)(c) **LOCATION WITHIN BASEMENT OR CELLAR** is amended by deleting it in its entirety and replacing it with the following:
- “(i) No part of any dwelling unit shall be located within a basement of a non-residential building.
- (ii) No habitable room shall be located within a cellar unless it has a floor to ceiling height of at least 1.95 m.”
11. That subsection 3(5)(e) **DWELLING UNIT AREA (MINIMAL)** is deleted in its entirety and subsequent sections renumbered accordingly.
12. That subsection 3(7) **GROUP HOMES** is amended by deleting it in its entirety and replacing it with the following:
- “Notwithstanding any other provisions of this By-law to the contrary, a Group Home may be permitted in any single dwelling unit provided the dwelling unit has 20 square metres per person residing within the unit. Group Homes must be registered with the municipality as per the Municipal Act.”
13. That subsection 3(9) **HOME OCCUPATIONS** is amended by deleting (f) and replacing it with the following:
- “(f) No home occupation shall create or become a public nuisance, particularly with regard to noise, traffic, emissions, parking or radio or television interference.”

and by adding the following:

- “(g) (x) a contractor’s yard  
(xi) a bed and breakfast establishment

- (h) Any open storage permitted in conjunction with a home occupation shall comply with the provisions of Section 3(15).”

14. That subsection 3(13) **LOTS WITH MORE THAN ONE USE OR ZONE** be renumbered and renamed:

“3(14.1) **ONE OR MORE PERMITTED USES PER LOT OR ZONE**”

and the following new section is added:

“3(14.1) **ONE MAIN BUILDING PER LOT**

- (a) No more than one main building shall be constructed on a lot except for the following:
  - (i) Permitted buildings within an agricultural, commercial, institutional, or industrial zone.”

15. That subsection 3(13) be replaced with the following:

**“MINIMUM DISTANCE SEPARATION – MDS I AND II**

(a) **MDS I – NEW NON-FARM USES**

Notwithstanding any other yard or setback provisions of this By-law to the contrary, no residential, institutional, commercial, industrial or recreational use, located on a separate lot and permitted within the Agricultural (A) Zone or any other zone in which agricultural uses are permitted, shall be erected or altered unless it complies with the Minimum Distance Separation I (MDS I) setback from a livestock facility, calculated using the Formulas published by the Province of Ontario, as may be amended from time to time. The above provisions shall not apply to lots existing as of the date of passing of this By-law, which are less than 4 hectares in area.

(b) **MDS II – NEW OR EXPANDING LIVESTOCK FACILITIES AND MANURE STORAGE FACILITIES**

Notwithstanding any other yard or setback provisions of this By-law to the contrary, no livestock facility or manure storage facility shall be erected or expanded unless it complies with the Minimum Distance Separation II (MDS II) setback, calculated using the Formulas published by the Province of Ontario, as may be amended from time to time. Notwithstanding the above, an existing manure storage system which does not meet MDS II requirements, may be replaced by a more compatible system which results in a reduction in the separation distance required, provided the livestock housing capacity is not increased.”

16. That subsection 3(15)(a) **OPEN STORAGE REGULATIONS** is amended by increasing the minimum height of a wall or other opaque barrier to 2.0 metres in paragraph (iv).

17. That subsection 3(16)(b) **PARKING SPACE REQUIREMENTS FOR RESIDENTAL USES (MINIMA)** is amended by addition of the following:

“(iii) Bed and Breakfast Establishments - 1 parking space for each room or suite used for the purposes of lodging for the travelling public, in addition to the required parking for the dwelling unit”

18. That subsection 3(22)(b) **RESTRICTED USES** is amended by deleting (xvii) it in its entirety.

19. That subsection 3(23)(a) **PROJECTION INTO REQUIRED YARDS** is amended to add the following:

“(vii) Underground service structures such as sewage systems and firefighting tank reservoirs which do not project more than 2.0 metres into a required interior side yard or rear yard, and which do not project more than 3.0 m into a required front yard or exterior side yard.”

20. That subsection 3(25) **SETBACKS FROM THE NATURAL ENVIRONMENT ZONE** is amended to add the following sentence to the end of subsection (c):

“Where the Conservation Authority provides written approval for a reduced setback from the NE Zone an amendment to this By-law shall not be required.”

21. That SECTION 3 – General Provisions is amended by adding the following:

**“3(27) TEMPORARY RESIDENCE DURING CONSTRUCTION**

(a) Where a new single detached dwelling is being constructed on a vacant lot in an Agricultural (A) Zone, a mobile home may be located and used as a temporary residence on the same lot during the construction of a new residence for a period of time not to exceed 12 months after the building permit for the new dwelling is issued, provided all requirements of the Chief Building Official are satisfied, including the provision of adequate sewage disposal and water supply, and the posting of sufficient securities to ensure the removal of the temporary dwelling.

(b) Where a new single detached dwelling is being constructed to replace an existing single detached dwelling on the same lot in an Agricultural (A) Zone, the existing dwelling may continue to be used as a temporary residence during the construction of the new residence for a period of time not to exceed 12 months after the building permit for the new dwelling is issued, provided all requirements of the Chief Building Official are satisfied, including the provision of adequate sewage disposal and water supply, and the posting of sufficient securities to ensure the removal of the temporary dwelling.”

22. That subsection 5(2) **A Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

“No person shall use land or erect, alter or use any buildings or structures within an Agricultural (A) Zone, except in accordance with the following provisions:”



23. That subsection 5(2) **A Zone USES PERMITTED** is amended by adding the following permitted uses:

- “(l) An accessory apartment in a single detached dwelling on a lot in accordance with Section 5(3)
- (m) An accessory bed and breakfast establishment in accordance with Section 3(1.1)
- (n) A secondary dwelling accessory to a farm”

24. That subsection 5(3)(e) **REDUCED LOT REQUIREMENTS** is amended to add 5(2)(l) as a permitted use to subsection 5(3)(e)(ii).

25. That subsection 5(3) **A Zone ZONE REQUIREMENTS** is amended by adding the following:

**“(g) ACCESSORY APARTMENTS**

- (i) **FLOOR AREA (MAXIMUM)** 40% of the Floor Area of the Principal Dwelling. In this context “Floor Area” means the total Floor Area of the Building measured from the exterior face of outside walls, or centre line of common walls. Floor Area does not include basements, stairs, landings, cold cellars, garages and carports.
- (ii) **SERVICING** The accessory apartment must connect to the existing well and septic which services the main dwelling
- (iii) **ACCESSORY BUILDINGS** Accessory apartments are not permitted in, or as, a detached building or structure”

26. That subsection 5(3) **A Zone ZONE REQUIREMENTS** is amended by adding the following:

**“(h) REGULATIONS FOR ESTABLISHMENT OF A SECONDARY DWELLING ACCESSORY TO A FARM**

- (i) **LOT AREA (MINIMUM)** 35.0 ha
- (ii) **LOCATION** A second residential dwelling shall be located within the Farm Building Cluster. The second residential dwelling unit must be detached from the main residential dwelling, shall share a common driveway with the main farm residence, and shall be located within a 61.0 m radius of the main farm residence. A second residential dwelling shall be provided with a potable water supply and adequate private sewage treatment facility.

(iii)	TYPE OF RESIDENTIAL DWELLING	A second residential dwelling unit shall be prefabricated, modular or a mobile home."
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27. That subsection 6(2) **HR Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

"No person shall use land or erect, alter or use any buildings or structures within a Hamlet Residential (HR) Zone, except in accordance with the following provisions:"

28. That subsection 7(2) **RR Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

"No person shall use land or erect, alter or use any buildings or structures within a Resort Residential (RR) Zone, except in accordance with the following provisions:"

29. That subsection 7(3)(c) **RR Zone FRONT YARD** is amended by deleting it in its entirety and replacing it with the following:

"(c) **FRONT YARD DEPTH (MINIMUM)** 7.5 m

Within the RR Zone, the front yard shall be considered a rear yard when the property abuts a lake or watercourse."

30. That subsection 7A(2) **MR Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

"No person shall use land or erect, alter or use any buildings or structures within a Millcreek Residential Area (MR) Zone, except in accordance with the following provisions:"

31. That subsection 7B(2) **ML Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

"No person shall use land or erect, alter or use any buildings or structures within a Mini Lakes (ML) Zone, except in accordance with the following provisions:"

32. That subsection 7B(5)(b) **ML Zone DWELLING SITE REQUIREMENTS** is amended by adding the following text after the first sentence:

"Notwithstanding the "Lot Frontage" definition of Section 2 of this By-law, "Site Width" means the horizontal distance between the side site lines measured along the site front line, but where the front site line is not a straight line or where the side site lines are not parallel, the site width is to be measured at the required minimum site front yard setback from and parallel to the chord of the site width, and for the purpose of this definition the chord of the site width is a straight line joining two points where the side site line intersections the site width."

33. That subsection 7B(5)(c) **ML Zone DWELLING SITE REQUIREMENTS** is amended by deleting the second sentence of the paragraph, and by deleting the fourth sentence of the paragraph and replacing it with the following:

- “(c) **Site Front Yard (Minimum)**  
Notwithstanding the above, this By-law recognizes those accessory buildings or structures which existed prior to December 19, 2012 that are within the front yard or have a front yard less than 2.0 metres.”
34. That subsection 7B(5)(d) **ML Zone DWELLING SITE REQUIREMENTS** is amended by deleting the third sentence and replacing it with the following:
- “(d) **Site Side Yard (Minimum)**  
Notwithstanding the above, this By-law recognizes those accessory buildings or structures which existed prior to December 19, 2012 that have a side yard less than 0.6 metres.”
35. That subsection 7B(5)(e) **ML Zone DWELLING SITE REQUIREMENTS** is amended by deleting the third sentence and replacing it with the following:
- “(e) **Site Rear Yard (Minimum)**  
Notwithstanding the above, this By-law recognizes those accessory buildings or structures which existed prior to December 19, 2012 that have a rear yard less than 0.6 metres.”
36. That subsection 7B(5)(h) **ML Zone DWELLING SITE REQUIREMENTS** is amended by deleting (h) in its entirety and replacing it with the following:
- “(h) **Site Coverage (Maximum)**  
Notwithstanding any other provision of this By-law to the contrary, the coverage of all buildings or structures, including accessory buildings or structures, within each site or lot area shall not exceed 35%. Open sided carports and uncovered decks not exceeding 0.6 m in height are exempt from the site coverage maximum.
- Notwithstanding the above, this By-law recognizes those buildings or structures including accessory buildings or structures, which existed prior to December 19, 2012 that have a coverage which exceeds 35%.”
37. That subsection 7B(6)(e) **ML Zone GENERAL ZONE REQUIREMENTS** is amended by changing the Building Floor Area (Maximum) for the recreation building as follows:
- “recreation building                      1,100 square metres”
38. That subsection 7B(6)(f) **ML Zone GENERAL ZONE REQUIREMENTS** is added as follows and existing subsection (f) is renumbered:
- “(f) **Front Lot Line**  
“Front Lot Line” does not apply to “Site Width” which may be measured at either street line in the case of a corner lot.
39. That subsection 8(2) **ER1 Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within an Estate Residential Type 1 (ER1) Zone, except in accordance with the following provisions:”

40. That subsection 8(2) **ER1 Zone USES PERMITTED** is amended by adding the following permitted use:
- “(d) An accessory apartment in a single detached dwelling on a lot in accordance with Section 8(3).”
41. That subsection 8(3) **ER1 Zone ZONE REQUIREMENTS** is amended by deleting the following:
- (i) **SEPARATION DISTANCE FROM ADJACENT BARNS**  
No single detached dwelling shall be located closer than 180 metres to the barns of an intensive agricultural use on adjacent property.
42. That subsection 8(3) **ER1 Zone ZONE REQUIREMENTS** is amended by adding the following:
- “(i) **ACCESSORY APARTMENTS**
- (i) **FLOOR AREA (MAXIMUM)** 40% of the Floor Area of the Principal Dwelling. In this context “Floor Area” means the total Floor Area of the Building measured from the exterior face of outside walls, or centre line of common walls. Floor Area does not include basements, stairs, landings, cold cellars, garages and carports.
- (ii) **SERVICING** The accessory apartment must connect to the existing well and septic which services the main dwelling
- (iii) **ACCESSORY BUILDINGS** Accessory apartments are not permitted in, or as, a detached building or structure”
43. That subsection 9(2) **ER2 Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within an Estate Residential Type 2 (ER2) Zone, except in accordance with the following provisions:”
44. That subsection 9(2) **ER2 Zone USES PERMITTED** is amended by adding the following permitted use:
- “(d) An accessory apartment in a single detached dwelling on a lot in accordance with Section 9(3).”
45. That subsection 9(3) **ER2 Zone ZONE REQUIREMENTS** is amended by deleting the following:
- (i) **SEPARATION DISTANCE FROM ADJACENT BARNS**  
No single detached dwelling shall be located closer than 180 metres to the barns of an intensive agricultural use on adjacent property.

46. That subsection 9(3) **ER2 Zone ZONE REQUIREMENTS** is amended by adding the following:

“(i) ACCESSORY APARTMENTS

- |                           |   |
|---------------------------|---|
| (i) FLOOR AREA (MAXIMUM)  | 40% of the Floor Area of the Principal Dwelling. In this context “Floor Area” means the total Floor Area of the Building measured from the exterior face of outside walls, or centre line of common walls. Floor Area does not include basements, stairs, landings, cold cellars, garages and carports. |
| (ii) SERVICING            | The accessory apartment must connect to the existing well and septic which services the main dwelling   |
| (iii) ACCESSORY BUILDINGS | Accessory apartments are not permitted in, or as, a detached building or structure”   |

47. That subsection 10(2) **RUR Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

“No person shall use land or erect, alter or use any buildings or structures within a Rural Residential (RUR) Zone, except in accordance with the following provisions:”

48. That subsection 10(3) **RUR Zone ZONE REQUIREMENTS** is amended by deleting the following:

- (i) SEPARATION DISTANCE FROM ADJACENT BARNS  
No single detached dwelling shall be located closer than 180 metres to the barns of an intensive agricultural use on adjacent property.

49. That subsection 11(2) **C1 Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

“No person shall use land or erect, alter or use any buildings or structures within a Hamlet Commercial (C1) Zone, except in accordance with the following provisions:”

50. That subsection 12(2) **C2 Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

“No person shall use land or erect, alter or use any buildings or structures within a Highway Commercial (C2) Zone, except in accordance with the following provisions:”

51. That subsection 13(2) **C3 Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:

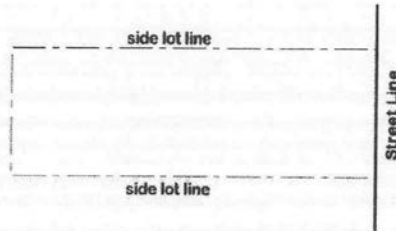
“No person shall use land or erect, alter or use any buildings or structures within a Commercial (C3) Zone, except in accordance with the following provisions:”

52. That subsection 14(2) **C4 Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within a Resort Commercial (C4) Zone, except in accordance with the following provisions:”
53. That subsection 15(2) **IND Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within an Industrial (IND) Zone, except in accordance with the following provisions:”
54. That subsection 16(2) **EXI Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within an Extractive (EXI) Zone, except in accordance with the following provisions:”
55. That subsection 17(2) **DI Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within a Disposal Industrial (DI) Zone, except in accordance with the following provisions:”
56. That subsection 18(2) **I Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within an Institutional (I) Zone, except in accordance with the following provisions:”
57. That subsection 19(2) **OS Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within an Open Space (OS) Zone, except in accordance with the following provisions:”
58. That subsection 20(2) **NE Zone USES PERMITTED** preamble is amended by deleting it in its entirety and replacing it with the following:
- “No person shall use land or erect, alter or use any buildings or structures within a Natural Environment (NE) Zone, except in accordance with the following provisions:”
59. That the following illustrations be added to the end of **SECTION 2 Definitions**:

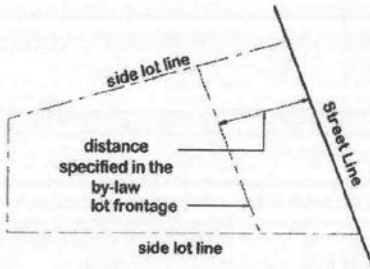
## ILLUSTRATIONS OF DEFINITIONS AND PROVISIONS

Note: The diagrams and illustrations on the following pages are for the purposes of illustration only and do not form part of the zoning by-law.

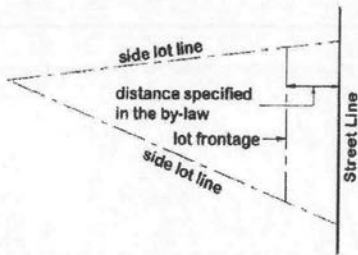
### GUIDE TO LOT FRONTAGES



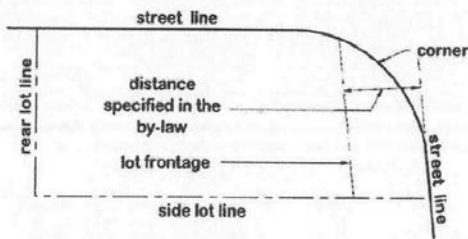
- A**  
**SIDE LOT LINES ARE PARALLEL; STREET IS STRAIGHT**  
the lot frontage is measured along the street line between the side lot lines



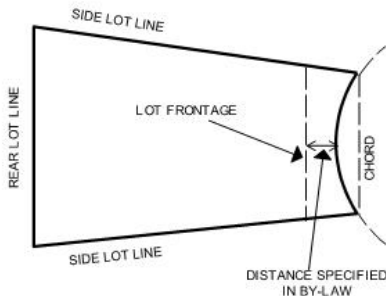
- B**  
**FRONT AND REAR LOT LINES ARE NOT PARALLEL**  
the lot frontage is measured along a line drawn between the side lot lines parallel to the front lot line at the distance specified in the by-law for the minimum front yard



- C**  
**NO REAR LOT LINE**  
the lot frontage is measured along a line drawn between the side lot lines parallel to the front lot line at the distance specified in the by-law for the minimum front yard



- D**  
**CORNER OR INTERIOR LOT ON A CURVE**  
the lot frontage is measured along a line drawn parallel to the tangent of the front lot line at the distance specified in the by-law for the minimum front yard



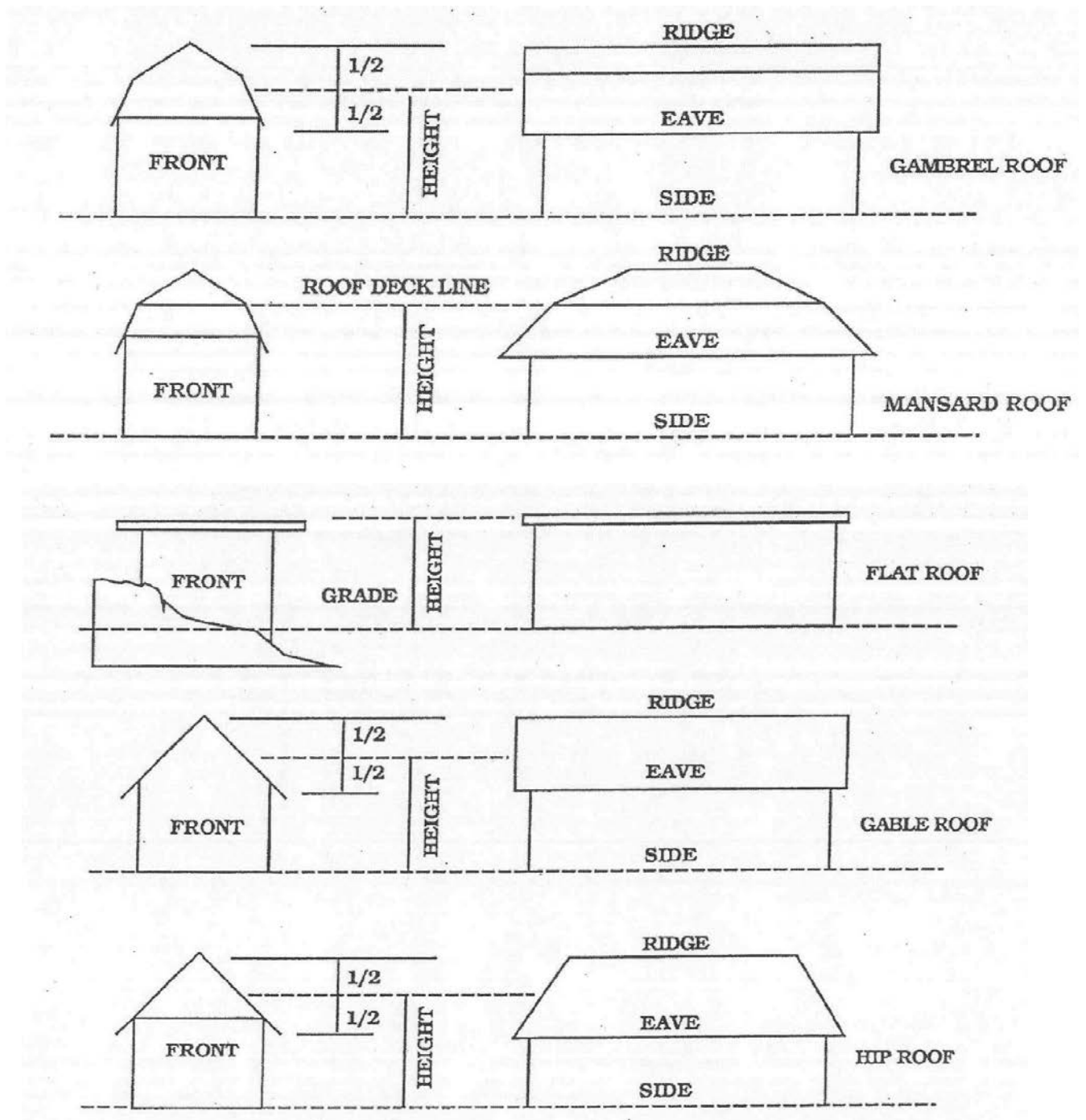
- E**  
**LOT ON A CUL-DE-SAC OR EYEBROW**  
the lot frontage is measured along a line 6.0 m back from and parallel to the chord of the lot frontage



## ILLUSTRATIONS OF DEFINITIONS AND PROVISIONS

Note: The diagrams and illustrations on the following pages are for the purposes of illustration only and do not form part of the zoning by-law.

### GUIDE TO HEIGHT DEFINITIONS



READ A FIRST AND SECOND TIME THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2016.

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CLERK

READ A THIRD TIME AND PASSED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2016.

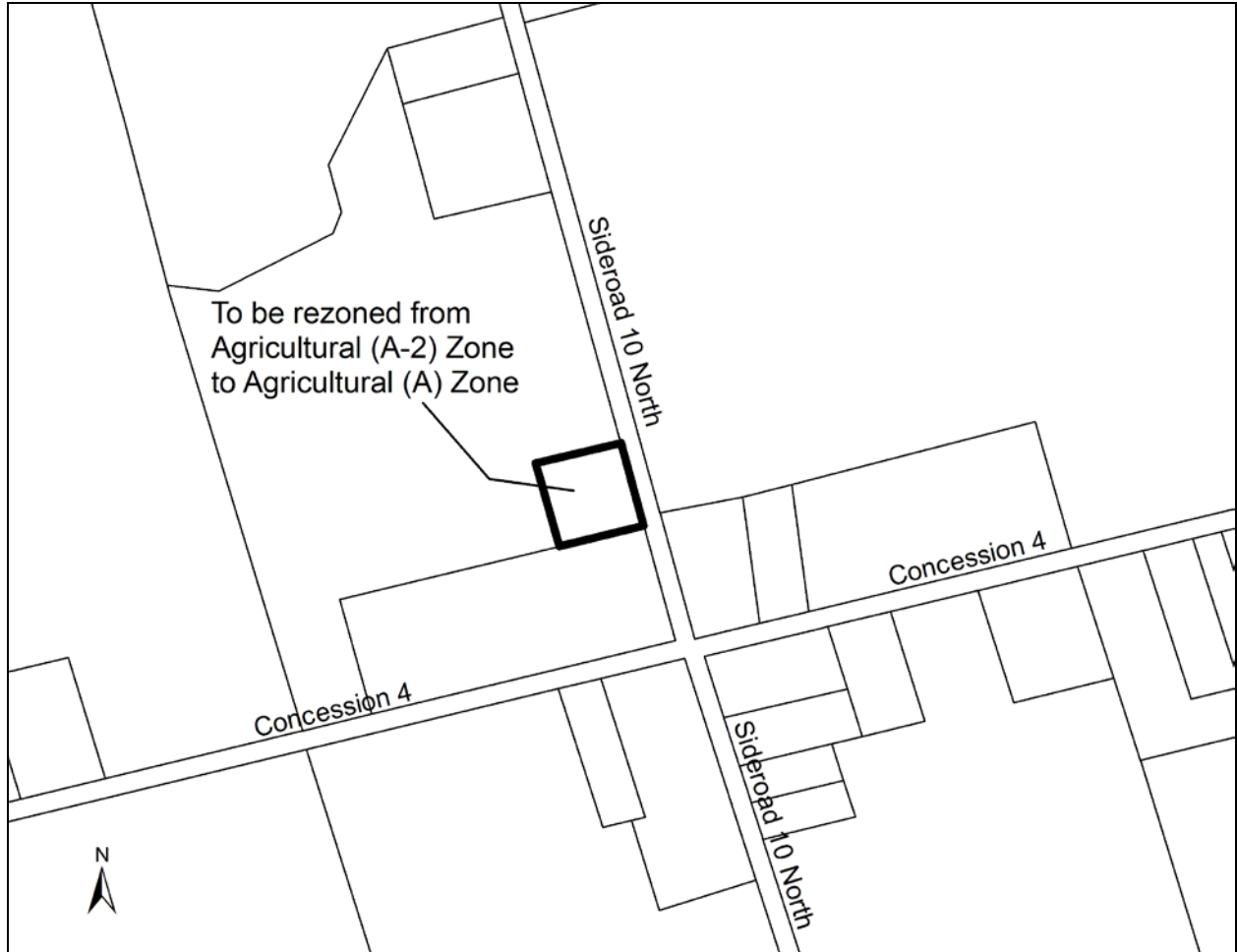
\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CLERK

**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NO. \_\_\_\_\_**

**SCHEDULE "A"**



This is Schedule "A" to By-law No. \_\_\_\_\_  
Passed this \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CLERK

# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

## EXPLANATION OF BY-LAW NO. \_\_\_\_\_

The purpose of By-law Number \_\_\_\_\_ is to amend various sections of the Township's Zoning By-law as follows:

### DEFINITIONS

#### Improvements

- Bed and Breakfast Establishments
- Accessory Dwelling Units
- Lot Frontage
- Front Lot Line
- Structure

#### Additions

- Building or Contractor's Yard
- Farm
- Farm Building Cluster
- Livestock
- Livestock Barns
- Livestock Facilities
- Manure Storage

#### Removal

- Agricultural Service Dwelling

### GENERAL PROVISIONS

#### Improvements

- Location of Dwelling Unit
- Group Homes
- Home Occupations
- One Main Building per Lot
- Open Storage
- Yard Projections
- NE Zone Setbacks

#### Additions

- Bed and Breakfast Establishments
- MDS I and II
- Temporary Residence during Construction

#### Removal

- Dwelling Unit Minimum

### OTHER

- Zone Permitted Use preambles
- Addition of Second Units in the Agricultural and Estate Residential Zones
- Rural Residential Zone Front Yard Depth
- Mini Lakes Zone clarifications and increase of recreation building area to 1,100 square metres
- Removal of Agricultural Exception (A-2) Zone allowing a kennel on a new residential lot severed from the property (B47/15) and place the portion of the property in question back into Agricultural (A) Zone
- Addition of Illustrations for assist with definitions and provisions



# COUNTY OF WELLINGTON

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## COMMITTEE REPORT

**To:** Chair and Members of the Planning Committee  
**From:** Mark Paoli, Manager of Policy Planning  
**Date:** June 9, 2016  
**Subject:** **COMMENTS ON PROPOSED CHANGES TO PROVINCIAL PLANS**

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### 1.0 Background:

The province started a Co-ordinated Land Use Planning Review of the Growth Plan for the Greater Golden Horseshoe (the Growth Plan); the Greenbelt Plan; the Oak Ridges Moraine Conservation Plan; and the Niagara Escarpment Plan, in 2015. The Growth Plan and Greenbelt apply within Wellington County.

The first phase of the review was focused on a discussion paper that was released for comment and concluded with a report prepared for the province by David Crombie with 87 recommendations. The County provided input to this part of the process through Planning Committee reports that were endorsed by Council, forwarded to the province and circulated to local municipalities.

A new phase of the review is underway as the province has released proposed changes to the Plans and is seeking input. While the deadline for comments is September 30th, County staff are bringing forward this report now so that local municipalities have time to use it as a base for their comments if they wish to do so.

### 2.0 Comments:

#### Overall Comment

The province is intruding too far into municipal planning, leaving little room for citizens to have meaningful input into the future of their own communities.

Also, the province's review is an opportunity for the Plans to reduce overlap with the PPS and focus more on growth management; instead, the scope of the Plans has broadened to include a number of topics that are already adequately addressed in the PPS, so should be added to the PPS. These include:

- Agriculture;
- Natural heritage;
- Cultural heritage; and
- Climate change.

A more detailed summary of comments is set out below:

<b>Comments on Both Plans</b>	<b>Growth Plan Comments</b>	<b>Greenbelt Plan Comments</b>
<p>The County of Wellington:</p> <ol style="list-style-type: none"> <li>1. Supports Greenbelt policy changes that defer to the Growth Plan for certain growth management and infrastructure policies as this reduces overlap and improves coordination.</li> <li>2. Views the establishment of Agricultural System mapping as being redundant given that the PPS already directs us to designate these lands.</li> <li>3. Recommends that Agricultural Support Network policies be added to the PPS instead of these Plans.</li> <li>4. Recommends that the requirement for an agricultural impact assessment for mineral aggregate applications be added to the PPS instead of these Plans.</li> <li>5. Notes that the PPS was broadened to include climate change policies and recommends that, if the province feels that the PPS climate change policies are not sufficient, then it should address this through changes to the PPS instead of these Plans.</li> </ol>	<p>The County of Wellington:</p> <ol style="list-style-type: none"> <li>1. Supports the continued ability of the County to establish alternative targets; however, we are concerned about the upward pressure on targets as the main factors on which the targets were justified remain, and major density increases are not accepted by the public in small town Ontario.</li> <li>2. Notes that some designated greenfield is made up of subdivision plans historically approved or supported by the province at lower densities. Making up for these lower densities in the remaining area is not realistic so the application of the target needs to exclude the build out of these plans.</li> <li>3. Supports the change to the 2041 time horizon and a consistent methodology to assess land needs; however, we are concerned that the 5-Year Review requirement for a municipal comprehensive review may prevent important projects that cannot wait for the next 5-Year Review (example: to expand to accommodate a school).</li> <li>4. Does not support the mandatory identification of, and prohibition of development on, excess lands. This should be optional.</li> <li>5. Supports the ability to establish 'prime employment areas'; however, discussion with our local municipalities is required and we are concerned that the definition excludes unserviced lands outside of settlement areas which are some of our best employment lands.</li> <li>6. Does not support the provincial imposition of a natural heritage system. Current PPS policies should govern the development of natural heritage systems in official plans.</li> </ol>	<p>The County of Wellington:</p> <ol style="list-style-type: none"> <li>1. Maintains the position stated in previous reports that the Greenbelt Plan is doing its intended job reasonably well, and we see no rationale for expanding beyond its current boundary in Wellington County.</li> <li>2. Does not support the proposed policy that would impose Greenbelt expansion on the County. Municipal support should be a requirement.</li> <li>3. Supports natural heritage policy changes that provide less onerous requirements for agricultural development than in the current Greenbelt Plan.</li> <li>4. Does not support the inclusion of buildings for agricultural, agriculture-related and on-farm diversified uses in the definition of 'major development'.</li> </ol>

### **3.0 Changes in Both Plans:**

#### **3.1 Agricultural System and Agricultural Support Network**

The province proposes to lead the establishment of an Agricultural System across the Greater Golden Horseshoe. It would consist of Specialty Crop areas, Prime Agricultural Areas and Rural Lands.

**Given that the land base for the system is already designated in official plans, we see this as a redundant exercise.**

Also added is a new policy for an “Agricultural Support Network”, defined below:

“a network that includes elements Important to the viability of the Agri-food sector such as: regional agricultural infrastructure and transportation networks, on-farm buildings and infrastructure, agricultural services, farm markets, distributors and first level processing and vibrant agricultural-supportive communities. “

New policies which have been introduced into the Plan include planning for the “Agricultural Support Network”. This would require planning decisions to consider the connections, both financial and physical of the Agricultural food Sector. It is unclear at this time what criteria would be applied to a land use decision in this regard.

**We recommend that Agricultural Support Network policies be added to the PPS instead of these Plans.**

#### **3.2 Agricultural Impact Assessment for new mineral aggregate operations**

Both Plans would require an Agricultural Impact Assessment to be completed for new mineral aggregate operations in the Prime Agricultural Area, which is not a requirement in the current Provincial Policy Statement.

**We recommend that the requirement for an agricultural impact assessment for mineral aggregate applications be added to the PPS instead of these Plans.**

#### **3.3 Climate change**

The scope of both Plans has widened to include climate change. The Growth Plan would require the County to “develop policies in the official plan to identify actions that will reduce greenhouse gas emissions and address climate change adaptation goals, aligned with the Ontario Climate Change Strategy, 2015 and Action Plan.”

**We note that the PPS was broadened to include climate change policies and recommend that, if the province feels that the PPS climate change policies are not sufficient, then it should address this in the PPS instead of these Plans.**



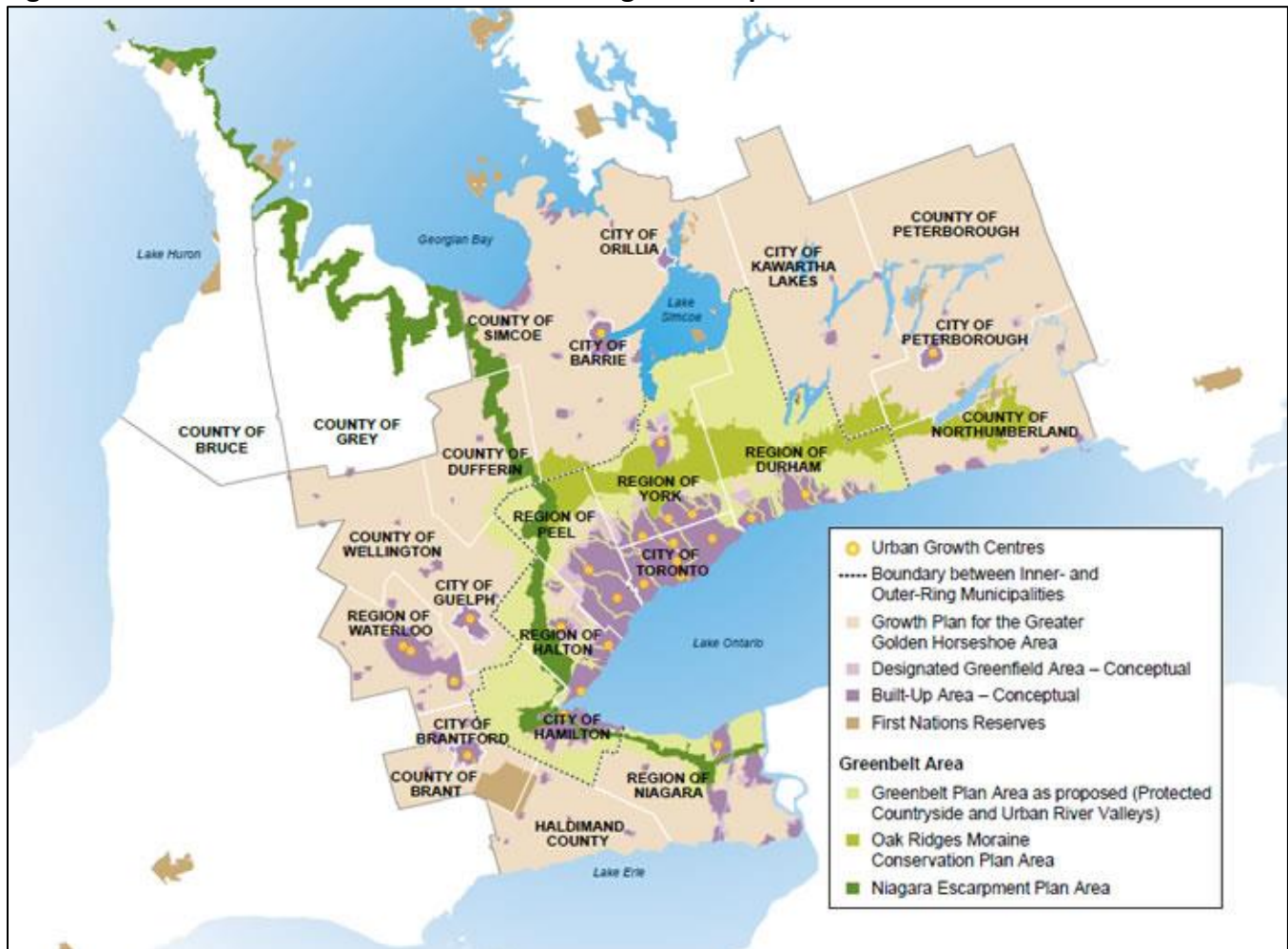
## 4.0 Main Growth Plan Changes:

### 4.1 Targets

#### Current Targets

The Growth Plan contains two areas that are referred to as the “inner ring” and “outer ring” and Wellington County is in the outer ring (see Figure 1 below).

**Figure 1: The Greater Golden Horseshoe and Niagara Escarpment Area**



Source: Ministry of Municipal Affairs and Housing

The current minimum targets that apply to the inner ring municipalities, as well as those municipalities in the outer ring that have an urban growth centre such as Waterloo Region and the City of Guelph are:

- Intensification - 40 % of residential development within the built boundary; and
- Greenfield Density - 50 persons and jobs per hectare.

In the outer ring, the Growth Plan provided Counties with the ability to request an alternative target that would be appropriate given the size, location and capacity of the built up area, and the characteristics of the municipality and adjacent communities.

In 2009, County Council submitted a request for alternative targets that was based on a staff report that set out the planning analysis for the minimum targets for Wellington County:

- Intensification - 20 % of residential development within the built boundary; and
- Greenfield Density - 40 persons and jobs per hectare.

The province approved Council's request, and the alternative targets were included in the Official Plan Amendment to conform with Places to Grow (OPA 65) that was adopted in 2009.

### **Proposed Changes**

The proposed minimum targets that apply to the inner ring municipalities, as well as those municipalities in the outer ring that have an urban growth centre such as Waterloo Region and the City of Guelph are:

- Intensification - 60 % of residential development within the built boundary; and
- Greenfield Density - 80 persons and jobs per hectare.

The proposed Intensification target is 50% higher than in the current Growth Plan and the proposed Greenfield Density target is 60% higher. Although the effect of the Greenfield Density increase will be offset somewhat by the fact that more land can be excluded from the calculation, it is also worth noting that these higher targets will need to be met on a smaller land area because the built boundary is to remain unchanged.

In the outer ring, Council may request alternative targets at the time of the next 5-Year Review of the Official Plan. At that point, we will be required to revisit the targets and resubmit justifications. There will be pressure to increase the targets based on the significant mandatory increases described above.

**We support the continued ability of the County to establish alternative targets; however, we are concerned about the upward pressure on targets as the main factors on which the targets were justified remain, and major density increases are not accepted by the public in small town Ontario.**

**We note that some designated greenfield area is made up of subdivision plans historically approved or supported by the province at lower densities. Making up for these lower densities in the remaining area is not realistic so the application of the target needs to exclude the build out of these plans.**

## 4.2 Land Needs Assessment

In the current Growth Plan, the assessment of land needs to justify a settlement expansion is: based on 20 years of growth as set out in the forecasts; carried out as part of a municipal comprehensive review that can be done as part of a 5-Year Review, or on an as needed basis; and is calculated using different methods.

In the proposed Growth Plan, the assessment of land needs to justify a settlement expansion is: based on the horizon of the Plan (2041); carried out as part of a municipal comprehensive review that can only be done as part of a 5-Year Review; and calculated using a standardized provincial methodology.

A related change is that, as an outer ring upper-tier, we would be required to identify any ‘excess lands’, (lands that exceed forecasted needs to 2041). If we have excess lands, we would be required to prohibit development on those lands. Although we would then be in a position to justify settlement expansions, notwithstanding the identified “excess”, the prohibition of development on designated land is likely to result in objections.

**We support the change to the 2041 time horizon and a consistent methodology to assess land needs; however, we are concerned that the 5-Year Review requirement for a municipal comprehensive review may prevent important projects that cannot wait for the next 5-Year Review (example: to expand to accommodate a school).**

**We do not support the mandatory identification of, and prohibition of development on, excess lands. This should be optional.**

## 4.3 Employment Lands

The proposed Growth Plan would establish a new category of employment lands referred to as “Prime Employment Areas” and defined as:

“Areas of employment within settlement areas that are designated in an official plan and protected over the long-term for uses that are land-extensive or have low employment densities and require these locations, including manufacturing, warehousing and logistics and appropriate associated uses and ancillary facilities.”

As an upper-tier municipality, the County may identify existing employment areas in settlement areas as prime employment areas, where appropriate. Implications of this would include:

- A requirement to prohibit residential and other sensitive land uses, institutional uses, and retail, commercial and office uses that are not ancillary to the primary employment use.
- Conversion of ‘prime employment areas’ to ‘employment areas’ to allow retail, commercial and office uses that are not ancillary to the primary employment use would be permitted only through a municipal comprehensive review (a 5-Year review under Section 26 of the Planning Act) to justify the need and location of the change.
- Conversion of ‘prime employment areas’ to non-employment uses would be prohibited.

- The foregoing would be more restrictive than current policy. This may be desirable in some locations where the priority is long term protection of the land base for industrial development, and not desirable in other locations where the strategy is to provide for transition to more retail or office commercial uses.
- Prime employment areas would be excluded from the designated greenfield area density calculation which would mitigate some of the effect that the lower industrial employment densities have on the greenfield density target.

**We support the ability to establish ‘prime employment areas’; however, discussion with our local municipalities is required and we are concerned that the definition excludes unserviced lands outside of settlement areas which are some of our best employment lands.**

#### **4.4 Natural Heritage System**

The province would establish a Natural Heritage System, similar to the current Greenbelt Plan, across the entire Greater Golden Horseshoe. The system in the Greenbelt Plan extends into working farm fields well beyond natural features and has been difficult to explain and justify to farmers, rural land owners and decision-making bodies. Although the 2014 PPS requires us to establish a Natural Heritage System in the County Official Plan, we intended to work with the language in the PPS to develop a system that would be appropriate for the agricultural area. Instead, with the changes proposed, we would be in the position of commenting on the province’s system before it is imposed.

**We do not support the provincial imposition of a natural heritage system. Current PPS policies should govern the development of natural heritage systems in official plans.**

## 5.0 Main Greenbelt Plan Changes:

### 5.1 Expansion

There is a new section called “Growing the Greenbelt” in which the Province shall lead a process to identify areas to be added to the Protected Countryside. A specific focus shall be on areas of ecological and hydrogeological significance where urbanization should not occur.

The policy direction calls for consultation with municipalities, among other stakeholders. Municipal support is not required.

**We maintain the position stated in previous reports that the Greenbelt Plan is doing its intended job reasonably well, and we see no rationale for expanding beyond its current boundary in Wellington County.**

**We do not support the proposed policy that would impose Greenbelt expansion on the County. Municipal support should be a requirement.**

### 5.2 Siting of Agricultural Buildings and Structures

The current Greenbelt Plan requires new development within 120 m of a Key Natural Heritage Feature in the Natural Heritage System or a Key Hydrologic Feature anywhere in the Protected Countryside to complete a natural heritage evaluation or a hydrologic evaluation to identify a vegetation protection zone.

In the Proposed Greenbelt Plan, development of Agricultural, Agricultural-related and On-farm diversified uses within 120 m of a Key Natural Heritage Feature or Key Hydrologic Feature will not be required to complete a natural heritage or hydrologic evaluation. Rather these types of developments will be sited in accordance with a number of criteria specified in the Plan which promote the enhancement and protection of the features.

**We support natural heritage policy changes that provide less onerous requirements for agricultural development than in the current Greenbelt Plan.**

### 5.3 Key Hydrologic Areas

A section has been added to provide policy direction in significant groundwater recharge areas, highly vulnerable aquifers, and significant surface water contribution areas. In these areas, major development is required to do water studies or submit designs that demonstrate that the hydrologic functions of these areas will be protected and, where possible, improved or restored.

The definition of major development includes buildings that are 500 m<sup>2</sup> or larger, which could include many agricultural buildings. Agricultural buildings are typically sited on large lots which, combined with the required setbacks from natural and hydrologic features, provide ample space for water to infiltrate. This requirement is not reasonable for agricultural development.

**We do not support the inclusion of buildings for agricultural, agriculture-related and on-farm diversified uses in the definition of ‘major development’.**

## 6.0 Summary:

The province has proposed extensive changes to the Growth Plan and Greenbelt Plan. While a number of the changes are supported, there are significant areas of concern.

This report summarized the main comments arising from our review to-date, and may provide a base for local municipality comments. Our review will continue over the summer as there are a number of areas, particularly related to infrastructure, where the changes will be felt more locally. Accordingly, we plan more analysis and discussions with local staff. This work may result in a Supplementary Report with additional comments in September.

### Recommendation:

That the report “Comments on Proposed Changes to Provincial Plans” be forwarded to the Minister of Municipal Affairs, and circulated to local municipalities.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark Paoli".

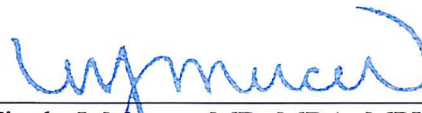
Mark Paoli  
Manager of Policy Planning

**Report to:** Board of Health  
**Submitted by:** Dr. Nicola Mercer, Medical Officer of Health & CEO  
**Prepared by:** Shawn Zentner, Manager Health Protection  
Mike Coburn, Public Health Inspector  
Sarah Croteau, Health Promotion Specialist  
**Approved by:** Rob Thompson, Director Health Protection  
**Subject:** 2015 TICK AND LYME DISEASE PROGRAM REPORT

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**RECOMMENDATION(S)**

- (a) That the Board of Health receives this report for information.



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Nicola J. Mercer, MD, MBA, MPH, FRCPC  
Medical Officer of Health & CEO



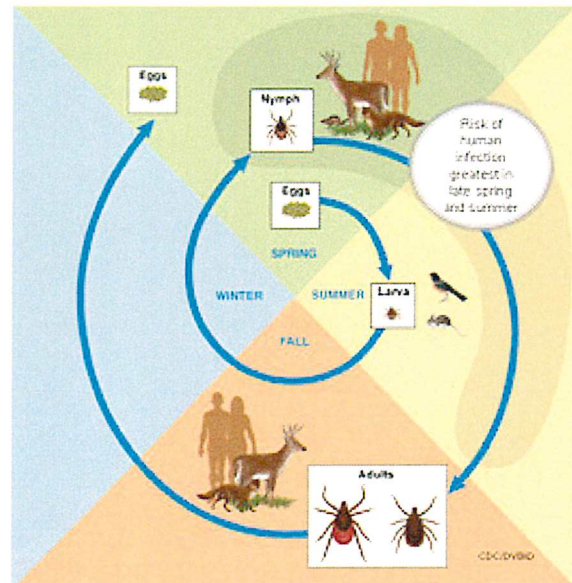
# 2015 Ticks and Lyme Disease Report

Wellington-Dufferin-Guelph Public Health

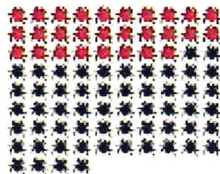


## Background

The bacterium that causes Lyme disease, *Borrelia burgdorferi*, is spread to humans and other animals through the bite of an infected blacklegged tick (also known as a deer tick). A blacklegged tick needs to be attached and feeding for at least 24 hours to transmit the bacteria.



## Passive Surveillance and Reporting



**84 ticks**

were submitted  
to WDGPH

**28**

were identified as  
blacklegged ticks



**3**

blacklegged ticks  
tested positive  
for the bacteria  
that causes Lyme  
disease



**0**

positive  
blacklegged ticks  
were acquired  
locally



**1**

reported human  
case of Lyme  
disease in WDG,  
likely acquired  
outside the area



**358**

confirmed human  
cases of Lyme  
disease in Ontario

## Active Surveillance

Public Health partnered with the University of Guelph to conduct tick dragging at 6 sites in Wellington, Dufferin and Guelph. This activity helps determine if blacklegged ticks are prevalent in a particular area.

## Education

- A pocket-sized Tick ID Card was designed and printed. 400 copies were distributed.
- Blog post on [staywellwdg.ca](http://staywellwdg.ca)
- Newsletter to animal care professionals
- Key messages tweeted to the public

## EXECUTIVE SUMMARY

Lyme disease (LD) is a zoonotic, tick-borne disease caused by spiral-shaped bacteria called *Borrelia burgdorferi*. The bacteria is transmitted to humans through the bite of an infected blacklegged tick with Lyme being the most common vector-borne disease in North America. In 2015, there were 358 confirmed cases of Lyme disease reported in Ontario, which represents a sharp increase from previous years. This can be attributed to increased public awareness and reporting, the expanding range of the blacklegged tick, and the consequent increases in human-tick encounters.

WDGPH's prevention and control program for Lyme disease focuses on public education and surveillance. Due to the expanding range of the blacklegged tick and the increasing number of Lyme disease cases reported in the province, surveillance and education efforts were intensified in 2015 from previous years.

Passive surveillance involved accepting ticks from the public for identification purposes. Positively identified blacklegged ticks were forwarded to Health Canada for bacterial testing. In 2015, over 80 ticks were submitted to WDGPH and one third of them were blacklegged ticks. Three of these ticks tested positive for *Borrelia burgdorferi*, however none of those that tested positive were acquired within the borders of Wellington or Dufferin counties.

An active surveillance initiative began in 2015, in partnership with the University of Guelph. Tick-dragging, an unsophisticated but effective method of collecting ticks, was carried out in areas with habitat that would be suitable for blacklegged ticks and the bacteria which causes Lyme disease. No blacklegged ticks were found.

Public education was also strengthened in 2015. Key messages focused on the cause and symptoms of Lyme disease, characteristics of blacklegged ticks, preventing tick bites and tick removal. These messages were communicated through the WDGPH website, social media, a blog post, print materials and the One Health newsletter.

Continued passive and active surveillance will be instrumental in acquiring baseline data for the blacklegged tick within Wellington and Dufferin counties. Measuring and mapping the tick's progress over time will allow WDGPH to better utilize resources and target education and awareness campaigns towards specific areas and populations in 2016 and beyond.

## BACKGROUND

Lyme disease is a zoonotic, tick-borne disease caused by a species of bacteria belonging to the *Borrelia* genus. In Canada, the only species known to cause Lyme disease is *Borrelia burgdorferi*. The bacteria are transmitted to humans through the bite of infected blacklegged ticks (*Ixodes scapularis*), also known as deer ticks. Lyme disease is the most commonly transmitted vector-borne disease in North America, and appears to be on the rise.<sup>1</sup>

In Ontario, in the early 1990s only Long Point Provincial Park on the north shore of Lake Erie was considered to be endemic.<sup>2</sup> Since that time the range of the blacklegged tick has expanded and there are currently seven known endemic Lyme disease areas, and several known high risk areas, in Ontario (**Appendix A**).<sup>2</sup> Lyme disease endemic areas are those in



which blacklegged ticks are established and where there is evidence that ticks are transmitting *B. burgdorferi* among reservoir hosts.<sup>3</sup> Lyme disease risk areas are locations where blacklegged ticks have been identified, or are known to occur, and where humans have the potential to come into contact with infected ticks, but where the presence of *B. burgdorferi* has not been confirmed.<sup>4</sup>

These endemic and high risk areas are similar in that they are typically zones of deciduous or mixed forests, and are populated by large and small-sized mammals which act as reservoirs for the bacteria and hosts for the ticks. This flora and fauna, as well as similar climatic characteristics, are conducive to the proliferation and survival of both the tick species and the bacteria. These areas are also located on bodies of water and are known destinations for, or on the flight paths of, migrating birds which, together with deer, are considered to be important factors in the distribution of blacklegged ticks. With the increase in tick numbers and continued expansion of its range, due in part to climate change, there has been an increase in human cases of Lyme disease. The majority of these cases are contracted in endemic and high risk areas in Eastern Ontario.<sup>1</sup>

Blacklegged ticks are not infected when they hatch from their eggs and only acquire the bacteria after feeding on an infected animal, such as a white-footed mouse or fox. By the time a tick becomes an adult female it has had two feedings and is more likely to test positive for *Borrelia* bacteria than a nymph. However, it is the nymph that is responsible for more human cases of Lyme disease, as their small size makes them difficult to detect (Figure 1).<sup>5</sup>

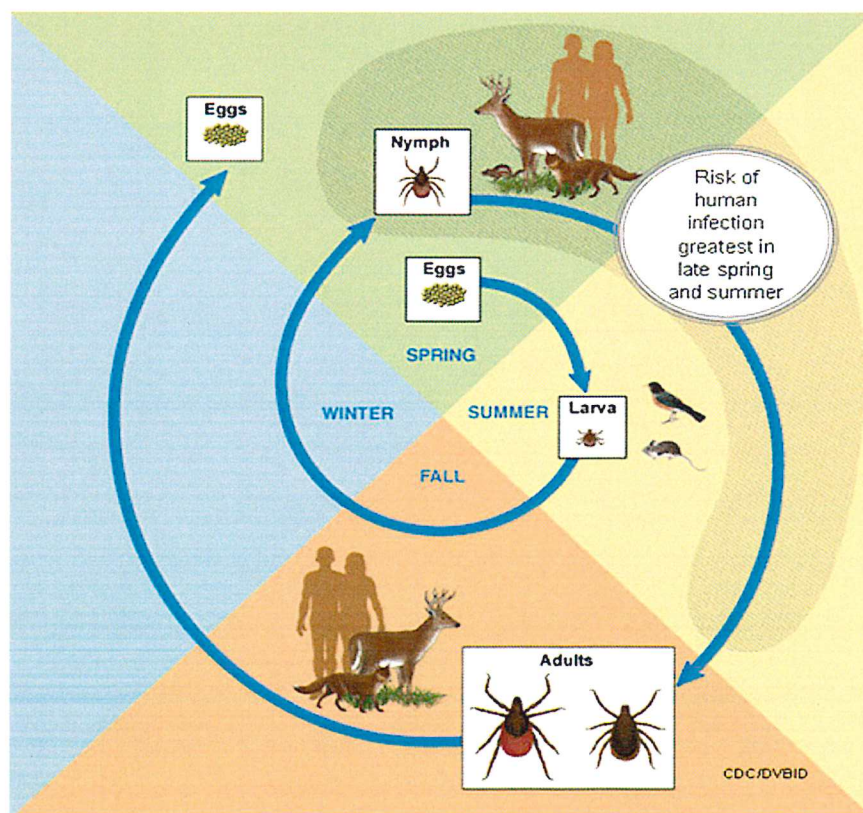


Figure 1. The life cycle of the blacklegged tick.<sup>5</sup>



In order for transmission of the bacteria to occur, the tick must actively feed on its host for a given period. Nymphs require at least 24 hours, and adult females require between 40 to 60 hours of active feeding. Moreover, adult ticks are most active in the spring and fall, while larvae and nymphs are most active during the summer months. The majority of suspect human cases of Lyme disease are reported during June, July, and August. There is a strong relationship between the number of human cases reported, increased human outdoor activities, and the presence of infected nymphs in the environment during these warmer months. Feeding nymphs are more difficult to detect on the body than adults, which leads to the increased likelihood of longer attachment times and, therefore, greater potential for bacterial transmission.

The disease is difficult to diagnose clinically, and is often mistaken for other ailments during the early stage of infection. Symptoms usually begin 3–30 days after being bitten by an infected blacklegged tick and can include fever, headache, fatigue and swollen lymph nodes. A “bull’s-eye rash” (*erythema migrans*) may appear in some infected people at the site of the tick bite. Treatment typically involves the administration of antibiotics. Early detection and treatment are instrumental in eliminating the infection and its symptoms, however if the disease is diagnosed late and/or treatment is delayed, more serious symptoms may develop which could be very difficult to address. Untreated individuals may progress to the second stage of the disease and develop more severe symptoms such as skin rashes, heart palpitations, muscle and joint pain, arthritis and arthritis-like conditions, extreme fatigue and weakness, central and peripheral nervous system disorders. The third stage of the disease can last for months or years with recurring neurological problems.<sup>1</sup>

WDGPH’s prevention and control program for Lyme disease focuses on public education and surveillance. Due to the expanding range of the blacklegged tick and the increasing number of Lyme disease cases reported in the province, surveillance and education efforts were intensified in 2015 from previous years.

### Passive Surveillance

WDGPH began recording the number and type of ticks that were submitted by the public in 2011. Before that time, tick inquiries were rare. During the years that followed, the number of ticks being submitted to the health unit has been increasing (**Appendix B**). In 2015, over 80 ticks were submitted by the public throughout the spring and summer months. In order to help develop a baseline for tick activity in the health unit, and to assist with Health Canada’s ongoing surveillance efforts, WDGPH expanded passive surveillance to include ticks found on pets. Submitted ticks were identified by WDGPH staff, where possible, any positively identified blacklegged ticks were forwarded to Health Canada’s National Microbiology Laboratory (Field Studies—Zoonotic Diseases and Special Pathogens) in Winnipeg for bacterial testing. Ticks which could not be positively identified by WDGPH staff were forwarded to Health Canada or the Public Health Ontario Laboratory for identification.

In 2015, 68% of all blacklegged ticks submitted to the health unit came from within the WDGPH region, however none tested positive for *B. burgdorferi*. A total of 3 adult female blacklegged ticks tested positive for *B. burgdorferi* and all originated from outside of health unit boundaries in Kingston, Ontario a known endemic area. Additionally, there was one

adult female blacklegged tick that tested positive for *Anaplasma phagocytophilum* and one that tested positive for *Babesia microti*.

### Active Surveillance

Considering the blacklegged tick's expanding range and population numbers, and the corresponding increase in tick-human encounters, WDGPH began active surveillance in 2015 in partnership with the University of Guelph. Active surveillance was initiated in the form of "tick dragging" in areas with habitat that would be suitable for the blacklegged tick and bacteria. Standard operating procedures based on Public Health Ontario guidelines were adopted.<sup>6</sup>

Tick-dragging (also known as tick-flagging) involves "dragging" a 1m x 1m square of white flannel fabric attached to a wooden pole through a potential tick habitat in the hopes that "questing" ticks will attach to the material. Areas for dragging were selected based on known tick habitats as well as areas deemed suitable for potential tick habitats. Each of the following areas was dragged twice in 2015, once in spring/early summer, and once in late summer/early fall:

- Luther Marsh Conservation Area, Grand Valley
- Island Lake Conservation Area, Orangeville
- Fletcher Creek Ecological Preserve, Puslinch Township
- Preservation Park, Guelph
- Speed River Trail, Guelph
- Watson Road Trail, Guelph

Several American dog ticks (also known as wood ticks) were collected during the tick-dragging sessions, however, no blacklegged ticks were found.

### Education

In 2015, several initiatives were undertaken to raise awareness among the community regarding Lyme disease and the prevention of tick bites:

- A webpage was created on the WDGPH website. The webpage had 43 page views from 29 unique individuals throughout 2015. Average time spent on this page was five minutes and nine seconds.
- A tick identification card was designed, printed and distributed to some local veterinary clinics, low-cost rabies vaccination clinics, and WDGPH office waiting areas (**Appendix C**). Approximately 400 were distributed throughout the fall of 2015. The tick ID card was very well received and feedback from partners indicate that it is popular among clients.
- A blog post on ticks and Lyme disease was posted in October 2015.
- In August 2015, ticks and Lyme disease were the focus of the WDGPH One Health newsletter that circulates to animal care professionals. This included information about local initiatives, tick submissions, and results of tick testing.
- Key messages were tweeted in late summer and fall of 2015.



Key messages focused on the cause and symptoms of Lyme disease, characteristics of blacklegged ticks, preventing tick bites and tick removal.

## **ANALYSIS/RATIONALE**

Lyme disease is the most commonly transmitted vector-borne disease in North America. In 2015, there were 358 confirmed cases of Lyme disease reported in Ontario, with the majority being acquired in the endemic and high risk areas of Eastern Ontario. This represents a sharp increase in the number of reported cases compared with previous years (**Appendix D**). This can be attributed to increased public awareness and reporting, the tick's expanding range, and increases in human-tick encounters.<sup>1</sup>

Historically, Wellington, Dufferin and Guelph have had few reported human cases of Lyme disease (**Appendix E**). Only one case was reported in 2015 and it was likely acquired outside the health unit boundaries in Short Hills Provincial Park (Niagara region). Although WDGP is not an endemic region, blacklegged ticks have been found in the area, with only one that has tested positive for *Borrelia burgdorferi*. Considering the expanding range of the blacklegged tick and the favourable flora and fauna that exist within Wellington and Dufferin counties, it is not unreasonable to expect that areas within the health unit could become endemic for the blacklegged tick and *Borrelia burgdorferi* in the future.

Continued passive and active surveillance will be instrumental in acquiring baseline data for the blacklegged tick within Wellington and Dufferin counties. Measuring and mapping the tick's progress over time will allow WDGP to better utilize resources and target education and awareness campaigns towards specific areas and populations in 2016 and beyond.

## **ONTARIO PUBLIC HEALTH STANDARD**

### **Health Hazard Prevention and Management Program Standard**

Goal: To prevent or reduce the burden of illness from health hazards in the physical environment.

The board of health shall develop a local vector-borne management strategy based on surveillance data and emerging trends in accordance with the *Infectious Diseases Protocol, 2015*.

## **WDGP STRATEGIC COMMITMENT**

### **Building Healthy Communities**

We will work with communities to support the health and well-being of everyone.

### **Service-Centered Approach**

We are committed to providing excellent service to anyone interacting with Public Health.

## HEALTH EQUITY

There is no current research that points to a health equity issue relating to Lyme disease. However, anecdotally, a large number of tick submissions are from people who have recently spent time at their cottages and therefore this population is more likely to be exposed to blacklegged ticks. Hikers and campers, particularly those frequenting provincial parks, are at higher risk for tick bites as they spend time in areas where blacklegged ticks are endemic.

## APPENDICES

Appendix A – List of Endemic Areas for Lyme Disease in Ontario

Appendix B – Number and Type of Ticks Submitted to WDGP for Analysis

Appendix C – Tick Identification Card Designed, Printed, and Distributed by WDGP

Appendix D – Number of Probable and Confirmed Cases of Lyme Disease in Ontario, 2005–2015

Appendix E – Number of Confirmed and Probable Cases of Lyme Disease and the Number of Positively Identified Ticks with *Borrelia burgdorferi*, in the WDG region, 2005–2015

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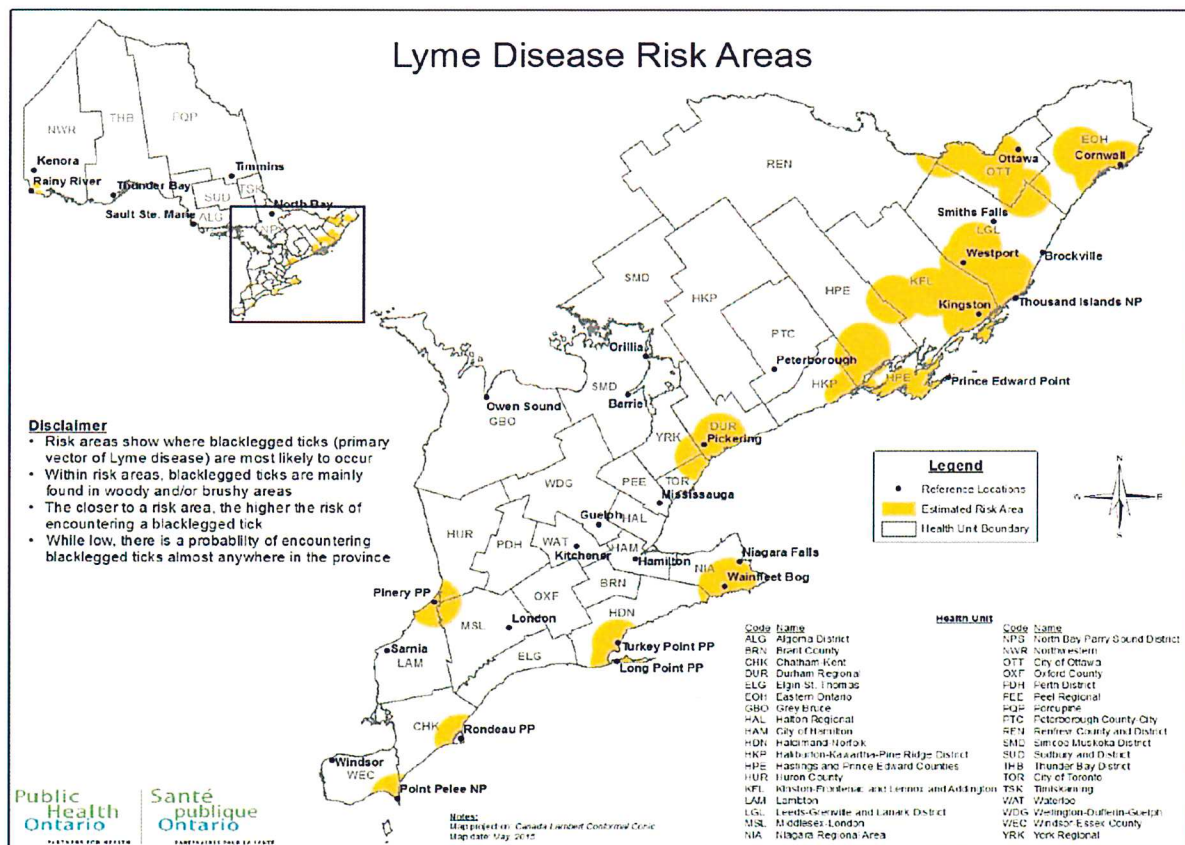


## APPENDIX A.

### List of Endemic Areas for Lyme Disease in Ontario:<sup>2</sup>

- Long Point Provincial Park
- Turkey Point Provincial Park
- Rondeau Provincial Park
- Point Pelee National Park
- Prince Edward Point National Wildlife Area
- Wainfleet Bog Conservation Area
- St. Lawrence Islands National Park

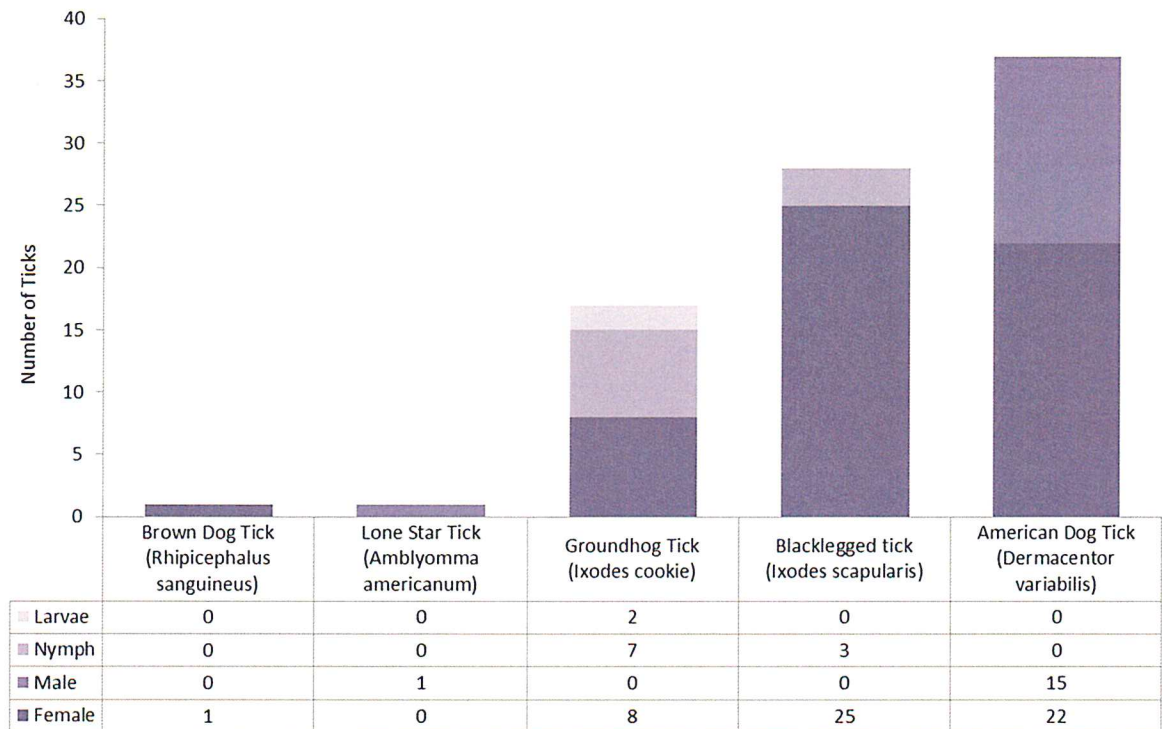
Figure A: Map of Risk Areas for Lyme Disease in Ontario<sup>4</sup>



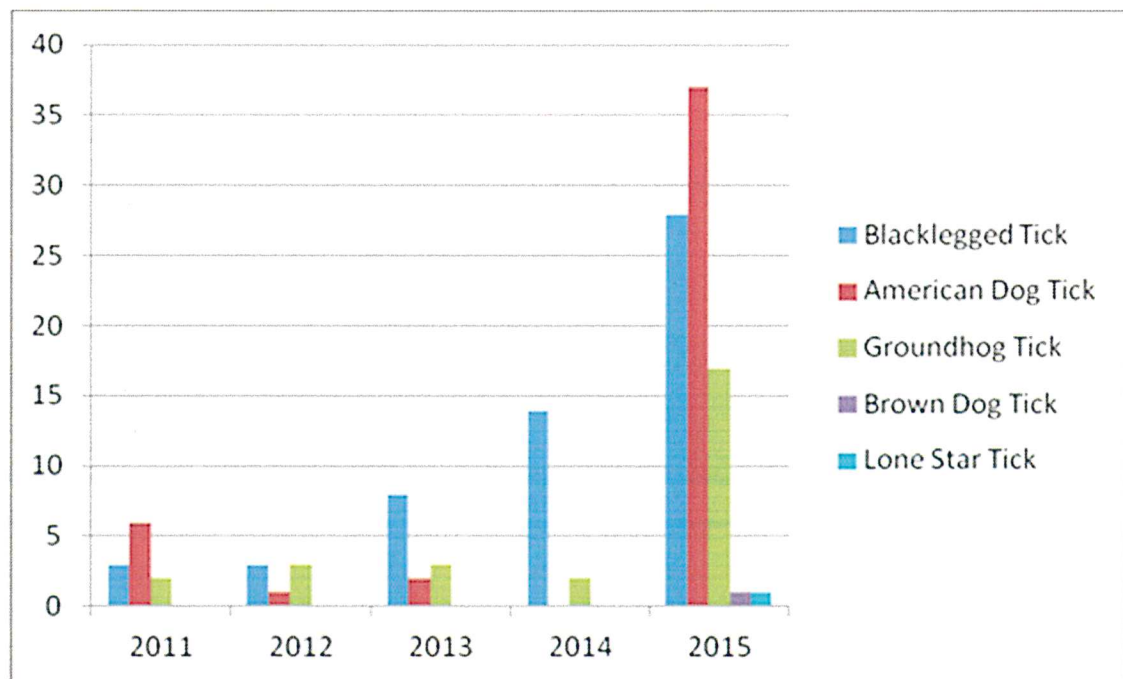


## APPENDIX B.

**Figure B1: Number and Type of Ticks submitted to WDGPH for Analysis in 2015**



**Figure B2: Number and Type of Ticks Submitted to WDGPH for analysis 2011-2015**




## APPENDIX C.

Figure C: Tick Identification Card designed, printed, and distributed by WDGPH.


### TICK ID

**KNOW THEM, PREVENT THEM.**


**Blacklegged Tick (Deer Tick)**  
Image source: URI TickEncounter Resource Center




larva




nymph



adult male




adult female




Approx. Size

nymph (1/8" - 1/4")    adult male (1/8")    engorged adult (up to 1/2")

**American Dog Tick (Wood Tick)**  
Image source: Maine Medical Center Research Institute




adult male




adult female

### PREVENT TICK BITES


Use caution in areas where ticks are more likely to be found:




Wear light-coloured pants and a long-sleeved shirt so ticks are easy to see.



Wear closed footwear and tuck pants into socks.



Use a repellent that contains DEET and follow the manufacturer's directions.




Perform daily full-body tick checks on yourself, children and pets.

**Ticks can be submitted for identification.**  
For more information call Public Health at  
**1-800-265-7293**

### TICK REMOVAL

Using tweezers or a tick remover:



- 1 Grasp the tick firmly between the body of the tick and the skin (do not pinch too tightly or bacteria from the tick may be squeezed into the bloodstream).
- 2 Pull the tick straight out.
- 3 Clean the bite area with soap and water.

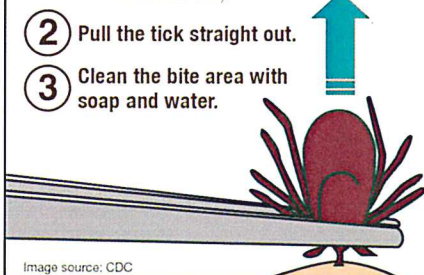



Image source: CDC

**If you have been bitten by a tick and are concerned, contact your healthcare provider.**  
**Keep the tick so it can be submitted for identification.**

### TICK FACTS

- 1 Ticks are usually found in wooded or brushy areas.
- 2 Ticks do not fly, jump or move very quickly.
- 3 The most common tick in Wellington, Dufferin and Guelph is the American Dog Tick – it is not associated with Lyme disease.
- 4 The Blacklegged tick may transmit the bacteria that cause Lyme disease.
- 5 The Blacklegged tick needs to be actively feeding for at least 24 hours to transmit Lyme disease.
- 6 A tick that is feeding will appear to be swollen and oversized.
- 7 In Ontario, Blacklegged ticks are more commonly found on the north shores of Lake Ontario and Lake Erie.

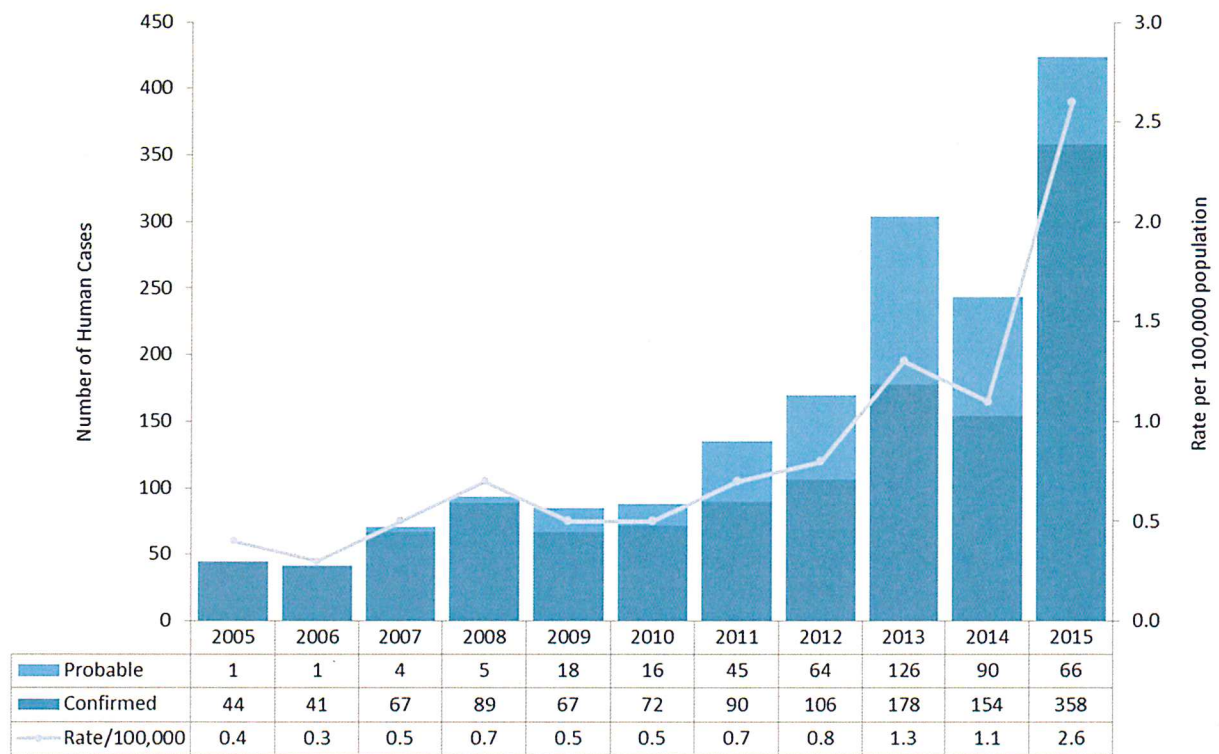


**PublicHealth**  
WELLINGTON-DUFFERIN-GUELPH  
Stay Well.

wdgpublichealth.ca  
1-800-265-7293 ext. 4753

## APPENDIX D.

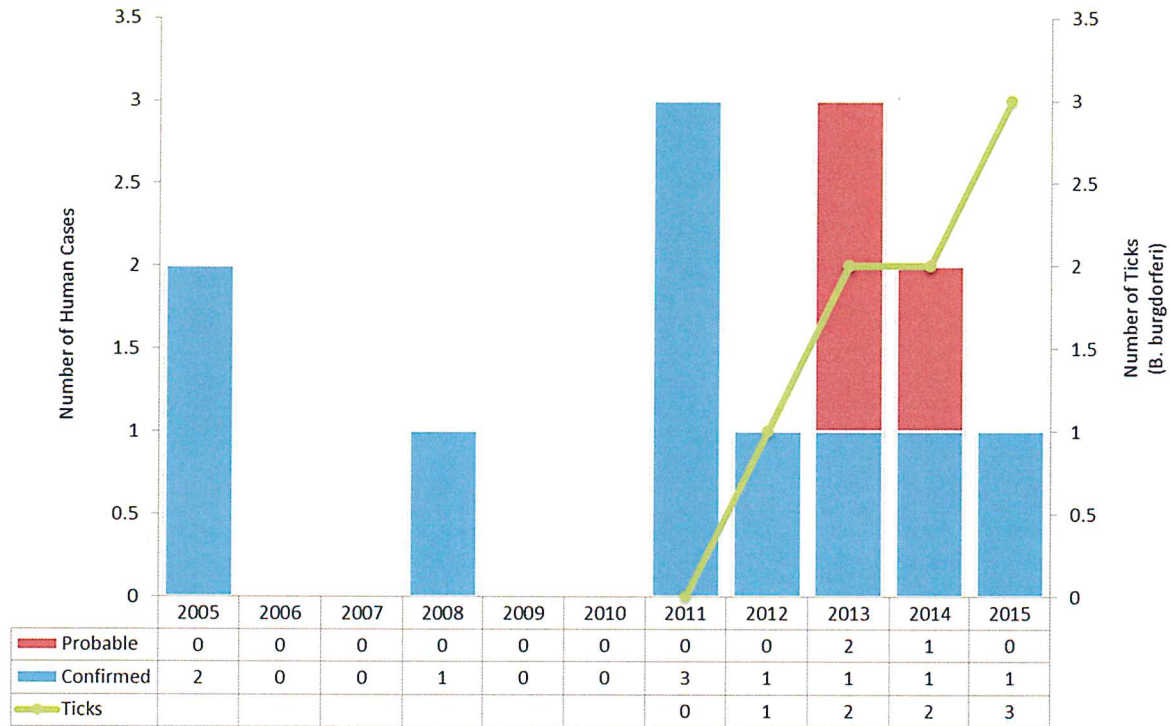
**Figure D: Number of Probable and Confirmed Cases of Lyme Disease in Ontario, 2005–2015**



Data source: iPHIS, 2005 – 2016 Case counts and crude rates of reportable diseases by year. Date extracted: May 11, 2016.

## APPENDIX E.

**Figure E:** Number of Confirmed and Probable Cases of Lyme Disease and the Number of Positively Identified Ticks with *Borrelia burgdorferi*, in the WDG region, 2005–2015



**Note:** There is no available information on number of ticks with *B. burgdorferi* from 2010 or prior.

Data source: iPHIS, 2005 – 2016 Case counts and crude rates of reportable diseases by year. Date extracted: May 11, 2016.

**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NUMBER 0XX/16**

Being a by-law to authorize the entering into a Licence Agreement with John Hamilton for temporary use of Storm Water Management Lands – Block 6, Plan 847

**WHEREAS** the *Municipal Act*, S.O. 2001, c.25 authorizes a municipality to enter into Agreements;

**AND WHEREAS** the Council for the Corporation of the Township of Puslinch deems it appropriate to enter into a Licence Agreement with John Hamilton;

**NOW THEREFORE** the Corporation of the Township of Puslinch hereby enacts as follows:

- 1. That the Corporation of the Township of Puslinch enter into a Licence Agreement with John Hamilton for temporary use of the Storm Water Management Lands, described as Block 6, Plan 847.
- 2. THAT the Mayor and Clerk are hereby authorized to execute the Licence Agreement.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 15<sup>th</sup> DAY OF JUNE, 2016.**

\_\_\_\_\_  
Dennis Lever, Mayor

\_\_\_\_\_  
Karen Landry CAO/Clerk



**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH****BY-LAW NUMBER 0XX/16**

Being a by-law to repeal By-law 37/13  
to appoint Donna Tremblay as Deputy  
Clerk for the Corporation of the  
Township of Puslinch

**WHEREAS** the *Municipal Act*, S.O. 2001, c.25 provides that a Council of a Municipality may pass a by-law for appointment such officers and servants as may be necessary for the purposes of the Corporation;

**AND WHEREAS** the Corporation of the Township of Puslinch passed by-law No. 37/13 appointing Donna Tremblay as Deputy Clerk on May 1, 2013;

**AND WHEREAS** the Deputy Clerk has terminated employment with the Corporation of the Township of Puslinch;

**NOW THEREFORE** the Corporation of the Township of Puslinch hereby enacts as follows:

1. That By-Law No. 37/13 is hereby repealed.
2. That this by-law takes effect on June 17, 2016.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 15<sup>th</sup> DAY OF JUNE, 2016.**

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Dennis Lever, Mayor

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Karen Landry CAO/Clerk