

**TOWNSHIP OF SOUTH FRONTENAC  
COMMITTEE OF THE WHOLE MEETING  
AGENDA**

TIME: 7:00 PM,  
DATE: Tuesday, May 12, 2015  
PLACE: Council Chambers.

1. Call to Order
2. Declaration of pecuniary interest and the general nature thereof
3. Scheduled Closed Session - n/a
4. \*\*\*Recess \*\*\*- n/a
5. Delegations - n/a
6. Reports Requiring Action
  - (a) Lindsay Mills, Planner, re: Timeline for Official Plan Update 3
  - (b) Lindsay Mills, Planner, re: Review of Application for Zoning By-law Amendment in Part of Lot 7, Concession IV, Portland District - Larcon Farms 4 - 10
  - (c) Lindsay Mills, Planner, re: Review of Proposed changes to a Site Plan Agreement, Part of Lots 20 and 21, Concession V, Storrington District: Applewood Resort 11 - 18
  - (d) Lindsay Mills, Planner, re: Township Initiated Housekeeping By-law 19 - 21
  - (e) Lindsay Mills, Planner, re: Planning Department: Blocked Time Schedule 22
  - (f) Wayne Orr, Chief Administrative Officer, re: Trailer By-law 23 - 24
  - (g) Wayne Orr, Chief Administrative Officer, re: Procedural By-law 25 - 39
  - (h) Wayne Orr, Chief Administrative Officer, re: Support for Solar projects under the FIT Program 40 - 66
7. Reports for Information
  - (a) Sydenham Drinking Water System 2014-2015 67 - 100
  - (b) Wayne Orr, Chief Administrative Officer, re: Transfer of old rescue from Fire department to Public Works department 101
8. Rise & Report
  - (a) County Council

- (b) Arena Board
- (c) Police Services Board
- (d) Portland Heritage
- 9. Information Items
  - (a) Lisa Munday, Manager, Chronic Disease Prevention, KFLA Health Unit, re: Appointment to South Frontenac Rides 102
  - (b) Michael Chan, Minister of Citizenship, Immigration and International Trade, re: Ontario Medal for Good Citizenship 103
- 10. New Business
- 11. Closed Session (if requested)
- 12. Adjournment

## PLANNING REPORT

**Township of South Frontenac**

**Planning Department**

**Prepared for Committee of the Whole**

**Agenda Date: May 12, 2015**

**Date of Report May 6, 2015**

**Subject: Timelines for Bringing Forward Revised Township of South Frontenac Official Plan**

### **SUMMARY OF THE RECOMMENDATION**

The recommendation is that the Committee receive for information a Planning Report, dated May 6, 2015, that outlines the steps to be taken to move forward with approval of the Township's revised Official Plan.

### **PURPOSE OF THE REPORT**

The purpose of this report is to bring to the Committee a timeline for approval of revisions to the Township's Official Plan.

### **BACKGROUND**

In 2013, the Planning Department prepared a draft revised Plan that incorporated a number of internal changes and provincially mandated changes. These were endorsed by Council and, on December 6, 2013, the draft plan was delivered to the Ministry of Municipal Affairs and Housing for their preliminary review. It should be noted that the submission to the ministry included changes to the text of the Plan and changes to the Schedules (Land Use Maps). In October, 2014 the ministry provided comments on the draft.

These comments are lengthy and were presented to the Committee of the Whole on February 10, 2015. At this time the Planning Department has incorporated all of the ministry's comments into the Official Plan and Planning is now ready to bring the document through the approval process.

The following is a tentative schedule of timing including presentations to Council and the public with final submission to the Ministry of Municipal Affairs and Housing for approval:

1. **June 2, 2015** - presentation to Council of the draft Official Plan;
2. **July 13, 2015** – open house presentation to members of the public;
3. **August 18, 2015** – special Council meeting to conduct a Statutory Public Meeting;
4. **September 1, 2015** – revised Official Plan presented to Council for adoption;
5. **September 11, 2015** – submission of the revised Official Plan to the Ministry of Municipal Affairs and Housing for final approval..

### **RECOMMENDATION**

It is recommended that the Committee receive the Planning Report, dated May 6, 2015 for information.

**Submitted/approved by:** Lindsay Mills      **Prepared by:** Lindsay Mills,  
 OP2015ReportToCofW

## **Planning Report:**

**Township of South Frontenac**  
**Prepared for Committee of the Whole**  
**Agenda Date: May 12, 2015**  
**Date of Report May 7, 2015**

**Planning Department**  
**File No. Z-15/01**  
**Applicant: Larcon Farms**

**Subject: Review of Application for Zoning By-law Amendment in Part of Lot 7, Concession IV, Portland District, Township of South Frontenac**

### **Summary of Recommendation:**

The recommendation is that the Committee receive for information and discussion a Planning Report, dated May 7, 2015, regarding a proposed lot addition and rezoning to an urban industrial lot.

### **Purpose of the Report:**

The purpose of this report is to bring to the Committee a report for discussion regarding a proposed lot addition and re-zoning for an urban industrial lot. The proposal came before Council at a public meeting on April 21, 2015 but decision was deferred as per objections from a neighbour.

### **Background**

On November 13, 2014, the Committee gave conditional approval to Consent Application S-75-14-P for a lot addition. The lot addition would add 1 hectare (2.6 ac) onto an existing industrial lot that is approximately 1.3 hectares (3 ac.) in size. One of the conditions of final approval is that the added portion be rezoned to the same urban industrial zone on the land that it is being added to. The purpose of the lot addition is to better accommodate the use and to facilitate possible future expansion of the mini-storage (warehousing) operation on the land. Attachment #1 shows the location of the subject land. Attachment #2 illustrated the portion of land that is the subject of the amendment. Attachment #3 is an air photo depiction of the subject land in relation to adjacent lands.

The rezoning came before Council at an advertised public meeting on April 21, 2015 where a neighbour objected to the proposal. The neighbour cited the fact that she would be looking directly across the street at an industrial building which would be unsightly and would lower her property value as the reasons for her objection. On this basis, Council deferred decision on the matter pending further discussion.

### **Analysis**

The proposal is to change the zoning on the added portion of land so that it matches the portion to be added to, which is zoned Urban Industrial (UI). The applicant advises that the added land would facilitate future expansion of his mini-storage operation although he states that this expansion would be at an unknown future date. As noted in the previous Planning report, the proposal to increase the size of the industrial parcel is fully within the intent of the Official Plan and would have the effect of regularizing the shape of the existing awkwardly-shaped lot, thus, making it more usable.

### **Official Plan:**

When evaluating any proposed rezoning, the Official Plan is used as a guide as it is an expression of Council's intent for development. The land is designated Settlement Areas in the Plan where it is Council's intention that a majority of new growth in the municipality will be directed where it can be supported by appropriate servicing. A full range of land uses is contemplated in this designation including commercial, industrial, institutional and residential. It states that the long-term vision for Settlement Areas is to provide an opportunity for a varied and balanced industrial/commercial base. Thus, the uses of the land appear to be supported by the policies of the Official Plan.

#### Zoning By-law:

Included with this report is Attachment #4 which is an excerpt from the zoning by-law listing all of the minimum requirements for development in the UI zone. It should be noted that the list of permitted uses is limited to uses that are relatively benign and compatible with other uses in urban areas and, in fact, by locating these uses and services here, all residents benefit from the services offered in their proximity (Note that the use of the subject land would be 'warehousing').

Regarding the concerns of the neighbour across the street from the subject land, section 21.3.4 of the zoning by-law tends to address her concerns. The section reads as follows:

**"21.3.4 For Lands Abutting a Public Road Allowance or Private Lane or Opposite a Residential Zone**

*Where any lot line in an UI Zone abuts a public road allowance or a private lane or where the lot on the opposite side of a street or a public road allowance or private lane is in a residential zone, a buffer planting strip adjoining such abutting lot line shall be provided on the UI Zone lot.*

Contents

*The buffer/planting strip shall consist of an earth berm and/or a continuous unpierced hedgerow of tree, evergreens or shrubs, not less than 2.0 metres (6.6 ft.) high and 3 metres (9.8 ft.) wide immediately adjoining the lot line or portion thereof along which such planting strip is required. The earth berm shall not be greater than a 3:1 slope.*

Maintenance

*A buffer/planting strip shall be planted, nurtured and maintained by the owner or owners of the lot on which the strip is located.*

Landscaped Open Space

*A buffer/planting strip referred to in this subsection may form a part of any landscaped open space required by this By-law.*

Interruption for Driveways or Pedestrian Walks

*In all cases where ingress and egress driveways or walks extend through a buffer/planting strip or it shall be permissible to interrupt the strip within 3 metres (9.8 ft.) of the edge of such driveway or within 1.5 metres (4.9 ft.) of the edge of such walk."*

Following from the above, any proposal to develop in the UI zone (ie., when he applies for a building permit) would require that the owner **enter into a site plan agreement** with the Township. The site plan agreement would specify all of the above requirements and any other special provisions that Council considers appropriate including stormwater management, fire routes, location of lighting etc.

#### Discussion

Even though industrial uses within an urban area may often seem incompatible with adjacent residential uses, the Official Plan and the zoning by-law recognize this and specify many mitigating measures. Also, as noted, urban industrial uses located in villages offer services that are meant to benefit the residents located there and the businesses who can take advantage of the higher density of patrons in an urban location.

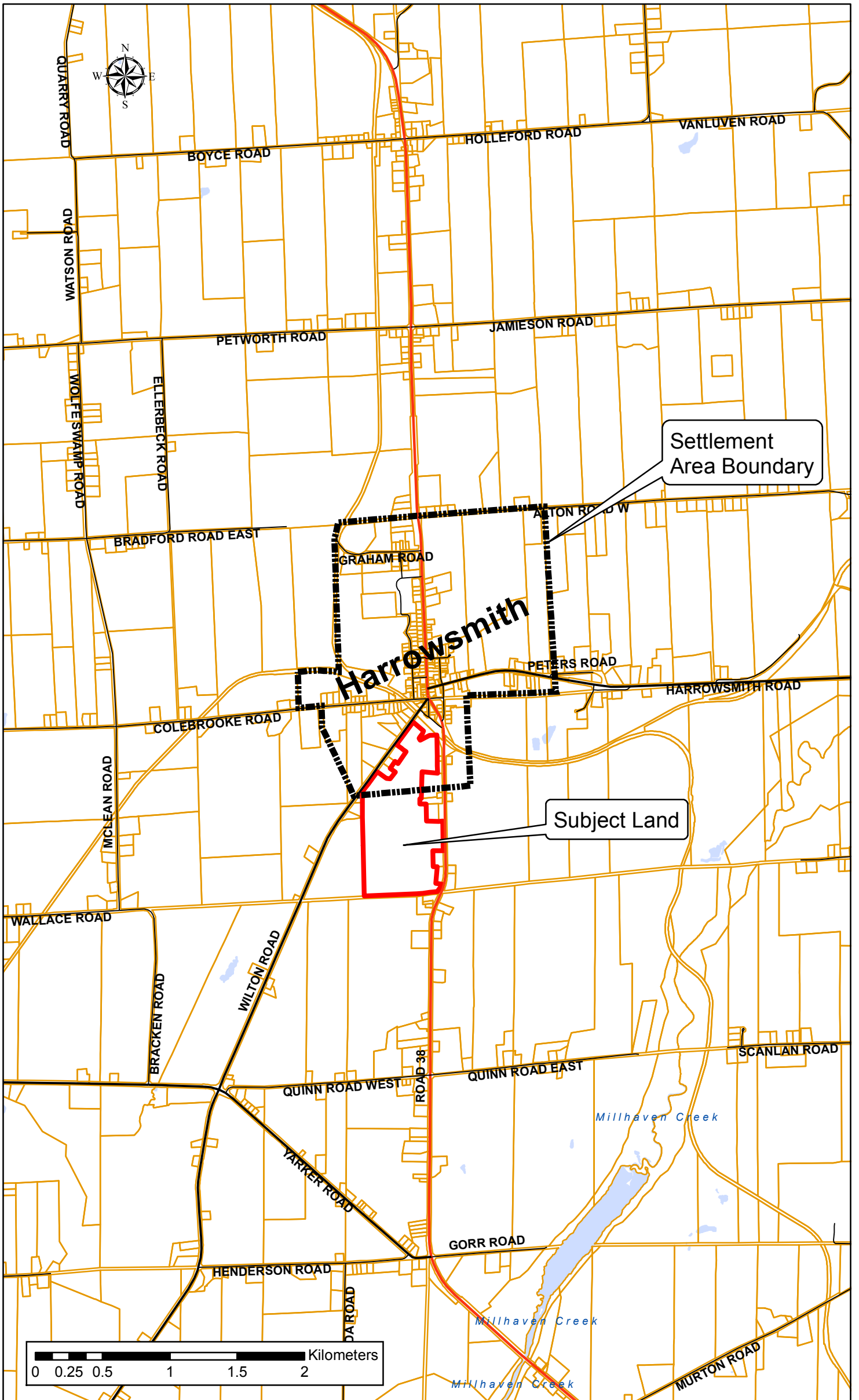
#### Recommendation

It is recommended that the Planning Report dated May 7, 2014 be received for information and discussion.

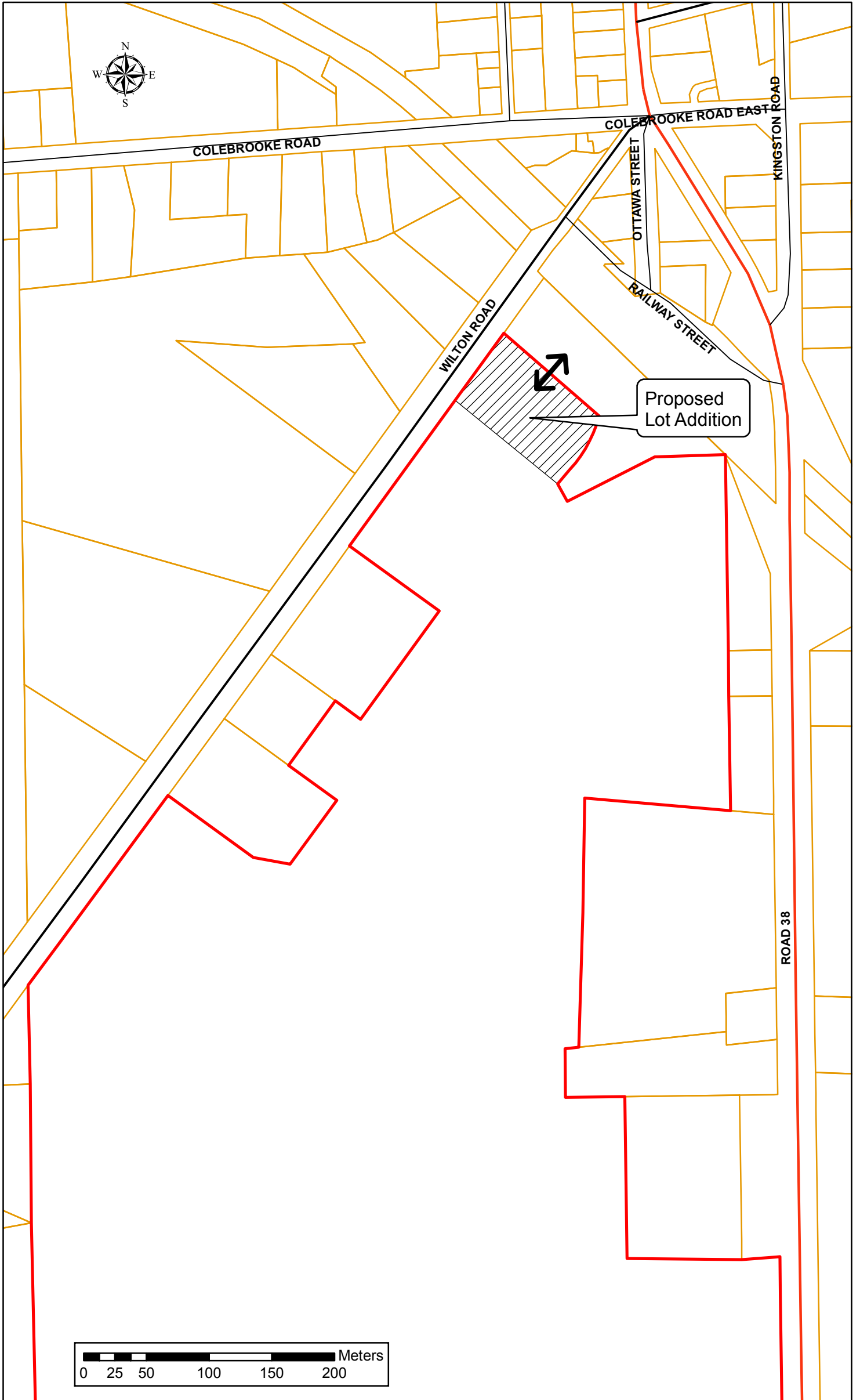
**Submitted/Approved by: Lindsay Mills**  
attachments

**Prepared by: Lindsay Mills**

# Attachment #1



# Attachment #2



# Attachment #3





**ATTACHMENT #4**

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**SECTION 21 - UI - URBAN INDUSTRIAL ZONE**

**21.1** Within a UI - Urban Industrial Zone, no person shall use any land, erect, alter, enlarge, use or maintain any building or structure for any use other than as permitted in this section and also such use, building or structure shall be in accordance with the regulations contained or referred to in this section.

**21.2 PERMITTED USES**

- any manufacturing, processing, or warehousing undertaking including storage warehousing,
- any workshop for the repair, processing, or treatment of small goods and wares, and any other service industries,
- any yard for the open or concealed storage of goods or materials,
- a motor vehicle repair garage,
- a research facility,
- a merchandising service shop,
- any business or professional offices accessory to a permitted industrial use,
- an accessory dwelling unit for a caretaker or security guard, in accordance with the provisions of Section 5.19,
- accessory buildings or uses to the above uses including a retail outlet for the purpose of selling goods manufactured, stored and/or assembled on the premises, provided such outlet is part of the principal building, and occupies not more than five (5) percent of the gross floor area of the principal building.

**21.3 ZONE REGULATIONS****21.3.1 For All Principal Buildings or Uses**

- Lot Area (Minimum) 8000 sq. metres (86,114 sq. ft.)
- Lot Frontage (Minimum) 76 metres (250 ft.)
- Front Yard (Minimum) 8 metres (26.2 ft.)
- Rear Yard (Minimum) 8 metres (26.2 ft.)
- Interior Side Yard (Minimum) 3 metres (9.8 ft.)
- Exterior Side Yard (Minimum) 8 metres (26.2 ft.)
- Lot Coverage (Maximum) 40 percent
- Building Height (Maximum) 15 metres (49.2 ft.)
- Off-street parking shall be provided in accordance with Section 5.30.
- Off-street loading facilities shall be provided in accordance with Section 5.31.
- A sight triangle of 15 metres (49.2 ft.) minimum shall be provided on a corner lot.

**21.3.2 For Accessory Buildings Not Attached To The Principal Building**

- Rear Yard (Minimum) 1.5 metres (4.9 ft.)
- Interior Side Yard (Minimum) 1.5 metres (4.9 ft.)
- Exterior Side Yard (Minimum) 8 metres (26.2 ft.)
- Building Height (Maximum) 4.5 metres (14.8 ft.)

**21.3.3 For Lands Abutting A Residential Zone or Residential Use**

Notwithstanding the provisions of subsection 20.3, where an interior side yard and/or rear yard abuts a residential zone then such interior side yard and/or rear yard shall be a minimum of 22 metres (72.2 ft.). This 22 metre (72.2 ft.) area shall be maintained in an open space condition and the open storage of goods or materials shall not be permitted within this 22 metre (72.2 ft.) area.

**21.3.4 For Lands Abutting a Public Road Allowance or Private Lane or Opposite a Residential Zone**

Where any lot line in an UI Zone abuts a public road allowance or a private lane or where the lot on the opposite side of a street or a public road allowance or private lane is in a residential zone, a buffer planting strip adjoining such abutting lot line shall be provided on the UI Zone lot.

**Contents**

The buffer/planting strip shall consist of an earth berm and/or a continuous unpierced hedgerow of tree, evergreens or shrubs, not less than 2.0 metres (6.6 ft.) high and 3 metres (9.8 ft.) wide immediately adjoining the lot line or portion thereof along which such planting strip is required. The earth berm shall not be greater than a 3:1 slope.

**Maintenance**

A buffer/planting strip shall be planted, nurtured and maintained by the owner or owners of the lot on which the strip is located.

**Landscaped Open Space**

A buffer/planting strip referred to in this subsection may form a part of any landscaped open space required by this By-law.

**Interruption for Driveways or Pedestrian Walks**

In all cases where ingress and egress driveways or walks extend through a buffer/planting strip or it shall be permissible to interrupt the strip within 3 metres (9.8 ft.) of the edge of such driveway or within 1.5 metres (4.9 ft.) of the edge of such walk.

**21.4 GENERAL PROVISIONS**

All special provisions of Section 5 "General Provisions" shall apply, where applicable, to any land, lot, building, structure or use within the UI Urban Industrial Zone.

## PLANNING REPORT

**Township of South Frontenac**

**Planning Department**

**Prepared for Committee of the Whole**

**Agenda Date: May 12, 2015**

**Date of Report May 5, 2015**

**Subject: Review of Proposed Changes to a Site Plan Agreement, Part of Lots 20 & 21, Concession V, Storrington District, Township of South Frontenac: Applewood Resort**

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### **SUMMARY OF THE RECOMMENDATION**

The recommendation is that the Committee receive for information a Planning Report, dated May 5, 2015, that outlines proposed changes to a site plan agreement that is registered on the title of subject land. The amended agreement would allow the owner to construct a total of four tourist resort buildings on the property at this time.

### **PURPOSE OF THE REPORT**

The purpose of this report is to bring to the Committee proposed changes to a site plan agreement that is registered on the title of the subject land. The report includes a location attachment, a site plan, and an amended site plan agreement.

### **BACKGROUND**

Last year Council passed a by-law to enter into a site plan agreement with the owner of the subject property to develop the land as a recreational resort. The 100 acre waterfront parcel already has a special zone to permit the use – namely ‘Special Recreational Resort Commercial Zone (RRC-2)’. This zoning permits development of forty-four tourist homes (serviced by multiple septic systems and wells) an accessory dwelling and an administration building. Attachment #1 shows the location of the subject land and Attachment #2 shows the site plan for the fully-developed resort.

More recently, as the Committee is aware, the owner applied to develop the land for a twenty-two unit residential plan of vacant land condominium instead of the resort use. This development proposal now has draft plan approval and the owner is working towards fulfilling the conditions for final registration of the plan.

At this time the owner wishes to construct four buildings on the property as rental units that would become single detached dwellings in the future if and when the Plan of Condominium development is approved. It should be noted that the Building Department cannot issue building permits for these structures as homes in the condominium development because the condominium plan must be registered first to create the individual units on which the homes would sit. However, building permits can be issued on the basis that the structures would be ‘tourist homes’ which are presently permitted in the RRC-2 zone.

### **DISCUSSION**

One change that is still needed to permit this limited construction, is an amendment to the site plan agreement. The agreement, as presently worded, requires an amendment to the Environmental Compliance Approval report issued by the Ministry of the Environment and Climate Change (this was an approval for the collective septic systems for the fully-developed resort). Also, the site plan requires upgrading of the entrance to the property to commercial standards and upgrading of Kier Road which is the public road leading to the development.

The above approval from the Ministry of Environment and Climate Change is required when the anticipated septic useage would be more than 10,000 litres per day. This would be the case for the fully developed resort. However, KFL&A Public Health has advised that septic system usage for the four buildings/rental dwellings proposed would be less than 10,000 litres and, thus, there is no requirement for any special approval from the ministry. Public Health has no objection to the four buildings on conventional septic beds. In addition, it is not expected that development of only four buildings on the site would require upgrading of Keir Road or of the entrance to the site. Public Works has confirmed this.

Attached to this report is an amending site plan agreement that specifies all the changes to the existing site plan that are required to permit the construction of the four buildings. This includes a site plan showing the locations of the building envelopes for the four structures as well as proposed septic locations.

It should be noted that the buildings to be constructed would look identical whether they are for tourist residential use as presently permitted or for permanent single family dwellings as permitted in the condominium development.

### **RECOMMENDATION**

It is recommended that the Committee receive the Planning Report, dated May 5, 2015 for consideration. It is anticipated that the amendment to the site plan agreement will be brought to Council for a decision soon.

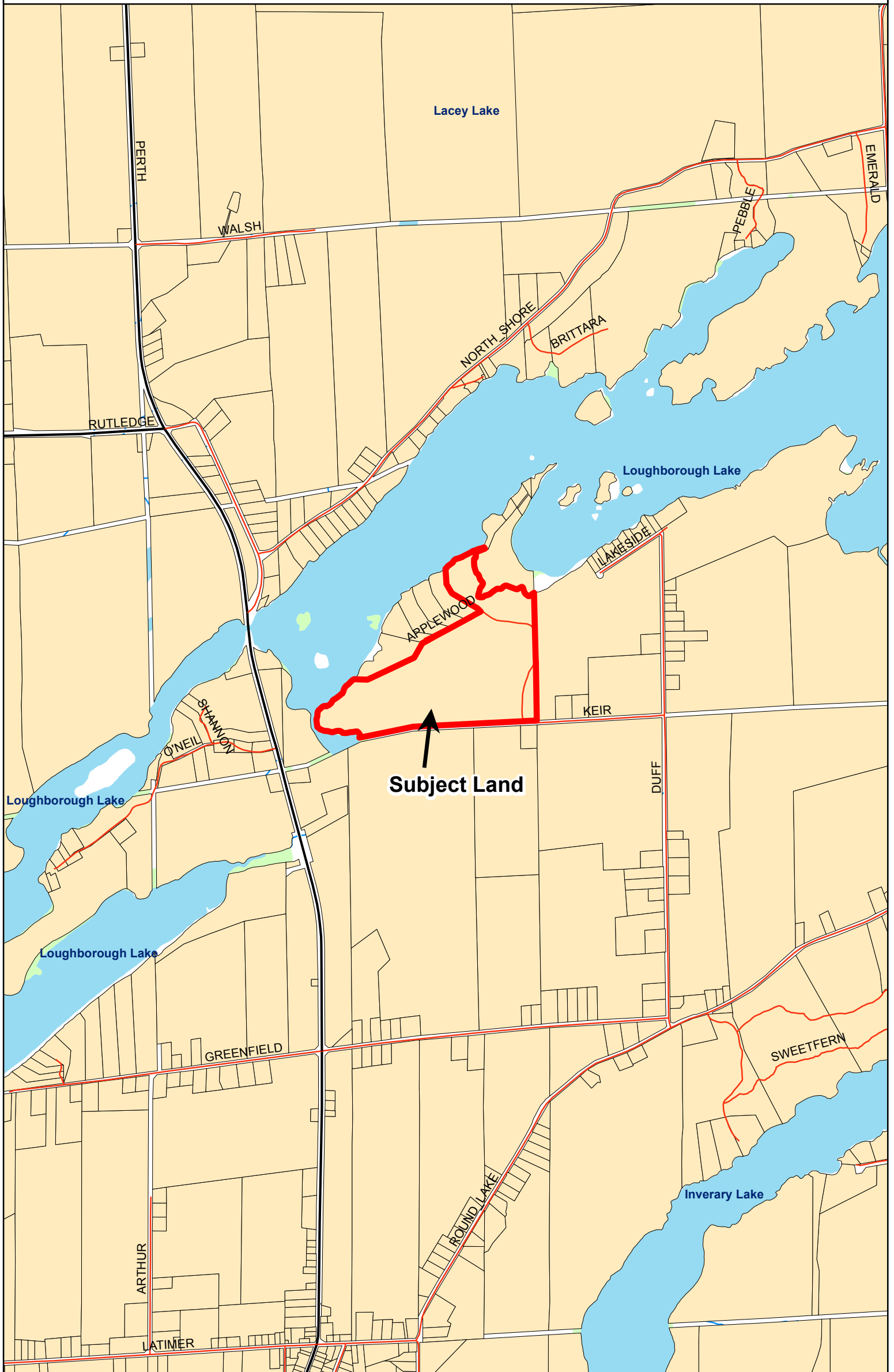
**Submitted/approved by:** Lindsay Mills      **Prepared by:** Lindsay Mills,

attachments

ApplewoodAmendment to SitePlanReportToCofW



# Attachment # 1





**THIS AMENDING SITE PLAN AGREEMENT made this \_\_\_ day  
of MAY, 2015.**

**BETWEEN:**

**1324789 ONTARIO INC.**

**And**

**MAGENTA WATERFRONT DEVELOPMENT CORPORATION**

**hereinafter called the "Owner"**

**OF THE FIRST PART**

**- and -**

**THE CORPORATION OF THE TOWNSHIP OF SOUTH FRONTENAC**

**hereinafter called the "Municipality"**

**OF THE SECOND PART**

**WHEREAS the Owner is the registered owner in fee simple of certain lands described in Schedule "A", attached hereto, located in the Township of South Frontenac (the "Owner's Land");**

**AND WHEREAS the Municipality is authorized to enter into this agreement and register it against the title to the Lands pursuant to section 41 of the Planning Act and section 6.17 of the Township of South Frontenac Official Plan;**

**AND WHEREAS the Municipality has passed by-law No. 2003-75 to designate all of the Township of South Frontenac as a "Site Plan Control Area";**

**AND WHEREAS the Owner entered into a Site Plan Control Agreement with the Municipality dated March 20, 2014, and registered on title as instrument FC177624;**

**AND WHEREAS the parties deem it appropriate to amend the Site Plan Control Agreement in accordance with the terms of this Amending Agreement;**

**NOW THEREFORE, THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants and agreements contained herein, the parties agree each with the other as follows:**

The Site Plan Control Agreement dated March 28, 2014 and registered on title as Instrument Number FC 177624 is hereby amended as follows:

1. Schedule "B" is hereby deleted and replaced with the Site Plan Drawing attached to this Amending Agreement as Schedule "A".
2. Paragraph 7 is amended by deleting this paragraph in its entirety and replacing it with, "The Owner agrees to construct the entrance to the property to the Township's "Standards for Commercial Entrances" prior to obtaining any building permits to permit construction of any buildings in excess of the 4 buildings permitted by this agreement. The Owner further agrees to construct Kier Road to a standard acceptable to the Township in its discretion to accommodate the anticipated traffic generated from the recreational resort commercial use prior to obtaining any building permits to permit construction of any buildings in excess of the 4 buildings permitted by this agreement."
3. Paragraph 8 is amended by deleting this paragraph in its entirety and replacing it with, "The Owner agrees that it shall not apply for any building permits for the

development of the Owner's Lands until a building permit has been obtained from Kingston Frontenac Lennox and Addington Public Health for the sewage disposal system necessary to permit any proposed uses. If the Owner intends to construct more than three r Tourist homes and one commercial unit, the Owner acknowledges and agrees that it shall be required to obtain an environmental compliance approval from the Ministry of the Environment and Climate Change. For greater certainty, the parties acknowledge and agree that Environmental Compliance Approval 2491-99VKFP, issued on August 29, 2013, does not permit the construction and operation of a tourist resort in accordance with the applicable zoning for the Owner's Lands."

4. Paragraph 9 is amended by deleting this paragraph in its entirety and replacing it with, "Development of the Owner's Lands shall be in accordance with the building permit approval issued by Kingston Frontenac Lennox and Addington Public Health for the sewage disposal systems."
5. Paragraph 12 is amended by deleting the following sentence, "The Owner further agrees to construct the entrance in accordance with the approved design and to the satisfaction of the Municipality prior to applying for any building permits for any buildings on the Owner's Lands."
6. The following additional paragraphs are added immediately following paragraph 15:
  - a. "16. The Owner agrees that it shall not apply for more than three building permits to construct tourist homes in accordance with the Resort Recreational Commercial Zoning. The Owner further agrees that it shall require an amendment to this Site Plan Control Agreement and approval for a sewage disposal system from the Ministry of the Environment and Climate Change prior to applying for building permits to allow construction of any additional tourist homes."
  - b. "17. The Owner agrees that it shall not apply for a building permit to construct the commercial building on the Owner's Lands until it has obtained building permits for three tourist homes."
  - c. "18. All buildings shall be constructed on Applewood Lane as this Lane exists at the time this Agreement is entered into."
  - d. "19. The Owner agrees to upgrade the fire access from Applewood Lane as shown on the approved Site Plan drawings prior to applying for any occupancy certificate for any building constructed on the Owner's Lands. The construction of the fire access shall be to the satisfaction of the Municipality."
  - e. "20. The Owner agrees to submit a stormwater management report to the Municipality within 30 days of execution of this Agreement. The Owner agrees that it shall comply with all recommendations contained in the storm water management report has approved by the Municipality and shall install all required storm water management facilities in accordance with the approved report and to the satisfaction of the Municipality."
  - f. "21. The Owner agrees that it shall not apply for any building permits to permit residential uses in excess of three total tourist home uses without obtaining additional *Planning Act* approval to permit such additional residential uses. The commercial building to be constructed on the Owner's Lands shall not be used for residential uses unless the Owner has obtained *Planning Act* approval to permit such uses, and has amended this Site Plan Control Agreement, as necessary."

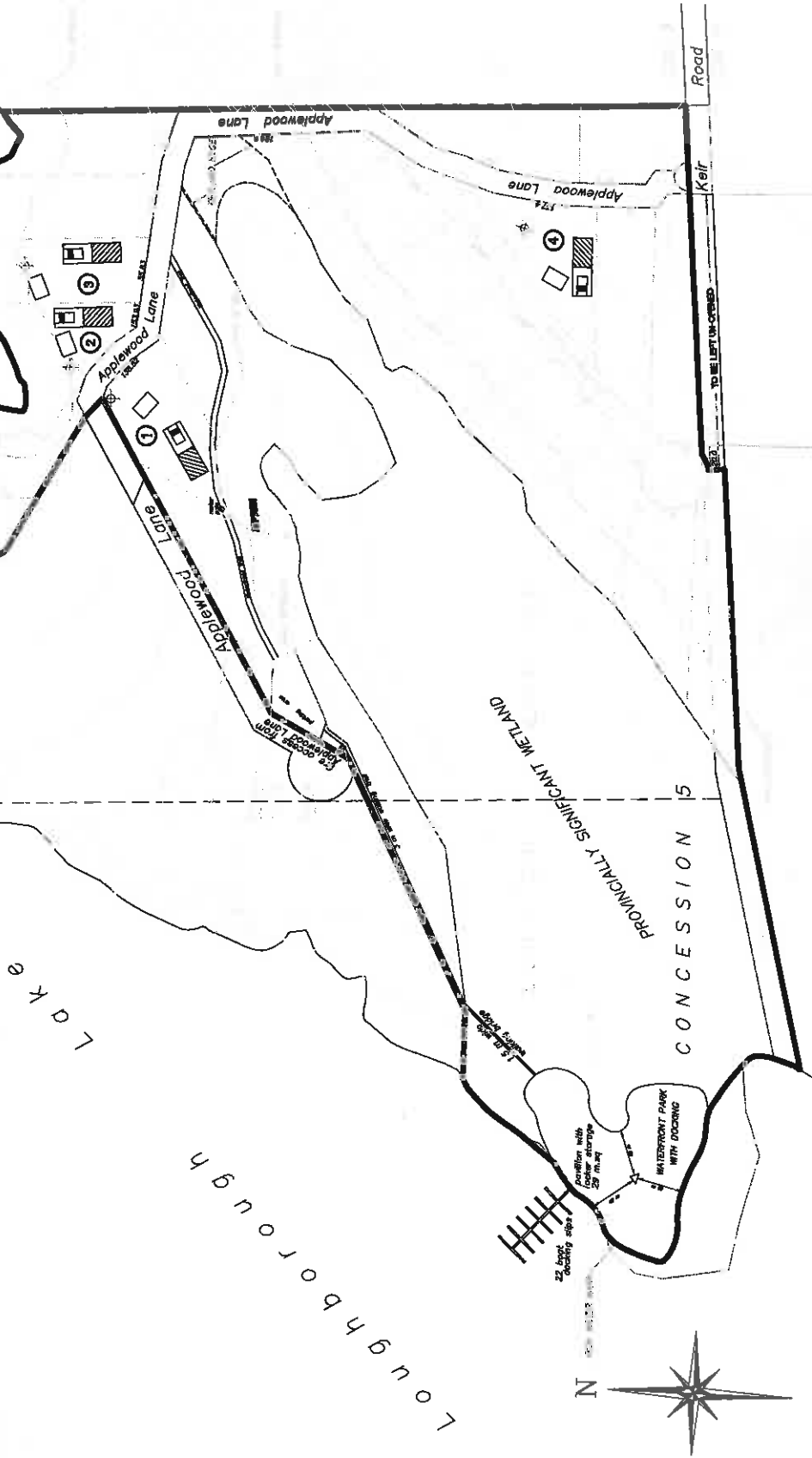


7. Except as amended by this Amending Agreement, the Site Plan Control Agreement shall remain in full force and effect.

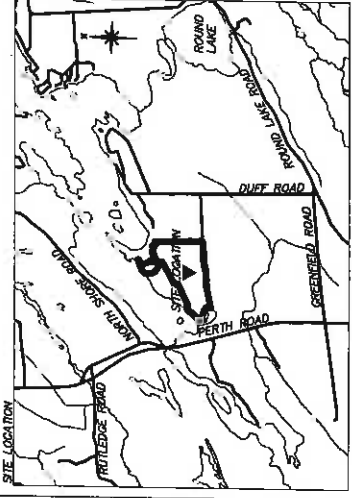
**WITNESS** the corporate seals of the respective corporate parties hereto, duly affixed under the hands of their respective signing officers, duly authorized in that behalf.

<b>SIGNED, SEALED AND DELIVERED</b>	)	<b>1324789 ONTARIO INC.</b>
	)	
<b>In the presence of</b>	)	
	)	
	)	_____
	)	<b>Martha Beach, President</b>
	)	
	)	<b>I have authority to bind the</b>
	)	<b>corporation</b>
	)	
	)	<b>MAGENTA WATERFRONT</b>
	)	<b>DEVELOPMENT</b>
	)	<b>CORPORATION</b>
	)	
	)	_____
	)	<b>William Marshall, President</b>
	)	<b>I have authority to bind the</b>
	)	<b>corporation</b>
	)	
	)	<b>THE CORPORATION OF THE</b>
	)	<b>TOWNSHIP OF SOUTH</b>
	)	<b>FRONTENAC</b>
	)	
	)	_____
	)	<b>Mayor</b>
	)	
	)	
	)	_____
	)	<b>Clerk</b>
	)	
	)	
	)	

APPLEWOOD LANE RESORT - REVISED SITE PLAN  
 Part of LOTS 20 and 21  
 CONCESSION 5  
 former Township of Storrington  
 now TOWNSHIP OF SOUTH FRONTENAC  
 County of Frontenac

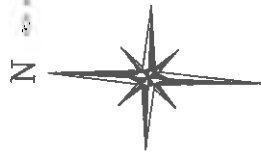


REG'D. PLAN 375



- Property Line
- Proposed Septic Bed Footprint (Primary)
- Proposed Septic Bed Footprint (Alternate)
- Proposed Building Envelope

metres



WESA  
 WESMA Environmental Services  
 4000 Highway 104  
 St. Catharines, Ontario L2R 6K7  
 Tel: 905.662.1111  
 Fax: 905.662.1112  
 www.wesa.com

2015-05-04

KC

## PLANNING REPORT

**Township of South Frontenac**

**Planning Department**

**Prepared for Committee of the Whole**

**Agenda Date: May 12, 2015**

**Date of Report: May 8, 2015**

**Subject: Township-Initiated Housekeeping Amendment to the  
Township of South Frontenac Comprehensive Zoning By-law**

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### **Summary of Recommendation:**

The recommendation is that the Committee receive the Planning Report dated May 8, 2015 regarding four amendments to the Comprehensive Zoning By-law to correct minor errors/omissions both in the mapping and in the text of the document (informally termed a “housekeeping bylaw”).

### **Purpose of the Report:**

The purpose of this report is to bring to the Committee housekeeping amendments to the Township’s Comprehensive Zoning By-law proposed by the Planning Department.

### **Background**

Since the Comprehensive Zoning By-law for the Township came into force and effect in January, 2005, staff have become aware of minor errors/omissions in the by-law, both in the mapping and in the text of the document. Since 2005 two housekeeping by-laws have been brought forward to Council to correct and clarify certain items.

More recently, four more items need to be dealt with as follows.

1. The by-law should specify that there be a minimum separation of 3 metres between all buildings on a property. This would be to ensure that there is adequate fire separation. The by-law presently only requires requires a minimum setback of 3 metres between the principal building and any accessory building. Thus, it should be amended to require this separation for all buildings.
2. ‘Shipping containers’ should be included in the definition of accessory buildings. This would help the Building Department classify them and require that they not be placed in the front yard and to ensure that they could not constitute a principal building on an otherwise vacant lot.
3. Following from #2 above, ‘Shipping Containers’ should be defined in the definition section. Note that shipping containers are also referred to as ‘sea containers’, ‘storage containers’ and ‘cargo containers’.
4. Schedule “D” the zoning map for Bedford District should be changed to eliminate the Special Limited Service Residential-Waterfront (RLSW-22) zoning. This zoning is worded as follows:

#### **“RLSW-22 (Part Lot 2, Concession XI, Bedford District - Norman)**

Notwithstanding any provision of this by-law to the contrary, the lands zoned Special Limited Service Residential-Waterfront (RLSW-22) shall be used only in accordance with the following:

- i) Further development of these lands, including future severances and rezonings which would have the effect of creating a more densely developed area, should not be considered due to the environmentally sensitive nature of the subject property on a narrow portion of Big Clear Lake unless it is demonstrated that such development would not have an adverse impact on the lake’s water quality. Big Clear Lake is considered

a sensitive lake trout lake and development which may have an adverse impact on this fishery should not be considered.”

This special zone should be deleted for two reasons; (1) the wording is not appropriate for a zoning by-law. This wording is Official Plan language which normally sets out the standards for development including lot-creation policies etc., (2) Big Clear Lake is not a narrow waterbody as stated nor is it a Highly Sensitive Lake Trout Lake as stated.

Development on Big Clear Lake is already guided by the policies of the Official Plan which do not need to be re-stated in the zoning by-law – especially when the reasons stated for the special zone are not true.

Attachment #1 hereto shows the location for the lots that are presently subject to the RLSW-22 zoning.

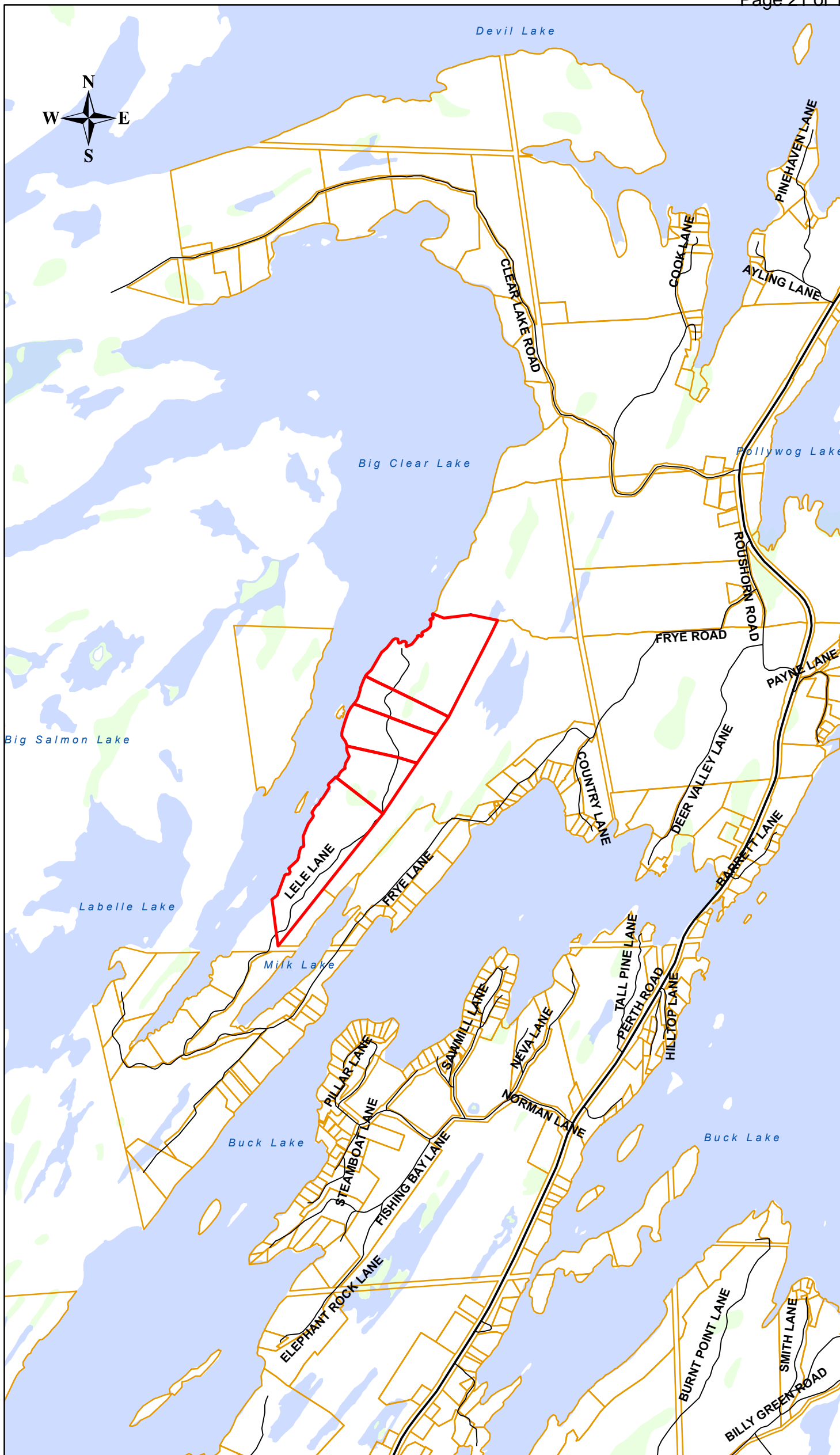
### **RECOMMENDATION**

It is recommended that the Committee receive the Planning Report, dated May 8, 2015, for information. It is expected that a by-law to effect the noted changes will be brought to Council shortly.

**Submitted/Approved by: Lindsay Mills**  
attachment

**Prepared by: Lindsay Mills**

HouskeepingReportToCofA2015



## PLANNING REPORT

Township of South Frontenac

Planning Department

**Prepared for Committee of the Whole**

**Agenda Date: May 12, 2015**

**Date of Report: May 4, 2015**

**Subject: Planning Department: Blocked Time Schedule**

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### **Summary of Recommendation:**

The recommendation is that the Committee receive the Planning Report dated May 4, 2015 regarding a proposal and support setting aside certain times of the week for the Planner work on large projects.

### **Purpose of the Report:**

The purpose of this report is to bring to the Committee a proposal to block time during the week during which could be set aside for the Planner to concentrate on large projects.

### **Background**

Demand for Planning services appears to be increasing in the Township of South Frontenac. The volume of work is increasing generally partly due to the growth that has occurred in the municipality in recent years and due to the increased complexity of development proposals.

Recent large projects have demanded much of the Planner's time. These have included review of the County Official Plan, writing a review of the Township's Official Plan as well as many large subdivision and plan of condominium proposals.

### **Discussion**

Planning has found it very difficult to deal with the continual day to day demands for planning application processing, planning advice and other planning services in general.

Accordingly, it is requested that the Committee support a plan to block out certain times of each week in which the Planner can concentrate solely of working on review and assessments of these large projects. It is believed that this would help in a better analysis of any give project coming forward in that the Planner could concentrate un-interrupted in undertaking his reviews.

It is recommended that the following times in each week be blocked for the Planner:

Tuesday afternoon,

Wednesday mornings,

Thursday mornings.

Note that Thursday mornings are already used to finalize reports that are due that day for Council and the Committee of the Whole. It should also be note that this scenario would help the department move more towards scheduled appointments for consultation with the public and developers.

### **Recommendation**

It is recommended that the Committee receive the Planning Report, dated May 4, 2015, for information and support the proposal to block out time for the Planner.

**Submitted/Approved by: Lindsay Mills**

**Prepared by: Lindsay Mills**



## STAFF REPORT CLERKS DEPARTMENT

**PREPARED FOR COW:** May 5, 2015

**AGENDA DATE:** May 12, 2015

**SUBJECT:**

Trailer By-law

**RECOMMENDATION:**

THAT Council extend the compliance date for prohibition of the use of trailers on private residential property to December 31, 2019

AND that KFL&A Public Health be asked to inspect the current 81 license holders to again insure compliance of the waste disposal systems with environmental regulations

AND only where Public Health determines that waste disposal systems remain in compliance, licenses may be renewed

AND that Council continue to enforce the Trailer Bylaw on a complaint basis.

AND that all current trailer license holders be advised in writing of this change.

**BACKGROUND:**

At the April 14, 2015 Committee of the Whole meeting, Council considered a report from the CAO that reviewed the history of the trailer bylaw and the extended time lines for compliance. Council was not clear in their direction to staff.

Issues raised included, the lack of ongoing public health enforcement, the previous ability to replace old trailers with newer same size trailers, the fact that many new trailers appear on new lots without licenses or enforcement, the capacity and cost to enforce, the need to finally address this issue and begin enforcement, the social implications of removing trailers where people live in them year round as a residence.

Based on the objective of ultimately reducing the number of trailers on private residential property and the reduction of over 50% in the number of licenses originally issued, coupled with the concerns expressed by Council, staff have prepared a recommendation for Council's consideration.

The time period for compliance with the prohibition of the use of trailers on private residential property expires on December 31, 2105.

The comprehensive Zoning By-law for the Township of South Frontenac (2003-75) became effective January 1, 2005. It defines a travel trailer and travel trailer park.

Under the zoning By-law, trailers are only permitted in special RRC (Recreational Resort Commercial) zones. The exception being where they are legal non-conforming or as a "Use, Accessory".

By-law 2004-93 is a By-law to license trailers. The essence of this By-law is to prohibit the use and or keeping of a trailer on any property except in an



## STAFF REPORT CLERKS DEPARTMENT

established trailer park. For those trailers that were placed prior to the old district by-laws, a license would need to be obtained and may be renewed annually. Stored trailers were exempted as well as the use of a trailer while building a single-family dwelling unit.

In June 2005, Council passed a resolution concerning the enforcement of both the zoning By-law and the licensing By-law.

The following is a summary of what the resolution provided for:

- Visitors may use their own trailers for short period of time on developed residential properties
- Special event organizers must have approval to allow the use of trailers
- The timeline for compliance will be extended to December 31, 2010
- Only trailers licensed in 2005 will be granted the extension
- In 2006 all trailers need to have complied with KFL&A regulations regarding sewage
- No new trailers are permitted

On December 15, 2009 Council amended the trailer license fee to \$30 per month from \$20.00 per month effective May 1, 2011 and passed a resolution: to extend the time period for compliance to December 31, 2015, to reiterate that no new trailers are allowed, and to prevent the replacement of existing licensed trailers with another trailer. All trailer license holders were mailed written notice of this change.

So far in 2015, 2 trailers have been removed. As of December 2014 there were 83 trailer licenses generating sales of \$27,390. In 2009 there were 110 trailer licenses generating sales of \$24,200 compared to 2005 when there was initially 169 licenses generating \$37,220.

The reduction in licenses is primarily a result of property owners removing their trailers and proceeding to build or leave the property vacant. In some instances property owners have had their trailers assessed by MPAC and now pay property taxes.

Council has alternatives to consider, three of which are,

- Begin enforcing the By-laws effective January 1, 2016 and have trailers removed
- Introduce a further extension to the enforcement of the By-laws for another period and allow for further attrition in the number of trailers
- Make changes to the licensing By-law

### **FINANCIAL IMPLICATIONS:**

Costs for public health services have not been assessed.

### **Submitted/approved by:**

Wayne Orr, CAO





## STAFF REPORT CLERKS DEPARTMENT

**PREPARED FOR COUNCIL:**     **May 5, 2015**

**AGENDA DATE:**               **May 12, 2015**

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**SUBJECT:**

Procedural Bylaw

**RECOMMENDATION:**

That Council provide clarity on changes to the Procedural Bylaw prior to bringing it forward for adoption.

**BACKGROUND:**

At the first meeting of Council in December 2014 notice of motions were filed on changes to the procedural bylaw. These suggested changes mirrored issues raised during the orientation sessions. With concurrence of Council, staff offered to prepare a DRAFT procedural bylaw for discussion. A draft was presented for discussion and feedback at the Committee of the Whole meeting on December 9. At the Council meeting of December 16 Council passed a motion to limit the number of terms committee members can server as well as the length of time committee Chairs may serve.

Based on the feedback and decisions of Council a revised draft was presented on January 20, 2015. At that time, recognizing the priorities of Council, the issue was deferred until the first Committee of the Whole in May. Attached is revised draft presented in January.

There has continued to be conversations about procedural issues including:

- the length of delegations from the public
- the number of times a delegation may return on the same issue
- the length of delegations at the request of Council (Auditor, Consultants etc.)
- whether there should be an opportunity at the end of the meeting for questions from the public

**ATTACHMENT:**

Revised Draft Procedural Bylaw – Jan 20

**Submitted/approved by:**  
**Wayne Orr, CAO**

## SCHEDULE "A" TO BY-LAW 2015-02

<b>PROCEDURAL RULES</b> <b>General</b>	2.1 Page 1 of 2
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**2.1 GENERAL**

(a) **INTRODUCTION** - This section addresses both basic procedural items and other more complex questions and issues that might arise in Council or Committee meetings. Well-documented procedures result in more productive Council meetings and lessen the amount of extraneous debate on unrelated topics.

(b) **DEFINITIONS** - Listed below are definitions of common procedural terms:

- 1) **AGENDA** and Orders of the Day are synonymous.
- 2) **AMENDMENT** means a change in the form of a Motion. An amendment is designed to alter or vary the terms of the main Motion without materially changing the meaning. It may propose that certain words be left out, that certain words be omitted and replaced by others, or that certain words be inserted or added. Every amendment must be strictly relevant to the question being considered.
- 3) **CLERK** means the C.A.O./Clerk or the Deputy Clerk acting in the Clerk's absence or in the absence of both the CAO/Clerk and the Deputy Clerk, another person appointed by Council resolution.
- 4) **CLOSED SESSION** means a meeting or a part of a meeting of Council or a Committee which is closed to the public. All meetings shall be open to the public except as provided for in the Municipal Act, 2001, Ch. 25, Section 239.
- 5) **COMMITTEE** means any advisory or other committee, subcommittee or similar entity of Council.
- 6) **COMMITTEE CHAIR** is the person presiding at meetings of Committees of Council. Elected by the Committee from its members and may be removed only by vote of a majority of the Committee.
- 7) **COMMITTEE OF THE WHOLE** means Council sitting in Committee.
- 8) **COUNCIL** means the Council of The Corporation of the Township of South Frontenac.
- 9) **HOLIDAY** means a holiday with pay (or statutory holiday) as identified in the current C.U.P.E., Local 4336, Collective Agreement.
- 10) **IN-CAMERA SESSION** shall have the same meaning as closed session (see item #4)
- 11) **MEETING** means any regular, special, committee or other meeting of Council.
- 12) **MEMBER** means a member of Council and a member of a Committee;
- 13) **MINUTES** – In strict accordance with the Municipal Act, 2001, Ch. 25, Sect 228, record, without note or comment, of all resolutions, decisions and other proceedings of Council
- 14) **MOTION** and resolution shall be considered synonymous and will include an original motion or an amendment to a motion;

<b>PROCEDURAL RULES</b> <b>General</b>	2.1 Page 2 of 2
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- 15) **POINT OF ORDER** The purpose of raising a point of order is to bring to the attention of the presiding officer that a rule has been broken or an error in procedure has been made as follows:
- a) Breaches of the rules of order of Council;
  - b) Difficulty in continuation of the meeting;
  - c) Improper, offensive or abusive language;
  - d) Notice that the discussion is outside the scope of the motion or the notice of motion;
  - e) Irregularities in the proceedings.
- 16) **PRESIDING OFFICER** is the Mayor or in his/her absence, Deputy Mayor or in his/her absence the acting head of Council whom presides at meetings of Council or the Chair of a Committee meeting;
- 17) **QUORUM** means a majority of the whole number of members required to constitute Council or a Committee.
- 18) **QUESTION** means that the vote now be taken.
- 19) **RECORDED VOTE** means the calling for the yeas and nays of all members of Council by any member of Council and the yeas and nays of each individual member of Council shall be so noted in the minutes.
- 20) **RULES OF ORDER** (See 2.2. (b))
- 21) **WEBSITE** means the Official Website of the Corporation of the Township of South Frontenac – [www.southfrontenac.net](http://www.southfrontenac.net)

## **2.2 MEETINGS**

(a) **MEETING LOCATION** – All meetings of Council shall be held at the municipal complex, 4432 George Street, Sydenham, Ontario, unless otherwise stipulated in a resolution of Council

(b) **RULES OF ORDER** – The rules of order of the parliament of Canada will govern the proceedings of the Council and the conduct of its members. The official parliamentary guide is Bourinot's Rules of Order. However, where the wording of this by-law varies from Bourinot's Rules of Order, this by-law shall take precedence.

(c) **SEATING** – During a meeting no person is permitted to come within the enclosure formed by the members' chairs or to address Council unless that person:

- Is a member of Council
- Is the C.A.O., the Clerk or Recording Secretary
- Has been given permission from the Presiding Officer

(d) **CHAIR** - The presiding officer of the Council shall be the Mayor. In his or her absence the Deputy Mayor shall preside. The Deputy Mayor will have the powers and duties of the Mayor when performing in that capacity. If neither the Mayor nor the Deputy Mayor is present to open the meeting, the Council shall elect a presiding officer.

(e) **CONVENING MEETINGS** - The inaugural meeting of Council shall be held on the first Tuesday in December at 7 o'clock p.m. but shall not be later than 31 days after Council term commences.

Unless otherwise stipulated, Council shall meet at 6:00 p.m. on the first and third Tuesday in each month from January to December inclusive with the exception of the months of July and August when only one meeting will be held each month, on the first Tuesday of the month. If needed, Council will convene and then proceed into closed session returning to open session at 7:00 p.m.

Council will not meet on a statutory holiday nor will it meet between Christmas and New Years.

Should a Council meeting conflict with any committee meeting, such committee meeting shall be rescheduled after consultation with the Committee Chair.

The Clerk will advertise any meeting date changes caused by this policy.

Council reserves the right to dispense with or alter the time, day or place of any meeting by resolution.

### **(f) NOTICE REQUIREMENTS**

#### **i. Notice to Members of Council and Staff**

The Clerk will give notice of all Council and Committee meetings to members of Council and to all Department Heads. The notice will be accompanied by an agenda and any other matter to be addressed at the meeting.

The Clerk will send the notice by delivery, by facsimile, by electronic mail to the residence or place of business of each member or by posting the agenda to AgendaNotes. Generally members will receive notice at least three days before the day of meeting. However failure to receive the notice will not affect the meeting itself, including the timing of or any actions taken there at.

**ii. Notice to the Public**

The Clerk shall give notice to the public of all regular meetings of Council by posting a schedule of meeting dates on the Township's official web site at the beginning of each calendar year. The agenda shall be posted on the Friday preceding the date of the Council meeting.

The Clerk shall give notice to the public of all special meetings of Council by posting a notice on the Township's website as soon as possible after the date of the special meeting has been confirmed.

**(g) SPECIAL MEETINGS** - A special meeting may be called under the following circumstances:

- The Mayor may at any time summon a special meeting.
- Upon receipt of a petition of the majority of the members of Council, the Clerk shall call a special meeting for the purpose and at the time mentioned in the petition. Notice may be given by telephone, e-mail or facsimile transmission or posting to AgendaNotes.

If there is no by-law or petition fixing the place of a special meeting, that meeting shall be held at the place where the last regular meeting was held.

**(h) CLOSED SESSION**

Notwithstanding Section 2.6, as per Subsection 239(2) of the Municipal Act, 2001, as amended, a meeting or part of a meeting may be closed to the public if the subject matter being considered is:

- a) the security of property of the municipality
- b) personal matters about an identifiable individual, including municipal employees
- c) a proposed or pending acquisition or disposition of land by the municipality;
- d) labour relations or employee negotiations
- e) litigation or potential litigation including matters before administrative tribunals effecting the municipality
- f) advice that is subject to solicitor client privilege including communications necessary for that purpose;
- g) a matter in respect of which a council, board, committee or other body has authorized a meeting to be closed under another Act; or
- h) if the meeting is held for the purpose of educating or training the members: and at the meeting, no member discusses or otherwise deals with any matter in a way that materially advances the business or decision-making of the council, local board or committee;

A meeting shall be closed to the public if the subject matter relates to the consideration of a request under the Municipal Freedom of Information and Protection of Privacy Act if the Council is the head of the institution for the purposes of the Act.

Prior to holding a meeting or part of a meeting that is to be closed to the public, Council shall state by resolution the fact that a closed meeting is being held and the general nature of the matter to be considered at the closed meeting.

A meeting may only be closed to the public during a vote, if:

- the subject matter is as defined above; and
- the vote is for a procedural matter or for giving directions or instructions to officers, employees or agents of the municipality or persons retained by or under contract with the municipality

<b>PROCEDURAL RULES</b> <b>Meetings</b>	2.2 Page 3 of 3
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- i. All information, documentation or deliberations received, reviewed or taken into a closed meeting is confidential.
- ii. The response of Members to enquiries about any matter dealt with by Council or a Committee of Council at a closed meeting, prior to it being reported publicly, shall be “no comment”, or words to that effect. No member shall release or make public any information considered at a closed meeting or discuss the content of such a meeting with persons other than members of Council or relevant senior staff members included in the Closed Session.
- iii. Any violation of this regulation may result in exclusion of the offending Member from future closed meetings of Council or a Committee of Council and that Member no longer being provided with correspondence, material or information proposed to be dealt with by Council at a closed meeting.
- iv. The determination of whether or not a violation of the closed meeting provision of this By-law and the length of the exclusion from closed meetings if so determined, shall be made by Council, and Council in Closed Session shall consider the issue. Prior to this determination by Council, the offending Member shall have the allegation explained to him/her, and he/she shall have the opportunity to provide his/her explanation regarding the matter. The results of Council’s deliberations shall be reported publicly.
- v. Despite clause (iv), the Member affected shall not be permitted to vote on a motion respecting his/her purported violation of the closed meeting provision of the procedural by-law, his or her exclusion from closed meetings, or the length of any such exclusion.
- vi. The release of any information about any matters dealt with by Council at a closed meeting shall be by the Mayor or his delegate only. Once the Mayor or his delegate has released the information, it shall be considered to be public information and a Member may discuss the matter without being considered to be in violation of this By-law.
- vii. Agendas, minutes or any items thereon for consideration by Council at a closed meeting shall not be released to the public.

**(i) COMMITTEE OF THE WHOLE COUNCIL**

Committee of the Whole Council meetings will be held on the 2<sup>nd</sup>, 4<sup>th</sup> and 5<sup>th</sup> Tuesdays of each month, if required, except during July and August, and shall follow similar rules of procedure as Regular Meetings of Council, except that discussions may be less formal. As appropriate direction provided to staff will be incorporated into reports and will be brought forward for formal approval at Council. Resolutions adopted by Committee of the Whole shall NOT be binding on Council.

Committee of the Whole meetings of Council shall be open to the public except as otherwise provided by The Municipal Act. (See Section 2.2(g)).

The first Committee of the Whole each month shall generally be focused on planning issues and the second Committee of the Whole shall be focused on public services issues. Other organizational issues will be brought forward as needed. Given the timing of some issues, planning and public services issues may need to be intermixed on the agenda.

<b>PROCEDURAL RULES</b> <b>Agenda</b>	2.3 Page 1 of 2
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**2.3 AGENDAS**

- (a) **REGULAR MEETINGS** - The Clerk will prepare an agenda for the use of members at regular meetings. The Agenda shall be posted in the Municipal Building, Sydenham and delivered to each member of Council by mail, facsimile transmission, e-mail or by posting to AgendaNotes not less than two days (48 hours) prior to the meeting date.

The Clerk will attach copies of all relevant correspondence to the agenda package for Council information.

All items of business for the agenda will be received by the Clerk by 12:00 noon on the Thursday prior to the meeting date.

The business of each meeting follows the order in which it stands on the agenda. The agenda for a meeting may only be amended at that meeting by a motion supported by a majority of the members present. Any undisposed matters will be placed on the agenda for the next meeting.

NOTE: When a "Closed Session" meeting is required, Council will convene at 6:00 p.m., proceed into closed session and then reconvene at 7:00 p.m. in open session.

**COUNCIL Agenda:**

- 1) Call to Order.
- 2) Declaration of pecuniary interest and the general nature thereof
- 3) **Scheduled** Closed Session
- 4) Recess
- 5) Public Meeting
- 6) Approval of Minutes
- 7) Business Arising
- 8) Reports Requiring Action
- 9) Committee Meeting Minutes
- 10) By-laws
- 11) Reports for Information
- 12) Information Items
- 13) Notice of Motions
- 14) Announcements
- 15) **Closed Session (if requested)**
- 16) Confirmatory By-law
- 17) Adjournment.

**COMMITTEE OF THE WHOLE Agenda:**

- 1) Call to Order.
- 2) Declaration of pecuniary interest and the general nature thereof
- 3) **Scheduled** Closed Session
- 4) Recess
- 5) Delegations
- 6) Reports Requiring Direction
- 7) Reports for Information
- 8) Rise and Report from Committees of Council (rotating basis)
- 9) Information Items
- 10) Notice of Motions
- 11) Announcements
- 12) **Closed Session (if requested)**
- 13) Adjournment.

During July and August a blended meeting agenda will be used incorporating both delegations and public meetings.

- (b) **DELEGATIONS** – Delegations will be received by Council when sitting as Committee of the Whole only. Delegations will be limited to a maximum ten minute presentation, unless otherwise approved by Council, and are considered in the following order:
- 1) Those persons Council has requested or commissioned to appear (e.g. representatives of senior government, consultants).
  - 2) Citizens, organizations or their representatives who have notified the Clerk in writing of their desire to appear before the appropriate Committee no later than 12 o'clock noon on the Thursday prior to the meeting date.
  - 3) Those persons not included on the agenda but who have requested and been granted permission by Council to address the meeting.

All delegations must provide a written summary of their presentation to the Clerk prior to 12:00 noon on the Thursday prior to the Committee meeting at which they will be appearing.

All Delegates will be encouraged by the Clerk to resolve concerns with the appropriate department head, prior to seeking delegation status.

Only topics which have come before Council or are scheduled to appear on Council's agenda are to be scheduled for delegate status.

Unrelated topics require the delegate to be sponsored by a member of Council, prior to being scheduled. Members of Council may sponsor a delegation by emailing the clerk requesting that the individual / group be given delegate status.



## **2.4 QUORUM, PRESIDING OFFICER**

(a) **REGULAR MEETINGS** - As soon as there is a quorum after the hour fixed for the meeting, the Presiding Officer will assume the role as Chair and call the members to order. The Clerk will then take note of attendance.

(b) **TIME LIMIT** - The time limit for a quorum is 30 minutes after the time appointed for the meeting. If no quorum is present after 30 minutes, the Council or Committee will stand adjourned until the next regular day of meeting or until a special meeting is called. The special meeting will deal with the matters intended to be addressed at the adjourned meeting. The Clerk will record the names of the members present at the expiration of the time limit and append this record to the next agenda.

(c) **PRESIDING OFFICER** - The Presiding Officer shall oversee the conduct of the meeting including:

- Call the meeting to order
- Introduce the items listed on the Agenda in the order presented unless otherwise determined by Council
- Call on the CAO or Department Head to address staff reports
- Call on the Clerk to read the motion or by-law as requested by the Presiding Officer
- Designate the Council Member or Staff Member as to who has the floor to speak
- To put to a vote all questions which are properly moved and seconded and after full discussion has been provided, and announce the results of the vote
- Ensure the preservation of good order and decorum
- Ruling on points of order and privilege
- Deciding all questions relating to the orderly procedure of the meeting subject to an appeal by any member of Council from any ruling of the Presiding Officer

The Presiding Officer may expel any person for improper conduct at a meeting.

The Presiding Officer may state his or her position on any matter before Council following the discussion of Council but before a matter is put to a vote. This will not require the Presiding Officer to relinquish the chair.

The Presiding Officer will vacate the chair prior to making a motion or serving a notice of motion. If making a motion, the presiding officer shall remain out of the chair during the debate and vote on the subject.

**2.5 CONDUCT OF COUNCIL MEMBERS**

(a) **SPEAKING** - Each member must be recognized by the Presiding Officer before speaking on any matter or motion. A member may not speak more than once on a matter without leave of the Presiding Officer, except:

- 1) In explanation of a material part of the speech which may have been misunderstood; or
- 2) In reply after everyone else wishing to speak has spoken

Generally no member may speak to the same matter or in reply for longer than 5 minutes.

Through the Presiding Officer, a member may ask for an explanation of any part of the previous speaker's remarks. A member may also, through the Presiding Officer, ask questions to obtain information relating to the report or minutes presented to Council or any clause contained therein. However this must be done prior to the commencement of the debate on the report, minute or clause.

Following the reading of a motion and during debate, all questions to staff are to be addressed through the Presiding Officer.

(b) **CONDUCT** - Members shall not:

- 1) Speak disrespectfully of the Reigning Sovereign, any member of the Royal Family, the Governor-General or a Lieutenant-Governor;
- 2) Use offensive words or unparliamentary language in Council;
- 3) Disobey the rules of the Council or decision of the Presiding Officer or of Council on questions of order or practice;
- 4) Leave his or her seat or make any noise or disturbance while a vote is being taken and the result is declared;
- 5) Enter the Council Chamber while a vote is being taken;
- 6) Interrupt a member while speaking, except to raise a point of order;
- 7) Pass between a member who is speaking and the Chair.

(c) **DECLARATIONS OF CONFLICT OF INTEREST**

Members shall at all times conduct themselves in accordance with the requirements of the Municipal Conflict of Interest Act, Chapter M50, Revised Statutes of Ontario 1990, including any subsequent amendments, revisions and regulations thereto.

All declarations and disclosures made in accordance with the Act shall be made by the member in accordance with the Act.

If, after making such a declaration, the member determines that he/she does not have a Conflict of Interest, then a public statement to that effect shall be made by the member. Such public statement may be in the same form and substance as the original declaration.

<b>PROCEDURAL RULES</b> <b>Conduct of Council Members</b>	2.5 Page 2 of 2
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**d) DISCIPLINARY ACTION**

It is not the intention of discipline in a meeting to punish a member but to change the behaviour of the member. If a member commits a breach of conduct, the escalation of remedies is as follows:

- 1) The Presiding Officer requests that the member refrain from breaking the rules and specifies the infraction or rule being broken.
- 2) If this fails, the Presiding Officer provides a sterner warning by calling the member to order.
- 3) If, after this instruction, the member continues with the action or refuses to be seated the Presiding Officer may, if the breach of conduct is serious enough, request that the offending member to apologize or failing an apology to be expelled from the meeting.

If expulsion from the meeting is ordered, the Presiding Officer may establish and appoint individuals to escort the member from the meeting room. If the member refuses to leave, the appropriate civil authorities should be called.

**e) EARLY DEPARTURE FROM MEETINGS**

A member who wishes to leave a meeting prior to the adjournment must so advise the Presiding Officer. The recording officer will note the member's time of departure.

**f) NOTICE OF ABSENCE FROM MEETING**

If a member can not be in attendance at a meeting, they should notify the Clerk or the Executive Secretary of their absence at their earliest opportunity.

<b>PROCEDURAL RULES</b> <b>Motions</b>	2.6 Page 1 of 3
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## **2.6 MOTIONS**

**(a) NOTICE OF MOTION** - The Clerk may receive a notice of motion at any time during a Council meeting. However they will become part of the agenda for the subsequent Council meeting unless otherwise approved by Council. A notice of motion requires a seconder only at the time of debate.

If a motion is not moved and seconded on the day and at the meeting for which notice was given, it cannot be moved at any subsequent meeting without notice being given on the agenda for that meeting.

**(b) GENERAL** - Every motion, once presented to the Presiding Officer, becomes the property of Council. The presiding officer may call on the Clerk to read the motion. A member can withdraw a motion only when the consent of the majority of Council is present. Motions shall be debated in the order of presentation to the Presiding Officer.

Any member may request that the Clerk read the motion under discussion at any time during the debate, except when another member is speaking.

Any member may request separation of a motion. Each section of the motion will be voted on separately.

When a matter is under debate, no motions can be made other than a motion:

- To refer / defer
- To amend
- To adjourn the meeting
- To vote on the matter

**(c) REFER/DEFER** - A motion to refer or defer takes precedence over any motion or amendment, except a motion to adjourn. A motion to refer requires direction as to the body to which it is being referred. A motion to defer must include a reason for deferral. Neither motion is debatable.

**(d) VOTING** - When a member makes a motion that the vote now be taken, it shall be put to a vote without debate. If a majority of the members agree to put a motion to a vote, the motion and any amendments thereto will be submitted to a vote immediately without further notice.

No members may speak or present another motion once the Presiding Officer commences the vote on that motion. Each member present at a Council meeting will vote when the vote is taken on a matter, unless prohibited from so doing by statute. Any member who is present but refuses to vote or abstains to vote, their vote will be deemed to be a vote in the negative.

A recorded vote on a motion before Council may be requested at any time by any Council member before the vote is taken or after the vote has been taken unless Council has commenced discussion on a new matter on the agenda.

When a member requests a recorded vote, all members will vote in the following order when polled by the Clerk in alphabetical order and Mayor. The Clerk will note the names of those who voted for and against in the minutes, and will announce the results.

If a member disagrees with the results of the vote, he or she may object to the declaration and ask that the Clerk retake the vote. An objection to any resolution shall not be recorded unless a recorded vote is requested.

**PROCEDURAL RULES**  
**Motions**

2.6  
Page 2 of 3

**(e) AMENDMENT** - A member may present only one amendment to the main motion at a time. Another amendment may be introduced only after the previous one has been disposed of. In the case of an amendment, the amendment to the motion may not be withdrawn or defeated until the amendment to the amendment has been dealt with.

**(f) NEW MATTER** - A member may not introduce a new matter without notice, unless Council without debate dispenses with the notice requirements by two-thirds vote.

**(g) RECONSIDERATION**

- i) A member who voted with the prevailing side may move for reconsideration at the **same meeting** as follows:

If the motion to reconsider receives a seconder, the motion for reconsideration shall be open to debate and voted upon. The motion will require the votes of two thirds of members present to pass.

If adopted, the motion to reconsider temporarily nullifies the previous decision. The main motion originally voted on is again pending. The motion may now be amended or considered as moved and voted upon.

Example:

1. Original Motion → Vote
2. Motion to Reconsider → Vote
3. Reconsideration of main motion (it may now be amended)→ Vote

- ii) If a member who voted on the prevailing side presents a motion for reconsideration at a **subsequent meeting**, the motion must be preceded by a notice of motion. At the subsequent meeting, the motion to reconsider follows the same process, as noted above. It will require a two thirds majority vote of the members present to carry.

Example:	Meeting #1 →	Vote on original motion
	Meeting #2 →	Notice of Motion to be received
	Meeting #3 →	Motion to Reconsider to be voted on
	Meeting #3 →	Matter for Reconsideration to be voted on

No matter may be reconsidered more than once in a twelve-month period.

A notice of motion for reconsideration will not stop or delay action on the decided matter unless Council agrees otherwise. In this case, Council must approve the injunction by a two-thirds majority vote of the members present.

If Council approves a motion to reconsider, the reconsideration will become the next order of business, unless the motion calls for a future definite date. Debate on the matter shall proceed as though it had not been previously voted upon. The debate must be confined to reasons for or against reconsideration only.

**(h) ADJOURNMENT** - A motion to adjourn a meeting will be in order except:

- ◆ When a member is in possession of the floor.
- ◆ When it has been decided that the vote now be taken.
- ◆ During the taking of a vote.
- ◆ If determined in the negative the vote shall not be taken again until some intermediate proceedings have been taken by Council

<b>PROCEDURAL RULES</b> <b>Motions</b>	2.6 Page 3 of 3
---	--------------------

Members may not leave their places on adjournment until the Presiding Officer vacates the role as Chair.

Council will adjourn at 10:00 p.m. if in session at that hour, unless determined otherwise by a majority vote of the members present.

**(i) BYLAWS** - The agenda may contain a summary of the contents of each by-law. If a majority of Council requests, the Clerk will read the by-law in its entirety.

All by-laws must be passed in meetings that are open to the public.

A Confirmatory By-law, to confirm the proceedings of Council during the meeting, will be placed before Council each meeting.

**(j) SUSPENSION OF THE RULES** – Any Member may request that the rules of procedure be temporarily suspended. An example of a motion to suspend the rules would be to extend the meeting past 10:00 p.m.

**(k) ULTRA VIRES** – No motion shall be put on a matter which is Ultra Vires the jurisdiction of Council

**(l) CHANGES TO COUNCIL COMPOSITION** - Where Council wishes to consider changes to the composition of council:

1. 5 votes shall be required to support the change,
2. At least one Councillor from each district shall support the change,
3. There shall be widespread consultation with voters before any proposal is adopted including at least one public meeting in advance of day of the meeting where the resolution is decided. Normal municipal procedures for public notice shall apply.

## **2.7 COMMITTEES**

(a) **SPECIAL PURPOSE COMMITTEES** - Council may from time to time appoint, by resolution, special purpose or “Ad Hoc” committees with Terms of Reference as set out in the appointment resolution.

(b) **EXTERNAL COMMITTEES/BOARDS** – Council may from time to time appoint, by resolution, individuals to external committees or boards. The term of office for community members shall be two terms, the length of which will be decided by Council. Terms are to be staggered such that there is always a productive mix of experienced and new volunteer members.

(c) **COMMITTEE CHAIR** - Each Committee at its first meeting in the year will elect a Committee Chair and Committee Vice-Chair from its members. The Committee Chair may be removed only by a vote of a majority of the Committee. The Chair shall only serve a maximum of two years.

The Committee will also at the first meeting arrange its own schedule of meetings.

(d) **QUORUM** - A quorum shall be a majority of those appointed to a Committee by Council. A majority is more than half of the total number of those appointed to the Committee (Bourinet’s Rules of Order).

(e) **COMMENCEMENT OF MEETINGS** - If a Committee Chair or Committee Vice-Chair is not present within fifteen minutes from the time of the opening of the Committee meeting, the members present will elect another member of the Committee to preside. That member will discharge the duties of the Presiding Officer for that meeting, or until the arrival of the Committee Chair or Vice-Chair.

(f) **RULES** - The rules governing the procedure of Council will be observed in all Committees, except that the number of times speaking on a question will not be limited.

(g) **VOTING** - The Mayor or his/her designate will be an ex-officio member of all Committees of Council. Further the Mayor or designate will have the same rights and privileges as any other Committee member and may constitute part of the quorum.

Any member, including the Committee Chair, may propose or second a motion. When the Committee Chair proposes a motion, he or she must vacate the chair to the Acting Chair of the Committee during the debate on the motion and resume the chair following the vote. All members will vote on all motions except when disqualified by reasons of interest or otherwise. A tie vote at the Committee level shall be considered lost.

(h) **DUTIES** - The Committee may report to Council any Committee member who refuses or neglects to attend a meeting. Council may then remove that member from the Committee and appoint another member in his/her place.

Council may discharge from responsibility any Committee, which refuses or neglects to give due consideration to any matter before it. Council may then allot such responsibility to another Committee.

All Committees are subject to the control and direction of Council.

Each Committee must submit to Council reports including minutes and recommendations on all matters connected with their duties.



## STAFF REPORT CLERKS DEPARTMENT

**PREPARED FOR COUNCIL:**     **May 7, 2015**

**AGENDA DATE:**               **May 12, 2015**

**SUBJECT:**

Support for Solar projects under the FIT program

**RECOMMENDATION:**

That Council ask staff to bring forward for adoption a blanket resolution in support of FIT Version4.0 Projects.

**BACKGROUND:**

Recently Council has had a number of delegations from Sun Edison on proposed large renewable projects for solar power generation. Currently a public open house is being scheduled to address two specific proposals. The Independent Electricity System Operator (IESO) has released an RFP for such projects that closes in September. Following all input and if a community benefit agreement can be reached Council will be asked to endorse the proposals which will in turn provide “points” towards the evaluation of the Sun Edison bid by the IESO

Concurrent to this, the IESO is anticipated to release another RFP for what is referred to as FIT Version4.0 projects which are smaller scale solar power generation projects that produce less than 500 kW. These projects may be ground mounted or roof top based. These types of projects are smaller than the solar farm projects that have been proposed by Sun Edison to date, but are larger than the small household roof top systems provided under the micro FIT program.

In November 2013 Council approved a blanket Support Resolution that supported in principle solar power projects within the Township pursuant to the FIT Version3.0 rules. This blanket approval was valid for projects applied for during a one year period.

Sun Edison has written to Mayor and Council (see attached) in advance of the FIT Version4.0 offering being finalized to ask for Council’s consideration of either project specific resolutions or a blanket resolution. Sun Edison has stated that their hope is that Council will provide project specific resolutions. They believe that this will offer “more accountability and protection for both your municipality and the project applicant in your community”. A copy of the DRAFT Blanket Resolution is attached for reference. The wording of the resolution is not subject to modification.

Sun Edison has put forward 9 projects for consideration. Another firm has called seeking direction on how they would be placed on Council’s agenda for consideration of their proposed projects.

Council has recently adopted its Strategic Plan including a commitment to a number of guiding principles. Specifically Council is committed to conducting business in a fair and consistent manner as well as helping to address climate change by improving energy efficiency and supporting renewal energy production. Staff interprets these commitments as supportive of FIT Version4.0 projects and a blanket resolution. This would allow all applicants for a FIT Version4.0 contract access to a blanket support resolution that would provide “points” towards the evaluation of the project by the IESO.





## STAFF REPORT CLERKS DEPARTMENT

### **ATTACHMENTS:**

- Letter from Sun Edison
- DRAFT Blanket Resolution

**Submitted/approved by:**  
**Wayne Orr**



April 14, 2015

Mayor Ron Vandewal and Members of Council  
Township of South Frontenac  
P.O. Box 100, Sydenham, Ontario  
Canada, K0H 2T0

Dear Mayor Vandewal and Members of Council:

**Re: SunEdison Request for Municipal Resolution**

We are writing to you to request a municipal resolution of support for proposed small ground mount (under 500 kW) solar projects in your municipality. SunEdison is developing nine small ground mounted solar projects in Township of South Frontenac and is seeking support from your council.

The locations of the projects are:

- **Location #1: 3358 Murton Road, South Frontenac, Ontario, K0H 1V0**
- **Location #2: 3385 Wilton Road, Harrowsmith, Ontario, K0H 1V0**
- **Location #3: 3833 Stage Coach Road, South Frontenac, Ontario, K0H 2T0**
- **Location #4: 3206 Railton Road, South Frontenac, Ontario, K0H 1V0**
- **Location #5: 2496 Rutledge Road, Loughborough, Ontario, K0H 2T0**
- **Location #6: 3321 Amey Road, South Frontenac, Ontario, K0H 1V0**
- **Location #7: 3348 Murton Road, South Frontenac, Ontario, K0H 1V0**
- **Location #8: LOUGHBOROUGH CON 5 PT LOT 1 AND RP 13R3698 PART 4 SOUTH FRONTENAC TOWNSHIP**
- **Location #9: 3254 Harrowsmith Road, South Frontenac, Ontario, K0H 1V0**

Under the new FIT rules, applications are prioritized based on a point system, and points are awarded if municipal council support is obtained. SunEdison will be submitting applications to the upcoming 240 MW FIT program, and would like to include your council's resolutions as part of our application. A council resolution will be given two (2) points in the new Prioritization Table (see Appendix A).

Each project is 500kW in size and will deliver meaningful benefits to each landowner. In addition, local jobs will be available during construction and operation of the plant. Local businesses, restaurants and supply houses often benefit while these type of project are under construction and during operation.

It is estimated that up to 20 jobs will be created during the construction phase of these projects, which will last approximately six (6) months. Furthermore, during the operation



period, SunEdison will require that the sites be maintained and serviced regularly, thereby, generating local employment.

Other benefits of solar are many including, but not limited to, the following:

- Complimentary to any existing agricultural or other land use.
  - A typical 500 kW project occupies 5% of a 100 acre property.
  - A landowner can continue to use the land for agricultural purposes.
  - Furthermore, these projects will occupy the least productive portion of a property.
- Small projects mean very small impact on local grids.
- Distributed generation eases grid congestion.
- Property assessments will be based on “industrial” use rather than agricultural uses --resulting in increased property tax revenue for local municipalities.

Details on our proposed projects is provided in Appendix B.

The Independent Electricity System Operator (IESO) has provided two options for passing a municipal council resolution; a blanket resolution or a project specific resolution (prescribed forms will be made available shortly). Although we will respect whatever decision you may make, our hope is that you will consider a project specific resolution. This approach will offer more accountability and protection for both your municipality and the project applicant in your community

The window for submitting applications is expected to open soon. It is our goal to commence discussions with you and council prior to the window opening.

Should you have any questions or concerns, please do not hesitate to contact myself or Ruby Latif for further information. Please let us know if we can provide further information or meet in person, at your convenience, to discuss our projects and your municipality.

Sincerely,

Utilia Amaral  
 Director, Managing Director, Strategic Affairs (Canada)  
 416 802 8041  
[uamaral@sunedison.com](mailto:uamaral@sunedison.com)

Enclosure: (22 pages)



## **About SunEdison**

SunEdison is a global provider of solar-energy services. As the largest solar energy company in North America, we develop, finance, install, operate, monitor and maintain solar developments around the world. SunEdison is a leading provider of silicon wafers to the semiconductor and solar industries as a result, SunEdison has a global perspective in the solar industry.

Beginning in 2007, SunEdison made significant investments in Ontario due to Ontario's market potential and the provincial government's dedication to renewable energy. SunEdison Canada now employs 40 people in Ontario, and is focused on developing and delivering solar energy throughout all of Ontario.

To date, SunEdison has created more than 1,000 full- time and part time jobs in Ontario and has invested significantly in the manufacturing of green energy products. In addition, SunEdison reached commercial operation on Ontario's first FIT contracted utility-scale solar project in Ingleside, Ontario in 2011. As of December 2014, SunEdison has interconnected over 260 MW in Ontario.

Most recently, SunEdison was recipient of the "Developer of the Year", Game Changer 2015 Awards.



### Appendix A – OPA Point System

Applications are ranked based on a point system. Points are awarded according to the table below.

#### Application Prioritization Table

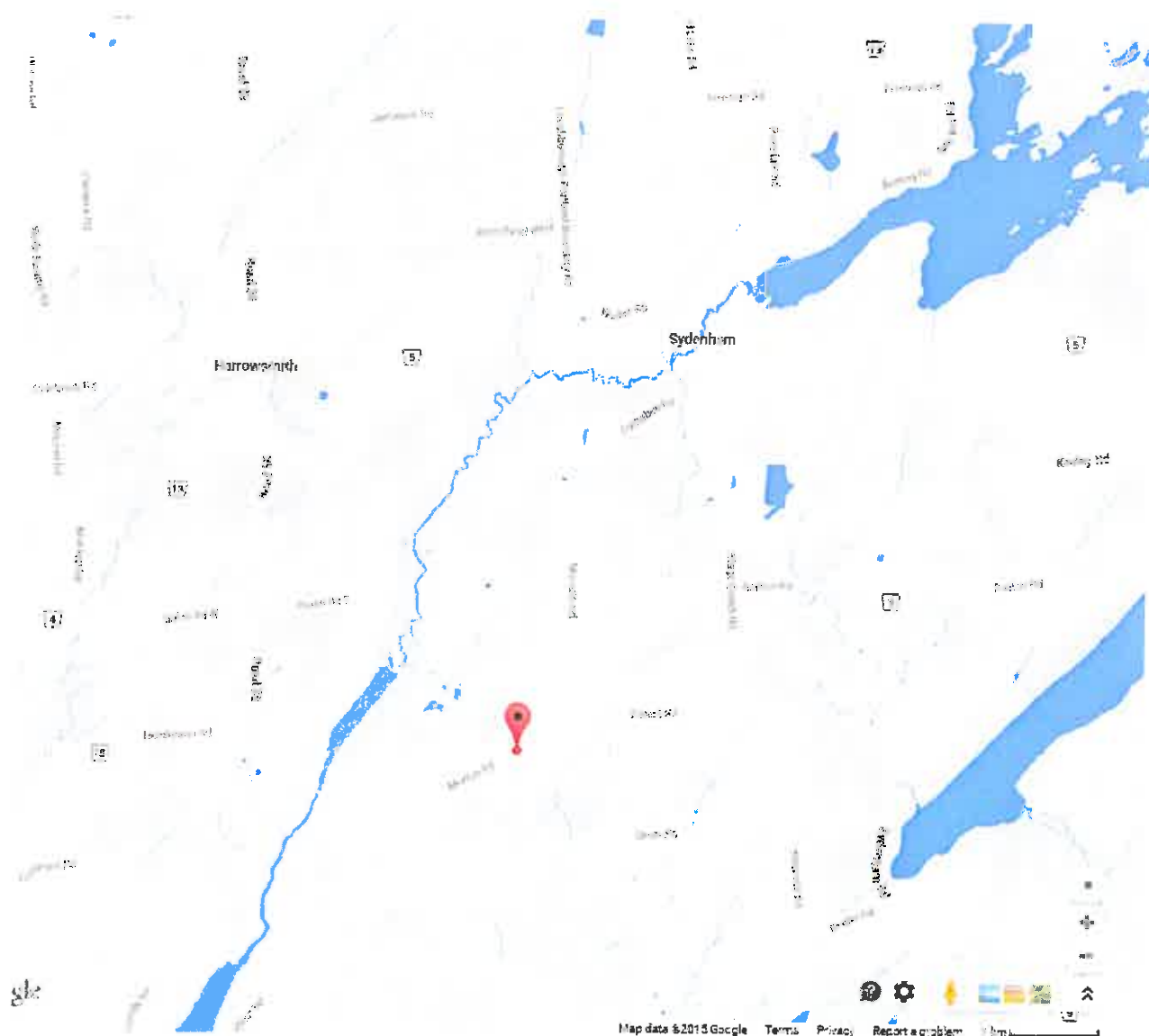
<b>Contract Price Reduction Priority Points</b>	<b>Priority Points</b>
Base Price	0
First Tier Reduced Price	1
Second Tier Reduced Price	2
Third Tier Reduced Price	3
<b>Additional Points</b>	
Local Municipal Council Support Resolution	2
Aboriginal Community Support Resolution	2
Municipal or Public Sector Entity Site Host	1
Aboriginal Community Site Host	1



## Appendix B – Project Details

### Project Information:

- SunEdison Project Number: ON-14-0045
- Property Owner: Francesco Esposito
- **Location #1: 3358 Murton Road, South Frontenac, Ontario, K0H 1V0**
- Lot/Concession: Lot 2 Concession 1
- Connection Point Voltage (KV): 44.4
- Project Contract Capacity in Kilowatts (AC): 500





- Legend**
- Building Location
  - Utility Line
  - Adjacent Parcel Fabric
  - Subject Property Limits
  - Proposed Solar Facility  
\* approx 7 ac.
  - Watercourse

**General Notes**

Not a legal survey.  
This map is for illustrative and reference purposes only.  
Dimensions are approximate.

Proposed site will be subject to future studies such as  
- Environmental Impact Study  
- Municipal Consultation  
- Soil Classification Study

Studies may result in alternate location on site for facility  
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**Schedule B  
Sketch of Landlord's  
Land & Premises**

PIN: 361330215      Owner: ESPOSITO

Address:  
3358 MURTON RD

471 Denbigh Ave Suite 305  
Toronto, Ontario  
Canada M4J 1L3  
(416) 410-7588  
www.4dm-inc.com

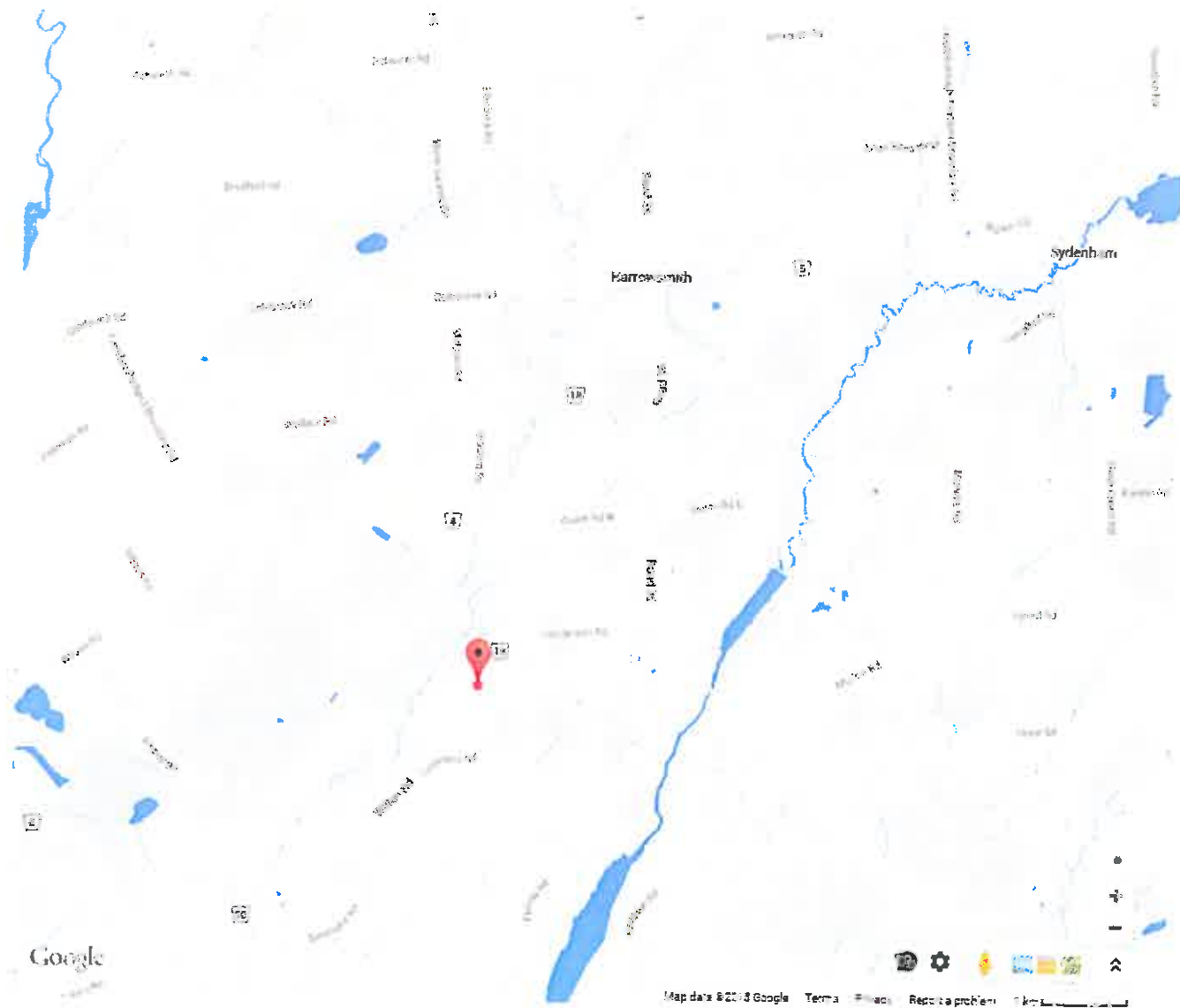
Date	May 20, 2014	City/Prov	MG
Scale	1:5,000	Checked by	RL
Position	UTM Zone 18N	North American 1983	
Station	North American 1983		

Drawing No. CR88 2 SunEdison Farm-06 20140520 v01.rvt





- SunEdison Project Number: ON-14-0058
- Property Owner: David Martin Groenewegen
- **Location #2: 3385 Wilton Road, Harrowsmith, Ontario, K0H 1V0**
- Lot/Concession: Lot 10 Concession 1
- Connection Point Voltage (KV): 44.4
- Project Contract Capacity in Kilowatts (AC): 500







**Legend**

- Building Location
- Utility Line
- Adjacent Lot Fabric
- Proposed Solar Facility  
\* approx. 7 ac
- Watercourse

**General Notes**

Not a legal survey  
This map is for illustrative and reference purposes only  
Dimensions are approximate.

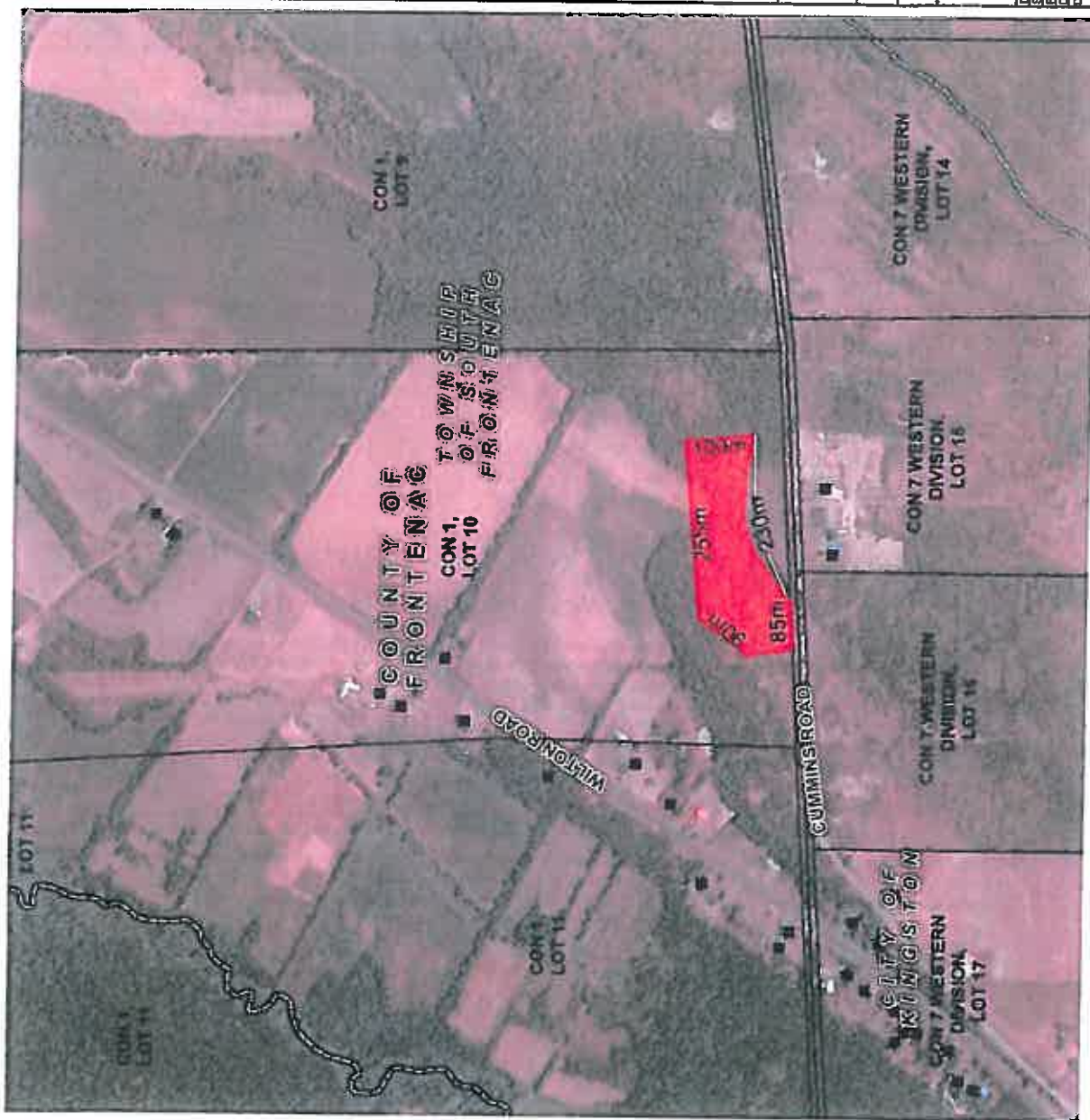
Proposed site will be subject to future studies such as  
- Environmental Impact Study  
- Municipal Consultation  
- Soil Classification Study

Studies may result in alternate location on site for facility  
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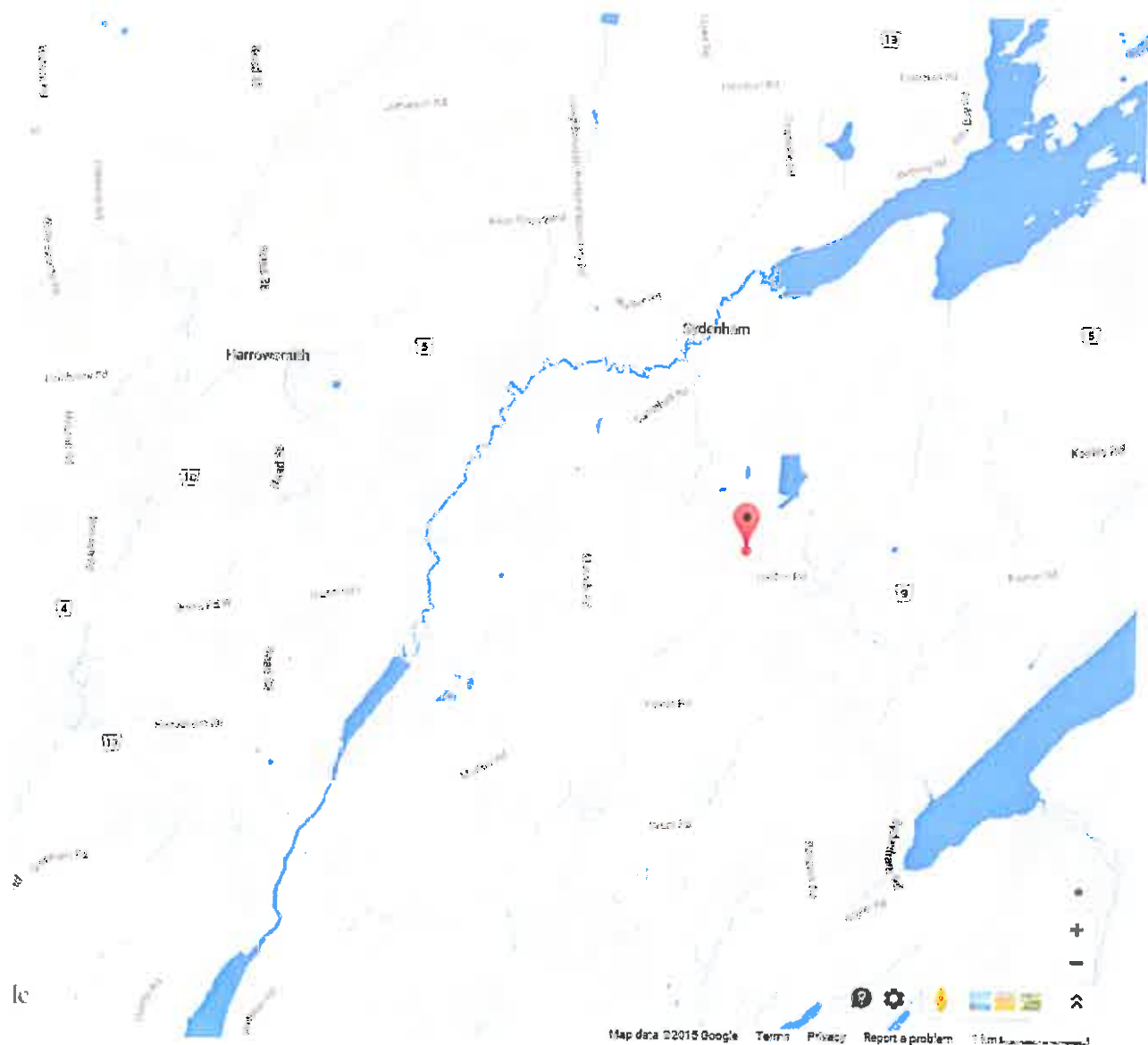
**Schedule B  
Sketch of Landlord's  
Land & Premises**

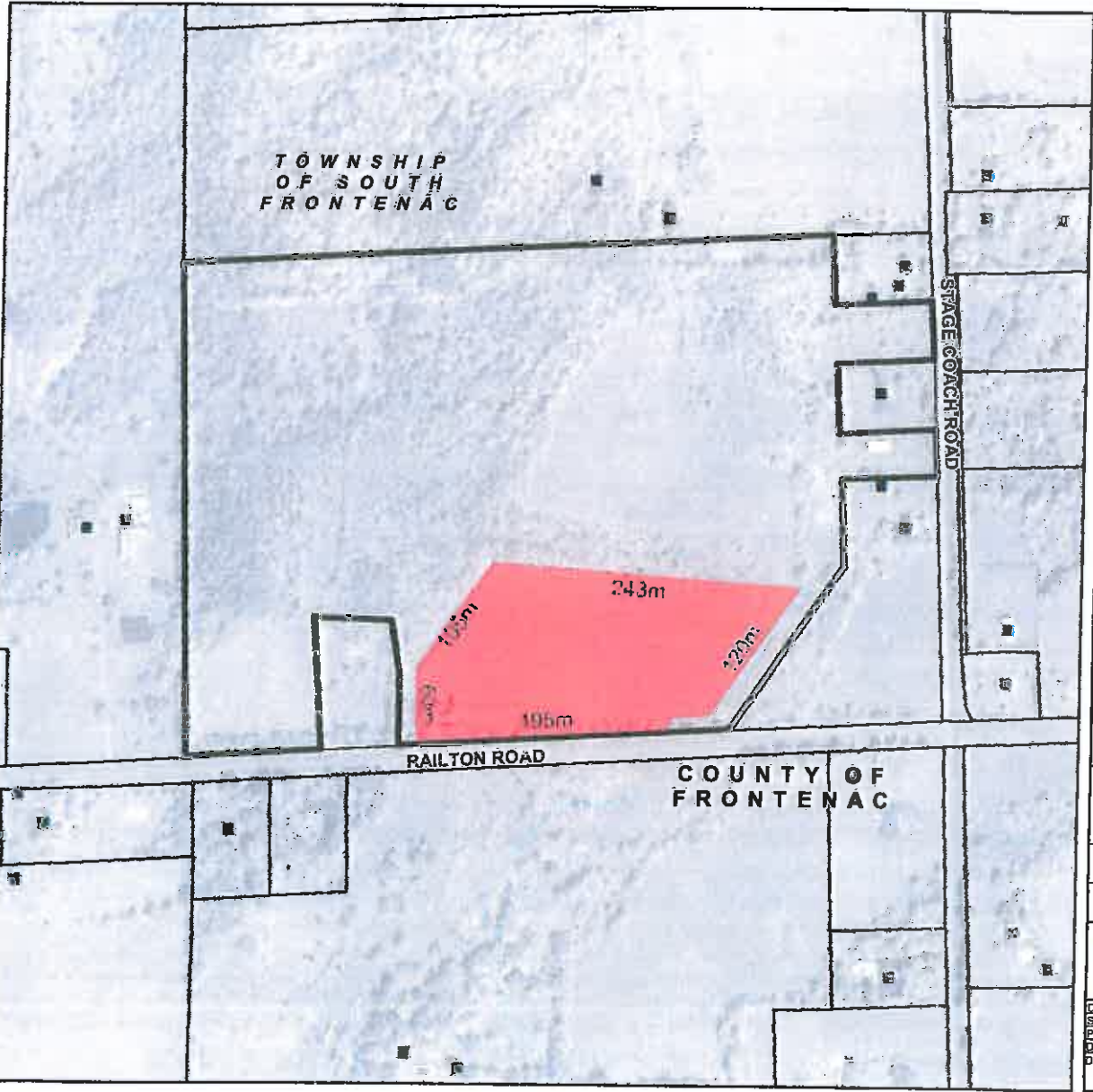
PIN:	Owner: GROENEWEGEN
Address: CUMMINS RD	
871 Dundas Ave. Suite 325 Toronto, Ontario Canada M4J 1L3 (416) 410-7589 www.gcm-ero.com	
Date:	Created by:
June 11, 2014	MG
Scale:	Checked by:
1:5,000	EK
Projection: UTM Zone 18N	
Datum: North American 1983	
Drawing No	





- SunEdison Project Number: ON-14-0063
- Property Owner: Theodore Henry Walter Buelow
- **Location #3: 3833 Stage Coach Road, South Frontenac, Ontario, K0H 2T0**
- Lot/Concession: Lot 3 Concession 3
- Connection Point Voltage (KV): 44
- Project Contract Capacity in Kilowatts (AC): 500





**Legend**

- Building Location
- Utility Line
- ⊕ Adjacent Parcel Fabric
- ⊕ Subject Property Limits
- ⊕ Proposed Solar Facility  
\* approx. 7 ac.
- Watercourse

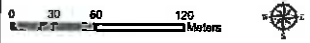
**General Notes**

Not a legal survey.  
This map is for illustrative and reference purposes only.  
Dimensions are approximate.

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- Municipal Consultation  
- Soil Classification Study

Studies may result in alternate location on site for facility

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**Schedule B  
Sketch of Landlord's  
Land & Premises**

PIN: 362760182      Owner: BUELOW

Address:  
3815 STAGE COACH RD

871 Danforth Ave., Suite 305  
Toronto, Ontario  
Canada M4J 1L3  
(416) 479-7589  
www.4dm-inc.com

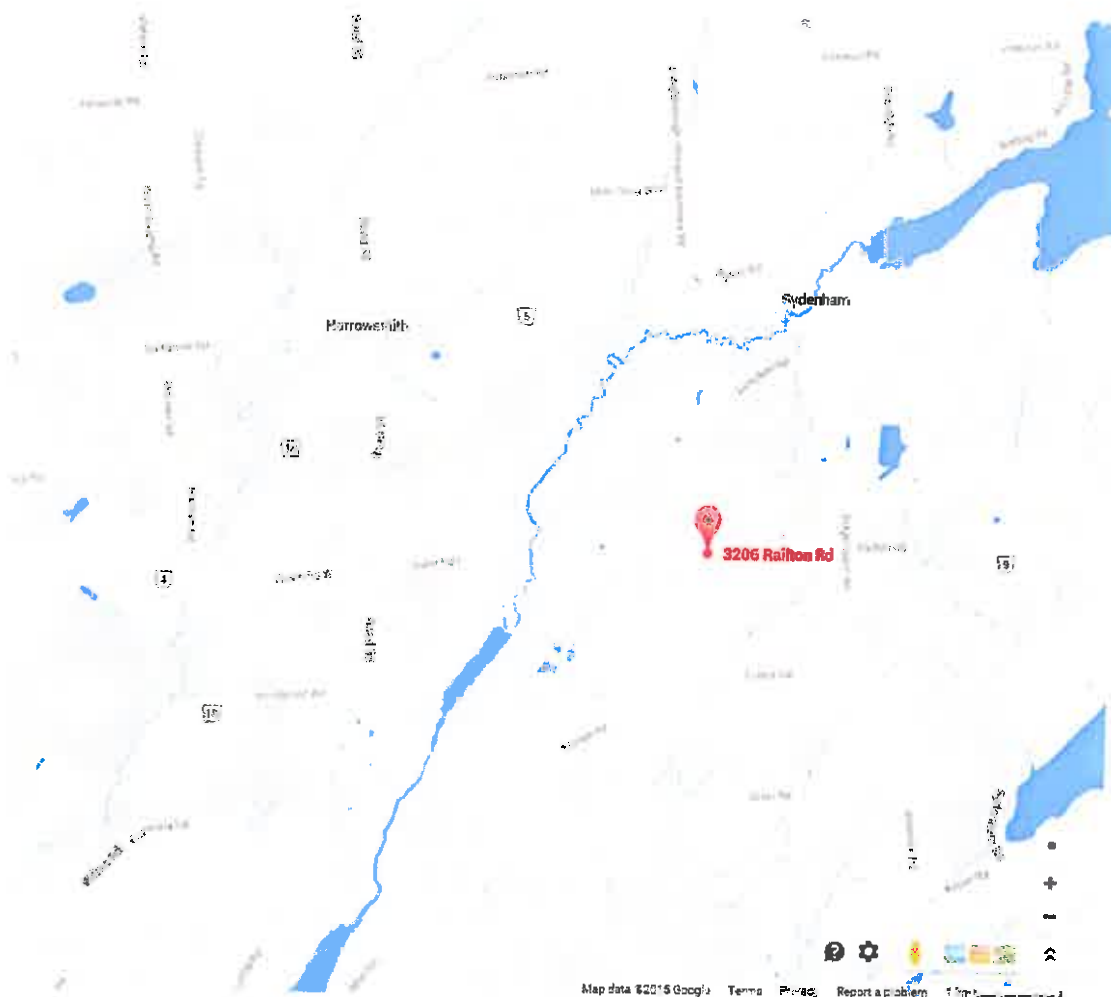
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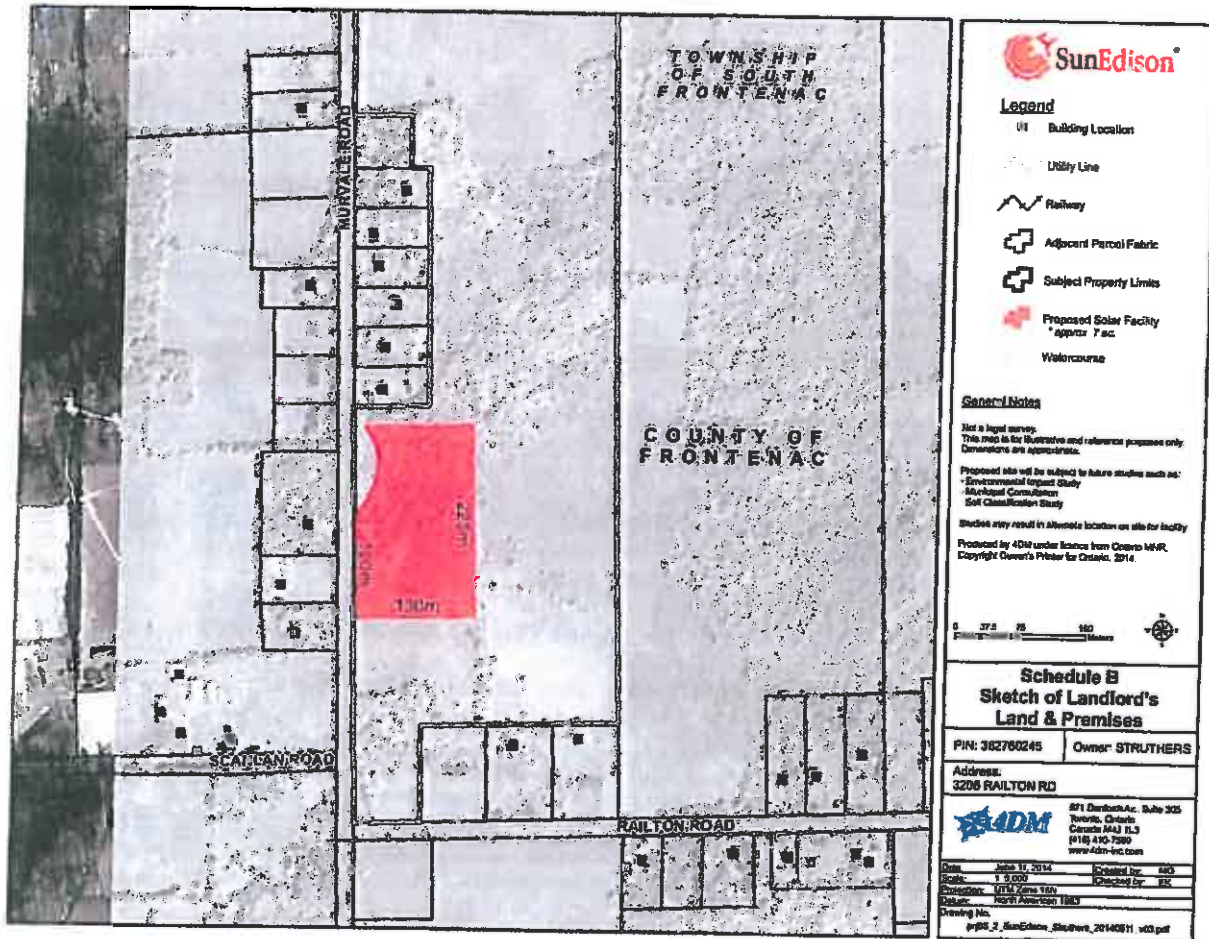
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Datum:	North American 1983

Drawing No.  
pr88\_2\_SunEdison\_Buelow\_20140527\_v02.pdf



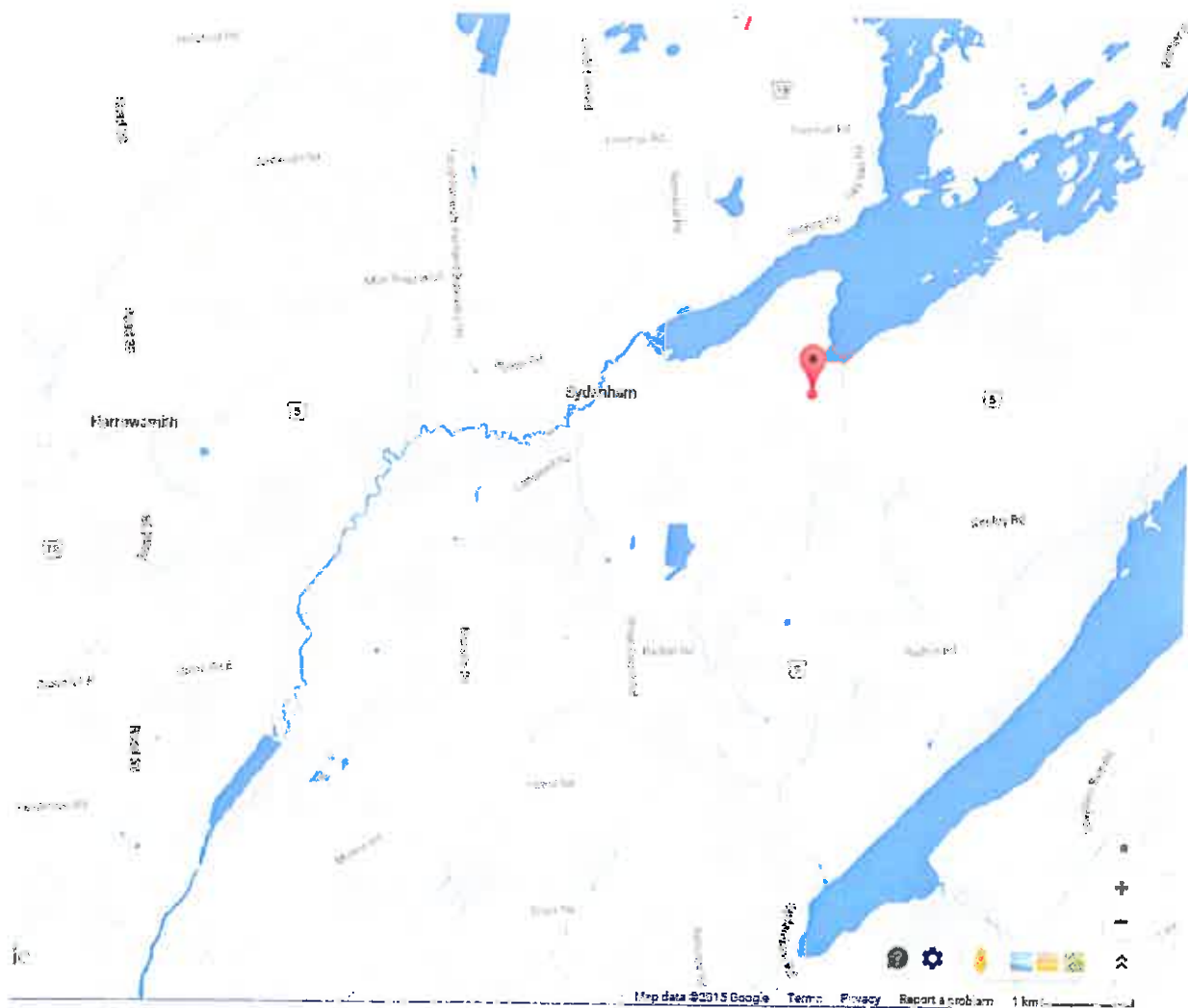
- SunEdison Project Number: ON-14-0094
- Property Owner: Ronald Struthers
- **Location #4: 3206 Railton Road, South Frontenac, Ontario, K0H 1V0**
- Lot/Concession: Lot 1 Concession 3
- Connection Point Voltage (KV): 44
- Project Contract Capacity in Kilowatts (AC): 500

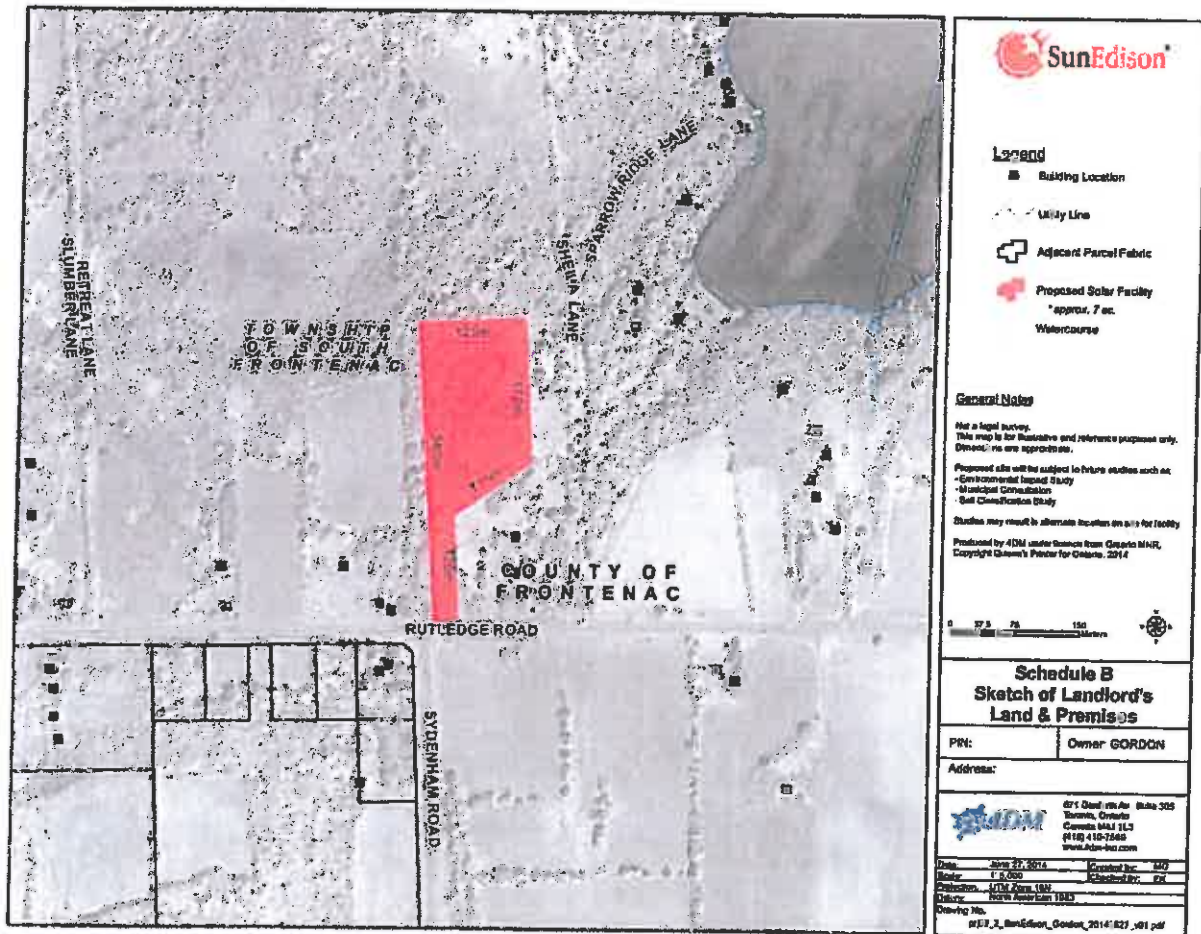






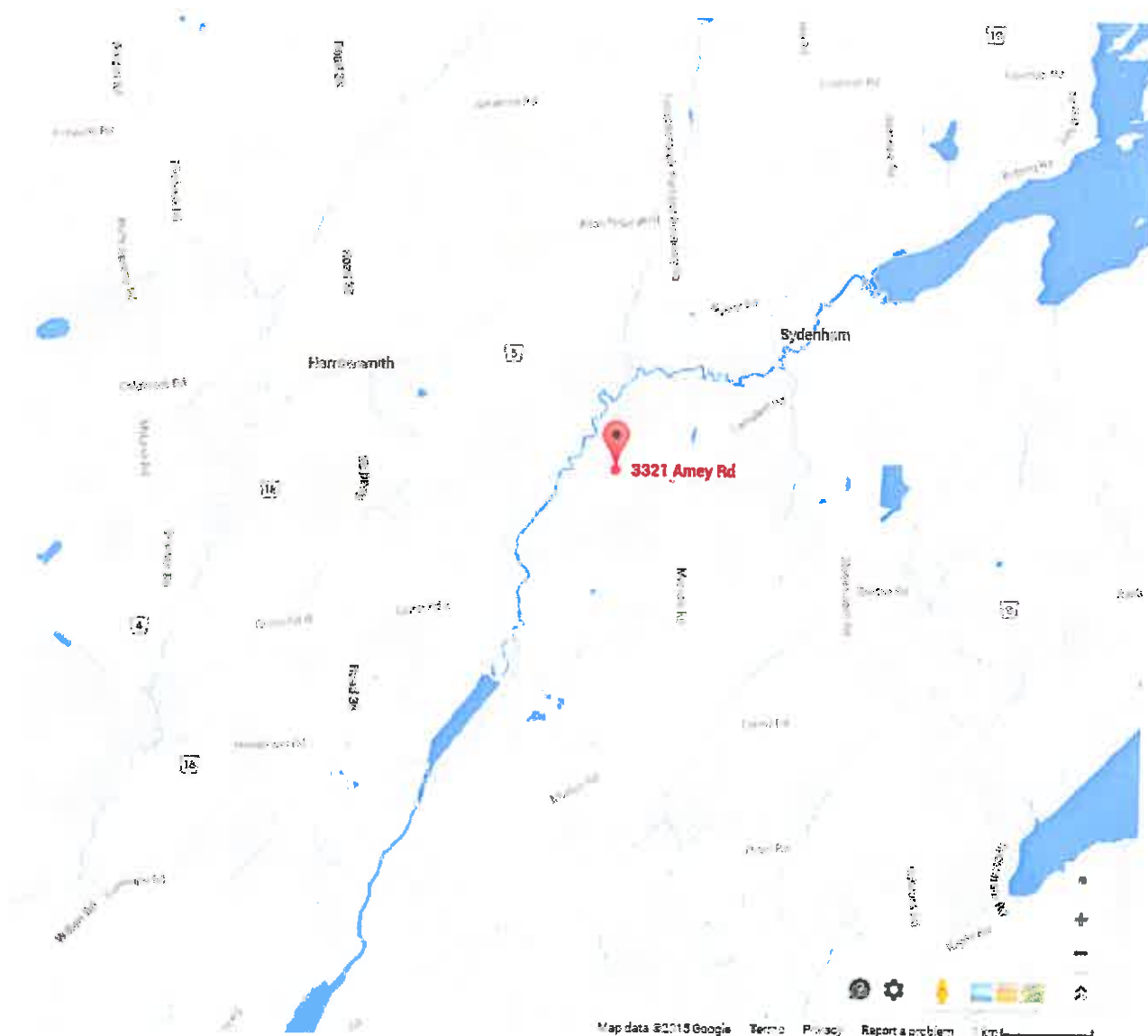
- SunEdison Project Number: ON-14-0107
- Property Owner: Sally Lorraine Gordon
- **Location #5: 2496 Rutiedge Road, Loughborough, Ontario, K0H 2T0**
- Lot/Concession: Lot 7 Concession 5
- Connection Point Voltage (KV): 44
- Project Contract Capacity in Kilowatts (AC): 500







- SunEdison Project Number: ON-14-0118
- Property Owner: James Jardine & Cherilyn Jardine
- **Location #6: 3321 Amey Road, South Frontenac, Ontario, K0H 1V0**
- Lot/Concession: Lot 1-2 Concession 3
- Connection Point Voltage (KV): 44
- Project Contract Capacity in Kilowatts (AC): 500







**Legend**

■ Building Location

— Utility Line

⊕ Adjacent Parcel Fabric

⊕ Subject Property Limits

⊕ Proposed Solar Facility  
\* approx. 7 ac.

⊕ Watercourse

**General Notes**

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Dimensions are approximate.

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- Municipal Consultation  
- Soil Classification Study

Studies may result in alternate location on site for facility  
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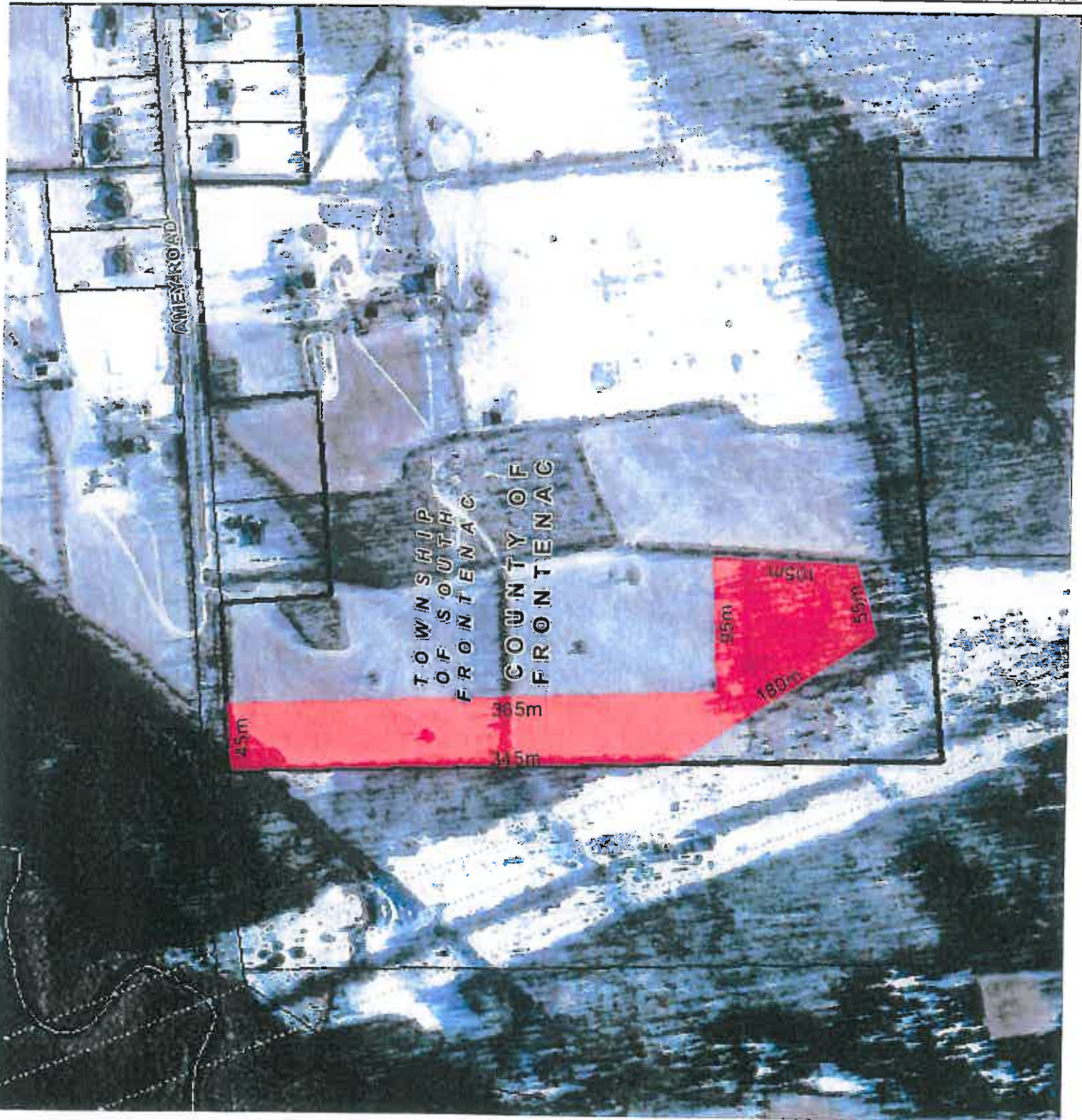
**Schedule B  
Sketch of Landlord's  
Land & Premises**

PIN: 361400212      Owner: JARDINE  
Address:  
3321 AMEY ROAD

671 Danforth Av., Suite 300  
Toronto, Ontario  
Canada M4J 1L3  
(416) 410-7556  
[www.4dm-inc.com](http://www.4dm-inc.com)

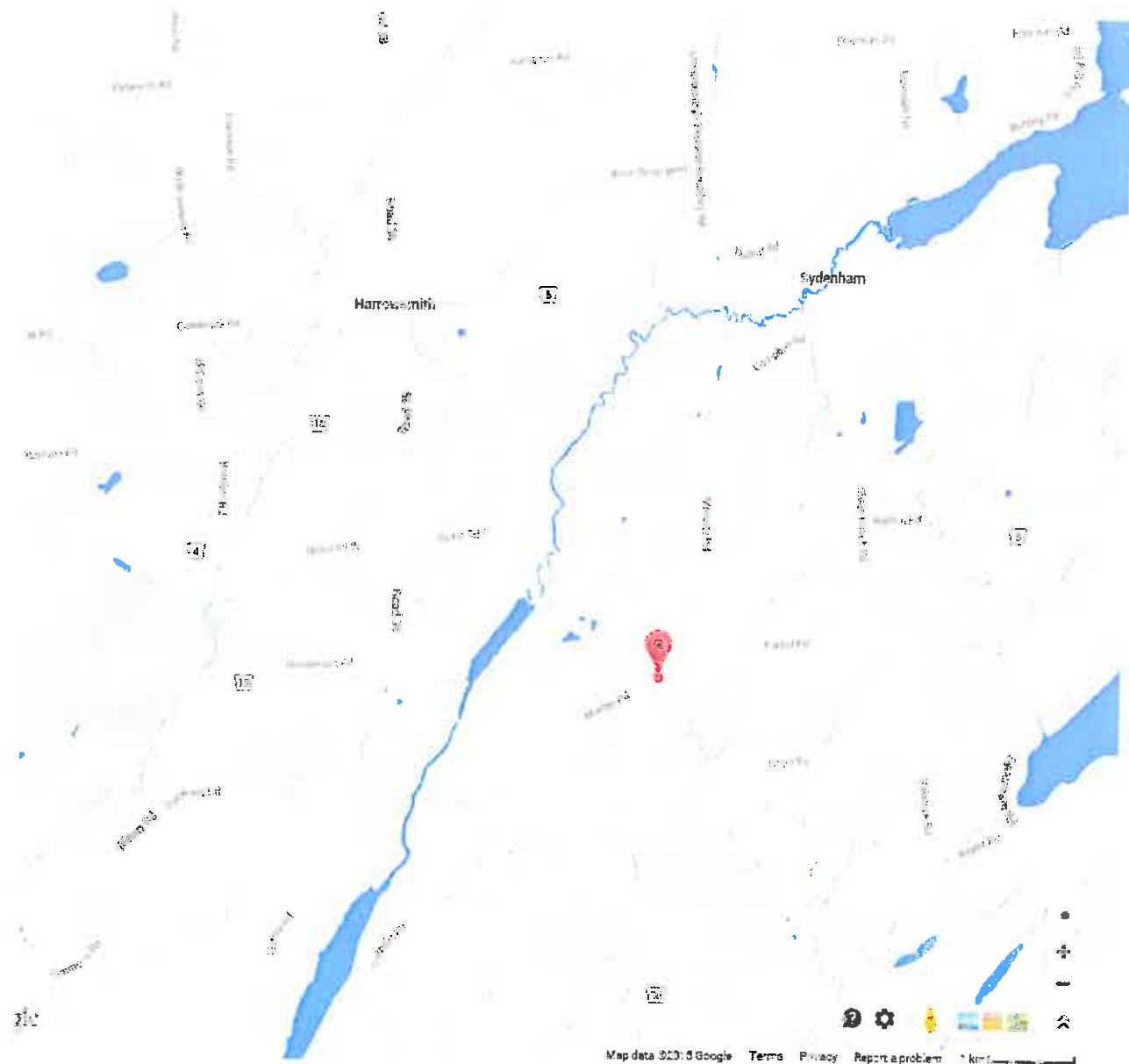
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Projection: UTM Zone 18N  
Datum: North American 1983

Drawing No.





- SunEdison Project Number: ON-14-0138
- Property Owner: Ruth Arlene Ward, Lisa Gow & Thomas Conrad Gow
- **Location #7: 3348 Murton Road, South Frontenac, Ontario, K0H 1V0**
- Lot/Concession: Lot 2 Concession 1
- Connection Point Voltage (KV): 44
- Project Contract Capacity in Kilowatts (AC): 500





**Legend**

Building Location

Utility Line

Adjacent Parcel Fabric

Subject Property Limits

Proposed Solar Facility  
\* approx. 7 ac.

Watercourse

**General Notes**

Not a legal survey.  
This map is for illustrative and reference purposes only.  
Dimensions are approximate.

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- Municipal Consultation  
- Soil Classification Study

Studies may result in alternate location on site for facility  
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**Schedule B  
Sketch of Landlord's  
Land & Premises**

PIN: 361400218

Owner: WARD

Address:

3348 MURTON ROAD



671 Danforth Av., Suite 2005  
Toronto, Ontario  
Canada M4J 1L3  
(416) 410-7569  
www.4dm-inc.com

Drawn:	May 30, 2014	Created by:	AK
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Datum:	North American 1983		
Drawing No.			

FELLOWS ROAD

75m 150m 380m 57m

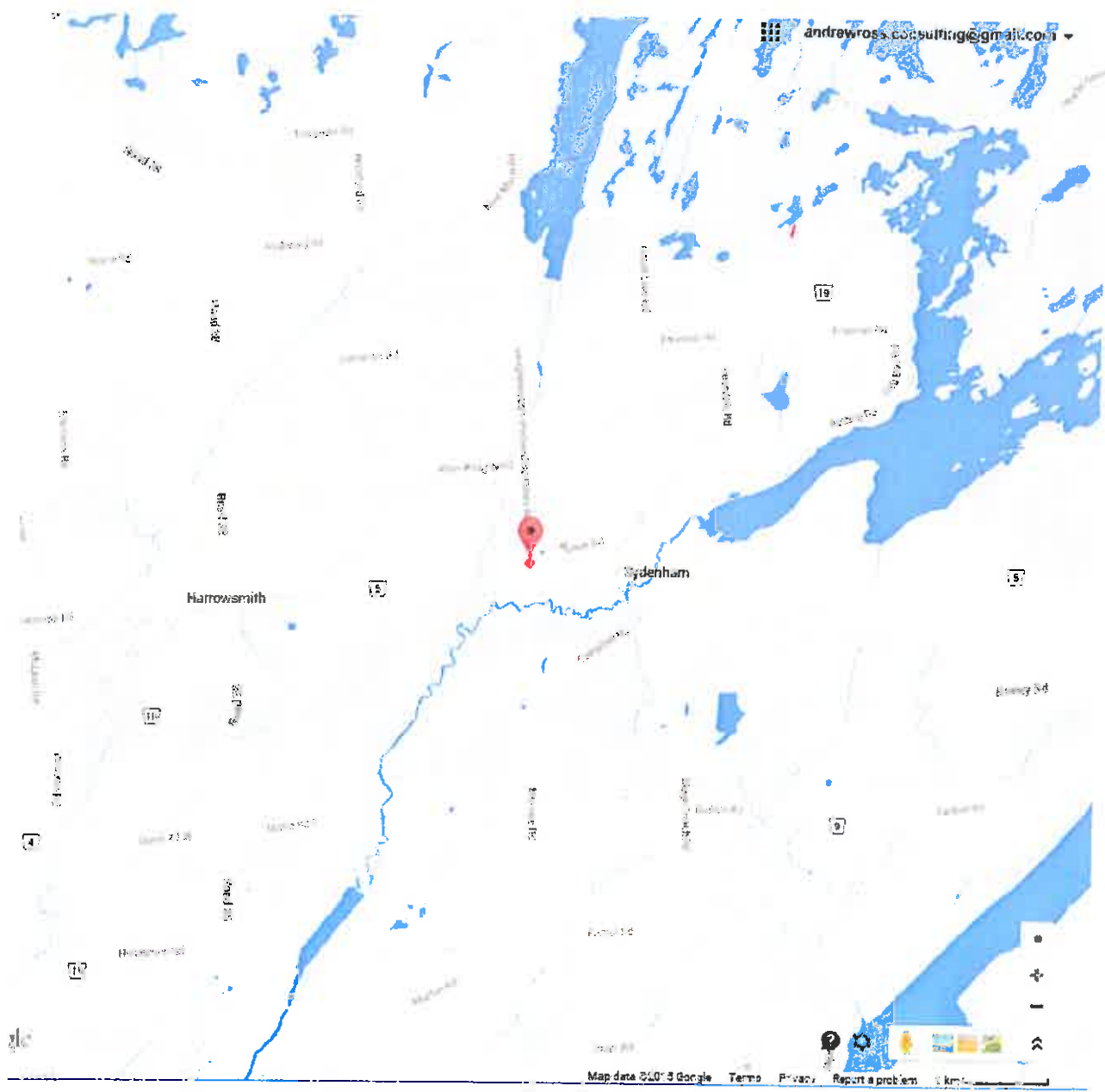
TOWNSHIP  
OF SOUTH  
FRONTENAC

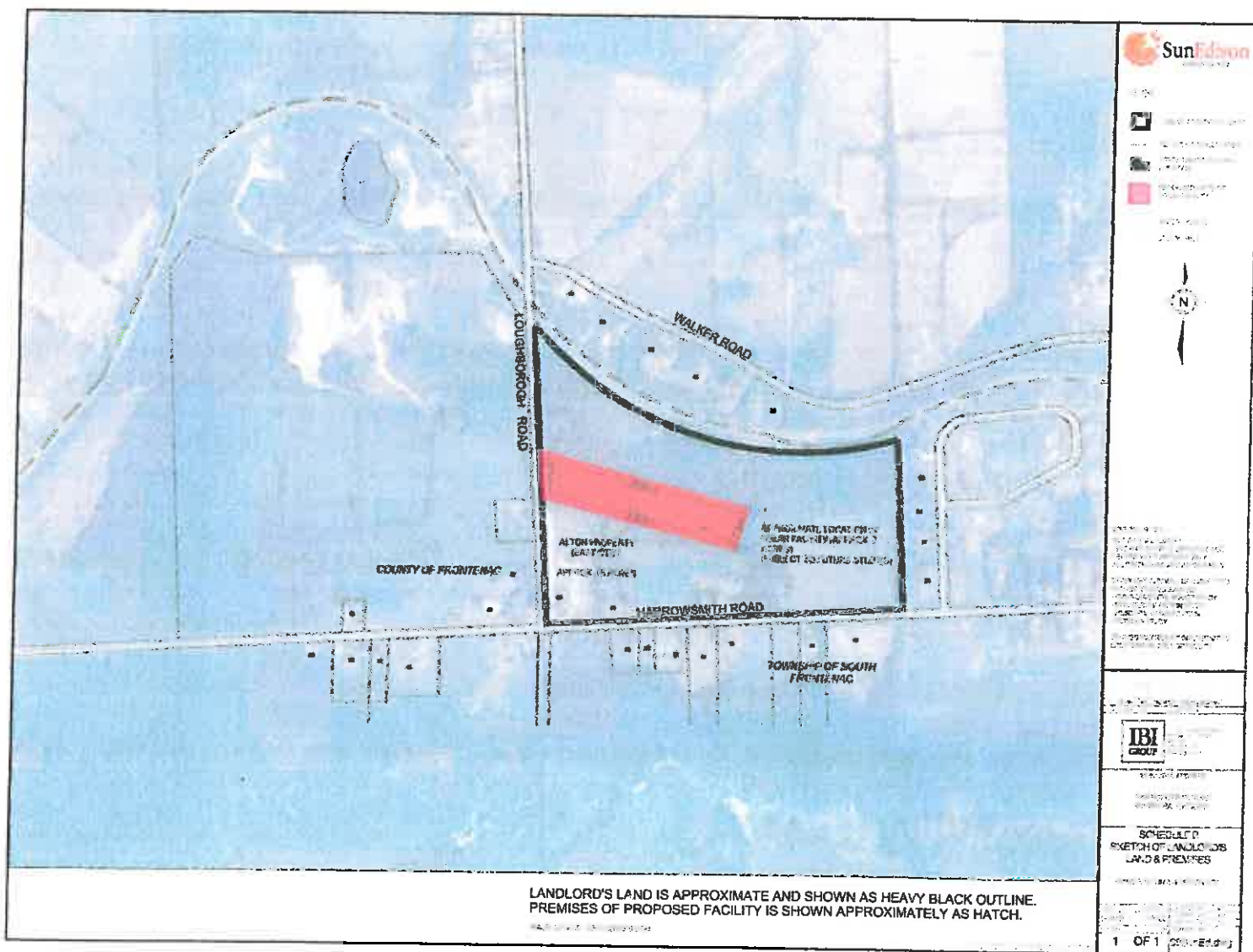
COUNTY OF  
FRONTENAC

MURTON ROAD



- SunEdison Project Number: ON-14-0139
- Property Owner: Mark Rayne Alton & Sharon L.D. Alton
- **Location #8: LOUGHBOROUGH CON 5 PT LOT 1 AND RP 13R3698 PART 4 SOUTH FRONTENAC TOWNSHIP**
- Lot/Concession: Lot 1 Concession 5
- Connection Point Voltage (KV): 44
- Project Contract Capacity in Kilowatts (AC): 500

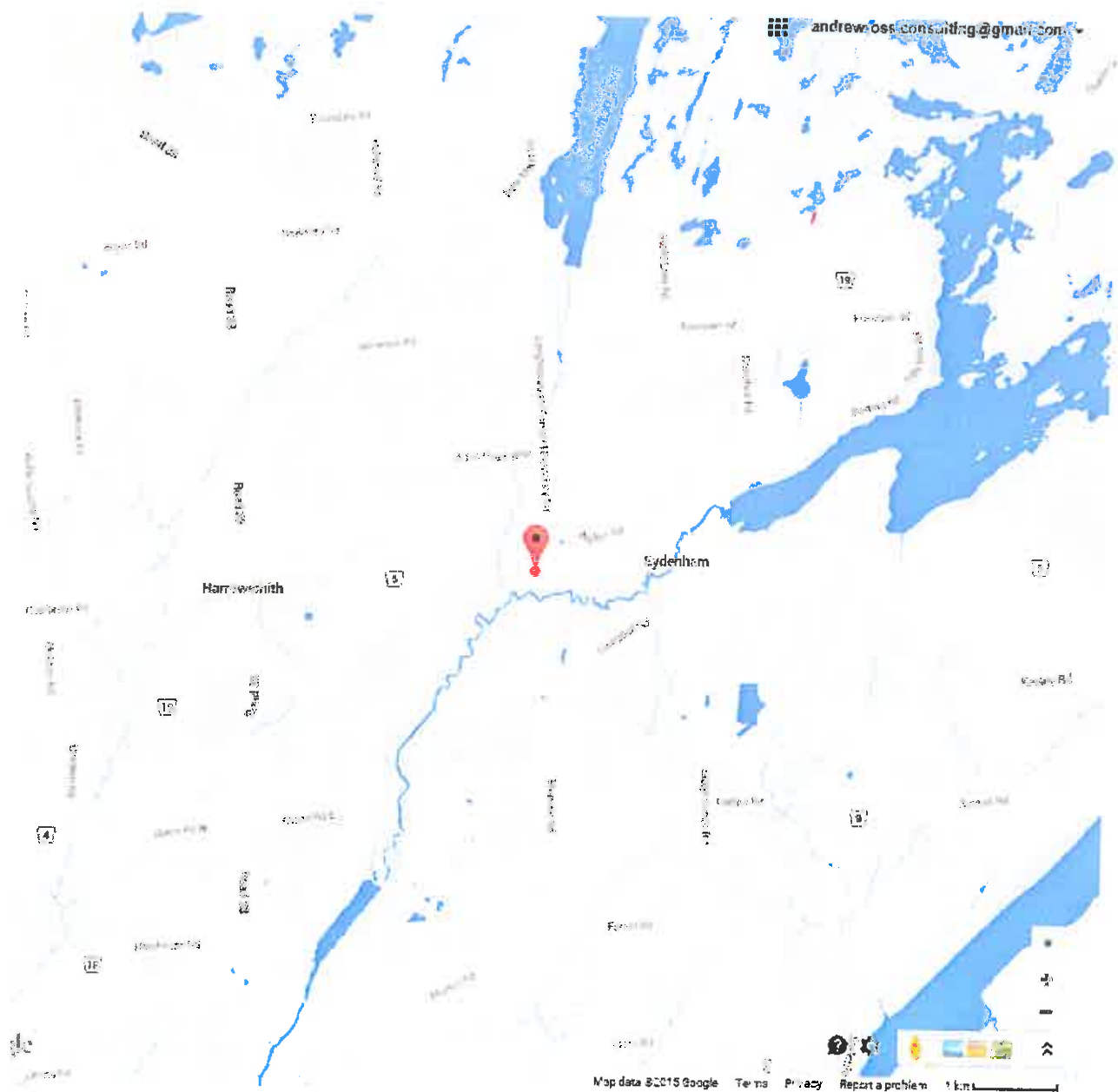




LANDLORD'S LAND IS APPROXIMATE AND SHOWN AS HEAVY BLACK OUTLINE.  
PREMISES OF PROPOSED FACILITY IS SHOWN APPROXIMATELY AS HATCH.



- SunEdison Project Number: ON-14-0140
- Property Owner: Mark Rayne Alton & Sharon L.D. Alton
- **Location #9: 3254 Harrowsmith Road, South Frontenac, Ontario, K0H 1V0**
- Lot/Concession: Lot 1 Concession 5
- Connection Point Voltage (KV): 44
- Project Contract Capacity in Kilowatts (AC): 500





## INSTRUCTIONS: MUNICIPAL COUNCIL BLANKET SUPPORT RESOLUTION

Section 5.1(g)(i) of the FIT Rules, Version 4.0

Page i of i | Jan 2015 | IESOMRD/f-FIT-011r1

Capitalized terms not herein defined have the meanings ascribed to them in the FIT Rules, Version 4.0.

### INSTRUCTIONS APPLICABLE TO ALL RESOLUTIONS

1. The instruction page is not required to be submitted with the hard copy Application materials.
2. The first page of the resolution must be marked, by the Applicant, with the FIT Reference Number associated with the Application.
3. Where the resolution has multiple pages, the resolution should be stapled.
4. Information provided in the resolution must be consistent with the information provided in the electronic Application Form in order for the Application to be awarded Priority Points.
5. Apart from the completion of any blanks in the template resolution, no amendments, other than those outlined in paragraph 6 below, may be made to the wording of this form.
6. Words in between square brackets (i.e. “[” and “]”) are immaterial to the intent of the template resolution and may be modified to follow standard procedure of the issuing body. Wording not contained within square brackets must not be changed in order for the Application to be awarded Priority Points.
7. The entirety of the resolution (all blanks) must be completed and it must be signed by an appropriate individual(s) in order for the Application to be awarded Priority Points, and all Prescribed Forms must be signed to be considered complete.

### INSTRUCTIONS SPECIFIC TO THE RESOLUTION

8. Local municipal councils have the option of drafting the Template: Municipal Council Blanket Support Resolution on the Council or equivalent governing body letterhead. The language of the Template: Municipal Council Blanket Support Resolution must be the same as shown in the template in order for the Applicant to obtain Priority Points. Priority Points will not be awarded if the blanket support resolution includes additional conditions or delegation of authority to staff for additional approvals.
9. The separate Prescribed Form: Municipal Council Support Resolution Confirmation may be completed and included in the Application by an Applicant that had received a FIT Rules, Version 3.0 Municipal Council Support Resolution (that was not a blanket support resolution) that was issued by the Municipality and that is still in effect in relation to the Applicant and the Project. The Prescribed Form: Municipal Council Support Resolution Confirmation may not be used as a substitute for a Municipal Council Support Resolution where no Municipal Council Support Resolution was previously issued for the Project previously.
10. Where no resolution number exists, insert "N/A" into the appropriate field.



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**TEMPLATE: MUNICIPAL COUNCIL BLANKET SUPPORT RESOLUTION**

Section 5.1(g)(i) of the FIT Rules, Version 4.0

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<p><b>1</b></p> <p>Resolution number: _____</p> <p>Date resolution was passed: _____</p>	<p>FIT Reference Number: _____</p> <p><i>(The FIT Reference Number must be inserted by the Applicant in order for the resolution to comply with the FIT Rules, even where Local Municipality letterhead is used. This is not to be inserted by the Local Municipality.)</i></p>
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<b>2</b>	<p><b>[WHEREAS]</b> capitalized terms not defined herein have the meanings ascribed to them in the FIT Rules, Version 4.0.</p> <p><b>[AND WHEREAS]</b> the Province's FIT Program encourages the construction and operation of _____ generation projects (the "Projects");</p> <p><b>[AND WHEREAS]</b> one or more Projects may be constructed and operated in _____ ;</p> <p><b>[AND WHEREAS]</b> pursuant to the FIT Rules, Version 4.0, Applications whose Projects receive the formal support of Local Municipalities will be awarded Priority Points, which may result in the Applicant being offered a FIT Contract prior to other Persons applying for FIT Contracts;</p> <p><b>[NOW THEREFORE BE IT RESOLVED THAT]</b></p> <p>Council of the _____ supports the construction and operation of the Projects anywhere in _____ .</p> <p>This resolution's sole purpose is to enable the participants in the FIT Program to receive Priority Points under the FIT Program and may not be used for the purpose of any other form of municipal approval in relation to the Application or Projects, or for any other purpose.</p> <p>This resolution shall expire twelve (12) months after its adoption by Council.</p>
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<b>3</b>	<p>Signed: _____ Signed: _____</p> <p>Title: _____ Title: _____</p> <p>Date: _____ Date: _____</p> <p style="text-align: center;"><i>(Signature lines for elected representatives. At least one signature required.)</i></p>
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**Ministry of the Environment  
and Climate Change**

Safe Drinking Water  
Branch

Kingston District Office  
1259 Gardiners Road, Unit 3  
PO Box 22032  
Kingston ON K7M 8S5

**Ministère de l'Environnement et  
de l'Action en matière de  
changement climatique**

Direction du contrôle de la qualité de  
l'eau potable

Bureau du district de Kingston  
1259, route Gardiners, unité 3  
C. P. 22032  
Kingston (Ontario) K7M 8S5



May 4, 2015

**Email: [worr@township.southfrontenac.on.ca](mailto:worr@township.southfrontenac.on.ca)**

The Corporation of the Township of South Frontenac  
4432 George Street  
P.O. Box 100  
Sydenham, Ontario  
K0H 2T0

Attention: Mr. Wayne Orr, Chief Administrative Officer

Dear Mr. Orr:

Re: Drinking Water Inspection Program – 2014-2015 Inspection  
Report Sydenham Drinking Water System – Inspection Number 1-BCBKB

The enclosed report documents findings of a focused inspection that was performed at the Sydenham Drinking Water System on January 20<sup>th</sup>, 2015.

Two sections of the report, namely “Actions Required” and “Recommended Actions” cite due dates for the submission of information or plans to my attention.

Please note that “Actions Required” are linked to incidents of non-compliance with regulatory requirements contained within an Act, a Regulation, or site-specific approvals, licenses, permits, orders, or instructions. Such violations could result in the issuance of mandatory abatement instruments including orders, tickets, penalties, or referrals to the ministry’s Investigations and Enforcement Branch. **There were no non-compliance issues identified by the inspection requiring actions.**

“Recommended Actions” convey information that the owner or operating authority should consider implementing in order to advance efforts already in place to address such issues as emergency preparedness, the fulsome availability of information to consumers, and conformance with existing and emerging industry standards. Please note that items which appear as recommended actions do not, in themselves, constitute violations.

In order to measure individual inspection results, the ministry continues to adhere to an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal/external risk experts. The Inspection Rating Record (IRR), appended to the inspection report, provides the ministry, the system owner and the local Public Health Unit with a summarized quantitative measure of the drinking water

system's annual inspection and regulated water quality testing performance. Please note the IRR methodology document, also appended to the inspection report, describes how the risk model was improved to better reflect any health related and administrative non-compliance issues that may be cited in our inspection reports. IRR ratings are published in the ministry's Chief Drinking Water Inspector's Annual Report. If you have any questions or concerns regarding the rating, please contact Jim Mahoney, Water Supervisor, at 613-548-6902.

Section 19 of the *Safe Drinking Water Act, 2002* (Standard of Care) cites a number of obligations of individuals who exercise decision-making authority over municipal drinking water systems. The ministry encourages individuals, particularly municipal councillors, to take steps to be well informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "*Taking Care of Your Drinking Water: A guide for members of municipal council*" found under "Resources" on the Drinking Water Ontario website at [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater).

New to the inspection report layout this year is the inclusion of a *Stakeholder Support* appendix (Appendix "A"). This addition has been made to promote awareness of the Drinking Water section of the Ontario.ca website at <http://www.ontario.ca/environment-and-energy/drinkingwater> with particular reference to key outreach publications that are downloadable free-of-charge. While the twelve publications specifically cited in the appendix are those that are most frequently accessed by owners and operators of drinking water systems servicing designated facilities, you will find many other useful support materials available through the website.

Thank you for the assistance afforded to me during the conduct of the compliance assessment. Should you have any questions regarding the content of the enclosed report, please do not hesitate to contact me.

Yours truly,

Daniel K. White  
 Inspector/Provincial Officer, Badge # 754  
 Water Compliance  
 Safe Drinking Water Branch  
 Kingston-Cornwall-Ottawa  
 Tel. Direct Line: (613) 548-6914  
 Tel. Toll Free: 1-800 267-0974 ext. 2676  
 DW

ec: Mark Segsworth, Public Works Manager, The Corporation of the Township of South Frontenac, 4432 George Street, P.O. Box 100, Sydenham, ON K0H 2T0, Email: [msegsworth@township.southfrontenac.on.ca](mailto:msegsworth@township.southfrontenac.on.ca)  
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- Kevin Riley, Director, Water & Wastewater Operations, Utilities Kingston, 86 Lappans Lane, P.O. Box 790, Kingston, ON K7L 4X7, Email: kriley@utilitieskingston.com
  - Joe Lewis, Manager, Water & Wastewater Underground Operations, Utilities Kingston, 86 Lappans Lane, P.O. Box 790, Kingston, ON K7L 4X7, Email: jlewis@utilitieskingston.com
  - Philip Emon, Supervisor, Water & Wastewater Operations, Utilities Kingston, 86 Lappans Lane, P.O. Box 790, Kingston, ON K7L 4X7, Email: pemon@utilitieskingston.com
  - Randall Whan, Supervisor, Water & Wastewater Treatment Operations, Utilities Kingston, 86 Lappans Lane, P.O. Box 790, Kingston, ON K7L 4X7, Email: rwhan@utilitieskingston.com
  - Randy McIvor, Supervisor, Water Quality Management, Water & Wastewater Operations, Utilities Kingston, 86 Lappans Lane, P.O. Box 790, Kingston, ON K7L 4X7, Email: rmcivor@utilitieskingston.com
  - James Patenaude, Quality Assurance Operator, Water & Wastewater Treatment Operations, Utilities Kingston, 86 Lappans Lane, P.O. Box 790, Kingston, ON K7L 4X7, Email: jpatenaude@utilitieskingston.com
  - Sarah Ryding, Manager, Environmental Health Team, Kingston, Frontenac and Lennox & Addington Public Health, 221 Portsmouth Avenue, Kingston, ON K7M 1V5, Email: sarah.ryding@kflapublichealth.ca
  - Rob McRae, Watershed Planning Coordinator, Cataraqui Region Conservation Authority, P.O. Box 160, Glenburnie, ON K0H 1S0, E-mail: robmcrac@cataraquiregion.on.ca
- c: File SI-FR-SF-PO-540 (2014)





**Ministry of the Environment**

**SYDENHAM DRINKING WATER SYSTEM  
Drinking Water System Inspection Report**

<b>DWS Number:</b>	260069290
<b>Inspection Number:</b>	1-BCBKB
<b>Date of Inspection:</b>	Jan 20, 2015
<b>Inspected By:</b>	Dan White







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**OWNER INFORMATION:**

**Company Name:** SOUTH FRONTENAC, THE CORPORATION OF THE TOWNSHIP OF  
**Street Number:** 4432 **Unit Identifier:**  
**Street Name:** GEORGE St  
**City:** SYDENHAM  
**Province:** ON **Postal Code:** K0H 2T0

**CONTACT INFORMATION**

**Type:** Owner **Name:** Wayne Orr  
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**Title:** Chief Administrative Officer, The Corporation of the Township of South Frontenac

**Type:** Owner **Name:** Mark Segsworth  
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**Email:** rmcivor@utilitieskingston.com  
**Title:** Supervisor, Water Quality Management, Water & Wastewater Operations, Utilities Kingston



**Site (Name):** RAW WATER

**Type:** Source

**Sub Type:** Surface Water

**Comments:**

The Sydenham Water Treatment Plant (WTP) obtains raw surface water from Sydenham Lake. The raw water intake is located 128 metres (m) off shore east of the treatment plant, at a depth of 6 m. The intake consists of a 400 millimetre (mm) diameter, high density polyethylene (HDPE) pipe and an intake crib. A length of 25 mm polyethylene tubing is installed inside the intake pipe, attached to a chlorine diffuser for future zebra mussel control.

Raw water flows by gravity through the intake into a low lift pumping station consisting of a screen well equipped with two (2) manually cleaned stationary screens, each measuring 3.75 m high and 1.55 m wide. The screens are installed to remove large debris such as but not limited to weeds, fish and driftwood. Raw water is pumped from the low lift well to the treatment process by three (3) submersible low lift pumps (two duty and one standby) each with a capacity of 7.8 litres per second (L/s) at 63 m total dynamic head (TDH).

The raw water has dissolved organic carbon (DOC) concentration ranging from 3.4 to 6.9 milligrams per litre (mg/L), an average DOC concentration of 5.6 mg/L, and average total organic carbon (TOC) concentration of 6.3 mg/L, colour ranging between 5 to 13 true colour units (TCU) and an average colour of 8 TCU. Raw water having higher DOC and colour concentrations has an elevated potential for the formation of trihalomethanes (THMs) during pre-treatment with chlorination or if downstream treatment processes are not able to remove these precursors.

Total coliform and Escherichia coli (E. coli) bacteria are also present in the raw water in densities ranging from < 2 colony forming units per 100 millilitres (cfu/100 mL) to > 400 cfu/100 mL and 0 cfu/100 mL to < 20 cfu/100 mL, respectively. Detections of indicators of microbial contamination are not unexpected for a raw surface water supply; therefore, highlighting the importance of the role of a well operated water treatment process in protecting public health.

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**Site (Name):** TREATMENT SYSTEM - PART 1

**Type:** Treated Water POE

**Sub Type:** Treatment Facility

**Comments:**

Raw water is pumped through a common low lift header (raw water discharge line) to the Sydenham WTP building. A coagulant (polyaluminum chloride/PACl) is injected into the raw water header upstream of an in-line static mixer and a Kinetico package direct pressure filtration system from a chemical metering system consisting of one 200 litre (L) storage tank with spill containment and two (2) chemical metering pumps (one duty and one standby) each having a capacity 7.8 litres per hour (L/h) with a turn down ratio of 600/1. The static mixer aids in the dispersion of the coagulant into the raw water to promote flocculation.

The coagulated-flocculated raw water flows to the Kinetico direct pressure filtration system, consisting of: three (3) pressure filtration tanks containing 70/80 Macrolite ceramic media, each rated for a peak capacity of 680 cubic metres per day (m<sup>3</sup>/d), complete with an air scour system consisting of a 7.5 horsepower (hp) air compressor, air pressure regulator & filter and an air flow meter; and two (2) 3.7 kilowatt (kW) self-priming backwash pumps. As water passes through the pressure filters floc formed from the addition of the coagulant and other particles present in the water are removed via physical and mechanical interactions with the filter media thereby reducing the turbidity and colour in the water.

As filters become loaded with floc and other particles removed from the water, a pressure loss (pressure differential) results across the filters. Once the pressure loss reaches a preset value (typically 48 hours or less of filter run time) the filters are backwashed to clean the filter media. Backwashing is accomplished by pumping clean water from the clearwells in reverse direction through the filter fluidizing the filter bed using the backwash pumps. During the backwash cycle, the filter media is also agitated by compressed air (air scour) to aid in cleaning the filter media by breaking up any particles stuck to the media. Effluent water from the backwash process is directed to the process waste residual management system.

Filtered water flow exits the pressure filters and may either be directed to two (2) parallel granular activated carbon (GAC) filters (Napier Reid) each rated at a normal flow of 3.9 L/s with an empty bed contact time of six (6) minutes for taste and odour control as required, or directly to two parallel ultraviolet (UV) (Trojan UV Swift SC) disinfection reactors, before entering a 300 mm diameter, 90 m long stainless steel serpentine contact pipe mounted on the exterior walls of the WTP building to provide chlorine contact time.

The UV reactors and chlorination system provide primary disinfection. The UV reactors: each have 16 low pressure high intensity bulbs; are each rated at the maximum plant rating (15.6 L/s); are flow paced and controlled by UV intensity; are equipped with automatic wipers for bulb cleaning, with chemical cleaning being conducted every 2 to 3 months. The Trojan UV Swift SC lamps are bioassay validated by Deutsche Vereinigung des Gas- und Wasserfaches (DVGW) and United States Environmental Protection Agency (USEPA).

A 10% to 12% strength sodium hypochlorite solution (chlorine solution) is injected in the chlorine contact pipe downstream of the UV reactors using a chemical metering system consisting of one (1) 1000 L polyethylene double walled storage tank; two (2) peristaltic chemical feed pumps (duty); and two (2) diaphragm chemical metering pumps (standby), each having a capacity of 3 L/h. The chlorine contact pipe meets CT requirements of 9/4 milligrams per litre-minutes (mg/L.min) for 0.5/10.0 °C respectively, based on a free chlorine residual concentration of 1.5 mg/L measured at the end of the contact pipe, pH, temperature and max flow.

A solution of ammonium sulphate is injected at the end of the chlorine contact pipe and upstream of two (2) 115 m<sup>3</sup> baffled clearwells/reservoirs using a chemical metering system consisting of one (1) 200 L ammonium sulphate storage drum with secondary containment and two (2) 0.22 L/h capacity chemical metering pumps to convert free chlorine residual and form chloramines (combined chlorine residual) to provide secondary disinfection in the distribution system and to reduce the THM formation potential in the finished water. Free and total chlorine residual measurements are used to determine the ammonia addition, typically at a 4:1 ratio to form predominately monochloramine. After injection with ammonium sulphate the finished water flows into the two clearwell/reservoirs, from which drinking water is pumped to the distribution system, including an elevated storage tank located on Stage Coach Road, via three (3) high lift pumps (two duty and one standby), each rated at 7.5 L/s at 75 m TDH.

The Sydenham WTP is equipped with a 150 kilowatt standby diesel generator set for emergency power complete with an exhaust silencer with stack and 1100 L capacity integral double walled fuel storage tank, located within a sound attenuating enclosure.

The drinking water system has been designed to treat water at a maximum flow rate of 1,296 m<sup>3</sup> per day.

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**Site (Name):** TREATMENT SYSTEM - PART 2

**Type:** Treated Water POE

**Sub Type:** Treatment Facility

**Comments:**

The Sydenham WTP is equipped with the following instrumentation and control:

One raw water turbidimeter (HACH 1720E) for continuous monitoring of raw water turbidity;

One raw water pH and temperature meter (Great Lake Instruments/GLI) for continuous measurement of raw water pH and temperature;

One raw water magnetic flow meter (Asea Brown Boveri/ABB) for continuous measurement of the flow rate and volume of raw water pumped into the treatment system;

One filter inlet turbidimeter (HACH 1720E) for continuous monitoring of the filter inlet turbidity;

Three filter effluent turbidimeters (HACH 1720E), one installed on each of the filter effluent line for Filters 1, 2 and 3 to continuously monitor filter effluent turbidity;

One combined filter effluent turbidimeter (HACH 1720E) for continuous monitoring of combined filter effluent turbidity;

- One filter backwash water turbidimeter (HACH Surface Scatter 6) for continuous monitoring of filter backwash water turbidity;
- One common filter effluent magnetic flow meter (ABB) for continuous measurement of the flow rate and volume of filter effluent produced;
- One backwash water magnetic flow meter (ABB) for continuous measurement of the backwash flow rate and volume of water used for backwashing;
- One chlorine residual analyzer (Prominent Dulcometer) drawing from mid-point in the contact tank for continuous monitoring of free chlorine residual;
- One chlorine residual analyzer (Prominent Dulcometer) for continuous monitoring of primary disinfection free chlorine residual prior to the application of ammonium sulphate;
- One chloramine (combined chlorine residual) analyzer (Prominent Dulcomarin) for continuous monitoring of combined chlorine residual in the water pumped to the distribution system;
- One finished water pH and temperature meter (Alldos) for continuous measurement of finished water pH and temperature;
- One finished water turbidimeter (HACH 1720E) for continuous monitoring of the finished water turbidity;
- One finished water magnetic flow meter (Krohne) for continuous measurement of the flow rate and volume of water pumped to the distribution system; and
- A supervisory control and data acquisition (SCADA) system.

**Site (Name):** WASTE RESIDUAL MANAGEMENT SYSTEM  
**Type:** Treated Water POE                      **Sub Type:** Treatment Facility  
**Comments:**

Water from filter backwashing and water analyzed by the various continuous analyzers is directed to a 55 m<sup>3</sup> backwash storage/settling tank. Settled water supernatant is pumped from the backwash storage/settling tank using a pump rated at 10 L/s to a 100 mm diameter discharge line to Sydenham Lake. The discharge line is equipped with a compound turbine flow meter (Sensus) for measuring the volume of process wastewater effluent, a HACH Surface Scatter 6 for continuous monitoring of the discharge turbidity and a composite sampler to sample during each discharge event to Sydenham Lake.

A 300 mm surge overflow pipe is also installed in the backwash storage/settling tank that discharges to an open ditch before entering Sydenham Lake.

**Site (Name):** DISTRIBUTION SYSTEM  
**Type:** Other    **Sub Type:** Other  
**Comments:**

The Sydenham distribution system services a population of approximately 1000 persons with 274 service connections. Approximately 50% of the users (145) out of the 274 are connected to the drinking water system. The system consists of approximately 6,363 metres of polyvinyl chloride (PVC) watermains, ranging in diameter from 150 mm to 250 mm; 47 hydrants; one (1) elevated storage tank; 35 valves; and four (4) pre-manufactured sample stations.

**Site (Name):** ELEVATED STORAGE TANK  
**Type:** Other    **Sub Type:** Reservoir

**Comments:**

The elevated storage tank is located on Stage Coach Road, to the north side of an existing building. The elevated storage tank is composite pedestal design consisting of a cast-in-place concrete foundation and pedestal supporting a welded steel storage tank having a storage capacity of 1,018 m<sup>3</sup> and provides pressure to the distribution system for fire protection. The inlet/outlet pipe is 250 mm diameter PVC SDR 18 pipe. The pipe is connected to the distribution main through a valve room located at the base of the elevated tank.

The elevated storage tank is equipped with two (2) continuous chlorine residual analyzers (Prominent Dulcometer) for monitoring free chlorine and total chlorine in the distribution system. The combined chlorine residual is calculated from the data recorded by the analyzers.

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**Site (Name):** DISTRIBUTION SYSTEM - Bedford Road Sample Station**Type:** Other **Sub Type:** Other**Comments:**

A prefabricated sample hydrant tapped into the water main complete with a locked enclosure is installed along Bedford Road.

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**Site (Name):** DISTRIBUTION SYSTEM - Walker Road Sample Station**Type:** Other **Sub Type:** Other**Comments:**

A prefabricated sample hydrant tapped into the water main complete with a locked enclosure is installed along Walker Road.

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**Site (Name):** DISTRIBUTION SYSTEM - Rutledge Road West Sample Station**Type:** Other **Sub Type:** Other**Comments:**

A prefabricated sample hydrant tapped into the water main complete with a locked enclosure is installed along Rutledge Road West.

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**Site (Name):** DISTRIBUTION SYSTEM - Rutledge Road East Sample Station**Type:** Other **Sub Type:** Other**Comments:**

A prefabricated sample hydrant tapped into the water main complete with a locked enclosure is installed along Rutledge Road East.

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**Site (Name):** MOE DWS Mapping**Type:** DWS Mapping Point **Sub Type:****Comments:**

Not Applicable

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## INSPECTION SUMMARY

### INTRODUCTION

- \* The primary focus of this inspection is to confirm compliance with Ministry of the Environment legislation and authorizing documents such as Orders and Certificates of Approval, as well as evaluating conformance with Ministry drinking water related policies and guidelines during the inspection period.

The Ministry is implementing a rigorous and comprehensive approach in the inspection of drinking water systems that keys on the source, treatment and distribution components of the system as well as management practices.

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O.Reg.170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

This report is based on a "focused" inspection of your system. Although the inspection involved fewer activities than those normally undertaken by a detailed inspection, it contained most of the elements required to assess key compliance issues.

Your system was chosen for a focused inspection during this inspection cycle because inspection findings over the past three years were such that the number of violations were minimal or non-existent, there were few or no orders issued to you that were of significance in the maintenance of water potability and there were no deficiencies as defined in O. Reg. 172/03. The undertaking of a focused inspection at your drinking water system during this year's inspection cycle does not ensure that a similar type of inspection will be conducted at any point in the future.

An unannounced inspection of the Sydenham Drinking Water System, herein also referred to as the "Sydenham DWS", the "drinking water system", the "DWS", or the "system", was conducted on January 20, 2014, under the authority of Section 81 of the Safe Drinking Water Act, by Daniel White, Provincial Officer / Inspector Badge # 754, herein also referred to as the "Inspector".

The Sydenham Drinking Water System is owned by the Corporation of the Township of South Frontenac, herein also referred to as the "owner" and consists of the Sydenham Water Treatment Plant (WTP) and the Sydenham Distribution System, herein referred to as the "distribution system".

The Sydenham DWS is operated by Ontario Corporation No. 1425447, operating as Utilities Kingston, herein also referred to as the "operating authority", which in turn, is wholly owned by the City of Kingston.

The DWS is operated under Drinking Water Works Permit Number (DWWP #) 166-201, issued on December 21st, 2010 and Municipal Drinking Water Licence Number (MDWL #) 166-101, issued on December 22nd, 2010.

The Inspector was accompanied and assisted during the inspection by James Patenaude, Quality Assurance Operator, Water and Wastewater Operations with Utilities Kingston.

The scope of the inspection included a physical inspection of the Sydenham WTP, the Sydenham Elevated Storage Tank and a review and compliance assessment of operating practices that included, but was not limited to the following documents: The Safe Drinking Water Act (SDWA); Ontario Regulation 170/03 Drinking Water Systems (O. Reg. 170/03); Ontario Regulation 172/03 Definitions of "Deficiency" and "Municipal Drinking Water System" (O. Reg. 172/03); Ontario Regulation 169/03 Ontario Drinking Water Standards (O. Reg. 169/03); Ontario Regulation 128/04 Certification of Drinking Water System Operators and Water Quality Analysts (O. Reg. 128/04);

## INTRODUCTION

Engineers' Report for the Sydenham Water Treatment Plant; Drinking Water Works Permit Number (DWWP #) 166-201, Issue Number 1, dated the 21st day of December, 2010; Schedule C: Authorization to Alter the Drinking Water System dated the 21st day of December, 2010; Municipal Drinking Water Licence Number (MDWL #) 166-101, Issue Number 1, dated the 22nd day of December, 2010; Permit To Take Water Number (PTTW #) 04-P-4041, issued on the 16th day of March, 2004; PTTW # 4730-9JLJ4J, issued on the 1st day of May, 2014; The Drinking Water Quality Management System (DWQMS) Volumes 1 through 3, including the Operational Plan for the DWS; logbooks and other record keeping mechanisms; and Reports/Certificates of Analysis for drinking water samples taken, and other records for the drinking water system for the period January 1st, 2014 to January 20th, 2015, inclusive, also herein referred to as the "inspection period".

The status of resolving non-compliance issues and/or implementing best practice recommendations identified during the previous inspection (#1-AO8P0), was also reviewed.

## CAPACITY ASSESSMENT

- \* **There was sufficient monitoring of flow as required by the Permit and Licence or Approval issued under Part V of the SDWA**

Flow measuring and recording requirements are prescribed in Section 2.0 "Flow Measurement and Recording Requirements" of Schedule C to MDWL # 166-101.

The Sydenham WTP is equipped with the following flow measurement devices:

One raw water magnetic flow meter (ABB) for continuous measurement of the flow rate and volume of raw water pumped into the treatment system;

One common filter effluent magnetic flow meter (ABB) for continuous measurement of the flow rate and volume of filter effluent produced;

One backwash water magnetic flow meter (ABB) for continuous measurement of the backwash flow rate and volume of water used for filter backwashing;

One finished water magnetic flow meter (Krohne) for continuous measurement of the flow rate and volume of water pumped to the distribution system; and

One compound turbine flow meter (Sensus) for measuring the volume of process wastewater effluent discharged to Sydenham Lake.

The flow measurement data is continuously transmitted to and recorded by the WTP SCADA system.

Calibration checks / calibrations were last undertaken on all the flow metering devices on March 4, 2014, by Ken Harris Instrumentation & Controls Ltd. The calibration reports for the flow metering devices indicated the devices were operating within acceptable accuracy / tolerances.

- \* **The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Permit and Licence or Approval issued under Part V of the SDWA.**

The rated capacity for the Sydenham WTP is prescribed in Table 1: Rated Capacity in Section 1.0 "Performance Limits" of Schedule C to MDWL # 166-101. According to Table 1, the Sydenham WTP is licenced to produce a not-to-exceed maximum daily volume of treated water of 1,290 m<sup>3</sup>/d based on flow from the treatment subsystem (WTP) to the distribution system.

The Inspector examined flow rate and volume data measured during the inspection period, and observed that the reported maximum daily volume flowing from the WTP to the distribution system during this period was 496 m<sup>3</sup>/d, or 38.4 % of the design capacity (occurring in November 2014).

## TREATMENT PROCESSES

## TREATMENT PROCESSES

- \* **The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.**

The Inspector conducted a supervised tour of the Sydenham WTP, and the Sydenham Elevated Storage Tank with James Patenaude for the purposes of examining the equipment installed, and comparing that equipment to the equipment described in the DWWP, and any Schedule C Authorizations to Alter the Drinking Water System.

Based upon a comparison of the equipment noted to be installed during the tour of the facilities identified above with the equipment described in DWWP # 166-201, and Schedule C Authorization to Alter the Drinking Water System, the Inspector noted that the equipment installed matches the description of the equipment in the DWWP, with the exception of the bulk storage tank for sodium hypochlorite described in Schedule C. Schedule C describes the bulk storage tank as a single 850 L tank, while a 1000 L tank is installed. A Form 2 – Record of Minor Modifications or Replacements to the Drinking Water System was completed to document this modification; as well, a Director Notification Form – Alterations to a Drinking Water System was completed and submitted to notify the Ministry of the change.

Copies of DWWP # 166-201, Schedule C and the Director Notification Form are included in the appendices to this inspection report.

Straub Performance Couplings (Division of Westflex Inc.) brand stainless steel pipe couplings have also been installed to seal pinhole leaks that have developed on, or in proximity to welded joints in the stainless steel primary disinfection contact serpentine piping.

- \* **Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a Permit, Licence or Approval issued under Part V of the SDWA at all times that water was being supplied to consumers.**

The Sydenham WTP is a direct filtration process, and includes treatment processes consisting of coagulation-flocculation, filtration, primary disinfection, and secondary disinfection. Primary disinfection is accomplished using ultraviolet (UV) light disinfection, and free chlorination, or a combination of UV light and free chlorination. Secondary disinfection is provided by chloramination.

The treatment requirements for Large Municipal Residential Systems (LMRS) obtaining water from a raw water supply that is surface water, such as the Sydenham DWS, are prescribed in Schedule 1 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK19](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK19)

In addition, according to Section 1-2 Schedule 1 to O. Reg. 170/03, to meet the prescribed treatment requirements, a DWS must be operated in accordance with the Ministry's Procedure for Disinfection of Drinking Water in Ontario (the "Procedure"), including meeting the following criteria:

A chemical coagulant must be used at all times when the treatment plant is in operation;

The chemical dosages must be monitored, and adjusted in response to variations in raw water quality;

Effective backwash procedures must be maintained, including filter-to-waste or an equivalent procedure during filter ripening to ensure that the effluent turbidity requirements are met at all times;

Filtrate (filter effluent) turbidity must be continuously monitored from each filter; and

95% of the filtered water turbidity measurements must be 0.3 Nephelometric Turbidity Units (NTU) or less in each month.

A copy of the Procedure may be obtained from the ministry's website at:

<https://www.ontario.ca/document/procedure-disinfection-drinking-water-ontario>

## TREATMENT PROCESSES

A review of logs and other records for the inspection period found:

The water treatment equipment was operating whenever water was being supplied to the distribution system, and the users of the DWS;

Coagulant was dosed to the water treatment process at all times when the water treatment plant was operating;

Chemical dosages were monitored, and adjusted in response to variations in raw water quality (turbidity, pH, temperature);

The filtered water turbidity was equal to or less than 0.3 Nephelometric Turbidity Units (NTU) in at least 95 per cent of all samples taken in each month;

The secondary disinfection free chlorine residual was maintained above 0.25 mg/L as combined chlorine; and

Only certified operators made adjustments to the water treatment equipment.

Each filter in the treatment process is equipped with a HACH 1720 E model continuous monitoring turbidimeter with high level process alarms (0.30 NTU), and regulatory alarms (1.00 NTU) monitored by the SCADA/plant alarm system.

The Sydenham WTP is equipped with automatic filter-to-waste capability to minimize post filtration backwash filter effluent turbidity spikes. The filter-to-waste system controls are programmed to cycle until filter effluent turbidity reaches 0.25 NTU or 8 minutes before returning the filter to service mode. If after 30 minutes the filter effluent does not drop below 0.30 NTU, the filter is taken out of service.

The maximum reported filter effluent turbidity from Filter 1, Filter 2, and Filter 3 for the inspection period was 0.53 NTU, 0.54 NTU, and 0.52 NTU, respectively.

Primary disinfection (1.0-log removal of Giardia cysts and 3.0-log removal of viruses) is provided by UV, and free chlorination.

According to a summary of log reduction calculations produced via the SCADA system, the minimum log reduction for Giardia, and virus inactivation was met or exceeded during the inspection period.

- \* **Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated so that at all times and all locations in the distribution system the chlorine residual was never less than 0.05 mg/l free or 0.25 mg/l combined.**

The requirements to maintain a free chlorine residual of 0.05 mg/L or a combined chlorine residual of 0.25 mg/L are prescribed under "General obligations" in Schedule 1 to O. Reg. 170/03. The reader is directed to the following URL for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK19](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK19)

The Inspector reviewed combined chlorine residual test results for distribution samples taken at the same time, and locations as samples taken for microbiological testing, and test results measured by continuous analyzer, and found that the minimum combined chlorine residual in the distribution system during the inspection period was 0.73 mg/L (measured on June 10th, 2014).

- \* **The primary disinfection equipment was equipped with alarms or shut-off mechanisms that satisfied the standards described in Section 1-6 (1) of Schedule 1 of Ontario Regulation 170/03.**

The requirements for primary disinfection equipment, not using chlorination or chloramination, to have alarms or mechanisms to ensure that no water is directed to users of water treated by the equipment in the event that the equipment malfunctions, loses power or ceases to provide the appropriate level of disinfection are prescribed in subsection 1-6 (1) of Schedule 1 to O. Reg. 170/03. The reader is directed to the following URL for the exact regulatory wording:

## TREATMENT PROCESSES

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK19](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK19)

The UV system is used with free chlorination to achieve primary disinfection. The UV system is equipped with two (one duty and one standby) UV disinfection units (Trojan UV Swift SC). The UV reactors are continuously monitored when in operation for UV intensity, calculated UV dose, flow rate and lamp status; and the system is equipped with alarms that will automatically shutdown the WTP, and alert operators at the water treatment plant or remotely should a UV reactor fail, malfunction or if the UV dose is less than 40 millijoules per square centimeter (mJ/cm<sup>2</sup>).

Continuous water quality analyzers are installed to sample, and test free chlorine residual in the serpentine chlorine contact piping at a mid-way point in the piping, and near the end of the piping prior to injection of ammonium sulfate solution for the conversion of free chlorine to chloramines. These analyzers are equipped with alarms to alert operators at the water treatment plant, and remotely should the free chlorine residual drop below a preset concentration value required to ensure adequate primary disinfection.

- \* **The Operator-in-Charge had ensured that all equipment used in the processes was monitored, inspected, and evaluated.**

The requirements for the operator-in-charge to ensure that processes within his or her responsibility are monitored, inspected and evaluated are prescribed in Section 26 "Duties of operator-in-charge" of O. Reg. 128/04. The reader is directed to the following URL for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_040128\\_e.htm#BK33](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_040128_e.htm#BK33)

A procedure "Sydenham Water Treatment Plant Operation and Operator Duties" details the equipment and process checks that must be completed by the operators, and recorded on specific log sheets; outlines the general WTP operators duties and responsibilities; and includes templates for daily rounds checklists, lab bench sheets, weekly duties checklist, monthly duties checklists and monthly facility inspection checklists.

Procedure: Sampling, Testing and Monitoring (DWQMS Document Number: W-G-09) contained in the Operational Plan for the system prescribes in-house operational sampling and testing, continuous monitoring checks, microbiological, chemical and lead sampling, and testing for the for the DWS.

Procedure: Facility and Equipment Inspections (DWQMS Document Number: WS-01-03) addresses monthly inspections of security related facilities, including fencing, gates, exterior doors, locks, hatches, vents and screens.

Procedure: Sydenham Water Treatment Plant operation and Operator Duties (DWQMS Document Number: WT-01-01S) identifies normal operational duties, rounds and operational checks, process monitoring expectations for operators responsible for the day-to-day operation of the Sydenham DWS.

In addition, Volume 2 of the DWQMS – Standard Operating Procedures (SOPs), contains approximately 42 procedures addressing the operation and maintenance of the treatment processes, equipment, water storage structures and distribution system components.

The Inspector verified during the inspection that the results of operational/treatment system process checks are recorded on log sheets.

Operators review daily reports generated by the Sydenham WTP's SCADA system. The shift operators on duty at the King Street WTP, in the City of Kingston, also have the capability to monitor the DWS remotely 24/7.

In-house testing conducted by the operator includes: daily free, total chlorine and combined (calculated) residual at various locations within the disinfection process and the treated water, weekly treated water aluminum residual, raw water and treated water UV transmittance.

The date and time of sampling, test results and initials of the operator who conducted the tests are recorded on log sheets/lab bench sheets.

## TREATMENT PROCESS MONITORING

- \* **Primary disinfection chlorine monitoring was being conducted at a location approved by Permit, Licence or Approval issued under Part V of the SDWA, or at/near a location where the intended CT had just been achieved.**

The requirement to monitor primary disinfection chlorine residual is prescribed in Schedule 7 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK25](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK25)

Primary disinfection chlorine monitoring is performed using continuous analyzers (Prominent Dulcometer) installed to monitor post UV chlorine residual for primary chlorination feed control, and near the end of the chlorine contact piping (prior to the application of ammonium sulphate solution for conversion to chloramines), to monitor for free chlorine at the point where the intended CT is achieved. The CT chlorine residual analyzer is also used to control the ammonium sulphate chemical metering system.

Log inactivation values for virus inactivation are calculated from the free chlorine residual values, and residence time in the serpentine piping. As previously indicated, the UV system provides 1-log inactivation for Giardia.

- \* **Continuous monitoring of each filter effluent line was being performed for turbidity.**

The requirement to monitor filter effluent turbidity is prescribed in Schedule 7 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK25](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK25)

Each filter effluent line is equipped with a continuous water quality analyzer (HACH 1720E Low Range Turbidimeter) to continuously measure filter effluent turbidity, and monitor filter performance. The turbidity results from the three (3) turbidimeters are transmitted to, trended and stored by the WTP SCADA system.

At the time of physical inspection, the turbidimeters displayed the following instantaneous turbidity values:

Filter # 1: 0.168 NTU

Filter # 2: 0.073 NTU

Filter # 3: 0.058 NTU

- \* **The secondary disinfectant residual was measured as required for the distribution system.**

The requirement to monitor secondary disinfection residual is prescribed in Schedule 7 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK25](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK25)

Continuous monitoring of combined chlorine residual in the distribution system is accomplished using two continuous chlorine residual analyzers, one measuring free chlorine residual, and the other measuring total chlorine residual. The output from the two analyzers is used by the SCADA system used to calculate combined chlorine residual.

On the day of the physical inspection, the continuous chlorine residual analyzers displayed a free chlorine residual of 0.00 mg/L, and a total chlorine residual of 1.75 mg/L, for a combined residual of 1.75 mg/L (Total – Free = 1.75 – 0.00 mg/L = 1.75 mg/L).

In addition, to the continuous monitoring, two (2) to three (3) grab samples were taken each week during the inspection period at the same time, and from the same locations where samples were collected for microbiological testing, and tested for combined chlorine residual.

## TREATMENT PROCESS MONITORING

Based on a review of records made available by the operating authority for distribution sampling and testing undertaken during the inspection period:

The minimum combined chlorine residuals measured by the above noted data sources during the inspection period were:

Elevated Storage Tank Analyzers: 0.90 mg/L

Microbiological Sampling: 0.73 mg/L

- \* **Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.**

The requirements for examining test results measured by continuous monitoring equipment are prescribed in Schedule 6 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

The test results produced by continuous water quality analyzers are recorded and trended by the SCADA system. The SCADA system produces a daily report including a summary of the continuous water quality analyzer test results. The operator conducting daily checks at the Sydenham DWS reviews the daily SCADA generated report.

The King Street WTP is staffed 24/7, including holidays. The operators-in-charge (shift operators) at the King Street WTP monitor the SCADA systems, including real-time and trended data, at all drinking water systems operated, and maintained by Utilities Kingston, including the Sydenham DWS.

- \* **All continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or approval or order, were equipped with alarms or shut-off mechanisms that satisfied the standards described in Schedule 6.**

The requirements for continuous water monitoring equipment, including alarming and automatic shut-off mechanisms is prescribed in Schedule 6 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

The Sydenham Drinking Water System's continuous monitoring equipment is designed to produce an alarm when minimum or maximum (as applicable) setpoints are reached.

The Inspector reviewed the alarm points, and found that turbidity analyzers utilize alarm settings to ensure that the filter performance efficiency requirements outlined in the document "The Procedure for Disinfection of Drinking Water in Ontario" are met. As the system uses direct filtration, this requirement is for filter effluent turbidity of less than or equal to 0.3 NTU for 95% of the measurements in each month of operation. This alarm setpoint is 0.30 NTU.

As previously indicated, the Sydenham DWS utilizes UV reactors, and free chlorination to achieve primary disinfection. The UV reactors in combination with the chemically-assisted filtration treatment process provide 3-log removal / inactivation of Giardia, with the UV reactors providing 1-log inactivation, and the treatment process providing 2-log removal. To provide 1-log inactivation, the UV reactors must continuously produce a UV dose of 40 mJ/cm<sup>2</sup>. The UV intensity is continuously monitored, and a UV fail / WTP interlock shutdown alarm is in place should the UV intensity be measured below that necessary to ensure the minimum UV dose of 40 mJ/cm<sup>2</sup>.

Primary disinfection for viruses is provided by free chlorination. A continuous chlorine residual analyzer measures free chlorine residual in the chlorine contact piping, prior to the application of ammonium sulfate, and conversion to chloramines. This analyzer utilizes two alarm set points, a low setpoint of 1.40 mg/L and a low-low setpoint of 1.20 mg/L for combined chlorine.

The DWS SCADA system calculates log inactivation of viruses based on real time monitoring of pH, filtered water flow rate, and pre-ammonia free chlorine residual. The SCADA system uses two

## TREATMENT PROCESS MONITORING

alarm setpoints to monitor log inactivation of viruses. The low setpoint is 4-log, while the low-low setpoint is 3-log. The disinfection system must provide at least 3-log inactivation for viruses.

Secondary disinfection is continuously monitored at the Sydenham Elevated Storage Tank using two continuous chlorine residual analyzers, one measuring free chlorine residual, and the other measuring total chlorine residual. The SCADA system uses the output from the analyzers to calculate combined chlorine residual (chloramine concentration). The SCADA system utilizes three alarm setpoints, a high setpoint of 3.00 mg/L, a low setpoint of 1.00 mg/L, and a low-low (regulatory alarm) setpoint of 0.25 mg/L.

Details concerning the above described alarms are contained with the Filter Effluent Turbidity Critical Control Limit Response Procedure, the Primary Disinfection Critical Control Limit Response Procedure and the Secondary Disinfection Critical Control Limit Response Procedure for the Sydenham Drinking Water System.

The Inspector reviewed the logs in detail for the inspection period, and observed that critical process alarms were responded to in an appropriate manner.

- \* **Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.**

The minimum testing and recording frequency requirements for continuous water quality monitoring equipment are prescribed in the Table in Schedule 6 to O. Reg. 170/03. The reader is directed to the following link for the exact content of the Table and regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Information provided to the Inspector with respect to continuous water quality analyzer sampling, and recording frequency indicated that all turbidimeters are polled every three (3) seconds, and all chlorine residual analyzers are polled every second for test results.

Subsection 4.5 and Table 8: UV Disinfection Equipment of Schedule C to MDWL # 166-101 prescribes that the UV disinfection equipment installed to provide primary disinfection must be equipped with continuous monitoring, and recording equipment to test/read for parameters including UV intensity, flow rate, and UV lamp status at a minimum frequency of every four (4) hours.

The UV disinfection performance parameters are continuously monitored when the units are in operation.

The format used for recording continuous monitoring results includes the date, time, sampling location, and the result of every test.

- \* **All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.**

The requirements for checking and calibrating continuous water monitoring equipment are prescribed in Schedule 6 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

All chlorine residual analysers and the continuous monitoring turbidimeters are checked using hand held / bench top colorimeters and turbidimeter.

The continuous chlorine residual analyzers and continuous turbidimeters are cleaned, calibrated and / or verified with standards annually per manufacturer's instructions by a third party.

DWQMS Procedure Number W-G-10 - Measurement and Recording Equipment Calibration and Maintenance contains details concerning the maintenance, and calibration procedures and calibration frequency used for continuous water quality monitoring equipment at the Sydenham DWS.



## TREATMENT PROCESS MONITORING

The Inspector verified through his review of records/logs that calibration checks are conducted at least monthly on all continuous analyzers. In addition, Utilities Kingston conducts annual calibration verifications of all continuous chlorine analyzers, and turbidimeters, as well as, hand held and bench top chlorine colorimeters, and turbidimeters by third parties. The calibration verification of all continuous chlorine analyzers was last conducted by Ken Harris Instrumentation & Control Ltd., on March 4th & 5th, 2014. The calibration verification of all continuous turbidimeters, as well as, hand held and bench top chlorine colorimeters, and turbidimeters was last conducted by ClearTech in April, 2014.

## OPERATIONS MANUALS

- \* **The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.**

The requirements for operations and maintenance manuals are prescribed in Section 28 of O. Reg. 128/04. A current copy of O. Reg. 128/04 may be found on the Province's e-Laws website at:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_040128\\_e.htm#BK36](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_040128_e.htm#BK36)

The Inspector reviewed the Operational Plan for the Sydenham DWS, and found that it contains a site plan, a process narrative description and process flow diagrams for the Sydenham WTP and the distribution system. In addition, Volume 5 of the DWQMS – Standard Operating Procedures contains 40 to 50 SOPs concerning the operation of the DWS, addressing: the operation and maintenance of the treatment processes, equipment, water storage structures and distribution system components; collecting microbiological samples; dealing with and documenting complaints; and information on treatment chemicals and handling.

Individual equipment, and unit process operations and maintenance (O&M) manuals are also accessible in the control room/office/lab at the WTP.

Engineering drawings, process flow diagrams, and process and instrumentation diagrams were also found to be available to the certified operators, responsible for operating the system, in accordance with section 15.0 Drawings, Schedule B of MDWL # 166-101.

- \* **The operations and maintenance manuals did meet the requirements of the Permit and Licence or Approval issued under Part V of the SDWA.**

The requirements for Operations and Maintenance Manuals for the DWS are prescribed in section 16.0 Operations and Maintenance Manual of Schedule B to MDWL # 166-101. As previously noted, a copy of MDWL # 166-101 is included in the appendices to this inspection report for reference purposes.

The Inspector reviewed the Operational Plan, Volume 2 of the DWQMS – Standard Operating Procedures and Volume 3 – Emergency Plan for the DWS, and found that the content included in the DWQMS met the requirements of section 16.0 of Schedule B of MDWL # 166-101.

## LOGBOOKS

- \* **Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.**

Schedule 7 to O. Reg. 170/03 sets out the minimum qualifications required for a person who conducts operational testing that is not conducted by continuous monitoring equipment. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

The Inspector reviewed log sheets/lab bench sheets used for recording the results of operational checks and testing; sample submission and chain of custody forms, for samples submitted to licenced laboratories; and field testing results, for chlorine residual and pH. From his review of the above noted records, the Inspector observed that the required testing was conducted by appropriately certified operators employed with Utilities Kingston.

## SECURITY

- \* **The owner had provided security measures to protect components of the drinking-water system.**

The Inspector conducted an assessment of site security at the Sydenham WTP, and the Sydenham Elevated Storage Tank on January 20, 2015.

The WTP is located within public parklands including recreational/sports fields along the Sydenham Lake waterfront. Access hatches to the finished water reservoirs are located within the WTP building. The WTP building exterior access doors and windows are kept locked at all times, and are equipped with contact switches hard-wired to an active alarm dialer. All exterior windows to the WTP building are also equipped with security screens. A portion of the Sydenham WTP property, including the lands where the standby generator and low lift pump well are located, is secured by a perimeter security fence, complete with locked access gates, and barbed wire. The low lift well access hatches are also equipped with locks. A certified operator visits the WTP daily to conduct operational checks, and testing.

The Sydenham Elevated Storage Tank is located on the property of a works yard. The exterior access doors to a room located within the pedestal base of the elevated storage tank housing: piping; valves; controls and two chlorine residual analyzers, are equipped with contact switches hard-wired to an active alarm dialer, and the doors are kept locked at all times. The elevated storage tank and property are not secured within perimeter security fencing. The proximity of the elevated storage tank to adjacent buildings would present difficulties in fencing the site.

The overflow pipe, installed on the Sydenham Elevated Storage Tank, is equipped with a flapper gate/valve, and the tank vent is equipped with both bird mesh, and an insect screen. The finished water/high lift pump reservoir vents to the interior of the WTP building.

Previous inspections of the Sydenham DWS have identified that incidents of vandalism have occurred at the WTP site, and have recommended the installation of perimeter security fence around the entire WTP property, including the WTP process building, and the installation of security camera/video monitoring and recording systems. Although vandalism has not occurred in recent years at the WTP site, in the public interest, the ministry continues to recommend that the entire Sydenham WTP site be secured within a perimeter security fence, or an alternative security system, such as security cameras, and remote monitoring system be installed to monitor and protect the water treatment facilities.

## CERTIFICATION AND TRAINING

- \* **The overall responsible operator had been designated for each subsystem.**

The requirements for the owner and / or operating authority of a municipal residential subsystem (drinking water system) to designate an overall responsible operator are prescribed by Ontario Regulation 128/04 - Certification of Drinking Water System Operators and Water Quality Analysts (O. Reg. 128/04). The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_040128\\_e.htm#BK31](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_040128_e.htm#BK31)

DWQMS General Procedure – Personnel Coverage (Document Number: W-G-05) identifies the following with respect to the designation of Overall Responsible Operator (ORO) for the Sydenham Drinking Water System:

The ORO for the water treatment and distribution systems operated by Utilities Kingston must hold licences of an equal, or greater level of certification than the facilities operated;

The ORO for the water treatment facilities and water distribution infrastructure managed, and operated by Utilities Kingston is the Director of Water and Wastewater Operations or alternate designated personnel; and

## **CERTIFICATION AND TRAINING**

Alternate personnel with appropriate licensing for specific facilities, or infrastructure will be appointed, as needed to the position(s) of ORO for specific facilities, or infrastructure by the Director of Water and Wastewater Operations, or President and Chief Executive Officer of Utilities Kingston as per section 23 of O. Reg. 128/04.

Kevin Riley is the current Director of Water and Wastewater Operations and the designated ORO for the Sydenham DWS. Mr. Riley holds valid and appropriate levels of certification to serve as the ORO for the Sydenham DWS.

- \* **Operators in charge had been designated for all subsystems which comprised the drinking-water system.**

The requirements for the owner and / or operating authority of a municipal residential subsystem (drinking water system) to designate “operators in charge” are prescribed by O. Reg. 128/04. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_040128\\_e.htm#BK33](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_040128_e.htm#BK33)

DWQMS General Procedure – Personnel Coverage (Document Number: W-G-05) also designates any, or all of the Water Treatment Operators currently performing operational on-call and maintenance duty, as prescribed in Section 26 of O. Reg. 128/04, as operators in charge (OIC). Similarly, the procedure designates any or all Water Distribution Operators conducting work in the distribution system as OIC.

- \* **Only certified operators made adjustments to the treatment equipment.**

The requirements that only certified operators make adjustments to treatment equipment are prescribed under “General obligations” of Schedule 1 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK19](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK19)

For a detailed listing of the functions that must only be performed by a person certified as an operator, the reader is referred to pages 10 through 12 of the ministry publication, “Certification Guide for Operators and Water Quality Analysts of Drinking Water Systems”, Revised April 2010, or a more recently published version.

The Inspector reviewed logbooks and other record keeping mechanisms for the inspection period, and observed that only certified operators made adjustments to the treatment equipment, and processes at the Sydenham WTP.

## **WATER QUALITY MONITORING**

- \* **All microbiological water quality monitoring requirements for distribution samples were being met.**

The distribution system microbiological sampling and testing requirements are prescribed in section 6-1.1 of Schedule 6 and section 10-2 of Schedule 10 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 10:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK28](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK28)

In the case of the Sydenham DWS, where the reported serviced population is approximately 1000, at least 9 distribution samples must be taken each month, with at least one sample being taken each week, and tested for *Escherichia coli* (*E. coli*) and total coliforms, and at least 25% of all

## WATER QUALITY MONITORING

samples taken each week tested for general bacteria population expressed as heterotrophic plate count (HPC).

The Inspector reviewed the records (sample submission & chain of custody forms and reports of analysis) made available for all distribution sampling and testing undertaken, during the inspection period, and observed that between nine (9) and 11 distribution samples were taken each month; two (2) to three (3) of the samples were taken each week and tested for E. coli, total coliforms; and one (1) to two (2) of the samples taken each week (33% to 100%) were tested for HPC.

- \* **All microbiological water quality monitoring requirements for treated samples were being met.**

The microbiological sampling and testing requirements for treated water are prescribed in section 6-1.1 of Schedule 6 and section 10-3 of Schedule 10 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 10:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK28](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK28)

In the case of the Sydenham DWS, where there is a single point of entry into the distribution system, one sample must be taken each week from the point where water enters the distribution system, and tested for E. coli, total coliforms and HPC.

The Inspector reviewed microbiological sampling and testing records for the inspection period, and observed that one treated water sample was taken each week, and submitted to a licensed laboratory for testing for E. coli, total coliforms and HPC.

- \* **All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

The inorganic water quality monitoring requirements are prescribed in Schedules 6 and 13 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 13:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK31](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK31)

The Inspector reviewed records for the inspection period, and observed that water samples were last taken from the point where the water enters the Sydenham distribution system, and submitted to a licensed laboratory, for testing for Inorganic (Schedule 23) parameters on July 9th, 2014. Samples were previously taken and tested for Inorganic (Schedule 23) parameters on July 17th, 2013.

- \* **All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

The organic water quality monitoring requirements are prescribed in Schedules 6 and 13 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 13:

**WATER QUALITY MONITORING**

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK31](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK31)

The Inspector reviewed records for the inspection period, and observed that water samples were last taken from the point where the water enters the Sydenham distribution system, and submitted to a licensed laboratory, for testing for Organic (Schedule 24) parameters on July 9th, 2014. Samples were previously taken and tested for Organic (Schedule 24) parameters on July 17th, 2013.

- \* **All trihalomethanes water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

The water quality monitoring requirements for trihalomethanes (THMs) are prescribed in Schedules 6 and 13 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 13:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK31](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK31)

The Inspector reviewed records for the inspection, and observed that distribution samples were taken on January 14th, April 15th, July 9th, and October 10th, 2014, and submitted to a licensed laboratory for THM testing.

The THM test results are summarized below:

January 14th, 2014:	43.3 micrograms per liter (µg/L)
April 15th, 2014:	25.5 µg/L
July 9th, 2014:	40.0 µg/L
October 10th, 2014:	33.4 µg/L

The Ontario Drinking Water Quality Standard (ODWQS or the "Standard") for THMs is 100 µg/L based on a moving average concentration of four quarterly sampling periods. The four quarter moving average concentrations for the inspection period were:

40.5 µg/L for the four quarterly period January 2014 - March 2014

38.9 µg/L for the four quarterly period April 2014 – June 2014

38.9 µg/L for the four quarterly period July 2014 – September 2014

35.6 µg/L for the four quarterly period October 2014 – December 2014

- \* **All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS.**

The water quality monitoring requirements for nitrate and nitrite are prescribed in Schedules 6 and 13 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 13:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK31](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK31)

The Inspector reviewed records for the inspection period, and observed that water samples were taken from the point where the water enters the Sydenham distribution system on: January 14th, February 12th, March 5th, April 15th, June 10th, July 9th, and October 10th, 2014, and submitted to a licensed laboratory for testing for nitrate and nitrite.

## WATER QUALITY MONITORING

The Standard for nitrate is 10 milligrams per litre (mg/L); the Standard for nitrite is 1.0 mg/L; and the Standard for nitrate + nitrite is 10 mg/L. A summary of the nitrate, nitrite, and nitrate + nitrite concentrations measured in the drinking water for the inspection period is provided below:

Nitrate: 0.1 to 0.3 mg/L

Nitrite: All samples had concentrations < 0.1 mg/L

Nitrate + Nitrite: 0.1 to 0.3 mg/L

- \* **All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

The water quality monitoring requirements for sodium are prescribed in Schedules 6 and 13 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 13:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK31](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK31)

The Inspector reviewed records for the inspection period, and observed that a water sample was taken from the point where the water enters the Sydenham distribution system on April 15th and July 9th, 2014, and submitted to a licensed laboratory for testing for sodium.

The concentration of sodium in the samples ranged between 12.4 and 12.5 mg/L. The sodium results are below the 20 mg/L limit, at which notice must be provided to the Ministry of the Environment and the local Medical Officer of Health.

The aesthetic objective for sodium is 200 mg/L.

- \* **All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

The water quality monitoring requirements for fluoride are prescribed in Schedules 6 and 13 to O. Reg. 170/03. The reader is directed to the following links for the exact regulatory wording:

Schedule 6:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

Schedule 13:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK31](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK31)

The Inspector reviewed records for the inspection period, and observed that a water sample was taken from the point where the water enters the Sydenham distribution system on July 9th, 2014, and submitted to a licensed laboratory for testing for fluoride.

The concentration of fluoride in the sample was 0.1 mg/L. The Standard for fluoride is 1.5 mg/L.

- \* **All water quality monitoring requirements imposed by the Permit and Licence or Approval issued under Part V of the SDWA were being met.**

Sections 4.2 to 4.4 and Table 7: Environmental Discharge Parameters of Schedule C to MDWL # 166-101 prescribe that a composite sample of the effluent from the process waste facility be taken at the point of discharge to Sydenham Lake at a monthly frequency, and tested for total suspended solids.

The Inspector reviewed test results for the process wastewater facility's effluent, for the inspection period, and observed that monthly composite samples of the effluent were taken and tested for total suspended solids. The Inspector also noted that two (2) samples of the process wastewater facility's effluent were taken in November 2013, and three (3) of the process wastewater facility's effluent were taken in December 2013, and tested for total suspended solids.

## WATER QUALITY MONITORING

The TSS concentration for samples taken during the inspection period ranged from 4 mg/L to 19 mg/L. The annual average TSS concentration for 2014 was 9 mg/L.

Section 1.5 and Table 3: Residue Management of Schedule C to MDWL # 166-101 prescribes that the annual average concentration for total suspended solids shall not exceed 15 mg/L.

Subsection 4.5 and Table 8: UV Disinfection Equipment of Schedule C to MDWL # 166-101 prescribes that the UV disinfection equipment, installed to provide primary disinfection, must be equipped with continuous monitoring and recording equipment to test / read for parameters including UV intensity, flow rate, and UV lamp status at a minimum frequency of every four (4) hours.

The UV disinfection equipment is equipped to provide continuous monitoring of the UV intensity, flow rate, and lamp status when the treatment equipment is in operation.

DWWP # 166-201 does not impose any water quality monitoring requirements.

- \* **All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.**

The Sydenham DWS was eligible during this inspection period for reduced sampling requirements as prescribed in subsection 15.1-5 (10) of Schedule 15.1 to O. Reg. 170/03.

The Inspector reviewed sampling and testing records for the community based lead testing program, and found that in accordance with sections 15.1-6 and 15.1-7 of Schedule 15.1 to O. Reg. 170/03:

During the period December 15, 2013 to April 15, 2014, distribution samples were taken from four (4) distribution locations, and tested for alkalinity and pH;

During the period June 15, 2014 to October 15, 2014, distribution samples were also taken from four (4) distribution locations, and tested for alkalinity and pH, and one (1) distribution location was tested for lead;

The samples were taken by certified operators;

The pH testing was conducted by certified operators; and

The samples for lead and alkalinity analysis were submitted to a licensed laboratory for testing.

The test results indicated the alkalinity ranged in concentration from 116 mg/L to 123 mg/L as calcium carbonate, the pH ranged between 8.01 and 8.02, and lead was in concentration of 0.18 µg/L.

The Standard for lead is 10 µg/L.

- \* **Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.**

The requirement to test for chlorine residual, at the same time and at the same location where microbiological samples are obtained, is prescribed in Schedule 6 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

The Inspector reviewed the laboratory sample submission and chain of custody forms completed for microbiological samples, and reports of analysis for those samples for the inspection period, and observed that free and total chlorine residual is measured and recorded for each microbiological sample taken, to enable the determination of combined chlorine residual (chloramine concentration). In some instances, only total chlorine residual was measured, as the % of combined chlorine is approximately 95%.

## WATER QUALITY ASSESSMENT

## WATER QUALITY ASSESSMENT

- \* **The audit samples collected by the inspector met the applicable Ontario Drinking Water Quality Standards and/or the aesthetic objectives or operation guidelines. The results of the audit sampling are summarized as follows:**

On Tuesday, January 20th, 2015, the Inspector collected distribution samples from the Sydenham Elevated Storage Tank for the purpose of spot checking free and total chlorine residual, and calculating combined residual. Chlorine residual testing was conducted using a ministry owned HACH Chlorine II Pocket Colorimeter. The results from the Inspector's field audit tests for chlorine residual are summarized below:

Free Chlorine: 0.17 mg/L

Total Chlorine: 1.79 mg/L

Combined Chlorine: 1.62 mg/L

The distribution combined chlorine residual value measured by the Inspector was above the recommended optimum target concentration of 1.0 mg/L (at a pH of 8.5 or less), and well above the minimum allowable concentration of 0.25 mg/L. The measured value was also less than the recommended never to exceed maximum concentration of 3.0 mg/L for combined chlorine, which is equivalent to the maximum acceptable concentration for chloramines, allowed by the Ontario Drinking Water Quality Standards.

- \* **Records show that all water sample results taken during the review period met the Ontario Drinking Water Quality Standards (O. Reg. 169/03).**

The prescribed Standards are contained within Ontario Regulation 169/03 - Ontario Drinking Water Quality Standards (O. Reg. 169/03). The reader is directed to the following link for a current copy of O. Reg. 169/03, for a listing of the Standards, and the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030169\\_e.htm](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030169_e.htm)

A review of certificates of analysis for samples taken during the inspection period, and operational testing data for the same period, found that the drinking water supplied met the Ontario Drinking Water Quality Standards.

## REPORTING & CORRECTIVE ACTIONS

- \* **All reporting requirements for lead sampling were complied with as per schedule 15.1-9 of O. Reg. 170/03.**

Reporting requirements for lead sampling, including reporting individual results for plumbing samples, and the provision of interpretive information to occupants of premises sampled, lead exceedances, and a summary of lead sampling and testing results for prescribed sampling periods are prescribed in Schedule 15.1 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK151](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK151)

The owner and operating authority was eligible for reduced sampling during the inspection period, and as a result, was not required to sample plumbing, and test plumbing samples for lead. The operating authority did however collect prescribed samples within the distribution system, and submitted the samples to a licensed laboratory for alkalinity testing, and conducted field testing for pH. A summary of this sampling was reported to the Ministry in "O. Reg. 170/03 Community Lead Testing End of Period Reports" submitted to the Ministry's Drinking Water Program Branch on April 17th, 2014 and October 22nd, 2014.

There were no exceedances of the Standard for lead, during the inspection period, that would require reporting.



## **REPORTING & CORRECTIVE ACTIONS**

- \* **Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.**

Minimum operator response requirements for alarms triggered by continuous monitoring equipment, or incidents in which continuous monitoring equipment triggers automatic shut-off of treatment equipment are prescribed in Schedule 6 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK24](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK24)

The Inspector examined logs for the Sydenham DWS, and log entries made by the duty operators providing 24/7 coverage at the King Street WTP, in detail for the inspection period. The Inspector observed that log entries indicated that all alarms were responded to in an appropriate manner.

- \* **When the primary disinfection equipment, other than that used for chlorination or chloramination, has failed causing an alarm to sound or an automatic shut-off to occur, a certified operator responded in a timely manner and took appropriate actions.**

Minimum operator response requirements, for alarms triggered by primary disinfection equipment, other than equipment used to provide chlorination, or chloramination, are prescribed in subsection 1-6 (2) of Schedule 1 to O. Reg. 170/03. The reader is directed to the following link for the exact regulatory wording:

[http://www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_030170\\_e.htm#BK19](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030170_e.htm#BK19)

The Inspector examined logs for the Sydenham DWS, and log entries made by the duty operators providing 24/7 coverage at the King Street WTP, in detail for the inspection period. The Inspector observed that log entries indicated that all alarms were responded to in an appropriate manner.

## **OTHER INSPECTION FINDINGS**

- \* **The following issues were also noted during the inspection:**

1. Only a portion of the Sydenham WTP property (including the lands where the standby generator and low lift pump well are located) is secured by a perimeter security fence, complete with locked access gates, and barbed wire.

Previous inspections of the Sydenham DWS have identified that incidents of vandalism have occurred at the WTP site, and have recommended the installation of perimeter security fence around the entire WTP property, including the WTP process building, and the installation of security camera/video monitoring and recording systems.

## NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

Not Applicable

## SUMMARY OF BEST PRACTICE ISSUES AND RECOMMENDATIONS

This section provides a summary of all best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. Best Management Practices are recommendations and not mandatory requirements, but may lead to safe drinking water for the consumer.

In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following practices and consider measures to implement them so that all drinking water systems continuously improve their processes.

### 1. The following issues were also noted during the inspection:

1. Only a portion of the Sydenham WTP property (including the lands where the standby generator and low lift pump well are located) is secured by a perimeter security fence, complete with locked access gates, and barbed wire.

Previous inspections of the Sydenham DWS have identified that incidents of vandalism have occurred at the WTP site, and have recommended the installation of perimeter security fence around the entire WTP property, including the WTP process building, and the installation of security camera/video monitoring and recording systems.

#### **Recommendation:**

1. Although vandalism has not occurred in recent years at the WTP site, in the public interest, the ministry continues to recommend that the entire Sydenham WTP site be secured within a perimeter security fence, or an alternative security system, such as security cameras, and remote monitoring system be installed to monitor and protect the water treatment facilities.

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**SIGNATURES**

Inspected By:

Dan White

Signature: (Provincial Officer):

Reviewed &amp; Approved By:

James Mahoney

Signature: (Supervisor):

Review &amp; Approval Date: 04/05/2015 (dd/mm/yyyy)

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.



## STAFF REPORT FIRE DEPARTMENT

**PREPARED FOR COUNCIL:** May 06, 2015

**AGENDA DATE:** May 12, 2015

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**SUBJECT:**

Transfer of old rescue from Fire department to Public Works department

**RECOMMENDATION:**

For information only

**BACKGROUND:**

As part of the vehicle replacement plan, a new Rescue was ordered in 2014 to replace the 1987 Rescue which has exceeded its age requirement for first response. Typically surplus vehicles are advertised for sale and sealed bids are accepted, however the Public Works department has expressed an interest in converting this vehicle into a mobile sign and barricade truck.

This report is to inform Council of the vehicle transfer from the Fire Department to the Public Works department.

Public Works will be responsible for the cost of licensing, painting the truck orange, replacing decals and removing fire department lighting. Sufficient funds were set aside in the 2015 operating budget for this anticipated change.

**Submitted/approved by:**  
Wayne Orr, CAO

**Prepared by:**  
Rick Chesebrough, Fire Chief

**KFL&A**  
**Public Health** 

*An accredited teaching health unit affiliated with Queen's University*  
 I.M. Gemmill MD, CCFP, FRCPC(C) Medical Officer of Health

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 SOUTH FRONTENAC

April 29, 2015

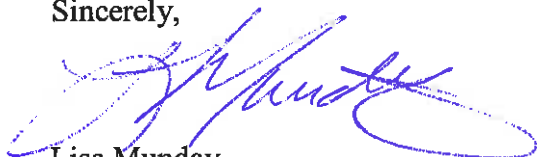
Township of South Frontenac  
 P.O. Box 100  
 4432 George Street  
 Sydenham, ON  
 K0H 2T0

Attention: Wayne Orr, Chief-Administrative Officer/Clerk

Dear Mr. Orr:

Congratulations to The Council of the Township of South Frontenac on the creation of the "South Frontenac Rides" committee. As requested, I would like to appoint Stephanie Sciberras to this committee. Stephanie is a Physical Activity Specialist on the Chronic Disease Prevention Team at KFL&A Public Health. She can provide the "South Frontenac Rides" committee with expertise and direction for the promotion of a "Healthy Active Lifestyle".

Sincerely,



Lisa Munday  
 Manager, Chronic Disease Prevention

**KINGSTON, FRONTENAC AND LENNOX & ADDINGTON PUBLIC HEALTH**

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Ministry of Citizenship,  
Immigration and International  
Trade

Ministère des Affaires civiques,  
de l'immigration et du Commerce  
International



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April 2015

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Dear Friends,

It is my pleasure to send you this call for nominations for the Ontario Medal for Good Citizenship.

Established in 1973, the Ontario Medal for Good Citizenship honours Ontarians who, through exceptional, long-term efforts, have made outstanding contributions to community life.

Recipients will be presented with their medal by the Lieutenant Governor of Ontario at a special ceremony at Queen's Park in the Fall of 2015.

Here is what you need to do to submit a nomination for this medal program:

- a) Visit [ontario.ca/honoursandawards](http://ontario.ca/honoursandawards) and click on the Ontario Medal for Good Citizenship icon.
- b) Download the appropriate PDF form.
- c) Read the eligibility criteria and instructions carefully.
- d) Fill out the form and submit it along with your supporting documents/testimonials before July 17, 2015. Instructions for submitting your package can be found on the website.

If you have any questions or would like additional information, please call 416 314-7526, toll free 1 877 832-8622 or TTY 416 327-2391.

I encourage you to take the time to nominate a deserving citizen in your community for an Ontario Medal for Good Citizenship. The men and women we honour stand as shining examples to us all.

Thank you for your attention to this important recognition program.

Yours truly,

Michael Chan  
Minister