



TOWNSHIP OF MELANCTHON

A G E N D A

Thursday, April 16, 2015 - 5:00 p.m.

1. Call to Order
2. Announcements
3. Additions/Deletions/Approval of Agenda
4. Declaration of Pecuniary Interest and the General Nature Thereof
5. Approval of Draft Minutes - April 2, 2015
6. Business Arising from Minutes
7. Point of Privilege or Personal Privilege
8. Public Question Period (Please visit our website under Agenda & Minutes for information on Public Question Period)
9. Road Business
 1. Culvert on 2nd Line SW - updateUnfinished Business
 1. Letter from G.W. Jorden, Planning Consultants Limited dated April 8, 2015, Re: The Section of the 4th Line O.S. Abutting Lots 9 & 10 Concessions 3 and 4, O.S.
 2. Speeding in Horning's Mills - information on radar sign/seasonal speed bumps
 3. DWPI - Poles on 4th Line - update
10. Correspondence
 - * Outside Board & Committee Minutes
 1. Minutes of the Centre Dufferin Recreation Complex - Meeting February 25, 2015
 2. Minutes of the Centre Dufferin Recreation Complex - Meeting January 14, 2015
 3. Minutes of the Grand River Conservation Authority Annual General Meeting - Meeting Friday February 27, 2015
 4. Minutes of Shelburne & District Fire Board - Meeting February 3, 2015
 5. Minutes of Shelburne & District Fire Board - Meeting March 3, 2015
 - * Items for Information Purposes
 1. Copy of a resolution passed by the Town of Orangeville dated March 27, 2015, Re: Costing Request for Ontario Provincial Police Provision of 9-1-1 Central Emergency Reporting Bureau (CERB) Services (A19)
 2. Highlights of the NVCA Board of Directors Meetings No. 03-15 - March 27, 2015
 3. AMO Communications - AMO Policy Update - Ministry of Education Releases New Process for School Closures
 4. Letter from R.A. (Rick) Philbin, Superintendent, Commander, Municipal Policing Bureau dated March 26, 2015, Re: Year 2014 Reconciled Contract Policing Costs and 2015 Billing Statement Adjustment - Ontario Provincial Police (OPP)
 5. Shelburne Announces Community Torchbearer for Pan Am Games Torch Relay
 6. AMO Communications - AMO Report to Member Municipalities Highlights of the March 2015 Board Meeting
 7. Email from Peggy Tollett, Treasurer Corporate Services, Town of Caledon dated April 1, 2015, Re: New Process for Payments - 2015 POA Budget
 8. AMO Communications - AMO Policy Update - Recent Developments Regarding Housing and Homelessness Prevention
 9. Letter from Gayle Wood, CAO, Nottawasaga Valley Conservation Authority dated April 1, 2015, Re: NVCA 2015 Municipal Levy
 10. Copy of a resolution passed by the Township of Madawaska Valley dated April 7, 2015, Re: Rising Hydro Rates

11. Letter from Lisa Thompson, MPP Huron-Bruce dated March 27, 2015, Re: Bill 66: Great Lakes Protection Act, 2015
12. Email from David Thwaites dated April 3, 2015, Re: Garbage and Debris in ditches and along roadsides in the Township of Melancthon
13. Email from Carol Mach, County Forest Manager, Dufferin County dated April 10, 2015, Re: Dufferin County Forest Annual Report
14. GRCA Current - April 2015 . Volume 20 Number 4

*** Items for Council Action**

1. Copy of a resolution passed by the CDRC dated March 30, 2015, Re: 2015 Approved Budget
2. Letter from Sylvia Jones, MPP Dufferin - Caledon dated March 2015, Re: Private Members Bill 36 - The Respecting Private Property Act
3. Email from Tecia White, Whitewater Hydrogeology Ltd., dated March 31, 2015, Re: Strada Aggregates - Melancthon Pit 2014 Compliance Report

***Items for County Official Plan**

1. Letter from Marcia Wallace, PhD, MCIP-RPP, Regional Director, Ministry of Municipal Affairs and Housing dated March 27, 2015, Re: Dufferin County Official Plan - MMAH File No. 22-OP-143362
2. Email from Sonya Pritchard, CAO Dufferin County - Report to Council dated April 9, 2015, Re: County OP Approval and next steps
3. Email from Sonya Pritchard, CAO Dufferin County dated April 10, 2015, Re: County OP Approval and next steps
4. Report from Denise Holmes to Mayor White and Members of Council dated April 10, 2015, Re: MMAH Decision - Dufferin County Official Plan

***Items for Dufferin Wind Power**

1. Email from Don Roger, Torys LLP dated March 31, 2015, Re: Melancthon-Dufferin Wind Agreement - Lender Acknowledgement and Consent Agreement

11. General Business

1. By-law to Govern the Proceedings of Council and its Committees and to Repeal By-law No. 8-2009, 15-2009, 3-2010, 21-2010, 11-2012, 15-2013 and 58-2014
2. By-law to amend the Shelburne and District Fire Department Agreement
3. By-law to amend By-law No. 17-2003 (Animal Control By-law)
4. New/Other Business/ Additions
 1. Horning's Mills Hall Board of Management - Applications for the Vacant Position on the Board
 2. Motion to approve a 2% increase in wages for Township Staff and Council as per the 2015 Budget
5. Unfinished Business
 1. Code of Conduct - Defer
 2. By-law Enforcement
 3. Hill Machinery Cleanup of Property - onsite to property - May 21, 2015 to see progress being made

12. Delegations

1. 5:30 p.m. - Mulmur Township Council - North Dufferin Recreation Centre - Costs

13. Closed Session (if required)

1. Approval of Draft Minutes - February 5, 2015

14. Notice of Motion

15. Confirmation By-law

16. Adjournment and Date of Next Meeting - Thursday, May 7, 2015 - 5:00 p.m.

17. On Sites

18. Correspondence on File at the Clerk's Office

April 8, 2015

VIA EMAIL

Ms. Denise B. Holmes, AMCT
CAO/Clerk
Township of Melancthon
157101 Highway 10
Melancthon, Ont.
L9V 2E6

Dear Ms. Holmes:

**The Section of the 4th Line O.S.
Abutting Lots 9 & 10 Concessions 3 and 4, O.S.**

The following comments are provided in response to your April 7th email concerning the section of the 4th Line, O.S., abutting Lots 9 and 10 in Concessions 3 and 4, O.S. Because the Official Plan designates this road section as a mineral aggregate haul route and a trucking company has enquired about using this road section for heavy truck traffic, Council is seeking an opinion on deleting this portion of the road from the No Heavy Trucks By-law and the Reduced Load Periods By-law.

With a lengthy record of pit operations and a related truck maintenance facility on the abutting lands, this road section has been an aggregate haul route for many years. Although having a somewhat lower standard of construction than the road section north of County Road 17, it has accommodated heavy truck traffic.

As indicated in section 5.6.2 (h) of the Official Plan, the use of this and other road sections as mineral aggregate haul routes at the time the Plan was prepared was the reason they were so designated. Also, other sections of the Plan, particularly sections 5.6.2 (i)(i) and 6.2.5 (b), specifically require traffic from all mineral aggregate operations to use such routes.

For consistency with the applicable Official Plan policies and to ensure conformity with the Planning Act, it would be appropriate to delete this road section from Schedule "A" to By-law Number 27-2012, the by-law restricting heavy trucks on certain Township roads. Extenuating circumstances that would justify not amending that By-law could include the impending termination of the road's use as a mineral aggregate haul route or some form of significant deterioration in the condition of the road that would limit its capacity to accommodate heavy truck traffic.


In view of the existing land uses in the area it appears unlikely that there are any such conditions relating to this road section. However, if conditions did warrant retaining the By-law in its present form and not permitting the use of this road section for heavy trucks, both now and for the foreseeable future, then an amendment should be made to the Official Plan to delete the mineral aggregate haul route designation from this part of the road.

Reduced load period by-laws such as By-law Number 10-2014 are intended to protect roads that could be adversely affected during the period in the spring when conditions in the road base may be changing as a result of the warming temperatures. The significance of any such effects vary depending on the road's construction standard. This aspect of the subject road section should be determined by the Road Superintendent or other suitably qualified person. In general, however, designated mineral aggregate haul routes would be built to a construction standard that would not require the application of such a by-law.

The following summarizes my recommendations on the two issues being considered by Council.

1. It is my opinion that the section of the 4th Line O.S. abutting Lots 9 and 10 in Concessions 3 and 4, O.S., should be deleted from Schedule "A" to By-law Number 27-2012, the by-law restricting heavy trucks on certain Township roads, unless there are extenuating circumstances such as those discussed herein.
2. Conversely, if there are conditions that justify the retention of the provisions of By-law 27-2012 as they apply to this road section, the Official Plan should be amended to delete the mineral aggregate haul route designation from this section of the road.
3. While mineral aggregate haul routes generally are constructed to a standard that does not warrant the use of reduced load period by-laws, the determination of whether the current by-law should continue to apply to the subject road section should be the responsibility of a person suitably qualified in the area of road construction standards.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. W. Jorden', written in a cursive style.

G. W. Jorden, RPP

CENTRE DUFFERIN RECREATION COMPLEX

BOARD OF MANAGEMENT

Minutes of the Regular meeting held February 25, 2015 at the CDRC

Attendance:	Laura Ryan	Mono
	Walter Benotto	Shelburne
	Dan Sample	Shelburne
	Wade Mills	Shelburne
	Heather Foster	Amaranth
	Chris Gerrits	Amaranth
	Janice Elliott	Melancthon
	Kim Fraser	Facility Administration Manager
	Rick Thompson	Facility Maintenance Manager

Absent: AJ Cavey, Ron Webster

Meeting called to order by Chair, Laura Ryan at 6:00pm
A quorum was present.

Agenda:

MOTION #1 – Moved by W. Mills seconded by D. Sample. Be it resolved we approve the agenda dated February 25, 2015 as circulated and presented.

Carried

Declaration of Pecuniary Interests:

Laura Ryan stated that if any member of the board had a disclosure of pecuniary interest that they could declare the nature thereof now or at any time during the meeting.

Discussion of Minutes of Previous Meetings:

MOTION #2 – Moved by D. Sample seconded by W. Mills. That the minutes of the CDRC Board of Management regular board meeting held January 14, 2015 be approved as presented and circulated.

Carried

Correspondence:

- Email from Shawnette Crouse, Town of Shelburne-Special Events Coordinator requesting use of the CDRC Facility (outside and arena lobby only) for Easter Egg Hunt on Saturday, April 4, 2015 from 1:00-3:00pm. Similar to last year.
- Request from Michelle Knott, supervisor of Hyland Centre Child Care requesting a letter acknowledging that the CDRC is the primary evacuation site in event of an emergency for the child care.
- Email(s) from CJ Schneider, Head Coach and partner of the Orangeville Americans Jr A Hockey Club. Seeking permission to return the franchise back to Shelburne.

MOTION #3 – Moved by W. Benotto seconded by W. Mills. That the CDRC Board of Management approves the use of the CDRC lobby as per similar to 2014 (last year's) usage for the Easter Egg Hunt.

Carried

MOTION #4 – Moved by W. Mills seconded by W. Benotto. That the CDRC Board of Management receives the letter from CJ Schneider and directs staff to work with team management to develop the necessary contracts to allow the program to move forward.

Carried

MOTION #5 – Moved by W. Benotto seconded by W. Mills. That correspondence is received and placed on file.

Carried

Finance Committee Report:

MOTION #6 – Moved by W. Mills seconded by W. Benotto. That the bills and accounts in the amount of \$191,675.48 be approved and paid.

Carried

J. Elliott arrives at 6:35pm

MOTION #7 – Moved by W. Benotto seconded by H. Foster. Be it resolved that the 2015 Budget as presented on February 25, 2015 (and attached Schedule C) be approved with Municipal Funding of \$168,300 being requested, and that a copy of this motion and the budget be sent to all member municipalities with a covering letter of explanation.

Carried

Pool Committee Report:

The Pool Committee met Friday, January 30, 2015 and conducted four (4) interviews.

MOTION #8 – Moved by D. Sample seconded by W. Benotto. Be it resolved that the CDRC Board of Management hires the following for the 2015 contract seasonal positions: Head Lifeguard-Lauren Brett; Head Day Camp Coordinator-Hannah Francis.

Carried

MOTION #9 – Moved by W. Mills seconded by D. Sample. That we receive the verbal report from the Pool Committee.

Carried

Facility Administration Manager's Report:

See Schedule A

MOTION #10 – Moved by W. Mills seconded by W. Benotto. That we receive the report from the Facility Administration Manager.

Carried

Facility Maintenance Manager's Report:
See Schedule B

MOTION #11 – Moved by W. Benotto seconded by J. Elliott. That the Arena Manager, Rick Thompson, has been approved by the CDRC Board of Management to take the Certified Pool Operators Certification at the cost of \$495.00 plus HST.

Carried

MOTION #12– Moved by W. Benotto seconded by W. Mills. That we receive the report from the Facility Maintenance Manager.

Carried

New Business:

CDRC Front Parking Area us by School during daytime:

Concern was raised with the school utilizing a lot of the front parking area, thereby limiting parking availability to CDRC patrons. After some discussion, the Board directs staff to contact the Principal of the school.

Confirmation by By-law

MOTION #13 – Moved by W. Mills seconded by D. Sample. Be it resolved that leave be given for the reading and enacting of by-law #02-2015 being a by-law to confirm certain proceedings of the CDRC Board of Management for its Regular Board meeting held February 25, 2015.

Carried

Adjournment:

MOTION #14-Moved by C. Gerrits seconded by W. Benotto. That we now adjourn at 7:05pm to meet again on March 25, 2015 at 6:00pm, or at the call of the chair.

Carried

Secretary - Treasurer

Chairperson

Dated

SCHEDULE 'A'

Facility Administration Managers Report –February 25, 2015

- Skate Canada Shelburne has been awarded Skates Alive 2015. A competition scheduled for December 4-6th.
- Andrew Lewis from Giant Tiger, partnered with his Dundalk hockey team and Shelburne Home Hardware are considering promoting an NHL Alumni Game here on Saturday, November 14, 2015. Proceeds from the event will be shared between Shelburne and Dundalk Minor Hockey.
- I met with CJ Schneider and Ryan Zeng from Orangeville Americans on February 12, 2015 and Rick and I gave them a tour of the facility. As well as ice rentals, they may be interested in renting office space. Seasonal revenue generated from the daytime practices will be approx. \$18,240.00. Seasonal revenue generated from evening games will be approx. \$9,660.00. Our previous contracts have required a \$5,000.00 payment in consideration for the *exclusive* use of a dressing room. That \$5,000.00 payment was then credited against ice rental costs once a total amount paid reached \$25,000.00 excluding HST.

Kim Fraser
Facility Administration Manager

SCHEDULE 'B'

Facility Maintenance Managers Report – February 25, 2015

- The front sidewalk has heaved again. We have put out the trip hazard signs.
- I am scheduled to renew my Certified Pool Operator (CPO) certification April 8 and 9, 2015. The cost is \$495.00 plus HST.
- I contacted Brent Freiburger from Genivar to get a cost to do a structural audit. He informed me that they could determine whether the roof is sound enough to put up solar panels. However, they would not be able to determine what type of life cycle is left on the roof. We would have to contact a roofing contractor for that information.

Rick Thompson
Facility Maintenance Manager

CENTRE DUFFERIN RECREATION COMPLEX

BOARD OF MANAGEMENT

Minutes of the Regular meeting held January 14, 2015 at the CDRC

Attendance:	Laura Ryan	Mono
	Walter Benotto	Shelburne
	Dan Sample	Shelburne
	Wade Mills	Shelburne
	AJ Cavey	Shelburne
	Heather Foster	Amaranth
	Chris Gerrits	Amaranth
	Janice Elliott	Melancthon
	Ron Webster	Melancthon
	Kim Fraser	Facility Administration Manager
	Rick Thompson	Facility Maintenance Manager

Meeting called to order by Facility Administration Manager, Kim Fraser at 6:00pm
A quorum was present.

Elections were opened:

Chairman: Moved by Wade Mills, seconded by Dan Sample to nominate Walter Benotto for Chairman. Carried

Walter Benotto accepts the nomination

Moved by AJ Cavey, seconded by Heather Foster to nominate Laura Ryan for Chairman. Carried
Laura Ryan accepts the nomination

Hearing no further nominations.

Moved by Janice Elliott, seconded by Dan Sample to close nominations. Carried

A ballot election was conducted. Six (6) votes for Laura Ryan, Three (3) votes for Walter Benotto

Laura Ryan accepts the position of Chairman

Chairman, L. Ryan assumes chair of the meeting. Laura thanks the members and continues with the meeting. The floor is opened to nominations for Vice-Chairman.

Vice-Chairman: Moved by H. Foster, seconded by D. Sample to nominate W. Benotto for Vice-Chairman. Carried

W. Benotto accepts the nomination.

Hearing no further nominations.

Moved by J. Elliott, seconded by R. Webster to close nominations. Carried

W. Benotto accepts the position of Vice-Chairman

Committees for 2015:

Discussion to remove Fundraising Committee was agreed upon. An assembly of committee members was established. See Schedule A

Agenda:

MOTION #1 – Moved by AJ Cavey seconded by J. Elliott. Be it resolved we approve the agenda dated January 14, 2015 as circulated and presented.

Carried

Declaration of Pecuniary Interests:

Laura Ryan stated that if any member of the board had a disclosure of pecuniary interest that they could declare the nature thereof now or at any time during the meeting.

Discussion of Minutes of Previous Meetings:

MOTION #2 – Moved by W. Benotto seconded by R. Webster. That the minutes of the CDRC Board of Management regular board meeting held November 12, 2014 be approved as presented and circulated.

Carried

Correspondence:

- Letter from Orangeville & Area Small Business Enterprise Centre, Coordinator, Ellen Sinclair requesting use of the Pool View Room free of charge on January 28, 2015.
- Township of Melancthon-Appointing Janice Elliott and Ron Webster to the CDRC Board of Management until November 30, 2015
- Township of Amaranth-Appointing Chris Gerrits and Heather Foster to the CDRC Board of Management
- Town of Mono-Re-appointing Mayor Laura Ryan to the CDRC Board of Management
- Town of Shelburne-appointing Walter Benotto, Wade Mills, Dan Sample and AJ Cavey to the CDRC Board of Management
- Email from Durham Bus Driver re: January 3, 2015

MOTION #3 – Moved by AJ Cavey seconded by J. Elliott. That the Centre Dufferin Recreation Complex Board has received & discussed the letter from Shawn Whitty; And further the Board respectfully denies the request for compensation & directs staff to forward this motion with a letter to Mr. Whitty.

Carried

MOTION #4 – Moved by J. Elliott seconded by C. Gerrits. That correspondence is received and placed on file.

Carried

Finance Committee Report:

MOTION #5 – Moved by W. Mills seconded by R. Webster. That the bills and accounts in the amount of \$83,032.26 be approved and paid.

Carried

MOTION #6 – Moved by AJ Cavey seconded by H. Foster. That effective immediately, cheque signing authorities for the CDRC chequing account be Kim Fraser, Laura Ryan and Walter Benotto.

Carried

Facility Administration Manager's Report:

See Schedule B

New ice rentals-discussions suggest that a policy be created to accept new rental groups. A new committee of Walter Benotto, Ron Webster and Wade Mills is formed.

MOTION #7 – Moved by D. Sample seconded by W. Mills. That we receive the report from the Facility Administration Manager.

Carried

Facility Maintenance Manager's Report:

See Schedule C

MOTION #8– Moved by C. Gerrits seconded by D. Sample. That we receive the report from the Facility Maintenance Manager.

Carried

Old Business:

Shelburne Muskies-Financial Position:

Follow up to last meeting, club President, Kerry Young; Executive Member and Pam addressed the Board of Management to further address the financial difficulties the club is facing. After some discussion the following motion was presented.

MOTION #9 – Moved by W. Mills seconded by W. Benotto. That the CDRC Board agrees to waive the T&C Room fee for the Shelburne Muskies during home games for the remainder of this season to allow for the cost-effective operation of a "booster club" unless the T&C Room has been previously rented by another paying customer, and that this apply retro actively to January 10, 2015. Not to exceed \$1,500.00.

Carried

Expressions of Interest-Advertising on New Olympia:

Two (2) Expressions of Interest were received from Ostic Insurance and Shelburne Primary Eye Care. After review and discussion the following motion was presented.

MOTION #10 – Moved by AJ Cavey seconded by J. Elliott. That the Centre Dufferin Recreation Complex receives the expressions of interest from Jamie Ostic and Shelburne Primary Eye Care; And further that the Board accepts the proposal from Ostic Insurance as outlined in his letter dated September 20, 2014.

Carried

New Business:

Schedule 2015 Meetings: The 4th Wednesday of the month at 6:00pm

Wednesday, February 25, 2015

Wednesday, March 25, 2015

Wednesday, April 22, 2015

Wednesday, May 27, 2015
Wednesday, June 24, 2015
Wednesday, July 22, 2015
Wednesday, August 26, 2015
Wednesday, September 23, 2015
Wednesday, October 28, 2015
Wednesday, November 25, 2015
Wednesday, December 23, 2015

In Camera

Enter In Camera at 7:40pm

MOTION #11 - Moved by W. Benotto seconded by D. Sample. Be it resolved that: The Board move into a closed session meeting pursuant to section 239 of the Municipal Act, 2001, as amended for the following reason(s): Personal matters about an identifiable individual, including an employee.

Carried

MOTION #12 - Moved by D. Sample seconded by W. Benotto. That the CDRC Board of Management rise from "In Camera" with direction to Chair, Vice Chair and Chris Gerrits at 8:25pm.

Carried

R. Webster leaves at 8:25pm
AJ Cavey leaves at 8:25pm

Confirmation by By-law

MOTION #13 – Moved by W. Benotto seconded by D. Sample. Be it resolved that leave be given for the reading and enacting of by-law #01-2015 being a by-law to confirm certain proceedings of the CDRC Board of Management for its Regular Board meeting held January 14, 2015.

Carried

Adjournment:

MOTION #14-Moved by C. Gerrits seconded by J. Elliott. That we now adjourn at 8:29pm to meet again on February 25, 2015 at 6:00pm, or at the call of the chair.

Carried

Secretary - Treasurer

Chairperson

Dated

SCHEDULE 'A'

CENTRE DUFFERIN RECREATION COMPLEX

BOARD OF MANAGEMENT

COMMITTEES FOR 2015

PROPERTY/FINANCE COMMITTEE:	CHAIRMAN:	Heather Foster
	Member:	Walter Benotto
	Member:	Wade Mills
	Member:	Ron Webster
POOL COMMITTEE:	Member:	Laura Ryan
	Member:	Ron Webster
	Member:	Chris Gerrits
	Member:	A.J. Cavey
POLICIES & PROCEDURES:	Member:	Laura Ryan
	Member:	Laura Ryan
	Member:	Heather Foster
	Member:	Janice Elliott
HUMAN RESOURCE:	Member:	Wade Mills
	Member:	Laura Ryan
	Member:	Janice Elliott
	Member:	Chris Gerrits
HALL OF FAME:	Member:	Walter Benotto
	Member:	A.J. Cavey
	Member:	Dan Sample
	Member:	Chris Gerrits
	Member:	Ron Webster

Laura Ryan is the CDRC Board of Management Chairman for 2015 and is ex-officio on all committees.

Walter Benotto is the CDRC Board of Management Vice-Chairman.

SCHEDULE 'B'

Facility Administration Managers Report –January 14, 2015

- Two (2) expressions of interest have been received from Ostic Insurance and Shelburne Primary Eye Care.
- Approx. November 27, 2014 I received a call from a gentleman interested in potentially bringing a Jr. A hockey team back to Shelburne for the 2015/2016 hockey season.
- There is a local gentleman still quite interested in establishing a ladies hockey league at the CDRC
- Effective January 1, 2015 new steps towards a smoke-free Ontario took place. The Town of Shelburne will provide signage when it becomes available.
- The Town of Shelburne will be providing training for the Rzone policy. We will be contacting CDRC user groups and inviting them to this information session, to be scheduled shortly.
- BDO will be conducting the annual financial audit the week of February 17, 2015.
- I am currently working on year end closing, summer pool and camp hiring and will soon be working on the Spring/Summer 2015 Recreation Guide.

Kim Fraser
Facility Administration Manager

SCHEDULE 'C'

Facility Maintenance Managers Report – January 14, 2015

- An emergency repair call went out to Wellington Comfort Systems on Saturday, November 15, 2014 as the boiler system broke down. Two (2) boilers were not firing. An ignition module was replaced on middle boiler. Third boiler still not working. Technician came back Thursday, November 20, 2014 to repair balance of boiler system. Required another ignition module, fan venter assembly and three (3) automatic air vents. Saturday service call billed \$731.20 plus HST. Thursday follow up call billed \$2281.20 plus HST.
- An emergency repair call went out to Georgian Bay Fire & Safety on Saturday, December 13, 2014 as the alarm was sounding and would not go off. A faulty heat detector was found in a dressing room as well as a faulty pull station at an arena exit. The service call was billed at \$877.60 plus HST.
- I've been informed by Scott Wheeldon that the back flow preventers require annual testing. Wellington Plumbing & Heating performed the test and it passed on November 11, 2014. Cost was billed \$475.00 plus HST.
- Kim and I attended the meeting for the Development Charge study at the Shelburne Town Hall on Friday, November 28th.

Rick Thompson
Facility Maintenance Manager



Grand River Conservation Authority Annual General Meeting

Friday, February 27, 2015

The following are the minutes of the Annual General Meeting held at 9:30 a.m. on Friday, February 27, 2015 at the Administration Center, Cambridge, Ontario.

Members Present:

J. Mitchell, Chair, L. Armstrong, B. Banbury, B. Bell, B. Coleman, B. Corbett, S. Foxton, G. Gardhouse, R. Hillier*, J. Jamieson, H. Jowett, K. Linton, G. Lorentz, C. Lunau, F. Morison, J. Nowak, V. Prendergast, W. Roth, M. Salisbury, P. Salter, S. Simons, W. Wettlaufer, C. White, G. Wicke

Members Regrets:

S. Shantz, W. Stauch

Staff:

J. Farwell, K. Murch, D. Bennett, D. Boyd, N. Davy, S. Lawson, S. Radoja, T. Ryan, B. Brown, N. Munn, F. Natolochny, B. Parrott, S. Wilbur

Also Present:

S. Arnold, Chair, St. Clair Region Conservation Authority; B. McDougall, General Manager, St. Clair Region Conservation Authority; J. Brennan, Retired Grand River Conservation Authority Member; B. Mackie, Chair, Kettle Creek Conservation Authority, E. VanHooren, General Manager/Secretary-Treasurer; Kettle Creek Conservation Authority; L. Boyko, Retired Grand River Conservation Authority Member; C. Millar, Retired Grand River Conservation Authority Member; J. d'Ailly, Retired Grand River Conservation Authority Member; S. Schmitt, Retired Grand River Conservation Authority Member; M. Laidlaw, Retired Grand River Conservation Authority Member; B. Timms, Chair, Niagara Peninsula Conservation Authority; D. Lever, Mayor, Township of Puslinch; R. Eddy, Mayor, County of Brant

1. Call to Order:

J. Mitchell, Chair, called the meeting to order at 9:30 a.m.

2. Roll Call and Certification of Quorum – 13 members constitute a quorum
(1/2 of members appointed by participating municipalities)

The Secretary-Treasurer called the roll and certified a quorum with 23 members present. A total of 24 members attended the meeting.

3. Chair's Remarks:

J. Mitchell welcomed members, staff and guests and made the following comments:

- On January 27, 2015 J. Mitchell, J. Farwell and K. Murch presented the 2015 Budget to Hamilton City council.
- On January 31, 2015 J. Mitchell attended the Opening Reception for the *Ocean Bound Exhibit* at the Museum.

*R. Hillier joined the meeting at 9:35 a.m.

- On February 5, 2015 J. Mitchell and J. Farwell attended a Lake Erie Region Source Protection Committee meeting. Agenda topics included final revisions to the Grand River Source Protection Plan.
- On February 12, 2015 J. Farwell and S. Radoja presented the 2015 Budget to the Region of Waterloo council.
- On February 13, 2015 the 18th Annual Heritage Day Workshop was held in Guelph. The theme for the morning program was "*The Great War Remembered*". The theme for the afternoon program was "*At the Confluence*". Approximately 120 people attended.
- On February 18, 2015 J. Farwell and K. Murch presented the 2015 Budget to Township of Amaranth council.
- During the upcoming March Break a number of Day Camps will be held at Grand River Conservation Authority (GRCA) Nature Centres. Further information can be found on the GRCA website.
- The March 27, 2015 General Membership Meeting will be held at the Waterloo Region Museum in Kitchener. A map showing the location will be provided to the members.

4. Review of Agenda:

The following item was added under Item 10. a):

Correspondence from Susan M. Stone, A.M.C.T., CAO/Clerk-Treasurer, Township of Amaranth to Keith Murch, Assistant Chief Administrative Officer and Secretary-Treasurer, Grand River Conservation Authority dated February 19, 2015 Re: Grand River Conservation Authority 2015 Budget.

5. Declarations of Pecuniary Interest:

There were no declarations of pecuniary interest made in relation to the matters to be dealt with.

6. Minutes of the Previous Meeting:

General Membership/Election of Officers Meeting – January 23, 2015

There were no questions or comments with respect to the minutes of the General Membership/Election of Officers Meeting of January 23, 2015.

Moved by: Pat Salter
Seconded by: W. Wettlaufer
(Carried)

THAT the Minutes of the General Membership/Election of Officers Meeting of January 23, 2015 be approved as circulated.

7. Business Arising from Previous Minutes:

None

8. Hearing of Delegations:

None

9. Presentations:

J. Mitchell presented C. Millar, J. Brennan, S. Schmitt, L. Boyko J. d'Ailly and M. Laidlaw with framed photographs as a token of appreciation for their years of service as members of GRCA

C. Millar said that of all the Boards she has represented she was most fond of GRCA because it contributes so much to the community.

J. Brennan thanked the members and staff for a rewarding four years and said that what the members do is important to a great number of people.

S. Schmitt said that he has the utmost respect for the staff and members and everyone should continue the good work.

L. Boyko said that he was a long time member of GRCA and supported the southern watershed. He acknowledged that GRCA's image has changed significantly and thanked staff for the critical duties they provide in the watershed.

J. d'Ailly said it has been an honour to be a member of GRCA because it is a well respected organization and what GRCA does is done well.

M. Laidlaw said that she has enjoyed being a member of GRCA.

10. Correspondence:

i. Copies for members

- i) Correspondence from Denise B. Holmes, AMCT, CAO/Clerk, Township of Melancthon to Keith Murch, assistant CAO/Secretary Treasurer, Grand River Conservation Authority dated February 6, 2015 Re: 2015 Budget and Levy Meeting
- ii) Correspondence from Jennifer Goertzen, Administrative Assistant, Township of Mapleton to Keith Murch, Assistant Chief Administrative Officer and Secretary-Treasurer, Grand River Conservation authority dated February 13, 2015 Re: Grand River Conservation Authority 2015 Budget and Levy Meeting

- iii) Correspondence from Susan M. Stone, A.M.C.T., CAO/Clerk-Treasurer, Township of Amaranth to Keith Murch, Assistant Chief Administrative Officer and Secretary-Treasurer, Grand River Conservation Authority dated February 19, 2015 Re: Grand River Conservation Authority 2015 Budget.
 - ii. Not copied
None
 - Moved by: V. Prendergast
 - Seconded by: B. Bell
 - (Carried)
 - iv) THAT correspondence from Denise B. Holmes, AMCT, CAO/Clerk, Township of Melancthon to Keith Murch, assistant CAO/Secretary Treasurer, Grand River Conservation Authority dated February 6, 2015 Re: 2015 Budget and Levy Meeting; correspondence from Jennifer Goertzen, Administrative Assistant, Township of Mapleton to Keith Murch, Assistant Chief Administrative Officer and Secretary-Treasurer, Grand River Conservation authority dated February 13, 2015 Re: Grand River Conservation Authority 2015 Budget and Levy Meeting and correspondence from Susan M. Stone, A.M.C.T., CAO/Clerk-Treasurer, Township of Amaranth to Keith Murch, Assistant Chief Administrative Officer and Secretary-Treasurer, Grand River Conservation Authority dated February 19, 2015 Re: Grand River Conservation Authority 2015 Budget be received as information.
11. 1st and 2nd Reading of By-Laws:
None
12. Presentation of Reports:
- a) **GM-02-15-12** Weighted Voting – 2015 Budget and General Levy
There were no questions or comments with respect to this report.
 - Resolution 15-15
 - Moved by: S. Foxton
 - Seconded by: W. Roth
 - (Carried)
 - THAT Report GM-02-15-12 – Weighted Voting – 2015 Budget and General Levy be received as information.
 - b) **GM-02-15-13** Budget 2015
B. Corbett requested an explanation as to why the surplus is allocated to certain items.
S. Radoja said the surplus has been allocated to such items as offsetting rental income due to residential vacancies, legal claims that will continue this year, repairs and maintenance to properties, demolitions, staff development, labour relations and collective bargaining.

J. Mitchell reminded the members that the budget vote would take place later in the meeting.

c) **GM-02-15-14** Financial Summary for the Period Ending January 31, 2015

There were no questions or comments with respect to this report.

Resolution 16-15

Moved by: B. Coleman

Seconded by: S. Foxton

(Carried)

THAT the Financial Summary for the period ending January 31, 2015 be approved.

d) **GM-02-15-15** Reforestation Services for Spring 2015

There were no questions or comments with respect to this report.

Resolution 17-15

Moved by: L. Armstrong

Seconded by: G. Wicke

(Carried)

THAT Grand River Conservation Authority accepts the bids for reforestation services with Bartram Woodlands Ltd. in the amount of \$16,590.00, Brinkman & Associates Reforestation Ltd. in the amount of \$88,765.00 and Kayanase in the amount of \$54,087.56 excluding taxes.

iii. **GM-02-15-16** General Levy Apportionment Agreement – City of Hamilton

There were no questions or comments with respect to this report.

Resolution 18-15

Moved by: J. Jamieson

Seconded by: B. Corbett

(Carried)

THAT Grand River Conservation Authority writes to the Ministry of Natural Resources requesting that the local agreement reached in 2001 and 2003 between the City of Hamilton and its four Conservation Authorities for General Levy apportionment be extended for a further year to be used for the apportionment of the 2015 General Levy;

AND THAT the Ministry of Natural Resources be asked to review the local agreement during 2015 and provide direction to the City of Hamilton and its four Conservation Authorities regarding apportionment of the General Levy in 2016 and beyond.

iv. **GM-02-15-17** Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation

There were no questions or comments with respect to this report.

Resolution 19-15

Moved by: B. Banbury

Seconded by: W. Wettlaufer

(Carried)

THAT Report GM-02-15-17 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation be received as information.

v. GM-02-15-18 Environmental Assessments

There were no questions or comments with respect to this report.

Resolution 20-15

Moved by: B. Banbury

Seconded by: W. Wettlaufer

(Carried)

THAT Report GM-02-15-18 – Environmental Assessments be received as information.

vi. GM-02-15-19 Cash and Investments Status Report as of January 31, 2015

There were no questions or comments with respect to this report.

Resolution 21-15

Moved by: K. Linton

Seconded by: W. Wettlaufer

(Carried)

THAT Report GM-02-15-21 – Cash and Investments Status Report as of January 31, 2015 be received as information.

vii. GM-02-15-20 Per Diems and Honorariums for 2015

There were no questions or comments with respect to this report.

Resolution 22-15

Moved by: L. Armstrong

Seconded by: G. Wicke

(Carried)

THAT Report GM-02-15-20 – Per Diems and Honorariums for 2015 be received as information.

viii. GM-02-15-21 Grand River Watershed Flood Warning System

There were no questions or comments with respect to this report.

Resolution 23-15

Moved by: S. Foxton
Seconded by: P. Salter
(Carried)

THAT Report GM-02-15-23 – Grand River Watershed Flood Warning System be received as information.

ix. GM-02-15-22 Current Watershed Conditions as of February 25, 2015

D. Boyd provided a verbal update with respect to this report as follows:

- Precipitation in February, 2015 to date has been near the long term average in the central and southern watershed and below the long term average in the most northern parts of the watershed.
- The average air temperature in February, 2015 to date at the Shand Dam climate station has been minus 14.8 degrees which is 8.2 degrees colder than the long term average.
- The three large reservoirs (Shand, Conestogo and Guelph) are within their normal operating range for this time of year.
- Observations of river ice conditions were conducted on February 17, 2015 – at that time watercourses were ice covered throughout the watershed with some areas reporting very thick river ice
- Lake Erie levels are close to the long term average for this time of year – Lake Erie is almost completely ice covered with intact ice at the mouth of the Grand River.
- Environment Canada is predicting below normal temperatures for Southern Ontario for the February to April period.
- It is anticipated that the spring melt could occur late in March or early in April, 2015.
- A request will be made to the Coast Guard at the appropriate time to send an icebreaker to break up ice at the mouth of the Grand River.

B. Corbett said he is glad to see that staff are taking proactive steps regarding the ice. He asked if the Coast Guard costs money. D. Boyd said that if proper procedures are followed to engage the services of the Coast Guard there is no charge.

Resolution 24-15

Moved by: J. Jamieson
Seconded by: W. Wettlaufer
(Carried)

THAT Report GM-02-15-24 – Current Watershed Conditions as of February 25, 2015 be received as information.

13. Committee of the Whole:

None

14. General Business:

i. Report of the Audit Committee

There were no questions or comments with respect to this report.

Resolution 25-15

Moved by: V. Prendergast

Seconded by: P. Salter

(Carried)

THAT the Report of the Audit Committee of the Grand River Conservation Authority be received, approved and attached to the Minutes of this meeting.

ii. Presentation of Financial Statements as of December 31, 2014 and Report of the Auditor KPMG, Chartered Professional Accounts

There were no questions or comments with respect to this item.

Resolution 26-15

Moved by: S. Foxton

Seconded by: B. Hillier

(Carried)

THAT the Financial Statements of Grand River Conservation Authority as at December 31, 2014 and the Report of the Auditors thereon be received, approved and placed on file;

AND THAT copies be made available to all member municipalities, Grand River Conservation Authority Members and the Ontario Ministry of Natural Resources and Forestry.

iii. Appointment of Auditors

G. Lorentz asked how long GRCA has retained the services of the current auditors. S. Radoja answered that KPMG have been doing GRCA's audits for almost ten years. G. Lorentz asked whether GRCA does Requests for Proposals and how the auditors are selected. K. Murch said that staff previously did a report to the members recommending that GRCA not go to market for auditing services. He said that staff conducted a survey of municipalities and other Conservation Authorities and determined that the fees being charged were competitive. G. Lorentz asked if the fees remain competitive. K. Murch answered that, in his opinion, they do.

Resolution 27-15

Moved by: H. Jowett

Seconded by: G. Gardhouse
(Carried)

THAT KPMG Chartered Professional Accountants are appointed as Grand River Conservation Authority Auditors for the year ended December 31, 2015 at a fee not to exceed \$34,400.

iv. Presentation of Budget Estimates for 2015

K. Murch explained the process and confirmed that 90% of the vote was present. He indicated that those in favour of the recommendation would be asked to stand so that their votes could be recorded. Those opposed to the recommendation would then be asked to stand so that their votes could be recorded.

J. Mitchell read the recommendation.

There were no further questions or comments with respect to this item.

K. Murch then asked those members in favour of the recommendation to stand. All members present stood making the vote unanimous.

Resolution 28-15

Moved by: W. Wettlaufer

Seconded by: J. Nowak
(Carried)

THAT the 2015 Budget of Grand River Conservation Authority of \$29,538,938 be approved;

AND THAT the member municipalities be assessed for payment:

Item	Amount
Matching Levy	\$ 871,073
Non-Matching Levy	\$ 8,676,927
Capital Levy	\$ 1,000,000
Total General levy	\$10,548,000

AND THAT each member municipality's share of the 2015 General Levy be calculated using "Modified Current Value Assessment" with an adjustment for the City of Hamilton which is based on a "local agreement" with the municipality and its four Conservation Authorities.

**Grand River Conservation Authority
2015 General Levy - Weight of Votes by Members
February 27, 2015**

<u>Appointed</u>	<u>Municipality/Group</u>	<u>Weight</u>	<u>Absent</u>	<u>Present</u>	<u>In Favour</u>	<u>Opposed</u>
Les Armstrong	Region of Waterloo	5.0%		5.0%	5.0%	
Sue Foxton	Region of Waterloo	5.0%		5.0%	5.0%	
Helen Jowett	Region of Waterloo	5.0%		5.0%	5.0%	
Geoff Lorentz	Region of Waterloo	5.0%		5.0%	5.0%	
Jane Mitchell	Region of Waterloo	5.0%		5.0%	5.0%	
Joe Nowak	Region of Waterloo	5.0%		5.0%	5.0%	
Wayne Roth	Region of Waterloo	5.0%		5.0%	5.0%	
Sandy Shantz	Region of Waterloo	5.0%		5.0%	5.0%	
Warren Stauch	Region of Waterloo	5.0%	5.0%			
Wayne Wettlaufer	Region of Waterloo	5.0%	5.0%			
Bernie Corbett	Haldimand & Norfolk Counties	1.2%		1.2%	1.2%	
Fred Morison	Haldimand & Norfolk Counties	1.2%		1.2%	1.2%	
Cindy Lunau	Region of Halton	2.8%		2.8%	2.8%	
Jeanette Jaimieson	City of Hamilton (adjusted)	2.8%		2.8%	2.8%	
Bruce Banbury	County of Oxford	1.0%		1.0%	1.0%	
Robert Hillier	City of Brantford	4.8%		4.8%	4.8%	
Vic Prendergast	City of Brantford	4.8%		4.8%	4.8%	
Bob Bell	City of Guelph	8.6%		8.6%	8.6%	
Mike Salisbury	City of Guelph	8.6%		8.6%	8.6%	
Guy Guardhouse	Group 1:	1.2%		1.2%	1.2%	
Pat Salter	Group 2:	1.5%		1.5%	1.5%	
George Wicke	Group 3:	0.5%		0.5%	0.5%	
Kelly Linton	Twp of Ctr Wellington	3.3%		3.3%	3.3%	
Chris White	Group 5:	4.1%		4.1%	4.1%	
Brian Coleman	County of Brant	1.8%		1.8%	1.8%	
Shirley Simons	County of Brant	1.8%		1.8%	1.8%	

- v. Provision for Current Borrowing (pending receipt of Municipal Levies, Provincial Grants and other revenues)

S. Foxton asked if the recommendation is a common practice. K. Murch answered that it is common however to his knowledge GRCA has never had to borrow money.

Resolution 29-15

Moved by: B. Corbett
Seconded by: B. Coleman
(Carried)

WHEREAS it is necessary for Grand River Conservation Authority (hereinafter called the "Authority) to borrow, on an interim basis, up to the sum of One Million Dollars (\$1,000,000) required for its purposes until payment to the Authority of grants and of sums to be paid to it by the participating municipalities designated as such under The Conservation Authorities Act, RSO 1990;

THEREFORE BE IT RESOLVED:

THAT Grand River Conservation Authority be authorized to borrow, on an interim basis, sums required to a maximum of One Million Dollars (\$1,000,000) necessary for its purposes Conservation Authority from the Canadian Imperial Bank of Commerce a sum or sums not exceeding in the aggregate One Million Dollars (\$1,000,000) and interest at the said Bank's minimum lending rate established from time to time, until payment to Grand River Conservation Authority by the participating municipalities;

AND THAT the Chair or Vice-Chair together with the Chief Administrative Officer or Secretary-Treasurer of the Authority be and they are hereby authorized to execute for and on behalf of Grand River Conservation Authority, a promissory note or notes for the sum to be borrowed under paragraph number 1 hereof and to affix thereto the corporate seal of Grand River Conservation Authority;

AND THAT the amount borrowed pursuant to this Resolution together with interest thereon be a charge upon the whole of the money received or to be received by Grand River Conservation Authority by way of grants as and when such moneys are received and of sums received or to be received by Grand River Conservation Authority from the participating municipalities as and when such moneys are received;

AND THAT the Chair or Vice-Chair or the Chief Administrative Officer or Secretary-Treasurer of Grand River Conservation Authority be and is hereby authorized and directed to apply, in payment of the moneys borrowed pursuant to this Resolution together with interest thereon, all of the moneys received by the Authority by way of grants or sums received by the Authority from the participating municipalities.

15. Appointment of Audit Committee:

J. Mitchell said that the Audit Committee is comprised of the Chair, Vice-chair and five members. She called for volunteers.

Resolution 30-15

Moved by: S. Foxton
Seconded by: L. Armstrong
(Carried)

THAT B. Coleman, W. Wettlaufer, F. Morison, J. Jamieson and C. White be appointed to the Audit Committee until the next Annual General Meeting.

16. Appointment of Special Recognition Committee

J. Mitchell indicated that the Chair and Vice-chair would sit on this committee and called for four volunteer members. C. Lunau asked what the responsibilities of this committee are. J. Mitchell said that the committee reviews applications for watershed awards and grants.

Resolution 31-15

Moved by: W. Roth
Seconded by: S. Simons
(Carried)

THAT P. Salter, W. Stauch, C. Lunau and S. Simons be appointed to the Special Recognition Committee until the next Annual General Meeting.

17. Third Reading of By-laws.

None

18. Other Business

None

19. Closed Meeting: (motion required pursuant to Section 36 of By-Law 1-2013)

Resolution 32-15

Moved by: C. White
Seconded by: S. Simons
(Carried)

THAT the meeting adjourn into closed session to discuss a labour relations matter.

The meeting adjourned at 9:55 a.m.

The meeting reconvened at 10:00 a.m.

a) GM-02-15-23 Salary Adjustments – January 1, 2015 (**confidential**)

Resolution 33-15

Moved by: B. Coleman
Seconded by: S. Simons
(Carried)

THAT the salary ranges for non-union positions be increased by 1.5% retroactive to January 1, 2015.

20. Next Meetings:

- General Membership Meeting
Friday, March 27, 2015 – 9:30 a.m.
Waterloo Region Museum, 10 Huron Road, Kitchener, Ontario
to be followed by Special Recognition Committee – Location to be announced
- General Membership Meeting
Friday, April 24, 2015 – 9:30 a.m.
Auditorium/Boardroom, Administration Centre, Cambridge, Ontario

21. Adjourn

The meeting adjourned at 10:10 a.m.

22. Grand River Source Protection Authority Meeting (if required)

Chair

Secretary-Treasurer

Grand River Conservation Authority

Report number: AUD -02-15-01
Date: February 27, 2015
To: Members of the Grand River Conservation Authority
Subject: Report of the Audit Committee

The Audit Committee met on February 18, 2015 at 12:00 noon to review the 2014 Financial Statements prepared by the Grand River Conservation Authority (GRCA) staff and reported on by KPMG LLP, Chartered Accountants, the external auditors appointed by the GRCA. These Audited Financial Statements and Schedules are attached.

Staff had the opportunity to discuss the performance of the auditors without them being present. The auditors were given the same opportunity with respect to management. Both parties confirmed a good working relationship.

The Audit Committee reviewed the Terms of Reference, dated February 28, 2014, and recommended one change.

The Audit Committee is satisfied that the Financial Statements, Notes and Schedules fairly present the financial position of the GRCA.

The Audit Committee made the following recommendations:

Motion: Audit 02-15-01:

THAT the Terms of Reference (February 18, 2015) for the Audit Committee be confirmed with an amendment to Paragraph 1. of the Responsibilities of the Audit Committee, replacing the word "acceptance" with the word "approval";

AND THAT the Computer Replacement Reserve be increased by \$60,000;

AND THAT the Forestry Management Reserve be increased by \$90,000;

AND THAT the 2014 Audited Financial Statements, Notes and Schedules be approved;

AND THAT KPMG Chartered Professional Accountants are appointed as Grand River Conservation Authority's Auditors for the year ended December 31, 2015 at an amount not to exceed \$ 34,400.

Prepared by:

Jane Mitchell
Chair, Audit Committee

SHELBURNE & DISTRICT FIRE BOARD

February 3, 2015

The Shelburne & District Fire Department **Board of Management** was held at the Fire Hall on the above mentioned date at 7:00 P.M.

Present

As per attendance record.

1. Opening of Meeting

- 1.1 Chair Tom Egan called meeting to order at 7:00 pm.

2 Additions or Deletions to Agenda

- 2.1 None at this time.

3. Approval of Agenda

3.1 Resolution #1

Moved by J. Horner - Seconded by G. Little

BE IT RESOLVED THAT:

The Board of Management approves the agenda as presented.
Carried

4. Approval of Minutes

4.1 Resolution #2

Moved by K. McGhee - Seconded by J. Elliott

BE IT RESOLVED THAT:

The Board of Management adopt the minutes under the date of January 6, 2015 as circulated.

Carried

5. **Pecuniary Interest**

5.1 No pecuniary interest declared.

6. **Public Question Period**

6.1 No public present.

7. **Delegations / Deputations**

7.1 No delegations present.

8. **Unfinished Business**

8.1 **Draft Operating & Capital Budgets for 2015**

The amended operating and capital budgets were presented to the board with some changes as discussed at the last meeting. Transportation for the new Fire Chief was discussed amongst the board, perhaps adding a vehicle to the forecasted capital plan would be an option. After further discussions the following motions were passed:

Resolution #3

Moved by J. Horner – Seconded by G. Little

BE IT RESOLVED THAT:

The Shelburne and District fire board of management adopt the 2015 Operating Budget in the amount of \$360,526.00 which represents a 3% increase over 2014; and further that this request be circulated to the participating municipalities for approval.

Carried

Resolution #4

Moved by W. Hannon – Seconded by K. McGhee

BE IT RESOLVED THAT:

In accordance with the adopted 5 year capital plan (ends 2016), the regular capital levy be set at \$95,000.00 for the year 2015 and that this request be circulated to the participating municipalities for approval.

Carried

9. **New Business**

9.1 **Draft Audited Financial Statements for 2014**

Resolution #5

Moved by J. Horner – Seconded by F. Nix

BE IT RESOLVED THAT:

The Shelburne & District Fire board receives the 2014 Draft Consolidated Financial Statements for the year ending December 31st, 2014 from RLP, LLP; and further the Board requests that the final copy of the Financial Statements be forwarded to the participating municipalities as soon as possible.

Carried

10. **Chief's Report**

10.1 **Monthly Report (January 2015)**

There were a total of 21 calls for the month of January. There were several inspections, fire plan reviews as well as regular training during the month.

10.2 **Update from Acting Fire Chief**

Sign Update – 2 Quotes have been received. Ed will follow up at next meeting with recommendation.

11. **Future Business**

11.1. Nothing at this time.

12. **Accounts & Payroll**

12.1 **Resolution #6**

Moved by F. Nix - Seconded by H. Hayes

BE IT RESOLVED THAT:

The bills and accounts in the amount of \$8,908.35 for the period of December 24th, 2014 to January 30th, 2015 as presented and attached be approved for payment.

Carried

12.2 Resolution #7

Moved by J. Elliott – Seconded by K. McGhee

BE IT RESOLVED THAT:

Payroll for the following month(s) be approved for payment:

January 2015 - \$40,793.88

Carried

13. Confirming and Adjournment

13.1 Resolution #8

Moved by W. Hannon – Seconded by J. Horner

BE IT RESOLVED THAT:

All actions of the Board Members and Officers of the Shelburne and District Fire Board of Management, with respect to every matter addressed and/or adopted by the Board on the above date are hereby adopted, ratified and confirmed; And each motion, resolution and other actions taken by the Board Members and Officers at the meeting held on the above date are hereby adopted, ratified and confirmed.

Carried

13.2 Resolution #9

Moved by H. Hayes – Seconded by G. Little

BE IT RESOLVED THAT:

The Board of Management do now adjourn at 8:08 pm to meet again on March 3, 2015 at 7:00 pm or at the call of the Chair.

Carried

Respectfully submitted by:

Carey Holmes

Carey Holmes, AMCT
Secretary-Treasurer

Approved:

Tom Egan

Chairperson

SHELBURNE & DISTRICT FIRE BOARD MEMBERS

Meeting Attendance Record Under Date of February 3, 2015

Municipality / Member	Present	Absent
Township of Amaranth		
Heather Foster		X
Gail Little	X	
Town of Mono		
Ken McGhee	X	
Fred Nix	X	
Township of Melancthon		
Janice Elliott	X	
Wayne Hannon	X	
Town of Shelburne		
Tom Egan	X	
Ken Bennington	X	
Township of Mulmur		
Heather McIntosh-Hayes	X	
Janet Horner	X	
Staff		
Ed Walsh – Acting Fire Chief	X	
David Holmes - Captain	X	
Carey Holmes - Sec/Treas.	X	

SHELBURNE & DISTRICT FIRE BOARD

March 3, 2015

The Shelburne & District Fire Department **Board of Management** was held at the Fire Hall on the above mentioned date at 7:00 P.M.

Present

As per attendance record.

1. Opening of Meeting

- 1.1 Chair Tom Egan called meeting to order at 7:00 pm.

2 Additions or Deletions to Agenda

- 2.1 None at this time.

3. Approval of Agenda

3.1 Resolution #1

Moved by F. Nix - Seconded by W. Hannon

BE IT RESOLVED THAT:

The Board of Management approves the agenda as presented.
Carried

4. Approval of Minutes

4.1 Resolution #2

Moved by W. Hannon - Seconded by F. Nix

BE IT RESOLVED THAT:

The Board of Management adopt the minutes under the date of February 3, 2015 as circulated.

Carried

5. **Pecuniary Interest**

- 5.1 No pecuniary interest declared.

6. **Public Question Period**

- 6.1 No public present.

7. **Delegations / Deputations**

- 7.1 No delegations present.

8. **Unfinished Business**

8.1 **Update on Staff Replacements**

The board discussed the Town of Mono's proposal to attain the Secretary/Treasurer position for the Shelburne & District Fire Board. Wages were discussed as there would be an increase. This information is to be brought to the staffing review committee for discussion and report back to the fire board.

Ward & Uptigrove have created a Staff Satisfaction survey for all the fire fighters and officers to complete online and submit by the end of March 2015. All responses will be dealt with. A copy of the survey is to be sent to the review committee first.

A job description for the Fire Chief is currently being prepared and will be presented to the sub-committee at the next scheduled meeting.

9. **New Business**

9.1 **Letter from Office of Fire Marshal**

The Town of Shelburne received a letter from the Ontario Fire Marshal. There were two vulnerable occupancies, which now are in compliance.

The Secretary/Treasurer will advise the Ontario Fire Marshal the new email addresses for the Town of Shelburne employees.

9.2 **Digital Copier/Printer/Scan & Fax**

Acting Fire Chief Ed Walsh explained to the board the issues he is experiencing with the existing photocopier. He presented a proposal to lease a new machine.

Resolution #3

Moved by: J. Elliott – Seconded by: G. Little

BE IT RESOLVED THAT:

The Shelburne & District Fire Board authorize the Chair to sign a lease agreement with Excel Business Systems for a 66 month period of \$72/month for a Canon Image Runner 2525 Digital Copier/Printer/Scanner and Fax.

Carried

10. Chief's Report

10.1 Monthly Report (February 2015)

There were a total of 21 calls for the month of February. The department participated in Shelburne Fest on the Family Day Weekend.

10.2 Update from Acting Fire Chief

**-Sign Update
-Jaws of Life**

Quotes were reviewed by the board on an excel spreadsheet and the following motion was passed:

Resolution #4

Moved by: J. Horner – Seconded by: H. Hayes

BE IT RESOLVED THAT:

The Shelburne & District Fire Board authorize the Acting Fire Chief to purchase the 9'5" x 3'8" LED screen from Libertelevision in the amount of \$19,940.00 plus taxes as per quote #203042B dated January 19, 2015.

And further that the funds for this purchase come from the Ontario Fire Service Grant 2005.

Carried

Acting Chief Ed Walsh reported to the board that the Jaws of Life main set is now 35 years old and has been consistently serviced annually. Unfortunately it can no longer be repaired if it were to break down. The Fire Fighter's Association is working on raising money to put towards the purchase of a new one. It was

proposed that 3 sets of RAMS could be bought by the association at the same time as the board purchases the Jaws & Cutters for approximately \$28,000. It was discussed that the jaws and cutters be budgeted and purchased in 2016 through the Capital Budget.

11. **Future Business**

11.1. Nothing at this time.

12. **Accounts & Payroll**

12.1 **Resolution #5**

Moved by J. Horner - Seconded by G. Little

BE IT RESOLVED THAT:

The bills and accounts in the amount of \$13,428.00 for the period of January 31st, 2015 to February 27th, 2015 as presented and attached be approved for payment.

Carried

12.2 **Resolution #6**

Moved by J. Elliott – Seconded by G. Little

BE IT RESOLVED THAT:

Payroll for the following month(s) be approved for payment:

February 2015 - \$16,744.50

Carried

13. **Confirming and Adjournment**

13.1 **Resolution #7**

Moved by J. Elliott – Seconded by J. Horner

BE IT RESOLVED THAT:

All actions of the Board Members and Officers of the Shelburne and District Fire Board of Management, with respect to every matter addressed and/or adopted by the Board on the above date are hereby adopted, ratified and confirmed; And each motion, resolution and other actions taken by the Board Members and Officers at the meeting held on the above date are hereby adopted, ratified and confirmed.

Carried

13.2 Resolution #8

Moved by J. Horner – Seconded by J. Elliott

BE IT RESOLVED THAT:

The Board of Management do now adjourn at 7:59 pm to meet again on April 7, 2015 at 7:00 pm or at the call of the Chair.

Carried

Respectfully submitted by:

Carey Holmes

Carey Holmes, AMCT
Secretary-Treasurer

Approved:

Tom Egan

Chairperson

SHELBURNE & DISTRICT FIRE BOARD MEMBERS

Meeting Attendance Record Under Date of March 3, 2015

Municipality / Member	Present	Absent
Township of Amaranth		
Heather Foster	X	
Gail Little	X	
Town of Mono		
Ken McGhee		X
Fred Nix	X	
Township of Melancthon		
Janice Elliott	X	
Wayne Hannon	X	
Town of Shelburne		
Tom Egan	X	
Ken Bennington	X	
Township of Mulmur		
Heather McIntosh-Hayes	X	
Janet Horner	X	
Staff		
Ed Walsh – Acting Fire Chief	X	
David Holmes - Captain	X	
Carey Holmes - Sec/Treas.	X	

Denise Holmes

From: Susan Greatrix <sgreatrix@orangeville.ca>
Sent: March-27-15 11:47 AM
To: W Kalinski; Jo Anne Glazier
Cc: Denise B. Holmes (dholmes@melancthontownship.ca); Jane M. Wilson (jwilson@townofgrandvalley.ca); John Telfer (jtelfer@townofshelburne.on.ca); Keith McNenly (keith@townofmono.com); P. Hillock (phillock@dufferincounty.ca); Sue Stone (suestone@amaranth-eastgary.ca); Terry Horner (thorner@mulmurtownship.ca)
Subject: RE: Town of Orangeville Council Resolution - 911 Costing
Attachments: 20130327 - PSB - 911 Costing.pdf; CERB Information Package 2013.pdf; Sample CERB Contract 5 Yr - Dufferin County.pdf; 911 Cost Inquiry - Dufferin County.pdf

Attached please find Council Resolution and related information re 911 costing for Dufferin County.

Susan.

Susan Greatrix, Clerk
Town of Orangeville
87 Broadway
Orangeville ON L9W 1K1
Tel: 519-941-0440, ext. 2242
Toll Free: 1-866-941-0440, ext. 2242
Fax: 519-941-9033
Cell: 519-278-4948
sgreatrix@orangeville.ca | www.orangeville.ca

Tread lightly... please consider the environment before printing this e-mail

Confidentiality Notice

The content of this e-mail and any attachments should be treated as confidential and the property of The Corporation of the Town of Orangeville. This e-mail message is for the sole use of the intended recipient. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you have received this e-mail in error. Please destroy all copies of this e-mail and notify the sender immediately.

Total Control Panel

[Login](#)

To: dholmes@melancthontownship.ca [Remove this sender from my allow list](#)

From: sgreatrix@orangeville.ca

You received this message because the sender is on your allow list.

Ontario
Provincial
Police

Police
provinciale
de l'Ontario



Municipal Policing Bureau
Bureau des services policiers des municipalités

777 Memorial Ave.
Orillia ON L3V 7V3

777, ave Memorial
Orillia (ON) L3V 7V3

Tel: (705) 329-6200

Fax: (705) 330-4191

File Reference:SSC – 15-002 C

March 11, 2015

Susan Greatrix, Clerk
Town of Orangeville
87 Broadway
Orangeville, ON L9W 1K1

RE: Costing Request: 9-1-1 CERB Services for Dufferin County

This correspondence will confirm the annual costs for the provision of OPP 9-1-1 CERB Services to Dufferin County, including the Townships of Amaranth, East Garafraxa, Melancthon, Mono, Mulmer, the Towns of Shelburne, Grand Valley and Orangeville, based upon a population of 56,881 is \$31,910.24.

The standard Ontario Provincial Police 9-1-1 CERB Services Agreement is based upon a five-year term and includes an option to terminate the agreement upon ninety (90) days written notice by either party. A copy has been attached to this correspondence for reference purposes.

Please be advised that the provision of 9-1-1 CERB Services to your community is contingent on your community being compliant with Bell Canada's PERS 9-1-1 regulations. 9-1-1 CERB Services will not be provided by the OPP unless Bell Canada has approved your community's request to be included in the 9-1-1 PERS system. The agreement for the provision of this service to your community from the OPP would be contingent on Bell Canada completing all necessary technical requirements to switch from your current 9-1-1 CERB Services provider. Any costs or staffing issues incurred during the transition would be the responsibility of the municipality.

The costing provided is preliminary. Should you wish to consider the OPP as your service provider for CERB Services, a more comprehensive costing process would be initiated. This would include involving Bell Canada to ensure the transfer of the services is feasible.

I have enclosed an information document, which describes the OPP provision of 9-1-1 CERB (PPSAP) Services and a sample contract template for your perusal.

Should you have any questions or concerns you may contact me at Ontario Provincial Police Headquarters in Orillia at (705) 329-6192 or through e-mail at pamela.ford@opp.ca.

Yours truly,

Pamela Ford, Sergeant
Contract Analyst, Specialized Services Agreements
Municipal Policing Bureau

c: Commander, Municipal Policing Bureau

Attachments



Town of Orangeville
87 Broadway, Orangeville, Ontario L9W 1K1
Tel. 519-941-0440 Fax 519-941-9033 Toll Free 1-866-941-0440
www.orangeville.ca

March 27, 2015

Orangeville Police Services Board
390 C Line
Orangeville ON L9W 3L1

**Re: Costing Request for Ontario Provincial Police Provision of 9-1-1
Central Emergency Reporting Bureau (CERB) Services (A19)**

At its meeting held on March 23, 2015, the Council of The Corporation of the Town of Orangeville approved the following resolution:

**"That the correspondence from the Ontario Provincial Police
Municipal Policing Bureau, dated March 11, 2015, with respect to a
costing request for 9-1-1 Central Emergency Reporting Bureau
(CERB) Services, be received;**

**And that the costing request response for 9-1-1 Central Emergency
Reporting Bureau (CERB) Services for Dufferin County be referred to
the Police Services Board for review and comment and to local area
municipalities and the County of Dufferin for information."**

Copies of the costing request response from Sergeant Pamela Ford, sample contract and CERB Information package are attached.

Yours truly,

Susan Greatrix, Clerk

Town of Orangeville

Tel: 519-941-0440, ext. 2242

Fax: 519-941-9033

Cell: 519-278-4948

sgreatrix@orangeville.ca | www.orangeville.ca

By email to: Jo Anne Glazier, Secretary
Orangeville Police Services Board
jglazier@orangeville.ca

Chief Wayne Kalinski
Orangeville Police Service
wkalinski@orangevillepolice.ca

cc Pam Hillock, Clerk/Director of Corporate Services
The Corporation of the County of Dufferin
55 Zina Street
Orangeville ON L9W 1E5
phillock@dufferincounty.ca

Jane M. Wilson, CAO/Clerk-Treasurer
Town of Grand Valley
5 Main St. N.
Grand Valley ON L9W 5S6
jwilson@townofgrandvalley.ca

Keith McNenly, Chief Administrative Officer and Clerk
Town of Mono
347209 Mono Centre Road
Mono ON L9W 6S3
keith@townofmono.com

John Telfer, CAO/Clerk
Town of Shelburne
203 Main Street East
Shelburne ON L9V 3K7
jtelfer@townofshelburne.on.ca

Susan M. Stone, CAO/Clerk-Treasurer
Township of Amaranth
Township of East Garafraxa
374028 6th Line
Amaranth ON L9W OM6
suestone@amaranth-eastgary.ca

Denise B. Holmes, CAO/Clerk
Township of Melancthon
157101 Highway 10
Melancthon ON L9V 2E6
dholmes@melancthontownship.ca

Terry Horner, CAO/Clerk
Township of Mulmur
758070 2nd Line E Mulmur ON L9V OG8
thorner@mulmurtownship.ca



OPP PROVISION

Of

9-1-1

**CENTRAL EMERGENCY
REPORTING BUREAU
(CERB) SERVICES**

2013 Version

OPP 9-1-1 CERB Services

The Ontario Provincial Police (OPP) has over ninety years of experience in providing services to municipalities throughout the Province of Ontario. Many of the services, including policing, communications and 9-1-1 Central Emergency Reporting Bureau (CERB), are provided under contract.

Trained personnel have expertise in both call taking and dispatch functions and are available to provide 9-1-1 CERB services 24 hours per day, seven days per week.

Presently, the OPP has over 80 contracts for 9-1-1 CERB Services (also known as PPSAP; Primary Public Safety Answering Point), with municipalities and Local Services Boards across Ontario.

If a Municipality chooses to accept an OPP contract for the provision of 9-1-1 CERB services, the resources of the Provincial Communications Centre will focus on meeting the needs of the Municipality, as set out in the contract.

Advantages to the Municipality include:

- assurance of the adequacy of the service;
- utilization of effective, state of the art technology;
- service provided at a defined cost.

The following information contained in this document describes CERB services as provided by the OPP.

Technical and Operational Information

Provincial Communications Centres Providing Call Reception

A Provincial Communication Centre is the incoming call centre and acts as the primary interface between the public and the OPP for both routine and emergency calls, including 9-1-1. The OPP currently operate five (5) Provincial Communication Centres in Ontario. All OPP Provincial Communication Centres operate in compliance with the provisions of Ontario Regulation 3/99 governing the adequacy and effectiveness of police services (Adequacy Standards). The OPP currently provides 9-1-1 CERB services to numerous municipalities throughout the province.

The OPP will provide year-round 9-1-1 CERB services to the Municipality, 24 hours per day through one of two Provincial Communication Centres. The North Bay Provincial Communication Centre is designated as the primary call reception centre, with the Orillia Provincial Communication Centre serving as the backup location. This will be required as part of the Bell conversion (cutover) plan. Staff and system requirements necessary for the provision of this service to the municipality will be available upon acceptance of the OPP as the provider of CERB services. 9-1-1 calls will be answered and directed to the various public safety agencies within the municipality's PERS E9-1-1 service. In order to accommodate 9-1-1 CERB responsibilities for the municipality, Bell PERS will be required to install circuits to direct the calls appropriately to the OPP. This work will be done without any cost to the municipality as part of a cutover plan.

Staffing of Provincial Communication Centres

The OPP staffs all of its Provincial Communication Centres, including the North Bay location, with OPP personnel, both civilian and uniform. The OPP also manages all of the personnel and equipment in these facilities required to receive and process all emergency calls directed to the CERB. A Provincial Communication Centre is normally staffed based on historical workloads and software that identifies the number of required personnel to adequately meet the OPP Grade-of-Service target. During normal operations the call-taker and dispatcher functions are separated, although all operators are trained to perform either role. On-duty senior civilian Communication Operators and Sergeant Team Leaders provide full time supervision and support.

In addition all OPP Provincial Communication Centres, including the North Bay CERB location, have a Sergeant Team Leader on duty at all times (24 hours a day, 365 days a year) to provide full time supervision and support.

The OPP is thoroughly familiar with the operation of the PERS E9-1-1 system, as it is a part of normal day-to-day operations. The OPP provides 9-1-1 downstream services for most PERS E9-1-1 services throughout the province and is also a major public safety agency providing police services throughout the province. As such, our personnel have considerable experience in dealing with emergent situations and serving the public

directly. This experience and fundamental orientation will be of benefit to the citizens of the Municipality.

Training

The provision of communications is a mission critical service for the OPP and as such, considerable resources and training are dedicated to these functions. A quality assurance program is being implemented to ensure employees are adequately trained and standard operating procedures are adhered to. All applicants for OPP communication operator positions are subjected to a rigorous screening process involving interviews, testing (C.O.M.E.T.), grammar and computer skills; and security checks. Once hired, they receive extensive training in a classroom environment, followed by practical training in the Provincial Communication Centre, and are matched with a peer monitor during their initial transition. The operation of PERS E9-1-1 is performed utilizing the Bell Canada Standards Manual. The OPP is a primary and secondary CERB provider for numerous 9-1-1 services and operates in this environment continually.

Standards

The OPP operation is guided by OPP Standard Operating Procedures that incorporates the Bell Canada Standards Manual. These procedures are applied consistently to all OPP 9-1-1 customers. The OPP currently has a service level objective of answering 95% of all 9-1-1 calls within 2 rings. This performance level is normally exceeded. Performance of all call answering activity is measured and reviewed daily. The 9-1-1 CERB calls are the highest rated priority in the system and are always answered first.

Note: The standard ringing cycle is 6 seconds and is fixed by the telephone company. Accordingly, the maximum time for 2 ringing cycles is 12 seconds from start to finish.

Each Provincial Communication Centre is equipped with digital reader-boards that display the number of calls waiting in the queues and the time for the longest outstanding call. During peak periods the reader boards are programmed to sound an audible alarm at preset limits showing the number of calls waiting and the time for the longest outstanding call. Immediately upon an alarm sounding, prompt action is taken to address the situation to relieve pressure. Team leaders continually monitor call activity and assign duties as required by the situation. When call activity is consistently high, built in Automatic Call Distribution (ACD) provides system flexibility, allowing communicator team leaders to re-assign call taking duties to address call volume fluctuations. During peak periods the reader boards are programmed to sound an audible alarm at preset limits showing the number of calls waiting and the time for the longest outstanding call. Immediately upon an alarm sounding, prompt action is taken to address the situation to relieve pressure. Use of this equipment facilitates efficiencies in call answering.

Redundancy and Back-up Sites

Both the primary CERB (the North Bay Provincial Communication Centre) and the back-up location (the Orillia Provincial Communication Centre) are equipped with the same types of equipment and provide equivalent operation and service.

Telephones: Within each Provincial Communication Centre, there are two (2) telephone systems that back up each other, totaling four (4) systems. The main Nortel Meridian M61C system includes redundant CPU memory and network, and is supported by a back-up Meridian M11C and a Symposium Call Centre Server ACD that provides full functionality for call-taking and dispatch operations in the event of a main M61C system failure. The systems can be transferred from one to the other, either automatically or manually, as the situation requires.

Power Supply: Both the primary CERB (the North Bay Provincial Communication Centre) and the back-up location (the Orillia Provincial Communication Centre) are equipped with Uninterrupted Power Supply (UPS) systems. Power to the Provincial Communication Centre is provided through banks of batteries, which are continually recharged by AC power. In the event that a failure of AC power occurs, a diesel-powered motor/generator set activates and continues to charge the battery system. This design promotes a stable environment enhancing the operation of computer systems. Either Provincial Communication Centre is capable of remaining on line indefinitely, provided fuel for the generators is maintained. Even without recharging, the battery system was designed to provide power to the Provincial Communication Centre for a minimum of twelve hours.

Back Up Site: The operation of a Provincial Communication Centre is mission critical to the OPP. The OPP has developed plans to deal with various system failures or disasters. There are several options to deal with emergent situations up to and including transferring all operations to the back-up location. This includes PERS E9-1-1 service (CERB and secondary) and regular OPP direct dial services via 888-310-1122/33.

It should also be noted the telephone company services (regular Central Office and PERS E9-1-1) for both the Orillia and North Bay Provincial Communication Centres are provided via a fiber ring that provided redundant access from the local Bell Central Office. Both locations are also served by different Bell DMS switching systems.

Multi-Language/Hearing-Voice Impaired Calls

All 9-1-1 calls are initially addressed in English. However, there are personnel on staff within the Provincial Communications Centre on each shift who are conversant in the French language. The OPP will respond, as provided by the French Language Services Act, to both verbal inquiries and written correspondence received in French.

The OPP is a subscriber to Language Line Services (formally AT&T Language Services) and regularly uses this service to access translation services. Each Provincial Communication Centre is equipped with two (2) TDD/TTY devices, which are connected to the telephone systems and PERS E9-1-1 calls can be transferred as required. These

devices are also utilized by the OPP to provide similar service through the direct dial 1-888-310-1133 number.

Multi-Channel Digital Logging Equipment

Both the primary CERB (the North Bay Provincial Communication Centre) and the back-up location (the Orillia Provincial Communication Centre) are equipped with Multi-Channel Digital Logging equipment. Multi channel digital recorders also provide continuous long-term storage on a 24-hour per day basis. The logger recordings are retained on compact discs in a secure environment at the Provincial Communications Centres. The OPP utilizes the Digital Voice Disc (DVD) recorder system, which allows instantaneous access to all communications, including 9-1-1 calls within the Provincial Communications Centre. This includes, but is not limited to, queries about conversations over the radio system, tape requests, concerns from officers and dispatchers/call takers, and allows for the auditing of calls for quality control purposes. Records are retained for a five (5) year period. DVD recordings of 9-1-1 related calls are the property of the OPP and no ownership can be accorded to the Municipality. These records contain other proprietary information.

Automatic Number/Location Identification Equipment (ANI/ALI)

All communicator consoles are equipped with Informer panels for display of ANI/ALI data. All Bell PERS E9-1-1 ANI/ALI data and associated information received with each individual E9-1-1 call is recorded on a hard copy printer. The PERS printer records are also kept in a secure environment at the Provincial Communication Centre with a retention period of 180 days. The OPP only record the portion of the call where they are the Agency in control. Once the call has been transferred to the appropriate agency, it is no longer recorded by the OPP. The OPP is responsible for its own operations and can accommodate the reception of ANI/ALI data. The ANI/ALI data will continue to be downloaded automatically to all secondary CERB agency systems as part of their interface to PERS E9-1-1, including the Ministry of Health. Bell is the provider of ANI/ALI data. The OPP will use the PERS system to pass ANI/ALI data on to any other agency that has the capability to receive it.

The OPP does not manually log any calls. PERS E9-1-1 printer records are the property of the OPP and no ownership can be accorded to the Municipality. These records contain other proprietary information.

The OPP is prepared to provide to authorized individuals, copies of PERS printer data and /or copies of audio recordings, as it directly pertains to the Municipality's CERB operation for purposes of civil litigation and/or criminal proceedings. Requests for such information must be received in writing at least 5 days prior to the end of the 180 day retention period, in the case of PERS printer records, or at least 5 days prior to the end of the five (5) year retention period in the case of audio recordings. The OPP will retain the originals until such proceedings are complete.

Online Conferencing

The Bell PERS system has a maximum conference capability of three (3) parties. In operation, the CERB will conference the originating 9-1-1 caller to the requested service (police/fire/ambulance). It is then the responsibility of the secondary CERB that receives the 9-1-1 call from the CERB, to manage the situation and conference others as required. The OPP can add a fourth party (i.e. Language Line Services) via the Meridian conference feature.

Reports

The OPP will provide reports, the frequency of which shall be monthly or as determined in consultation with the Municipality, which will show the overall efficiency of the CERB operation in answering 9-1-1 calls and the volume of calls handled for the Municipality.

The OPP notifies Bell of any identified addressing errors related to the ANI/ALI addressing database. As a standard practice, the OPP reports any noted failures of the PERS system to Bell Canada.

Costs

The OPP determines the costs for this service based on the population of the community. The annual rate per capita is \$0.561.

Additional Charges:

The per capita rate shall remain constant for the term of the Agreement for CERB Services. The annual rate shall be reviewed at the end of every calendar year the Agreement is in effect. In the event that the residential population of the Municipality increases or decreases by more than 10% during either the previous year, or cumulatively since the date the Agreement began, the annual rate shall be adjusted accordingly for the following year, and the Municipality shall be obliged to pay the OPP the revised annual rate. The OPP shall determine the annual revisions to the residential population using population figures found in the latest version of the Ontario Municipal Directory, or if not found there, then in other recognized sources.

Allowances for business interruptions:

Due to the equipment redundancy and back-up provisions, the OPP do not expect any disruption to CERB service. To date there has been no service interruptions to CERB services that are attributable to the OPP. The OPP have committed significant resources to the telecommunications infrastructure to prevent disruptions and consequently are not offering any monetary allowances.

Template for O.P.P.
911 CERB Services Agreement

This Agreement made in four (4) originally executed copies.

AGREEMENT FOR THE PROVISION OF 9-1-1 CERB SERVICES

BETWEEN:

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF ONTARIO as
represented by the MINISTRY OF COMMUNITY SAFETY
AND CORRECTIONAL SERVICES
on behalf of the ONTARIO PROVINCIAL POLICE**

("O.P.P.")

OF THE FIRST PART

AND:

**THE CORPORATION OF THE _____
(the "Municipality")**

OF THE SECOND PART

RECITALS:

- A. WHEREAS** Bell Canada has entered into an agreement with the Municipality to provide the Municipality with a 9-1-1 Public Emergency Reporting Service – Ontario;
- B. AND WHEREAS** it is the obligation of the Municipality under its agreement with Bell Canada to ensure that a Central Emergency Reporting Bureau serves the Municipality;
- C. AND WHEREAS** the Municipality is permitted under its agreement with Bell Canada to contract with a third party for the management and operation of the Central Emergency Reporting Bureau;
- D. AND WHEREAS** the Municipality wishes to contract with the O.P.P. for the management and operation of the Central Emergency Reporting Bureau;
- E. AND WHEREAS** the Municipality confirms its adherence to this Agreement by executing it, as provided for herein, and providing the O.P.P. with a certified copy of the resolution or by-law authorizing it entering into this Agreement;

NOW THEREFORE, in consideration of the promises and covenants herein, the Parties agree as follows:

- 0.1** The Parties warrant that the recitals are true.

1.0 DEFINITIONS AND INTERPRETATION

1.1 Definitions - For the purposes of this Agreement, the following terms have the meanings ascribed below:

“Agreement” means this agreement and Schedule “A”, which is attached to, and forms part of this Agreement.

“ALI” means an automatic location identification, which consists of a database feature that displays, to the CERB and Remote Agencies, address and location data with respect to a telephone line from which the 9-1-1 Call originates.

“ANI” means an automatic number identification, which consists of a database feature that displays the telephone number of the primary exchange service that originates the 9-1-1 Call to the CERB.

“Call Control” means a feature that allows the 9-1-1 call taker at the CERB to maintain control of the line upon which the 9-1-1 Call was made regardless of calling-party action.

“CERB” means the Central Emergency Reporting Bureau serving the Municipality, and located at the O.P.P. Provincial Communications Centre (PCC), which is the first point of reception by the O.P.P. of 9-1-1 Calls.

“Director” means the Director of Provincial Communication Operations, Communications and Technology Services Bureau.

“ESZ” means an Emergency Services Zone, which is a geographic area served by a Remote Agency in the Municipality.

“Party” means the O.P.P. or the Municipality, and “Parties” shall mean both of them.

“Mayor” or “Reeve” means Mayor or Reeve for the municipality.

“Remote Agency” means the communication center of a fire, police or ambulance agency, within an ESZ, to which 9-1-1 Calls are transferred from the CERB, and for which the Remote Agency is then responsible for taking appropriate action.

“Selective Routing and Transfer” means a feature that automatically routes a 9-1-1 Call to the appropriate CERB or Remote Agency based upon the ANI of the telephone line from which the 9-1-1 Call originates.

“9-1-1 Call” means a phone call received at the CERB, which requires an emergency response, typically the transfer of the call to a Remote Agency.

“9-1-1 PERS” means the Public Emergency Reporting Service – Ontario, which is a telecommunications service provided by Bell Canada pursuant to Bell Canada General Tariff Item 1400 to Municipalities for the delivery of 9-1-1 Calls to the CERB and to Remote Agencies and pursuant to the agreement between Bell Canada and the Municipality.

1.2 **Severability** - If any term of this Agreement shall be held to be illegal, invalid, unenforceable, null, void or inoperative by a court of competent jurisdiction, the remaining terms shall remain in full force and effect.

1.3 **Section Headings** - The section headings contained herein are for purposes of convenience only, and shall not be deemed to constitute a part of this Agreement or to affect the meaning or interpretation of this Agreement in any way.

1.4 **Entire Agreement** - This Agreement constitutes the entire agreement of the Parties, with respect to the provision and operation of services as defined hereunder and supersedes any previous agreement whether written or verbal. In the event of a conflict or inconsistency between this Agreement, and a tender document such as request for proposals issued by the Municipality for the provision of services as described hereunder or the proposal that the O.P.P. submitted in response to the tender document, this Agreement shall prevail to the extent of the conflict or inconsistency.

1.5 **Amendments** - Any amendments to this Agreement shall be in writing and shall not take effect until approved in writing by both Parties.

2.0 **NOTICES**

2.1 **Notice** - Any notice required pursuant to this Agreement shall be in writing and delivered personally, sent by facsimile transmissions ("FAX") or by registered mail to the following addresses:

To the Municipality:

The _____
The Corporation of the _____ of _____
01 Anywhere Street
Anyplace ON (Postal Code)
FAX: (xxx) xxx-xxxx

To the O.P.P.

Attention: Director – Provincial Communications Operations,
Communications and Technology Services Bureau
General Headquarters
777 Memorial Avenue
Orillia, Ontario
L3V 7V3
FAX: (705) 329-6230

Or to such other addresses either of the Parties may indicate in writing to the other. Any notice given in accordance with this Agreement shall be deemed to have been received upon delivery, if delivered personally, at the time of transmission if sent by FAX, or five (5) days after posting, if sent by registered mail.

2.2 **Notices in Writing** – All notices required under this Agreement shall be in writing.

3.0 **RATES AND METHOD OF PAYMENT**

3.1 The Municipality shall pay the O.P.P. for providing and operating the CERB as follows:

- (a) **Amount of Annual Rate** - The Municipality shall be charged and shall be required to pay an annual rate of \$_____ based on the Municipalities' residential population of _____ at a per capita cost of **\$0.561**. The per capita cost shall remain constant for the 5-year term of this agreement.
- (b) **Review of Annual Rate** - The annual rate specified in clause (a) of section 3.1 herein shall be reviewed at the end of every calendar year the Agreement is in effect. In the event that the residential population of the Municipality increases or decreases by more than 10% during either the previous year, or cumulatively since the date the Agreement began, the annual rate shall be adjusted accordingly for the following year, and the Municipality shall be obliged to pay the O.P.P. the revised annual rate. The O.P.P. shall determine the annual revisions to the residential population using population figures found in the latest version of the Ontario Municipal Directory, or if not found there, then in other recognized sources.
- (c) **Invoices** - The first invoice shall be issued immediately to the Municipality upon the start of the Agreement. The Municipality shall subsequently be invoiced annually at the beginning of each calendar year, and the invoice shall cover the time period for the subsequent calendar year, or portion thereof that this Agreement is in effect.
- (d) **Interest for Late Payments** – In addition to any other remedies the O.P.P. may have at law, the Municipality shall be charged and required to pay interest at the rate set by the Minister of Finance for Ontario from time to time if the O.P.P. has not received full payment from the Municipality within thirty (30) days of the date the O.P.P. issued an invoice.

4.0 RESPONSIBILITIES OF THE O.P.P.

The O.P.P. shall manage and operate the CERB and:

- 4.1 **Personnel** - Staff the CERB at a level appropriate to answer, handle and transfer 9-1-1 Calls to the appropriate Remote Agency in a manner and at a level based on typical 9-1-1 call volumes in the Municipality.
- 4.2 **Equipment** - Provide, in its operation of the CERB, terminal equipment which permits the utilization of features provided by Bell Canada to the Municipality under 9-1-1 PERS consisting of "ALI", "ANI", "Selective Routing and Transfer" and "Call Control" features, and such features can be adapted, where required, for callers who are hearing or voice impaired.
- 4.3 **Hours** - Operate the CERB twenty-four (24) hours a day, (7) seven days a week.
- 4.4 **9-1-1 Call Response** - Answer, handle and transfer all 9-1-1 Calls received by the CERB, and associated ANI/ALI information, to a designated Remote Agency within the proper ESZ, as deemed appropriate by CERB personnel. This shall include maintaining control of the line upon which each 9-1-1 Call is received until the 9-1-1 Call is confirmed as being transferred to the appropriate Remote Agency or until the 9-1-1 Call is terminated.
- 4.5 **Record Retention** - Retain digital voice records of all 9-1-1 Calls received at the CERB, for five (5) years and hard copy records of all Bell PERS E911 ANI/ALI printer data for one hundred eighty (180) days from the date such records are created. The O.P.P. is prepared to provide, to authorized personnel, certified copies of audio recordings and/or copies of PERS printer data, as it directly pertains to the CERB for the purposes of civil litigation and/or criminal proceedings provided the request is received no later than five days prior to the end of the retention period of the recordings or records. The O.P.P. shall retain the original recordings or records until the conclusion of any civil or criminal proceedings to which such records relate.
- 4.6 **Back up CERB** - Provide an operational back-up CERB to which 9-1-1 Calls shall be transferred at the discretion of the O.P.P. or Bell Canada in the event that the primary CERB is unable to accept the 9-1-1 Calls, except that 9-1-1 Calls shall not be transferred to the back-up CERB where call overflow occurs because of high call volumes to the primary CERB.
- 4.7 **Non-English Callers** - Make reasonable efforts to respond to 9-1-1 Calls from non-English callers, subject to the O.P.P.'s ability to access the services of a third party provider. The O.P.P. does not warrant that it shall be able to provide services to non-English callers, or that it shall be able to access such services from a third party provider.
- 4.8 **Reports** - Provide reports, the frequency of which shall be monthly or as determined by the O.P.P. in consultation with the Municipality, which show the overall efficiency of the CERB in answering 9-1-1 Calls, including the volume of 9-1-1 Calls.

5.0 RESPONSIBILITIES OF THE MUNICIPALITY

The Municipality shall:

- 5.1 **Payment** - Be responsible to the O.P.P. for the amount of payment, in the manner, and within the time lines set out in Article 3.0 herein.
- 5.2 **Designate Remote Agencies** - Designate Remote Agencies for each and every ESZ in the Municipality to which the CERB shall answer, handle and transfer a 9-1-1 Call, and co-ordinate the participation of all such Remote Agencies in the manner required by this Agreement.
- 5.3 **Warranty** - Warrant and represent that each Remote Agency shall operate twenty-four (24) hours a day, seven (7) days a week and shall answer and respond to all 9-1-1 Calls directed to it from the CERB.
- 5.4 **9-1-1 PERS** - notify the O.P.P. in writing immediately upon becoming aware of any changes to 9-1-1 PERS that shall affect or are likely to affect the services the O.P.P. is offering under this Agreement, or of any changes to, or the termination or expiry of any agreement between the Municipality and Bell Canada related to 9-1-1 PERS.

6.0 INSURANCE AND LIMITATION OF LIABILITY

- 6.1 **Insurance** - The Municipality and the O.P.P. shall, during the term of this Agreement, maintain sufficient insurance to cover their respective obligations under this Agreement and shall provide evidence of the same to each other or, if the Parties are self-insured, each Party shall provide to the other Party evidence that is satisfactory to that Party that the Municipality and/or the O.P.P., as the case may be, is and shall be, at all relevant times, in a position to face successfully its monetary obligations stemming from liability under the Agreement.
- 6.2 **Limitation of Liability** - Notwithstanding any other provision in this Agreement, the O.P.P. shall not be responsible or liable for any injury, death or property damage to the Municipality, its employees, subcontractors or agents or for any claim by any third party against the Municipality, its employees, subcontractors or agents arising from:
 - (a) **External Information** - The accuracy or completeness or lack thereof of any information the O.P.P. receives from the Municipality, Bell Canada or any other third party, and which the O.P.P. relies upon in providing services under this Agreement;
 - (b) **Equipment and Services** - Equipment or services provided by any other party (including the failure of any other party to provide equipment or services) which the O.P.P. uses and relies upon to provide services under this Agreement including but not limited to:

- (i) Equipment or services required to transfer services provided under this Agreement from any other party to the O.P.P.,
 - (ii) Services provided to non-English speakers who place 9-1-1 Calls,
 - (iii) Services provided by Bell Canada to the Municipality under 9-1-1 PERS; and,
 - (iv) Services provided by Remote Agencies.
- (c) **Call Volumes** - The inability of the O.P.P. to respond to 9-1-1 Calls due to call volumes that exceed the capacity of the CERB, including the equipment and personnel who work at the CERB.

6.3 **Survival** – Section 6.2 shall survive the termination or expiry of this Agreement.

7.0 **COMPLIANCE WITH LAWS AND CONFIDENTIALITY**

- 7.1 **Compliance with Laws** - Both Parties agree to comply with all applicable laws in effect in the Province of Ontario in performing their respective obligations and duties under this Agreement.
- 7.2 **Confidential Information** – Both Parties agree that except where required by law, or for the purpose of performing duties or obligations under this Agreement, neither Party shall directly or indirectly disclose, destroy, exploit or use, either during or after the term of this Agreement, any confidential information belonging to the other Party, unless the other Party has provided its written consent. Both Parties further agree that when this Agreement terminates or expires, they shall return all confidential information belonging to the other Party.

8.0 **DISPUTE RESOLUTION**

- 8.1 **Dispute Resolution** – Subject to Article 9.0 herein, if any dispute arises between the O.P.P. and the Municipality as to their respective rights and obligations under this Agreement, the Parties may use the following dispute resolution mechanism to resolve such disputes:
- (a) The Unit Commander of the CERB and the Municipality Representative named in Section 2.1 herein shall attempt to settle the dispute within fourteen (14) business days of the dispute arising;
 - (b) If the Unit Commander of the CERB and the Municipality Representative are unable to settle the dispute within fourteen (14) business days of the dispute arising, they shall refer the dispute to the Director. The Director and the Municipality Representative shall attempt to resolve the dispute within fourteen (14) business days;

- (c) If the Parties are still unable to resolve the dispute, the Commissioner or the Deputy Commissioner of the O.P.P. and the Municipality Representative agrees to attempt to resolve the dispute within fourteen (14) business days; and,
- (d) If the Parties are still unable to resolve the dispute, each may, with the agreement of the other Party, refer the dispute to arbitration in accordance with the Arbitration Act, 1991, as amended.

9.0 TERM, TERMINATION AND RENEWAL

- 9.1 **Term** – Subject to this Agreement being terminated in accordance with this Article, this Agreement shall be effective from the ____ of _____, 200__ until the ____ day of _____, 200__.
- 9.2 **Renewal** - This Agreement may be renewed for a further term of five (5) years, upon the Municipality giving six (6) months written notice to the O.P.P., on the same terms and conditions with the possible exception of the payment of the annual rate, which shall be agreed to by the Parties.
- 9.3 **Termination** - Either Party to this Agreement may terminate this Agreement without cause and without incurring any liability upon providing ninety (90) days written notice of termination to the other Party, in which case this Agreement shall terminate ninety (90) days following the delivery of such notice. Should a notice to terminate be given, the Municipality shall continue to be obligated to pay for the cost of the services under this Agreement up to and including the date of such termination and the O.P.P. shall continue to be responsible to provide the services described in this Agreement up to and including the date of such termination.
- 9.4 **Immediate Termination** – Either Party may terminate this Agreement immediately without incurring any liability if Bell Canada withdraws offering 9-1-1 PERS to the Municipality or if the agreement between Bell Canada and the Municipality for the provision of 9-1-1 PERS is terminated or is expired and not renewed.

10.0 GENERAL

- 10.1 **No Waiver** - The failure of a Party to this Agreement to enforce at any time any of the provisions of this Agreement or any of its rights in respect thereto or to insist upon strict adherence to any term of this Agreement shall not be considered to be a waiver of such provision, right or term or in any way to affect the validity of this Agreement.
- 10.2 **Waiver in Writing** - Any waiver by any Party hereto of the performance of any of the provisions of this Agreement shall be effective only if in writing and signed by a duly authorized representative of such Party.
- 10.3 **No Prejudice** - The exercise by any Party to this Agreement of any right provided by this Agreement shall not preclude or prejudice such Party from exercising any other right it may have under this Agreement, irrespective of any previous action or proceeding taken by it hereunder.
- 10.4 **Restructuring** – The Municipality shall notify, and consult with the O.P.P. before the Municipality's boundaries are altered, the Municipality is amalgamated with another municipality, the Municipality is dissolved or the legal status of the Municipality is subject to other substantive changes.
- 10.5 **Relations** – The Agreement shall not create nor shall it be interpreted as creating any association, partnership, any employment relationship or any agency relationship between the Parties.
- 10.6 **Media** – Both Parties agree that they shall not at any time directly or indirectly communicate with the media in relation to this Agreement unless they first provide written notice to the other Party.
- 10.7 **Promotion** – Neither Party shall publicize or issue any publications related to this Agreement unless they first notify the other Party in writing.
- 10.8 **Assignment** - Neither Party shall assign this Agreement or any portion thereof without the prior written consent of the other, which consent may not be arbitrarily withheld.
- 10.9 **Force Majeure** - Neither Party shall be liable for damages caused by delay or failure to perform its obligations under this Agreement where such delay or failure is caused by an event beyond its reasonable control. The Parties agree that an event shall not be considered beyond one's reasonable control if a reasonable business person applying due diligence in the same or similar circumstances under the same or similar obligations as those contained in the Agreement would have put in place contingency plans to either materially mitigate or negate the effects of such event. If a Party seeks to excuse itself from its obligations under this Agreement due to a force majeure event, that Party shall immediately notify the other Party of the delay or non-performance, the reason for such delay or non-performance and the anticipated period of delay or non-performance.

IN WITNESS WHEREOF, each of the Parties hereto have executed this Agreement:

Corporation of the _____

Mayor/Reeve

Date: ____ day of _____, 20__.

CAO/Clerk

Date: ____ day of _____, 20__.

Ontario Provincial Police (O.P.P.)

Deputy Commissioner

Date: ____ day of _____, 200__.

SCHEDULE "A"

BYLAW OF COUNCIL

Attached to and forming part of the Agreement between

**HER MAJESTY THE QUEEN
IN RIGHT OF THE PROVINCE OF ONTARIO
as represented by the MINISTRY OF COMMUNITY SAFETY
AND CORRECTIONAL SERVICES
on behalf of the ONTARIO PROVINCIAL POLICE**

And

THE CORPORATION OF THE _____

Sample

Insert Bylaw Here

Sample



HIGHLIGHTS

of the NVCA BOARD OF DIRECTORS MEETINGS
No. 03-15 – March 27, 2015

NVCA 2015 Budget Approved

The board of directors approved the authority's 2015 budget at \$4,877,242. The 2015 budget is \$267,044 higher than 2014. Of that increase, \$61,000 came from a 3% increase in the municipal levy. The levy accounts for 42% of the approved budget; the remainder comes from government grants, uses fees, donations and interest income.

The budget is available on the NVCA website under About → Plans, Annual Reports & Financials.

2015-2018 NVCA Business Plan Approved

Business Plan to put goals from Strategic Plan into Operation

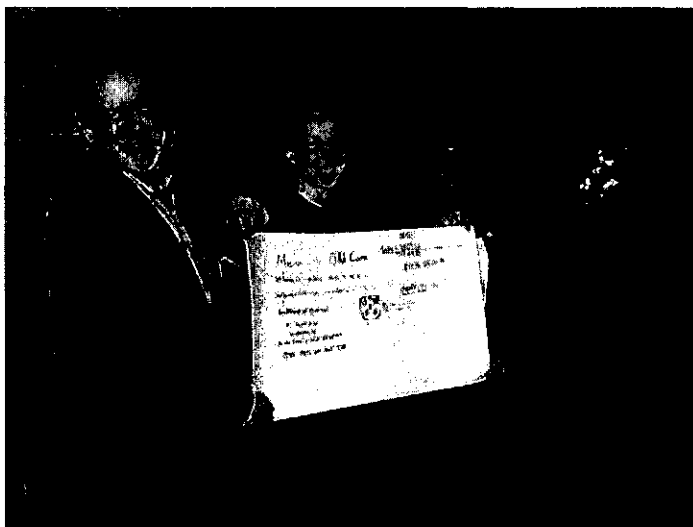
Following on the board's approval of the Strategic Plan Initiatives at their last meeting, staff presented a business plan outlining how these initiatives will be implemented over the next three years.

Internal program leads, costs to implement, action items and implementation periods are set for each of the 39 strategic initiatives coming out of the Strategic Plan.

The board approved the business plan, requiring staff to formally report on status of plan on an annual basis.

Both the strategic plan and the business plan are available on the NVCA website under About → Plans, Annual Reports & Financials.

Helping hand for the Tiffin Forest



Thanks to Toronto's Maurice Cody Child Care for the generous donation of \$1,774.25 to support restoration at the Tiffin Conservation Area!

Children from Maurice Cody come to Tiffin every year in the spring. When they heard about the damage from last year's tornado, they held a dance-a-thon to raise money to help replant trees lost during the storm.

Utopia Grist Mill Restoration Plan

The board of directors heard from Susan Antler, chair of the Friends of the Utopia Grist Mill & Park, a non-profit group dedicated to the preservation and enhancement of the Utopia Conservation Area and the historic Bell's Gristmill which is located at the site.

Starting in 2007, the Friends assumed financial and stewardship responsibility for the Utopia Conservation Area under an agreement with the NVCA. Among their activities to date, they have established and maintained walking trails, installed fencing, and hosted a number of well-received community events. In addition to raising annual operating funds, the Friends have garnered \$150,000 for the restoration of the gristmill.

Ms. Antler presented the Friends' business plan and the plans for Phase I of the gristmill restoration. Members of the board approved the plan and commended the Friends for their efforts to date.

In brief

During this meeting, the board also approved:

- The appointment of Nathan Cutler as an officer for the NVCA as per the *Conservation Authorities Act*.
- The purchase of trees for the NVCA's tree planting program up to a cost of \$160,000. More than 213,000 trees will be planted by NVCA's forestry program this year.
- A policy governing social media use by NVCA staff.
- A change to the way the board receives information on NVCA media coverage and outreach activities.

For more information

D. Gayle Wood, CAO, gwood@nvca.on.ca, 705-424-1479 ext. 225

For the full meeting agenda including documents and reports, visit the NVCA website at nvca.on.ca/about/boardofdirectors.

Future meetings & events

Spring Tonic Maple Syrup Festival, Saturday, April 11 and Sunday, April 12, 9:00 a.m. - 3:00 p.m., Tiffin Centre for Conservation, Utopia

Evening of Thanks Awards

Celebration Thursday, April 16, 5:00 - 6:30 p.m., Tiffin Centre for Conservation, Utopia - RSVP requested

NVCA Board of Directors Meeting, Friday, April 24, 9:00 a.m. - 11:00 a.m., Tiffin Centre for Conservation, Utopia

NVCA Source Protection Authority Meeting (NVSPA), Friday, April 24, 11:00 a.m. - 12:00 p.m., Tiffin Centre for Conservation, Utopia

Arbour Day Tree Sale, Saturday, May 9, 8:00 a.m. to 12:00 p.m. at the Tiffin Centre for Conservation, Utopia and 9:00 a.m. to 12:00 p.m. at the Nordic Centre, Wasaga Beach (co-hosted by the Ganaraska Hiking Club of Wasaga Beach)

There are numerous **volunteer tree planting events** happening across the watershed this spring. Please visit nvca.on.ca and look under About → Careers & Volunteers for a full listing.

Wendy Atkinson

From: AMO Communications <communicate@amo.on.ca>
Sent: March-27-15 5:15 PM
To: watkinson@melancthontownship.ca
Subject: AMO Policy Update - Ministry of Education Releases New Process for School Closures

March 27, 2015

Ministry of Education Releases New Process for School Closures

The Ministry of Education has revised the Pupil Accommodation Review Guidelines (PARG) that governs the local School Board process to consider school closures. In addition, the Ministry has released a new Community and Planning and Partnerships Guideline (CPPG) which outlines how School Boards are to work with municipal governments and other community partners to fill underutilized space in schools.

The CPPG mandates that School Boards, prior to initiating a Pupil Accommodation Review, must reach out to municipalities and other community partners to obtain planning related information and to explore potential partnership opportunities for underutilized space. Only after completion of a capital planning process can a School Board initiate a review to consider whether a school should be consolidated or closed. This is a positive development.

There are a number of significant changes to the newly revised PARG including:

- a new obligation of School Boards to formally consult with municipal governments;
- a shift away from considering the impact of school closures to community well-being and the local economy toward a more exclusive focus on student achievement; and,
- a reduction in the minimum duration and number of public meetings required for the Pupil Accommodation Review process.

AMO raised many issues and provided practical suggestions about the guidelines before they were finalized by the Ministry, not all of which are reflected in the final version. It is positive to see a municipal role formally incorporated into the process through a new obligation of School Boards to notify and consult with municipalities. However, AMO is disappointed that School Boards will not be mandated to invite interested municipalities to sit as members on the Accommodation Review Committees (ARCs).

There are other significant concerns with the new guidelines. Of primary concern is a new shift away from considering the impact of school closures to community well-being and the local economy toward a more exclusive focus on student achievement. All the value considerations are valid and should be considered in a holistic manner. If not, there may be a disconnect between School Board decisions and local municipal planning priorities that seek to create strong communities and strong local economies. The municipal sector is also concerned that the new changes will serve to reduce public engagement in the Pupil Accommodation Review process rather than enhance it.

It is important to note that the new guidelines only set out minimum standards for School Boards to follow. The guidelines are flexible. Boards may choose to exceed the provincial standards if community voices express the need. Municipalities are encouraged to review the guidelines and make representations to School Board Trustees on what the local standards should be in their community.

On a related matter, AMO welcomes the recent appointment of Karen Pitre as the Premier's Special Advisor on Community Hubs. It is hoped that this appointment and creation of an advisory group will accelerate the development of a province-wide policy. An avenue with great potential are approaches that grow schools into community hubs by integrating local programs and services, such as libraries and community centres within existing school infrastructure, where it may be practical and cost efficient for municipal governments. Space may also be well utilized by non-profit organizations. The community hub model is an opportunity that could work well in some parts of Ontario and may serve to avert unnecessary school closures in many cases.

Please see the Ministry of Education [website](#) to view the new guidelines.

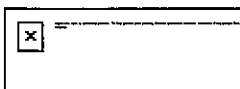
Please see AMO's [letter](#) dated December 18th, 2014 providing feedback on the proposed guidelines.

AMO Contact: Michael Jacek, Senior Advisor, mjacek@amo.on.ca, 416.971.9856 ext. 329.

PLEASE NOTE: AMO Breaking News will be broadcast to the member municipality's council, administrator, and clerk. Recipients of the AMO broadcasts are free to redistribute the AMO broadcasts to other municipal staff as required. We have decided to not add other staff to these broadcast lists in order to ensure accuracy and efficiency in the management of our various broadcast lists.

DISCLAIMER: Any documents attached are final versions. AMO assumes no responsibility for any discrepancies that may have been transmitted with this electronic version. The printed versions of the documents stand as the official record.

OPT-OUT: If you wish to opt-out of these email communications from AMO please click [here](#).



Total Control Panel

[Login](#)

To: watkinson@melancthontownship.ca

Message Score: 20

High (60): Pass

From: communicate@amo.on.ca

My Spam Blocking Level: Medium

Medium (75): Pass

Low (90): Pass

[Block](#) this sender

[Block](#) amo.on.ca

This message was delivered because the content filter score did not exceed your filter level.

Ontario
Provincial
Police

Police
provinciale
de l'Ontario

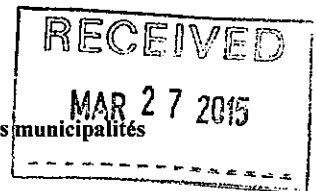


Municipal Policing Bureau
Bureau des services policiers des municipalités

777 Memorial Ave.
Orillia (ON) L3V 7V3

Tel: 705 329-6200
Fax: 705 330-4191

File number/Référence:



777, ave Memorial
Orillia ON L3V 7V3

Tél.: 705 329-6200
Télééc.: 705 330-4191

March 26, 2015

The Township of Melancthon
157101 Highway 10
R.R. #6
Shelburne, ON ON L0N 1S9

Dear Sir/Madame

Re: Year 2014 Reconciled Contract Policing Costs and 2015 Billing Statement Adjustment - Ontario Provincial Police (OPP)

Please find attached the *2014 Policing Cost Summary* and *2015 Billing Statement Adjustment*, reconciling the municipality's OPP allocated policing costs for the calendar year and adjusting the 2015 Billing Statement costs to reflect the 2014 Reconciled Policing Costs for the phase-in adjustment for 2015.

As stated in the 2015 Municipal Policing Billing Statements issued September 29, 2014, we have completed a recalculation of the phase-in adjustments for 2015 taking into consideration the final results of the 2014 costs. Further, the capped decrease per property rate (if applicable) has been adjusted based on the final year end status of costs.

The final credit or invoice combining the *2014 Policing Cost Summary* and *2015 Billing Statement Adjustment* will be sent to the municipality directly by the Ontario Shared Services (OSS) in April. If you wish to use the credit (if applicable) amount against your current balance (or a future invoice), please clearly indicate this request on your remittance (cheque stub or remittance advice) to OSS to ensure your credit is properly applied on your account.

If you have any questions regarding the attached *2014 Policing Cost Summary* or *2015 Billing Statement Adjustment*, please contact your local Detachment Commander.

Regards,

A handwritten signature in black ink, appearing to read "R. A. Philbin".

R. A. (Rick) Philbin, Superintendent
Commander
Municipal Policing Bureau

/atc
Attachments

c: : Chair, Melancthon Police Services Board
Detachment Commander Dufferin County OPP
ec: Regional Commander, Central Region

2015 Billing Statement Adjustment

Melancthon Tp				
Property Count: 1275			\$/Property	Total \$
				Reconciliation \$
2014 Final Year End Reconciliation Amount				-5,459
2015 Revised Phase-In Adjustment Billing Summary				
Final Reconciled 2014 Costs (see below)	400,656	314.24		
2015 Calculated Cost per Property		331.00	422,024	
Cost per Property Variance	(Increase)	16.76		
2015 Adjustment (Maximum per property)	(Increase)	16.76		
Actual 2015 Phase-In Adjustment		0.00	0	
Revised Billing for 2015			422,024	
Original Billing for 2015			422,024	
2015 Billing Statement Adjustment				0
2014 Reconciliation Results and 2015 Adjustment Total				-5,459

The combined 2014 Reconciliation results and 2015 Adjustment credit will be issued by Ontario Shared Services.

The following was excluded from the Final Reconciled 2014 Costs:

Revenue

O.P.P. COSTING SUMMARY
Actual Policing Costs for the period
January 1, 2014 to December 31, 2014
(See Attached Notes)

TOWNSHIP OF MELANCTHON

Salaries and Benefits

<u>Uniform Members</u>	(Note 1)	<u>Positions</u>	<u>\$</u>	
Inspector		-	-	
Staff Sergeant-Detachment Commander.		0.09	11,821	
Staff Sergeant		-	-	
Sergeant		0.34	37,156	
Constables.		2.06	187,466	
Part-Time Constables.		-	-	
Total Uniform Salaries	(Note 2)			236,442
Overtime (Actual)	(Note 2)			22,317
Contractual Payout (Vacation & Statutory Holidays)	(Note 3)			5,903
Shift Premiums	(Note 4)			1,620
Benefits (26.6% of Salaries; 2% of Overtime, Part-time 20.6%) . .	(Note 5)			63,340
Total Uniform Salaries & Benefits				329,622
<u>Civilian Members</u>	(Note 1)	<u>Positions</u>	<u>\$</u>	
Detachment Administrative Clerk		0.17	10,232	
Caretaker		-	-	
Communication Operators	(Note 6)		12,858	
Prisoner Guards / Expenses	(Note 7)		3,381	
Office Automation Support Salaries & Benefits.	(Note 8)		969	
Telephone Support Salaries & Benefits.	(Note 9)		291	
Operational Support Salaries & Benefits.	(Note 10)		9,606	
Total Civilian Salaries				37,338
Benefits (25.5% of Salaries; 19.1% Part-Time)	(Note 5)			2,609
Total Civilian Salaries & Benefits				39,947

Total Salaries & Benefits	369,569
--------------------------------------	----------------

Other Direct Operating Expenses

(Note 11)

Communication Centre	632	
Operational Support	2,248	
RHQ Municipal Support	4,995	
Vehicle Usage	20,064	
Telephone	2,819	
Detachment Supplies & Equipment	1,320	
Accommodation	1,464	
Uniform & Equipment	2,923	
Cleaning Contract	754	
Mobile Radio Equipment Repairs & Maintenance	1,970	
Office Automation - Uniform	3,491	
Office Automation - Civilian	287	
Total Other Direct Operating Expenses		42,968
2014 Total Actual Gross Policing Cost.		412,537
Revenues Collected on Behalf of the Municipality	(Note 12)	(4,758)
Provincial Services Usage	(Note 13)	(11,881)

FINAL RECONCILED 2014 COSTS	\$ 395,898
Less TOTAL AMOUNT BILLED PER ESTIMATE	\$ 408,996
DIFFERENCE	\$ (13,098)
SEMI-ANNUAL RECONCILIATION CREDIT (if applicable)	\$ 7,639
FINAL YEAR END RECONCILIATION AMOUNT	\$ (5,459)

O.P.P. COSTING SUMMARY
Actual Policing Costs for the period
January 1, 2014 to December 31, 2014

TOWNSHIP OF MELANCTHON

NOTES TO STATEMENT

- 1) Uniformed salaries used for the reconciliation to actual costs are the January 1, 2014 salaries negotiated with the Ontario Provincial Police Association (OPPA). Civilian salaries are the salaries negotiated with the OPPA effective January 1, 2014.
- 2) Salary & overtime reconciliation by rank and classification are detailed on the attached Schedule "A".
- 3) Contractual Payouts are calculated using actual costs.
- 4) Shift Premium is calculated at \$675 per Sergeant and Constable.
- 5) The benefit rates are 26.6% of salaries for uniformed officers, 25.5% for civilian staff, 20.6% for part-time uniformed staff, 19.1% for part-time civilian staff and 2% for overtime payments.
- 6) Communication Operator costs are calculated at \$5,164 per uniformed member..
- 7) Prisoner Guards / Expenses are calculated at \$1,358 per uniformed member.
- 8) Office Automation Support Salaries & Benefits are calculated at \$389 per uniformed member.
- 9) Telephone Support Salaries & Benefits are calculated at \$117 per uniformed member.
- 10) Operational Support Salaries & Benefits are calculated at \$3,858 per uniformed member.
- 11) Other items are calculated as follows:
 - a) Communication Center is calculated at \$254 per uniform member.
 - b) Operational Support is calculated at \$903 per uniformed member.
 - c) RHQ Municipal Support is calculated at \$2,006 per uniformed member.
 - d) Vehicle Usage is calculated at \$8,058 per uniformed member.
 - e) Telephone cost is calculated at \$1,132 per uniformed member.
 - f) Detachment Supplies & Equipment are calculated at \$530 per uniformed member.
 - g) Accommodation is calculated at \$588 per uniformed member.
 - h) Uniform & Equipment is calculated at \$1,174 per uniformed member.
 - i) Cleaning Contracts are calculated at \$303 per uniformed member.
 - j) Mobile Radio Equipment Maintenance is calculated at \$791 per uniformed member.
 - k) Office Automation is calculated at \$1,402 per uniformed member and \$1,687 per civilian member.
- 12) Revenues collected on behalf of the municipality for the period January 01 to December 31, 2014 as provided by detachment.

Total Revenue Reimbursed to Municipality

\$ 4,757.81

- 13) A Provincial Services Usage (PSU) reduction of 2.88% of the actual policing cost is given to the municipality. This PSU compensates the municipality for the deployment of officers to other areas in response to investigations or other occurrences deemed to be provincial responsibilities.

O.P.P. COSTING SUMMARY**TOWNSHIP OF MELANCTHON**

Actual Policing Costs for the period
January 1, 2014 to December 31, 2014

Reconciliation of Salaries

Rank	Contract Positions	2014 Annual Salary	Regular # of Hours Provided (Note 1)	Overtime Hours Provided (Note 2)	FTE Positions by Rank (Note 3)	Actual Salary Dollars (Note 3)	Actual Overtime Dollars (Note 2)
S/Sgt - Det.Com. 01	0.09						
Staff Sergeant 1- 23+		131,343	126	45.25	0.09	11,821	2,848
Total - S/Sgt - Det.Com. 01			126	45.25	0.09	11,821	2,848
Sergeants	0.34						
Sergeant 1- 23+		110,557	436	66.00	0.24	26,036	3,496
Sergeant 1- 17-23		107,839	92	1.50	0.05	5,336	78
Sergeant 1- 8-17		105,120	102	30.00	0.06	5,784	1,511
Total - Sergeants			629	97.50	0.34	37,156	5,084
Constables	2.06						
1st Class 1- 23+		98,777	389	50.75	0.20	20,003	2,402
1st Class 1- 17-23		96,059	744	24.00	0.39	37,228	1,105
1st Class 1- 8-17		93,340	749	108.75	0.39	36,430	4,863
1st Class 1- 3-8		90,621	1,695	119.63	0.88	80,043	5,194
2nd Class (Const 2-3 Years)		80,658	13	-	0.01	557	-
3rd Class (Const 1½ - 2 Years)		72,501	251	15.75	0.13	9,486	547
4th Class (Const 1 - 1½ Year)		63,434	113	9.00	0.06	3,720	274
Total - Constables			3,952	327.88	2.06	187,466	14,385
Total - All Ranks			4,707	470.63	2.49	236,442	22,317
Total Hours Worked in Contract				4,707			
Minimum Hours Required in Contract				3,653			
Hours Provided to Municipality Above Required Minimum				1,054			

Notes:

- 1) The number of hours provided includes regular hours only and does not include overtime hours.
- 2) The overtime hours are accumulated by rank and classification and are charged at the appropriate hourly rate.
- 3) The full time equivalent (FTE) number of officers (Inspector / Staff Sergeant Detachment Commander, Staff Sergeant, Sergeant and Constable) were obtained by dividing the number of regular officer hours provided in each classification by the total number of regular officer hours. That percentage is multiplied by the number of positions in the contract. Actual salary dollars are then obtained by multiplying the FTE number by the annual salary for each classification.



SHELburnE Announces Community Torchbearer for Pan Am Games Torch Relay

SHELburnE March 23, 2015 – Shelburne is proud to announce LENOARD J. GUCHARDI as the Shelburne community torchbearer for the TORONTO 2015 Pan Am Games Torch Relay, presented by President's Choice® and OLG.

The torch relay will visit Shelburne on June 12th and will feature LENOARD J. GUCHARDI as the community torchbearer. The community torchbearer was selected through an application process, where names and information about the individuals involvement in the community and sports were received. Town Council reviewed all applications that were received and are pleased to announce that Lenard would be representing the Town of Shelburne as our Community Torchbearer.

"Lenoard J. Guchardi" will proudly carry the Pan Am flame as Shelburne's community torchbearer," said Ken Behnington, Mayor of Shelburne. "Shelburne is excited to be a part of this historic journey and we look forward to showing our community to the world."

During the 41-day torch relay, each of the 3,000 torchbearers will complete, on average, a 200-metre relay segment. The torch will be carried by more than 60 modes of transportation and exceed 5,000 kilometres on the road and 15,000 kilometres by air.

"The torch is a unique symbol of the Pan Am Games and carries a powerful energy that will unite Canadians," said Saad Rafi, chief executive officer, TO2015. "The torchbearers will proudly carry the flame through more than 130 communities, igniting the Pan Am spirit as they go."

Featured on the torch are the United We Play! pictograms — colourful depictions of people in motion — symbolizing the assembly of athletes through the celebration of sport and culture. The aluminum torch stands 65 centimetres high and weighs 1.2 kilograms (or roughly the same weight as a baseball bat). With a burn time of 10 to 12 minutes, the flame can withstand winds of up to 70 kilometres per hour and is visible in all kinds of weather conditions.



**About the TORONTO 2015 Pan Am Games Torch Relay**

The TORONTO 2015 Pan Am Games Torch Relay, presented by President's Choice® and OLG, is supported by community partner CIBC and signature supporters Star Media Group and Metroland Media, Ontario Trillium Foundation and Porter Airlines. The torch relay will invite Canadians to celebrate and share the Pan Am spirit throughout its 41-day journey towards Toronto, the Host City of the Games.

The torch relay starts May 30, 2015, and concludes July 10, 2015, with the dramatic lighting of the cauldron at the Opening Ceremony in downtown Toronto.

The TORONTO 2015 Games are funded by the Government of Canada, the Province of Ontario, as well as Lead Partner CIBC and other partners and sponsors.

For more information, visit TORONTO2015.org/torch-relay.

-30-

News editors, please note photos are available through an FTP site: LINK

For further information, please contact:

Carlene Siopis
Manager, marketing and communications, TO2015
647.206.0259
relaymedia@toronto2015.org



Wendy Atkinson

From: AMO Communications <communicate@amo.on.ca>
Sent: March-30-15 11:16 AM
To: watkinson@melancthontownship.ca
Subject: AMO Policy Update

March 30, 2015

AMO Report to Member Municipalities Highlights of the March 2015 Board Meeting

To keep members informed, AMO provides updates on important issues considered at regular AMO Board of Directors' meetings. The March 27th meeting was the first Board of Directors meeting for the nine new members appointed to fill vacancies resulting from the municipal election. Check out www.amo.on.ca for your full AMO Board 2014-2016.

Highlights of the Board meeting include:

New AMO Secretary-Treasurer

Scott Wilson, CAO, County of Wellington and AMO Board member was appointed by the AMO Board of Director temporarily to fill the vacancy for the AMO Secretary-Treasurer until August 2015. A nomination process, as required by by-law, will occur seeking candidates to complete the term.

Ontario Climate Change Strategy – Meeting with the MOECC Minister

The Honourable Glen Murray, Minister of Environment and Climate Change (MOECC), attended the Board meeting to discuss the state of scientific knowledge on climate change and impacts of emerging weather patterns on Ontario's environment and economy. The Minister provided an overview of some of the issues the government is considering as it develops its strategy as well as the potential economic development opportunities that could be provided through technological innovation and productivity gains of moving to a low carbon economy in the province. The Minister committed to working with municipal governments as full partners and noted his appreciation of the framework adopted by the Board and looks forward to working with the AMO's Climate Change Task Force on Ontario's Climate Change Strategy.

Contact: Craig Reid, Senior Advisor, e-mail: creid@amo.on.ca , Ext. 334.

What's Next Ontario? AMO's Fiscal Sustainability Project

Achieving fiscal sustainability is an overarching goal shared by all municipal governments. The AMO Board approved, as part of its 2015 strategic objectives, a special project involving some substantial research and policy development related to identifying what a future municipal fiscal sustainability framework could look like for the needs and diversity of over 400 municipalities. The project is named "What's next Ontario?" AMO members are asked to stay tuned and then participate in the conversation to develop a vision for how we can achieve a more predictable fiscal future.

Contact: Matthew Wilson, Senior Advisor, email: mwilson@amo.on.ca, Ext. 323.

Implementation of the Social Assistance Management System (SAMS)

After receiving a SAMS update, the Board directed that the AMO President follow-up with the Minister of Community and Social Services, the Honourable Helena Jacek on the need for full financial compensation based on actual costs incurred until such time as the short and long-term problems within the system are resolved. While some progress has been made, efforts continue to stabilize the system across the province. Over the last month, the Ministry has enacted a series of new actions to address the problems including: site visits by the Deputy Minister; creation of a front-line users group; contracting a third part advisor to provide independent, expert advice; and, provided \$5 million in one-time funding to municipalities and DSSABs for costs incurred up until March 31, 2015. In a

March 19th letter Richard Steele, the Ministry of Community and Social Services Assistant Deputy Minister, to Ontario Works administrators did say: "This additional \$5 million is in recognition of the tremendous efforts being made to implement SAMS and brings the cumulative amount of provincial funding provided to support the operational costs of SAMS implementation to \$15 million - \$5 million anticipated and provided prior to implementation and an additional \$10 million provided post-implementation. The funding is 100% provincial with no cost-sharing requirement for costs incurred up to March 31, 2015". It is unclear if the financial compensation is sufficient as the Ministry did not survey municipalities and DSSABs on the actual costs.

Contact: Michael Jacek, Senior Advisor, email: mjacek@amo.on.ca, ext. 329.

Municipal Paper on New Waste Diversion Legislation

New provincial waste diversion legislation is expected shortly. Staff is preparing a municipal discussion paper to outline municipal governments' perspective for the MOECC Minister and officials that can inform legislation development. The Board approved the finalization of the paper which is based on key principles that include environmental impacts, preserving limited disposal capacity, ensuring fair compensation for municipalities for services provided as well as any assets and associated costs that are stranded as a new system is implemented.

Contact: Dave Gordon, Senior Advisor, email: dgordon@amo.on.ca, ext. 371.

Self-Insured Long Term Disability

The Ministry of Finance (MOF) recently consulted stakeholders about exempting certain employers through regulation from being required to obtain third party insurance. After speaking with municipal staff and the Ontario Municipal Human Resources Association (OMHRA), AMO staff made a submission to MOF requesting that municipalities be exempted from the amendments to the *Insurance Act* with respect to long term disability benefits. We are awaiting a response.

Contact: Renatta Austin, Policy Advisor, email: raustin@amo.on.ca, ext. 367.

Fair and Open Tendering

Open tendering continues to be an issue for municipal governments as it increases municipal infrastructure costs. In March, AMO's President wrote a letter to Minister Flynn requesting that municipal governments be exempted from the "construction employer" provisions in the *Labour Relations Act*. While there is a process under the LRA, there have been no exemptions for municipalities to date.

Contact: Renatta Austin, Policy Advisor, email: raustin@amo.on.ca, ext. 367.

MEPCO Update

The AMO Board was updated on the work of the MEPCO Board and its mandate to deal with pension related matters. MEPCO made a submission to the Province on its proposed Ontario Retirement Pension Plan (ORPP) which is framework legislation before the House. MEPCO noted some potential impacts and is seeking clarification. At its recent meeting, George Cooke, OAC Board Chair, provided an update on the 2014 OMERS investment return of 10% (net), as well as recent organizational changes and the status of proposed membership growth initiatives. Mayor Rick Goldring, City of Burlington, a member of the AMO Board was appointed to the MEPCO Board.

Contact: Bruce McLeod, MEPCO Coordinator, email: bmcleod@amo.on.ca, ext. 350.

LAS Update

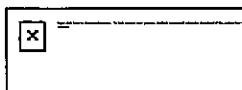
LAS, in conjunction with a Schedule 1 Chartered Bank, is launching a high interest savings account (HISA) for municipalities. By aggregating monies invested, all municipal government, regardless of size, will realize a higher rate of return than going on their own. The HISA will offer complete liquidity with no lock in provisions or withdrawal penalties. Net interest rates will be anywhere between 1.15% to 1.25% depending upon the bank prime rate and the total aggregated amount deposited.

Contact: Jason Hagan, LAS Program Manager, email: jhagan@amo.on.ca, ext. 320.

PLEASE NOTE: AMO Breaking News will be broadcast to the member municipality's council, administrator, and clerk. Recipients of the AMO broadcasts are free to redistribute the AMO broadcasts to other municipal staff as required. We have decided to not add other staff to these broadcast lists in order to ensure accuracy and efficiency in the management of our various broadcast lists.

DISCLAIMER: Any documents attached are final versions. AMO assumes no responsibility for any discrepancies that may have been transmitted with this electronic version. The printed versions of the documents stand as the official record.

OPT-OUT: If you wish to opt-out of these email communications from AMO please click [here](#).



Total Control Panel

[Login](#)

To: watkinson@melancthontownship.ca

Message Score: 40

High (60): Pass

From: communicate@amo.on.ca

My Spam Blocking Level: Medium

Medium (75): Pass

Low (90): Pass

[Block](#) this sender

[Block](#) amo.on.ca

This message was delivered because the content filter score did not exceed your filter level.

Denise Holmes

From: Peggy Tollett <Peggy.Tollett@caledon.ca>
Sent: April-01-15 4:00 PM
To: Heather Foster; suestone@amaranth-eastgary.ca; Heather Haire; Carey deGorter; kcanivet@amaranth-eastgary.ca; dholmes@melancthontownship.ca; watkinson@melancthontownship.ca; ken.mcghee@townofmono.com; hboston@mulmurtownship.ca; vdouglas@orangeville.ca; sgreatrix@orangeville.ca; phossie@townofshelburne.on.ca; jwilson@townofgrandvalley.ca
Cc: Lori Eagleson; Darlene Noakes
Subject: New Process for payments
Attachments: 2015 POA Budget V2.pptx

Hi Everyone,

Just to follow up on our POA meeting from March 27, 2015, based on our discussions at the meeting will start the new allocation for payments with the end of March 2015.

I will send you the revenue collected and expenses for the first quarter of 2015, as well as the reconciliation for the allocation to each of the municipalities. Similar to what was presented at the March 27 meeting. I have attached a copy of the presentation for your information.

Please let me know if you had any additional concerns after speaking to your individual areas.

I would like to have the payments issued for April 17, 2015.

Thank you

Peggy Tollett, CPA, CGA
Treasurer
Corporate Services

Town of Caledon
6311 Old Church Road
Caledon, ON, L7C 1J6

905-584-2272 x. 4112
www.caledon.ca

"This message (and any associated files) is intended only for the use of the individual or entity to which it is addressed. The content of the message is the property of the Corporation of the Town of Caledon. The message may contain information that is privileged, confidential, subject to copyright and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any dissemination, distribution, copying, or modification of this message is strictly prohibited. If you have received this message in error, please notify the sender immediately, advising of the error and delete this message without making a copy. (Information related to this email is automatically monitored and recorded and the content may be required to be disclosed by the Town to a third party in certain circumstances). Thank you."

Total Control Panel

[Login](#)

To: dholmes@melancthontownship.ca

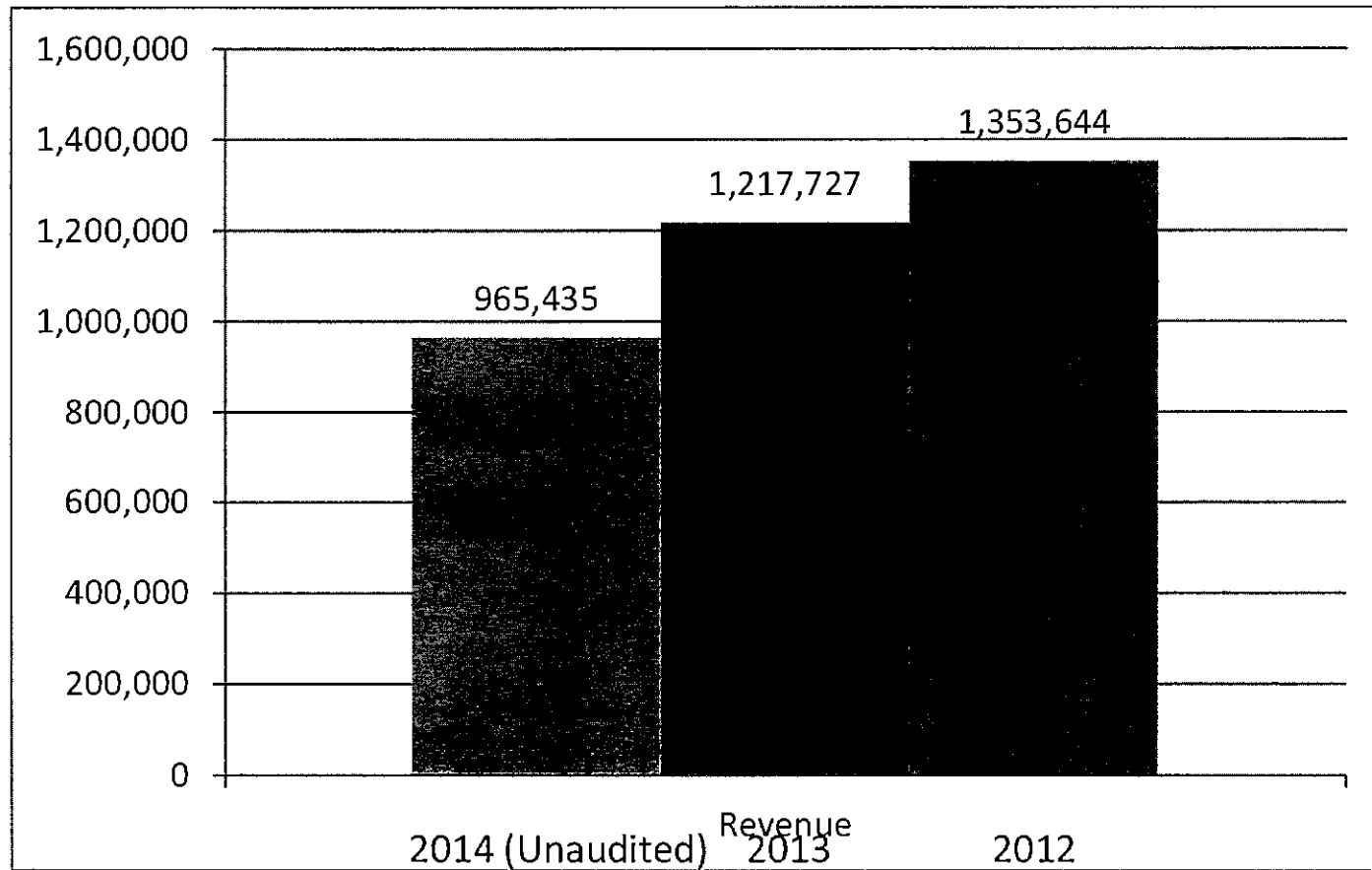
Message Score: 50

High (60): Pass

2015 POA Budget Review

March 27, 2015

Revenue 2014 - 2012



Average for 3 years = \$1,178,935

POA Operations – Dufferin County

Budget 2014 – 2015

	2014 Budget	2014 Actuals (Unaudited)	2015 Budget
Revenue			
Fine Revenue Collected (Current)	975,000	713,119	875,353
Collections of fines in arrears	300,000	247,318	303,582
Interest Earned		4,998	
Total Revenue	1,275,000	965,435	1,178,935
Expenditures			
Wages/Benefits/Overtime	365,439	348,917	377,240
Bank Charges	12,000	18,408	18,000
Computer Charges (ICON)	30,225	21,147	24,000
Contract Services/Prosecutor and adjud	147,603	139,568	157,305
Court - Transcript, Witness and Interpre	14,000	11,942	11,000
Facility rental	12,000	12,211	12,000
Legal forms	7,500	1,706	6,500
Legal Publications	500	246	500
Meeting Expenses	300	70	300
Membership / Dues	250	200	430
Mileage	500	691	500
Office supplies	5,000	4,831	5,000
Printing and Advertising	300		300
Telephone/Internet	7,650	7,234	7,650
Training / Development / Seminars	2,000	2,000	2,000
Total Expenses (recovered at 100%)	605,267	569,172	622,725
Net Revenue Before Payments to Serviced Municipalities	669,733	396,263	556,210

2014 Shortfall in Recovery

Total Cost of Dufferin POA	\$569,172
Recovery - 47%	\$444,330
Shortfall	<u>\$124,842</u>

Amount of Revenue Payments to other municipalities	\$521,105
Net Revenue available	\$396,263
Shortfall	<u>\$124,842</u>

Allocation of 2014 Shortfall in Recovery

Location	2014 Fines	% of Total Fines	Clawback Portion
Shelburne	62,476.32	12.83%	16,017.70
Melancthon	32,283.33	6.63%	8,276.81
Mulmur	18,723.79	3.85%	4,800.41
Orangeville	194,609.04	39.97%	49,893.93
Mono	130,205.74	26.74%	33,382.19
Amaranth	19,499.54	4.00%	4,999.30
Grand Valley	9,138.43	1.88%	2,342.91
East Garafraxa	20,003.98	4.11%	5,128.63
Total	\$ 486,940.17		\$ 124,841.87

Proposed Change in Allocation / Recovery

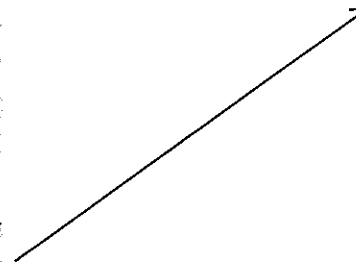
Based on 2014 Actuals

Municipality	Total Revenue	Allocation %	Allocation \$
Shelburne	20,304.76	8.38%	9,522.50
Melancthon	11,943.76	4.93%	5,601.37
Mulmur	9,217.53	3.80%	4,322.82
Orangeville	101,140.28	41.73%	47,432.63
Mono	66,543.36	27.45%	31,207.42
Amaranth	14,151.53	5.84%	6,636.77
Town of Grand Valley	3,958.02	1.63%	1,856.23
East Garafraxa	15,113.51	6.24%	7,087.91
Total Revenue	242,372.75		113,667.65

POA - Orangeville

Quarter 1 Expenses March YTD 128,705.10

Amount to be re-allocated 113,667.65



Removal of the 47% recovery charge to a quarterly reconciliation and allocation.
Benefits

- Reduce fluctuations with calculation
- No Claw backs or Refunds
- Less Administration per month

Wendy Atkinson

From: AMO Communications <communicate@amo.on.ca>
Sent: April-01-15 4:01 PM
To: watkinson@melancthontownship.ca
Subject: AMO Policy Update - Recent Developments Regarding Housing and Homelessness Prevention

April 1, 2015

Recent Developments Regarding Housing and Homelessness Prevention

AMO is providing information to members on a number of recent developments this week concerning housing and homelessness prevention:

Homelessness Funding

The Province announced it is providing \$587 million over two years to municipalities and District Social Service Administration Boards (DSSABs) through the Community Homelessness Prevention Initiative (CHPI). These funding levels are consistent with the commitments made in the 2014 Provincial Budget. AMO has long advocated for continued enhancements to provincially funded housing and homelessness programs.

Funding homelessness prevention programs helps the most vulnerable residents in our communities. It will help the Province, municipalities, and DSSABs to work towards the goal of ending homelessness to fulfil the provincial commitment made in the renewed Poverty Reduction Strategy. Programs such as the CHPI are essential to this effort to help those who are homeless to become housed. Sustaining social housing and building new affordable housing units must also be part of the equation. Enhanced, long-term federal-provincial funding programs are also needed to make this happen.

More information on the allocation of the \$587 million is found on the Government of Ontario's website: [Ontario Allocates \\$587 Million to Help End Homelessness](#).

Toronto Releases Study Demonstrating the Return on Investments in Social Housing

The City of Toronto highlighted this week the urgent need for capital repairs of its social housing stock owned and managed by the Toronto Community Housing Corporation (TCHC). They released a study that clearly makes a solid business case for investments in social housing which will result in socio-economic benefits to the City.

While the case study concerns Toronto's public housing, this study easily stands for other communities elsewhere in Ontario. The accumulating capital repair backlog in social housing portfolios across the province are of increasing concern. AMO stands with Toronto in calling upon the federal and provincial governments to make sustained investments in social housing.

More information on the study is found on the Toronto Community Housing Corporation's (TCHC) website: [Investing in TCHC revitalization and repairs creates jobs, spurs economic growth](#).

The study by the Canadian Centre for Economic Analysis is found also on the TCHC website: [Socio-Economic Analysis: Value of Toronto Community Housing's 10-Year Capital Investment Plan and Revitalization](#).

Federation of Canadian Municipalities (FCM) Pre-Budget Submission

The Federation of Canadian Municipalities (FCM) released their pre-budget submission for the 2015-16 Federal Budget. In the submission, FCM makes the link between affordable housing and healthy communities as well as illustrating the economic return on investment. FCM is calling upon the federal government to continue investing in housing and to create incentives to increase rental housing stock. Specifically, the recommendations are:

1. Protect and make permanent Canada's \$2.072 billion annual federal affordable housing programs and investments; and,
2. Preserve and increase affordable rental housing through tax incentives aimed at removing barriers to new affordable and market-rental housing (i.e. Eco-Energy retrofit, Rental Incentive Tax Credit).

AMO supports FCM efforts to advocate for stronger engagement by the federal government in the housing sector.

The Budget Submission is found on the FCM website:

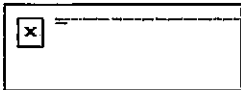
[Strengthening Canada Through Our Hometowns: FCM Budget 2015 Submission.](#)

AMO Contact: Michael Jacek, Senior Advisor, E-mail: mjacek@amo.on.ca, 1-877-426-6527 (toll free) or 416.971.9856 (local) ext. 329.

PLEASE NOTE: AMO Breaking News will be broadcast to the member municipality's council, administrator, and clerk. Recipients of the AMO broadcasts are free to redistribute the AMO broadcasts to other municipal staff as required. We have decided to not add other staff to these broadcast lists in order to ensure accuracy and efficiency in the management of our various broadcast lists.

DISCLAIMER: Any documents attached are final versions. AMO assumes no responsibility for any discrepancies that may have been transmitted with this electronic version. The printed versions of the documents stand as the official record.

OPT-OUT: If you wish to opt-out of these email communications from AMO please click [here](#).



Total Control Panel

[Login](#)

To: watkinson@melancthontownship.ca

Message Score: 35

High (60): Pass

From: communicate@amo.on.ca

My Spam Blocking Level: Medium

Medium (75): Pass

Low (90): Pass

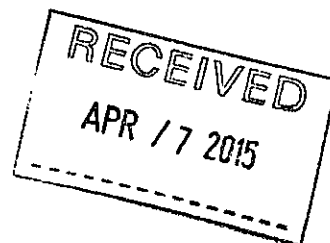
[Block this sender](#)

[Block amo.on.ca](#)

This message was delivered because the content filter score did not exceed your filter level.



April 1, 2015



Mayor Darren White and Council
The Township of Melancthon
157101 Hwy 10
Melancthon, Ontario
L9V 2E6

Member Municipalities

Adjala-Tosorontio
Amaranth
Barrie
The Blue Mountains
Bradford-West Gwillimbury
Clearview
Collingwood
Essa
Grey Highlands
Innisfil
Melancthon
Mono
Mulmur
New Tecumseth
Oro-Medonte
Shelburne
Springwater
Wasaga Beach

Dear Mayor White & Council:

Re: NVCA 2015 Municipal Levy

On March 27, 2015 the NVCA Board of Directors approved the circulated 2015 NVCA Budget. As you are aware, the NVCA circulated our Draft 2015 Budget to our 18 member municipalities on December 2, 2014 for a 60 day review and comment.

The NVCA Board and staff look forward to implementing the 2015 Conservation Authority programs supported by the approved budget including:

- Private land stewardship, restoration and reforestation
- Conservation Authority education and recreation
- Flood forecasting and warning
- Municipal source water protection
- Natural Hazard and Natural Heritage protection in accordance with the *Planning Act* and Provincial Regulations
- Environmental monitoring and preparation of watershed report cards
- Implementing the NVCA 2015-2018 Strategic and Business Plans.

Watershed Counties

Dufferin
Grey
Simcoe

The approved budget will enable the NVCA, in partnership with our local Municipalities, and residents to continue to protect and restore the environment, reduce and or prevent flood and erosion hazards to property and persons, and continue to support the health of the local residents and the health of our local economy.

Member of



www.nvca.on.ca

NOTTAWASAGA VALLEY CONSERVATION AUTHORITY • Centre for Conservation
John Hix Conservation Administration Centre • Tiffin Conservation Area • 8195 8th Line • Utopia, On L0M 1T0
Telephone: 705.424.1479 • Fax: 705.424.2115 • Web: www.nvca.on.ca • Email: admin@nvca.on.ca

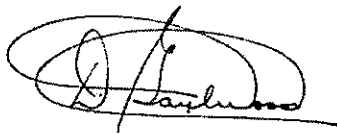
Info 9 - April 16, 2015

Further to the interim levy invoice issued in March by the NVCA, the next installment invoice will be issued in May and will reflect the approved budget.

Should you have any questions regarding the approved NVCA budget or associated conservation programs please contact me directly.

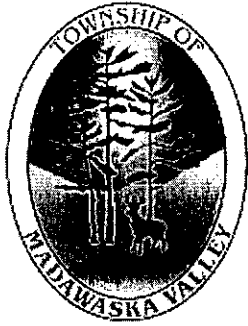
Thank you again for your ongoing support of the NVCA. I would like to also thank the NVCA Board Members for their continued governance, ensuring that the watershed conservation needs are best served.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Gayle Wood", enclosed within a large, loopy oval shape.

D. Gayle Wood, CMM3
Chief Administrative Officer

Copy: NVCA Board Member, Darren White
Municipal Clerk & CAO Denise Holmes



THE CORPORATION OF THE TOWNSHIP OF MADAWASKA VALLEY

85 Bay Street, P.O. Box 1000, Barry's Bay, Ontario K0J 1B0

TEL: (613) 756-2747 FAX: (613) 756-0553

E-MAIL - info@madawaskavalley.ca.

Tuesday, April 7, 2015

Dear Municipal Leader,

The Township of Madawaska Valley recognizes the struggle that many of its ratepayers in our rural area are experiencing with rising hydro rates and feels that, as a collective of municipalities, we must let our voices be heard to the Province. Similar to many municipalities across Ontario, we have an aging community, many on a fixed income, who have a decreasing ability to make ends meet. Similarly, industrial and commercial growth in rural Ontario is becoming increasingly difficult because of rising hydro rates; it is preventing younger families from relocating to our communities to help them grow. To that end, the Council of the Township of Madawaska Valley, at their March 23, 2015 regular meeting of council, passed the following resolution:

Moved by: Councillor Bromwich

14-2303-15

Seconded by: Councillor Archer

23 March 2015

BE IT RESOLVED:

WHEREAS the cost of hydro has doubled and in some cases more than doubled in the past five years; and

WHEREAS the costs of electricity in the Province of Ontario is forcing businesses to consider leaving the area; and

WHEREAS many families are having difficulty keeping up with their monthly payments; and

WHEREAS the Province's Long Term Energy Plan anticipates that consumers will face hydro rates that will rise by 42% over the next five (5) years; and

WHEREAS it is essential that the residents and businesses of the Madawaska Valley to have access to affordable hydro to thrive and prosper; and

WHEREAS Council urges Provincial relief to Ontario Hydro One Customers to reflect the means of rural residents to reasonably access hydro through a review of Provincial policies and their agencies that set Ontario rates for electricity, distribution charges, debt retirement, global adjustments costs and carbon taxes. Council requests, that this review would include consultation with rural and urban municipalities; and

WHEREAS Council reminds Rural municipalities to advocate the investigation by the Ontario Ombudsman regarding the major systemic issues identified by complaints involving overcharging of hydro, an explanation of line items on billing and, resolve of related matters; and

WHEREAS it is imperative that the Province of Ontario review their energy policies and utilize The Rural and Northern Lens advocated by the Rural Ontario Municipal Association to evaluate and assess the needs of rural municipalities so that they can succeed and thrive. Many rural municipalities have a population of 50% or more seniors on fixed incomes who are struggling to keep warm in low population density communities with colder temperatures that do not benefit from the heat retention in

condominium residences and whom are challenged by geography and climate scales. Our core sectors of economic development in our region, lumber mills and farming, are often under-employed and are subject to rates that are higher than other provinces due to impact of high delivery charges and global adjustment fees (that can be up to 2.5 times higher than the actual hydro used) and threaten the sustainability of families and agro-food sectors in rural Ontario; and

WHEREAS all municipalities that have a significant amount of citizens moving into the seasonal residences, that they are encouraged to inform those residents to seek relief from seasonal hydro rates through direct communication of such to their electrical utility provider;

WHEREAS all municipalities should be encouraged to monitor, through specific data categories, smart meter electrical fires and/or smart meter malfunctions that have resulted in explosions, and further to better assess their impact and the potential need of CSA approved meters employing codes and standards used globally by regulators and industry to facilitate safer and more sustainable products.

NOW THEREFORE BE IT RESOLVED THAT the Township of Madawaska Valley CALL ON Premier Wynne and the Province of Ontario to take immediate action to prevent these and any other rate increase from being implemented; and

THAT Premier Wynne and the Province of Ontario be encouraged to do something to bring these rates down to a reasonable level and to do so as quickly as possible; and

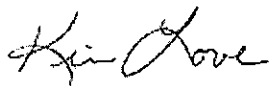
THAT this motion be circulated to all Ontario municipalities for support.

The Township of Madawaska Valley is a smaller municipality, in the western quadrant of Renfrew County with approximately 4300 permanent residents, with a larger summer population. For more information on our municipality, please visit us online at www.madawaskavalley.ca.

Like many rural Ontario municipalities, we are faced with increasing adversity to growth. It is the Council's desire to show support for the Township's homeowners by passing this resolution and asking for immediate relief from the Province.

On behalf of the Council of the Township of Madawaska Valley, please endorse our resolution and send it to the appropriate representatives at Queen's Park.

Sincerely,



Kim Love

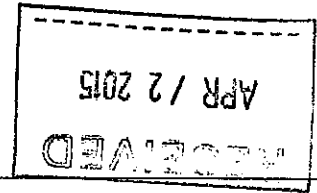
Mayor, Township of Madawaska Valley

cc.

Honourable Kathleen Wynne, Province of Ontario

MPP John Yakabuski, Renfrew-Nipissing-Pembroke

Peter Emon, Warden, County of Renfrew



Lisa Thompson, MPP
Huron-Bruce

Queen's Park Office:
Room 430, Legislative Building
Toronto, ON M7A1A8
Tel. (416) 325-3467
Fax (416) 325-3490
E-mail: lisa.thompson@pc.ola.org

March 27, 2015

RE: Bill 66: Great Lakes Protection Act, 2015

Dear Mayor and Members of Municipal Council:

I am writing to you today with regard to *Bill 66: Great Lakes Protection Act, 2015*. The stated purpose of the bill is "protect and restore the ecological health of the Great Lakes-St. Lawrence River Basin" and "to create opportunities for individuals and communities to become involved in the protection and restoration of the ecological health of the Great Lakes-St. Lawrence River Basin."

It goes without saying that the Ontario PC caucus is fully supportive of improving and protecting our Great Lakes eco-systems. However, Bill 66 has raised questions with regard to the duplication of governance, the absence of funding to implement initiatives, uncertainty surrounding stakeholder representation at meetings of the Guardians' Council and the potential for further erosion in the power of local planning authorities and municipalities.

As you consider the impact of Bill 66 I would encourage you to apply the Rural and Northern Lens created by the AMO Northern & Rural Working Group. The lens is meant to be employed by provincial ministries to assess the impacts of new policy initiatives or changes in existing programs before they are implemented. I have attached a copy of ROMA's rural lens for your reference. I have also included a map that shows that 105 out of 107 ridings across Ontario are affected by the Great Lakes- St. Lawrence Basin Watershed.

As Bill 66 progresses I invite you to submit your feedback so that I can bring your views on Bill 66 forward during debate and committee hearings.

Please visit www.bill66feedback.ca to find a copy of the bill and to submit your amendments, concerns and suggestions. I encourage you to share this with your council and colleagues as well.

I look forward to hearing from you.

Sincerely,

Lisa Thompson, MPP
Huron-Bruce



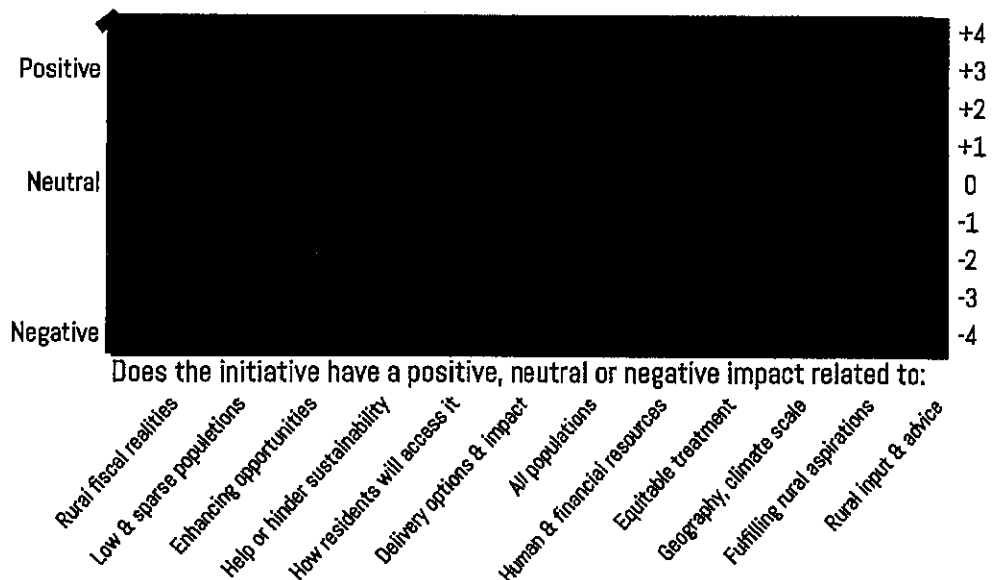
The Rural and Northern Lens: A Way Forward



At the end of the day the rural and northern lens is about people. It is about the livelihoods of nearly 2 million people who call rural and northern communities their home. It is about the communities these people live within, their jobs, their built and natural environment, the services they receive and the quality of their lives.

The Rural and Northern Lens provides us with an invitation. An invitation to all levels of government to do better with what they have and to ensure that the needs and requirements of rural and northern residents are met so that they may thrive and succeed. The Lens is particularly important for the provincial government. Various ministries must accommodate the needs of a large and urbanizing province and it is critical to ensure that Rural and Northern needs are not lost in the development of policy. This Lens can help.

It is a tool culminating in the sample chart below. It provides a quick visual representation of the positive and negative impacts of public initiatives. The need is obvious.



Rural Ontario Municipal Association: A Voice for Rural Ontario
roma.ona

Using the Lens:

Respond to the 12 questions.

Score your response as Positive, Neutral or Negative, using the +4 to -4 scoring system.

		+4
Positive		+3
		+2
		+1
Neutral		0
		-1
		-2
		-3
Negative		-4

Does the initiative have a positive, neutral or negative impact related to:

Rural fiscal realities
Low & sparse populations
Enhancing opportunities
Help or hinder sustainability
How residents will access it
Delivery options & impact
All populations
Human & financial resources
Equitable treatment
Geography, climate scale
Fulfilling rural aspirations
Rural input & advice



Rural Ontario
Municipal Association

The Rural and Northern Lens

The Rural Ontario Municipal Association (ROMA) is committed to the betterment of Rural and Northern Ontario. ROMA acts as the rural municipal voice in Ontario when considering and responding to proposed legislation while proactively working with the Government on solutions. ROMA takes pride in promoting, supporting and enhancing strong and effective rural governments.

The ROMA discussion paper - A Voice for Rural and Northern Ontario, serves as a reference point for future provincial policy development and implementation. The paper reflects the interests of rural and northern municipal governments in order to call attention to their communities' needs and requirements so they can thrive and succeed.

The paper provides a "lens" by which policy can be questioned, evaluated and decided upon.

The "Rural Lens" brings focus to the potential impacts of proposed policy, decisions and new actions on rural municipalities. It helps to ensure that questions are asked in a structured, objective and consistent manner. It helps to assess impacts in advance of decisions. It promotes education and understanding of issues by staff and elected officials at all levels of government.

ROMA requests that the Province filter all policy decisions and legislation through this lens to help ensure that rural and northern communities thrive and succeed. The Lens will also be used by ROMA and is provided to rural municipalities for their use.



The Rural and Northern Lens: A Dozen Questions

For Rural and Northern Ontario does the proposed initiative:

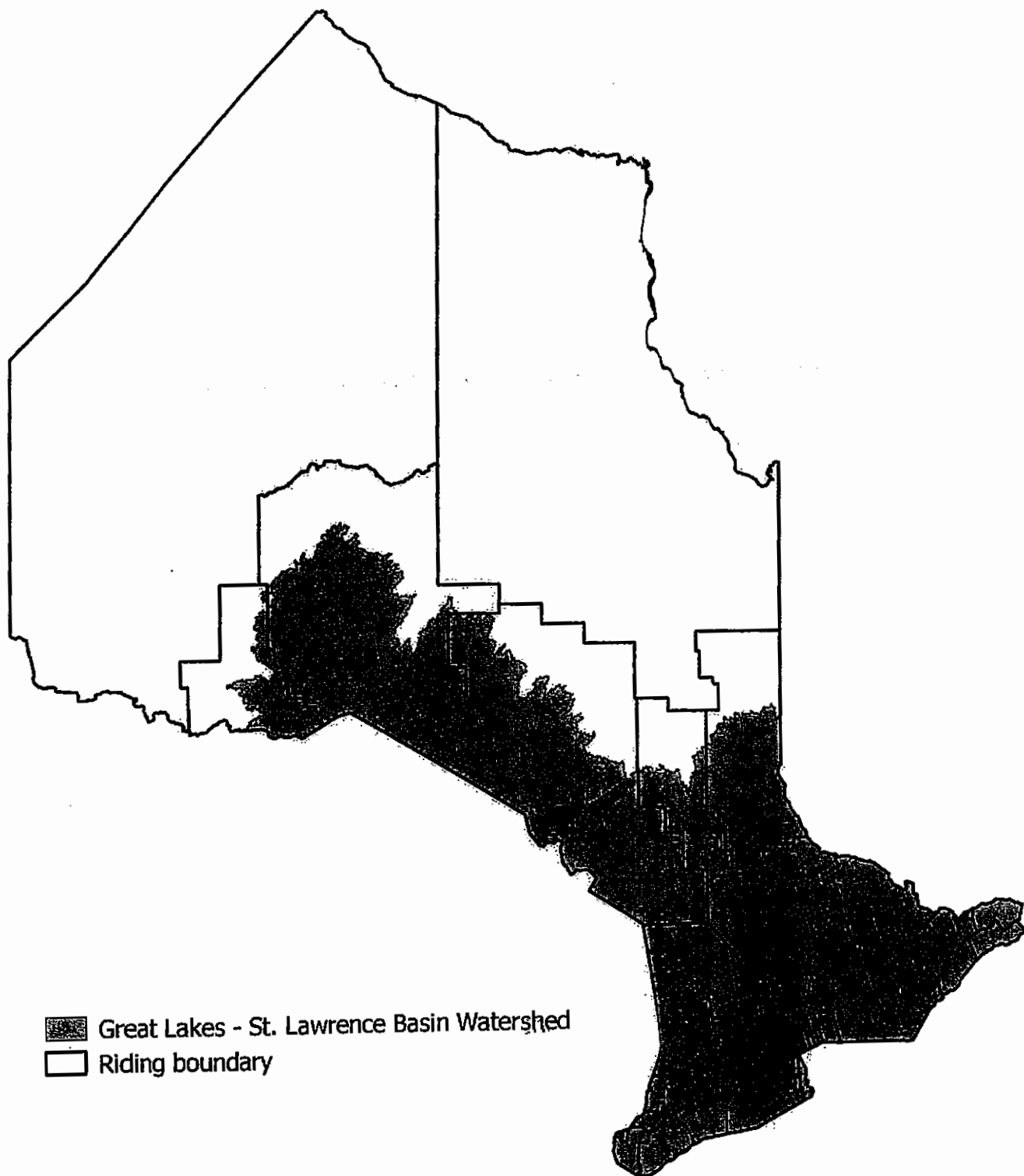


1. Benefit or hinder the fiscal realities of Rural and Northern Ontario?

2. Have a business case that accounts for low and sparse populations?

3. Enhance opportunities in Rural and Northern Ontario?

4. Help or hinder goals of sustainability blending environmental, social and economic factors?
5. Consider how and if rural people will be able to access it?
6. Consider all options for delivery, ensuring efficiency, the potential for co-delivery and an acceptable administrative impact on municipalities?
7. Account for the needs of special populations (such as youth, elderly and immigrants)?
8. Have adequate human and financial resources to be effective?
9. Ensure that Rural and Northern communities are receiving equitable treatment or services relative to others in the province?
10. Recognize the geography, weather and scale of Rural and Northern Ontario and include adjusted program criteria to accommodate these realities?
11. Accommodate the aspirations of residents from rural communities and the north?
12. Build upon the input and advice of rural residents, communities and municipalities?



Denise Holmes

From: David Thwaites
Sent: April-03-15 10:46 AM
To:
Cc: dwhite@melancthontownship.ca; jelliott@melancthontownship.ca;
dbesley@melancthontownship.ca; whannon@melancthontownship.ca;
jwebster@melancthontownship.ca; dholmes@melancthontownship.ca
Subject: melancthon proud

Marnie:

As I was out walking this morning I was "impressed" by the amount of garbage and debris in the ditches and on the roadside.

I reflected back to this past fall during the municipal election when I heard over and over again a sense of disappointment over the lack of things Melancthon and of the things that were dividing the residents of Melancthon.

I wondered whether the state of our roadsides might provide an opportunity to do Melancthon proud by sending out a challenge to all residents to participate in a Melancthon Proud Project. I would invite and challenge all Melancthonites to take to the ditches and roadsides on and before Saturday April 18 to clean up Melancthon. It may well become an annual event and rite of spring but we should take pride in our countryside and environment.

In my walk I noticed as well that much of the mess was about the area of our mailboxes, no doubt due to the presence of roadside garbage pickup and the Melancthon winds. As I have copied this email to our elected officials perhaps the challenge might extend to an invitation to GFL to pick up extra garbage bags for free or alternatively for the Township to absorb the cost on Monday April 20th in an effort to facilitate the challenge I have made to Melancthonites. Absent the incentive the challenge is in fact more challenging as the participating residents have no place to put the bags of garbage collected.

I also observed in my walk that much of the garbage, at least along Third Line, appeared to have been placed by driveby persons who have no sense of environment as beer bottles/cans/fast food containers and bags of garbage, even a mattress, had been tossed by the roadside. The challenge I place would extend to those who have acted without regard for community, to refrain from depositing their garbage recklessly and without regard for others and the environment.

I send this email with two purposes, hoping perhaps that the power of the press through an article by yourself in next week's paper might assist and to encourage all who receive this email to participate and to forward the challenge on to other Melancthonites.

thanks Marnie

David Thwaites

Total Control Panel

[Login](#)

To: dholmes@melancthontownship.ca [Remove](#) this sender from my allow list
From: ;

Denise Holmes

From: Caroline Mach <forestmanager@dufferinmuseum.com>
Sent: April-10-15 7:18 AM
To: John Telfer; Sue Stone; Denise Holmes (dholmes@melancthontownship.ca); Terry Horner (thorner@mulmurtownship.ca); Keith McNenly; Jane Wilson; Ed Brennan (ebrennan@orangeville.ca); Darla Fraser (dfraser@orangeville.ca); Rose Dotten (info@shelburnelibrary.ca); Shann Leighton (sleighton@grandvalley.org)
Subject: Dufferin County Forest Annual Report
Attachments: annual14.pdf

Hello everyone,

Attached you will find the 2014 Annual Report for the Dufferin County Forest for your information.

Should you wish to provide a link to this report from your website, you are welcome to use:
www.dufferinmuseum.com/forest/img/annual.pdf

Feel free to direct any questions regarding the report to me.

Thank you
Caroline

Caroline Mach, R.P.F. | County Forest Manager | County of Dufferin
705-435-1881 | 877-941-7787 | fax: 705-435-9876
[sign up for our email newsletter](#)

DISCLAIMER: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to which they are addressed. If you have received this email in error please notify the sender. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the County of Dufferin. Finally, the recipient should check this email and any attachments for the presence of viruses. The County of Dufferin accepts no liability for any damage caused by any virus transmitted by this email. The Corporation of the County of Dufferin, 55 Zina Street, Orangeville, Ontario. www.dufferincounty.ca

Total Control Panel

[Login](#)

To: dholmes@melancthontownship.ca
From: forestmanager@dufferinmuseum.com

Message Score: 50
My Spam Blocking Level: High

High (60): Pass
Medium (75): Pass
Low (90): Pass

[Block](#) this sender
[Block](#) dufferinmuseum.com

This message was delivered because the content filter score did not exceed your filter level.



**Annual Report
January 1, 2014 - December 31, 2014**



**Annual Work Schedule
January 1, 2015 - December 31, 2015**



**Caroline Mach, R.P.F.
County Forest Manager**
705-435-1881 or 877-941-7787
forestmanager@dufferinmuseum.com
January 27, 2015



TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
1.0 INTRODUCTION.....	6
2.0 PUBLIC USE AND RELATIONS	6
2.1 Partnerships	6
2.2 Signs.....	7
2.3 Advertising and Promotion	7
2.4 Forest Walks.....	8
2.5 Demonstration Area	8
2.6 Hunting.....	8
2.7 Recreational Events	9
2.8 Mansfield Outdoor Centre.....	9
2.9 Access Maintenance.....	9
2.10 Garbage Removal	9
2.11 Research	10
3.0 ENVIRONMENTAL AND RESOURCE MANAGEMENT	10
3.1 Site Preparation.....	11
3.2 Reforestation.....	11
3.3 Marking.....	11
3.4 Non-Commercial Tending	11
3.5 Commercial Harvesting	11
3.6 Pests and Diseases	12
3.7 Forest Fire Management.....	13
4.0 ADMINISTRATION.....	13
4.1 Budget Summary - 2014	13
4.2 Grants Under the <i>Forestry Act</i>	13
4.3 Property Acquisition and Disposal	14
5.0 MONITORING	14
6.0 MANAGEMENT PLAN	14
7.0 STAFF	16
8.0 ANNUAL WORK SCHEDULE - 2015	16
8.1 Public Use and Relations	16
8.2 Environmental and Resource Management.....	16
8.3 Administration	17
8.4 Monitoring.....	17
8.5 Management Plan.....	17

LIST OF TABLES

Table 1: Forest Use Permits (Hunting) Issued for the Dufferin County Forest 2010-2014	9
Table 2: Larger-Scale Recreational Events in the Dufferin County Forest 2014	9
Table 3: Environmental and Resource Management Activities for the Dufferin County Forest 2010-2014	10
Table 4: Tendered Timber Sales for the Dufferin County Forest 2014	12
Table 5: Areas Planned to be Marked in the Dufferin County Forest 2015	17

EXECUTIVE SUMMARY

The Dufferin County Forest consists of thirteen tracts that in total form a 1,054 hectare (2,606 acre) forested area owned and managed by the County of Dufferin. The Forest has many important functions, including erosion and water control, natural heritage protection, biodiversity, wildlife habitat, recreational opportunities, and support of the rural economy through timber production.

From the first purchase of land in 1930 until 1991 the Forest was managed by the Ministry of Natural Resources (MNR) through agreements made under the *Forestry Act*. In 1995, the County completed a long-term, comprehensive management plan for the Forest properties, the first County in Ontario to do so. Following completion of the plan, a County Forest Manager was hired to implement it.

On March 13, 1997, the County signed a Memorandum of Understanding with the Ministry of Natural Resources (MNR). This Memorandum, which expired in 2002, outlined the County's and the Ministry's responsibilities in the management of the Dufferin County Forest. Since the expiration of that agreement, the County has been responsible for all aspects of the management of the Dufferin County Forest.

The following are some highlights from the past year within each of the objective streams outlined in the management and operating plans: Public Use and Relations, Environmental and Resource Management, and Administration.

Public Use and Relations

- i. ongoing repair and replacement of gates and signs in the Forest;
- ii. seven larger-scale recreational events;
- iii. two forest walks (wildflower identification and tree identification);
- iv. enforcement of the County Forest by-law (2003-50) by off-duty OPP officers from September to December in the Main Tract and;
- v. continued cooperation on programs and events with the Dufferin County Museum & Archives and the Dufferin Simcoe Land Stewardship Network

Environmental and Resource Management

- i. one public tender of red oak generating a total revenue of over \$40,000 and;
- ii. marking of 21 hectares of conifer plantations and 18 ha of red oak.

Administration

- i. no property was acquired or disposed of in 2014.

Next year, 2015, will see the continuation of various activities. There will be signs posted, forest walks, tendered timber sales, monitoring of harvesting operations, enforcement of the County Forest by-law (2003-50), several larger-scale recreational events, and a land use agreement with the Mansfield Outdoor Centre. In addition, a new twenty-year management plan for the Dufferin County Forest will be completed.

1.0 INTRODUCTION

The Dufferin County Forest consists of thirteen tracts that in total form a 1,054 hectare (2,606 acre) forested area owned and managed by the County of Dufferin. The Forest has many important functions including erosion and water control, natural heritage protection, biodiversity, wildlife habitat, recreational opportunities, and support of the rural economy through timber production.

From the first purchase of property in 1930 until 1991, the Forest was managed on behalf of the County by the Ministry of Natural Resources (MNR). This relationship was governed by twenty-year agreements made under the *Forestry Act*. In 1991, the most recent of these agreements expired. This fact, combined with changes to the MNR's private land forestry policy, resulted in the development of a new management plan for the Forest in which the County took the lead role, assisted by MNR. Dufferin was the first County in Ontario to take the lead in developing a management plan for its forest properties. The process to develop the plan started in earnest in July, 1994 with the hiring of a Forest Management Plan Author. Less than one year later, on June 8, 1995, Dufferin County Council approved the final draft of the plan. Throughout the process, there was participation from the MNR, a Forest Advisory Team, and the general public, all of whom provided valuable input and comments.

In 1995, the County took over the control and co-ordination of all activities having to do with the Dufferin County Forest. In order to fulfill this new role, Dufferin hired a County Forest Manager, the first County in Ontario to do so.

On March 13, 1997, the County signed a Memorandum of Understanding with the Ministry of Natural Resources (MNR). This Memorandum, which expired in 2002, outlined the County's and the Ministry's responsibilities in the management of the Dufferin County Forest. A new Memorandum will not be signed, thus terminating the formal relationship between the MNR and the County in the management of the Dufferin County Forest.

In 2005, the Dufferin County Forest celebrated its 75th anniversary.

In 2009, County Council approved a new five-year operating plan (2010-2015) for the Forest.

This annual report is divided into sections that correspond with those in *Our Forest, Our Future: Dufferin County Forest Management Plan 1995-2015* and the operating plan (2010-2015) and coincides with the County's fiscal year, January 1 to December 31.

2.0 PUBLIC USE AND RELATIONS

In 2014, public use and relations continued to be an important part of the management of the Dufferin County Forest. A number of the public relations activities were conducted in co-operation with the Dufferin County Museum & Archives and/or the Dufferin Simcoe Land Stewardship Network.

2.1 Partnerships

An important element in the County's taking over the management of the Dufferin County Forest was the creation of partnerships that would enable the County to achieve the goal and objectives of the long-term forest management plan (1995-2015), which were reiterated in the operating plan for 2010-2015. The potential relationships were outlined in section 8.0 (pgs. 34-36) of the management plan. In accordance with

the general intent of that section, the County Forest has developed two very important partnerships; with the Dufferin County Museum & Archives and with the Dufferin Simcoe Land Stewardship Network. These partnerships have enabled the County to achieve some of the objectives of the management plan that do not necessarily involve work on the ground in the Forest.

In the long-term forest management plan and in the new operating plan, the County made a significant commitment to inform and educate the public about the Dufferin County Forest and forests and forestry in general. The specific objectives can be found on pgs. 43 and 44 of the management plan and pgs. 15 to 19 of the operating plan. They include all ages and sectors of the population. The activities that the County partners on with the Museum and the Land Stewardship Network are chosen to achieve these public use and relations objectives. Generally speaking, they include regular contributions to the Museum's *Museletter*, forest walks, and participation in various workshops, displays, and events for the general public.

The County Forest Manager has been a member of the Dufferin Simcoe Land Stewardship Network since its formation in 1995; the Dufferin County Museum & Archives hosts some of the meetings of the Land Stewardship Network.

By partnering with the Dufferin County Museum & Archives and the Land Stewardship Network in seeking to achieve its public use and relations objectives for the County Forest, the County is able to make more efficient use of its resources in this area.

2.2 Signs

In the past year, fewer than ten metal "No motorized vehicles" signs had to be replaced due to vandalism/theft. "No motorized vehicle" signs are used to supplement the County Forest by-law signs at several locations where there are ongoing issues with entry by motorized vehicles.

The local Ontario Federation of Snowmobile Clubs (OFSC) member clubs (Dufferin, Orangeville, and Alliston & District) posted signs indicating the location of the OFSC trails through the Main, Randwick, Simmons, Riverview, and Mono Tracts of the Dufferin County Forest.

Temporary signs were posted at a number of the tracts showing the dates of the spring wild turkey hunt, the fall wild turkey hunt and the two five-day periods of the fall deer shotgun hunt. This was done to inform users that there would be a concentration of hunters in the Forest during those periods. Additional signs urging hunters to "Exercise Extreme Caution" were posted around the southern section of the Randwick Tract prior to the spring wild turkey hunt, the fall wild turkey hunt and the two five-day periods of the deer shotgun hunt. The "No hunting" signs that were posted along the boundary between the southern section of the Randwick Tract and the private land to the west in 1999 were monitored; no new signs were necessary.

Signs were posted at the Main Tract showing the dates of the seven larger-scale recreational events. As with the signs indicating the primary hunting seasons, this was done to alert the users of the Forest.

2.3 Advertising and Promotion

In order to make non-hunting users of the Dufferin County Forest aware of the hunting seasons, a series of three notices was placed in the Orangeville, Shelburne, Creemore, and Alliston newspapers in conjunction with the fall deer hunt. Notices were placed prior to the beginning of the bow hunt, prior to the first five-day period of the shotgun hunt, and prior to the second five-day period of the shotgun hunt. These choices were made

based on the fact that the two five-day periods of shotgun hunt (as opposed to the bow hunt) draw more hunters in a shorter period of time. Similar notices were also placed prior to the start of the spring wild turkey hunt and the fall wild turkey hunt.

The "Hunting in the Dufferin County Forest" information package was distributed to the 147 hunters who purchased forest use permits, as well as on a request basis. Email inquiries were first directed to the website for information.

Numerous phone and e-mail requests for information on the Dufferin County Forest and forests and forestry in general were answered. The information that was distributed consisted mostly of Dufferin County Forest pamphlets, maps of the Main Tract, executive summaries of the operating plan, and information on various insects and diseases that affect trees.

A news release was produced and distributed in conjunction with the release of the annual report for 2013.

The County Forest website (www.dufferinmuseum.com/forest) was updated throughout the year to provide forest users and other interested members of the public with timely information about events and activities.

The County Forest was part of the County of Dufferin's displays at the spring home show and the Career Pathways Dufferin events held at the Orangeville Fairgrounds.

2.4 Forest Walks

The County held two guided forest walks in the Little Tract in co-operation with the Dufferin Simcoe Land Stewardship Network. On May 24, a wildflower identification walk; on May 31 a tree identification walk.

2.5 Demonstration Area

To assist in public education, a conifer plantation thinning demonstration area was established adjacent to the Main Tract parking lot in 1997. The area (2.5 hectares) was planted with red pine and some spruce in 1967. It has been divided into four sections that were thinned in 1998 as follows: 50% removal, 25% removal, 33% removal, and 0% removal. This will enable the public to observe the impact of various thinning regimes on the growth of the trees and on the development of regeneration and understorey plants. The second thinning in half of each of the original four sections took place in 2009; this will further demonstrate the effect of one as opposed to two thinnings. Disks were collected from the trees at the time of both thinnings so that comparisons in annual ring growth can be made. The demonstration area is a valuable tool in the education of landowners and the general public on the effects of conifer plantation thinning.

2.6 Hunting

Table 1 shows the number of Forest Use Permits (Hunting) that have been issued over the past five years. In 2014, these permits generated revenue of \$4,410 for the County. Monitoring of hunting will continue, particularly during the fall deer shotgun hunts, which are traditionally of most concern because they attract a large number of hunters in a short space of time.

Table 1: Forest Use Permits (Hunting) Issued for the Dufferin County Forest 2010-2014

Year	2014	2013	2012	2011	2010
Number of Permits	147	70	93	119	161

2.7 Recreational Events

Table 2 gives details of the seven larger-scale recreational events that took place in the Main Tract of the County Forest in 2014. In total, the events generated revenue of almost \$2,000 for the County. The events progressed without problems.

Table 2: Larger-Scale Recreational Events in the Dufferin County Forest 2014

Date of Event	Type of Event	Number of Participants
April 12	Substance Projects Mountain Bike Event	62
June 21	OCTRA Horseback Ride	85
July 19	Debra Moore Horseback Ride for Breast Cancer	195
August 2	Substance Projects Mountain Bike Event	36
August 16	Chesley Saddle Club Horseback Ride	25
September 6	Substance Projects Mountain Bike Event	70
October 6	OCTRA Horseback Ride	114

2.8 Mansfield Outdoor Centre

In 2014, the Mansfield Outdoor Centre once again leased cross-country ski trails in the south portion of the Main Tract, generating revenue of \$1,000 for the County.

2.9 Access Maintenance

The Mansfield Outdoor Centre placed, at its own expense, orange plastic snow fencing at several strategic locations in the Main Tract. This was done to prevent snowmobiles from accessing the cross-country ski trails leased by the Mansfield Outdoor Centre.

In 2014, one of the gates at the Mono Tract had to be replaced.

2.10 Garbage Removal

The amount of garbage in most areas of the Forest has not reached a critical state, but it is important to be proactive so that members of the public do not begin to feel that the Forest is a free landfill. Litter is collected by the County Forest Manager, as time permits. Large pieces of garbage, such as appliances and tires, are removed by staff from the County Operations Centre.

2.11 Research

Red Oak Management

The area in the Main Tract (Compartment 27, 25 ha) that was established as a red oak research project in 1994 will not be continued as a formal research project. However, management activities will continue in such a way as to promote the establishment and growth of red oak on the site.

In the spring of 2009 the area underwent a prescribed burn to control vegetation that was competing with the small red oak seedlings on the site. Unfortunately, due largely to a change in the predicted weather, the burn did not control as much of the competing vegetation as was hoped. A detailed plan on how to proceed with management of this site is being developed.

Biodiversity Plots

In 2000, the County established its first research plot, the Beaton Plot. This plot was established in Compartment 25 of the Main Tract on part of the former site of Camp Dufferin. The protocol used to establish the plot was developed through the Smithsonian Institute and is recognized and used around the world. This will allow for data comparisons (e.g. number of plant species present) between the Beaton Plot and other local, national, and international plots. The purpose of the Beaton Plot is to study the natural succession on the site. In 2001, a sign was placed at the site to inform forest users about the history and purpose of the plot.

3.0 ENVIRONMENTAL AND RESOURCE MANAGEMENT

In accordance with the long-term forest management plan and the new operating plan, the County manages the biological components of the Forest using an ecosystem management approach. Table 3 shows a summary of resource management activities undertaken in the Dufferin County Forest over the last five years.

Table 3: Environmental and Resource Management Activities for the Dufferin County Forest 2010-2014

Activity	2014	2013	2012	2011	2010
Site preparation (hectares)	0	0	0	0	0
Reforestation (hectares)	0	0	0	0	0
Marking (hectares)	32	32	33	20	36
Non-commercial tending (hectares)	0	0	0	0	0
Commercial harvesting (hectares)	18	32	33	20	36
Commercial harvesting (m ³)	421	3,170	1,322	1,237	1,308
Borax application (hectares)	0	0	0	0	0

3.1 Site Preparation

Site preparation is a mechanical, fire, chemical, or hand treatment that modifies a site to provide favourable conditions for natural or artificial regeneration. There was no site preparation necessary in 2014.

3.2 Reforestation

Reforestation refers to the establishment of a forest through artificial means, usually by planting or direct seeding. There was no reforestation necessary in 2014.

3.3 Marking

Marking is the operation that designates the trees within a stand that are to be commercially harvested. The marking follows a silvicultural prescription written specifically for the stand. The prescription and the marking that follows it are the most important functions in determining the future structure and composition of any forest stand. The number, size, and species of trees that are removed has a significant impact on the growth and development of the remaining trees. Since all harvesting in the Dufferin County Forest is done by some variation of the selection cutting system, all stands must be marked prior to harvesting. The marking is done by a crew hired on contract.

The stands that were tendered in 2014 were marked on contract at a cost of just under \$3,000. This modest investment ensured the healthy growth and development of the forest stands that were thinned and generated timber sale revenue of over \$40,000, even though only one of the three marked stands was sold (see section 3.5 Commercial Harvesting).

3.4 Non-Commercial Tending

In order to achieve forest management objectives, it is sometimes necessary to conduct non-commercial tending operations such as pruning, thinning (removal of trees in an immature stand to accelerate diameter growth and improve form of remaining trees), improvement cutting (removal of less desirable trees to improve the composition and quality of a stand), or cleaning (removal of less desirable species of the same age to free the favoured trees in a stand not past the sapling stage). As the name implies, this type of tending does not produce revenue; it is done at some cost to the County. In general, non-commercial tending operations are associated with young plantations or with stands that are of low commercial quality. Currently, the Dufferin County Forest does not have many of either of these types of stands. There was no non-commercial tending necessary in 2014.

3.5 Commercial Harvesting

Annually, wood is harvested on a sustainable basis from the Dufferin County Forest. The majority of the wood is sold by open public tender. Occasionally, a small amount of wood is sold to the public for personal use or as a negotiated sale. Table 4 summarizes the tendered timber sales for 2014 for the Dufferin County Forest.

Table 4: Tendered Timber Sales for the Dufferin County Forest 2014

Tender Number	Tract and Compartments	Volume (m ³)	Number of Trees	Species	Area (ha)	Value
DCF 14-08-003	Main (26a)	421	750	red oak	18.0	\$43,109.00
Total		421	750		18.0	\$43,109.00

In 2014, the tender was awarded to Bauman Sawmill Inc. of Wallenstein, Ontario. Tenders may not be awarded to the highest bidder in situations where the highest bidder's reputation is poor or unknown. There were two other tenders advertised, in the case of DCF 14-08-001 both bidders were disqualified because they did not submit the required paperwork; in the case of DCF 14-08-002 there were no bids. Both of these will be re-tendered in 2015.

3.6 Pests and Diseases

Outbreaks of insects and diseases in the Dufferin County Forest are managed using an integrated pest management approach. If levels of pests and/or diseases reach intolerable levels, integrated pest management techniques may include the use of natural predators and parasites, genetically resistant hosts, environmental modifications and, when necessary and appropriate, chemical pesticides and herbicides.

Information on insect and disease populations is provided by the Canadian Forest Service, the Ministry of Natural Resources, the Canadian Food Inspection Agency, and other partners.

Although there has been much in the media about the Asian longhorned beetle, it is not an immediate threat to the Dufferin County Forest.

In 2013, the presence of emerald ash borer was confirmed in one location in Dufferin County, at the south end of Orangeville. Public education regarding this pest is ongoing through public events, information at the County Forest office and on the website, and responses to public inquiries. In 2012, a report describing how the borer will be dealt with in the context of the County Forest was presented to, and approved by, County Council. Since there is relatively little ash in the County Forest¹, it is anticipated that the impact of the emerald ash borer will not be significant in the County Forest itself. Dead or dying ash that are considered to be hazard trees due to their proximity to trails will be removed as soon as possible after they are identified. Stands with an ash component will be managed in accordance with the strategies outlined in *Managing Ash in Farm Woodlots; Some Suggested Prescriptions* (Williams & Schwan, 2011)².

Although the impact of emerald ash borer on the County Forest is not expected to be significant, individual landowners and municipalities that have larger proportions of ash in their tree cover will see a greater impact, both economically and ecologically.

¹ Black ash makes up 80% of the basal area in one 2 ha (5 acre) stand; white ash makes up 20% of the basal area in three stands that make up a total area of 23 ha (57 acres); and white ash makes up 10% of the basal area in eleven stands that make up a total area of 125 ha (309 acres). The total area of the Dufferin County Forest is 1,054 ha (2,606 acres). The only areas where issues with the number of dead ash would be expected to arise are in the black ash stand and in the northeast part of the Main Tract where there are several stands with a 10 or 20% ash component adjacent to each other.

² This publication is available from the County Forest Manager's office or online at: www.ontariowoodlot.com/pages_pdf_new/EAB%20Prescriptions%20for%20Managing%20Ash%20in%20Farm%20Woodlots.pdf

3.7 Forest Fire Management

Forest fire management involves the maintenance of fire roads, trimming of brush to provide access for fire suppression, and the actual suppression of forest fires. The County is responsible for the maintenance of fire roads and the trimming of brush, while fire suppression is conducted by the local fire departments. In co-operation with Emergency Management Services and Public Works, a forest fire management plan for the County Forest is being developed.

4.0 ADMINISTRATION

4.1 Budget Summary - 2014

Besides staff, the majority of expenses in 2014 included contract enforcement, advertising and promotion, tree marking, and signs. The majority of revenues were generated from timber sales. These were supplemented by land use, forest use, and special event permits. In 2014, timber sales were over \$40,000. There are many factors that affect the value of the timber sold from the Dufferin County Forest, some of which are difficult to predict from year to year. These factors include the price of wood locally and regionally, the location, size and species of trees offered for sale, and the supply of wood of various species and sizes in a given year. For details of the budget, please refer to the County of Dufferin's Budget 2014.

4.2 Grants Under the *Forestry Act*

In the past, the provincial government provided grants for the purchase of Dufferin County Forest properties. Since the Memorandum of Understanding signed between the County and the Ministry of Natural Resources has expired, the re-payment of the grants is governed by the following excerpts from the *Forestry Act*:

"forestry purposes" includes the production of wood and wood products, provision of proper environmental conditions for wild life, protection against floods and erosion, recreation, and protection and production of water supplies; ("fins forestières")

2. (1) The Minister may enter into agreements with owners of land suitable for forestry purposes that provide for the management or improvement of the land for these purposes upon such conditions as the Minister considers proper. 1998, c. 18, Sched. I, s. 20.

Grants

(2) The Minister may make grants of the sums provided for in the agreement, on such conditions as the Minister considers appropriate, out of the money appropriated by the Legislature to any conservation authority or municipality for the purpose of assisting it in the acquisition of land that is suitable for forestry purposes and that is to be managed under an agreement. 1998, c. 18, Sched. I, s. 20.

Forestry purposes only

(3) A conservation authority or municipality that has entered into an agreement under subsection (1) or a predecessor provision shall not, without the approval of the Minister, use any land in respect of which grants have been made under subsection (2) or a predecessor provision for any purpose that is inconsistent with forestry purposes at any time during or after the term of the agreement. 1998, c. 18, Sched. I, s. 20.

Repayment

(4) A conservation authority or municipality that uses land covered by an agreement authorized under subsection (1) or a predecessor provision for a purpose that is inconsistent with forestry purposes shall repay to the Province of Ontario all grants that it received under the agreement to acquire the land unless the Minister provides that the grants need not be repaid. 1998, c. 18, Sched. I, s. 20.

Sale of land

(5) Land in respect of which grants have been made under subsection (2) or a predecessor provision shall not, without the approval of the Minister, be sold, leased or otherwise disposed of during or after the term of the agreement. 1998, c. 18, Sched. I, s. 20.

Proceeds shared

(6) The proceeds from any sale, lease or other disposition of land in respect of which grants have been made under subsection (2) or a predecessor provision shall be divided as the Minister directs between the conservation authority or municipality, as the case may be, and the Province of Ontario, with the conservation authority or municipality receiving not less than 50 per cent of the proceeds. 2000, c. 26, Sched. L, s. 4 (2).

Exception

(7) Subsection (6) does not apply to a sale, lease or other disposition for the use of the Province of Ontario. 1998, c. 18, Sched. I, s. 20.

These provisions are not substantially different from those under previous *Forestry Act* agreements or the Memorandum of Understanding.

The following Dufferin County Forest properties were bought partially with grants from the province (the amount of the grant is shown in brackets):

- i. compartments 15, 16, 17, and 18 of the Main Tract (\$4,603.67); purchased in 1963
- ii. the south half of compartment 25 of the Main Tract (\$468.80); purchased in 1961
- iii. compartment 46 of the Mono Tract (\$327.25); purchased in 1960
- iv. Simmons Tract (\$3,884.83); purchased in 1967
- v. Little Tract (\$19,012.65); purchased in 1971

Due to the size and location of these properties, it is unlikely that the County will be disposing of any of them or using them for other than "forestry purposes".

4.3 Property Acquisition and Disposal

There was no property acquisition or disposal during 2014.

5.0 MONITORING

In 2014 the primary monitoring activities were cut inspections conducted during commercial harvesting operations, monitoring of hunting activity (particularly during the two five-day deer shotgun hunt periods), and enforcement of the County Forest by-law (2003-50). To improve enforcement of the County Forest by-law, off-duty OPP officers were hired to patrol the Main Tract from September to December.

Cut inspections were done to ensure that the loggers complied with the terms and conditions of the Agreement for the Sale of Timber. There were no significant violations of timber sale agreements in 2014.

Other monitoring activities included:

- i. general observation of, and communication with, users of the Forest and;
- ii. surveying signs and gates at the forest properties and arranging for replacement when and where necessary.

6.0 MANAGEMENT PLAN

Since the County of Dufferin took over day-to-day management of the Dufferin County Forest from the Ministry of Natural Resources and Forestry in 1995, management of the forest has been governed by a twenty-year forest management plan supported by five-year operating plans and annual reports and work schedules. During 2014 significant effort was devoted to the development of a new twenty-year forest management plan and associated recreation policy. A brief timeline of the development of the plan follows:

2013

- forest inventory conducted
- user survey conducted (online and on-site)

- mailing to forest property neighbours and users regarding management plan development
- random household survey
- Forest Plan Advisory Team³ meeting
 - introductions

January, 2014

- signs at key locations in the Forest informing the public about the management plan process
- Forest Plan Advisory Team meeting
 - brainstorm ideas for management plan
 - discuss any concerns/issues that could be addressed in the plan
 - to-date survey results provided prior to the meeting to inform discussion

February-March 2014

- closed responses to user survey
- closed responses to random household survey
- developed draft management plan

April, 2014

- mailing to interested parties regarding draft forest management plan open houses
- Forest Plan Advisory Team meeting
 - review of draft forest management plan and draft recreation policy
 - presentation of proposal for use from Ontario Federation of Trail Riders (off-road motorcyclists)

May, 2014

- open houses for general public to review draft forest management plan, draft recreation policy, and proposal for use from Ontario Federation of Trail Riders (off-road motorcyclists) (May 9 at 55 Zina St.; May 10 at Dufferin County Museum & Archives)
- start of review period (May 1-July 31) for draft forest management plan, draft recreation policy, and proposal for use from Ontario Federation of Trail Riders (off-road motorcyclists)
- draft forest management plan (and draft recreation policy and proposal for use by Ontario Federation of Trail Riders) sent to three municipal forestry colleagues primarily for review of technical forestry aspects of the draft forest management plan

June 17, 2014

- open public meeting to receive input and comments on the draft forest management plan, draft recreation policy, and proposal for use from Ontario Federation of Trail Riders (off-road motorcyclists)

July 31, 2014

- end of review period of draft forest management plan, draft recreation policy, and proposal for use from Ontario Federation of Trail Riders (off-road motorcyclists)

August, 2014

- development of final forest management plan
- Forest Plan Advisory Team meeting
 - discussion and minor revisions to final forest management plan

³ Team of stakeholder representatives (mostly recreational groups) formed to provide input and guidance to the development of the forest management plan.

September, 2014

- submission of forest management plan to DCMAHL Board
- at its October session, County Council deferred further action on the forest management plan and the associated recreation policy to the new Council

7.0 STAFF

The Forest is included in the activities of the Dufferin County Museum & Archives and Heritage Lands Department headed by Director Darrell Keenie. The day-to-day activities involving the Forest are conducted and co-ordinated by the County Forest Manager, Caroline Mach. Activities and issues dealing with the Forest have been presented to the Dufferin County Museum & Archives and Heritage Lands Board, and subsequently to Dufferin County Council.

County Operations Supervisor Scott Martin and his staff must also be acknowledged for their work in posting signs, cutting hazard trees, and cleaning up garbage.

8.0 ANNUAL WORK SCHEDULE - 2015

The specific activities for 2015 are described in the following sections.

8.1 Public Use and Relations

Although no new signs are planned, sign replacement will continue to be a part of public use and relations in 2015.

In 2015, it is anticipated that the Mansfield Outdoor Centre will lease cross-country ski trails in the Main Tract as they have done in the past.

It is expected that the Main Tract will host three Ontario Competitive Trail Riding Association horseback rides and two Substance Projects mountain bike rides in 2015.

Public relations activities will continue to be conducted in partnership with the Dufferin County Museum & Archives and the Dufferin Simcoe Land Stewardship Network. These will include two educational walks (tree identification and wildflower identification).

The County Forest will participate in the County of Dufferin's displays at the spring home show at the Orangeville Fairgrounds.

8.2 Environmental and Resource Management

It is anticipated that there will be 22 hectares of conifer plantations and hardwood stands marked to be tendered for sale in 2015. The breakdown of the areas is shown in Table 5.

Table 5: Areas Planned to be Marked in the Dufferin County Forest 2015

Tract (Compartment)	Species	Area (hectares)
Main (12b & 13d)	red oak	15
Main (13b & 14c)	red pine	7
Total Area		22

As in the past, the number of trees and the volume to be harvested will be known once the tree marking is completed. The stands will be publicly tendered in the fall of 2015.

Information about the emerald ash borer and how to manage trees and woodlots in its presence will continue to be distributed to the general public.

8.3 Administration

For details of the budget, refer to the County of Dufferin's Budget 2015.

8.4 Monitoring

In 2015, the monitoring program will continue to focus on three broad areas:

- i. conducting regular cut inspections of ongoing logging operations;
- ii. enforcing the County Forest by-law (2003-50) through the hiring of off-duty OPP officers and;
- iii. monitoring of hunting activity, particularly during the two five-day deer shotgun hunts.

8.5 Management Plan

In 2015, work will continue on the development of a new twenty-year management plan and associated recreation policy for the Dufferin County Forest.

GRCA Current



April 2015 • Volume 20 Number 4

GRCA General Membership

Chair	Jane Mitchell
Vice-Chair	Vic Prendergast
Townships of Amaranth, East Garafraxa, Melancthon and Southgate and Town of Grand Valley	Guy Gardhouse
Townships of Mapleton and Wellington North	Pat Salter
Township of Centre Wellington	Kelly Linton
Town of Erin, Townships of Guelph/Eramosa and Puslinch	Chris White
City of Guelph	Bob Bell, Mike Salisbury
Region of Waterloo	Les Armstrong, Sue Foxton, Helen Jowett, Geoff Lorentz, Jane Mitchell, Joe Nowak, Wayne Roth, Sandy Shantz, Warren Stauch, Wayne Wettlaufer
Municipality of North Perth and Township of Perth East	George Wicke
Halton Region	Cindy Lunau
City of Hamilton	Jeanette Jamieson
Oxford County	Bruce Banbury
County of Brant	Brian Coleman, Shirley Simons
City of Brantford	Robert Hillier, Vic Prendergast
Haldimand and Norfolk Counties	Bernie Corbett, Fred Morison

GRCA camp programs prove popular

March Break adventure camps at Laurel Creek and Guelph Lake nature centres were fully booked with 30 campers at each location.

Apps' Mill Nature Centre offered daily registrations, and was 88 per cent full.

Summer camp registration at five locations (Guelph Lake, Laurel Creek, Rockwood, Apps' Mill and Belwood Lake) opened on Feb. 24, with 1,564 available camper weeks in July and August. By the end of March, more than 45 per cent of the spaces were booked.

The camps provide an opportunity for children to experience nature in a fun, yet educational way.

Fire is a normal part of the life cycle of prairie habitats. Native species can tolerate fire, so burning the land clears out non-native species. Fire also releases important nutrients into the soil, which promotes growth and increases seed yields.

At one time, about 25 per cent of the Grand River watershed was tallgrass prairie. Today, only one per cent remains.

Good winter for parks

Winter programs operated at four parks — Laurel Creek, Shades Mills, Pinehurst Lake and Belwood Lake.

Cold weather and snow conditions led to favourable conditions for ice fishing, cross-country skiing and snowshoeing this year, starting in January and continuing until mid-March.

Park revenue this winter was over \$100,000.

Dry weather in March

Precipitation in March was well below the long-term average across the watershed, with only 20 to 30 per cent of the normal rainfall.

Most of the snowpack in the central and southern part of the watershed had melted by the end of the month. Cold weather helped slow down the melt and the average temperature at Shand Dam was 5.1 C which is 2.5 degrees colder than the long-term average. Forty-nine days of below freezing temperatures ended on March 10, when the mercury rose to above freezing.

The large reservoirs were all within their normal operating range at the end of March.

New reservation system

The new park reservation system opened for business on March 31 for the 2015 season.

Only reservations for Guelph Lake's Hillside Festival were taken on the first day and bookings filled quickly. Hillside fans represent the overwhelming majority of customers using the GRCA's reservation system on the first day each year.

The campsite reservation system for all 2,500 campsites at eight parks was activated on April 1. Bookings will continue to be taken until they close Oct. 15.

The new reservation system had been online since March 6 to give customers a chance to learn their way around the new website and to set up a personal account before the system began taking bookings. Campsites may be booked online at www.grcacamping.ca or over the phone by calling 1-877-558-GRCA (4722).

Each summer the GRCA hires approximately 250 students to work in 11 parks.

Brant Park controlled burn

A controlled burn will take place at Brant Park in early April.

The goal is to maintain and enhance the tall-grass prairie and other native plants on the property owned by the GRCA. The burn will be held when weather conditions allow. There must be several days of dry weather in advance of the burn, and there must be light or no wind on the burn day. About five hectares will be burned.



www.grandriver.ca

Grand River Conservation Authority

Aerial river photos

Flights of the river system took place March 18 and 19 to provide aerial photos of ice conditions.

At that time, most of the ice had moved out of the Speed River. The Nith River was partially ice covered, while the Upper Grand and Conestogo Rivers were mostly ice covered.

The southern Grand River had stable ice sheets above the dams in Caledonia and Dunnville, but in many areas the ice was breaking up.

The photos provided information to assist the GRCA with managing the reservoir system during the spring melt.

Queen's Park reception

The GRCA is holding a reception for watershed MPPs at Queen's Park at the end of April.

A similar event took place in 2012. GRCA staff, members of the board and members of the Grand River Conservation Foundation will be on hand to discuss GRCA programs, issues affecting the watershed and to encourage continuing partnerships with the province.

Displays will be focused on those areas where the province and the GRCA can build a stronger working relationship.

10 tree planting events

The public is being invited to get down and dirty at 10 tree planting events across the watershed.

These take place April 19 to May 11 in a variety of communities, sometimes with partner organizations.

The events provide an opportunity for residents from across the watershed to plant trees to benefit the natural environment and the watershed. The majority of plantings take place on GRCA or municipal property.

In 2014, GRCA staff partnered with community organizations to host 1,500 volunteers at 14 events where more than 11,000 trees were planted.

The full list with details about the public events is available online at www.grandriver.ca/events.



This view of Shade's Mills Reservoir in Cambridge was taken in mid-March to see how much ice remained on rivers and reservoirs in the watershed. The photos provided information to assist the GRCA with managing the reservoir system during the spring melt.

Six flood messages

The GRCA issued six flood messages in March.

In the middle of March warm weather moved into the watershed and started to melt snow, resulting in the first watershed conditions statement March 13. A flood watch message was issued March 16 for the entire watershed, noting potential for ice jams in Grand Valley, West Montrose, Brantford and Cayuga as well as flooding on the Nith River.

Updates were issued March 17 and 18, when the southern Grand River was the main area of concern, including Brantford and Cayuga. A termination message was issued March 19.

Warm weather and rain resulted in a water safety conditions statement on March 25.

Watershed heroes May 1

The annual call for nominations for watershed award recipients is underway with a nomination deadline of May 1.

Anyone can nominate someone who they think is deserving of an award — an individual, family, group or business — by completing a simple one-page form. There are two types of awards — Honour Roll Awards for a sustained record and Watershed Awards for

outstanding examples of environmental work.

More information on the program and the nomination form can be found at www.grandriver.ca/awards.

This issue of *GRCA Current* was published in April 2015.

It is a summary of the March 2015 business conducted by the Grand River Conservation Authority board and committees as well as other noteworthy happenings and topics of interest.

The Grand River Conservation Authority welcomes the photocopying, forwarding and distribution of *GRCA Current*.

Next board meeting:

April 24 at 9:30 a.m.
GRCA Administration Centre.

Receive GRCA Current:

GRCAcurrent-subscribe@grandriver.ca

Meeting reports

www.grandriver.ca/MeetingReports

Coming events:

www.grandriver.ca/Calendar

Receive Grand Actions newsletter:

www.grandriver.ca/GrandActions

Denise Holmes

From: Kim Fraser <kfraser@shelburne.ca>
Sent: March-30-15 1:23 PM
To: Denise Holmes; Kathy Pearl; Jennifer Willoughby; Jackie Pherrill
Subject: CDRC-2015 Budget
Attachments: CDRC 2015 BUDGET.pdf

Hello,

Please see attached the CDRC 2015 Budget. Please note that the balance in the Capital Reserve Account will be confirmed upon completion of the 2014 financial audit.

February 25, 2015
Motion #7
Moved by: W. Benotto
Seconded by: H. Foster

Be it resolved that the 2015 Budget as presented on February 25, 2015 (and attached) be approved with Municipal Funding of \$168,300.00 being requested, and that a copy of this motion and the budget be sent to all member municipalities with a covering letter of explanation. Carried.

Thank you

Kim Fraser
CDRC Facility Administration Manager
(519) 925-2400

Total Control Panel

[Login](#)

To: dholmes@melancthontownship.ca
From: kfraser@shelburne.ca

Message Score: 40
My Spam Blocking Level: High

High (60): Pass
Medium (75): Pass
Low (90): Pass

[Block](#) this sender
[Block](#) shelburne.ca

This message was delivered because the content filter score did not exceed your filter level.

Town of Shelburne
Township of Amaranth
Township of Melancthon
Town of Mono

March 17, 2015

Subject: Approved CDRC 2015 Budget

Please find attached the CDRC's 2015 Budget as approved by the Board of Management at the regular board meeting on February 25, 2015.

The CDRC is requesting funding totaling \$168,300 from the contributing municipalities. This is a 2% increase from 2014, however this is the first increase since 2012.

We have budgeted an operating loss of \$129,250.00 for 2015, which is up from past years. In regards to capital, we have not applied any addition to the reserve account as we withdrew \$80,000 to cover the cost of the new Olympia.

The other major capital project anticipated, by 2018 that remains substantially unfunded at this time, is the replacement of the roof over the ice surface. This is estimated to be approximately \$450,000. We will be pursuing all alternate funding avenues that may be available.

If you have any questions please feel free to contact your rep on the Board or myself as finance chair.

Heather Foster
Finance Chair
CDRC Board of Management

CDRC 2015 APPROVED BUDGET

Presented to Board Feb 25, 2015

Copies to:

Town of Shelburne

Township of Melancthon

Township of Amaranth

Town of Mono

CDRC 2015 APPROVED BUDGET (Feb 25 Board Meeting)

	2012	2013	2014	2014	2015	2015 BUDGET VS		2015	2016	2017	2018
OPERATING REVENUE	ACTUAL	ACTUAL	Budget	ACTUAL	Budget	2014 ACTUAL		ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
ICE RENTALS	\$250,637	\$249,910	\$254,800	\$239,241	\$253,700	\$14,459	6%	\$261,311	\$269,150	\$277,225	\$285,542
FLOOR RENTALS	\$61,511	\$71,706	\$70,200	\$72,049	\$66,100	(\$5,949)	-8%	\$68,083	\$70,125	\$72,229	\$74,396
OTHER RENTALS	\$8,801	\$9,395	\$8,900	\$9,099	\$13,600	\$4,501	49%	\$9,395	\$9,395	\$9,395	\$9,395
POOL RECEIPTS	\$64,500	\$59,644	\$60,000	\$52,900	\$55,000	\$2,100	4%	\$56,650	\$58,350	\$60,100	\$61,903
CONCESSION SALES	\$94,474	\$90,066	\$83,500	\$82,725	\$83,800	\$1,075	1%	\$86,314	\$88,903	\$91,571	\$94,318
MISCELLANEOUS	\$145,109	\$31,308	\$9,600	\$11,582	\$8,600	(\$2,982)	-26%	\$18,995	\$18,995	\$18,995	\$18,995
OPERATING REVENUE	\$625,032	\$512,030	\$487,000	\$467,596	\$480,800	\$13,204	3%	\$500,748	\$514,918	\$529,514	\$544,548

	2012	2013	2014	2014	2015	2015 BUDGET VS		2015	2016	2017	2018
OPERATING EXPENDITURE	ACTUAL	ACTUAL	Budget	ACTUAL	Budget	2014 ACTUAL		ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
WAGES	\$318,728	\$328,985	\$339,570	\$327,619	\$344,000	\$16,381	6%	\$354,320	\$364,950	\$375,898	\$387,175
MAINTENANCE	\$85,602	\$75,056	\$78,100	\$77,369	\$73,500	(\$3,869)	-5%	\$75,705	\$77,976	\$80,315	\$82,725
UTILITIES	\$86,606	\$107,510	\$92,000	\$111,117	\$114,400	\$3,283	3%	\$117,832	\$121,367	\$125,008	\$128,758
CONCESSION SALES	\$50,584	\$44,336	\$45,000	\$42,814	\$40,000	(\$2,814)	-7%	\$41,200	\$42,436	\$43,709	\$45,020
ADMINISTRATIVE	\$38,869	\$40,434	\$39,500	\$38,232	\$38,150	(\$82)	0%	\$36,525	\$37,623	\$38,755	\$39,920
OPERATING EXPENDITURE	\$578,389	\$596,321	\$594,170	\$597,151	\$610,050	\$12,899	2%	\$625,582	\$644,352	\$663,685	\$683,599

	2012	2013	2014	2014	2015	2015 BUDGET VS		2015	2016	2017	2018
OPERATING COSTS	ACTUAL	ACTUAL	Budget	ACTUAL	Budget	2014 ACTUAL		ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
OPERATING REVENUE	\$625,032	\$512,030	\$487,000	\$467,596	\$480,800	\$13,204	3%	\$500,748	\$514,918	\$529,514	\$544,548
OPERATING EXPENDITURE	\$578,389	\$596,321	\$594,170	\$597,151	\$610,050	\$12,899	2%	\$625,582	\$644,352	\$663,685	\$683,599
OPERATING LOSS (GAIN)	(\$48,643)	\$84,291	\$107,170	\$129,554	\$129,250	(\$304)	0%	\$124,834	\$129,434	\$134,171	\$139,051

	2012	2013	2014	2014	2015	2015 BUDGET VS		2015	2016	2017	2018
CAPITAL EXPENDITURES	ACTUAL	ACTUAL	Budget	ACTUAL	Budget	2014 ACTUAL		ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
CAPITAL EXPENSES	\$56,322	\$46,346	\$74,000	\$63,717	\$120,000	\$56,283	88%	\$120,000	\$125,000	\$10,000	\$460,000
PLUS: FUNDS TO CAP RES	\$0	\$34,363	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$37,409	\$0
LESS: FROM RESERVES	\$0	\$0	\$15,170	\$28,271	\$80,950	\$52,679	186%	\$34,865	\$73,671	\$0	\$84,249
CAPITAL REQUIREMENTS	\$56,322	\$80,709	\$57,830	\$35,446	\$39,050	\$3,604	10%	\$85,135	\$51,329	\$47,409	\$375,751

MUNICIPAL FUNDING	\$165,000	\$165,000	\$165,000	\$165,000	\$168,300	\$3,300	2%	\$165,000	\$165,000	\$165,000	\$165,000
-------------------	-----------	-----------	-----------	-----------	-----------	---------	----	-----------	-----------	-----------	-----------

	2012	2013	2014	2014	2015	2015 BUDGET VS		2015	2016	2017	2018
CAPITAL RESERVE ACC'T	ACTUAL	ACTUAL	Budget	ACTUAL	Budget	2014 ACTUAL		ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
FROM OPERATIONS	\$155,321	\$0	\$0	\$0	\$0	\$0	#DIV/0!	(\$44,969)	(\$15,763)	(\$16,580)	(\$349,802)
(TO)/FROM CAPITAL COSTS	\$0	\$0	\$0	\$28,271	\$80,950	\$52,679	186%	\$34,865	\$73,671	(\$37,409)	\$84,249
RESERVE ACCT BALANCE	\$156,032	\$156,032	\$156,032	\$127,761	\$76,082	(\$52,679)	-41%	(\$4,752)	(\$94,188)	(\$73,357)	(\$507,407)

	2012	2013	2014	2014	2015	2015 BUDGET VS		2015	2016	2017	2018
MUNICIPAL FUNDING	ACTUAL	ACTUAL	Budget	ACTUAL	Budget	2014 ACTUAL		ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
SHELBURNE	\$102,300	\$102,300	\$102,300	\$102,300	\$104,348	\$2,048	2%	\$102,300	\$102,300	\$102,300	\$102,300
AMARANTH	\$24,750	\$24,750	\$24,750	\$24,750	\$25,245	\$495	2%	\$24,750	\$24,750	\$24,750	\$24,750
MELANCTHON	\$24,750	\$24,750	\$24,750	\$24,750	\$25,245	\$495	2%	\$24,750	\$24,750	\$24,750	\$24,750
MONO	\$13,200	\$13,200	\$13,200	\$13,200	\$13,464	\$264	2%	\$13,200	\$13,200	\$13,200	\$13,200
TOTAL	\$165,000	\$165,000	\$165,000	\$165,000	\$168,300	\$3,300	2%	\$165,000	\$165,000	\$165,000	\$165,000

REVENUE DETAIL

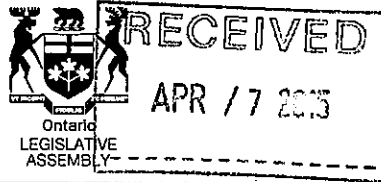
	2012	2013	2014	2014	2015	2015 BUDGET VS		2015	2016	2017	2018
OPERATING REVENUE	ACTUAL	ACTUAL	Budget	ACTUAL	Budget	2014 ACTUAL		ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
Hockey (ex Minor Hockey)	\$65,350	\$63,971	\$65,000	\$61,087	\$65,000	\$3,914	6%	\$66,950	\$68,959	\$71,027	\$73,158
Minor Hockey	\$112,414	\$108,611	\$115,000	\$111,725	\$115,000	\$3,275	3%	\$118,450	\$122,004	\$125,664	\$129,434
Hockey Schools / Leagues	\$29,131	\$28,083	\$30,000	\$7,945	\$18,000	\$10,055	127%	\$18,540	\$19,096	\$19,669	\$20,259
Figure Skating	\$30,739	\$30,729	\$31,000	\$31,807	\$31,000	(\$807)	-3%	\$31,930	\$32,888	\$33,875	\$34,891
Public School Skating	\$7,534	\$12,799	\$8,000	\$19,870	\$18,000	(\$1,870)	-9%	\$18,540	\$19,096	\$19,669	\$20,259
Broomball	\$5,469	\$5,718	\$5,800	\$6,807	\$6,700	(\$107)	-2%	\$6,901	\$7,108	\$7,321	\$7,541
Total Ice Rentals	\$250,637	\$249,910	\$254,800	\$239,241	\$253,700	\$14,459	6%	\$261,311	\$269,150	\$277,225	\$285,542
Banquet Hall/Meeting Room Rent	\$23,201	\$23,778	\$23,000	\$24,456	\$22,500	(\$1,956)	-8%	\$23,175	\$23,870	\$24,566	\$25,324
Ball Hockey	\$10,088	\$11,138	\$10,700	\$10,963	\$9,500	(\$1,463)	-13%	\$9,785	\$10,079	\$10,381	\$10,692
Lacrosse	\$10,320	\$10,756	\$10,800	\$10,374	\$10,400	\$27	0%	\$10,712	\$11,033	\$11,364	\$11,705
Daycamp	\$12,172	\$20,275	\$20,000	\$22,557	\$20,000	(\$2,557)	-11%	\$20,600	\$21,218	\$21,855	\$22,510
Special Events	\$5,750	\$5,760	\$6,700	\$3,700	\$3,700	\$0	0%	\$3,811	\$3,925	\$4,043	\$4,164
Total Floor Rentals	\$61,511	\$71,706	\$70,200	\$72,049	\$66,100	(\$5,949)	-8%	\$68,083	\$70,125	\$72,229	\$74,396
Sign & Olympia Advertising	\$8,924	\$9,395	\$8,900	\$9,099	\$13,600	\$4,501	49%	\$9,395	\$9,395	\$9,395	\$9,395
Tables & Chairs	(\$123)	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Total Other Rentals	\$8,801	\$9,395	\$8,900	\$9,099	\$13,600	\$4,501	49%	\$9,395	\$9,395	\$9,395	\$9,395
Pool Receipts:	\$64,600	\$59,644	\$60,000	\$52,900	\$55,000	\$2,100	4%	\$56,650	\$58,350	\$60,100	\$61,903
Food Booth	\$86,854	\$80,894	\$75,000	\$73,651	\$75,000	\$1,349	2%	\$77,250	\$79,568	\$81,955	\$84,413
Pro Shop	\$1,400	\$1,558	\$1,400	\$1,754	\$1,700	(\$64)	-4%	\$1,751	\$1,804	\$1,858	\$1,913
Vending & Pop	\$6,220	\$7,613	\$7,100	\$7,311	\$7,100	(\$211)	-3%	\$7,313	\$7,532	\$7,758	\$7,991
Total Concession Sales	\$94,474	\$90,066	\$83,500	\$82,725	\$83,800	\$1,075	1%	\$86,314	\$88,903	\$91,571	\$94,318
Fund Raising	\$46,563	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Grants	\$8,707	\$16,395	\$7,000	\$7,298	\$6,000	(\$1,298)	-18%	\$16,395	\$18,395	\$16,395	\$16,395
Donations/Pepsi Support	\$14,770	\$13,234	\$2,500	\$3,407	\$2,500	(\$907)	-27%	\$2,500	\$2,500	\$2,500	\$2,500
Telephone	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Interest	\$69	\$483	\$100	\$189	\$100	(\$89)	-47%	\$100	\$100	\$100	\$100
Miscellaneous	\$75,000	\$1,196	\$0	\$688	\$0	(\$688)	-100%	\$0	\$0	\$0	\$0
Total Miscellaneous	\$145,109	\$31,308	\$9,600	\$11,582	\$8,600	(\$2,982)	-26%	\$18,995	\$18,995	\$18,995	\$18,995
Total Operating Revenue	\$625,032	\$512,030	\$487,000	\$467,596	\$480,800	\$13,204	3%	\$500,748	\$514,918	\$529,514	\$544,548

EXPENDITURE DETAIL

EXPENDITURES	2012 ACTUAL	2013 ACTUAL	2014 Budget	2014 ACTUAL	2015 Budget	2015 BUDGET VS 2014 ACTUAL		2015 ESTIMATE	2016 ESTIMATE	2017 ESTIMATE	2018 ESTIMATE
Arena	\$140,737	\$140,691	\$149,000	\$136,161	\$141,000	\$4,049	4%	\$145,230	\$149,587	\$154,075	\$158,697
Pool	\$52,374	\$48,618	\$51,000	\$46,873	\$50,000	\$3,127	7%	\$51,500	\$53,045	\$54,636	\$56,275
Office	\$44,127	\$48,509	\$47,000	\$52,083	\$52,000	(\$83)	0%	\$53,560	\$55,167	\$56,822	\$58,526
Concession	\$27,607	\$26,579	\$29,000	\$27,455	\$26,000	(\$1,455)	-5%	\$26,780	\$27,583	\$28,411	\$29,263
Day Camp	\$9,018	\$11,118	\$15,570	\$14,811	\$16,000	\$1,389	10%	\$16,480	\$16,974	\$17,484	\$18,008
Benefits	\$44,866	\$53,469	\$48,000	\$50,445	\$59,000	\$8,555	17%	\$60,770	\$62,593	\$64,471	\$66,405
Total Wages	\$318,728	\$328,985	\$339,570	\$327,619	\$344,000	\$16,381	5%	\$364,320	\$364,950	\$375,898	\$387,175
General Building	\$40,769	\$30,013	\$33,000	\$36,335	\$35,000	(\$1,335)	-4%	\$36,050	\$37,132	\$38,245	\$39,393
Building Inspection	\$1,927	\$3,073	\$3,600	\$1,984	\$2,100	\$116	6%	\$2,163	\$2,228	\$2,295	\$2,364
Ice Machinery	\$20,038	\$17,017	\$18,000	\$15,817	\$12,000	(\$3,817)	-24%	\$12,380	\$12,731	\$13,113	\$13,508
Grounds	\$5,129	\$8,293	\$6,000	\$7,905	\$8,000	\$95	1%	\$8,240	\$8,487	\$8,742	\$9,004
Elevator Maintenance **NEW**	\$3,486	\$3,583	\$3,600	\$3,749	\$3,900	\$151	4%	\$4,017	\$4,138	\$4,262	\$4,389
Janitorial	\$7,137	\$7,852	\$7,000	\$6,201	\$6,500	\$299	5%	\$6,695	\$6,896	\$7,103	\$7,316
Swimming Pool & Equipment	\$7,116	\$5,224	\$7,000	\$5,377	\$6,000	\$623	12%	\$6,180	\$8,365	\$6,556	\$6,753
Banquet Hall	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Total Maintenance	\$86,602	\$75,056	\$78,100	\$77,369	\$73,500	(\$3,869)	-5%	\$75,705	\$77,976	\$80,316	\$82,725
Hydro	\$60,251	\$81,520	\$65,000	\$81,797	\$85,000	\$3,203	4%	\$87,550	\$90,177	\$92,882	\$95,668
Natural Gas	\$20,819	\$21,801	\$22,000	\$25,037	\$25,000	(\$37)	0%	\$25,750	\$26,523	\$27,318	\$28,138
Water & Sewage	\$5,536	\$4,190	\$5,000	\$4,284	\$4,400	\$116	3%	\$4,532	\$4,668	\$4,808	\$4,952
Total Utilities	\$86,606	\$107,510	\$92,000	\$111,117	\$114,400	\$3,283	3%	\$117,832	\$121,367	\$125,008	\$128,758
Food Booth	\$50,584	\$44,336	\$45,000	\$42,814	\$40,000	(\$2,814)	-7%	\$41,200	\$42,436	\$43,709	\$45,020
Pro Shop	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Vending & Pop	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Total Concession Sales	\$50,584	\$44,336	\$45,000	\$42,814	\$40,000	(\$2,814)	-7%	\$41,200	\$42,436	\$43,709	\$45,020
Insurance	\$14,908	\$14,127	\$15,000	\$15,474	\$15,000	(\$474)	-3%	\$15,450	\$15,914	\$16,391	\$16,883
Telephone / Website	\$2,652	\$2,789	\$3,000	\$2,346	\$2,400	\$55	2%	\$2,472	\$2,546	\$2,623	\$2,701
Office Supplies	\$2,352	\$1,831	\$2,500	\$2,529	\$2,500	(\$29)	-1%	\$2,575	\$2,652	\$2,732	\$2,814
Pool Supplies, Courses, Etc	\$4,229	\$5,657	\$4,200	\$3,597	\$3,800	\$203	6%	\$3,914	\$4,031	\$4,152	\$4,277
Postage	\$248	\$168	\$300	\$243	\$300	\$57	24%	\$309	\$318	\$328	\$338
Advertising	\$2,842	\$6,350	\$5,000	\$4,879	\$5,000	\$121	2%	\$5,150	\$5,305	\$5,464	\$5,628
Prior Year Deficit	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Audit Fees	\$6,407	\$2,315	\$3,000	\$1,739	\$2,500	\$761	44%	\$2,575	\$2,652	\$2,732	\$2,814
Courses, Fees, Dues	\$1,852	\$3,910	\$3,500	\$4,122	\$3,500	(\$622)	-15%	\$3,605	\$3,713	\$3,825	\$3,939
Bank Charges	\$577	\$582	\$500	\$612	\$550	(\$62)	-10%	\$567	\$583	\$601	\$619
Sign Expenses	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Miscellaneous, Hall of Fame, Can	\$802	\$2,705	\$2,500	\$2,692	\$2,600	(\$92)	-3%	(\$92)	(\$92)	(\$92)	(\$92)
Total Administrative	\$36,869	\$40,434	\$39,500	\$38,232	\$38,150	(\$82)	0%	\$36,525	\$37,623	\$38,755	\$39,920
Total Operating Expenditures	\$578,389	\$596,321	\$594,170	\$597,151	\$610,050	\$12,899	2%	\$625,582	\$644,352	\$663,685	\$683,599
Allocate to Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0	\$0	\$0	\$0
Total Expenditures	\$578,389	\$596,321	\$594,170	\$597,151	\$610,050	\$12,899	2%	\$625,582	\$644,352	\$663,685	\$683,599

CAPITAL SPENDING HISTORY 2010-2012 + PROJECTION TO 2018

	2010	2011	2012	2013	2014 Bdg	2014	2015	2016	2017	2018	Total
Doors & Windows				\$1,196							\$5,196
Marbellite & Drain		\$20,740									\$20,740
Emergency Exit		\$3,500									\$3,500
Rubber Decking			\$33,408								\$73,408
Total Pool	\$0	\$24,240	\$33,408	\$1,196	\$0	\$0	\$0	\$0	\$0	\$0	\$218,318
Ice Board Replacement			\$3,168								\$40,063
Olympia							\$80,000				\$80,000
Condenser Replacement			\$3,802								\$33,802
Compressor Replacement					\$50,000	\$54,657					\$104,657
Header Trench Replacement					\$6,000		\$6,000				\$12,000
Player Benches / Matting					\$8,000	\$6,599					\$14,599
Ice Edger				\$3,562							\$3,562
Total Ice Related	\$0	\$0	\$6,970	\$3,562	\$64,000	\$61,256	\$86,000	\$0	\$0	\$0	\$430,167
Major Renovation & Addition (note)	\$50,000	\$26,597	\$3,463	\$19,968							\$304,586
Sidewalk/Entrance Replacement							\$30,000				
Roof Replacement								\$115,000		\$450,000	\$205,450
Boiler Liners			\$1,933								\$4,510
Painting			\$3,668								\$8,568
Alarm Panic Locks		\$3,815									\$3,815
Floor Scrubber		\$3,997									\$3,997
Generator Switch				\$9,308							
Debit Machine		\$999									\$999
Total Building & Grounds	\$50,000	\$35,408	\$9,064	\$29,276	\$0	\$0	\$30,000	\$115,000	\$0	\$450,000	\$842,944
Food booth fryer & grill						\$813					\$14,824
Food booth freezers				\$2,290							
Town & Country Room	\$35,818		\$2,600	\$7,276		\$1,647					\$94,315
Total Rental & Sales	\$35,818	\$0	\$2,600	\$9,566	\$0	\$2,461	\$0	\$0	\$0	\$0	\$111,428
Unidentified			\$4,280	\$2,748	\$10,000		\$4,000	\$10,000	\$10,000	\$10,000	\$111,391
Total Other	\$0	\$0	\$4,280	\$2,748	\$10,000	\$0	\$4,000	\$10,000	\$10,000	\$10,000	\$97,391
Grand Total	\$85,818	\$59,648	\$56,322	\$46,346	\$74,000	\$63,717	\$120,000	\$125,000	\$10,000	\$460,000	\$1,700,247



Sylvia Jones, MPP
Dufferin-Caledon

244 Broadway
Orangeville, Ontario
L9W 1K5

Tel. (519) 941-7751
Fax (519) 941-3246

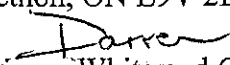
12596 Regional Road 50
Bolton, Ontario
L7E 1T6

Tel. (905) 951-9382
Fax (905) 951-1807

1-800-265-1603
E-mail: sylvia.jonesco@pc.ola.org

March 2015

Mayor Darren White and Council
Township of Melancthon
157101 Highway 10
Melancthon, ON L9V 2E6


Dear Mayor White and Councillors:

I wanted to let you know that my private member's bill, Bill 36 the *Respecting Private Property Act* passed second reading in the Legislature with all-party support. It has been referred to the Standing Committee on Justice Policy for public consultation.

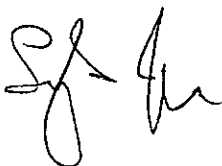
Bill 36 has received support from residents and a wide range of stakeholders, including the Ontario Federation of Agriculture.

If enacted, Bill 36 would amend the *Trespass to Property Act* by creating a minimum fine of \$500 for trespassing and increase the maximum compensation for damages to \$25,000. Currently the *Trespass to Property Act* has no minimum fine for those who trespass, and has a maximum limit of \$1,000 on compensation for damages.

Bill 36 would ensure property owners are fairly compensated for destruction of their property, and signal that trespassing is a serious issue that will not be taken lightly in the justice system.

I would like to hear your thoughts on Bill 36 the *Respecting Private Property Act* and would appreciate your support. If you are interested in reviewing the bill and have any questions please visit www.sylviajonesmpp.ca or call 416-325-1898.

Sincerely,



Sylvia Jones, MPP
Dufferin-Caledon

Encl:



Bill 36 – Respecting Private Property Act

SYLVIA JONES, MPP

Dufferin-Caledon

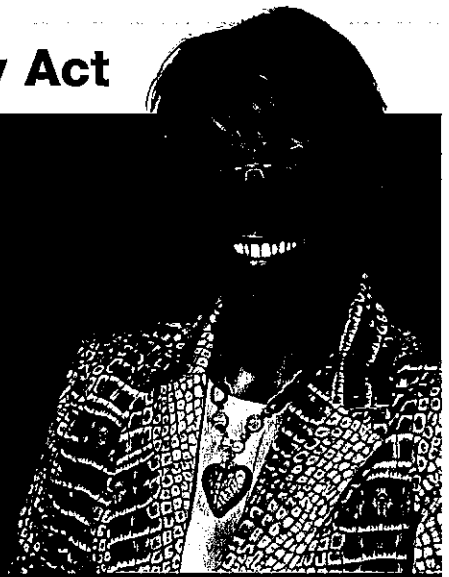
**PASSED 2nd
READING**

244 Broadway
Orangeville ON L9W 1K5
Tel: 519-941-7751



Toll Free: 1-800-265-1603
E-mail: sylvia.jonesco@pc.ola.org
[twitter](#) @sylviajonesmpp
[facebook](#) Sylvia Jones

12596 Regional Road 50
Bolton ON L7E 1T6
Tel: 905-951-9382



Support Sylvia Jones' Private Members Bill Bill 36, Respecting Private Property Act

Currently there is no minimum fine for trespassing on private property and the Trespass to Property Act limits the maximum compensation a property owner can receive for damages due to trespassing to \$1,000.

"We must find a way to discourage trespassing on private property and create a system of fair compensation for individuals who experience damage on their property as a result of trespassing."

*– Sylvia Jones MPP, speaking during
2nd reading of Bill 36*

The Ontario Federation of Agriculture (OFA) has been asking for changes to be made to the Trespass to Property Act. The OFA would like a minimum fine for those who trespass and an increase in the limit for compensation for damages.

One of the problems that arise when people trespass on private property is they can end up damaging the property, including crops, livestock and fencing. Unfortunately, it is left to the property owners to repair these damages, and the costs can quickly add up to thousand's of dollars.

The Respecting Private Property Act will make necessary changes to the Trespass to Property Act. This bill will establish a minimum fine of \$500 for trespassing. As well, it would increase the limit for compensation on damages to \$25,000 from the current limit of \$1,000.

"The Respecting Private Property Act will make necessary changes to the Trespass to Property Act. Increasing the limit on compensation for damages allows property owners to be fairly compensated for destruction of their property, and a minimum fine will also send a message that trespassing is a serious issue and will not be taken lightly."

*– Sylvia Jones MPP, speaking during
2nd reading of Bill 36*

Increasing the limit on compensation for damages allows property owners to be fairly compensated for destruction of their property. A minimum fine will also send a message that trespassing is a serious issue and should not be taken lightly.

Sylvia Jones, MPP - Dufferin-Caledon www.sylviajonesmpp.ca

How YOU Can Help

- If you support the intention of Bill 36 I encourage you to contact the Chair of the Committee on Justice Policy MPP Shafiq Qaadri at sqaadri.mpp@liberal.ola.org to ask that public hearings are scheduled. Please be sure to cc the Clerk Tamara Pomanski at tpomanski@ola.org, and myself at sylvia.jonesqp@pc.ola.org.
- To get a copy of Bill 36, go online to www.sylviajonesmpp.ca or call 416-325-1898.
- Share this information with friends, family, and anyone interested in promoting the protection of property owner's rights.
- If you have questions, please email sylvia.jonesqp@pc.ola.org.

Support for Bill 36

"The Ontario Federation of Agriculture (OFA) is proud to support Sylvia Jones MPP's Bill 36, the Respecting Private Property Act. The OFA has been working with government and policy makers to amend the Trespass to Property Act for many years. We need this act updated to reflect the severity of trespassing and the damages that result from thoughtless or reckless behaviour."

- Keith Currie, Vice President, Ontario Federation of Agriculture

"Our members are seeing an increase in trespassing, both on foot and on motorized off-road vehicles. Crops are damaged, animals have escaped from gates left open. All the garbage left behind is left for us to clean up. There is also an increased risk in liability to our members, if injury occurs on their property. We fully support this bill, it will encourage deterrence from exposure to such cases, and we thank Sylvia Jones MPP for all her efforts."

- Randy McLeod, President, Peel Federation of Agriculture

If you would like more information or have questions about Bill 36, please contact the office of Sylvia Jones, MPP for Dufferin-Caledon at:

Room 443, Legislative Building, Queens Park, Toronto, ON, M7A 1A8, (416) 325-1898 or
244 Broadway, Orangeville, ON, L9W 1K5, 1-800-265-1603 or
12596 Regional Road 50, Bolton, ON, L7E 1T6

Email: sylvia.jonesqp@pc.ola.org

Working For You!

Denise Holmes

From: Tacia White <tecia@white-water.ca>
Sent: March-31-15 1:25 PM
To: dholmes@melancthontownship.ca
Cc: mpietrolungo@strada-aggregates.com; GHoran@Strada-Aggregates.com
Subject: Strada Aggregates - Melancthon Pit 2014 Compliance report
Attachments: 2014 Complaine Report_Melancthon Final_COMPLETE.pdf

Hi Denise,

Please accept this digital version of the first compliance report for the Melancthon Pit in Shelburne. Operations at the site began in the early summer of 2014. The 2014 compliance report has been prepared to cover the operational period (June – Dec 2014). This report contains additional monitoring data that goes beyond the ARA requirements. The additional data has been collected to meet recommendations made by the Township in the application process.

Please note that the due date for the Strada's Shelburne Pit is in September. I will be forwarding you a copy of the Shelburne Pit report upon completion.

If you have any questions or concerns, please feel free to call at any time.

Tacia White
Whitewater Hydrogeology Ltd.
Cell: 705-888-7064
www.white-water.ca

Total Control Panel

[Login](#)

To: dholmes@melancthontownship.ca
From: srs0=18pcf=en=white-water.ca=tecia@eigbox.net

Message Score: 15
My Spam Blocking Level: High

High (60): Pass
Medium (75): Pass
Low (90): Pass

[Block](#) this sender
[Block](#) eigbox.net

This message was delivered because the content filter score did not exceed your filter level.

Whitewater

Hydrogeology Ltd.



2014 COMPLIANCE GROUNDWATER MONITORING REPORT.

MELANCTHON PIT

Prepared for:
Strada Aggregates

Whitewater Hydrogeology Ltd
Phone: 705.888-7064
Email: tecia@white-water.ca

Date: March 2015

March 30, 2015

Strada Aggregates Inc.
30 Floral Parkway
Concord, Ontario
L4K 4R1

Attention: Mr. Grant Horan
Controller

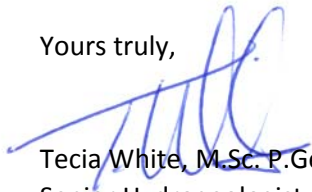
Re: Strada Aggregates: Melancthon Pit 2014 Compliance Report

Dear Sir:

Whitewater Hydrogeology Ltd. (Whitewater) is please to present the Melancthon Pits first Compliance Groundwater Monitoring Report, which includes the monitoring data since the aggregate operations began in the summer of 2014. The findings indicate that the extraction of aggregate from above the water table has had no measurable influence on the groundwater regime.

If you have any questions or concerns, please do not hesitate to call at any time.

Yours truly,



Tecia White, M.Sc. P.Geo.
Senior Hydrogeologist
Whitewater Hydrogeology Ltd.

Table of Contents

1.0	INTRODUCTION	1
1.1	Compliance Monitoring Program.....	1
1.2	2014 Site Operations.....	4
1.2.1	<i>Site Operations.....</i>	<i>4</i>
1.2.2	<i>Drilling and Well Construction Program</i>	<i>4</i>
2.0	Regional SETTING	4
2.1	Physiography.....	4
2.2	Hydrology	4
2.3	Geology	6
2.3.1	<i>Quaternary Geology.....</i>	<i>6</i>
2.3.2	<i>Paleozoic Geology</i>	<i>6</i>
2.4	Hydrogeology	6
3.0	HYDROGEOLOGICAL AND HYDROLOGICAL EVALUATION	8
3.1	Groundwater Elevations	8
3.2	Groundwater Quality	11
3.3	Surface Water Levels.....	12
3.4	Surface Water Quality	13
4.0	CONCLUSIONS AND RECOMMENDATIONS	14
5.0	REFERENCES	14

List of Figures

Figure 1: Regional Location Map	2
Figure 2: Monitoring Location Map	3
Figure 3: Digital Elevation Model (DEM).....	5
Figure 4: Quaternary Geology.....	7
Figure 5: Continuous Water Levels (Shallow Aquifer).....	9
Figure 6: Continuous Water Levels (Bedrock Aquifer).....	9
Figure 7: Water Table Elevations (masl)	10
Figure 8: Surface Water Elevations.....	13

List of Tables

Table 1: Compliance Monitoring Program.....	1
Table 2: 2014 Manual Groundwater Elevations	8
Table 3: Hydrocarbon Detections	11

List of Appendices

Appendix A	Borehole Logs
Appendix B:	Water Quality Laboratory Results

1.0 INTRODUCTION

Strada Aggregates, Inc. (Strada) owns and operates the Melancthon Pit; a 47.5 ha (117.3 acre) above water aggregate site located in the West Half of Lots 11 and 12, Concession 3 O.S., Township of Melancthon, Dufferin County (Figure 1). Strada holds a Class “A” Aggregate Resources Act (ARA) license at the Melancthon Pit, which is restricted to extracting aggregate material to no closer than 1.5 m above the established water table.

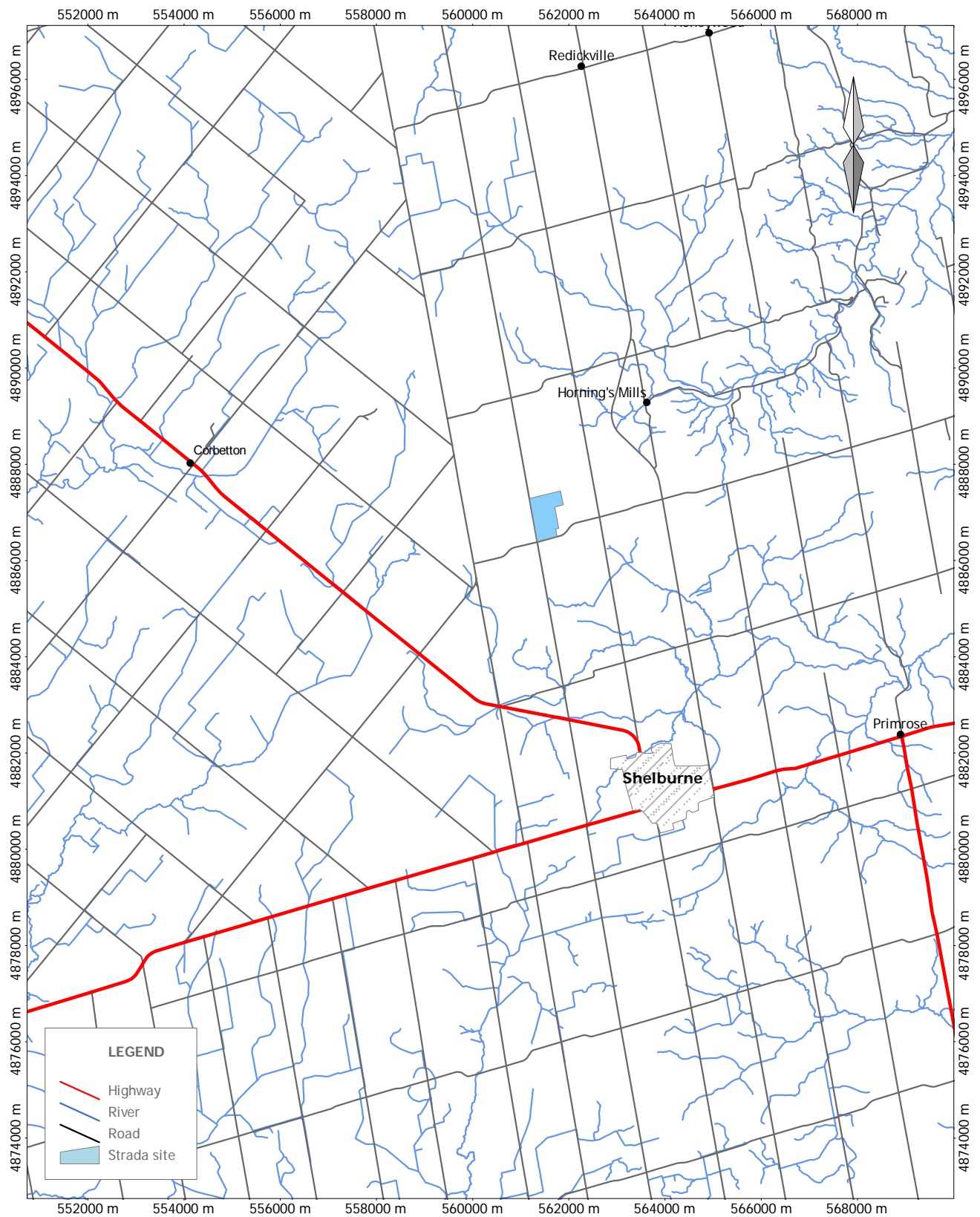
1.1 Compliance Monitoring Program

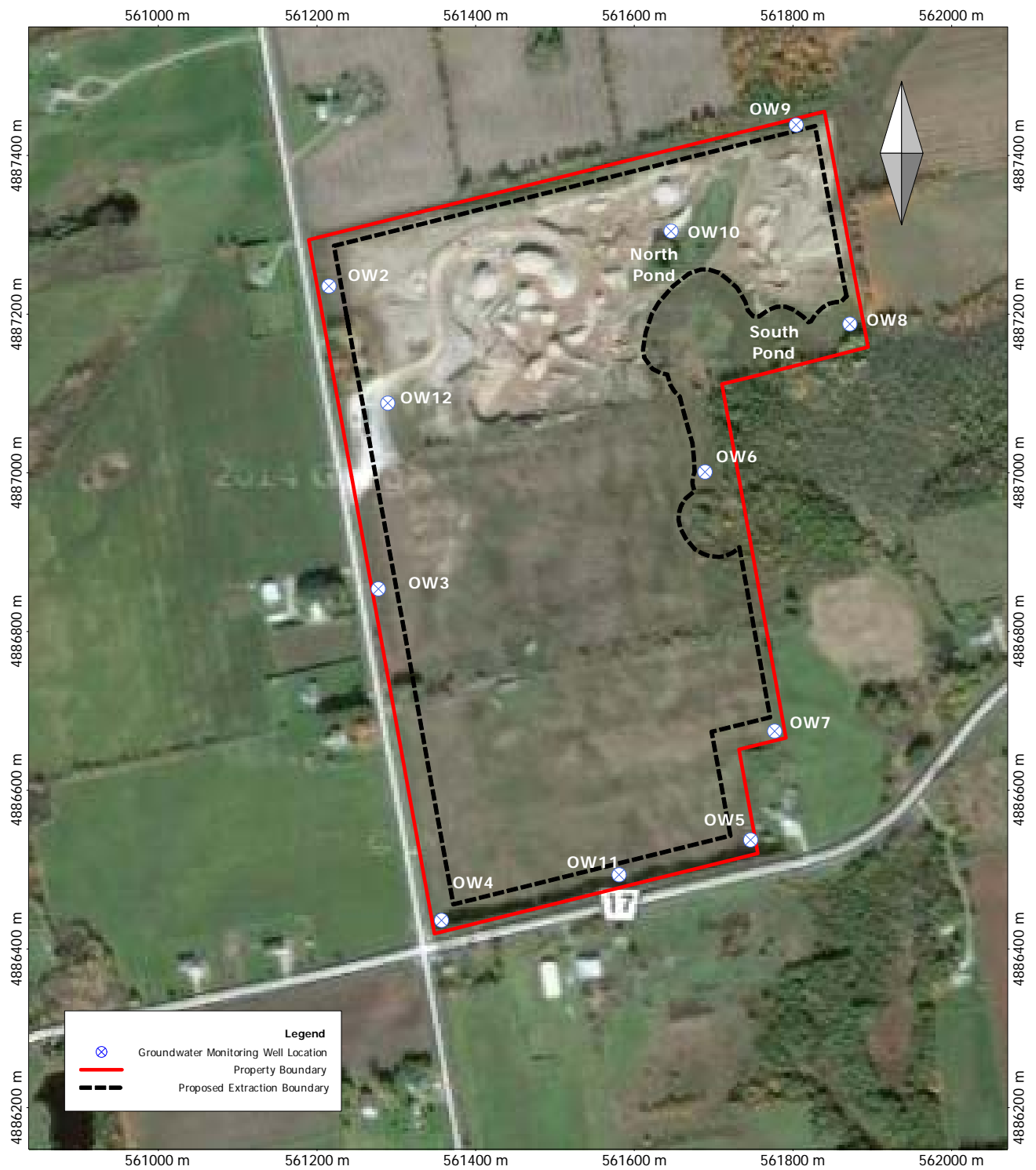
As a condition of the Site Plans, an annual groundwater monitoring report is to be submitted to the Ministry of Natural Resources and Forestry (MNRF) by March 31 of each year. The compliance groundwater monitoring program regulated under the sites ARA license reflects the recommended program outlined in the report “Hydrogeological Assessment Report; Proposed Melancthon Pit” dated March 2010. To supplement the regulated monitoring program, Strada has added several monitoring locations to meet the recommendations by the Township of Melancthon.

The on-going monitoring program at the site is outlined in Table 1 and locations are provided on Figure 2. The information that is highlighted in red represents the components recommended by the Township. The groundwater monitoring program consists of multi-level monitoring wells. These wells nests consist of a shallow well (sand and gravel), a deep overburden well (Tavistock Till), and a bedrock well, which are identified as monitors A, B, and C respectively.

TABLE 1: COMPLIANCE MONITORING PROGRAM

Well No.	Water Level Elevations		Water Quality (semi-annual)		Water Quality Monitoring Location Rationale
	Continuous Datalogger	Monthly Manuals	General Parameters	Petroleum Hydrocarbons	
OW2-A	X	X	X	X	Up-gradient / Background Water Quality
OW2-B	X	X	X	X	
OW2-C	X	X	X		
OW3-A	X	X	X		Up-gradient / Background Water Quality
OW3-B	X	X			
OW4-A	X	X	X	X	
OW4-B	X	X	X	X	Down-gradient / Water Quality
OW4-C	X	X	X		
OW5-A	X	X	X	X	
OW5-B	X	X	X	X	OW8-A is a replacement well which straddles the water table
OW5-C	X	X			
OW6-A	X	X	X	X	
OW7-A	X	X	X	X	Down-gradient / Water Quality
OW7-C	X	X	X	X	
OW8-A	X	X	X	X	
OW8-B	X	X			Down-gradient of Fuel Storage Surface Water Quality
OW9-A	X	X			
OW10A	X	X	X		
OW10B	X	X			Down-gradient of Fuel Storage Surface Water Quality
OW11-A	X	X	X	X	
OW11-C	X	X	X	X	
OW12-A	X	X	X	X	Down-gradient of Fuel Storage Surface Water Quality
South Pond	X	X	X	X	
Wash Pond	X	X	X	X	





1.2 2014 Site Operations

1.2.1 Site Operations

Strada began to prepare the Melancthon Pit for operations in late 2013. The site preparation involved stripping the overburden in Phase 1a and Phase 1b to provide material for the construction of the berms and to clear the land for extraction. Due to poor weather conditions, the site preparation was not completed until summer of 2014 when the construction of the berms and internal roads were completed and Strada obtained the final certification for the scale house.

1.2.2 Drilling and Well Construction Program

During the spring and early summer of 2014, additional groundwater monitoring wells were drilled and constructed. In agreement with the Township of Melancthon, Strada added 7 new monitoring wells at 5 locations across the site. Borehole logs for all monitoring wells are provided in Appendix A. Monitoring commenced on June 24, 2014 immediately following the completion of the drilling program.

2.0 REGIONAL SETTING

2.1 Physiography

The subject property resides within the physiographic region referred to as the Horseshoe Moraines (Chapman and Putnam, 1984). From Singhampton south to Caledon Village, the moraines lie along the brow and slopes of the Niagara Escarpment. Associated with these moraines is a system of spillways with board gravel and sand terraces. The Melancthon Pit extracts sand and gravels from this spillway system referred to as the Orangeville Moraine.

A Digital Elevation Model (DEM) of the region is presented on Figure 3. The most dominant feature on the DEM in this region is the glacial re-entrant valley of the Pine River. This valley extends east of Horning Mills, terminating at Terra Nova. The Boyne River is also obvious on the DEM just north of Primrose. Both re-entrant valley systems cut deeply into the bedrock escarpment from the east. The subject property is located on the plateau formed by the dolostone cap rock, west of the Niagara Escarpment face.

2.2 Hydrology

The subject lands are within the Nottawasaga watershed, which covers an area of 3,361 km². Smaller rivers and streams within the study area are outside of this system, draining to Nottawasaga Bay west of Wasaga Beach. The Melancthon Pit is located in proximity to the drainage divide between two of two headwaters systems of the Nottawasaga River (the Pine River and the Boyne River). These rivers rise west of the Niagara Escarpment and flow in an easterly direction (Figure 3).

The Pine River arises within a series of wetlands southwest of Redickville (Figure 1). The Melancthon Pit is located within the Boyne River sub-watershed. The Boyne River, a major tributary of the Nottawasaga River, has cut a broad, meandering valley system into the sand and till deposits creating a series of meander basins with remnants of the ancient river courses such as depressions, low ridges and terraces.

There are no streams or permanent watercourses on the site. There are two semi-permanent ponds located in the northwestern portion of the property (referred to as the North and South Ponds). These ponds are closed systems (i.e., there are no surface water drainage courses into or out of these features).

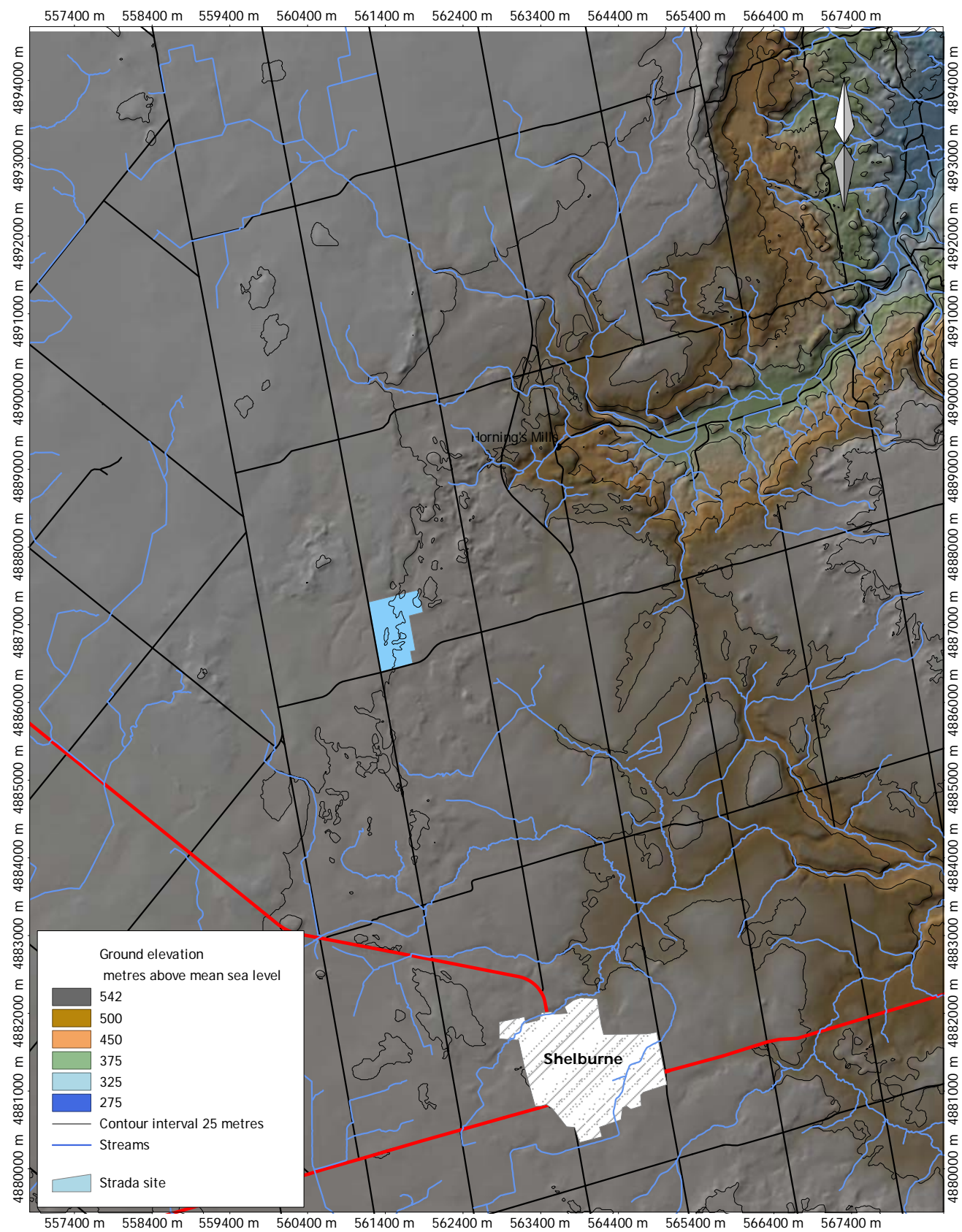


FIGURE 3: DIGITAL ELEVATION MODEL (DEM)

2.3 Geology

2.3.1 Quaternary Geology

The Quaternary deposits in the study area are presented on Figure 4. The Quaternary materials consist of ice-contact stratified deposits that are incised into the underlying fine grained till. The ice-contact drift materials are described as mainly medium-grained sand with some gravel, pebbly sand and bouldery sand (Gwyn, 1972). This sand and gravel unit is the material that is extracted from the Melancthon Pit.

The unconsolidated sand and gravel resource is underlain by a clay till deposit. This till unit may represent the regionally extensive Tavistock Till sheet, which is found at the surface in the vicinity of the subject property. Tavistock Till is a calcareous silty clay to silt till largely derived from glaciolacustrine sediments. This till sheet overlies the Paleozoic bedrock.

2.3.2 Paleozoic Geology

The Paleozoic bedrock beneath the subject property is made up of a sedimentary rock sequence consisting primarily of layered dolostone, shale and sandstones units that were deposited in an ocean environment. Located at the top of the bedrock column is the Amabel Formation, the only formation exposed above the escarpment, followed by the underlying Fossil Hill Formation and Cabot Head Formation of the Cataract Group. These layers dip towards the Michigan Basin to the southwest at a rate of 4.8 to 7.6 m per kilometer (Straw, 1968).

The top of the bedrock ranges between approximately 492 masl and 473.8 masl beneath the subject lands. The topography appears to mimic ancestral drainage systems. The bedrock surface slopes toward the southeast, with what appears to be two erosional channels from the north and west, which merge in the northwestern portion of the Melancthon Pit.

2.4 Hydrogeology

Two principal aquifers were identified in the Town of Shelburne Ground Water Management Study (Burnside, 2001) being the overburden aquifer and the contact zone aquifer. The contact zone includes the upper fractured bedrock. Production wells in the Town of Shelburne utilize the contact zone aquifer (i.e., bedrock aquifer).

All of the domestic wells (where information is available) in the 1 km area obtain water from the Amabel Formation (bedrock aquifer), with the exception of MOE Well No. 1316. Based on the well depths and depth to which water was found, the first water-bearing zone that was able to sustain a yield that would meet the demands for most domestic needs was in the upper bedrock system.

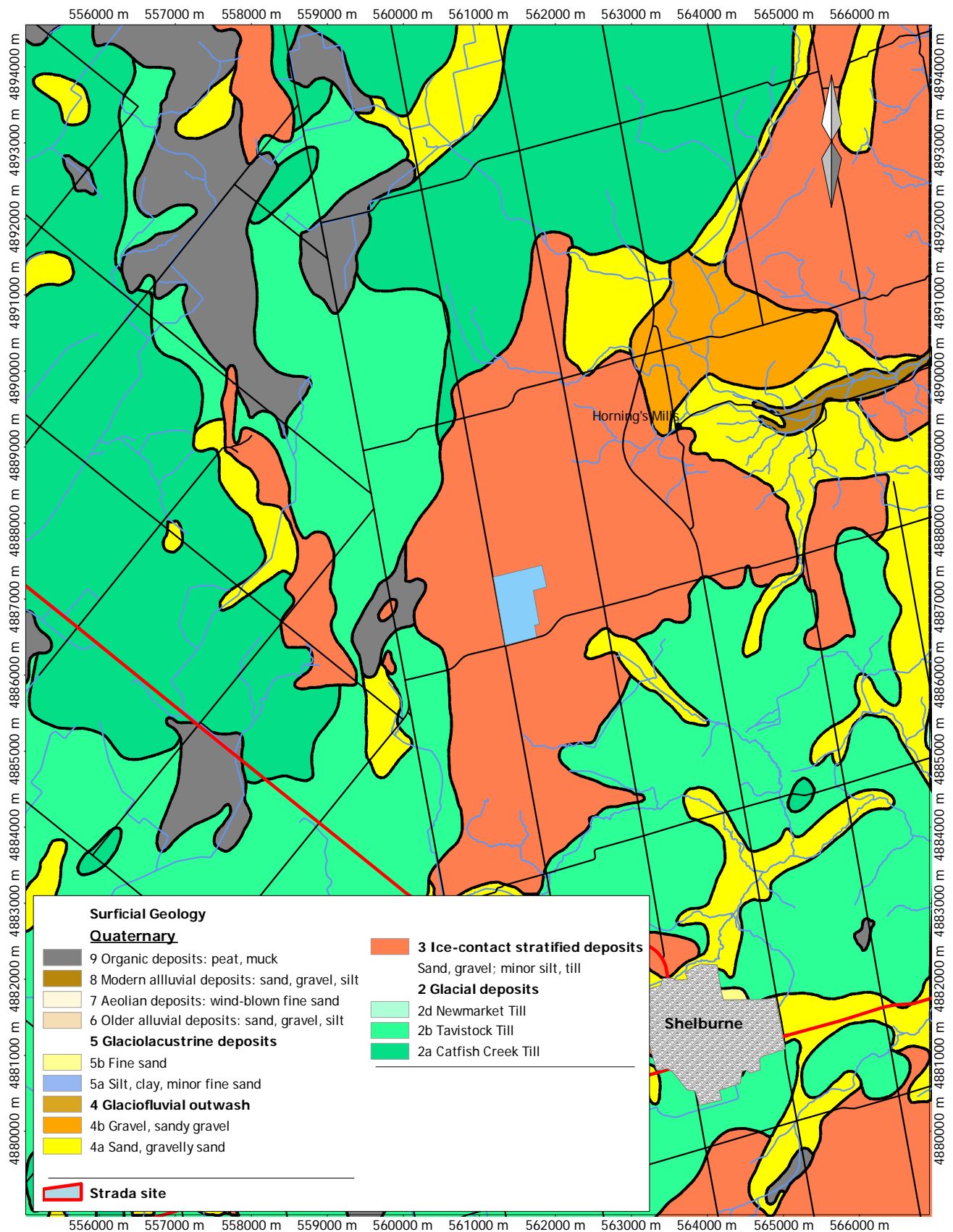


FIGURE 4: QUATERNARY GEOLOGY

3.0 HYDROGEOLOGICAL AND HYDROLOGICAL EVALUATION

3.1 Groundwater Elevations

The baseline hydrogeological assessment (Whitewater, 2010) included the continuous and manual water level measurements at 21 groundwater monitoring wells, which were relied upon to characterize of the groundwater flow regimes in the bedrock and overburden aquifers. As discussed, the monitoring program has expanded to include 7 new / replacement monitoring wells. The 2014 monitoring results are provided in the below sections.

TABLE 2: 2014 MANUAL GROUNDWATER ELEVATIONS

Well ID	Jun-24	Jul-12	Aug-27	Sept-4	Oct-14	Nov-12	Nov-24	Dec-3
OW2-A	NA	497.50	497.56	497.42	497.51	497.65	497.67	497.90
OW2-B	NA	496.14	496.13	495.99	496.23	496.42	496.38	497.01
OW2-C	NA	494.40	494.33	495.13	495.21	494.45	494.56	495.14
OW3-A	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
OW3-B	490.78	490.71	490.35	490.28	490.49	490.50	490.62	490.89
OW4-A	498.52	498.43	498.47	498.44	498.49	498.52	498.56	498.75
OW4-B	498.16	498.15	498.12	498.03	498.09	498.18	498.23	498.44
OW4-C	492.80	492.38	491.90	491.79	491.66	491.74	491.87	492.25
OW5-A	490.77	490.62	490.29	490.24	490.17	490.15	490.17	490.33
OW5-B	492.42	491.97	491.56	491.52	491.40	491.40	491.49	491.83
OW5-C	492.38	491.86	491.51	491.43	491.35	491.36	491.57	491.61
OW6-A	ND	492.10	492.12	492.04	491.90	491.87	491.88	492.06
OW7-A	ND	7.63	6.86	7.30	7.26	7.03	7.05	7.33
OW7-C	ND	7.85	7.08	7.51	7.58	7.26	7.16	7.43
OW8-A	493.33	493.89	493.08	492.98	492.95	492.91	492.98	493.10
OW8-B	490.84	490.47	490.07	489.96	489.78	489.79	495.93	490.05
OW9-A	492.10	NA	NA	NA	492.15	492.11	492.14	492.16
OW10A	ND	492.68	492.70	492.51	492.22	492.21	492.31	492.31
OW10B	ND	488.85	488.99	488.86	488.81	488.74	488.79	488.81
OW11-A	ND	3.78	4.36	4.08	4.52	4.53	4.43	4.10
OW11-C	ND	3.80	4.36	4.10	4.53	4.53	4.42	4.09
OW12-A	ND	ND	ND	ND	ND	ND	497.31	497.37

Note:

1. OW7 and OW11 have not been geodetically surveyed
2. ND = not drilled (Drilling occurred on June 24 and November 24, 2014 [after scales/fuel location approved])
3. NA = not accessible (berm construction)

Automatic dataloggers have been installed in the all of the shallow wells, which have collected continuous water level data to allow for a long-term (i.e., seasonal) and short-term (storm event) evaluation of the aquifer response. Several of the original dataloggers installed at the site were reporting anomalous data and significant drift in the dataset. Loggers were replaced as needed at the site and questionable data was not relied upon in the assessment. The continuous data is presented on Figure 5 and Figure 6.

The groundwater pattern mimics the topographic surface as well as the top of the Tavistock Till geological contact. Generally, groundwater in the water table aquifer flows from a high along the western property boundary towards the east (Figure 7). The elevation of the water table at the site ranges between approximately 490 and 500 masl. Season trends are observed with groundwater highs occurring in the spring and fall periods.

The groundwater elevation in the upper bedrock system ranges between 486 masl and 491 masl during the drier periods, which increases to between 490.5 masl and 495.5 masl during the spring. The groundwater levels at the site continue to fall within the historical ranges.

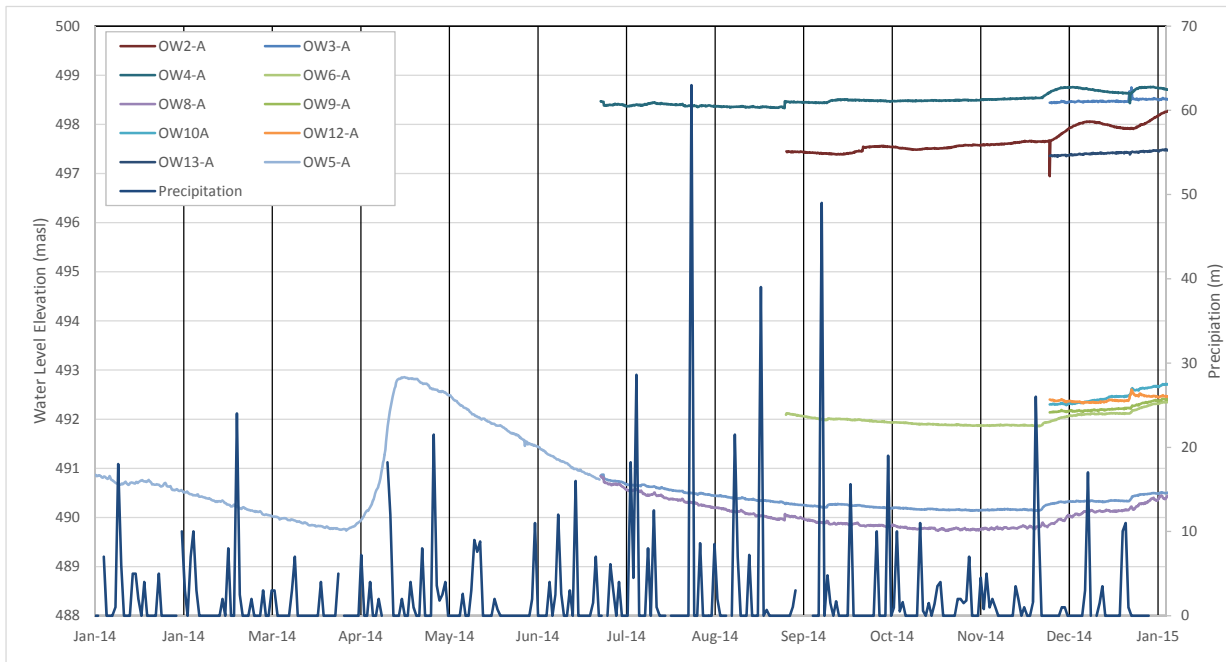


FIGURE 5: CONINUOUS WATER LEVELS (SHALLOW AQUIFER)

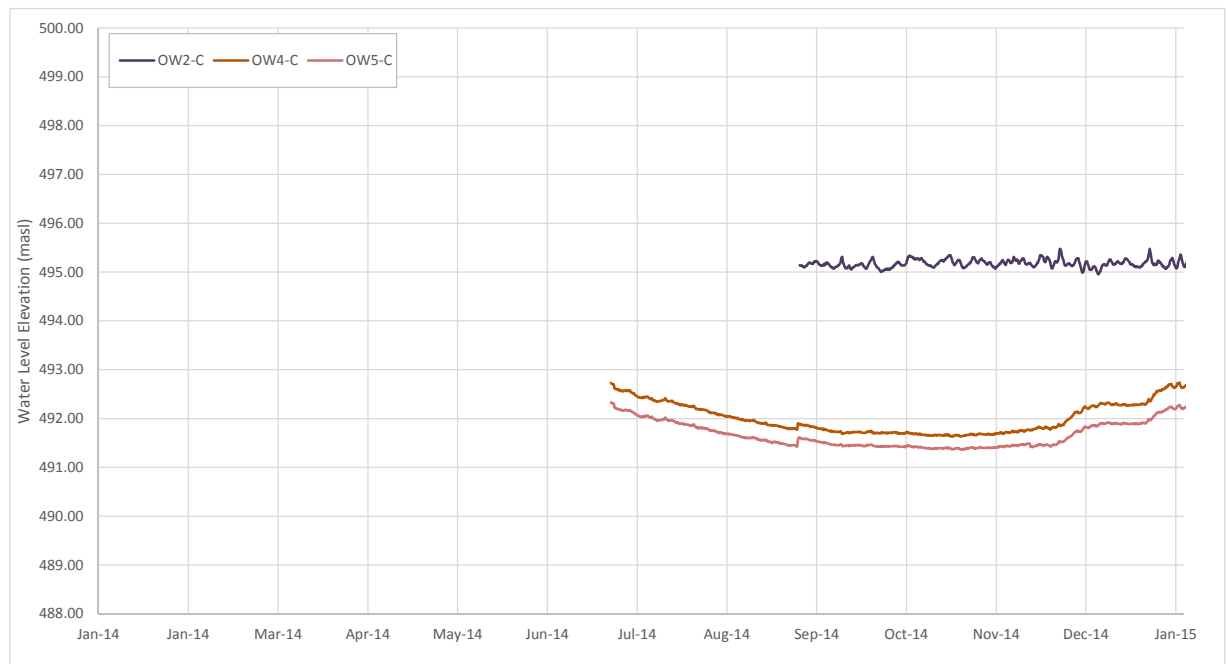


FIGURE 6: CONTINUOUS WATER LEVELS (BEDROCK AQUIFER)

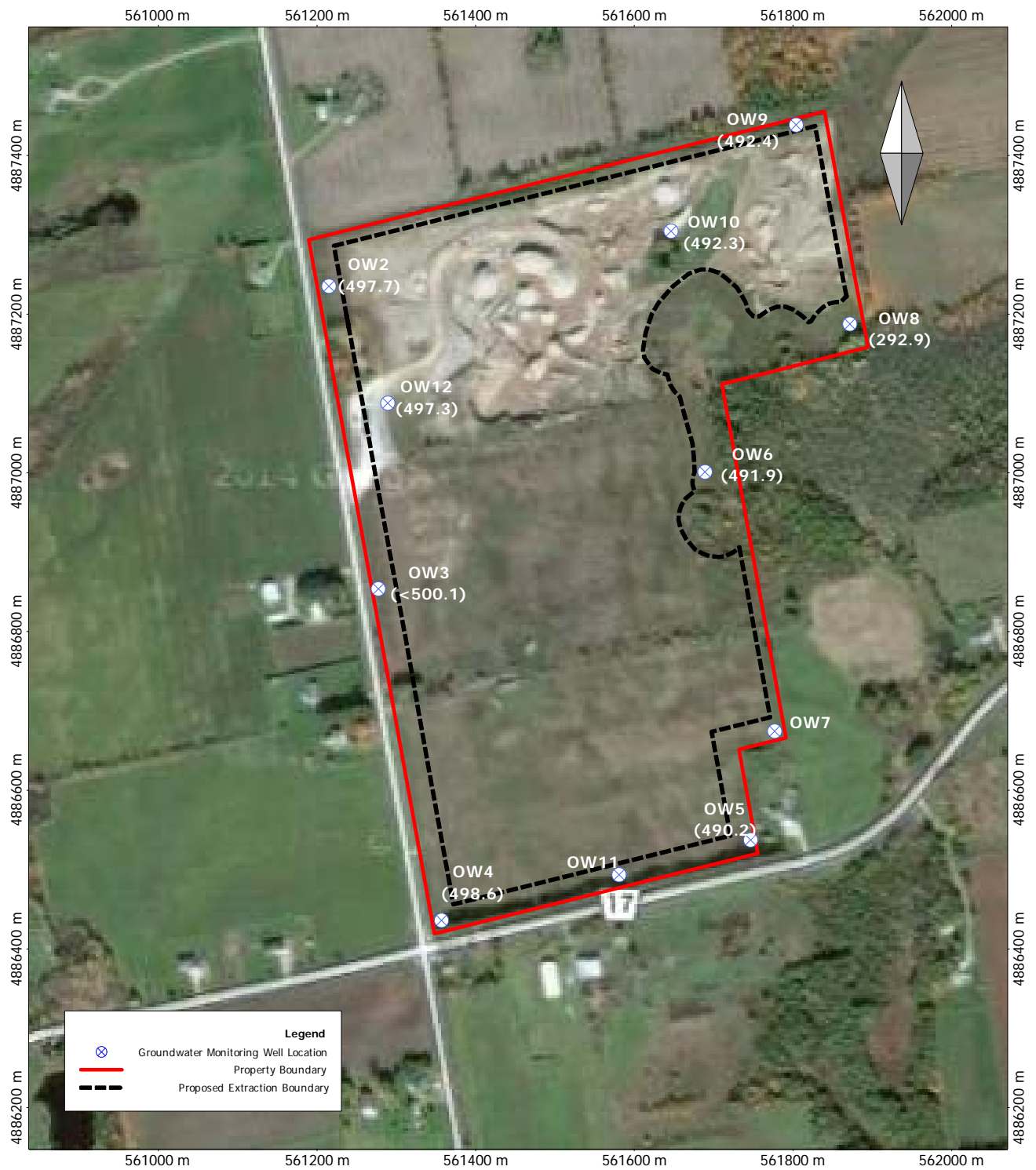


FIGURE 7: WATER TABLE ELEVATIONS (MASL)

3.2 Groundwater Quality

Water quality sampling at the Melancthon Pit is completed on a semi-annual basis (spring and fall). Samples are to be collected and analyzed for general water chemistry, volatile organic compounds (VOCs) and petroleum hydrocarbons (PHC). The first groundwater samples for the operating Melancthon Pit were collected on November 24, 2014 (Pit not operating in the spring of 2014).

Groundwater samples were collected from dedicated monitoring wells following purging of at least three borehole volumes of water from each monitoring well (or until well pumped dry) using dedicated check valve pumps and tubing. Groundwater samples for inorganic analysis were also filtered using disposable 0.45 µm filters (where permissible). The samples obtained for VOC/PHC analyses were obtained from the top of the water column within the well utilizing dedicated bailers prior to any purging.

The laboratory provided all sample bottles, which were prepared with preservatives for consistency, as required. Samples were maintained in coolers with freezer packs and were delivered to the required laboratory within 24 to 36 hours of collection. The reports presenting the results from Testmark are provided in Appendix B.

The groundwater geochemistry at the site is characterized by relatively low concentrations for most parameters. This is illustrated by the fact many inorganic parameters have a concentration that is below laboratory detection limits. The 2014 data remained within the ranges reported prior to the operation of the site.

The water quality results reported detections of volatile organic compounds and hydrocarbons. Immediately upon receiving the November sample results, a second sample was collected and analyzed to confirm (or refute) the presence of the contaminants. The second round of sampling indicated that the groundwater was free of detectable volatile organic compounds and hydrocarbons. A summary of the results are provided in Table 3.

TABLE 3: HYDROCARBON DETECTIONS

Well ID	Parameter	Reg. 153 Limit	MDL for Nov 24	Nov-24	Dec-24
OW5-A	F3 (C16-C34)	0.5	<0.005	0.86	<0.003
	F4 (C34-C50)	0.5	<0.005	0.175	<0.003
OW5-B	Toluene	0.024	<0.0002	0.00021	<0.0002
OW4-A	Toluene	0.024	<0.0002	0.00033	<0.0002
OW8-A	Toluene	0.024	<0.0002	0.00084	<0.0002
	Methyl isobutyl ketone (MIBK)	0.64	<0.0005	0.0111	<0.005
OW8-A	F3 (C16-C34)	0.5	<0.005	0.415	<0.006
OW12-A	Methyl isobutyl ketone (MIBK)	0.64	<0.005	0.0164	<0.005
	Toluene	0.024	<0.0002	0.00029	<0.0002

Note: all concentrations reported as mg/L

The detections of F3, F4, Toluene, and Methyl isobutyl ketone (MIBK) were generally significantly below Ontario Regulation 153 Standards and just slightly above the detection limits, with the exception of the concentration of F3 hydrocarbons at OW5-A. It should be noted of the laboratories low detection limits for these parameters (~100 times lower than the Standards). Dr. Mark Charbonneau (President and CEO of Testmark Laboratories) was consulted on the results and he indicated that the data initially reported for these compounds is much lower than anything that would raise a flag in the regulation tables. He indicated that it

is not uncommon to detect toluene in low levels in water samples simply because the compound is often used as a solvent in laboratories and it is difficult to report at low detection limits due to the ubiquitous use of the solvent.

OW5-A and OW12-A initially reported middle distillate present, however the second sample reported concentrations less than detection limit. If future sampling results in the evidence of hydrocarbons, Testmark will analyze the chromatograms to attempt to identify the petroleum product present. In some cases where a high organic content soil is present the patterns from the chromatograms show that the result is not due to petrogenic sources.

It should be noted that chloromethane was detected at OW4-A, OW5-B and OW8-A at low concentrations (0.004, 0.0005, and 0.0005 mg/L, respectively). Again, Dr. Charbonneau was consulted and it was his professional opinion that low levels of chloromethane would be expected as it is naturally produced in rotting environments.

Inaccuracy and imprecision can come from many causes, including resolution limits of measurement tools, calibration issues, random noise (electronic, optical, thermal, etc.), drift, and interfering substances. Due to the low concentrations detected in the first sampling round, and the lack of detection in subsequent samples, it is concluded that VOCs and PHCs are not present in the groundwater at the Melancthon Pit. Regardless, the VOCs and PHCs at the site will be closely monitored. In addition, it is recommended that duplicates, field and travel blanks be added to the program to allow for an increased understanding of the presence/absence of VOCs and PHCs detected at low concentrations.

3.3 Surface Water Levels

Continuous water level data was collected from the North and South Ponds in 2014. Due to the dense tree cover, a vertical geodetic elevation for the North Pond measuring point was not obtained and the water levels are estimated. Based on estimation of the measuring point, water levels within the North Pond were consistently higher than those of the South Pond throughout the monitoring period, representing a difference of between approximately 0.18-0.5 m. Altogether, the North Pond water levels ranged between approximately 494.3 masl (metres above sea level) and 492.9 masl, while the South Pond water levels ranged between approximately 494.1 masl and 492.4 masl.

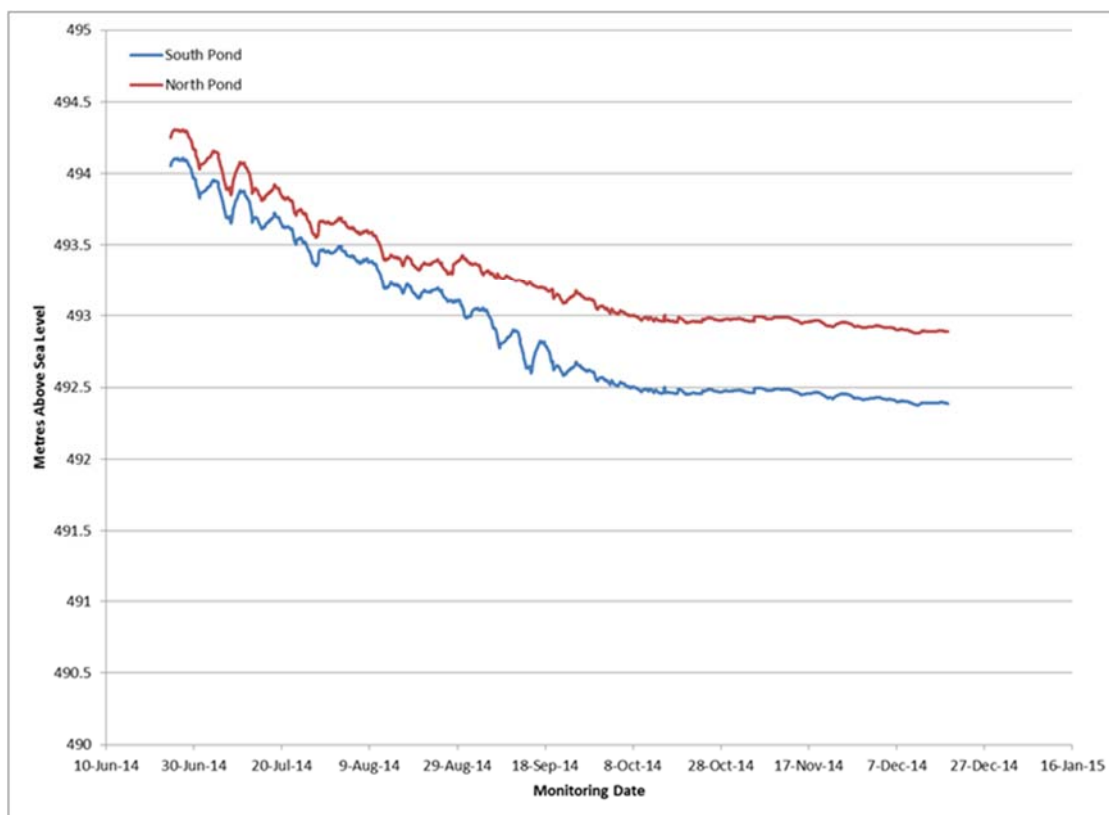


FIGURE 8: SURFACE WATER ELEVATIONS

3.4 Surface Water Quality

Similar to the groundwater quality program, surface water was analyzed for general water quality, VOCs and PHCs. As anticipated, the surface water quality remains unchanged and reflects background conditions.

Styrene was detected in the North Pond at a concentration of 0.0004 mg/L. The laboratory detection limit is 0.0002 mg/L in comparison to the required detection limit for Regulation 153, which is 0.01 mg/L. Dr. Charbonneau confirmed that Styrene is rare to find styrene in the environment and with the reported concentration near the detection limit where the variability in the measurement is very high, it is possible to have other compounds which may contribute to a signal.

On-going monitoring is required to develop a database for trend and impact analysis of the Melancthon Pit on the surface water regime.

4.0 CONCLUSIONS AND RECOMMENDATIONS

1. The operation of the Melancthon Pit is currently not having any measureable impacts on the groundwater regime (water quality or quantity).
2. It is recommended that the compliance monitoring program continue as stipulated on the Site Plans and in agreement with the Township of Melancthon.
3. It is recommended that duplicates, field and trip blanks be collected in 2015 for the analysis of VOCs and PHC at OW4-A, OW5-A, OW8-A, and OW12-A.

5.0 REFERENCES

- Brunton, F. R. and C. Brintnell. 2011.
Project Unit 08-004. Final Update of Early Silurian Stratigraphy of the Niagara Escarpment and Correlation with Subsurface Units Across Southwestern Ontario and the Great Lakes Basin. Ontario Geological Survey.
- Chapman, L.J., and Putman, D.F., 1984.
The Physiography of southern Ontario. 3rd Edition. Ontario Geological Survey , Special Volume 2.
- Gwyn, Q.H.J., 1972
The Quaternary Geology of Dundalk area – Southern Ontario. Ont. Dept. Mines and Northern Affairs, P.727
- Whitewater Hydrogeology Ltd., 2010
Level 2 Hydrogeological Assessment: Proposed Melancthon Pit. Prepared for Strada Aggregates.

APPENDIX A

BOREHOLE LOGS

Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram	
-4				<p>The diagram shows a vertical well. On the left is a thick black line representing the 'Open Hole' (C). On the right are two casing strings, labeled 'B' and 'A' at the bottom. String 'B' is the outer casing, and string 'A' is the inner casing. Both strings have various components indicated by symbols: a pump at the top, a valve, and a screen at the bottom. The casing strings are shown with different patterns to represent different materials or sections.</p>	
0	508		TOP SOIL		
4	504		SILTY SAND: Brown, occasional stone, loose, dry		
8	500		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet		
12	496		TAVISTOCK TILL: Grey, clay with stones, dense to soft, damp		
16	492				
20	488				
24	484				
28	480		AMABEL FORMATION: Dolostone, buff to white, fossiliferous		
32	476				
36	472				
40	468				
44	464				
48	460				
52	456				
56	452				
60	448				
64	444				
68	440				
72	436		CABOT HEAD SHALE: Green, soft, damp		
76	432			C	

Drilling Date: March 2007 / April 2008

Drilling Company: Keith Lang Drilling

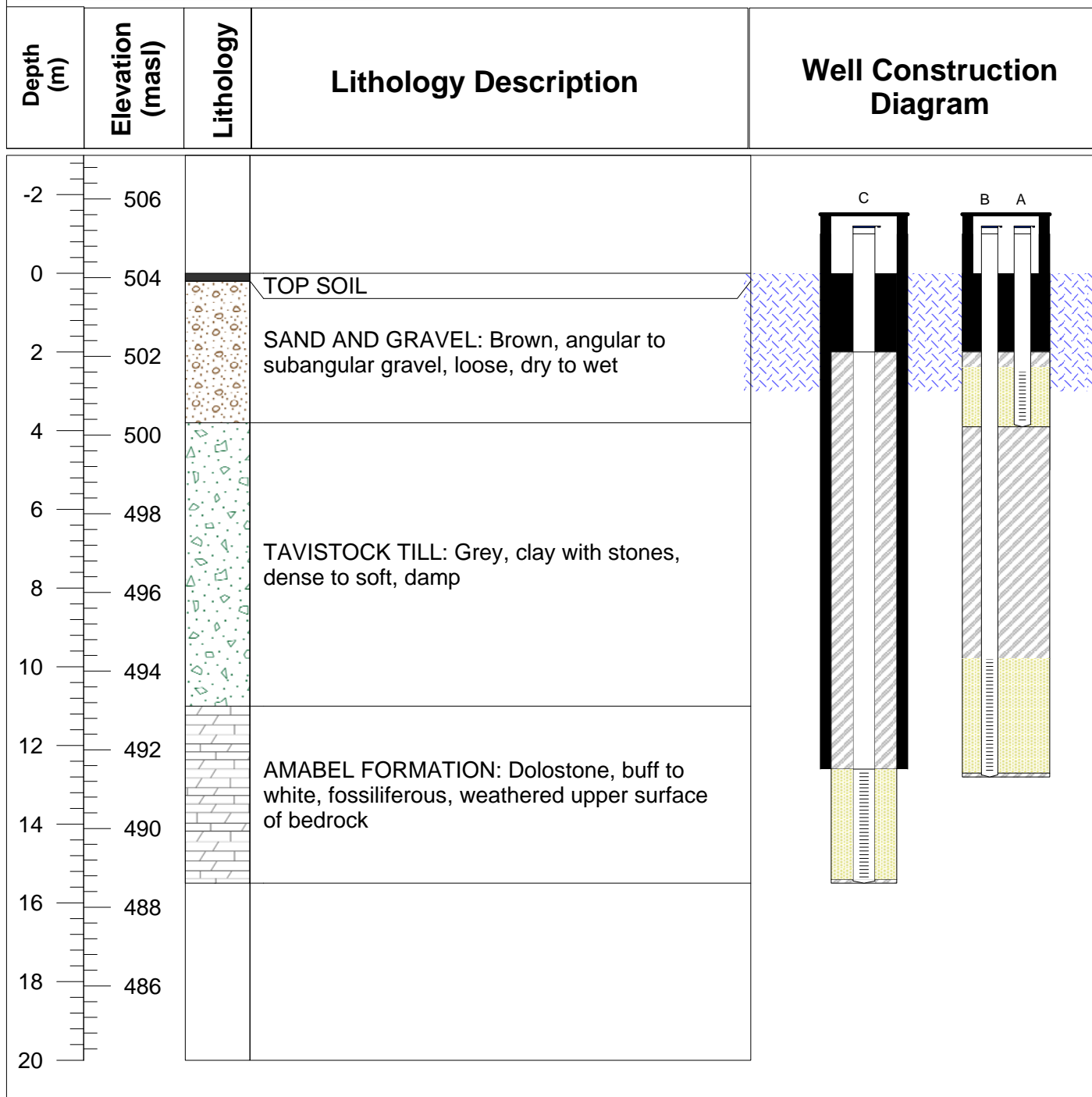
Geologist: Ken Goff / Tecia White

Location: Township of Melancthon

Easting: 561,689

Northing: 4,887,097





Drilling Date: March 2007 / April 2008

Drilling Company: Keith Lang Drilling

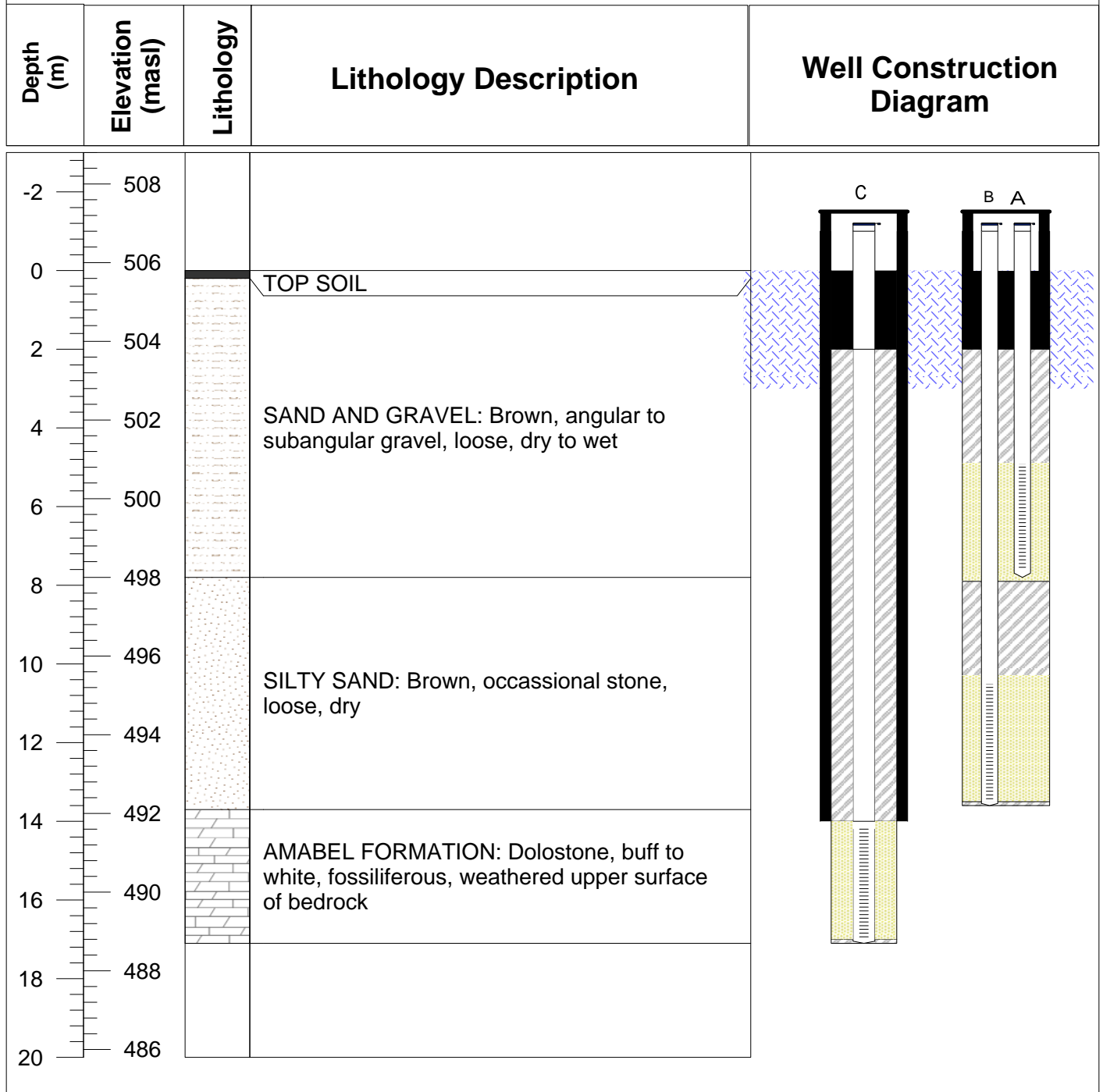
Geologist: Ken Goff / Tecia White

Location: Township of Melancthon

Easting: 561,272

Northing: 4,886,849





Drilling Date: March 2007 / April 2008

Drilling Company: Keith Lang Drilling

Geologist: Ken Goff / Tecia White

Location: Township of Melancthon

Easting: 561,313

Northing: 4,886,400



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
-4				
-2	496			
0	494		TOP SOIL	
2	492		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet	
4	490			
6	488			
8	486		TAVISTOCK TILL: Grey, clay with stones, dense to soft, damp	
10	484			
12	482		AMABEL FORMATION: Dolostone, buff to white, fossiliferous, weathered upper surface of bedrock	
14	480			
16	478			
18	476			
20	474			

Drilling Date: March 2007 / April 2008

Drilling Company: Keith Lang Drilling

Geologist: Ken Goff / Tecia White

Location: Township of Melancthon

Easting: 561,742

Northing: 4,886,523



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
-2	497			
-1	496			
0	495			
1	494		SILTY SAND: Brown, occasional stone, loose, dry	
2	493			
3	492			
4	491			
5	490		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet	
6	489			
7	488			
8	487			
9	486			
10	485			
11	484			
12	483			

Drilling Date: Jun-15

Drilling Company: Keith Lang Drilling

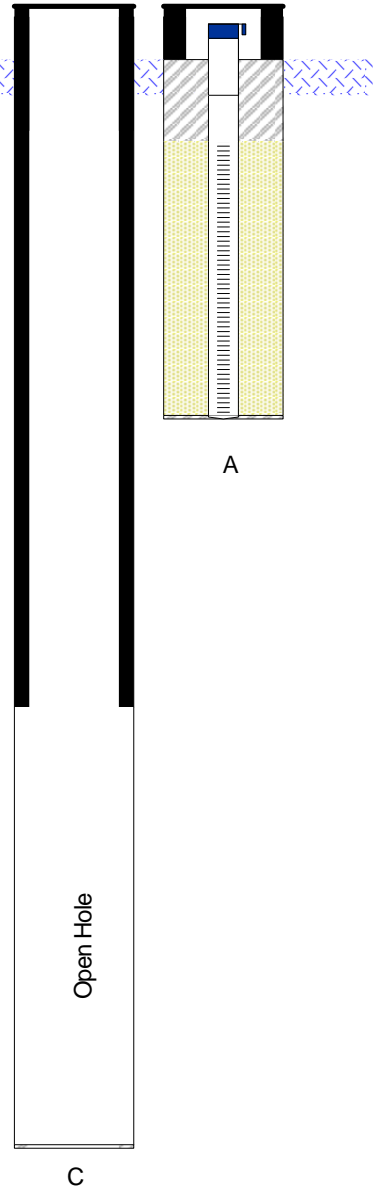
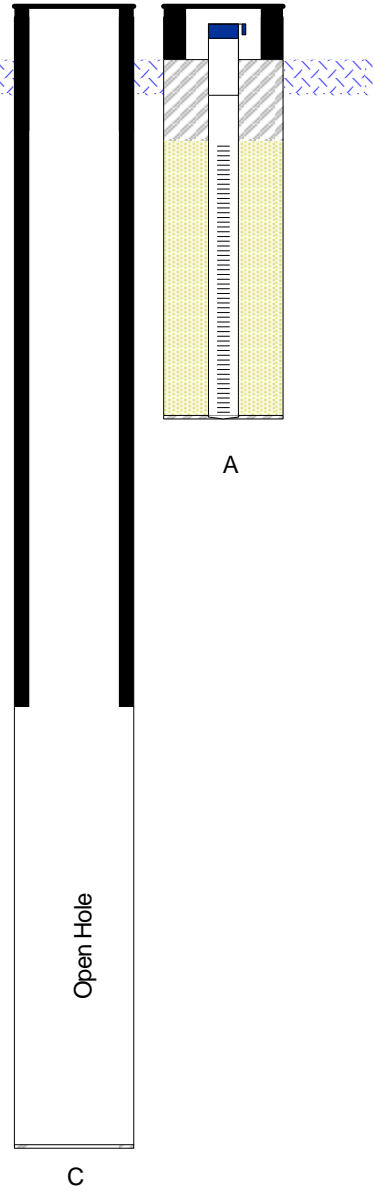
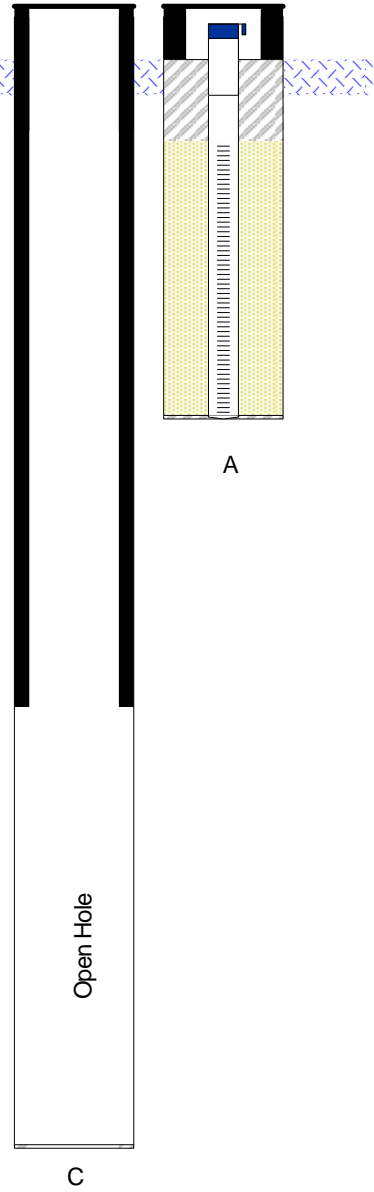
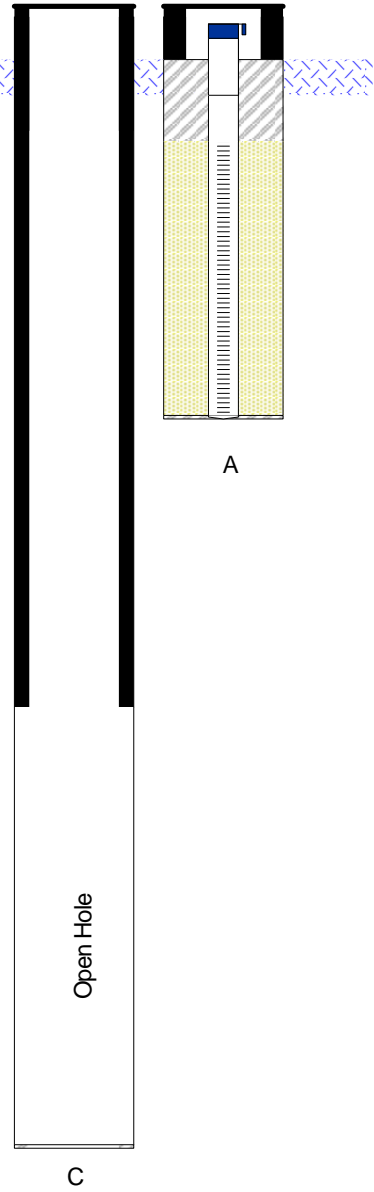
Geologist: Tecia White

Location: Township of Melancthon

Easting: 561,660

Northing: 4,886,939



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
-2	-2			
0	0			
2	2		SILTY SAND: Brown, occasional stone, loose, dry	
4	4			
6	6		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet	
8	8			
10	10			
12	12		TAVISTOCK TILL: Grey, clay with stones, dense to soft, damp	
14	14			
16	16			
18	18			
20	20			
22	22			
24	24		AMABEL FORMATION: Dolostone, buff to white, fossiliferous, weathered upper surface of bedrock	
26	26			
28	28			
30	30			
32	32			

Drilling Date: Jun-15

Drilling Company: Keith Lang Drilling

Geologist: Tecia White

Location: Township of Melancthon

Easting:

Northing:



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
-2	498			
0	496		TOP SOIL	
2	494			
4	492		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet	
6	490			
8	488			
10	486			
12	484			
14	482		TAVISTOCK TILL: Grey, clay with stones, dense to soft, damp	
16	480			
18	478			
20	476			
22	474		AMABEL FORMATION: Dolostone, buff to white, fossiliferous, weathered upper surface of bedrock	
24	472			

Drilling Date: Jun-15

Drilling Company: Lantech Drilling Services

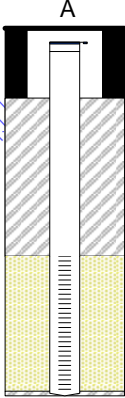
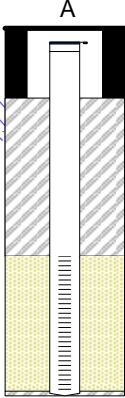
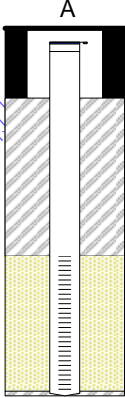
Geologist: Tecia White

Location: Township of Melancthon

Easting: 561,881

Northing: 4,887,192



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
-2	498			
0	496			
2	494			
4	492			
6	490			
8	488			
10	486			
12	484			
14	482			
16	480			
18	478			
20	476			
22				

Drilling Date: March 2007 / April 2008

Drilling Company: Keith Lang Drilling

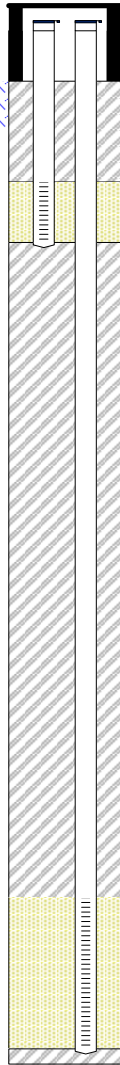
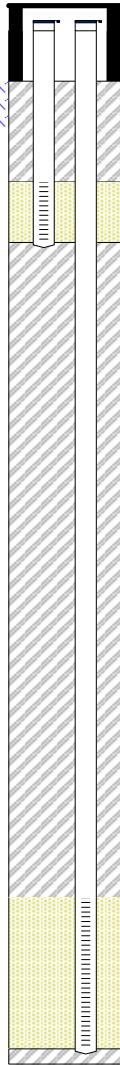
Geologist: Ken Goff / Tecia White

Location: Township of Melancthon

Easting: 561,806

Northing: 4,887,468



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
-2	496			
0	494		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet	
2	492			
4	490		SILTY CLAY: Brown, compact, moist	
6	488			
8	486		SILTY SAND: Brown, occasional stone, loose, dry	
10	484			
12	482			
14	480		TAVISTOCK TILL: Grey, clay with stones, dense to soft, damp	
16	478			
18	476			
20	474		AMABEL FORMATION: Dolostone, buff to white, fossiliferous, weathered upper surface of bedrock	
22				

Drilling Date: March 2007 / April 2008

Drilling Company: Keith Lang Drilling

Geologist: Ken Goff / Tecia White

Location: Township of Melancthon

Easting: 561,628

Northing: 4,887,239



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
2	2			
0	0		SILTY SAND: Brown, occasional stone, loose, dry	
-2	-2			
-4	-4		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet	
-6	-6			
-8	-8		TAVISTOCK TILL: Grey, clay with stones, dense to soft, damp	
-10	-10			
-12	-12		AMABEL FORMATION: Dolostone, buff to white, fossiliferous, weathered upper surface of bedrock	
-14	-14			
-16	-16			
-18	-18			
-20	-20			

Drilling Date: Jun-15

Drilling Company: Keith Lang Drilling

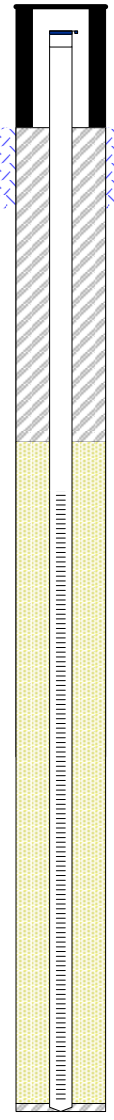
Geologist: Tecia White

Location: Township of Melancthon

Easting:

Northing:



Depth (m)	Elevation (masl)	Lithology	Lithology Description	Well Construction Diagram
-2				
-1	507			
0	506			
1	505		SILTY SAND: Brown, occasional stone, loose, dry	
2	504			
3	503			
4	502			
5	501			
6	500			
7	499		SAND AND GRAVEL: Brown, angular to subangular gravel, loose, dry to wet	
8	498			
9	497			
10	496			
11	495			
12	494			
13	493			

Drilling Date: Jun-15

Drilling Company: Lantech Drilling Services

Geologist: Tecia White

Location: Township of Melancthon

Easting: 561,282

Northing: 4,887,057



APPENDIX B

WATER QUALITY RESULTS



TESTMARK Laboratories

Committed to Quality and Service

Analytical Report

Client:	Tecia White	Work Order Number:	229358
Company:	Whitewater Hydrogeology Ltd.	Date Order Received:	11/27/2014
Address:	80 Chamberlain Cres Collingwood, Ontario, L9Y 0C8	Regulation:	Information not provided
Phone:	(705) 888-7064	PO #:	
Fax:		Project #:	Strada Aggregates (Shelburne Pit South)
Email:	tecia@white-water.ca		

Analyses were performed on the following samples submitted with your order.

The results relate only to the items tested.

Sample Name	Lab #	Matrix	Type	Comments	Date Collected	Time Collected
OW4-07A (labelled 7a)	605902	Ground Water	Raw		11/23/2014	
OW4-07B (labelled 4B)	605903	Ground Water	Raw		11/23/2014	
OW4-07C (labelled 4c)	605904	Ground Water	Raw		11/23/2014	
OW5-08A (labelled 5a)	605905	Ground Water	Raw		11/23/2014	
OW5-8B (labelled 5b)	605906	Ground Water	Raw		11/23/2014	
OW6-10A (labelled 6a)	605907	Ground Water	Raw		11/23/2014	
OW7-10A (labelled 4a)	605908	Ground Water	Raw		11/23/2014	
OW7-10C (labelled 7c)	605909	Ground Water	Raw		11/23/2014	
OW11-10A (labelled 11a)	605910	Ground Water	Raw		11/23/2014	
OW11-10C (labelled 11c)	605911	Ground Water	Raw		11/23/2014	
OW12-10A (labelled 12a)	605912	Ground Water	Raw		11/23/2014	
OW8-08A (labelled 8a)	605913	Ground Water	Raw		11/23/2014	



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

The following instrumentation and reference methods were used for your sample(s)

Method Name	Description	Reference
Ammonia Water	Determination of Ammonia/Ammonium in Water Instrument group: Internally Subcontracted	Based on APHA-4500NH3 H
Hardness/ICP	Determination of Hardness in Water by ICP Instrument group: Perkin Elmer ICPMS	Based on SW846-6020
OP Water	Determination of Ortho-Phosphate in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
PHC F1 Water	Determination of PHC F1 in Water - Tier 1 CCME Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
PHC F2-F4 Water	Determination of PHC (F2-F4) in Water - Tier 1 CCME by GC/FID Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
T01-Alkalinity	Determination of Alkalinity in Water Instrument group: Accumet ISE Meter	Modified from APHA 2320
T02-pH Water	Determination of pH in Water Instrument group: Accumet ISE Meter	Modified from APHA-4500-H+B
T05-Anions Water	Determination of Anions by Ion Chromatography Instrument group: Dionex IC	Modified from SW846-9056
T12-CONDWATER	Determination of conductivity in Water Instrument group: Conductivity Meter	Modified from APHA-2510
T13-ICPMS Water	Determination of Metals in Water by ICPMS Instrument group: PE Elan ICP/MS-1	Modified from SW846-6020
T21-Turbidity	Determination of Turbidity by Nephelometry Instrument group: Nephelometer	Modified from APHA-2130 B
T26-Colour	Determination of Colour by Spectrophotometry Instrument group: Shimadzu UV/Vis	Modified from APHA-2120C
T27-TDS	Determination of Total Dissolved Solids in water by gravimetry Instrument group: Denver Balance	Modified from APHA-2540
T94-Carbonate	Determination of Carbonate and Bi-Carbonate Instrument group: Calculation	Based on APHA-2330
TOC Water	Determination of Total Organic Carbon in Water Instrument group: Internally Subcontracted	Based on APHA-5310C
TP Water	Determination of Total Phosphorus in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
VOC Water	Determination of Volatile Organic Compounds in Water by P&T/GC/MS Instrument group: Internally Subcontracted	Based on EPA 624



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

This report has been approved by:

Mark Charbonneau, Ph.D.
Lab Director

Mark Charbonneau, Ph.D.
Metals Section Head



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Data:

Sample Name: OW4-07A (labelled 7a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605902

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	<0.01	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	60.8	mg/L	20141202.R13.1E
Magnesium	0.004	9.49	mg/L	20141202.R13.1E
Total Hardness (as CaCO ₃)	0.1	191	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.013	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	94	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	249	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.77	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	8.6	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	7.5	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	21.4	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	601	µS/cm	20141202.T12A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW4-07A (labelled 7a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605902

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	67.6	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	60800	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	335	ug/L	20141129.T13B
Magnesium	4	9490	ug/L	20141129.T13B
Manganese	1	3.8	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	7	ug/L	20141129.T13B
Potassium	1	1000	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	3560	ug/L	20141129.T13B
Strontium	10	231	ug/L	20141129.T13B
Zinc	1	28.1	ug/L	20141129.T13B
T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	10	4790	NTU	20141201.T21A
T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	1	TCU	20141202.T26A
T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	30	310	mg/L	20141203.T27B
T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	248	mg/L	20141203.T94A
Carbonate	1	1.4	mg/L	20141203.T94A
TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	1.4	mg/L	20141201.R55.2A
TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.0344	mg/L	20141203.R23.2A
VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW4-07A (labelled 7a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605902

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	98	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	134	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	0.33	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	96	% Rec	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 6 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW4-07A (labelled 7a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605902

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW4-07B (labelled 4B)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605903

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	<0.01	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	65.6	mg/L	20141202.R13.1E
Magnesium	0.004	8.45	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	199	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.011	mg/L	20141128.R23.1B
Orthophosphate (as P) (Dup)	0.005	0.013	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	98	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	254	mg/L as CaCO3	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO3	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.77	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	42.4	mg/L	20141204.T05A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 7 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW4-07B (labelled 4B)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605903

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	5.49	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	14.9	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	706	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	47	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	65600	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	361	ug/L	20141129.T13B
Magnesium	4	8450	ug/L	20141129.T13B
Manganese	1	<1	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	6.5	ug/L	20141129.T13B
Potassium	1	489	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	8650	ug/L	20141129.T13B
Strontium	10	133	ug/L	20141129.T13B
Zinc	1	2.9	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	379	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	3	390	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	253	mg/L	20141203.T94A
Carbonate	1	1.4	mg/L	20141203.T94A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW4-07B (labelled 4B)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605903

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	1.3	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.132	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	99	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	124	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 9 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW4-07B (labelled 4B)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605903

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	96	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW4-07C (labelled 4c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605904

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.058	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	62.9	mg/L	20141202.R13.1E
Magnesium	0.004	9.67	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	197	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.0076	mg/L	20141128.R23.1B

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	278	mg/L as CaCO3	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO3	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.88	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	43.4	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	5.78	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	16.8	mg/L	20141204.T05A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 10 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW4-07C (labelled 4c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605904

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	717	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	40.7	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	62900	ug/L	20141129.T13B
Copper	1	1.4	ug/L	20141129.T13B
Iron	20	362	ug/L	20141129.T13B
Magnesium	4	9670	ug/L	20141129.T13B
Manganese	1	2.8	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	6.9	ug/L	20141129.T13B
Potassium	1	501	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	10600	ug/L	20141129.T13B
Strontium	10	133	ug/L	20141129.T13B
Zinc	1	20.6	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	421	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	6	408	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	276	mg/L	20141203.T94A
Carbonate	1	2	mg/L	20141203.T94A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.0318	mg/L	20141203.R23.2A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW5-08A (labelled 5a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605905

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.063	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	64	mg/L	20141202.R13.1E
Magnesium	0.004	7.43	mg/L	20141202.R13.1E
Total Hardness (as CaCO ₃)	0.1	190	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.012	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) - Less BTEX (Dup)	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX (Dup)	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	860	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	175	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	75	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	258	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	8.02	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	7.6	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	6.12	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	11.6	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	615	µS/cm	20141202.T12A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW5-08A (labelled 5a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605905

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	55.1	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	64000	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	457	ug/L	20141129.T13B
Magnesium	4	7430	ug/L	20141129.T13B
Manganese	1	189	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	7.4	ug/L	20141129.T13B
Potassium	1	3840	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	2010	ug/L	20141129.T13B
Strontium	10	142	ug/L	20141129.T13B
Zinc	1	2	ug/L	20141129.T13B
T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	1540	NTU	20141201.T21A
T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A
T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	20	353	mg/L	20141203.T27B
T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	255	mg/L	20141203.T94A
Carbonate	1	2.5	mg/L	20141203.T94A
TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	2.3	mg/L	20141201.R55.2A
TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.343	mg/L	20141203.R23.2A
VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW5-08A (labelled 5a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605905

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	98	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	125	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	96	% Rec	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 14 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW5-08A (labelled 5a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605905

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW5-8B (labelled 5b)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605906

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	<0.01	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	63.1	mg/L	20141202.R13.1E
Magnesium	0.004	10.9	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	202	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.015	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	30	<30	ug/L	20141201.R59f2w12
F3 (C16-C34)	30	<30	ug/L	20141201.R59f2w12
F4 (C34-C50)	30	<30	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	90	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	293	mg/L as CaCO3	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO3	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.88	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	41.2	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 15 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW5-8B (labelled 5b)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605906

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Nitrate (as N)	0.1	3.84	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	11.7	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	736	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	37.5	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	63100	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	361	ug/L	20141129.T13B
Magnesium	4	10900	ug/L	20141129.T13B
Manganese	1	1.2	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	6.4	ug/L	20141129.T13B
Potassium	1	1670	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	10800	ug/L	20141129.T13B
Strontium	10	137	ug/L	20141129.T13B
Zinc	1	23	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	10	3190	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	30	392	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	291	mg/L	20141203.T94A
Carbonate	1	2.1	mg/L	20141203.T94A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW5-8B (labelled 5b)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605906

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	2.1	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.0987	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	98	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	125	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 17 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW5-8B (labelled 5b)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605906

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	0.21	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	95	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW6-10A (labelled 6a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605907

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.076	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	36.4	mg/L	20141202.R13.1E
Magnesium	0.004	5.65	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	114	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.016	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	105	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	283	mg/L as CaCO3	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO3	20141203.T01A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 18 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW6-10A (labelled 6a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605907

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	8.12	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	20.1	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	4.25	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	66.2	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	750	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	45.6	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	50	36400	ug/L	20141129.T13B
Copper	1	1.8	ug/L	20141129.T13B
Iron	20	250	ug/L	20141129.T13B
Magnesium	4	5650	ug/L	20141129.T13B
Manganese	1	6	ug/L	20141129.T13B
Molybdenum	1	2.1	ug/L	20141129.T13B
Nickel	1	5.1	ug/L	20141129.T13B
Potassium	1	1630	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	49500	ug/L	20141129.T13B
Strontium	10	223	ug/L	20141129.T13B
Zinc	1	2	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	819	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW6-10A (labelled 6a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605907

T27-TDS

Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	20	435	mg/L	20141203.T27B

T94-Carbonate

Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	279	mg/L	20141203.T94A
Carbonate	1	3.5	mg/L	20141203.T94A

TOC Water

Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	1.8	mg/L	20141201.R55.2A

TP Water

Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.635	mg/L	20141203.R23.2A

VOC Water

Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	97	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	136	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 20 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW6-10A (labelled 6a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605907

VOC Water				
Parameter	MDL	Result	Units	QAQCID
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	95	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW7-10A (labelled 4a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605908

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	<0.01	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	68.2	mg/L	20141202.R13.1E
Magnesium	0.004	9.11	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	208	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.015	mg/L	20141128.R23.1B

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	93	% Rec	20141201.R59f2w12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW7-10A (labelled 4a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605908

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	305	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.91	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	14.8	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	5.13	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	19	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	678	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	31	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	68200	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	435	ug/L	20141129.T13B
Magnesium	4	9110	ug/L	20141129.T13B
Manganese	1	2.8	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	8	ug/L	20141129.T13B
Potassium	1	1680	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	3640	ug/L	20141129.T13B
Strontium	10	158	ug/L	20141129.T13B
Zinc	1	2.5	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	1890	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 22 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW7-10A (labelled 4a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605908

T26-Colour				
Parameter	MDL	Result	Units	QAQCID

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	20	340	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	303	mg/L	20141203.T94A
Carbonate	1	2.3	mg/L	20141203.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	1.9	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	<0.002	mg/L	20141203.R23.2A

Sample Name: OW7-10C (labelled 7c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605909

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.071	mg/L	20141201.R42.1A
Ammonia (as N) (Dup)	0.01	0.075	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	21.8	mg/L	20141202.R13.1E
Magnesium	0.004	7.82	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	86.6	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	<0.005	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	93	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	188	mg/L as CaCO3	20141203.T01A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 23 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW7-10C (labelled 7c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605909

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.87	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	2.2	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	0.18	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	4.7	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	354	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	11.3	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	50	21800	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	200	12000	ug/L	20141129.T13B
Magnesium	4	7820	ug/L	20141129.T13B
Manganese	1	244	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	2.2	ug/L	20141129.T13B
Potassium	1	351	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	1470	ug/L	20141129.T13B
Strontium	1	49.3	ug/L	20141129.T13B
Zinc	1	1.5	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	121	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW7-10C (labelled 7c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605909

T27-TDS

Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	3	162	mg/L	20141203.T27B

T94-Carbonate

Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	187	mg/L	20141203.T94A
Carbonate	1	1.3	mg/L	20141203.T94A

TOC Water

Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	0.8	mg/L	20141201.R55.2A

TP Water

Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	<0.002	mg/L	20141203.R23.2A

VOC Water

Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	98	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	123	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 25 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW7-10C (labelled 7c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605909

VOC Water				
Parameter	MDL	Result	Units	QAQCID
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	96	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW11-10A (labelled 11a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605910

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.027	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	66.1	mg/L	20141202.R13.1E
Magnesium	0.004	9.26	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	203	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.013	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW11-10A (labelled 11a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605910

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	85	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	296	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.82	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	46.2	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	2.73	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	11	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	743	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	41.4	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	66100	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	383	ug/L	20141129.T13B
Magnesium	4	9260	ug/L	20141129.T13B
Manganese	1	<1	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	5.8	ug/L	20141129.T13B
Potassium	1	1470	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	11700	ug/L	20141129.T13B
Strontium	10	139	ug/L	20141129.T13B
Zinc	1	18.5	ug/L	20141129.T13B



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW11-10A (labelled 11a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605910

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	987	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	10	376	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	294	mg/L	20141203.T94A
Carbonate	1	1.8	mg/L	20141203.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	2.4	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.652	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	97	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	128	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 28 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW11-10A (labelled 11a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605910

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	95	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW11-10C (labelled 11c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605911

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	1.32	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	19.7	mg/L	20141202.R13.1E
Magnesium	0.004	8.55	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	84.4	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	<0.005	mg/L	20141128.R23.1B



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW11-10C (labelled 11c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605911

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	98	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	149	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.76	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	38	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	<0.1	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	9.7	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	449	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	12.3	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	50	19700	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	200	10700	ug/L	20141129.T13B
Magnesium	4	8550	ug/L	20141129.T13B
Manganese	1	308	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Nickel	1	2.2	ug/L	20141129.T13B
Potassium	1	1350	ug/L	20141129.T13B

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 30 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW11-10C (labelled 11c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605911

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	9570	ug/L	20141129.T13B
Strontium	1	29.6	ug/L	20141129.T13B
Zinc	1	2.3	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	299	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	3	219	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	148	mg/L	20141203.T94A
Carbonate	1	<1	mg/L	20141203.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	7.74	mg/L	20141201.R55.2A
Total Organic Carbon (Dup)	0.4	7.7	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	<0.002	mg/L	20141203.R23.2A
Total Phosphorus (as P) (Dup)	0.002	<0.002	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	70	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW11-10C (labelled 11c)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605911

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	135	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	94	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW12-10A (labelled 12a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605912

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.17	mg/L	20141201.R42.1A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW12-10A (labelled 12a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605912

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	50.9	mg/L	20141202.R13.1E
Magnesium	0.004	7.65	mg/L	20141202.R13.1E
Total Hardness (as CaCO ₃)	0.1	159	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.022	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	63	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	262	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.99	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	8.8	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	2.19	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A
Sulphate	0.5	16.5	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	576	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	38.6	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 33 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW12-10A (labelled 12a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605912

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	50	50900	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	363	ug/L	20141129.T13B
Magnesium	4	7650	ug/L	20141129.T13B
Manganese	1	13.5	ug/L	20141129.T13B
Molybdenum	1	3.8	ug/L	20141129.T13B
Nickel	1	5.6	ug/L	20141129.T13B
Potassium	1	1790	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	3230	ug/L	20141129.T13B
Strontium	10	201	ug/L	20141129.T13B
Zinc	1	1.9	ug/L	20141129.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	10	18400	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	1	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	30	359	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	260	mg/L	20141203.T94A
Carbonate	1	2.4	mg/L	20141203.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	4.15	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.017	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW12-10A (labelled 12a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605912

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	70	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	134	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	11.1	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	0.84	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	95	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 35 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW12-10A (labelled 12a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605912

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: OW8-08A (labelled 8a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605913

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.139	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	36	mg/L	20141202.R13.1E
Magnesium	0.004	2.86	mg/L	20141202.R13.1E
Total Hardness (as CaCO ₃)	0.1	102	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.0095	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	71	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	220	mg/L as CaCO ₃	20141203.T01A
M-Alkalinity (pH 4.5) (Dup)	2	222	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3) (Dup)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	8.08	pH	20141203.T02A
pH (Dup)	N/A	8.08	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.5	<0.5	mg/L	20141204.T05A
Chloride	0.5	1.4	mg/L	20141204.T05A
Fluoride	0.5	<0.5	mg/L	20141204.T05A
Nitrate (as N)	0.1	2.89	mg/L	20141204.T05A
Nitrite (as N)	0.1	<0.1	mg/L	20141204.T05A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 36 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW8-08A (labelled 8a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605913

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Sulphate	0.5	4.3	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	453	µS/cm	20141202.T12A
Conductivity (Dup)	1	452	µS/cm	20141202.T12A

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Aluminum (Dup)	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Antimony (Dup)	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Arsenic (Dup)	1	<1	ug/L	20141129.T13B
Barium	1	7.9	ug/L	20141129.T13B
Barium (Dup)	1	7.9	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Boron (Dup)	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Cadmium (Dup)	0.1	<0.1	ug/L	20141129.T13B
Calcium	50	36000	ug/L	20141129.T13B
Calcium (Dup)	50	35100	ug/L	20141129.T13B
Copper	1	1.3	ug/L	20141129.T13B
Copper (Dup)	1	1.4	ug/L	20141129.T13B
Iron	20	253	ug/L	20141129.T13B
Iron (Dup)	20	239	ug/L	20141129.T13B
Magnesium	4	2860	ug/L	20141129.T13B
Magnesium (Dup)	4	2860	ug/L	20141129.T13B
Manganese	1	<1	ug/L	20141129.T13B
Manganese (Dup)	1	<1	ug/L	20141129.T13B
Molybdenum	1	<1	ug/L	20141129.T13B
Molybdenum (Dup)	1	<1	ug/L	20141129.T13B
Nickel	1	4.3	ug/L	20141129.T13B
Nickel (Dup)	1	4	ug/L	20141129.T13B
Potassium	1	578	ug/L	20141129.T13B
Potassium (Dup)	1	573	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Selenium (Dup)	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Silver (Dup)	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	1190	ug/L	20141129.T13B
Sodium (Dup)	1	1180	ug/L	20141129.T13B
Strontium	1	96.9	ug/L	20141129.T13B
Strontium (Dup)	1	99.9	ug/L	20141129.T13B
Zinc	1	5.6	ug/L	20141129.T13B
Zinc (Dup)	1	5.7	ug/L	20141129.T13B

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 37 of 40



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW8-08A (labelled 8a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605913

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	0.1	65.9	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	3	239	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	217	mg/L	20141203.T94A
Bicarbonate (Dup)	1	219	mg/L	20141203.T94A
Carbonate	1	2.4	mg/L	20141203.T94A
Carbonate (Dup)	1	2.5	mg/L	20141203.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	2.2	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.0203	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	70	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	134	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

Sample Name: OW8-08A (labelled 8a)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605913

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	95	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229358

MDL Method detection limit or minimum reporting limit.

% Rec Surrogate compounds are added to the sample in some cases and the recovery is reported as a percent recovered.

QAQCID This is a unique reference to the quality control data set used to generate the reported value.

Data reported for organic analysis in soil samples are corrected for moisture content

Matrix If the matrix is a leachate, the sample was extracted according to regulation 558.

INT Interferences

TNTC Too numerous to count

ND Not detected

NDOGN No Data, Overgrown with Non-Target

NDOGT No Data, Overgrown with Target

NDOGHPC No Data, Overgrown HPC

Unless otherwise specified in the sample comments section of the report, the following statements apply to all samples which were analyzed using the CCME PHC method.

The method as performed complies with the Reference Method for the CWS PHC and is validated for use in this laboratory.

The Chromatogram descended to the baseline at or before nC50.

The nC6 and nC10 response factors were within 30% of the response factor for Toluene.

The nC10, nC16, and nC34 response factors were within 10% of their average.

The nC50 was at least 70% of the nC10-nC16-nC34 average.

The linearity of the calibration curve was within 15% based on response factor.

Any QC data is available on request.

Extraction and analysis hold times were met.

If F4G results are reported, they are not to be added to the C6 to C50 results.

BTEX and selected PAHs have been subtracted from the appropriate fractions only if the parameter names are F1-BTEX, F2-NAPTH, and F3-PAH, otherwise, these compounds have not been subtracted from their respective fractions.



TESTMARK Laboratories

Committed to Quality and Service

Analytical Report

Client:	Tecia White	Work Order Number:	229364
Company:	Whitewater Hydrogeology Ltd.	Date Order Received:	11/27/2014
Address:	80 Chamberlain Cres Collingwood, Ontario, L9Y 0C8	Regulation:	Information not provided
Phone:	(705) 888-7064	PO #:	
Fax:		Project #:	Strada Aggregates (Shelburne Pit South)
Email:	tecia@white-water.ca		

Analyses were performed on the following samples submitted with your order.

The results relate only to the items tested.

Sample Name	Lab #	Matrix	Type	Comments	Date Collected	Time Collected
OW13-14A (labelled 13)	605857	Ground Water	Raw		11/23/2014	



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229364

The following instrumentation and reference methods were used for your sample(s)

Method Name	Description	Reference
Ammonia Water	Determination of Ammonia/Ammonium in Water Instrument group: Internally Subcontracted	Based on APHA-4500NH3 H
Hardness/ICP	Determination of Hardness in Water by ICP Instrument group: Perkin Elmer ICPMS	Based on SW846-6020
OP Water	Determination of Ortho-Phosphate in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
PHC F1 Water	Determination of PHC F1 in Water - Tier 1 CCME Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
PHC F2-F4 Water	Determination of PHC (F2-F4) in Water - Tier 1 CCME by GC/FID Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
T01-Alkalinity	Determination of Alkalinity in Water Instrument group: Accumet ISE Meter	Modified from APHA 2320
T02-pH Water	Determination of pH in Water Instrument group: Accumet ISE Meter	Modified from APHA-4500-H+B
T05-Anions Water	Determination of Anions by Ion Chromatography Instrument group: Dionex IC	Modified from SW846-9056
T12-CONDWATER	Determination of conductivity in Water Instrument group: Conductivity Meter	Modified from APHA-2510
T13-ICPMS Water	Determination of Metals in Water by ICPMS Instrument group: PE Elan ICP/MS-1	Modified from SW846-6020
T21-Turbidity	Determination of Turbidity by Nephelometry Instrument group: Nephelometer	Modified from APHA-2130 B
T26-Colour	Determination of Colour by Spectrophotometry Instrument group: Shimadzu UV/Vis	Modified from APHA-2120C
T27-TDS	Determination of Total Dissolved Solids in water by gravimetry Instrument group: Denver Balance	Modified from APHA-2540
T94-Carbonate	Determination of Carbonate and Bi-Carbonate Instrument group: Calculation	Based on APHA-2330
TOC Water	Determination of Total Organic Carbon in Water Instrument group: Internally Subcontracted	Based on APHA-5310C
TP Water	Determination of Total Phosphorus in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
VOC Water	Determination of Volatile Organic Compounds in Water by P&T/GC/MS Instrument group: Internally Subcontracted	Based on EPA 624



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229364

This report has been approved by:

Mark Charbonneau, Ph.D.
Lab Director

Mark Charbonneau, Ph.D.
Metals Section Head



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229364

Sample Data:

Sample Name: OW13-14A (labelled 13)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605857

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	<0.01	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	60.1	mg/L	20141202.R13.1E
Magnesium	0.004	14.4	mg/L	20141202.R13.1E
Total Hardness (as CaCO ₃)	0.1	209	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.025	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	70	<70	ug/L	20141201.R59f2w12
F3 (C16-C34)	70	415	ug/L	20141201.R59f2w12
F4 (C34-C50)	70	<70	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	90	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	286	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.56	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.05	<0.05	mg/L	20141204.T05A
Chloride	0.05	21.5	mg/L	20141204.T05A
Fluoride	0.05	0.1	mg/L	20141204.T05A
Nitrate (as N)	0.01	4.75	mg/L	20141204.T05A
Nitrite (as N)	0.01	<0.01	mg/L	20141204.T05A
Sulphate	0.05	22.3	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	662	µS/cm	20141202.T12A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229364

Sample Name: OW13-14A (labelled 13)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605857

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141129.T13B
Antimony	0.5	<0.5	ug/L	20141129.T13B
Arsenic	1	<1	ug/L	20141129.T13B
Barium	1	104	ug/L	20141129.T13B
Boron	2	<2	ug/L	20141129.T13B
Cadmium	0.1	<0.1	ug/L	20141129.T13B
Calcium	500	60100	ug/L	20141129.T13B
Copper	1	<1	ug/L	20141129.T13B
Iron	20	333	ug/L	20141129.T13B
Magnesium	4	14400	ug/L	20141129.T13B
Manganese	1	15.3	ug/L	20141129.T13B
Molybdenum	1	1.7	ug/L	20141129.T13B
Nickel	1	6.2	ug/L	20141129.T13B
Potassium	1	1970	ug/L	20141129.T13B
Selenium	1	<1	ug/L	20141129.T13B
Silver	0.1	<0.1	ug/L	20141129.T13B
Sodium	1	3300	ug/L	20141129.T13B
Strontium	10	173	ug/L	20141129.T13B
Zinc	1	2	ug/L	20141129.T13B
T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	10	12800	NTU	20141201.T21A
T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141202.T26A
T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	20	414	mg/L	20141203.T27B
T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	285	mg/L	20141203.T94A
Carbonate	1	<1	mg/L	20141203.T94A
TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	2.1	mg/L	20141201.R55.2A
TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	<0.002	mg/L	20141203.R23.2A
VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229364

Sample Name: OW13-14A (labelled 13)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605857

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	100	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	125	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	16.4	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	0.29	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	97	% Rec	20141201.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 6 of 7



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229364

Sample Name: OW13-14A (labelled 13)

Date: 11/23/2014

Matrix: Ground Water

Lab #: 605857

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

MDL Method detection limit or minimum reporting limit.

% Rec Surrogate compounds are added to the sample in some cases and the recovery is reported as a percent recovered.

QAQCID This is a unique reference to the quality control data set used to generate the reported value.

Data reported for organic analysis in soil samples are corrected for moisture content

Matrix If the matrix is a leachate, the sample was extracted according to regulation 558.

INT Interferences

TNTC Too numerous to count

ND Not detected

NDOGN No Data, Overgrown with Non-Target

NDOGT No Data, Overgrown with Target

NDOGHPC No Data, Overgrown HPC

Unless otherwise specified in the sample comments section of the report, the following statements apply to all samples which were analyzed using the CCME PHC method.

The method as performed complies with the Reference Method for the CWS PHC and is validated for use in this laboratory.

The Chromatogram descended to the baseline at or before nC50.

The nC6 and nC10 response factors were within 30% of the response factor for Toluene.

The nC10, nC16, and nC34 response factors were within 10% of their average.

The nC50 was at least 70% of the nC10-nC16-nC34 average.

The linearity of the calibration curve was within 15% based on response factor.

Any QC data is available on request.

Extraction and analysis hold times were met.

If F4G results are reported, they are not to be added to the C6 to C50 results.

BTEX and selected PAHs have been subtracted from the appropriate fractions only if the parameter names are F1-BTEX, F2-NAPTH, and F3-PAH, otherwise, these compounds have not been subtracted from their respective fractions.



TESTMARK Laboratories

Committed to Quality and Service

Analytical Report

Client:	Tecia White	Work Order Number:	229366
Company:	Whitewater Hydrogeology Ltd.	Date Order Received:	11/27/2014
Address:	80 Chamberlain Cres Collingwood, Ontario, L9Y 0C8	Regulation:	Information not provided
Phone:	(705) 888-7064	PO #:	
Fax:		Project #:	Strada Aggregates (Shelburne Pit South)
Email:	tecia@white-water.ca		

Analyses were performed on the following samples submitted with your order.

The results relate only to the items tested.

Sample Name	Lab #	Matrix	Type	Comments	Date Collected	Time Collected
South Pond	605865	Surface Water	Grab		11/24/2014	
North Pond (labelled wash pond)	605866	Surface Water	Grab		11/24/2014	



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

The following instrumentation and reference methods were used for your sample(s)

Method Name	Description	Reference
Ammonia Water	Determination of Ammonia/Ammonium in Water Instrument group: Internally Subcontracted	Based on APHA-4500NH3 H
Hardness/ICP	Determination of Hardness in Water by ICP Instrument group: Perkin Elmer ICPMS	Based on SW846-6020
OP Water	Determination of Ortho-Phosphate in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
PHC F1 Water	Determination of PHC F1 in Water - Tier 1 CCME Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
PHC F2-F4 Water	Determination of PHC (F2-F4) in Water - Tier 1 CCME by GC/FID Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
T01-Alkalinity	Determination of Alkalinity in Water Instrument group: Accumet ISE Meter	Modified from APHA 2320
T02-pH Water	Determination of pH in Water Instrument group: Accumet ISE Meter	Modified from APHA-4500-H+B
T05-Anions Water	Determination of Anions by Ion Chromatography Instrument group: Dionex IC	Modified from SW846-9056
T12-CONDWATER	Determination of conductivity in Water Instrument group: Conductivity Meter	Modified from APHA-2510
T13-ICPMS Tot. Water	Determination of Total Metals in Water by ICP/MS with Digestion Instrument group: PE Elan ICP/MS-1	Modified from SW846-6020
T21-Turbidity	Determination of Turbidity by Nephelometry Instrument group: Nephelometer	Modified from APHA-2130 B
T26-Colour	Determination of Colour by Spectrophotometry Instrument group: Shimadzu UV/Vis	Modified from APHA-2120C
T27-TDS	Determination of Total Dissolved Solids in water by gravimetry Instrument group: Denver Balance	Modified from APHA-2540
T94-Carbonate	Determination of Carbonate and Bi-Carbonate Instrument group: Calculation	Based on APHA-2330
TOC Water	Determination of Total Organic Carbon in Water Instrument group: Internally Subcontracted	Based on APHA-5310C
TP Water	Determination of Total Phosphorus in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
VOC Water	Determination of Volatile Organic Compounds in Water by P&T/GC/MS Instrument group: Internally Subcontracted	Based on EPA 624



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

This report has been approved by:

Mark Charbonneau, Ph.D.
Lab Director

Mark Charbonneau, Ph.D.
Metals Section Head



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

Sample Data:

Sample Name: South Pond

Date: 11/24/2014

Matrix: Surface Water

Lab #: 605865

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.012	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	18.7	mg/L	20141202.R13.1E
Magnesium	0.004	1.33	mg/L	20141202.R13.1E
Total Hardness (as CaCO ₃)	0.1	52.2	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	<0.005	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141201.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141201.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	103	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	75.3	mg/L as CaCO ₃	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO ₃	20141203.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.45	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.05	<0.05	mg/L	20141204.T05A
Bromide (Dup)	0.05	<0.05	mg/L	20141204.T05A
Chloride	0.05	0.89	mg/L	20141204.T05A
Chloride (Dup)	0.05	0.89	mg/L	20141204.T05A
Fluoride	0.05	<0.05	mg/L	20141204.T05A
Fluoride (Dup)	0.05	<0.05	mg/L	20141204.T05A
Nitrate (as N)	0.01	0.079	mg/L	20141204.T05A
Nitrate (as N) (Dup)	0.01	0.086	mg/L	20141204.T05A
Nitrite (as N)	0.01	<0.01	mg/L	20141204.T05A
Nitrite (as N) (Dup)	0.01	<0.01	mg/L	20141204.T05A
Sulphate	0.05	1.22	mg/L	20141204.T05A
Sulphate (Dup)	0.05	1.19	mg/L	20141204.T05A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/4/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 4 of 11



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

Sample Name: South Pond

Date: 11/24/2014

Matrix: Surface Water

Lab #: 605865

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	162	µS/cm	20141202.T12A

T13-ICPMS Tot. Water				
Parameter	MDL	Result	Units	QAQCID
Total Aluminum	1	12.2	ug/L	20141129.T13A
Total Antimony	0.5	<0.5	ug/L	20141129.T13A
Total Arsenic	1	<1	ug/L	20141129.T13A
Total Barium	1	8.6	ug/L	20141129.T13A
Total Boron	2	<2	ug/L	20141129.T13A
Total Cadmium	0.1	<0.1	ug/L	20141129.T13A
Total Calcium	50	18700	ug/L	20141129.T13A
Total Copper	1	2	ug/L	20141129.T13A
Total Iron	20	308	ug/L	20141129.T13A
Total Magnesium	4	1330	ug/L	20141129.T13A
Total Manganese	1	75.8	ug/L	20141129.T13A
Total Molybdenum	1	<1	ug/L	20141129.T13A
Total Nickel	1	2	ug/L	20141129.T13A
Total Potassium	100	1900	ug/L	20141129.T13A
Total Selenium	1	<1	ug/L	20141129.T13A
Total Silver	0.1	<0.1	ug/L	20141129.T13A
Total Sodium	100	240	ug/L	20141129.T13A
Total Strontium	1	42.1	ug/L	20141129.T13A
Total Zinc	1	3	ug/L	20141129.T13A

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	0.1	7.39	NTU	20141201.T21A
Turbidity (Dup)	0.1	7.09	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	10	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	3	88	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	75.1	mg/L	20141203.T94A
Carbonate	1	<1	mg/L	20141203.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	6.04	mg/L	20141201.R55.2A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

Sample Name: South Pond

Date: 11/24/2014

Matrix: Surface Water

Lab #: 605865

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.0607	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	96	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	126	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

Sample Name: South Pond

Date: 11/24/2014

Matrix: Surface Water

Lab #: 605865

VOC Water				
Parameter	MDL	Result	Units	QAQCID
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	<0.2	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	<0.2	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	96	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw

Sample Name: North Pond (labelled wash pon

Date: 11/24/2014

Matrix: Surface Water

Lab #: 605866

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.013	mg/L	20141201.R42.1A

Hardness/ICP				
Parameter	MDL	Result	Units	QAQCID
Calcium	0.05	31	mg/L	20141202.R13.1E
Magnesium	0.004	4.45	mg/L	20141202.R13.1E
Total Hardness (as CaCO3)	0.1	95.7	mg/L	20141202.R13.1E

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.0061	mg/L	20141128.R23.1B

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141201.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141201.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141201.R59f2w12
F2 (C10-C16)	30	<30	ug/L	20141201.R59f2w12
F3 (C16-C34)	30	<30	ug/L	20141201.R59f2w12
F4 (C34-C50)	30	<30	ug/L	20141201.R59f2w12
o-Terphenyl (Surr.)	N/A	105	% Rec	20141201.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	142	mg/L as CaCO3	20141203.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO3	20141203.T01A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

Sample Name: North Pond (labelled wash pon Date: 11/24/2014 Matrix: Surface Water Lab #: 605866

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.43	pH	20141203.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.05	<0.05	mg/L	20141204.T05A
Chloride	0.05	4	mg/L	20141204.T05A
Fluoride	0.05	<0.05	mg/L	20141204.T05A
Nitrate (as N)	0.01	<0.01	mg/L	20141204.T05A
Nitrite (as N)	0.01	<0.01	mg/L	20141204.T05A
Sulphate	0.05	9.14	mg/L	20141204.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	308	µS/cm	20141202.T12A

T13-ICPMS Tot. Water				
Parameter	MDL	Result	Units	QAQCID
Total Aluminum	1	563	ug/L	20141129.T13A
Total Aluminum (Dup)	1	658	ug/L	20141129.T13A
Total Antimony	0.5	<0.5	ug/L	20141129.T13A
Total Antimony (Dup)	0.5	<0.5	ug/L	20141129.T13A
Total Arsenic	1	<1	ug/L	20141129.T13A
Total Arsenic (Dup)	1	<1	ug/L	20141129.T13A
Total Barium	1	26.6	ug/L	20141129.T13A
Total Barium (Dup)	1	27.6	ug/L	20141129.T13A
Total Boron	2	<2	ug/L	20141129.T13A
Total Boron (Dup)	2	<2	ug/L	20141129.T13A
Total Cadmium	0.1	0.14	ug/L	20141129.T13A
Total Cadmium (Dup)	0.1	0.11	ug/L	20141129.T13A
Total Calcium	50	31000	ug/L	20141129.T13A
Total Calcium (Dup)	50	30400	ug/L	20141129.T13A
Total Copper	1	7.1	ug/L	20141129.T13A
Total Copper (Dup)	1	6.2	ug/L	20141129.T13A
Total Iron	20	1380	ug/L	20141129.T13A
Total Iron (Dup)	20	1370	ug/L	20141129.T13A
Total Magnesium	4	4450	ug/L	20141129.T13A
Total Magnesium (Dup)	4	4580	ug/L	20141129.T13A
Total Manganese	1	223	ug/L	20141129.T13A
Total Manganese (Dup)	1	219	ug/L	20141129.T13A
Total Molybdenum	1	<1	ug/L	20141129.T13A
Total Molybdenum (Dup)	1	<1	ug/L	20141129.T13A
Total Nickel	1	4.4	ug/L	20141129.T13A
Total Nickel (Dup)	1	4.1	ug/L	20141129.T13A
Total Potassium	100	3210	ug/L	20141129.T13A
Total Potassium (Dup)	100	3220	ug/L	20141129.T13A
Total Selenium	1	<1	ug/L	20141129.T13A
Total Selenium (Dup)	1	<1	ug/L	20141129.T13A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

Sample Name: North Pond (labelled wash pon Date: 11/24/2014 Matrix: Surface Water Lab #: 605866

T13-ICPMS Tot. Water				
Parameter	MDL	Result	Units	QAQCID
Total Silver	0.1	<0.1	ug/L	20141129.T13A
Total Silver (Dup)	0.1	<0.1	ug/L	20141129.T13A
Total Sodium	100	790	ug/L	20141129.T13A
Total Sodium (Dup)	100	800	ug/L	20141129.T13A
Total Strontium	1	68.2	ug/L	20141129.T13A
Total Strontium (Dup)	1	68	ug/L	20141129.T13A
Total Zinc	1	9.9	ug/L	20141129.T13A
Total Zinc (Dup)	1	6.3	ug/L	20141129.T13A

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	0.1	9.01	NTU	20141201.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	18	TCU	20141202.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	3	170	mg/L	20141203.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	142	mg/L	20141203.T94A
Carbonate	1	<1	mg/L	20141203.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	13.3	mg/L	20141201.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.103	mg/L	20141203.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20141201.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	99	% Rec	20141201.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

Sample Name: North Pond (labelled wash pon Date: 11/24/2014 Matrix: Surface Water Lab #: 605866

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20141201.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	129	% Rec	20141201.R14vw
Acetone	30	<30	ug/L	20141201.R14vw
Benzene	0.2	<0.2	ug/L	20141201.R14vw
Bromobenzene	0.2	<0.2	ug/L	20141201.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20141201.R14vw
Bromoform	0.2	<0.2	ug/L	20141201.R14vw
Bromomethane	0.2	<0.2	ug/L	20141201.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20141201.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20141201.R14vw
Chloroethane	0.2	<0.2	ug/L	20141201.R14vw
Chloroform	0.2	<0.2	ug/L	20141201.R14vw
Chloromethane	0.2	<0.2	ug/L	20141201.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20141201.R14vw
Dibromomethane	0.2	<0.2	ug/L	20141201.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Dichloromethane	1	<1	ug/L	20141201.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20141201.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20141201.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20141201.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20141201.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141201.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141201.R14vw
n-Hexane	0.5	<0.5	ug/L	20141201.R14vw
o-Xylene	0.2	<0.2	ug/L	20141201.R14vw
Styrene	0.2	0.4	ug/L	20141201.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Toluene	0.2	0.33	ug/L	20141201.R14vw
Toluene-d8 (Surr.)	N/A	96	% Rec	20141201.R14vw
Total Xylenes	0.4	<0.4	ug/L	20141201.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141201.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20141201.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20141201.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20141201.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229366

MDL Method detection limit or minimum reporting limit.
% Rec Surrogate compounds are added to the sample in some cases and the recovery is reported as a percent recovered.
QAQCID This is a unique reference to the quality control data set used to generate the reported value.
Data reported for organic analysis in soil samples are corrected for moisture content
Matrix If the matrix is a leachate, the sample was extracted according to regulation 558.
INT Interferences
TNTC Too numerous to count
ND Not detected
NDOGN No Data, Overgrown with Non-Target
NDOGT No Data, Overgrown with Target
NDOGHPC No Data, Overgrown HPC

Unless otherwise specified in the sample comments section of the report, the following statements apply to all samples which were analyzed using the CCME PHC method.

The method as performed complies with the Reference Method for the CWS PHC and is validated for use in this laboratory.
The Chromatogram descended to the baseline at or before nC50.
The nC6 and nC10 response factors were within 30% of the response factor for Toluene.
The nC10, nC16, and nC34 response factors were within 10% of their average.
The nC50 was at least 70% of the nC10-nC16-nC34 average.
The linearity of the calibration curve was within 15% based on response factor.
Any QC data is available on request.
Extraction and analysis hold times were met.
If F4G results are reported, they are not to be added to the C6 to C50 results.
BTEX and selected PAHs have been subtracted from the appropriate fractions only if the parameter names are F1-BTEX, F2-NAPTH, and F3-PAH, otherwise, these compounds have not been subtracted from their respective fractions.



TESTMARK Laboratories

Committed to Quality and Service

Analytical Report

Client:	Tecia White	Work Order Number:	229683
Company:	Whitewater Hydrogeology Ltd.	Date Order Received:	12/2/2014
Address:	80 Chamberlain Cres Collingwood, Ontario, L9Y 0C8	Regulation:	Information not provided
Phone:	(705) 888-7064	PO #:	
Fax:		Project #:	Strada Aggregates (Shelburne Pit North)
Email:	tecia@white-water.ca		

Analyses were performed on the following samples submitted with your order.

The results relate only to the items tested.

Sample Name	Lab #	Matrix	Type	Comments	Date Collected	Time Collected
2A	606641	Ground Water	None		11/26/2014	
2B	606642	Ground Water	None		11/26/2014	
2C	606643	Ground Water	None		11/26/2014	



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

The following instrumentation and reference methods were used for your sample(s)

Method Name	Description	Reference
Ammonia Water	Determination of Ammonia/Ammonium in Water Instrument group: Internally Subcontracted	Based on APHA-4500NH3 H
OP Water	Determination of Ortho-Phosphate in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
PHC F1 Water	Determination of PHC F1 in Water - Tier 1 CCME Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
PHC F2-F4 Water	Determination of PHC (F2-F4) in Water - Tier 1 CCME by GC/FID Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
T01-Alkalinity	Determination of Alkalinity in Water Instrument group: Accumet ISE Meter	Modified from APHA 2320
T02-pH Water	Determination of pH in Water Instrument group: Accumet ISE Meter	Modified from APHA-4500-H+B
T05-Anions Water	Determination of Anions by Ion Chromatography Instrument group: Dionex IC	Modified from SW846-9056
T12-CONDWATER	Determination of conductivity in Water Instrument group: Conductivity Meter	Modified from APHA-2510
T13-Hardness	Determination of Total Hardness Instrument group: Calculation	Modified from APHA-2340B
T13-ICPMS Water	Determination of Metals in Water by ICPMS Instrument group: PE Elan ICP/MS-1	Modified from SW846-6020
T21-Turbidity	Determination of Turbidity by Nephelometry Instrument group: Nephelometer	Modified from APHA-2130 B
T26-Colour	Determination of Colour by Spectrophotometry Instrument group: Shimadzu UV/Vis	Modified from APHA-2120C
T27-TDS	Determination of Total Dissolved Solids in water by gravimetry Instrument group: Denver Balance	Modified from APHA-2540
T94-Carbonate	Determination of Carbonate and Bi-Carbonate Instrument group: Calculation	Based on APHA-2330
TOC Water	Determination of Total Organic Carbon in Water Instrument group: Internally Subcontracted	Based on APHA-5310C
TP Water	Determination of Total Phosphorus in Water Instrument group: Internally Subcontracted	Based on APHA-4500P
VOC Water	Determination of Volatile Organic Compounds in Water by P&T/GC/MS Instrument group: Internally Subcontracted	Based on EPA 624



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

This report has been approved by:

Mark Charbonneau, Ph.D.
Lab Director



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Data:

Sample Name: 2A

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606641

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	<0.01	mg/L	20141204.R42.1A

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.012	mg/L	20141204.R23.1A

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141204.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141204.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141204.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141204.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141204.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141204.R59f2w12
o-Terphenyl (Surr.)	N/A	79	% Rec	20141204.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	265	mg/L as CaCO3	20141205.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO3	20141205.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	7.99	pH	20141205.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.1	<0.1	mg/L	20141208.T05A
Chloride	0.1	10.1	mg/L	20141208.T05A
Fluoride	0.1	<0.1	mg/L	20141208.T05A
Nitrate (as N)	0.03	5.29	mg/L	20141208.T05A
Nitrite (as N)	0.03	<0.03	mg/L	20141208.T05A
Sulphate	0.1	14.3	mg/L	20141208.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	604	µS/cm	20141205.T12B

T13-Hardness				
Parameter	MDL	Result	Units	QAQCID
Total Hardness (as CaCO3)	0.1	232	mg/L	20141209.T13C

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	45.3	ug/L	20141209.T13B
Antimony	0.5	<0.5	ug/L	20141209.T13B

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/9/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 4 of 12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2A

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606641

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Arsenic	1	<1	ug/L	20141209.T13B
Barium	1	58.1	ug/L	20141209.T13B
Boron	2	<2	ug/L	20141209.T13B
Cadmium	0.1	<0.1	ug/L	20141209.T13B
Calcium	500	72300	ug/L	20141209.T13B
Copper	1	1.2	ug/L	20141209.T13B
Iron	200	530	ug/L	20141209.T13B
Magnesium	4	12600	ug/L	20141209.T13B
Manganese	1	2.1	ug/L	20141209.T13B
Molybdenum	1	<1	ug/L	20141209.T13B
Nickel	1	6.5	ug/L	20141209.T13B
Potassium	1	1660	ug/L	20141209.T13B
Selenium	1	<1	ug/L	20141209.T13B
Silver	0.1	<0.1	ug/L	20141209.T13B
Sodium	1	3040	ug/L	20141209.T13B
Strontium	10	128	ug/L	20141209.T13B
Zinc	1	11	ug/L	20141209.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	1250	NTU	20141204.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141208.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	20	390	mg/L	20141208.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	263	mg/L	20141205.T94A
Carbonate	1	2.4	mg/L	20141205.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	2.4	mg/L	20141204.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.145	mg/L	20141204.R23.2A

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141203.R14vw4

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/9/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 5 of 12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2A

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606641

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1-Dichloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dibromoethane	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dichloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dichloroethane-d4 (Surr)	N/A	105	% Rec	20141203.R14vw4
1,2-Dichloropropane	0.2	<0.2	ug/L	20141203.R14vw4
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1,3-Dichloropropane	0.2	<0.2	ug/L	20141203.R14vw4
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1-Bromo-4-fluorobenzene (Surr.)	N/A	112	% Rec	20141203.R14vw4
Acetone	30	<30	ug/L	20141203.R14vw4
Benzene	0.2	<0.2	ug/L	20141203.R14vw4
Bromobenzene	0.2	<0.2	ug/L	20141203.R14vw4
Bromochloromethane	0.2	<0.2	ug/L	20141203.R14vw4
Bromodichloromethane	0.2	<0.2	ug/L	20141203.R14vw4
Bromoform	0.2	<0.2	ug/L	20141203.R14vw4
Bromomethane	0.2	<0.2	ug/L	20141203.R14vw4
Carbon tetrachloride	0.2	<0.2	ug/L	20141203.R14vw4
Chlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
Chloroethane	0.2	<0.2	ug/L	20141203.R14vw4
Chloroform	0.2	<0.2	ug/L	20141203.R14vw4
Chloromethane	0.2	<0.2	ug/L	20141203.R14vw4
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141203.R14vw4
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141203.R14vw4
Dibromochloromethane	0.2	<0.2	ug/L	20141203.R14vw4
Dibromomethane	0.2	<0.2	ug/L	20141203.R14vw4
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141203.R14vw4
Dichloromethane	1	<1	ug/L	20141203.R14vw4
Ethylbenzene	0.2	<0.2	ug/L	20141203.R14vw4
Hexachlorobutadiene	0.2	<0.2	ug/L	20141203.R14vw4
m+p-Xylene	0.3	<0.3	ug/L	20141203.R14vw4
Methyl ethyl ketone	0.5	<0.5	ug/L	20141203.R14vw4
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141203.R14vw4
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141203.R14vw4
n-Hexane	0.5	<0.5	ug/L	20141203.R14vw4
o-Xylene	0.2	<0.2	ug/L	20141203.R14vw4
Styrene	0.2	<0.2	ug/L	20141203.R14vw4
Tetrachloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
Toluene	0.2	<0.2	ug/L	20141203.R14vw4
Toluene-d8 (Surr.)	N/A	98	% Rec	20141203.R14vw4
Total Xylenes	0.4	<0.4	ug/L	20141203.R14vw4
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/9/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 6 of 12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2A

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606641

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141203.R14vw4
Trichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
Trichlorofluoromethane	0.2	<0.2	ug/L	20141203.R14vw4
Vinyl chloride	0.2	<0.2	ug/L	20141203.R14vw4

Sample Name: 2B

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606642

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	0.021	mg/L	20141204.R42.1A

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	0.01	mg/L	20141204.R23.1A

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20141204.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20141204.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20141204.R59f2w12
F2 (C10-C16)	40	<40	ug/L	20141204.R59f2w12
F3 (C16-C34)	40	<40	ug/L	20141204.R59f2w12
F4 (C34-C50)	40	<40	ug/L	20141204.R59f2w12
o-Terphenyl (Surr.)	N/A	92	% Rec	20141204.R59f2w12

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	169	mg/L as CaCO3	20141205.T01A
P-Alkalinity (pH 8.3)	2	<2	mg/L as CaCO3	20141205.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	8.29	pH	20141205.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.1	<0.1	mg/L	20141208.T05A
Chloride	0.1	4.02	mg/L	20141208.T05A
Fluoride	0.1	1.14	mg/L	20141208.T05A
Nitrate (as N)	0.03	0.063	mg/L	20141208.T05A
Nitrite (as N)	0.03	<0.03	mg/L	20141208.T05A
Sulphate	0.1	13.5	mg/L	20141208.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	368	µS/cm	20141205.T12B



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2B

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606642

T13-Hardness				
Parameter	MDL	Result	Units	QAQCID
Total Hardness (as CaCO ₃)	0.1	87.2	mg/L	20141209.T13C

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	15.5	ug/L	20141209.T13B
Antimony	0.5	<0.5	ug/L	20141209.T13B
Arsenic	1	3.5	ug/L	20141209.T13B
Barium	1	10.5	ug/L	20141209.T13B
Boron	2	290	ug/L	20141209.T13B
Cadmium	0.1	<0.1	ug/L	20141209.T13B
Calcium	50	16600	ug/L	20141209.T13B
Copper	1	<1	ug/L	20141209.T13B
Iron	20	105	ug/L	20141209.T13B
Magnesium	4	11100	ug/L	20141209.T13B
Manganese	1	26.1	ug/L	20141209.T13B
Molybdenum	1	16	ug/L	20141209.T13B
Nickel	1	1.7	ug/L	20141209.T13B
Potassium	1	3030	ug/L	20141209.T13B
Selenium	1	<1	ug/L	20141209.T13B
Silver	0.1	<0.1	ug/L	20141209.T13B
Sodium	1	22900	ug/L	20141209.T13B
Strontium	10	350	ug/L	20141209.T13B
Zinc	1	2.9	ug/L	20141209.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	1	371	NTU	20141204.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	1	TCU	20141208.T26A

T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	6	180	mg/L	20141208.T27B

T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	166	mg/L	20141205.T94A
Carbonate	1	3	mg/L	20141205.T94A

TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	1.4	mg/L	20141204.R55.2A

TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	0.522	mg/L	20141204.R23.2A



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2B

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606642

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1-Dichloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,1-Dichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dibromoethane	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dichloroethane	0.2	<0.2	ug/L	20141203.R14vw4
1,2-Dichloroethane-d4 (Surr)	N/A	105	% Rec	20141203.R14vw4
1,2-Dichloropropane	0.2	<0.2	ug/L	20141203.R14vw4
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1,3-Dichloropropane	0.2	<0.2	ug/L	20141203.R14vw4
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
1-Bromo-4-fluorobenzene (Surr.)	N/A	107	% Rec	20141203.R14vw4
Acetone	30	<30	ug/L	20141203.R14vw4
Benzene	0.2	<0.2	ug/L	20141203.R14vw4
Bromobenzene	0.2	<0.2	ug/L	20141203.R14vw4
Bromochloromethane	0.2	<0.2	ug/L	20141203.R14vw4
Bromodichloromethane	0.2	<0.2	ug/L	20141203.R14vw4
Bromoform	0.2	<0.2	ug/L	20141203.R14vw4
Bromomethane	0.2	<0.2	ug/L	20141203.R14vw4
Carbon tetrachloride	0.2	<0.2	ug/L	20141203.R14vw4
Chlorobenzene	0.2	<0.2	ug/L	20141203.R14vw4
Chloroethane	0.2	<0.2	ug/L	20141203.R14vw4
Chloroform	0.2	<0.2	ug/L	20141203.R14vw4
Chloromethane	0.2	<0.2	ug/L	20141203.R14vw4
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20141203.R14vw4
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20141203.R14vw4
Dibromochloromethane	0.2	<0.2	ug/L	20141203.R14vw4
Dibromomethane	0.2	<0.2	ug/L	20141203.R14vw4
Dichlorodifluoromethane	0.2	<0.2	ug/L	20141203.R14vw4
Dichloromethane	1	<1	ug/L	20141203.R14vw4
Ethylbenzene	0.2	<0.2	ug/L	20141203.R14vw4
Hexachlorobutadiene	0.2	<0.2	ug/L	20141203.R14vw4
m+p-Xylene	0.3	<0.3	ug/L	20141203.R14vw4
Methyl ethyl ketone	0.5	<0.5	ug/L	20141203.R14vw4
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20141203.R14vw4
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20141203.R14vw4
n-Hexane	0.5	<0.5	ug/L	20141203.R14vw4
o-Xylene	0.2	<0.2	ug/L	20141203.R14vw4
Styrene	0.2	<0.2	ug/L	20141203.R14vw4
Tetrachloroethylene	0.2	<0.2	ug/L	20141203.R14vw4

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/9/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 9 of 12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2B

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606642

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Toluene	0.2	<0.2	ug/L	20141203.R14vw4
Toluene-d8 (Surr.)	N/A	97	% Rec	20141203.R14vw4
Total Xylenes	0.4	<0.4	ug/L	20141203.R14vw4
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20141203.R14vw4
Trichloroethylene	0.2	<0.2	ug/L	20141203.R14vw4
Trichlorofluoromethane	0.2	<0.2	ug/L	20141203.R14vw4
Vinyl chloride	0.2	<0.2	ug/L	20141203.R14vw4

Sample Name: 2C

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606643

Ammonia Water				
Parameter	MDL	Result	Units	QAQCID
Ammonia (as N)	0.01	<0.01	mg/L	20141204.R42.1A
Ammonia (as N) (Dup)	0.01	<0.01	mg/L	20141204.R42.1A

OP Water				
Parameter	MDL	Result	Units	QAQCID
Orthophosphate (as P)	0.005	<0.005	mg/L	20141204.R23.1A
Orthophosphate (as P) (Dup)	0.005	<0.005	mg/L	20141204.R23.1A

T01-Alkalinity				
Parameter	MDL	Result	Units	QAQCID
M-Alkalinity (pH 4.5)	2	87.1	mg/L as CaCO3	20141205.T01A
P-Alkalinity (pH 8.3)	2	11.5	mg/L as CaCO3	20141205.T01A

T02-pH Water				
Parameter	MDL	Result	Units	QAQCID
pH	N/A	9.35	pH	20141205.T02A

T05-Anions Water				
Parameter	MDL	Result	Units	QAQCID
Bromide	0.1	<0.1	mg/L	20141208.T05A
Chloride	0.1	1.16	mg/L	20141208.T05A
Fluoride	0.1	0.38	mg/L	20141208.T05A
Nitrate (as N)	0.03	<0.03	mg/L	20141208.T05A
Nitrite (as N)	0.03	<0.03	mg/L	20141208.T05A
Sulphate	0.1	1.36	mg/L	20141208.T05A

T12-CONDWATER				
Parameter	MDL	Result	Units	QAQCID
Conductivity	1	183	µS/cm	20141205.T12B

T13-Hardness				
Parameter	MDL	Result	Units	QAQCID
Total Hardness (as CaCO3)	0.1	30.3	mg/L	20141209.T13C

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum	1	<1	ug/L	20141209.T13B

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/9/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 10 of 12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2C

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606643

T13-ICPMS Water				
Parameter	MDL	Result	Units	QAQCID
Aluminum (Dup)	1	<1	ug/L	20141209.T13B
Antimony	0.5	<0.5	ug/L	20141209.T13B
Antimony (Dup)	0.5	<0.5	ug/L	20141209.T13B
Arsenic	1	<1	ug/L	20141209.T13B
Arsenic (Dup)	1	<1	ug/L	20141209.T13B
Barium	1	<1	ug/L	20141209.T13B
Barium (Dup)	1	<1	ug/L	20141209.T13B
Boron	2	118	ug/L	20141209.T13B
Boron (Dup)	2	129	ug/L	20141209.T13B
Cadmium	0.1	<0.1	ug/L	20141209.T13B
Cadmium (Dup)	0.1	<0.1	ug/L	20141209.T13B
Calcium	50	2750	ug/L	20141209.T13B
Calcium (Dup)	50	2810	ug/L	20141209.T13B
Copper	1	2.5	ug/L	20141209.T13B
Copper (Dup)	1	<1	ug/L	20141209.T13B
Iron	20	57	ug/L	20141209.T13B
Iron (Dup)	20	62	ug/L	20141209.T13B
Magnesium	4	5700	ug/L	20141209.T13B
Magnesium (Dup)	4	5740	ug/L	20141209.T13B
Manganese	1	5.9	ug/L	20141209.T13B
Manganese (Dup)	1	6	ug/L	20141209.T13B
Molybdenum	1	2.4	ug/L	20141209.T13B
Molybdenum (Dup)	1	2.3	ug/L	20141209.T13B
Nickel	1	<1	ug/L	20141209.T13B
Nickel (Dup)	1	<1	ug/L	20141209.T13B
Potassium	1	643	ug/L	20141209.T13B
Potassium (Dup)	1	643	ug/L	20141209.T13B
Selenium	1	<1	ug/L	20141209.T13B
Selenium (Dup)	1	<1	ug/L	20141209.T13B
Silver	0.1	<0.1	ug/L	20141209.T13B
Silver (Dup)	0.1	<0.1	ug/L	20141209.T13B
Sodium	1	16400	ug/L	20141209.T13B
Sodium (Dup)	1	16000	ug/L	20141209.T13B
Strontium	1	17.2	ug/L	20141209.T13B
Strontium (Dup)	1	17.2	ug/L	20141209.T13B
Zinc	1	5	ug/L	20141209.T13B
Zinc (Dup)	1	3.7	ug/L	20141209.T13B

T21-Turbidity				
Parameter	MDL	Result	Units	QAQCID
Turbidity	0.1	6.19	NTU	20141204.T21A
Turbidity (Dup)	0.1	5.93	NTU	20141204.T21A

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
True Colour	1	<1	TCU	20141208.T26A
True Colour (Dup)	1	<1	TCU	20141208.T26A

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

12/9/2014

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 11 of 12



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 229683

Sample Name: 2C

Date: 11/26/2014

Matrix: Ground Water

Lab #: 606643

T26-Colour				
Parameter	MDL	Result	Units	QAQCID
T27-TDS				
Parameter	MDL	Result	Units	QAQCID
Total Dissolved Solids	3	77	mg/L	20141208.T27B
T94-Carbonate				
Parameter	MDL	Result	Units	QAQCID
Bicarbonate	1	71	mg/L	20141205.T94A
Carbonate	1	14.9	mg/L	20141205.T94A
TOC Water				
Parameter	MDL	Result	Units	QAQCID
Total Organic Carbon	0.4	0.68	mg/L	20141204.R55.2A
TP Water				
Parameter	MDL	Result	Units	QAQCID
Total Phosphorus (as P)	0.002	<0.002	mg/L	20141204.R23.2B
Total Phosphorus (as P) (Dup)	0.002	<0.002	mg/L	20141204.R23.2B

MDL Method detection limit or minimum reporting limit.

% Rec Surrogate compounds are added to the sample in some cases and the recovery is reported as a percent recovered.

QAQCID This is a unique reference to the quality control data set used to generate the reported value.

Data reported for organic analysis in soil samples are corrected for moisture content

Matrix If the matrix is a leachate, the sample was extracted according to regulation 558.

INT Interferences

TNTC Too numerous to count

ND Not detected

NDOGN No Data, Overgrown with Non-Target

NDOGT No Data, Overgrown with Target

NDOGHPC No Data, Overgrown HPC

Unless otherwise specified in the sample comments section of the report, the following statements apply to all samples which were analyzed using the CCME PHC method.

The method as performed complies with the Reference Method for the CWS PHC and is validated for use in this laboratory.

The Chromatogram descended to the baseline at or before nC50.

The nC6 and nC10 response factors were within 30% of the response factor for Toluene.

The nC10, nC16, and nC34 response factors were within 10% of their average.

The nC50 was at least 70% of the nC10-nC16-nC34 average.

The linearity of the calibration curve was within 15% based on response factor.

Any QC data is available on request.

Extraction and analysis hold times were met.

If F4G results are reported, they are not to be added to the C6 to C50 results.

BTEX and selected PAHs have been subtracted from the appropriate fractions only if the parameter names are F1-BTEX, F2-NAPTH, and F3-PAH, otherwise, these compounds have not been subtracted from their respective fractions.



TESTMARK Laboratories

Committed to Quality and Service

Analytical Report

Client:	Tecia White	Work Order Number:	231585
Company:	Whitewater Hydrogeology Ltd.	Date Order Received:	12/31/2014
Address:	80 Chamberlain Cres Collingwood, Ontario, L9Y 0C8	Regulation:	Information not provided
Phone:	(705) 888-7064	PO #:	
Fax:		Project #:	Strada Aggregates (Shelburne Pit South)
Email:	tecia@white-water.ca		

Analyses were performed on the following samples submitted with your order.

The results relate only to the items tested.

Sample Name	Lab #	Matrix	Type	Comments	Date Collected	Time Collected
OW5-08A (labelled 5a)	611802	Water	None		12/24/2014	
OW12-10A (labelled 12a)	611803	Water	None		12/24/2014	
OW4-07A (labelled 7a)	611804	Water	None		12/24/2014	
OW5-8B (labelled 5b)	611805	Water	None		12/24/2014	
OW13	611806	Water	None		12/24/2014	

The following instrumentation and reference methods were used for your sample(s)

Method Name	Description	Reference
PHC F1 Water	Determination of PHC F1 in Water - Tier 1 CCME Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
PHC F2-F4 Water	Determination of PHC (F2-F4) in Water - Tier 1 CCME by GC/FID Instrument group: Internally Subcontracted	CWS PHC Tier I CCME
VOC Water	Determination of Volatile Organic Compounds in Water by P&T/GC/MS Instrument group: Internally Subcontracted	Based on EPA 624

This report has been approved by:

Mark Charbonneau, Ph.D.
Lab Director



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

Sample Data:

Sample Name: OW5-08A (labelled 5a)

Date: 12/24/2014

Matrix: Water

Lab #: 611802

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20150107.R59f2w12
F2 (C10-C16)	30	<30	ug/L	20150107.R59f2w12
F3 (C16-C34)	30	<30	ug/L	20150107.R59f2w12
F4 (C34-C50)	30	<30	ug/L	20150107.R59f2w12
o-Terphenyl (Surr.)	N/A	94	% Rec	20150107.R59f2w12

Sample Name: OW12-10A (labelled 12a)

Date: 12/24/2014

Matrix: Water

Lab #: 611803

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,1,2-Tetrachloroethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,1-Trichloroethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2,2-Tetrachloroethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2-Trichloroethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethylene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2,4-Trichlorobenzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromo-3-chloropropane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromoethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichlorobenzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	81	% Rec	20150102.R14vw
1,2-Dichloroethane-d4 (Surr) (Dup)	N/A	80	% Rec	20150102.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloropropane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichlorobenzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichloropropane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,4-Dichlorobenzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	109	% Rec	20150102.R14vw
1-Bromo-4-fluorobenzene (Surr.) (Dup)	N/A	109	% Rec	20150102.R14vw
Acetone	30	<30	ug/L	20150102.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

Sample Name: OW12-10A (labelled 12a)

Date: 12/24/2014

Matrix: Water

Lab #: 611803

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Acetone (Dup)	30	<30	ug/L	20150102.R14vw
Benzene	0.2	<0.2	ug/L	20150102.R14vw
Benzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Bromobenzene	0.2	<0.2	ug/L	20150102.R14vw
Bromobenzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromochloromethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromodichloromethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Bromoform	0.2	<0.2	ug/L	20150102.R14vw
Bromoform (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Bromomethane	0.2	<0.2	ug/L	20150102.R14vw
Bromomethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20150102.R14vw
Carbon tetrachloride (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
Chlorobenzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Chloroethane	0.2	<0.2	ug/L	20150102.R14vw
Chloroethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Chloroform	0.2	<0.2	ug/L	20150102.R14vw
Chloroform (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Chloromethane	0.2	0.44	ug/L	20150102.R14vw
Chloromethane (Dup)	0.2	0.32	ug/L	20150102.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
cis - + trans-1,3-Dichloropropene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,2-Dichloroethylene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,3-Dichloropropene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Dibromochloromethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Dibromomethane	0.2	<0.2	ug/L	20150102.R14vw
Dibromomethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Dichlorodifluoromethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Dichloromethane	1	<1	ug/L	20150102.R14vw
Dichloromethane (Dup)	1	<1	ug/L	20150102.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20150102.R14vw
Ethylbenzene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20150102.R14vw
Hexachlorobutadiene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20150102.R14vw
m+p-Xylene (Dup)	0.3	<0.3	ug/L	20150102.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20150102.R14vw
Methyl ethyl ketone (Dup)	0.5	<0.5	ug/L	20150102.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20150102.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

1/8/2015

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 3 of 9



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

Sample Name: OW12-10A (labelled 12a)

Date: 12/24/2014

Matrix: Water

Lab #: 611803

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Methyl isobutyl ketone (MIBK) (Dup)	0.5	<0.5	ug/L	20150102.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20150102.R14vw
Methyl tert-butyl ether (MTBE) (Dup)	0.5	<0.5	ug/L	20150102.R14vw
n-Hexane	0.5	<0.5	ug/L	20150102.R14vw
n-Hexane (Dup)	0.5	<0.5	ug/L	20150102.R14vw
o-Xylene	0.2	<0.2	ug/L	20150102.R14vw
o-Xylene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Styrene	0.2	<0.2	ug/L	20150102.R14vw
Styrene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Tetrachloroethylene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Toluene	0.2	<0.2	ug/L	20150102.R14vw
Toluene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Toluene-d8 (Surr.)	N/A	99	% Rec	20150102.R14vw
Toluene-d8 (Surr.) (Dup)	N/A	99	% Rec	20150102.R14vw
Total Xylenes	0.4	<0.4	ug/L	20150102.R14vw
Total Xylenes (Dup)	0.4	<0.4	ug/L	20150102.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trans-1,2-dichloroethylene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
Trans-1,3-dichloropropene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trichloroethylene (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Trichlorofluoromethane (Dup)	0.2	<0.2	ug/L	20150102.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20150102.R14vw
Vinyl chloride (Dup)	0.2	<0.2	ug/L	20150102.R14vw

Sample Name: OW4-07A (labelled 7a)

Date: 12/24/2014

Matrix: Water

Lab #: 611804

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	82	% Rec	20150102.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

Sample Name: OW4-07A (labelled 7a)

Date: 12/24/2014

Matrix: Water

Lab #: 611804

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,3-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	108	% Rec	20150102.R14vw
Acetone	30	<30	ug/L	20150102.R14vw
Benzene	0.2	<0.2	ug/L	20150102.R14vw
Bromobenzene	0.2	<0.2	ug/L	20150102.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromoform	0.2	<0.2	ug/L	20150102.R14vw
Bromomethane	0.2	<0.2	ug/L	20150102.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20150102.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
Chloroethane	0.2	<0.2	ug/L	20150102.R14vw
Chloroform	0.2	<0.2	ug/L	20150102.R14vw
Chloromethane	0.2	0.54	ug/L	20150102.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Dibromomethane	0.2	<0.2	ug/L	20150102.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Dichloromethane	1	<1	ug/L	20150102.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20150102.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20150102.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20150102.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20150102.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20150102.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20150102.R14vw
n-Hexane	0.5	<0.5	ug/L	20150102.R14vw
o-Xylene	0.2	<0.2	ug/L	20150102.R14vw
Styrene	0.2	<0.2	ug/L	20150102.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Toluene	0.2	<0.2	ug/L	20150102.R14vw
Toluene-d8 (Surr.)	N/A	98	% Rec	20150102.R14vw
Total Xylenes	0.4	<0.4	ug/L	20150102.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20150102.R14vw

Sample Name: OW5-8B (labelled 5b)

Date: 12/24/2014

Matrix: Water

Lab #: 611805

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

Sample Name: OW5-8B (labelled 5b)

Date: 12/24/2014

Matrix: Water

Lab #: 611805

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	79	% Rec	20150102.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	110	% Rec	20150102.R14vw
Acetone	30	<30	ug/L	20150102.R14vw
Benzene	0.2	<0.2	ug/L	20150102.R14vw
Bromobenzene	0.2	<0.2	ug/L	20150102.R14vw
Bromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromoform	0.2	<0.2	ug/L	20150102.R14vw
Bromomethane	0.2	<0.2	ug/L	20150102.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20150102.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
Chloroethane	0.2	<0.2	ug/L	20150102.R14vw
Chloroform	0.2	<0.2	ug/L	20150102.R14vw
Chloromethane	0.2	0.53	ug/L	20150102.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Dibromomethane	0.2	<0.2	ug/L	20150102.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Dichloromethane	1	<1	ug/L	20150102.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20150102.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20150102.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20150102.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20150102.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20150102.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20150102.R14vw
n-Hexane	0.5	<0.5	ug/L	20150102.R14vw
o-Xylene	0.2	<0.2	ug/L	20150102.R14vw
Styrene	0.2	<0.2	ug/L	20150102.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Toluene	0.2	<0.2	ug/L	20150102.R14vw

6820 Kitimat Rd., Unit #4, Mississauga, ON L5N 5M3

1/8/2015

Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

Page 6 of 9



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

Sample Name: OW5-8B (labelled 5b)

Date: 12/24/2014

Matrix: Water

Lab #: 611805

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Toluene-d8 (Surr.)	N/A	99	% Rec	20150102.R14vw
Total Xylenes	0.4	<0.4	ug/L	20150102.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20150102.R14vw

Sample Name: OW13

Date: 12/24/2014

Matrix: Water

Lab #: 611806

PHC F1 Water				
Parameter	MDL	Result	Units	QAQCID
F1 (C6-C10) - Less BTEX	5	<5	ug/L	20150106.R59f1w
F1 (C6-C10) - Less BTEX (Dup)	5	<5	ug/L	20150106.R59f1w
F1 (C6-C10) Incl. BTEX	5	<5	ug/L	20150106.R59f1w
F1 (C6-C10) Incl. BTEX (Dup)	5	<5	ug/L	20150106.R59f1w

PHC F2-F4 Water				
Parameter	MDL	Result	Units	QAQCID
Baseline @ C50	N/A	Yes	NA	20150107.R59f2w12
F2 (C10-C16)	60	<60	ug/L	20150107.R59f2w12
F3 (C16-C34)	60	<60	ug/L	20150107.R59f2w12
F4 (C34-C50)	60	<60	ug/L	20150107.R59f2w12
o-Terphenyl (Surr.)	N/A	98	% Rec	20150107.R59f2w12

VOC Water				
Parameter	MDL	Result	Units	QAQCID
1,1,1,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,1-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2,2-Tetrachloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1,2-Trichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,1-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
1,2,4-Trichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromo-3-chloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dibromoethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane	0.2	<0.2	ug/L	20150102.R14vw
1,2-Dichloroethane-d4 (Surr)	N/A	80	% Rec	20150102.R14vw
1,2-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1,3-Dichloropropane	0.2	<0.2	ug/L	20150102.R14vw
1,4-Dichlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
1-Bromo-4-fluorobenzene (Surr.)	N/A	109	% Rec	20150102.R14vw
Acetone	30	<30	ug/L	20150102.R14vw
Benzene	0.2	<0.2	ug/L	20150102.R14vw
Bromobenzene	0.2	<0.2	ug/L	20150102.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

Sample Name: OW13

Date: 12/24/2014

Matrix: Water

Lab #: 611806

VOC Water				
Parameter	MDL	Result	Units	QAQCID
Bromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromodichloromethane	0.2	<0.2	ug/L	20150102.R14vw
Bromoform	0.2	<0.2	ug/L	20150102.R14vw
Bromomethane	0.2	<0.2	ug/L	20150102.R14vw
Carbon tetrachloride	0.2	<0.2	ug/L	20150102.R14vw
Chlorobenzene	0.2	<0.2	ug/L	20150102.R14vw
Chloroethane	0.2	<0.2	ug/L	20150102.R14vw
Chloroform	0.2	<0.2	ug/L	20150102.R14vw
Chloromethane	0.2	<0.2	ug/L	20150102.R14vw
cis - + trans-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,2-Dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
cis-1,3-Dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
Dibromochloromethane	0.2	<0.2	ug/L	20150102.R14vw
Dibromomethane	0.2	<0.2	ug/L	20150102.R14vw
Dichlorodifluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Dichloromethane	1	<1	ug/L	20150102.R14vw
Ethylbenzene	0.2	<0.2	ug/L	20150102.R14vw
Hexachlorobutadiene	0.2	<0.2	ug/L	20150102.R14vw
m+p-Xylene	0.3	<0.3	ug/L	20150102.R14vw
Methyl ethyl ketone	0.5	<0.5	ug/L	20150102.R14vw
Methyl isobutyl ketone (MIBK)	0.5	<0.5	ug/L	20150102.R14vw
Methyl tert-butyl ether (MTBE)	0.5	<0.5	ug/L	20150102.R14vw
n-Hexane	0.5	<0.5	ug/L	20150102.R14vw
o-Xylene	0.2	<0.2	ug/L	20150102.R14vw
Styrene	0.2	<0.2	ug/L	20150102.R14vw
Tetrachloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Toluene	0.2	<0.2	ug/L	20150102.R14vw
Toluene-d8 (Surr.)	N/A	100	% Rec	20150102.R14vw
Total Xylenes	0.4	<0.4	ug/L	20150102.R14vw
Trans-1,2-dichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trans-1,3-dichloropropene	0.2	<0.2	ug/L	20150102.R14vw
Trichloroethylene	0.2	<0.2	ug/L	20150102.R14vw
Trichlorofluoromethane	0.2	<0.2	ug/L	20150102.R14vw
Vinyl chloride	0.2	<0.2	ug/L	20150102.R14vw



TESTMARK Laboratories

Committed to Quality and Service

Whitewater Hydrogeology Ltd.

Work Order: 231585

MDL Method detection limit or minimum reporting limit.
% Rec Surrogate compounds are added to the sample in some cases and the recovery is reported as a percent recovered.
QAQCID This is a unique reference to the quality control data set used to generate the reported value.
Data reported for organic analysis in soil samples are corrected for moisture content
Matrix If the matrix is a leachate, the sample was extracted according to regulation 558.
INT Interferences
TNTC Too numerous to count
ND Not detected
NDOGN No Data, Overgrown with Non-Target
NDOGT No Data, Overgrown with Target
NDOGHPC No Data, Overgrown HPC

Unless otherwise specified in the sample comments section of the report, the following statements apply to all samples which were analyzed using the CCME PHC method.

The method as performed complies with the Reference Method for the CWS PHC and is validated for use in this laboratory.
The Chromatogram descended to the baseline at or before nC50.
The nC6 and nC10 response factors were within 30% of the response factor for Toluene.
The nC10, nC16, and nC34 response factors were within 10% of their average.
The nC50 was at least 70% of the nC10-nC16-nC34 average.
The linearity of the calibration curve was within 15% based on response factor.
Any QC data is available on request.
Extraction and analysis hold times were met.
If F4G results are reported, they are not to be added to the C6 to C50 results.
BTEX and selected PAHs have been subtracted from the appropriate fractions only if the parameter names are F1-BTEX, F2-NAPTH, and F3-PAH, otherwise, these compounds have not been subtracted from their respective fractions.

**Ministry of
Municipal Affairs
and Housing**

Municipal Services Office
Central Ontario
777 Bay Street, 13th Floor
Toronto ON M5G 2E5
Phone: 416 585-6226
Fax: 416 585-6882
Toll-Free: 1 800 668-0230

**Ministère des
Affaires municipales
et du Logement**

Bureau des services aux municipalités
du Centre de l'Ontario
777, rue Bay, 13^{ème} étage
Toronto ON M5G 2E5
Téléphone : 416 585-6226
Télécopieur : 416 585-6882
Sans frais : 1 800-668-0230



Ontario

RECEIVED

MAR 31 2015

March 27, 2015

Pam Hillock, Clerk
County of Dufferin
55 Zina Street
Orangeville, ON
L9W 1E5

Dear Ms. Hillock:

**Subject: Dufferin County Official Plan
MMAH File No. 22-OP-143362**

We are pleased to provide you with the attached copy of the Notice of Decision and Decision regarding the first Dufferin County Official Plan. For your convenience, we are also providing you with a Minister's Modified copy of the Official Plan which incorporates all of the modifications to the Official Plan using highlights where text has been added and strikeouts where text has been deleted.

Following the 20-day appeal period under the *Planning Act*, the Ministry of Municipal Affairs and Housing will notify you of whether any appeals were lodged.

If you have any questions, do not hesitate to contact Mark Christie, Manager, Community Planning and Development at 416-585-6063.

Yours truly,

Marcia Wallace, PhD, MCIP-RPP
Regional Director

c.c. Sonya Pritchard, County of Dufferin
Sue Stone, Townships of Amaranth and East Garafraxa
Keith J. McNenly, Town of Mono
Susan Greatix, Town of Orangeville
John Telfer, Town of Shelburne,
Jane M. Wilson, Town of Grand Valley
Denise Holmes, Township of Melancthon
Terry Horner, Township Mulmur

File No.: 22-OP-143362
Municipality: County of Dufferin

Date of Decision: March 25, 2015
Date of Notice: March 27, 2015
Last Date of Appeal: April 16, 2015

NOTICE OF DECISION

With respect to an Official Plan
Subsection 17(34) of the Planning Act

A decision was made, on the date noted above, to approve with modifications, the Official Plan for the County of Dufferin, as adopted by By-law No. 2014-31.

Purpose and Effect of the Official Plan

This is the first Official Plan for the County of Dufferin, as required to be prepared pursuant to Ontario Regulation 101/13. The Official Plan will guide land use planning and development within the whole County of Dufferin. Once approved, all lower tier municipalities shall update their official plans to ensure that they conform to the new Dufferin County Official Plan. A copy of the decision is attached.

When and How to File An Appeal

Any appeal to the Ontario Municipal Board must be filed with the Minister of Municipal Affairs and Housing no later than 20 days from the date of this notice, as shown above as the last date of appeal.

The appeal should be sent to the attention of the Planner, at the address shown below and it must,

- (1) set out the specific part of the proposed official plan to which the appeal applies,
- (2) set out the reasons for the request for the appeal, and
- (3) be accompanied by the fee prescribed under the Ontario Municipal Board Act in the amount of \$125.00 payable by certified cheque to the Minister of Finance, Province of Ontario.

Who Can File An Appeal

Only individuals, corporations or public bodies may appeal a decision of the approval authority to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or the group on its behalf.

No person or public body shall be added as a party to the hearing of the appeal unless, before the plan was adopted, the person or public body made oral submissions at a public meeting or written submissions to the council or, in the opinion of the Ontario Municipal Board, there are reasonable grounds to add the person or public body as a party.

When the Decision is Final

The decision of the Minister of Municipal Affairs and Housing is final if a Notice of Appeal is not received on or before the last date of appeal noted above.

Other Related Applications:

N/A.

Getting Additional Information

Additional information about the application is available for public inspection during regular office hours at the Ministry of Municipal Affairs and Housing at the address noted below or from the County of Dufferin.

Mailing Address for Filing a Notice of Appeal

Ministry of Municipal Affairs and Housing
Municipal Services Office - Central Ontario
777 Bay St., 13th Floor
Toronto ON M5G 2E5

Submit notice of appeal to the attention of:

Sybelle von Kursell

Team Lead

Tele: (416) 585-6053

Fax: (416) 585-6882

e-mail: sybelle.vonkursell@ontario.ca

Please use the subject line of:

"Dufferin County Official Plan – appeal request"

DECISION
With respect to an Official Plan
Subsection 17(34) of the Planning Act

I hereby modify and approve all of the Dufferin County Official Plan for the entire County of Dufferin adopted by By-law No. 2014-31. The modifications to the official plan are as follows:

1. **Section 3.3.3** "Community Settlement Areas," sub-policy (a) is deleted and replaced with the following: "*Community settlement areas* and their boundaries are identified on Schedule B."
2. **Section 3.5.1.1** "County Municipal Comprehensive Review" is modified as follows:
 - a. **Policy 3.5.1.1 (g)**, inserting the words: "and there are no reasonable alternatives which avoid the *Agricultural Areas*, and" after the words: "alternative locations have been evaluated"
 - b. **Adding the following two new sub-policies:**
 - "n) impacts from expanding settlement area on agricultural operations which are adjacent or close to settlement area are mitigated to the extent feasible; and
 - "o) in determining the most appropriate direction for expansions to the boundaries of settlement areas, the policies of this plan shall be applied."
 - c. **Policy 3.5.1.1 (l)**, deleting the word "and"
 - d. **Policy 3.5.1.1 (m)**, replacing the period with a semi-colon.
3. **Policy 3.5.2 (d)** "Allocation of the Future Reserved Population Growth Where an Urban Settlement Area Expansion is Not Proposed" is modified by inserting the words "natural heritage" before the word "systems."
4. **Policy 3.5.4** "Community Settlement Area" is deleted.
5. **Section 3.5.4.1** "Local Municipal Comprehensive Review" is modified as follows:
 - a. **The section is renumbered** as 3.5.4
 - b. **The preamble paragraphs** are deleted and replaced with the following:

"The County encourages local municipalities to undertake a local municipal comprehensive review concurrent with or following a County

municipal comprehensive review. The local municipal comprehensive review will follow, at a minimum, the requirements listed below.”

- c. **Policy 3.5.4.1 (e)** (now renumbered 3.5.4 (e)) by deleting the word “community”
 - d. **Policy 3.5.4.1 (f)** (now renumbered 3.5.4 (f)) by deleting the word “community”
 - e. **Policy 3.5.4.1 (g)** (now renumbered 3.5.4 (g)) by deleting the word “community” in the first sentence and deleting the second sentence in its entirety
 - f. **Policy 3.5.4.1 (h)** (now renumbered 3.5.4 (h)) is deleted and replaced with the following:
 - “h) In the event that the review concludes that one or more *settlement area* boundary(ies) should be altered, then any adjustment to the boundary must meet the tests of policy 3.5.1.1.”
 - g. **Policy 3.5.4.1 (i)** (now renumbered 3.5.4 (i)) is deleted.
6. **Policy 4.2.5** “Agricultural Area Lot Creation and Adjustment” is modified by adding a new sub-policy (g) as follows:
- “(g) The creation of new residential lots in the *prime agricultural area* shall not be permitted except in accordance with policy 4.2.5 (c).”
7. **Policy 4.3.2 (a) (iii)** “Permitted Uses” is modified by adding the words “or units” after the words “three new *lots*.”
8. **Policy 4.3.3 (e)** “Land Use Policies” is modified by inserting the words and punctuation: “,including lot creation and new or expanding livestock facilities,” after the words “All farm and non-farm development”
9. **Policy 4.4.2.1** “New or Expanding Mineral Resource Operations” is modified as follows:
- a. By inserting a new sub-policy 4.4.2.1 (c) and re-numbering subsequent policies, as follows:
 - “(c) *Mineral aggregate resource operations* shall be protected from development and activities that would preclude or hinder their expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact.”
 - b. By deleting **Policy 4.4.2.1 (d)** (now renumbered (e)) and replacing with the following:
 - “(d) The County’s Aggregate Resources Master Plan may rely on studies prepared in response to policy 4.4.2.1 (c) and take into

account the potential cumulative impacts that may result from proposed new or expanding *mineral aggregate resource operations* when added to other past, present and known *mineral aggregate resource* applications in the vicinity. The cumulative impact assessment will be undertaken in consultation with local municipalities, applicable Conservation Authorities, aggregate operation owner/applicants, and the public.”

10. **Section 5.3** “Natural Heritage Features and Functions” is modified by inserting a new sub-section 5.3.10 and renumbering subsequent policies accordingly, as follows:

“5.3.10 *Vegetative Protection Zone*

For lands within a provincial plan area, the applicable provincial plan policies regarding the identification of vegetative protective zones apply, as do the associated policies regarding the minimum vegetative protective zone buffer area and prohibition of development and site alteration within them.”

11. **Section 5.4.2** “Sourcewater Protection” is modified as follows:

- a. **Policy 5.4.2 (a)** replace the words “source water” with the words “drinking water sources” in the fourth sentence, and insert the words and punctuation “, significant groundwater recharge areas” after the words “municipal wellhead protection areas.”
- b. **Policy 5.4.2 (c)** is deleted and replaced with the following:
 - “c) Prior to the approval of development applications within designated vulnerable areas, the proponents shall demonstrate to the satisfaction of the County, local municipality, Conservation Authority and Province, where necessary, that the quality and quantity of municipal drinking water sources will not be negatively impacted.”
- c. Adding two new sub-policies as follows:
 - “d) Prior to approval of new or expanded development within well head protection areas Q2-A1 and Q2-A2 (shown as “Water Quantity Area” on Appendix 2) the proponent shall demonstrate that pre-development groundwater recharges rates will be maintained and/or where possible, improved.
 - “e) Local municipalities shall further identify within their official plans the time of travel zone/areas within the Wellhead Protection Areas.

12. **Policy 8.3.1 (c)** "Amendments to County Official Plan" is modified by inserting a new sub-policy, and renumbering subsequent policies accordingly, as follows:

"v. the impact of the proposed amendment on *prime agricultural areas and agricultural uses*;"

13. **Policy 8.6.1** "Local Municipal Official Plans" is modified as follows:

a. **The third paragraph of the policy**, insert the words "where permitted by Ontario Regulation 699/98 and by County by-law and" after the words "may be exempt from County approval" in the first sentence.

b. **Inserting two new sub-policies, and renumbering subsequent policies accordingly, as follows:**

"vii. Change to the boundary of the county *natural heritage system*;

"vii. New or expanding *mineral aggregate operations*;"

14. **Policy 8.6.9** "Existing Uses" is modified by deleting the words and punctuation: ", continuation" and ", or variations to similar uses", and "that may be"; and by replacing "subject to any" with "in accordance with" in the second sentence. The third sentence is modified by inserting the words "and/or prohibitions" after the words "existing use" and by inserting the words "or prohibitions" after the words "such policies."

15. **Policy 8.8.1 (q)** "Interpretation Policies" is modified as follows:

a. **Insert** the words: "or *Provincial Plan*" after the words "Provincial Policy Statement" in both instances of the **second sentence**.

b. **Delete the third and fourth sentences** which state: "The Provincial Policy Statement has been and will continue to be reviewed in light of the local context and circumstances. The Provincial Policy Statement and this Plan will be reviewed and balanced in totality to determine public interest and consistency in the County."

c. **Insert** the words: "and/or *Provincial Plan*" after the words "Provincial Policy Statement" in both instances of the **last sentence**.

16. **Definition 24** "Built Boundary" is modified by replacing "Infrastructure" with "Municipal Affairs and Housing"

17. **Definition 77** "Intensification Area" is modified by replacing "Infrastructure" with "Municipal Affairs and Housing"

18. **All Schedules and Appendices** are modified by deleting the word "Draft" from the title of each.

19. **All Schedules and Appendix 3** are further modified by replacing the Community Settlement Area symbol as follows:

- a. **Within the Township of Amaranth:** the Laurel, Waldemar and Farmington community settlement area boundaries as identified in the in Amaranth Official Plan on September 11, 2014.
- b. **Within the Township of East Garafraxa:** the Marsville and Orton community settlement area boundaries as identified in the in East Garafraxa Official Plan on September 11, 2014.
- c. **Within the Town of Grand Valley:** the Colbeck and Monticello community settlement area boundaries as identified in the in Grand Valley Official Plan on September 11, 2014.
- d. **Within the Township of Melancthon:** The Horning's Mills, Riverview, and Corbetton community settlement area boundaries as provided in the Melancthon Official Plan as adopted on August 14, 2014.
- e. **Within the Town of Mono:** the Cardinal Woods, Purple Hill, Hockley Village, Camilla, and Mono Centre community settlement area boundaries and the portion of the Rosemont hamlet located within the Town of Mono, as provided in the Mono Official Plan Amendment 35 as adopted on March 25, 2014.
- f. **Within the Township of Mulmur:** The Mansfield, Terra Nova, Honeywood, Rosemont, Primrose and Violet Hill community settlement area boundaries as provided in the Mulmur Official Plan on September 11, 2014.

20. **Schedule A:** "Provincial Plan Areas" is further modified by changing the Niagara Escarpment designations of "Mineral Resource Extraction Area" to "Escarpment Natural" and "Escarpment Protection" in the area located on Part of Lots 1, 2, and 3, Concession 7.

For greater clarity Attachment 1 of this decision provides a copy of Amendment 191 to the Niagara Escarpment Plan wherein the updated land use designations are shown.

21. **Schedule C:** "Agricultural Area and Rural Lands" is further modified by inserting note within the legend as follows: "Areas shown in white contribute to the Countryside Area. See Schedules B and E, and local official plans for precise land uses. Generally, these areas consist of significant natural heritage features, mineral aggregate extraction operations/permitted areas, existing estate residential development, or major rural recreational use/permitted areas."

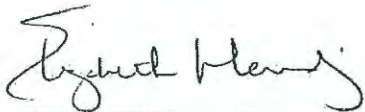
For greater clarity Attachment 2 of this decision provides Schedules A-H1 inclusive and Appendix 3 with the modifications noted in items 18-21 above.

22. **Appendix 2:** "Source Water Protection" is deleted and replaced with a new Appendix as provided in Attachment 3 of this decision.

For greater clarity the modifications to the adopted Appendix 2 that are reflected in the new Appendix 2 are as follows:

- i. Identifying the significant groundwater recharge areas identified in the Lake Erie and South Georgian Bay-Lake Simcoe Assessment Reports.
- ii. Identifying additional Wellhead Protection Areas in Mono and Orangeville in accordance with the South Georgian Bay-Lake Simcoe and
- iii. Delineating the Wellhead Protection Areas Q1-A1, Q1-A2, Q2-A1, and Q2-A2 as provided in the Credit Valley-Toronto and Region – Central Lake Ontario Assessment Reports.

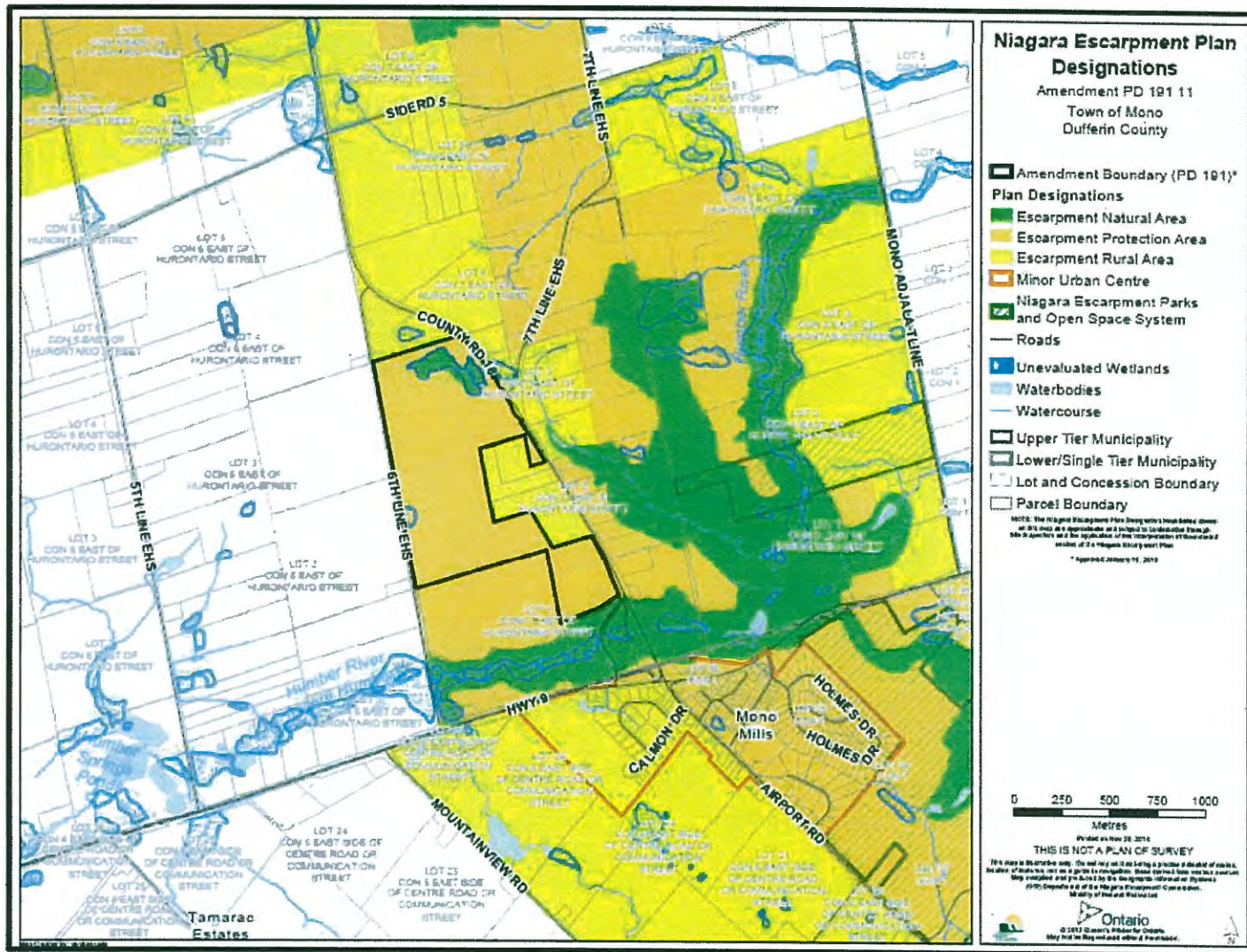
Dated at Toronto this 25 of March, 2015.



Elizabeth Harding
Assistant Deputy Minister
Municipal Services Division
Ministry of Municipal Affairs and Housing

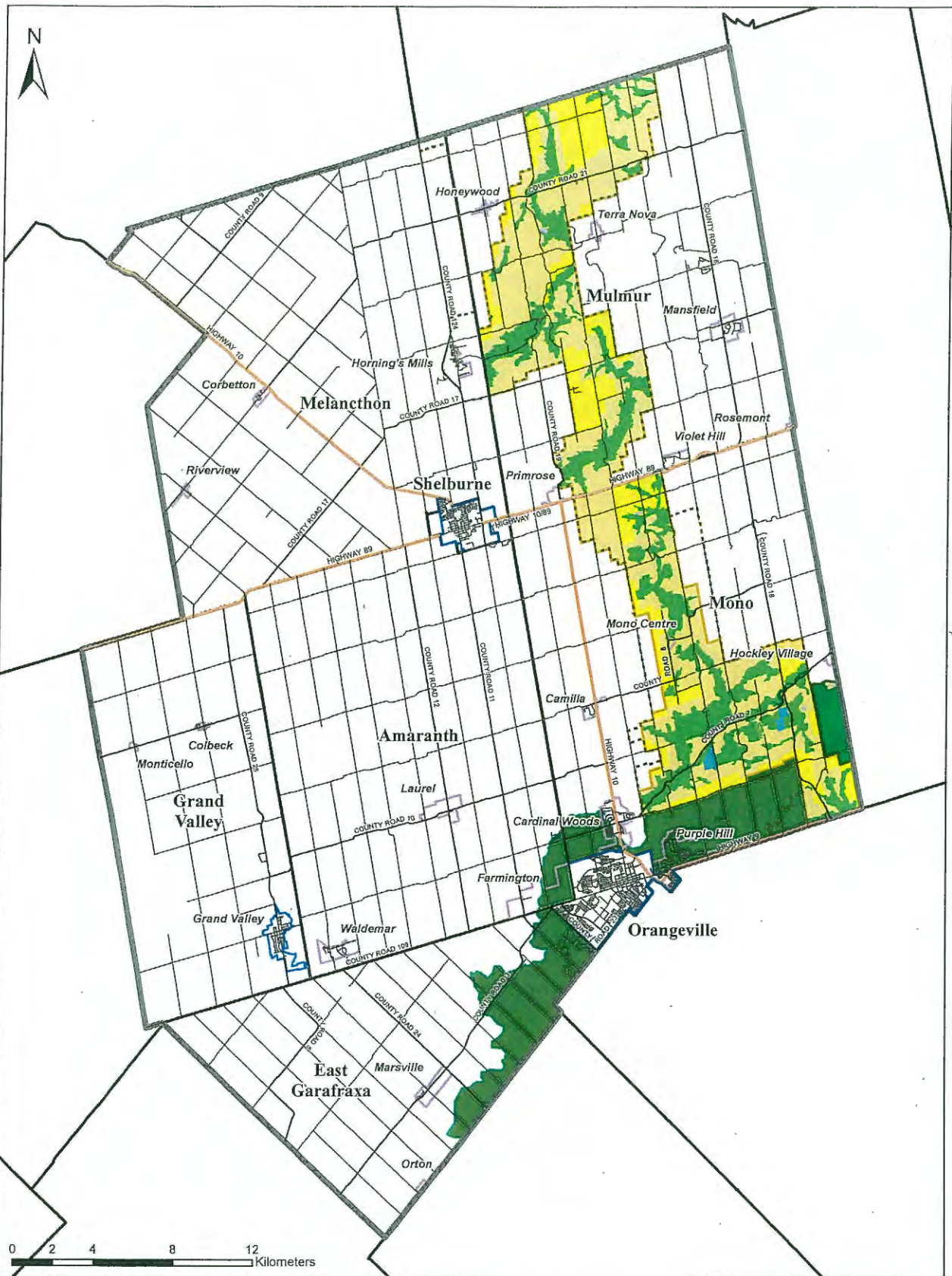
Attachment 1

Amendment 191 to the Niagara Escarpment Plan
wherein the updated land use designations are shown.



Attachment 2

**Modified Schedules A – H1 inclusive and Appendix 3
wherein the community settlement area boundaries and additional provincial
modifications are shown**



Legend

- Urban Settlement Area
- Community Settlement Area
- Provincial Highway
- County Road
- Other Road
- Dufferin County Boundary
- Municipal Boundaries

- Greenbelt Plan Area (S. 2.3)
- Protected Countryside
- Oak Ridges Moraine Conversation Plan Area (S. 2.2)
- Natural Core
- Natural Linkage
- Countryside

- Niagara Escarpment Plan Area (S. 2.3)
- Escarpment Natural Area
- Escarpment Protection Area
- Escarpment Recreation Area
- Escarpment Rural Area
- Mineral Resource Extraction Area
- Niagara Escarpment Development Control Area

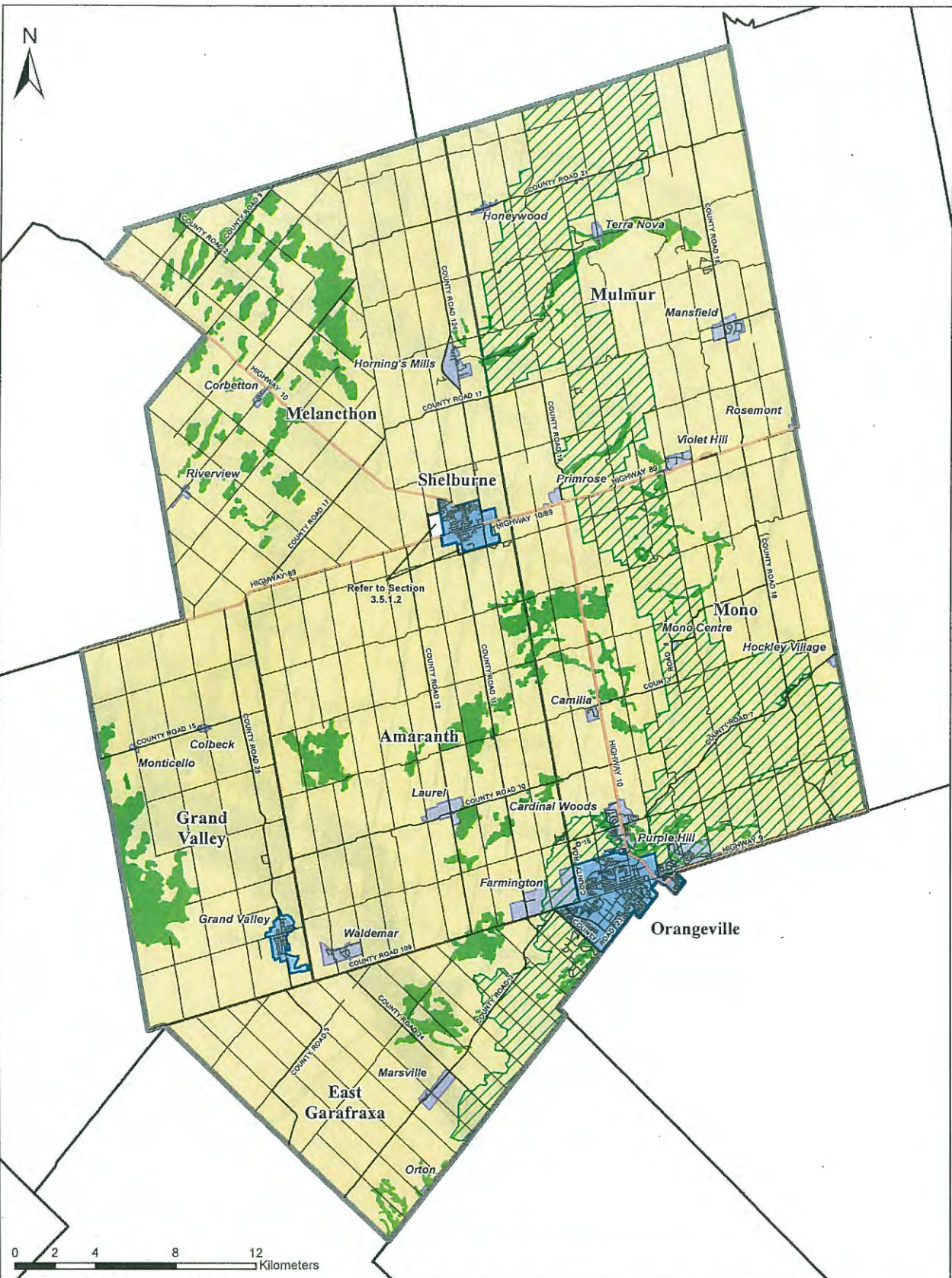
DUFFERIN
COUNTY
OFFICIAL PLAN

Schedule A Provincial Plan Areas

MMM GROUP
Date: March 2015

Sources: LIO (2012), MTO (2012), Dufferin County, NEP (2012), ORMCP, Greenbelt Plan

Document Path: M:\Jobs\2013 MUST USE COLLABORATION\MAPPING ONLY\14_13255_001.P01 - Dufferin County OPLAND2015 03\Schedule B - Community Settlement Structure and Land Use.mxd



Legend

- | | | |
|--------------------------|--------------------------------------|--|
| Provincial Highway | Urban Settlement Area (S. 3.3.2) | Provincial Plan Areas (S. 2.0) |
| County Road | Community Settlement Area (S. 3.3.3) | Provincially Significant Wetlands (S. 5.3.1) |
| Other Road | Countryside Area (S. 3.3.4) | |
| Dufferin County Boundary | | |
| Municipal Boundaries | | |

DUFFERIN
COUNTY

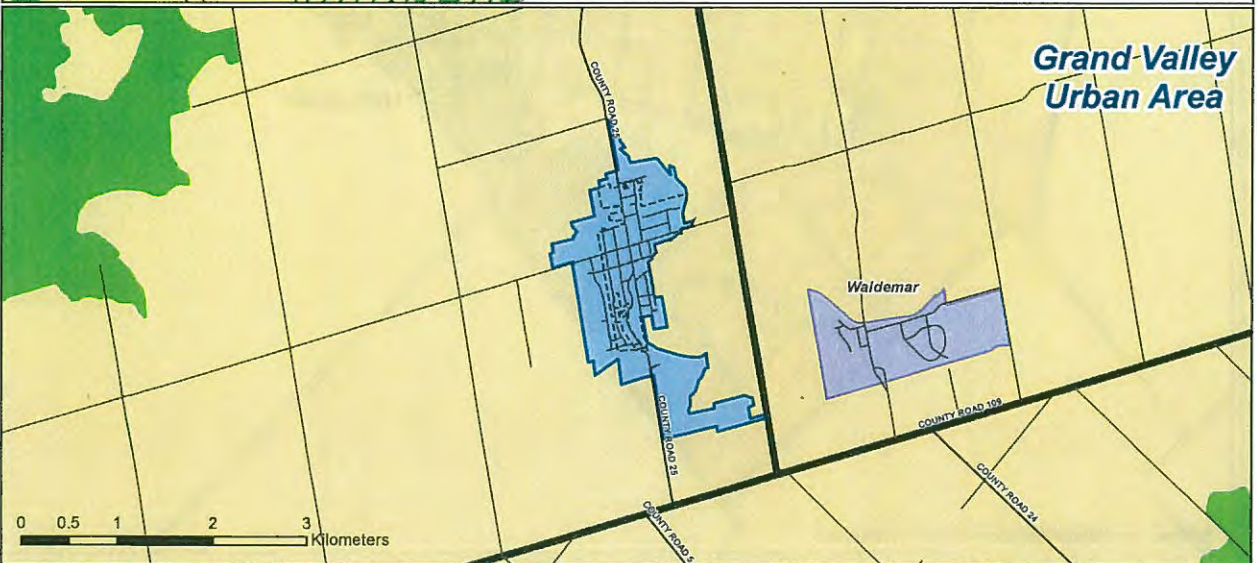
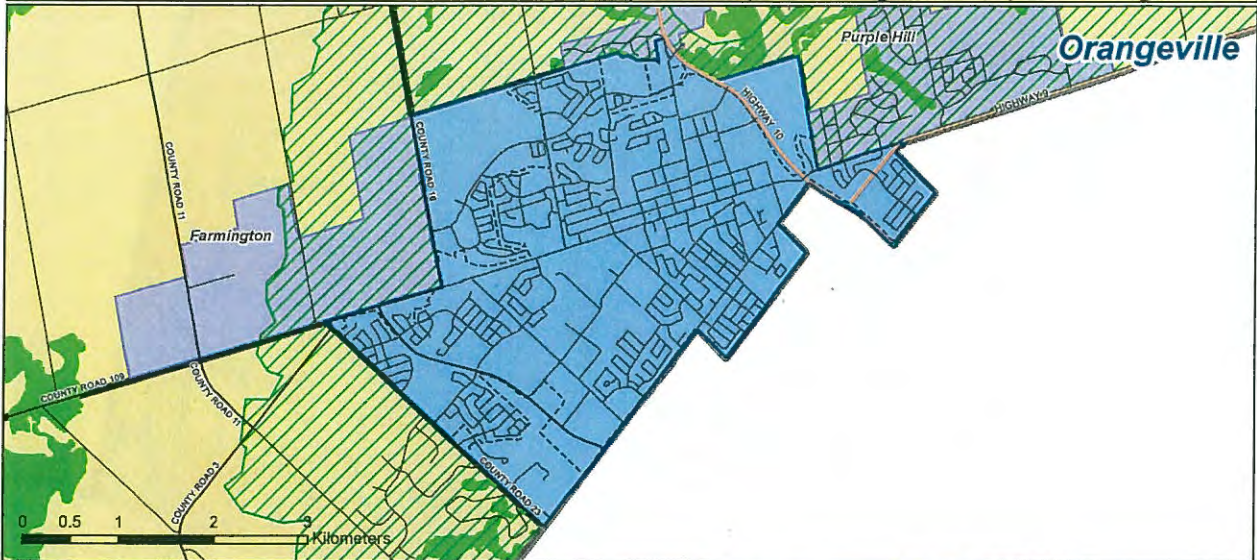
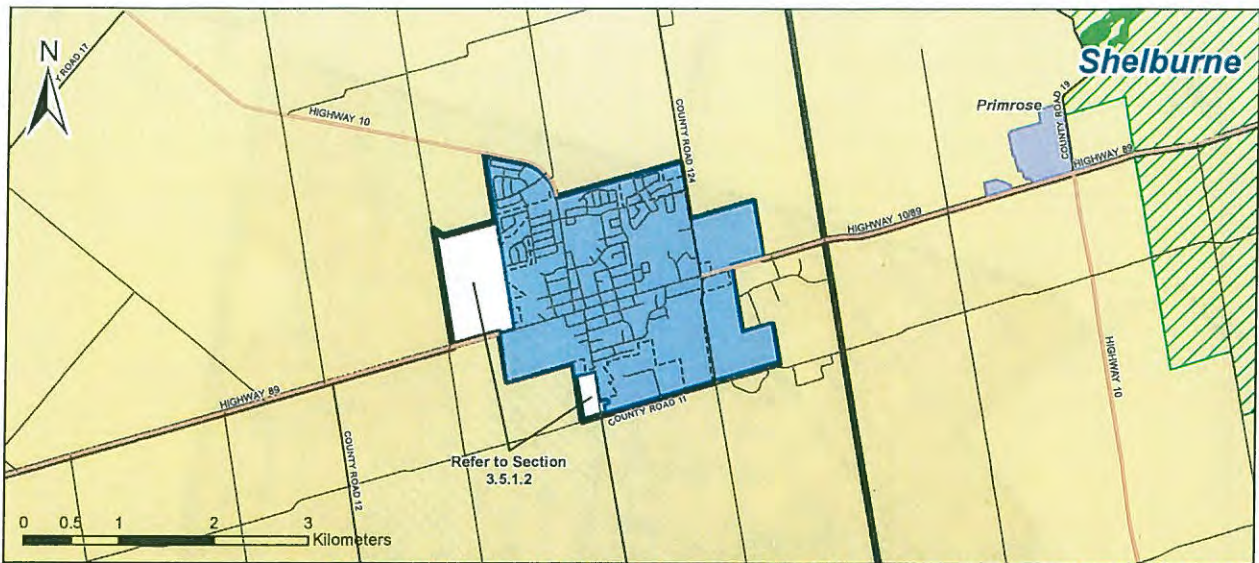
OFFICIAL PLAN

Schedule B **Community Structure** **and Land Use**

MMM GROUP

Date: March 2015

Sources: LIQ (2012), MTO (2012), Dufferin County, Mulmur OP, East Garafraxa OP, Amaranth OP, Grand Valley OP, Mono OP, NEP



Legend

Provincial Highway

County Road

Other Road

Dufferin County Boundary

Municipal Boundaries

Urban Settlement Area (S. 3.3.2)

Built Boundary Area (S. 3.5.1)

Community Settlement Area (S. 3.3.3)

Countryside Area (S. 4.0)

Provincial Plan Areas (S. 2.0)

Provincially Significant Wetlands (S. 5.3.1)

DUFFERIN
COUNTY

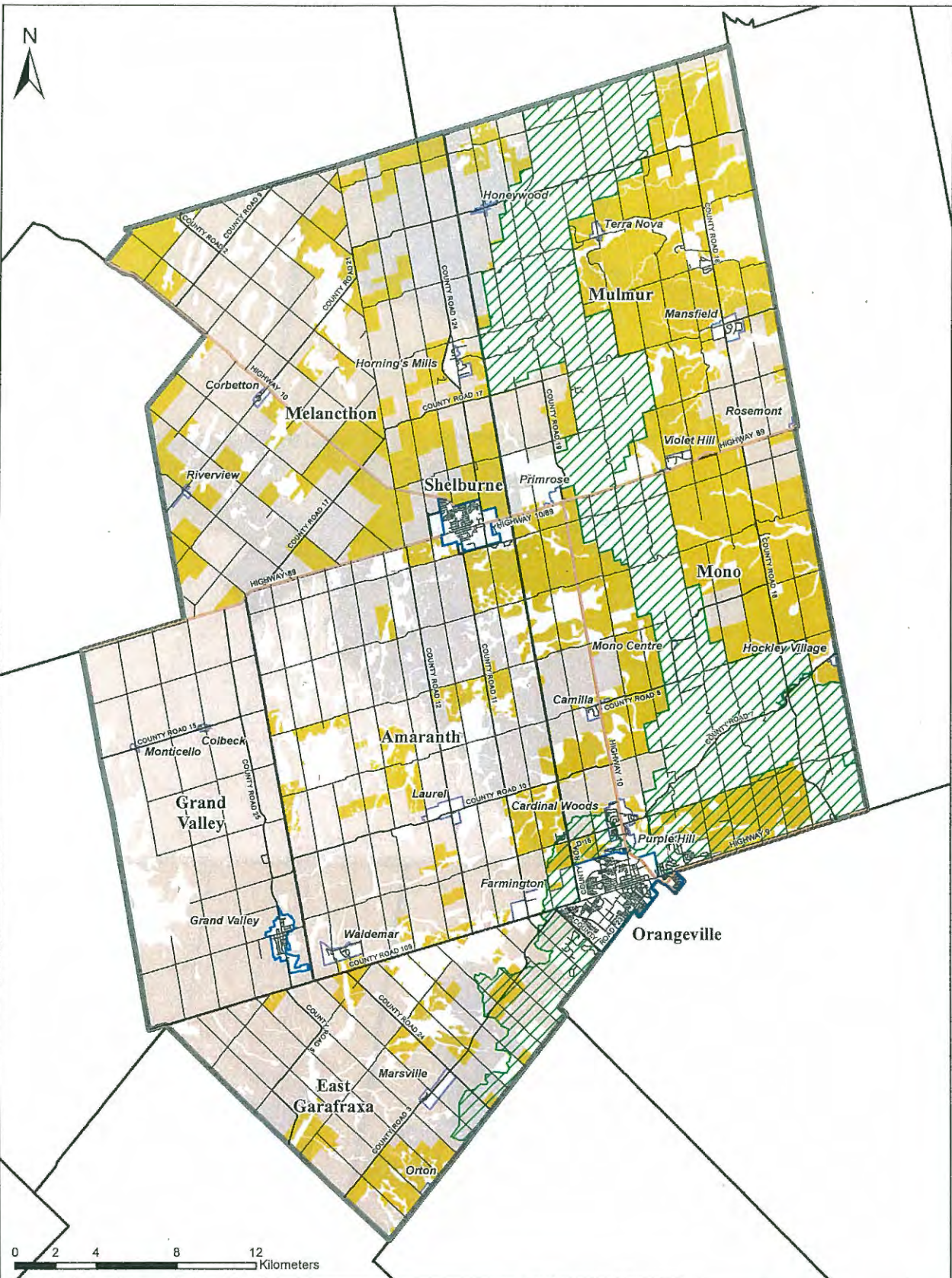
OFFICIAL PLAN

Schedule B1
Community Structure
and Land Use

MMM GROUP

Date: March 2015

Sources: LIO (2012), MTO (2012), Dufferin County, Mulmur OP, East Garafraxa OP, Amaranth OP, Grand Valley OP, Mono OP, NEP



Legend

- Urban Settlement Area
- Community Settlement Area
- Provincial Highway
- County Road
- Other Road
- Dufferin County Boundary
- Municipal Boundaries

- Agricultural Area (S. 4.2)
- Rural Lands (S. 4.3)
- Provincial Plan Areas (S. 2.0)

Note: Areas shown in white, and located outside settlement areas, contribute to the Countryside Area. See Schedules B and E, and local official plans for precise land uses. Generally, these areas consist of significant natural heritage features, mineral aggregate extraction operations/permitted areas, existing estate residential development, or major rural recreational use/permitted areas.

DUFFERIN COUNTY

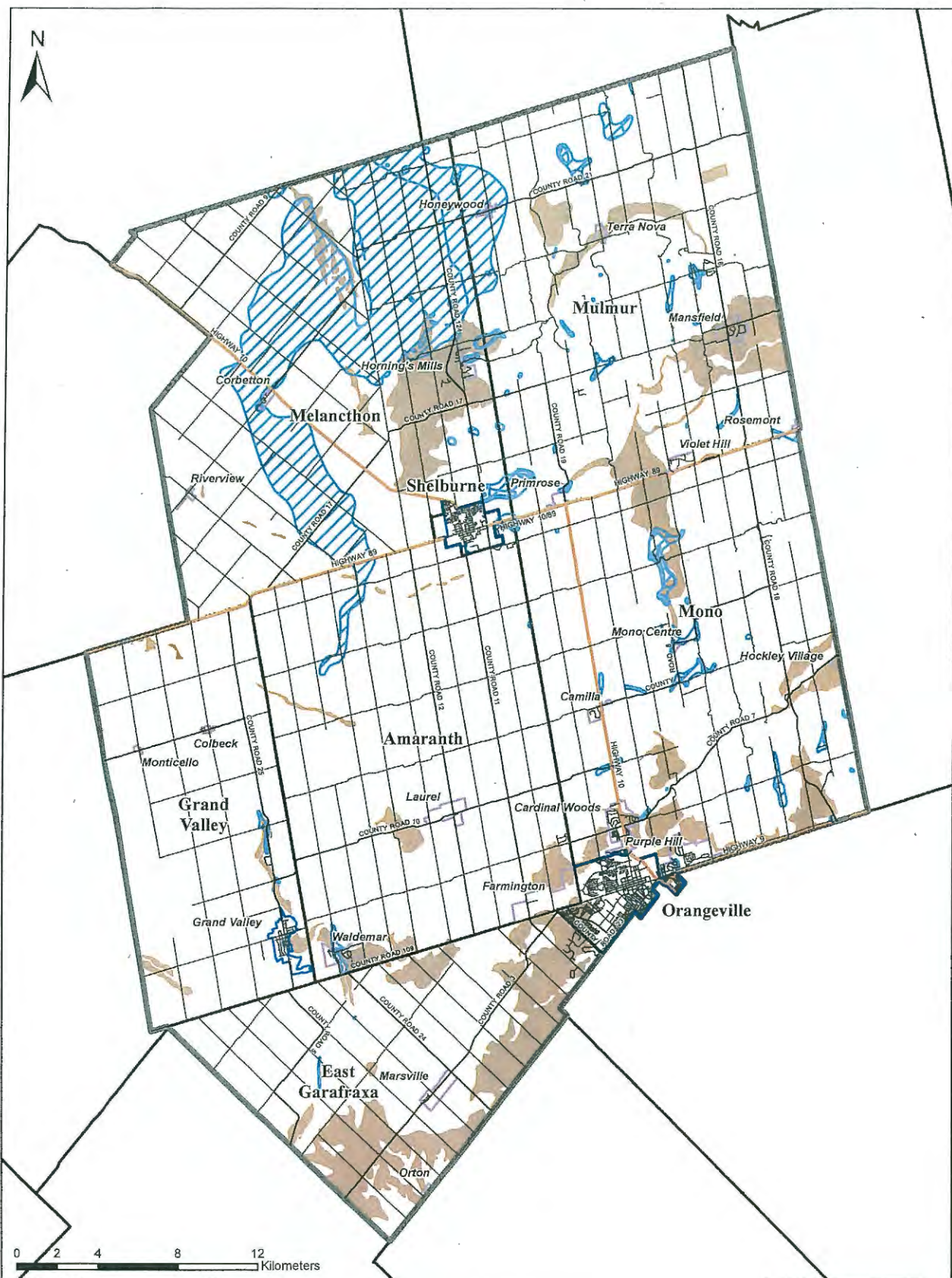
OFFICIAL PLAN

Schedule C Agricultural Area and Rural Lands

MMM GROUP

Date: March 2015

Document Path: M:\Data\2013 MUST USE E-COLLABORATION\MAPPING ONLY\14_13256.001.P01 - Dufferin County OF\MXD\2015 03\Schedule D - Aggregate Resource Areas.mxd



Legend

- Urban Settlement Area
- Community Settlement Area
- Provincial Highway
- County Road
- Other Road
- Dufferin County Boundary
- Municipal Boundaries

Mineral Aggregate Resources (S. 4.4)

- Sand and Gravel Resource Area
- Bedrock Resource Area



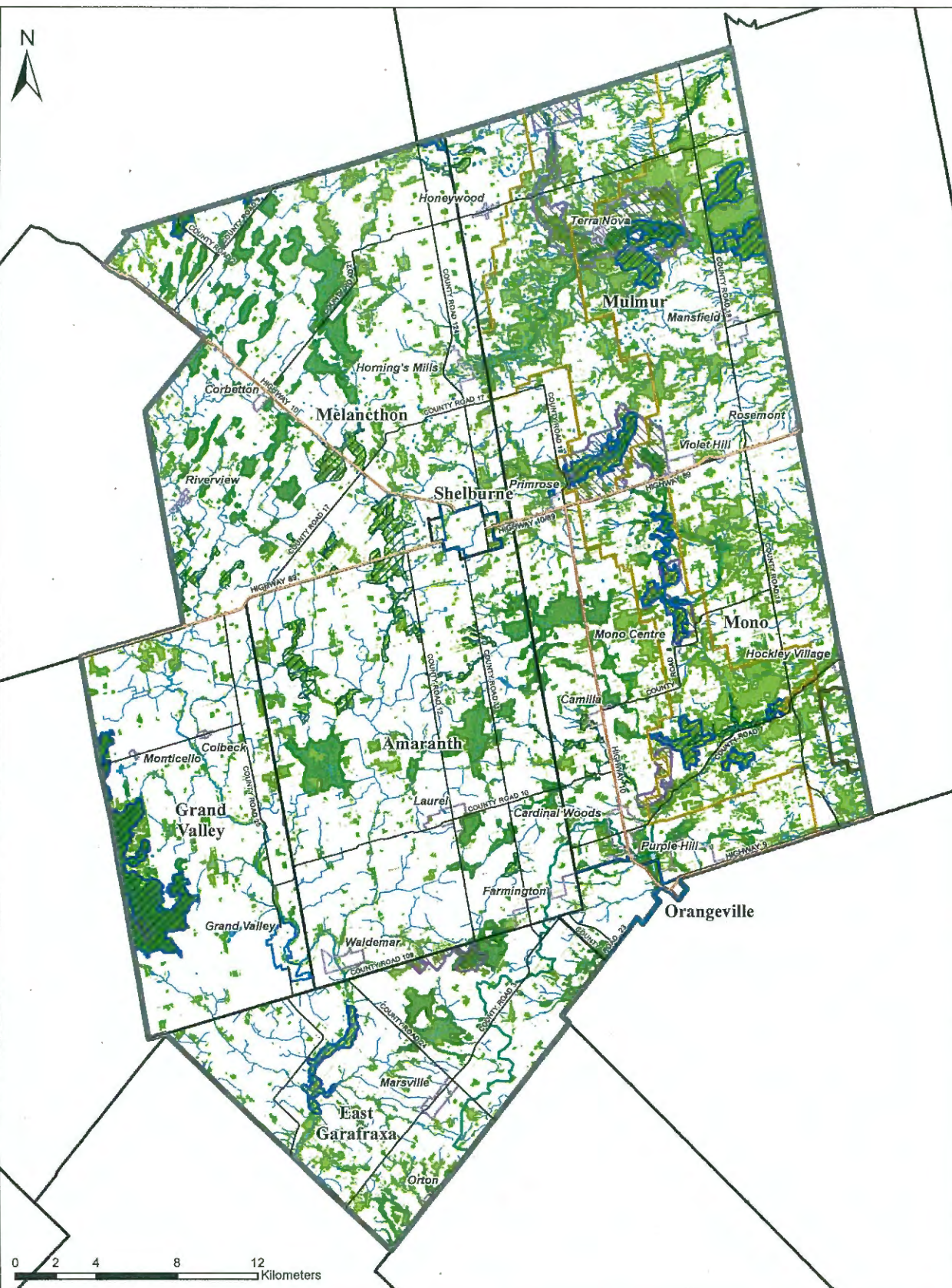
OFFICIAL PLAN

Schedule D Mineral Aggregate Resource Areas



Date: March 2015

Sources: LIO (2012), MTO (2012), Dufferin County, Aggregate Resources Inventory of Dufferin County, Paper 183-Revision 2 (2014)



Legend

- | | | |
|---------------------------|--|--|
| Urban Settlement Area | Provincially Significant Wetlands (S. 5.3.1) | Greenbelt Plan Protected Countryside Area (S. 2.1) |
| Community Settlement Area | Earth Science Area of Natural and Scientific Interest (S. 5.3.3) | Oak Ridges Moraine Conservation Plan Area (S. 2.2) |
| Provincial Highway | Life Science Area of Natural and Scientific Interest (S. 5.3.3) | Niagara Escarpment Plan Area (S. 2.3) |
| County Road | Woodlands (S. 5.3.4) | |
| Dufferin County Boundary | Unevaluated Wetlands (S. 5.3.6) | |
| Municipal Boundaries | Watercourses (S. 5.3.8) | |
| Waterbody | | |

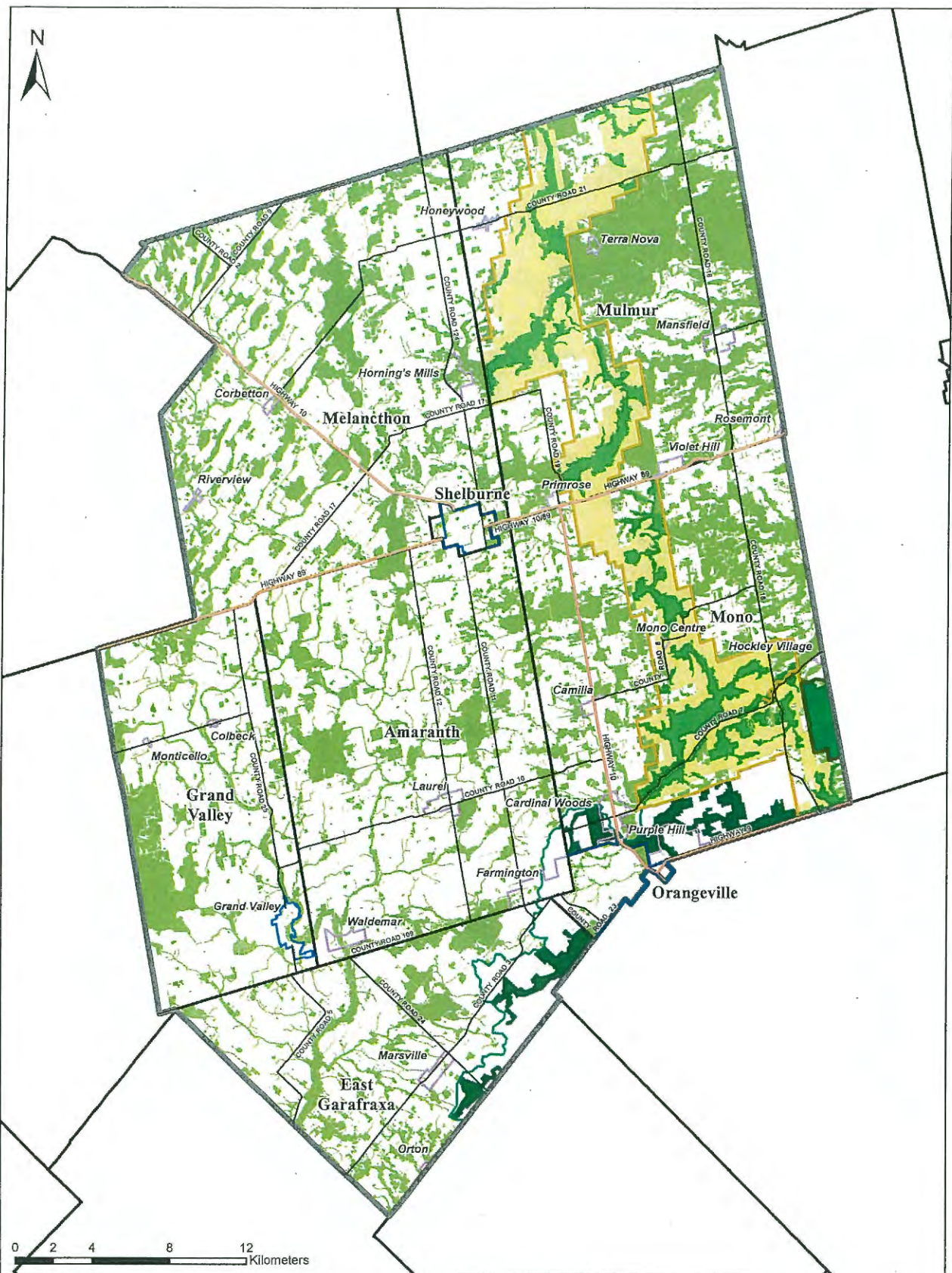
DUFFERIN
COUNTY

OFFICIAL PLAN

Schedule E Natural Heritage Features

MMM GROUP
Date: March 2015

Sources: Credit Valley Conservation, Grand River Conservation, Nottawasaga Valley Conservation, LIO (2012), Dufferin County



Legend

- | | | |
|---------------------------|---|---------------------------------------|
| Urban Settlement Area | County Preliminary Natural Heritage System (S. 5.2) | Niagara Escarpment Plan Area (S. 2.3) |
| Community Settlement Area | Greenbelt Plan Area (S. 2.3) | Escarpment Natural Area |
| Provincial Highway | Natural Heritage System | Escarpment Protection Area |
| County Road | Oak Ridges Moraine Conservation Plan Area (S. 2.2) | |
| Dufferin County Boundary | Natural Core | |
| Municipal Boundaries | Natural Linkage | |

DUFFERIN
COUNTY

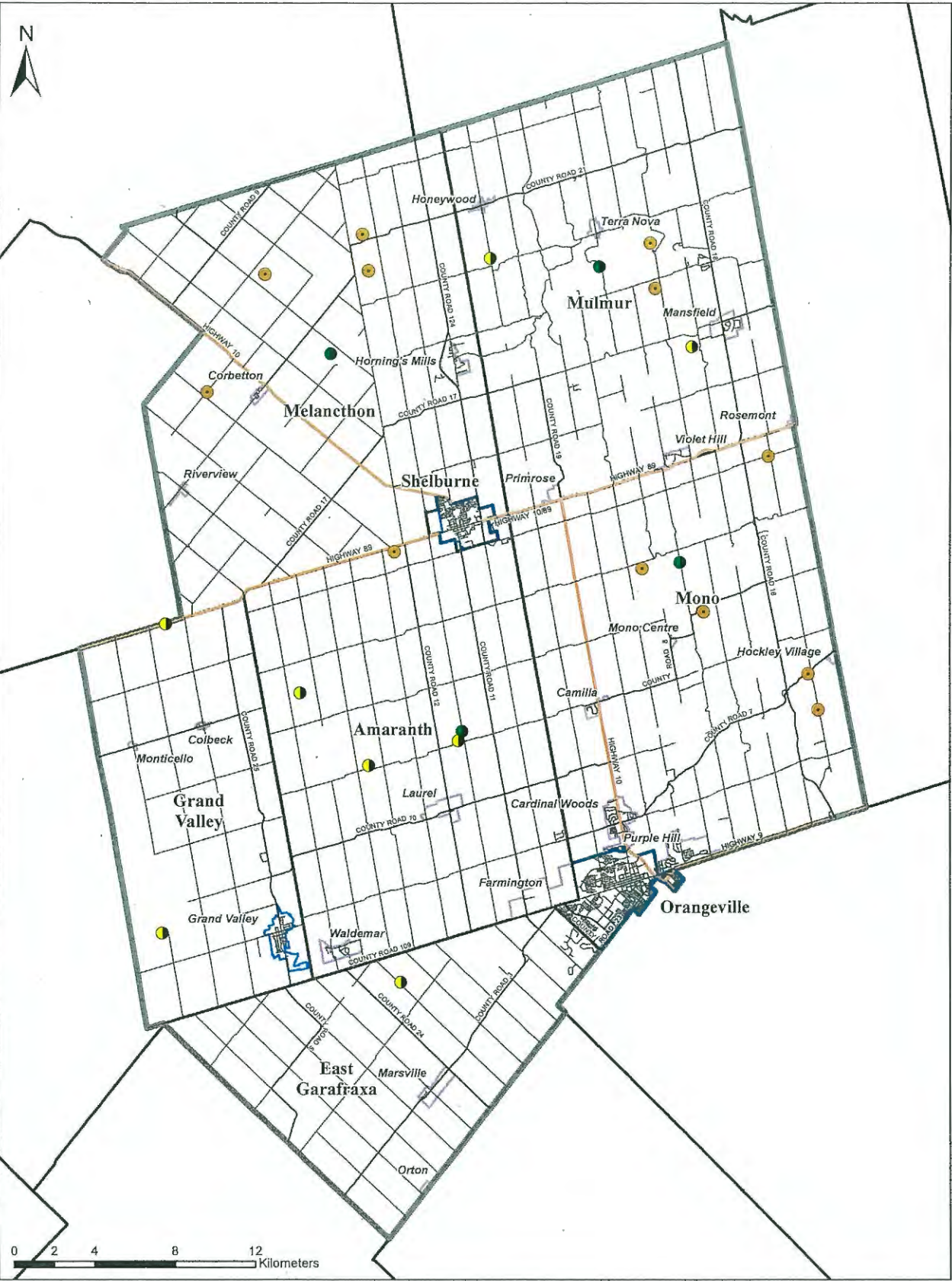
OFFICIAL PLAN

Schedule E1
Natural Heritage
System

MMM GROUP

Date: March 2015

Document Path: M:\lob\2013 MUST USE E-COLLABORATION\MAPPING ONLY\114_12255_001.P01 - Dufferin County OPMXD2015 03\Schedule F - Waste Disposal Sites.mxd



- Legend**
- Urban Settlement Area
 - Community Settlement Area
 - Provincial Highway
 - County Road
 - Other Road
 - Dufferin County Boundary
 - Municipal Boundaries

- Petroleum Wells (S. 4.4.4)**
- Petroleum Well
- Waste Disposal Sites (S. 6.3.1)**
- Active
 - Former

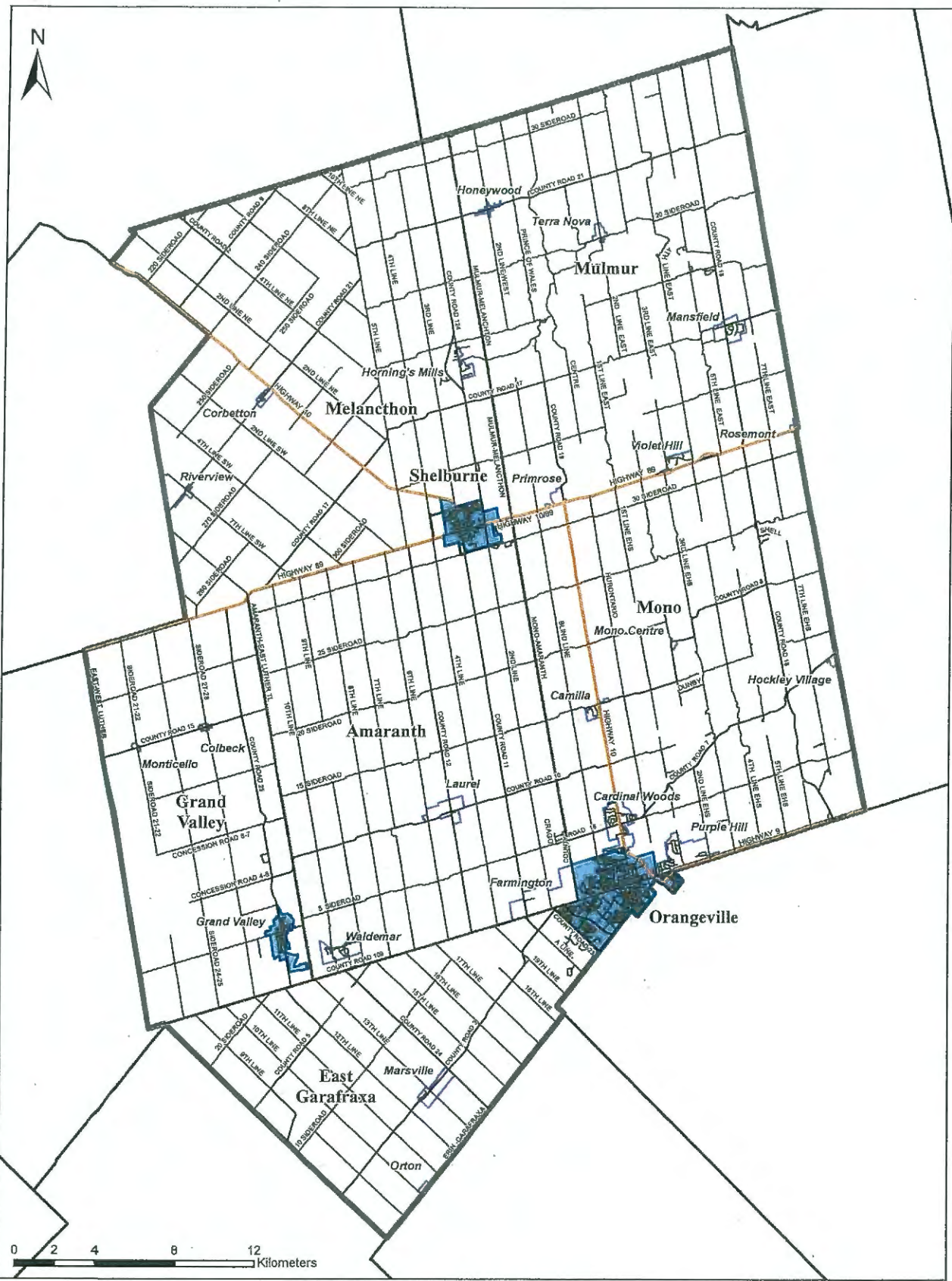
DUFFERIN COUNTY
OFFICIAL PLAN

Schedule F
Human-Made Hazards

MMM GROUP
Date: March 2015

Sources: LIO (2012), MTO (2012), Dufferin County, Aggregate Resources Inventory of Dufferin County, Paper 163-Revised (2009), Ontario Oil, Gas and Salt Resources Library (2014)

Document Path: M:\Joss2013 MUST USE E-COLLABORATION\MAPPING ONLY\114_12255.001 P01 - Dufferin County OF\MXD\2015 03\Schedule G - Transportation.mxd

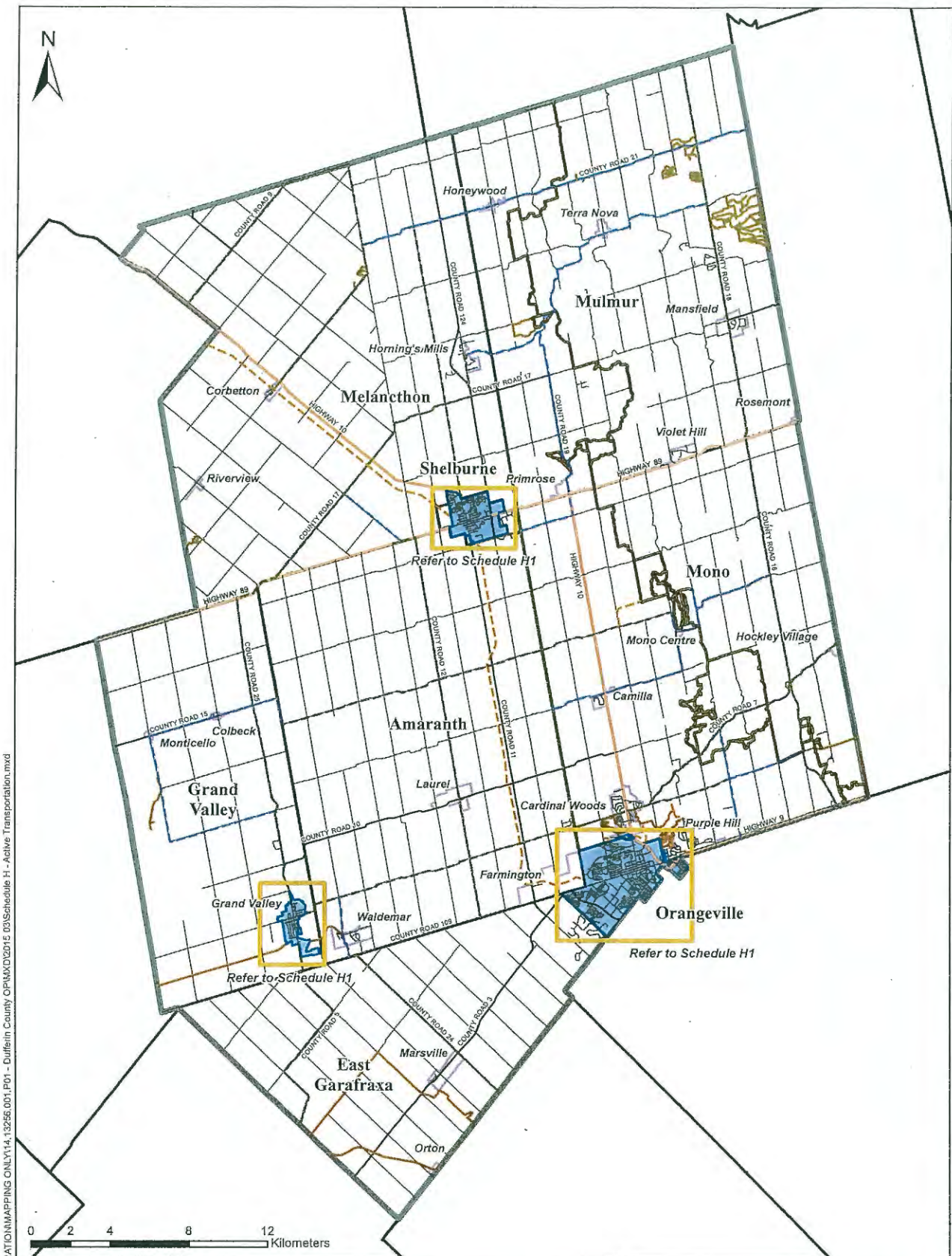


- Legend**
- | | |
|---------------------------|-------------------------------|
| Urban Settlement Area | Provincial Highway (S. 7.2.2) |
| Community Settlement Area | County Road (S. 7.2.2) |
| Dufferin County Boundary | Other Road |
| Municipal Boundaries | |

DUFFERIN COUNTY
OFFICIAL PLAN
Schedule G
Transportation

MMM GROUP
Date: March 2015

Sources: LJO (2012), Dufferin County, Grand Valley



Legend

- Urban Settlement Area
- Community Settlement Area
- Provincial Highway
- County Road
- Other Road
- Dufferin County
- Municipal

Facility Types (S. 7.2.3)

- Existing Bike Lane
- Proposed Bike Lane
- Existing Shoulder
- Proposed Shoulder
- Proposed Signed Route

- Existing On Road Route¹
- Previously Planned On Road Route¹
- Existing Off Road Route¹
- Previously Planned Off Road Route¹
- Bruce Trail

1. For existing and previously planned On & Off-Road Routes within the urban areas of Orangeville and Shelburne Refer to the Town of Orangeville Traffic Master Plan and Town of Shelburne Active Transportation Plan

DUFFERIN
COUNTY

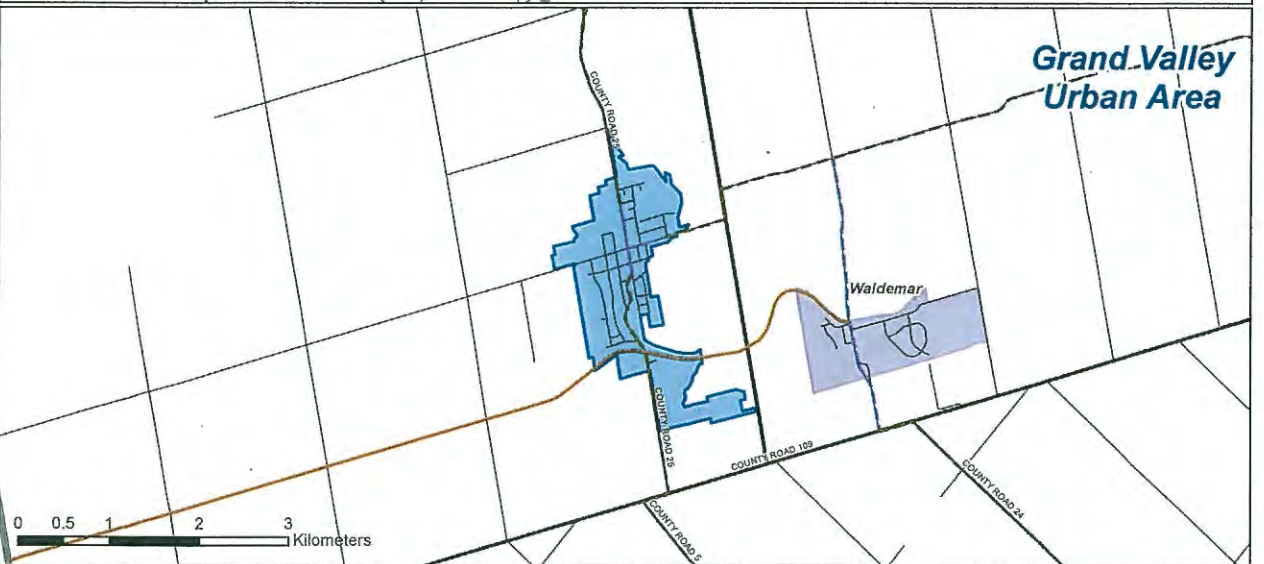
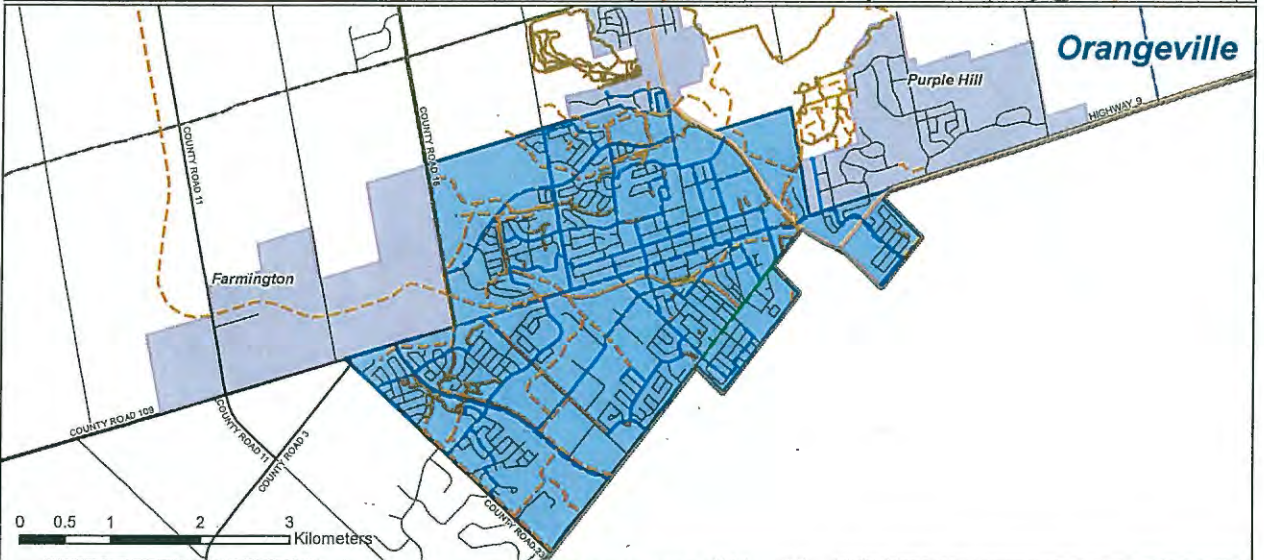
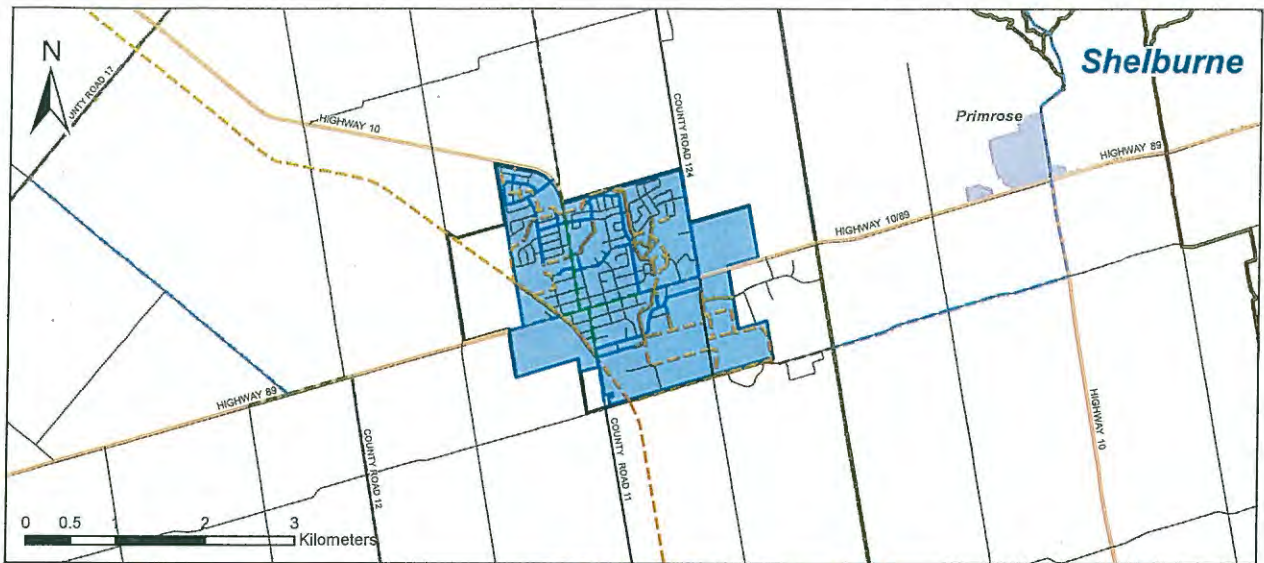
OFFICIAL PLAN

Schedule H
Active
Transportation

MMM GROUP

Date: March 2015

Sources: LJO (2012), Dufferin County, Active Transportation Plan (Oct. 2012)



Legend

- Urban Settlement Area
- Community Settlement Area
- Provincial Highway
- County Road
- Other Road
- Dufferin County Boundary
- Municipal Boundaries

Facility Types (S. 7.2.3)

- Existing Bike Lane
- Proposed Bike Lane
- Existing Shoulder
- Proposed Shoulder
- Proposed Signed Route

- Existing On Road Route¹
- Previously Planned On Road Route¹
- Existing Off Road Route¹
- Previously Planned Off Road Route¹
- Bruce Trail

1. For existing and previously planned On, Off-Road Routes within the urban areas of Orangeville and Shelburne Refer to the Town of Orangeville Trails Master Plan and Town of Shelburne Active Transportation Plan

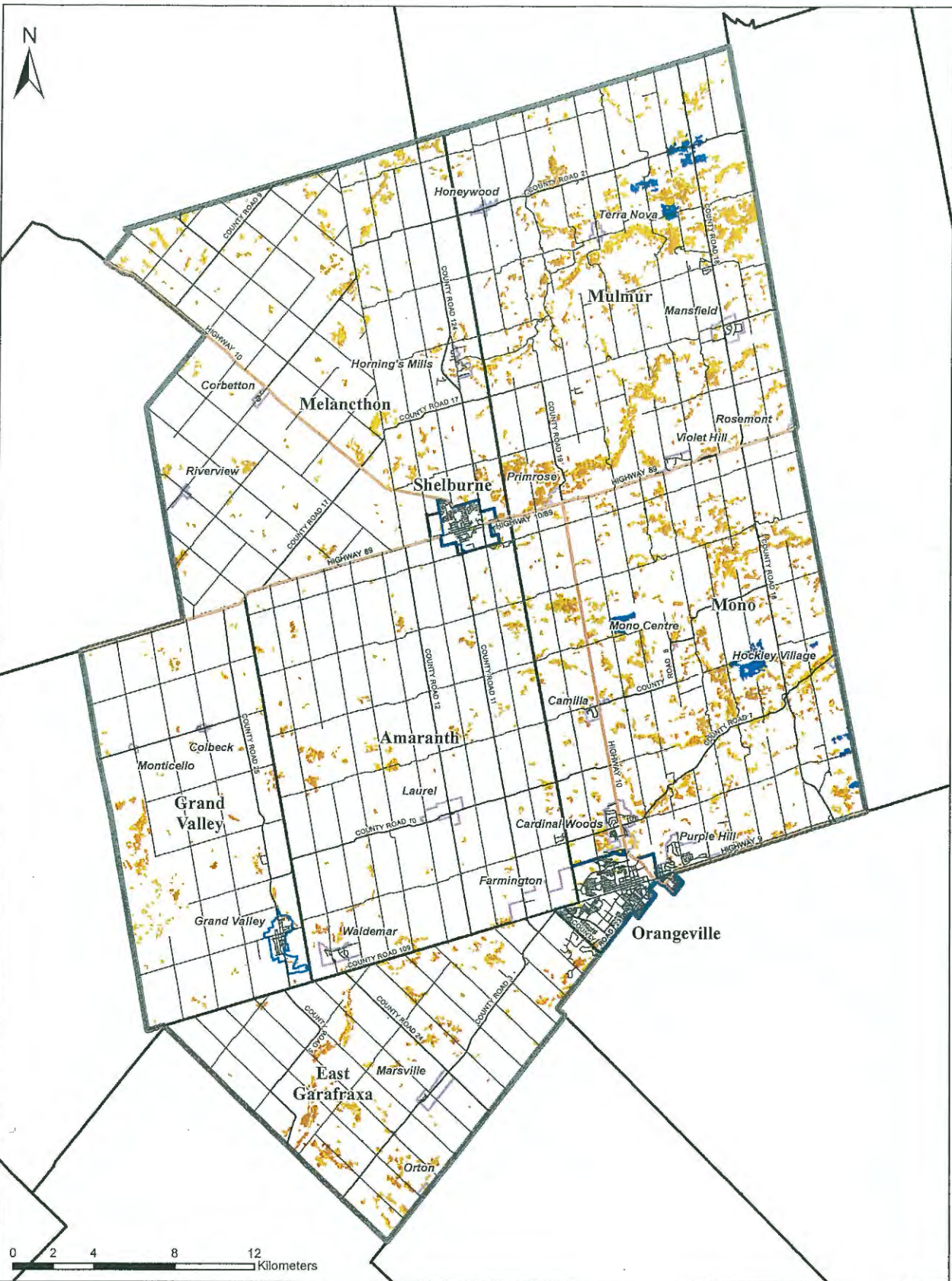
DUFFERIN
COUNTY

OFFICIAL PLAN

Schedule H1
Active
Transportation

MMM GROUP

Date: March 2015



Legend

- Urban Settlement Area
- Community Settlement Area
- Provincial Highway
- County Road
- Other Road
- Dufferin County Boundary
- Municipal Boundaries

Potential Forest Hazard Classification for Wildland Fire (S. 6.2.3)

- Extreme Risk
- High Risk
- Pine - Needs Evaluation

DUFFERIN COUNTY

OFFICIAL PLAN

Appendix 3

Potential Forest Hazard Classification for Wildland Fire

MMM GROUP

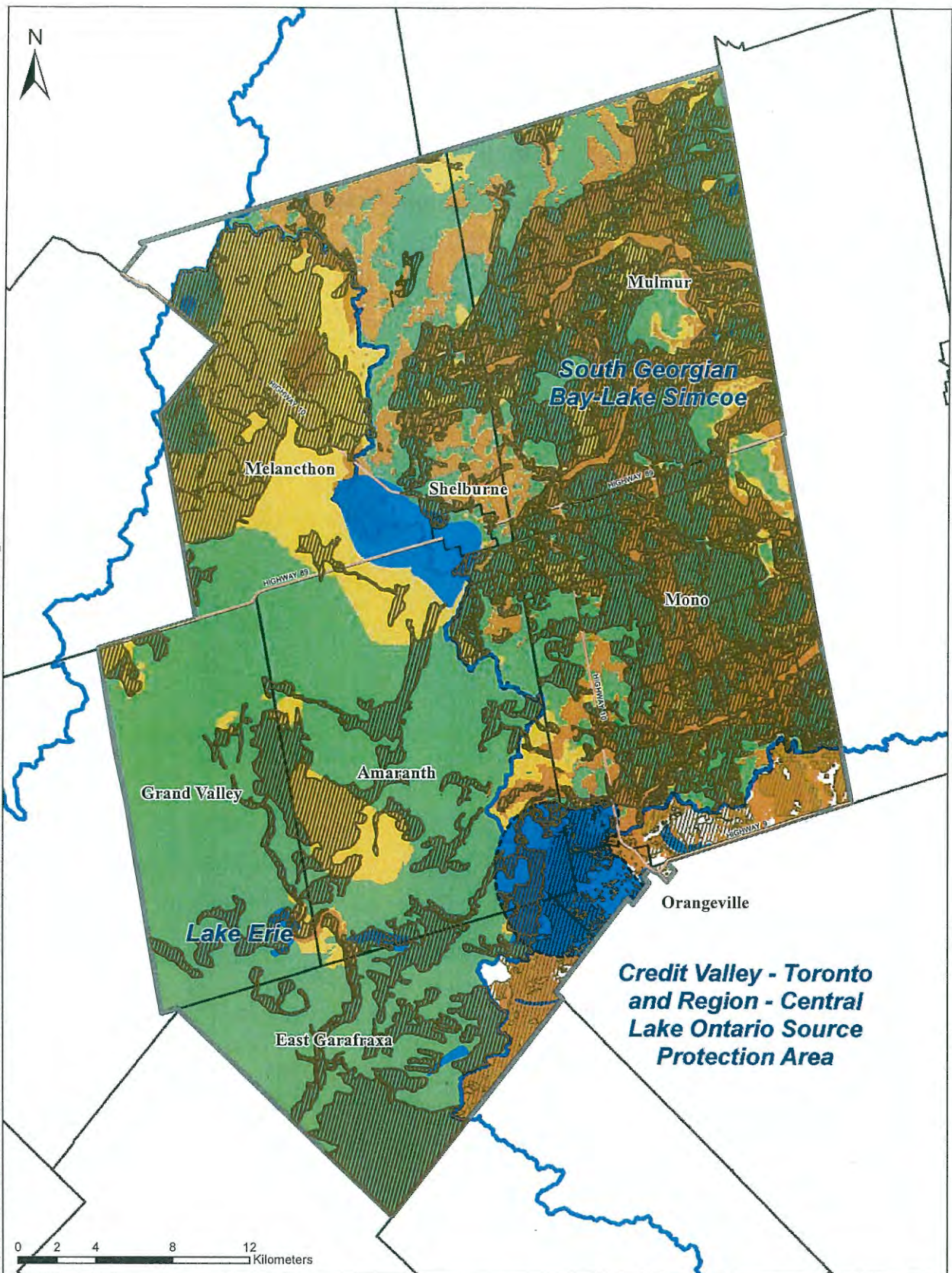
Date: March 2015

Sources: LIO (2012), MTO (2012), Dufferin County, NEP (2012), ORMCP, MNR (2014)

Document Path: M:\Jobs\2013 MUST USE E-COLLABORATION\MAPPING ONLY\14.13256.001.P01 - Dufferin County OP\UXD2015.03\Appendix 3 - Potential Forest Hazard.mxd

Attachment 3

Modified Appendix 2 – Source Water Protection



Legend

- | | |
|---------------------------------------|----------------------------------|
| Source Protection Plan | Source Water Protection (S. 5.4) |
| Provincial Highway | Municipal Wellhead Protection |
| Dufferin County Boundary | Vulnerable Aquifer |
| Municipal Boundaries | High |
| Water Quantity Area | Medium |
| Significant Groundwater Recharge Area | Low |

DUFFERIN
COUNTY
OFFICIAL PLAN

Appendix 2 Source Water Protection

NIMM GROUP

Date: March 2015

Denise Holmes

From: Sonya Pritchard <spritchard@dufferincounty.ca>
Sent: April-01-15 3:33 PM
To: 'Terry Horner (External)'; Sue Stone (External); Keith McNenly (External); Mark Early (External); Jane Wilson (External); 'Tracey ELGV Atkinson'; Christine Gervais (External); Denise Holmes (External); Johnn Telfer (External); 'Steve Wever'; ntuckett@orangeville.ca; Ed Brennan
Subject: County OP Approval and next steps
Attachments: Official Plan Implementation.doc

Good afternoon everyone,

For those of you at the Source Water meeting yesterday here is the report we discussed that I am sending to County Council next week.

The report identifies current planning items that will need to be addressed over the next while and suggests a strategy for moving forward. The money for a planning consultant included in the County draft budget was significantly reduced and isn't likely enough to cover the work that needs to be done. Hopefully, this report will be approved so we can move forward.

If you have any questions please let me know.

Regards,

Sonya

DISCLAIMER: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to which they are addressed. If you have received this email in error please notify the sender. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the County of Dufferin. Finally, the recipient should check this email and any attachments for the presence of viruses. The County of Dufferin accepts no liability for any damage caused by any virus transmitted by this email. The Corporation of the County of Dufferin, 55 Zina Street, Orangeville, Ontario. www.dufferincounty.ca



REPORT TO COUNCIL

To: Warden Maycock and Members of County Council
From: Sonya Pritchard, Chief Administrative Officer
Meeting Date: April 9, 2015
Subject: Count of Dufferin Official Plan Implementation

Purpose

The purpose of this report is to advise Council that the first County of Dufferin Official Plan was approved by the Minister of Municipal Affairs and Housing and to recommend an implementation strategy.

Background and Discussion

Official Plan Process

In early 2013, the Minister of Municipal Affairs and Housing approved Ontario Regulation 101/13 to amend Ontario Regulation 352/02 of the Planning Act. This change requires mandatory adoption of Official Plans by all counties. The County of Dufferin and 4 other counties were impacted by this amendment. All other counties and regions in Ontario already had Official Plans in place and were administering the upper-tier planning responsibilities defined in the Planning Act.

In July 2013, Council approved a process to move forward with the development of the first Official Plan for the County of Dufferin. An official plan steering committee consisting of one County councillor from each member municipality was established to provide oversight and a staff working group consisting of planning staff from each local municipality was set up to assist with information gathering, policy development, and to provide feedback. In addition, a Stakeholders group consisting of representatives from various local organizations was created. In August 2013 and Tracey Atkinson was appointed the Project Manager. Following competitive RFP process, the MMM Group was selected as the project consulting firm in September 2013.

Over the course of the next year the project team successfully moved through a well-defined and structured process. The project was broken into three phases:

1. Background Issues and Options Report
 - a. Background information review (Growth Plan report, local Official Plans, applicable provincial policy, related studies, etc)

- b. Presentations to local Council
 - c. Stakeholder Group consultation
 - d. Public Open House
 - e. Report Development
 - f. Presentation of the Report
2. Draft County Official Plan
 - a. Writing the Draft Plan
 - b. Presentations to County Council, Stakeholder Group, and a joint workshop style meeting with all local Councils
 - c. Public Open House
3. Final County Official Plan
 - a. Consultation report identify feedback and comments received
 - b. Presentations on revised plan
 - c. Statutory Public meeting
 - d. Adoption of Plan by County Council
 - e. Submission to Ministry of Municipal Affairs and Housing for approval

Throughout the entire process the local staff working group and planning staff from the Ministry of Municipal Affairs and Housing were involved. This cooperative and consultative approach along with extensive experience and focus of the project team were instrumental in keeping the project on track and meeting the accelerated schedule. There has been considerable positive feedback received from local Councillors, stakeholder participants and member of the public on the Official Plan process.

Some of the most difficult policy decisions during the process related to the following matters:

- Growth Plan allocations and intensification targets
- Rural settlement area delineation
- Aggregates
- Plan administration

These matters were addressed with reasonable satisfaction and policies were incorporated into the plan that were able to address most local concerns. It was acknowledged at the time of adoption that some of the policies included would not satisfactorily address provincial priorities and that modifications would likely be included in the approved document.

Provincial Approval and Modifications

The Minister of Municipal Affairs and Housing approved the first County of Dufferin Official Plan on March 25, 2015 with some modifications and a Notice of Decision was issued on March 27, 2015 (attached). The last date to appeal the decision is April 16, 2015. Once the appeal process is over the Plan will come into effect.

Most of the modifications were minor in nature. Other more significant changes were not unexpected as they were issues that had been raised by provincial staff during the process. Overall, there were very few modifications which speaks to the success of the process and the excellent work of the project team.

Modifications to note are the following:

- Section 3.3.3 – requires community settlement areas be delineated (This change was anticipated as it is now common practice throughout the province);
- Section 4.4.2.1 (c) - addition of a new sub-policy indicating that mineral aggregate resource operations shall be protected from development and activities that would hinder their expansion or continued use. (This change is consistent with provincial policy.);
- Section 4.4.2.1 (e) – changed to reflect that an Aggregate Resources Master Plan may rely on studies undertaken in relation to new or expanding aggregate applications may be used to take into account cumulative impacts;
- Section 8.6.1 - addition of 2 sub policies that indicate OPAs for Orangeville and Mono relating to County natural heritage system boundary changes and new or expanding mineral aggregate operations are not exempt from County approval;

Plan Administration

During the Official Plan process the matter of plan administration and delegation of planning authority was addressed multiple times resulting in three specific decisions by County Council:

1. To delegate consent and subdivision and condominium approval to the local municipalities effective the date of approval of the County Official Plan in accordance with Sections 51.2(2) and 54(1) of the Planning Act (February 13, 2014);
2. To add a part-time/contract planning position at cost of between \$40-70,000 annually at the appropriate time following the adoption of the County Official Plan (June 12, 2014);
3. To delegate approval of Official Plan Amendments under Section 17 of the Planning Act to Orangeville and Mono as approved by the Minister in July 2014 and to delegate the OPAs for the other six municipalities to the County planning position -Item 2 above (September 11, 2014).

Implementation

Developing a strategy to implement the Official Plan first requires an assessment of the current situation and the County's new planning role.

Ministry of Municipal Affairs and Housing staff have indicated that files currently with the province will be transitioned to the County/local municipalities. It is anticipated that a meeting will be scheduled shortly to review these items with County and local municipal staff.

Once the Official Plan has final approval following the appeal process, the County of Dufferin becomes the approval authority for all future Official Plan Amendments (OPA) for the Townships and the Town of Shelburne and Town of Grand Valley. There are approximately 10 OPAs that are either in process and that the County will take carriage of or that are anticipated immediately following the final approval of the Official Plan. Orangeville and Mono, once delegated by by-law will continue to be the approval authority of their respective OPAs except those that are not exempt from approval by the County.

There are approximately 10 draft plans of subdivision that have either been submitted and are at some stage in the planning process or very near submission. These files will all be under the approval authority of the lower-tier municipal Councils following delegation by by-law, by the County. It is important to note that even though approval authority is to be delegated the County is still required to provide a commenting role (similar to the role previously played by MMAH). The County will have to review applications to ensure that development is consistent with the new Official Plan, Provincial Plans and Provincial Policies. The County may also provide comments on consent applications, zoning by-law amendments and site plan projects should they have some County significance or cross-jurisdictional impact.

Once the Source Protection Plans are approved, each municipality has 5 years to update their Official Plan policies. In many instances, municipalities are proposing to undertake the source protection policy updates in conjunction with their next 5 year OPA update.

The County Official Plan, itself, also has a requirements for a future OPA relating to a Natural Heritage System. In addition, the Council may choose to complete the Aggregate Resources Master Plan referenced in the OP.

There are also a few approvals currently before the OMB that we believe will continue to be the carriage of MMAH, and will not be transitioned to the County.

Finally, the County of Dufferin is responsible for providing comments and coordinating responses with respect to provincial policy matters. There is a concurrent review of the Growth Plan, Niagara Escarpment Plan, Oak Ridges Moraine Plan, and the Greenbelt Plan over the next several months.

Immediate County responsibilities and required actions

- Coordinate transition from province to County/local municipalities
- Draft By-law to delegate subdivision approval to all lower-tier municipalities
- Draft By-law to delegate Official Plan approval authority to Mono and Orangeville

-
- Develop application forms
 - Determine planning fees and draft bylaw
 - Update website (add planning page, including forms, fees, processes)
 - Develop a process for processing applications for which the County is the approval authority
 - Develop a process for providing comments on applications where approval authority has been delegated, including consulting with agencies
 - Develop a pre-consultation process
 - Create an OP check-list (list of studies triggered by sections of the Official Plan)
 - Develop annual reporting templates & growth monitoring

Short term and ongoing County responsibilities and required actions

- Review and provide comments as required on local planning applications
- Review and approve local OPAs
- Provide comments on provincial policy matters related to current reviews
- Process applications for County OPAs

Long Term projects

- Natural Heritage Systems Strategy Study
- Aggregate Resources Master Plan (if desired)
- 5 year updates of local Official Plans and County Official Plan

In order to carry out these responsibilities and complete the required tasks requires planning expertise. As stated above this matter was considered during the last term of Council and a decision was made to hire a part-time contract planner to take on the planning function at the County. This approach was suggested in lieu of hiring a full-time staff person until such time as proper assessment of the workload and volume of applications could be made. It should also be noted that using the same planner or firm for an extended period (one-two years) would be preferred to using a number of resources. There is a need for someone taking on the County planning position to become familiar with the County Official Plan, local Official Plans, the relationship between the County Plan and various provincial plans, and local issues.

There is concern that insufficient resources at the County may result in the review, commenting, and approval process being delayed. One of the advantages of the County taking on planning from the province is that it provides the opportunity for matters to be dealt with more quickly and with a better understanding of local issues. The planners from the Towns of Mono and Orangeville have indicated they are willing to provide support and advice during the transition where possible. However, it will be necessary to fill a part-time/contract planning position at the County.

Financial Impact

The 2015 budget includes \$11,000 for planning work. Work completed to date on modifications and communications with provincial staff have used approximately \$1,200 of that amount. The remaining funds of just under \$10,000 are insufficient to fulfill the responsibilities and complete the required actions. It is impossible to predict the exact amount of funds required in the first year but a total amount of \$40,000 would be reasonable. There is sufficient money in the Reserve for Rate Stabilization to cover these costs for 2015. There will be a requirement to provide stable funding through the operating budget starting in 2016.

Some of the planning costs can be recovered from the applicants. It is anticipated that fees will be created to cover the costs of subdivision/condominium application review and OPA review and approval stemming from development applications. Other costs such as setting up planning processes and fees, providing comments and review on provincial policy, reviewing municipally initiated items will need to be borne by the County. Another option would be for County costs related to a specific municipality (i.e. a municipally initiated OPA) to be reimbursed by the municipality in question.

Local Municipal Impact

With the approval of the first County of Dufferin Official Plan delegation of subdivision and condominium approval can proceed creating enhanced planning authority for six of the local municipalities. Delegation of Section 17 OPA approval can also occur for Orangeville and Mono ensuring the status quo is maintained. A bylaw to delegate consents is included with this agenda.

Recommendation:

THAT the Chief Administrative Officer's report County of Dufferin Official Plan implementation dated April 9, 2015, be received;

AND THAT, staff be directed to bring forward the planning authority delegation bylaws for subdivision/condominium approval and Official Plan Amendment approval for the Towns of Orangeville and Mono;

AND THAT, \$30,000 be transferred from the Reserve for Rate Stabilization to the planning operating budget for 2015;

AND THAT staff be authorized to hire a part-time/contract planner to ensure that the County planning responsibilities are carried out in an effective and timely manner.

Respectfully submitted,

Sonya Pritchard, CPA, CMA
Chief Administrative Officer

Denise Holmes

From: Sonya Pritchard <spritchard@dufferincounty.ca>
Sent: April-10-15 1:10 PM
To: Denise Holmes
Subject: RE: County OP Approval and next steps

Hi Denise,

The recommendation that was approved by Council was changed slightly to clarify the subdivision delegation matter to add "for all municipalities". It now reads:

THAT the Chief Administrative Officer's report County of Dufferin Official Plan implementation dated April 9, 2015, be received;
AND THAT, staff be directed to bring forward the planning authority delegation bylaws for subdivision/condominium approval for all municipalities and Official Plan Amendment approval for the Towns of Orangeville and Mono;
AND THAT, \$30,000 be transferred from the Reserve for Rate Stabilization to the planning operating budget for 2015;
AND THAT staff be authorized to hire a part-time/contract planner to ensure that the County planning responsibilities are carried out in an effective and timely manner.

Sonya Pritchard, CPA, CMA|Chief Administrative Officer
County of Dufferin|Phone: 519-941-2816 Ext. 2502| spritchard@dufferincounty.ca |
55 Zina Street, Orangeville, ON L9W 1E5

-----Original Message-----

From: Denise Holmes [<mailto:dholmes@melanctontownship.ca>]
Sent: Friday, April 10, 2015 11:11 AM
To: Sonya Pritchard
Subject: RE: County OP Approval and next steps

Hi Sonya,

I was going to put your Report on the Township Agenda for next week? Did you amend it at all from the one that you sent with this email?

Thanks!

Regards,

Denise

Denise B. Holmes, AMCT | CAO/Clerk | Township of Melancthon | dholmes@melanctontownship.ca | PH: 519-925-5525 ext 101 | FX: 519-925-1110
| www.melanctontownship.ca |

Please consider the environment before printing this e-mail This message (including attachments, if any) is intended to be confidential and solely for the addressee. If you received this e-mail in error, please delete it and advise me immediately. E-mail transmission cannot be guaranteed to be secure or error-free and the sender does not accept liability for errors or omissions.



The Corporation of

THE TOWNSHIP OF MELANCTHON

157101 Hwy. 10, Melancthon, Ontario, L9V 2E6

Telephone - (519) 925-5525

Fax No. - (519) 925-1110

Website: www.melancthontownship.ca

Email: info@melancthontownship.ca

CORPORATION OF THE TOWNSHIP OF MELANCTHON

REPORT TO COUNCIL

TO: MAYOR WHITE AND MEMBERS OF COUNCIL

FROM: DENISE HOLMES, CAO/CLERK

SUBJECT: MMAH DECISION - DUFFERIN COUNTY OFFICIAL PLAN

DATE: APRIL 10, 2015

Recommendation

That the CAO/Clerk is hereby instructed to submit an appeal of the decision of the Ministry of Municipal Affairs and Housing approving the Official Plan for the County of Dufferin, with that appeal relating to only the Melancthon portion of the map included in Appendix 2, "Source Water Protection", as well as the policies of subsection 5.4.2(a) of the Plan, and that the appeal submission also indicate that Council's intent is to resolve the associated issues with the Ministry and the County through discussions rather than a full Ontario Municipal Board hearing.

Background

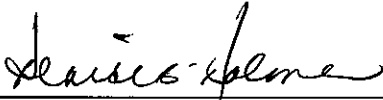
On March 27, 2015, the Ministry of Municipal Affairs issued its Decision on the first ever Dufferin County Official Plan. A copy of that decision is in this meeting's Agenda Package - Item #1 under County Official Plan Correspondence. One of the items that the Ministry is proposing to modify is Appendix 2: "Source Water Protection" and the Ministry has deleted and replaced it with a new Appendix which is provided as Attachment 3 in the Decision. As you will recall, the Ministry made a similar modification to the Township of Melancthon Official Plan's - Schedule G, by deleting Melancthon's Schedule of Source Water Mapping and replacing it with mapping from the County Official Plan. Subsequently, Melancthon Council appealed this part of the Ministry's decision on the Township Plan by way of a motion passed at the April 2, 2015 Council meeting.

In order to ensure consistency between the approved editions of the Official Plans for the County and the Township, it is recommended that those portions of the Ministry's approval of the County of Dufferin Official Plan relating to both the Melancthon portion of the mapping in Appendix 2 and the policies of Section 5.4.2 (a), be appealed to the Ontario Municipal Board

Financial

The fee to appeal the Dufferin County Official Plan is \$125.00.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Denise Holmes", written over a horizontal line.

Denise B. Holmes, AMCT
CAO/Clerk

Denise Holmes

From: Roger, Don <droger@torys.com>
Sent: March-31-15 8:53 AM
To: 'Denise Holmes'; 'Stephen Christie'
Cc: Rebecca Crump (rebecca.crump@clypg.ca); Gibbons, Andy; Crowe, Sarah
Subject: RE: Melancthon-Dufferin Wind Agreement - Lender Acknowledgement and Consent Agreement
Attachments: #18297599v4_TorysAtWork_ - DWPI - Melancthon - Acknowledgement and Conse....docx; Blackline_18297599_4 (3) - 18297599v4.pdf

Hi Denise and Steve,

The proposed bond financing with BNY Trust Company of Canada as the Collateral Agent, to be secured by all of Dufferin Wind Power's assets, is to be evidenced by a Trust Indenture which will be the operative document to hold the security rather than through a Collateral Agency Agreement. We have therefore had to make a few changes to the Acknowledgement and Consent Agreement to reflect the revised structure. The changes do not affect the substantive rights of the parties under that document.

I attach a revised copy of the Acknowledgement and Consent Agreement, together with a blackline showing the changes that have been made. With your concurrence we would like to replace the three copies of the Acknowledgement and Consent Agreement you sent to me with the revised pages. The alternative would be to have this form of Acknowledgement and Consent Agreement executed. Please let me know what you would prefer to do.

Best regards,

Don Roger

P. 416.865.7347 | F. 416.865.7380 | 1.800.505.8679

From: Roger, Don
Sent: March-27-15 12:56 PM
To: 'Denise Holmes'
Cc: 'Stephen Christie'; Rebecca Crump (rebecca.crump@clypg.ca); Gibbons, Andy
Subject: RE: Melancthon-Dufferin Wind Agreement - Lender Acknowledgement and Consent Agreement

Good afternoon, Denise.

Just a note to confirm receipt of the attached letter and the enclosed copies of the Acknowledgement and Consent Agreement. We will return a fully signed agreement to you when the financing is completed.

Thank you very much,

Don Roger

P. 416.865.7347

From: Denise Holmes [<mailto:dholmes@melanctontownship.ca>]
Sent: March-24-15 12:54 PM
To: Roger, Don; 'Stephen Christie'
Cc: Gibbons, Andy
Subject: RE: Melancthon-Dufferin Wind Agreement - Lender Acknowledgement and Consent Agreement

Hi Don,


This was approved at last Thursday's Council meeting and the signed Agreements are in the mail.

Regards,

Denise



Denise B. Holmes, AMCT | CAO/Clerk | Township of Melancthon | dholmes@melanctontownship.ca | PH: 519-925-5525
ext 101 | FX: 519-925-1110 | www.melanctontownship.ca |

 **Please consider the environment before printing this e-mail** This message (including attachments, if any) is intended to be confidential and solely for the addressee. If you received this e-mail in error, please delete it and advise me immediately. E-mail transmission cannot be guaranteed to be secure or error-free and the sender does not accept liability for errors or omissions.

From: Roger, Don [<mailto:droger@torys.com>]
Sent: March-24-15 12:10 PM
To: Stephen Christie (schristie@sbslaw.ca)
Cc: Denise B. Holmes (dholmes@melanctontownship.ca); Gibbons, Andy
Subject: RE: Melancthon-Dufferin Wind Agreement - Lender Acknowledgement and Consent Agreement

Hi Steve,

Do you have any update for us?

Thanks,

Don Roger

P. 416.865.7347 | F. 416.865.7380 | 1.800.505.8679
79 Wellington St. W., 30th Floor, Box 270, TD South Tower
Toronto, Ontario M5K 1N2 Canada | www.torys.com

TORYS
LLP

From: Roger, Don
Sent: March-12-15 3:00 PM
To: Stephen Christie (schristie@wstutzlaw.com)
Cc: Denise B. Holmes (dholmes@melancthontownship.ca); Gibbons, Andy
Subject: Melancthon-Dufferin Wind Agreement - Lender Acknowledgement and Consent Agreement

Hi Stephen,

Dufferin Wind Power Inc. is in the process of doing a bond financing with BNY Trust Company of Canada as the Collateral Agent which will be secured by all of its assets, including an assignment of its interest in the Melancthon-Dufferin Wind Agreement as security for its obligations. We expect this financing to close in early April 2015. We have prepared an Acknowledgement and Consent Agreement substantially in the form of the one attached as Schedule "E" to the Melancthon-Dufferin Wind Agreement dated July 31, 2013. This document has been vetted by the lenders' counsel. In section 115 of the Melancthon-Dufferin Wind Agreement, the Township of Melancthon agreed to execute and deliver to an Acknowledgement and Consent Agreement in favour of any applicable lender, collateral agent or security trustee substantially in the form of Schedule "E" to that agreement. In the proposed financing there is a Collateral Agent, but no Agent as well so we have deleted the references to Agent and duplicative covenants where applicable. I attach the following to this e-mail:

- 1. The executed Melancthon-Dufferin Wind Agreement;*
- 2. The Acknowledgement and Consent Agreement we are proposing be entered into by the Township of Melancthon and BNY Trust Company;*
and

3. A blackline comparing Acknowledgement and Consent Agreement we are proposing with the one attached as Schedule "E" to the Melancthon-Dufferin Wind Agreement.

Dufferin Wind Power Inc. will pay, or reimburse the Township of Melancthon, for your reasonable legal fees and expenses in connection with advising the Township in connection with this matter in accordance with section 83 of the Melancthon-Dufferin Wind Agreement.

We would like to settle this form promptly and have three copies executed by the Township. We will then arrange for BNY Trust Company to execute the document, insert the date of the Collateral Agency Agreement at closing, and return one fully executed copy to the Township.

Please let me know if you require anything further.

Best regards,

Don Roger

P. 416.865.7347

This email and any attachments are for the sole use of the intended recipients and may be privileged or confidential. Any distribution, printing or other use by anyone else is prohibited. If you are not an intended recipient, please contact the sender immediately, and permanently delete this email and attachments.

Le présent courriel et les documents qui y sont joints sont exclusivement réservés à l'utilisation des destinataires concernés et peuvent être de nature privilégiée ou confidentielle. Toute distribution, impression ou autre utilisation est interdite aux autres personnes. Si vous ne faites pas partie des destinataires concernés, veuillez en informer immédiatement l'expéditeur, ainsi que supprimer ce courriel et les documents joints de manière permanente.

Total Control Panel

[Login](#)

To: dholmes@melancthontownship.ca [Remove](#) this sender from my allow list
From: droger@torys.com

You received this message because the sender is on your allow list.

This email and any attachments are for the sole use of the intended recipients and may be privileged or confidential. Any distribution, printing or other use by anyone else is prohibited. If you are not an intended recipient, please contact the sender immediately, and permanently delete this email and attachments.

ACKNOWLEDGMENT AND CONSENT AGREEMENT

This Acknowledgement and Consent Agreement ("**Acknowledgement**") is made as of the _____ day of April, 2015

BETWEEN:

THE CORPORATION OF THE TOWNSHIP OF MELANCTHON
("**Owner**")

- AND -

BNY TRUST COMPANY OF CANADA
("**Collateral Agent**")

WHEREAS:

- A. Collateral Agent, as trustee, on its own behalf and in its capacity as trustee for certain bondholders (collectively, the "**Secured Creditors**") under and in accordance with the Trust Indenture made as of April ____, 2015 (as amended, supplemented, restated, extended, renewed or replaced from time to time, the "**Trust Indenture**") between, *inter alia*, Dufferin Wind Power Inc. and the Collateral Agent.
- B. The Owner and Dufferin Wind Power Inc. (the "**Developer**") entered into the Melancthon – Dufferin Wind agreement dated July 31, 2013 (as that agreement may be amended, supplemented, restated, extended, renewed or replaced from time to time, the "**Agreement**"), pursuant to which the Owner has granted to the Developer, *inter alia*, certain rights in connection with use of and access to municipal roads (the "**Rights**") and the lands described in Schedule "A" thereto (the "**Lands**") on the terms and conditions set out in the Agreement.
- C. Pursuant to the Trust Indenture (and documentation delivered in connection therewith), the Collateral Agent has been granted charges, mortgages, assignments and security interests (collectively, the "**Security Interests**") in all of the property, undertaking, assets, interests, rights and benefits of the Developer, including without limitation, all of the Developer's right title, estate, interest and equity in the Agreement, the Rights together with all rights, privileges, benefits, agreements and interests therein, and all improvements, equipment, structures, chattels, personal property and appurtenances thereto in, on, under or appurtenant to the Lands (collectively, the "**Collateral**").
- D. The Owner has agreed to execute and deliver this Acknowledgement to the Collateral Agent pursuant to the provisions of the Agreement.

NOW THEREFORE in consideration of the sum of Two Dollars (\$2) paid by the Collateral Agent to the Owner and other good and valuable consideration, the receipt and sufficiency of

which are hereby acknowledged, the Owner hereby acknowledges, covenants and confirms to the Collateral Agent, as follows:

1. The Owner consents to the creation of the Security Interests and the registration thereof on the title to the Lands in the applicable land registry office.
2. The Owner acknowledges that, following an event of default as defined in the Trust Indenture (each, an “**Event of Default**”), the Collateral Agent or the Secured Creditors or any nominee or designee thereof or any receiver or receiver-manager (collectively, an “**Agent Party**”) shall have the right to enforce the Security Interests, including, without limitation, the right to enjoy and enforce the rights of the Developer under the Agreement and, in the course of the enforcement of such rights, shall be entitled to sell, assign, transfer, negotiate or otherwise dispose of the Agreement, provided that in exercising such rights the Agent Party shall assume all of the liabilities and obligations of the Developer under or in connection with the Agreement, subject to Section 4 hereof.
3. The Owner agrees:
 - (a) to give the Collateral Agent written notice (at the addresses below) of any default by the Developer under the Agreement, concurrent with the delivery of such notice to the Developer;
 - (b) that if the Developer fails to cure the breach or default identified in such notice, the Collateral Agent or any other Agent Party may, but in no way shall be obligated to, cure such default and the Owner shall not terminate the Agreement or exercise any other remedy under the Agreement if the Collateral Agent or any other Agent Party, within 90 days of the date of the Collateral Agent’s receipt of the written notice referred to in section 3(a) above, is diligently proceeding to cure such breach or default;
 - (c) that if any default by the Developer the Agreement is not of a curable nature, it will not exercise any right to terminate if the Collateral Agent or any other Agent Party or nominee thereof agrees to assume the rights and obligations of the Developer under the Agreement, including its obligations under the Operation and Maintenance Part, to the extent that it is capable of assuming and correcting the default by the Developer, so long the Collection Infrastructure is still operating and the Collateral Agent, Agent Party or nominee promptly and diligently commences and pursues the curing of all other outstanding defaults under the Agreement;
 - (d) that if the Agreement is terminated or surrendered for any reason prior to the expiry of the term thereof, whether as a result of a default by the Developer thereunder or otherwise, the Owner shall give notice of such termination to the Collateral Agent and shall offer to enter into a new or replacement agreement (the “**Replacement Agreement**”) with the Collateral Agent or another Agent Party or other person designated by, as applicable, the Collateral Agent or other Agent

Party, which Replacement Agreement shall be on substantially the same terms and conditions as the Agreement;

- (e) that if within 30 days of receipt of the notice referred to in item section 3(d) above, the Collateral Agent or other Agent Party requests a Replacement Agreement, the Owner shall enter into such Replacement Agreement with, as applicable, the Collateral Agent or other Agent Party or other person designated by the Collateral Agent or other Agent Party, notwithstanding any of the foregoing, the Agent Party confirms and acknowledges that the Owner shall not be liable to the Agent Party for the non-delivery of any notice pursuant to section 3(a) above;
 - (f) that although the Owner and the Developer may modify the Agreement from time to time between themselves, the Collateral Agent will not be bound by any material adverse modifications made without the Collateral Agent's prior written consent, but with notice from the Developer to the Collateral Agent as may be required pursuant to the Trust Indenture and provided that such amendments would not reasonably be expected to impair the Collateral Agent's security interest in the Collateral; and
 - (g) the Owner will, at any time and from time to time, upon not less than five business days' prior request by the Collateral Agent and the payment of the Owner's reasonable fees, deliver to the Collateral Agent a statement in writing certifying that: (i) the Agreement is in full force and full effect unamended (or setting out any such amendments), (ii) all amounts owing and payable under the Agreement have been paid (or setting out any unpaid amounts), and (iii) to the Owner's knowledge, the Developer is not in default of its obligations under the Agreement in any material respect (or setting out any such defaults).
4. The Collateral Agent covenants and agrees with the Owner that during any period the Collateral Agent exercises its Security Interests and takes possession of the Developer's interest in the Lands (either directly or indirectly through an Agent Party) or takes control of or manages the Developer's interest in the Lands or the Collateral or any part thereof, or forecloses upon the Agreement, or succeeds to the interest of the Developer under the Agreement, it will assume all of the obligations of the Developer under or in connection with the Agreement during such period to the extent that they may be performed by the Collateral Agent, and thereafter, but only while the Collateral Agent is in possession or control of the Lands, observe and perform all of the Developer's obligations under the Agreement to the extent that they may be performed by the Collateral Agent. For greater certainty, the Collateral Agent shall only be liable for the performance of the obligations of the Developer from and after the date (the "**Possession Date**") which the Collateral Agent is in possession or control of the Lands and only for the period the Collateral Agent remains in possession or control of the Lands. The Collateral Agent shall not be liable for any obligations of the Developer arising prior to the Possession Date.
5. The Owner confirms and acknowledges that in the event that the Collateral Agent or any other Agent Party assigns, transfers or otherwise disposes of its interest in the Agreement

pursuant to its Security Interests (a “**Transfer**”), it will not unreasonably withhold, delay or condition its consent to the Transfer, and, upon such assignee or transferee covenanting and agreeing in writing with the Owner to assume and perform all of the covenants and obligations of the Developer pursuant to the Agreement, each of the Collateral Agent and the other Agent Party shall, thereupon and without further agreement, be freed and relieved of all liability with respect to the Agreement from and after the effective date of such Transfer.

6. All notices hereunder shall be in writing, sent by registered mail, return receipt requested or by fax, to the respective parties and the addresses set forth on the signature page or at such other address as the receiving party shall designate in writing.
7. This Acknowledgement may be executed in any number of counterparts and delivered electronically, shall be governed by the laws of the Province of Ontario and binds and inures to the benefit of the Collateral Agent, and its successors and assigns and shall be binding upon the heirs, personal representatives, successors and assigns of the Owner.
8. Each of the parties hereto agrees to do, make and execute all such further documents, agreements, assurances, acts, matters and things and take such further action as may be reasonably required by any other party hereto in order to more effectively carry out the true intent of this Acknowledgement.
9. The provisions of this Acknowledgement shall continue in effect until the Owner shall have received the written notice from the Collateral Agent that all amounts advanced, and obligations arising under the Trust Indenture have been paid and performed in full.

[SIGNATURE LINES FOLLOW ON THE NEXT PAGE]

IN WITNESS WHEREOF, this Acknowledgement is executed by the parties as of the date first written above.

Address for Notice:

**THE CORPORATION OF THE TOWNSHIP OF
MELANCTHON**

The Corporation of the Township
of Melancthon
157101 Highway 10
Melancthon, Ontario
L9V 2E6
Fax: (519) 925-1110

Per: _____
Darren White, Mayor

Per: _____
Denise B. Holmes, CAO

We have authority to bind the Corporation

Address for Notice:

BNY TRUST COMPANY OF CANADA

BNY Trust Company of Canada
320 Bay Street, 11th floor
Toronto, Ontario M5H 4A6
Attention: Corporate Trust
Administration
Fax.: (416) 360-1711

Per: _____

Per: _____

We have authority to bind the above

ACKNOWLEDGMENT AND CONSENT AGREEMENT

This Acknowledgement and Consent Agreement (“**Acknowledgement**”) is made as of the _____ day of April, 2015

BETWEEN:

THE CORPORATION OF THE TOWNSHIP OF MELANCTHON
 (“**Owner**”)

- AND -

BNY TRUST COMPANY OF CANADA
 (“**Collateral Agent**”)

WHEREAS:

- A. Collateral Agent, as trustee, on its own behalf and in its capacity as ~~agent~~trustee for certain ~~present and future lenders, creditors and~~ bondholders (collectively, the “**Secured Creditors**”) under and in accordance with the ~~Agreement~~Trust Indenture made as of April _____, 2015 (as amended, supplemented, restated, extended, renewed or replaced from time to time, the “~~Collateral Agency Agreement~~Trust Indenture”) between, *inter alia*, Dufferin Wind Power Inc., ~~the persons who are, and from time to time become, parties thereto as guarantors,~~ and the Collateral Agent, ~~as agent for the Secured Creditors.~~
- B. The Owner and Dufferin Wind Power Inc. (the “**Developer**”) entered into the Melancthon – Dufferin Wind agreement dated July 31, 2013 (as that agreement may be amended, supplemented, restated, extended, renewed or replaced from time to time, the “**Agreement**”), pursuant to which the Owner has granted to the Developer, *inter alia*, certain rights in connection with use of and access to municipal roads (the “**Rights**”) and the lands described in Schedule “A” thereto (the “**Lands**”) on the terms and conditions set out in the Agreement.
- C. Pursuant to the ~~Collateral Agency Agreement~~Trust Indenture (and documentation delivered in connection therewith), the Collateral Agent has been granted charges, mortgages, assignments and security interests (collectively, the “**Security Interests**”) in all of the property, undertaking, assets, interests, rights and benefits of the Developer, including without limitation, all of the Developer’s right title, estate, interest and equity in the Agreement, the Rights together with all rights, privileges, benefits, agreements and interests therein, and all improvements, equipment, structures, chattels, personal property and appurtenances thereto in, on, under or appurtenant to the Lands (collectively, the “**Collateral**”).
- D. The Owner has agreed to execute and deliver this Acknowledgement to the Collateral Agent pursuant to the provisions of the Agreement.

NOW THEREFORE in consideration of the sum of Two Dollars (\$2) paid by the Collateral Agent to the Owner and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Owner hereby acknowledges, covenants and confirms to the Collateral Agent, as follows:

1. The Owner consents to the creation of the Security Interests and the registration thereof on the title to the Lands in the applicable land registry office.
2. The Owner acknowledges that, following ~~an event of default by the Developer under the Credit Agreement or~~ an event of default as defined in the ~~Collateral Agency Agreement~~ Trust Indenture (each, ~~and an~~ **“Event of Default”**), the Collateral Agent or the Secured Creditors or any nominee or designee thereof or any receiver or receiver-manager (collectively, an **“Agent Party”**) shall have the right to enforce the Security Interests, including, without limitation, the right to enjoy and enforce the rights of the Developer under the Agreement and, in the course of the enforcement of such rights, shall be entitled to sell, assign, transfer, negotiate or otherwise dispose of the Agreement, provided that in exercising such rights the Agent Party shall assume all of the liabilities and obligations of the Developer under or in connection with the Agreement, subject to Section 4 hereof.
3. The Owner agrees:
 - (a) to give the Collateral Agent written notice (at the addresses below) of any default by the Developer under the Agreement, concurrent with the delivery of such notice to the Developer;
 - (b) that if the Developer fails to cure the breach or default identified in such notice, the Collateral Agent or any other Agent Party may, but in no way shall be obligated to, cure such default and the Owner shall not terminate the Agreement or exercise any other remedy under the Agreement if the Collateral Agent or any other Agent Party, within 90 days of the date of the Collateral Agent’s receipt of the written notice referred to in section 3(a) above, is diligently proceeding to cure such breach or default;
 - (c) that if any default by the Developer the Agreement is not of a curable nature, it will not exercise any right to terminate if the Collateral Agent or any other Agent Party or nominee thereof agrees to assume the rights and obligations of the Developer under the Agreement, including its obligations under the Operation and Maintenance Part, to the extent that it is capable of assuming and correcting the default by the Developer, so long the Collection Infrastructure is still operating and the Collateral Agent, Agent Party or nominee promptly and diligently commences and pursues the curing of all other outstanding defaults under the Agreement;
 - (d) that if the Agreement is terminated or surrendered for any reason prior to the expiry of the term thereof, whether as a result of a default by the Developer thereunder or otherwise, the Owner shall give notice of such termination to the

Collateral Agent and shall offer to enter into a new or replacement agreement (the “**Replacement Agreement**”) with the Collateral Agent or another Agent Party or other person designated by, as applicable, the Collateral Agent or other Agent Party, which Replacement Agreement shall be on substantially the same terms and conditions as the Agreement;

- (e) that if within 30 days of receipt of the notice referred to in item section 3(d) above, the Collateral Agent or other Agent Party requests a Replacement Agreement, the Owner shall enter into such Replacement Agreement with, as applicable, the Collateral Agent or other Agent Party or other person designated by the Collateral Agent or other Agent Party, notwithstanding any of the foregoing, the Agent Party confirms and acknowledges that the Owner shall not be liable to the Agent Party for the non-delivery of any notice pursuant to section 3(a) above;
- (f) that although the Owner and the Developer may modify the Agreement from time to time between themselves, the Collateral Agent will not be bound by any material adverse modifications made without the Collateral Agent’s prior written consent, but with notice from the Developer to the Collateral Agent as may be required pursuant to the ~~Collateral Agency Agreement~~**Trust Indenture** and provided that such amendments would not reasonably be expected to impair the Collateral Agent’s security interest in the Collateral; and
- (g) the Owner will, at any time and from time to time, upon not less than five business days’ prior request by the Collateral Agent and the payment of the Owner’s reasonable fees, deliver to the Collateral Agent a statement in writing certifying that: (i) the Agreement is in full force and full effect unamended (or setting out any such amendments), (ii) all amounts owing and payable under the Agreement have been paid (or setting out any unpaid amounts), and (iii) to the Owner’s knowledge, the Developer is not in default of its obligations under the Agreement in any material respect (or setting out any such defaults).

- 4. The Collateral Agent covenants and agrees with the Owner that during any period the Collateral Agent exercises its Security Interests and takes possession of the Developer’s interest in the Lands (either directly or indirectly through an Agent Party) or takes control of or manages the Developer’s interest in the Lands or the Collateral or any part thereof, or forecloses upon the Agreement, or succeeds to the interest of the Developer under the Agreement, it will assume all of the obligations of the Developer under or in connection with the Agreement during such period to the extent that they may be performed by the Collateral Agent, and thereafter, but only while the Collateral Agent is in possession or control of the Lands, observe and perform all of the Developer’s obligations under the Agreement to the extent that they may be performed by the Collateral Agent. For greater certainty, the Collateral Agent shall only be liable for the performance of the obligations of the Developer from and after the date (the “**Possession Date**”) which the Collateral Agent is in possession or control of the Lands and only for the period the Collateral Agent remains in possession or control of the Lands. The Collateral Agent shall not be liable for any obligations of the Developer arising prior to the Possession Date.

5. The Owner confirms and acknowledges that in the event that the Collateral Agent or any other Agent Party assigns, transfers or otherwise disposes of its interest in the Agreement pursuant to its Security Interests (a “**Transfer**”), it will not unreasonably withhold, delay or condition its consent to the Transfer, and, upon such assignee or transferee covenanting and agreeing in writing with the Owner to assume and perform all of the covenants and obligations of the Developer pursuant to the Agreement, each of the Collateral Agent and the other Agent Party shall, thereupon and without further agreement, be freed and relieved of all liability with respect to the Agreement from and after the effective date of such Transfer.
6. All notices hereunder shall be in writing, sent by registered mail, return receipt requested or by fax, to the respective parties and the addresses set forth on the signature page or at such other address as the receiving party shall designate in writing.
7. This Acknowledgement may be executed in any number of counterparts and delivered electronically, shall be governed by the laws of the Province of Ontario and binds and inures to the benefit of the Collateral Agent, and its successors and assigns and shall be binding upon the heirs, personal representatives, successors and assigns of the Owner.
8. Each of the parties hereto agrees to do, make and execute all such further documents, agreements, assurances, acts, matters and things and take such further action as may be reasonably required by any other party hereto in order to more effectively carry out the true intent of this Acknowledgement.
9. The provisions of this Acknowledgement shall continue in effect until the Owner shall have received the written notice from the Collateral Agent that all amounts advanced, and obligations arising, under the ~~Credit Agreement and all Obligations (as defined in the Collateral Agency Agreement)~~ **Trust Indenture** have been paid and performed in full.

[SIGNATURE LINES FOLLOW ON THE NEXT PAGE]

IN WITNESS WHEREOF, this Acknowledgement is executed by the parties as of the date first written above.

Address for Notice:

The Corporation of the Township
of Melancthon
157101 Highway 10
Melancthon, Ontario
L9V 2E6
Fax: (519) 925-1110

**THE CORPORATION OF THE TOWNSHIP OF
MELANCTHON**

Per: _____
Darren White, Mayor

Per: _____
Denise B. Holmes, CAO

We have authority to bind the Corporation

Address for Notice:

BNY Trust Company of Canada
320 Bay Street, 11th floor
Toronto, Ontario M5H 4A6
Attention: Corporate Trust
Administration
Fax.: (416) 360-1711

BNY TRUST COMPANY OF CANADA

Per: _____

Per: _____

We have authority to bind the above

Document comparison by Workshare Compare on March-30-15 9:28:42 AM

Input:	
Document 1 ID	file:///C:/Users/scrowe/AppData/Local/Microsoft/Windows/Temporary Internet Files/Content.Outlook/0LLG1SD3/18297599_4 (3).DOCX
Description	18297599_4 (3)
Document 2 ID	interwovenSite:///INVENTORYS1/TorysAtWork/18297599/4
Description	#18297599v4<TorysAtWork> - DWPI - Melancthon - Acknowledgement and Consent
Rendering set	Firm_Standard

Legend:	
<u>Insertion</u>	
Deletion	
<u>Moved from</u>	
<u>Moved to</u>	
Style change	
Format change	
Moved deletion	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
	Count
Insertions	10
Deletions	13
Moved from	0
Moved to	0
Style change	0
Format changed	0
Total changes	23

THE CORPORATION OF THE TOWNSHIP OF MELANCTHON

BY-LAW NO. -2015

A BY-LAW TO GOVERN THE PROCEEDINGS OF COUNCIL AND ITS COMMITTEES AND TO REPEAL BY-LAW NO. 8-2009, 15-2009, 3-2010, 21-2010, 11-2012, 15-2013 and 58-2014

WHEREAS *the Municipal Act* provides that a Council shall adopt a procedural by-law for governing the calling, place and proceedings of meetings, provide for public notice of meetings and to govern the conduct of its members.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF MELANCTHON HEREBY ENACTS AS FOLLOWS:

DEFINITIONS

1. In this By-Law:

- 1.1 "Act" means *The Municipal Act*, 2001, S.O. 2001, c.25, as amended.
- 1.2 "Chair" means the person presiding at the Meeting.
- 1.3 "Clerk" means the Township Clerk or Deputy Clerk of the Township.
- 1.4 "Closed Meeting or Session" refers to a Meeting or portion thereof which is closed to the public in accordance with the applicable legislation.
- 1.5 "Committee" means the Committee of the Whole, a Standing Committee, or Special Committee of the Council.
- 1.6 "Committee of the Whole" means all of the Members sitting in Committee.
- 1.7 "Committee Chair" means the Chair of the Committee.
- 1.8 "Council" means the Council of the Corporation of the Township of Melancthon.
- 1.9 "Deputation" means an address to Council or Committee at the request of a person wishing to speak.
- 1.10 "Majority Vote" in Council or Committee means an affirmative vote of more than one-half of the votes cast by those present.
- 1.11 "Meeting" means a meeting of the Council or a Committee.
- 1.12 "Member" means a "Member of Council or Committee."
- 1.13 "Members of the Gallery" means a person in attendance at the meeting.
- 1.14 "Motion to lay on the table" means a particular matter removes the subject from consideration until the Council votes to take it from the table.
- 1.15 "Newspaper" means a printed publication in sheet form, intended for general circulation, published regularly at intervals of not longer than a week, consisting in great part of news of current events of general interest and sold to the public and to regular subscribers.
- 1.16 "Notice of Motion" means a written motion received by the Clerk at a meeting of Council, moved by a member, for inclusion on an agenda of a subsequent meeting of Council.
- 1.17 "Notice" means a written or printed communication publicly displayed.
- 1.18 "Point of Order" means a question by a member with the view to calling attention to any issue relating to the Procedural By-Law or the conduct of Council's business or in order to assist the member in understanding

Council's procedures, making an appropriate motion or understanding the effect of a motion.

- 1.19 "Point of Privilege or Personal Privilege" means a question by a member who believes that another member has spoken disrespectfully towards that member or another member or who considers that his or her integrity or that of a member or Township official has been impugned or questioned by a member.
 - 1.20 "Posted" means posted on the Township of Melancthon web site in a section under the heading "PUBLIC NOTICES".
 - 1.21 "Published" means published in a daily or weekly newspaper that, in the opinion of the Clerk, has such circulation within the municipality as to provide reasonable notice to those affected thereby, and "publication" has a corresponding meaning.
 - 1.22 "Public Question Period" means the time set aside at Council meetings for a member of the public to ask a question of Council.
 - 1.23 "Quorum" means the minimum number of members required to be present at a meeting to carry on business.
 - 1.24 "Question" means a sentence worded or expressed so as to seek information.
 - 1.25 "Recorded Vote" means a written record of the name and vote of every member voting on any matter or question.
 - 1.26 "Resolution" means the decision of Council on any motion.
2. The rules and regulations contained in this By-law shall be observed in all proceedings of the Council and shall be the rules and regulations for the order and dispatch of business in the Council and in the Committees. Provided the rules and regulations contained herein may be suspended by a vote of the Council and in any case for which provision is not made herein the procedure to be followed shall be, as near as may be, that followed in the Legislative Assembly of Ontario and its Committees.

COUNCIL AND COUNCIL MEETINGS

- 3. Meetings of the Council shall be held in the Council Chambers or at any other place provided for by Resolution of Council. Council will make every effort to give at least two (2) weeks' notice of any change of venue.
- 4. The inaugural meeting of Council shall take place at 9:00 A.M. on the first Thursday of December following the election. The regular meeting of Council shall be held on the first Thursday of each month at 5:00 P.M., and on the third Thursday of the month, starting at 5:00 P.M., Roberts Rules of Order shall prevail where applicable in all matters not covered by this By-law.
- 5. During the regular Council meeting in January, Council will review and confirm the next year's tentative meeting dates.
- 6. The Mayor may at any time summon a special meeting of Council on 24 hours' notice to the Members of Council, or, upon receipt of the petition of the majority of the Members of the Council, the Clerk shall summon a special meeting for the purpose and at the time mentioned in the petition. Twenty-four hours' notice of all special meetings of Council shall be given to the Members through the Clerk's office. The only business to be dealt with at a special meeting is that which is listed. The Mayor at his/her discretion may call an emergency meeting.
- 7. In the case of the absence of the Mayor from the Municipality or if he/she is absent through illness, or he/she refuses to act or his/her office is vacant, another member of Council shall be appointed to act from time to time in the place and stead of the Mayor and he/she shall have all the rights, powers, and authority of the Head of Council, while so doing.

8. As soon after the hour fixed for the holding of the meeting of the Council as a quorum is present, the Mayor shall take the Chair and call the meeting to order.

ACCOUNTABILITY AND TRANSPARENCY

9. (a) All Council and Committee meetings shall be open to the public.
- (b) Notwithstanding Paragraph 9 (a) above, a meeting of Council or Committee may be closed to the public if the subject matter being considered relates to:
- i) the security of the property of the municipality or local board;
 - ii) personal matters about an identifiable individual, including municipal or local board employees;
 - iii) a proposed or pending acquisition or disposition of land by the municipality or local board;
 - iv) labour relations or employee negotiations;
 - v) litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board;
 - vi) advice that is subject to solicitor-client privilege, including communications necessary for that purposes;
 - vii) a matter in respect of which a council, board, committee or other body may hold a closed meeting under another Act.
 - viii) the subject matter relates to the consideration of a request under the Municipal Freedom of Information and Protection of Privacy Act.
 - ix) a meeting of a council or local board or of a committee of either of them may be closed to the public if the following conditions are both satisfied:
 - 1) the meeting is held for the purpose of educating or training the members;
 - 2) 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.
- (c) Before holding a meeting or part of a meeting that is to be closed to the public, a municipality or local board or committee or either of them shall state by resolution,
- i) the fact of the holding of the closed meeting, time entered and the general nature of the matter to be considered at the closed meeting; or
 - ii) in the case of a meeting under 9 b ix), the fact of the holding of the closed meeting, the general nature of its subject-matter and that it is to be closed under that subsection.
- (d) Subject to subsection 9 b), a meeting shall not be closed to the public during the taking of a vote.
- (e) A meeting may be closed to the public during a vote if,

- i) subsection 9 (b) permits or requires a meeting to be closed to the public and,
 - ii) the vote is for a procedural matter or for giving directions or instructions to officers, employees or agents of the municipality, local board or committee of either of them or persons retained by or under a contract with the municipality or local board.
- (f) Meeting or sessions which are closed to the public may be referred to as closed meetings or closed sessions.
- (g) Confidentiality – Members shall ensure that confidential matters disclosed to them and materials provided to them during closed meetings or sessions are provided to them in advance of the meeting or session are kept confidential. The obligation to keep information confidential applies even if the member ceases to be a member of Council.

ABSENCE OF HEAD OF COUNCIL

10. Subject to the provisions of *The Municipal Act*, and where no Presiding Officer has been appointed under Clause 6 of this by-law, in case the Head of Council does not attend within fifteen (15) minutes after the time appointed for a meeting of the Council, the Clerk shall call the members to order and an acting Head of Council shall be appointed from among the Members present and he/she shall preside until the arrival of the Head of Council and while so presiding the acting Head of Council shall have all the powers of the Head of Council.

NO QUORUM

11. If no quorum is present one half hour after the time appointed for a meeting of the Council, the Clerk shall record the names of the members present and the meeting shall stand adjourned until the date of the next meeting.

CURFEW

12. No item of business may be dealt with at a Council meeting after Ten (10) P.M., unless agreed to by the majority of Council present.

INCLEMENT WEATHER

13. For all Council and Committee meetings, should the Mayor, or his/her designate or Chair deem the weather to be severe or an emergency, the meeting shall be cancelled and rescheduled for another time.

THE CONDUCT OF PROCEEDINGS AT A MEETING OF COUNCIL OR COMMITTEES

14. It shall be the duty of the Mayor or other Presiding Officer,
- (a) to open the meeting of Council by taking the chair and calling the Members to order,
 - (b) to announce the business before the Council in the order in which it is to be acted upon,
 - (c) to receive and submit, in the proper manner, all motions presented by the Members of Council,
 - (d) to put to vote all questions which are duly moved and seconded, or necessarily arise in the course of proceedings and to announce the result,
 - (e) to decline to put to vote motions which infringe the rules of procedure,
 - (f) to restrain the Members, within the rules of order, when engaged in debate,
 - (g) to enforce on all occasions the observance of order and decorum among the Members,

- (h) to call by name any Member persisting in breach of the rules of order of the Council, thereby ordering him/her to vacate the Council Chamber,
 - (i) to receive all messages and other communications and announce them to the Council,
 - (j) to authenticate, by his/her signature when necessary, all by-laws, resolutions, and minutes of the Council,
 - (k) to inform the Council, when necessary or when referred to for the purpose, on a point of order or usage,
 - (l) to represent and support the Council, declaring its will, and implicitly obeying its decisions in all things,
 - (m) to ensure that the decisions of Council are in conformity with the laws and by-laws governing the activities of the Council,
 - (n) to adjourn the meeting when the business is concluded,
 - (o) to adjourn the meeting without question in the case of grave disorder arising in the Council Chamber or meeting room,
 - (p) to order any individual or group in attendance at the meeting to cease and desist any behaviour which disrupts the order and decorum of the meeting and to order the individual or group to vacate the Council Chamber or meeting room where such behaviour persists.
15. It shall be the role of Council,
- (a) to represent the public and to consider the well-being and interests of the municipality;
 - (b) to develop and evaluate the policies and programs of the municipality;
 - (c) to determine which services the municipality provides;
 - (d) to ensure that administrative policies, practices and procedures and controllership policies, practices and procedures are in place to implement the decisions of Council;
 - (e) to ensure the accountability and transparency of the operations of the municipality, including the activities of the senior management of the municipality;
 - (f) to maintain the financial integrity of the municipality; and
 - (g) to carry out the duties of Council under this or any other Act.

AGENDAS

16. The Clerk at his/her discretion, and who may consult with the Mayor, shall have prepared, from all petitions, communications, correspondence and delegation requests, which are received no later than 12 Noon on the Thursday prior to the regular meeting, an agenda under the following headings:

- (a) Call to Order
- (b) Announcements
- (c) Additions/Deletions/Approval of Agenda
- (d) Declaration of Pecuniary Interest and the General Nature Thereof
- (e) Approval of Draft Minutes
- (f) Business Arising from Minutes
- (g) Point of Privilege or Personal Privilege
- (h) Public Question Period
- (i) Committee/Outside Board Reports
- (j) County Council Update
- (k) Road Business
- (l) Correspondence
- (m) General Business
- (n) New/Other Business/Additions to Agenda
- (o) Unfinished Business
- (p) Delegations
- (q) Closed Session
- (r) Notice of Motion
- (s) Onsites
- (t) Correspondence on File at the Clerk's Office
- (u) Confirmation By-law

(v) Adjournment

17. Agendas shall be generally formatted as above, but modifications to the matter to be included may be affected without requiring amendments of this By-law.
18. The business of the Council shall in all cases be taken up in order in which it stands upon the agenda unless otherwise decided by Council.
19. Any item which is not on the agenda as printed, but has been determined by the Clerk to be of a nature which requires Council's attention prior to the next scheduled meeting, may be added by addendum at the discretion of the Clerk.
20. Any items brought forward as a time sensitive issue by other means shall require a majority vote of the members present to be added to the agenda.
21. Council shall take breaks at the discretion of the Mayor and Council.
22. Agenda Packages shall be posted on the Township's Website (under Agendas and Minutes) by the close of business on the Monday prior to the regular Council meeting or by the close of business on the Tuesday if the Monday falls on a Statutory Holiday. Items that will not be included in the package will consist of the draft minutes, draft by-laws (unless authorized by Council or at the discretion of the Clerk), Closed Session materials, documents directly available from other sources i.e. Government Agencies, Conservation Authorities, etc. and links will be provided. The materials included in the package in advance of the meeting are at the discretion of the CAO or designate. Correspondence received after the before mentioned deadline may or may not be included with the posted agenda. Paper copies of the complete agenda packages or specified agenda items will be available upon request within two business days of the request and shall be accompanied by payment as per the Township's fee schedule. The posted Agenda for a Council/Committee meeting shall constitute notice of a meeting under this By-law
23. Any submission made to Council and listed on the Agenda may be withdrawn by the submitting person or agency at any point preceding that submission being reviewed by Council at the meeting for which the Agenda applied.

PUBLIC QUESTION PERIOD

24. Public Question Period will fall on the Agenda after Point of Privilege or Personal Privilege on the regular Council Agenda.
25. Council requests that questions be submitted ahead of the meeting by 12 Noon on the Thursday prior to the regular Council meeting. Each person will be allowed to ask one question, either written or oral, during this time, and one question for clarification purposes only after the answer is given on the original question.
26. A question arising from the posted material on the website may be asked at the meeting and does not necessarily have to be received in writing. Council reserves the right to defer any question if they are not able to answer it at the meeting.
27. The time allotted for Public Question Period will be 20 minutes. If less time is required and there are no further questions, the Mayor/Chair will declare Public Question Period to be closed and carry on with the regular business of the meeting, or if time permits, individuals will be allowed to ask an additional question. Also, with time permitting, anyone wishing to make a comment may do so and Council may choose to respond to the comment if felt to be in the Public interest.

AUDIO RECORDING AND VIDEOTAPING COUNCIL MEETINGS

28. Videotaping of Council Meetings will not be permitted. Video interviews of a Member of Council or Staff can be conducted after the meeting in the office.
29. Audio recording will be permitted under the following conditions:
- (a) the request must be made to the CAO before the meeting starts.
 - (b) only accredited Reporters/Journalists will be allowed to record.
 - (c) the request must be approved by Motion of Council stating the Name and Affiliation to the Media Outlet of the Requester and the general reason for wanting to record.
 - (d) Should a request by an accredited Journalist to record all or part of a meeting be approved, all parties should be aware that the Council for the Township of Melancthon will also be recording the same meeting or part thereof.
30. For clarification purposes, this applies to Council meetings. For Public Meetings held under the Planning Act for a Zoning By-law Amendment or Official Plan amendment, these meetings could be videotaped or tape recorded provided approval of the CAO has been received and that it has been posted that the meeting is being recorded.

MINUTES

31. Minutes shall record:
- (a) The place, date and time of the meeting and the time of adjournment;
 - (b) The names of Council/Committee members and staff present;
 - (c) The reading, if requested, correction and adoption of the minutes of prior meetings;
 - (d) All other proceedings, which will include motions, resolutions, decisions and directions of the meeting without note or comment. Council decisions and directions to Staff will be clearly stated by the Mayor/Chair to the Clerk for recording.
 - (e) The public may ask questions or address Council during public question period, which is not recorded. Council and or staff may respond at their discretion or they may or may not defer the item to a future agenda.
 - (f) The draft minutes of each Council/Committee meeting shall be presented to Council for approval at the next regular Council/Committee meeting. The minutes shall be made available to the Public after Council approval by motion of Council.
 - (g) After the Council minutes have been approved by Council, they shall be signed by the Mayor and Clerk.

VERBAL SUB-COMMITTEE/COMMITTEE/OUTSIDE BOARD REPORTS

32. Verbal Reports of each Council Member's Sub-Committee/Committee/Outside Board meeting will be given at the first regular Council meeting of the month.
33. It will be the responsibility of the Council member giving the verbal report to have it type-written and submitted to the CAO/Clerk to be kept on file in the Clerk's Office.

COMMITTEES

34. (a) Council shall, determine the appropriate number of Committees, mandates and their membership. The Committees shall sit for the term of

Council, or as determined by Council.

- (b) All Committees will forward their recommendations to Council in the form of a Report.
- (c) The Committee minutes will be forwarded to Council in approved form.
- (d) Council members who are not members of a specific committee may attend meetings of that committee and may, with consent of the Chair of that committee, take part in the discussion, but shall not be counted in the quorum or entitled to make motions or to vote but their attendance shall be noted in the minutes at these meetings.
- (e) Council may at its discretion, appoint Board/Committee members by By-law or resolution or dismiss members of any Board/Committee by resolution of Council.

COMMITTEE OF THE WHOLE

- 35. (a) When it appears that any matter may be more conveniently considered in Committee of the Whole, and the proceedings taken in Committee when adopted by Council shall be deemed to be proceedings of Council.
- (b) The Mayor shall preside as Chair of the Committee of Whole. In the event that Council wishes to designate another Member of Council, other than the Mayor, to act as Chair for the Committee of the Whole, this may be done by resolution of Council.
- (c) In the event the Mayor is absent, the Deputy Mayor will preside as Chair of the Committee of the Whole. If Council has designated another Member to Chair the Committee of the Whole and that Member is absent, the Committee of the Whole shall select another Chair from the Members present.
- (d) The Chair of the Committee of the Whole shall maintain order in Committee and report the proceedings to Council.
- (e) The rules governing the procedure of Council and the conduct of Members shall be observed in Committee of the Whole so far as they are applicable, provided that no vote shall be recorded.

DISCLOSURES OF PECUNIARY INTEREST

- 36. Where a Member, either on his or her own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter and is present at a meeting of the Council or local board at which the matter is the subject of consideration, the Member, in accordance with the *Municipal Conflict of Interest Act*:
 - (a) shall determine whether they may have a pecuniary interest and to disclose the nature thereof.
 - (b) shall prior to any consideration of the matter at the meeting, disclose the Member's interest verbally at the meeting and then in writing, in a form provided, to the Clerk, the general nature thereof; and
 - (c) shall not take part in the discussion of, or vote on any question in respect of the matter;
 - (d) shall not attempt in any way whether before, during or after the meeting to influence the voting on the matter.

- (e) where a meeting is open to the public, the Member shall, in addition to complying with the requirements of *the Municipal Conflict of Interest Act*, shall forthwith leave the meeting or part of the meeting during which the matter is under consideration.
- (f) where a meeting is not open to the public, the Member shall, in accordance with the *Municipal Conflict of Interest Act*, forthwith leave the meeting or the part of the meeting during which the matter is under consideration.
- (g) where the interest of a Member has not been disclosed by reason of the Member's absence from a particular meeting, the Member shall disclose the Member's interest and otherwise comply at the first meeting of the Council or Committee, as the case may be, attended by the Member after the particular meeting.
- (h) every declaration of interest and the general nature thereof made shall where the meeting is open to the public, be recorded in the minutes of the meeting by the Clerk of the Municipality or secretary of the committee or local board, as the case may be.
- (i) every declaration of interest made, but not the general nature of that interest, shall, where the meeting is not open to the public, be recorded in the minutes of the next meeting that is open to the public.
- (j) where the number of members who, by reason of the Provisions of *The Municipal Conflict of Interest Act*, are disabled from participating in a meeting is such that at that meeting the remaining members are not of sufficient number to constitute a quorum, then, despite any other general or special Act, the remaining number of members shall be deemed to constitute a quorum, provided such number is not less than two.

PETITIONS AND COMMUNICATIONS

- 37. Every communication, including a petition designed to be presented to the Council, shall be legibly written or printed and shall not contain any obscene or improper matter or language and shall be signed by at least one person, and filed with the Clerk.

DEPUTATIONS/DELEGATIONS

- 38. (a) All deputants/delegations shall be received for inclusion on the Agenda at the discretion of the CAO/Clerk or designee and the request shall be put in writing regarding the nature of the deputation/delegation on the "Delegation Request Form" provided by the Township Office. The request must be received by 12 noon on the Thursday prior to the requested meeting. All deputants at Council, not listed on the agenda, shall only be heard upon the consent of Council.
- (b) All deputants shall address the Mayor/Chair and shall state their name and whom they represent.
- (c) Each delegation shall be limited in speaking to not more than ten (10) minutes except that a delegation consisting of more than five (5) persons shall be limited to two (2) speakers, each limited to speaking not more than a combined total of fifteen (15) minutes. A maximum of two (2) deputations/delegations per meeting shall be permitted. Delegations for the purposes of Council Training shall be permitted a longer period of speaking time at the discretion of the CAO/Clerk.
- 2) Each issue and/or deputation/delegation will be allowed one meeting presentation to the Council and/or committee with a period of 6 months lapsing before the issue can be raised again. An exception may be granted if substantially new and/or substantially significant information is

provided to the Clerk or Committee Secretary.

- (d) No deputant shall;
 - 1) speak disrespectfully of any person;
 - 2) use offensive words;
 - 3) speak on any subject other than the subject for which he or she has received approval to address Council or Committee;
 - 4) disobey the rules of procedure or a decision of the Chair or Council.
- (e) The Mayor/Chair may shorten the time of any deputation, any questions of a deputant or debate during a deputation for disorder or any other breach of this by-law.
- (f) No person, except Members and authorized staff shall be allowed to come within the area of Council during a Council meeting without permission of the Mayor/Chair or Council.
- (g) In the event that a previously scheduled delegation does not appear at the prescribed time, with or without notice, the Council will continue on with the business of the day and may or may not at the discretion of Council, receive the delegation on their arrival and that delegation may be rescheduled to a later date.
- (h) Members of the public who constitute the audience at a meeting, shall not:
 - 1) address Council or Committee address without permission;
 - 2) bring signage, placards or banners into such meetings and refrain from any activity or behaviour that would affect the Council or Committee deliberations.
 - 3) enter the meeting room without first removing any non-religious or non-medical head gear.
 - 4) shall put on silence all electronic devices.
- (i) The Chair may cause to be expelled and excluded any member of the public, who creates any disturbance or acts improperly, during a meeting of Council or Committee. If necessary, the Chair may call upon the Clerk to seek the appropriate assistance from police officers.

READING OF BY-LAWS AND PROCEEDINGS THEREON

- 39. No by-law except a by-law to confirm the proceedings of Council shall be presented to Council unless the subject matter thereof has been considered and approved by Council.
 - 1. Every by-law shall be introduced upon motion by a Member of the Council, specifying the title of the By-Law.
 - 2. Every by-law when introduced shall be in typewritten form and shall contain no blanks except such as may be required to conform to accepted procedure or to comply with provisions of any act and shall be complete with the exception of the number and date thereof.
- 40. Every by-law shall have three readings prior to it being passed and may be given three readings on the same day except when requested otherwise by motion of the majority of the members present or as otherwise provided by law.

41. The first and second reading of a by-law shall be decided without amendment or debate.
42. If Council so determines, a by-law may be taken as read.
43. The Clerk shall set out on all by-laws enacted by Council the date of the several readings thereof.
44. Every by-law enacted by the Council shall be numbered and dated and shall be sealed with the seal of the Corporation and signed by the Clerk and the Mayor and shall be deposited by the Clerk in his/her office for safekeeping.

MOTIONS

45. **Notices of Motion** - Notice of all new motions except motions listed in Clauses 57 and 58 shall be given in writing, delivered to the Clerk by 12 Noon on the Thursday prior to the regular Council meeting at which a motion is to be introduced and a motion shall be printed in full in the agenda for that meeting of the Council and each succeeding meeting until the motion is considered or otherwise disposed of. The motion shall be submitted to the Clerk in writing over the signature of the mover and shall be complete and correct.
46. **Motion to Reconsider** - A motion to reconsider shall not be made during the same meeting of Council at which the original determination was taken. If a decision has not been substantially acted upon, a member who voted on the prevailing side may at any time within six months of the original decision, introduce a motion to reconsider a previous decision.
47. **Seconding** – All motions shall be seconded before being debated or being put to a question and recorded in the minutes of the meeting.
48. **Presentation of Motion by Mayor** - When a motion is presented in Council in writing, it shall be read or if it is a motion which may be presented orally (Section 69), it shall be stated by the Mayor before debate.
49. **Amendment** - A motion to amend;
 - shall be presented in writing,
 - shall receive disposition of Council before a previous amendment or the question,
 - shall not be further amended more than once provided that further amendment may be made to the main question,
 - shall be relevant to the question to be received,
 - shall not be received proposing a direct negative
 - may propose a separate and distinct disposition of a question,
 - shall be put in the reverse order to that in which it is moved.
50. **Questions Stated** - Immediately preceding the taking of the vote, the Mayor or Presiding Officer may state the question in the form introduced and shall do so if required by a Member except when a motion for the previous question has been resolved in the affirmative. He/She shall state the question in the precise form in which it will be recorded in the minutes.
51. **No Interruption After Question** - After a question is finally put by the Mayor no Member shall speak to the question nor shall any other motion be made until after the vote is taken and the result has been declared.
52. **Unrecorded Vote** - The manner of determining the decision of the Council on a motion shall be at the discretion of the Mayor and may be by voice, show of hands, standing or otherwise.

53. **Recorded Vote** – If a member present at a meeting at the time of a vote requests immediately before or immediately after the taking of the vote that the vote be recorded, each member present, except a member who is disqualified from voting by any Act, shall announce his or her vote openly and the Clerk shall record each vote starting with the Member who requested the vote and proceeding to the right of that Member and ending with the Mayor who will have the last vote, unless otherwise prohibited by statute. The names of those who voted for and others who voted against shall be noted in the minutes. The Clerk to announce the results.
54. **Tie Votes** – Any questions on which there is a tie vote shall be deemed to be lost, except where otherwise provided by any Act.
55. **Failure to Vote** – A failure to vote by a member who is present at the meeting at the time of the vote and who is qualified to vote shall be deemed to be a negative vote.
56. (a) **Withdrawing a Motion** – A motion can be withdrawn by the mover and seconder at any time before the motion is called to a vote.
- (b) **Rescinding a Motion** – A motion to rescind a motion previously passed can be made by anyone but only if no action has been taken on the motion to be rescinded. It requires a two-thirds vote for adoption.
- (c) **Tabling a Motion** - A motion to “table” (or defer) a motion must be supported by the majority of the members present and is put to vote without debate or amendment.
57. The following matters and motions with respect thereto may be introduced orally without written notice and without leave, except as otherwise provided by these Rules of Procedure:
- (a) a point of order or personal privilege;
 - (b) presentations of petitions,
 - (c) to lay on the table,
 - (d) to postpone indefinitely or to a day certain;
 - (e) to move the previous question
58. The following motions may be introduced without notice and without leave, but such motions shall be in writing and signed:
- (a) to refer,
 - (b) to adjourn,
 - (c) to amend,
 - (d) to suspend the Rules of Procedure
59. Except as provided by Clause 57 above, all motions shall be in writing and signed by the Mayor.

RULES OF DEBATE

60. To address Council, a Member shall raise their hand requesting to speak, be recognized by the Chair, stand and direct all comments through the Chair.
61. When two or more Members indicate their desire to speak at the same time, the Chair shall designate the order of speakers.
62. When a Member is speaking, no other Member shall interrupt the

- Member speaking except to raise a point of order, privilege or personal privilege.
63. Any Member may require a motion or question under discussion to be read at any time during the debate but not so as to interrupt the Member speaking.
 64. No Member shall speak for longer than five (5) minutes on a question without Council's permission.
 65. No Member shall speak more than twice to the same question provided that no member shall speak more than once until each Member who has indicated a desire to speak on the issue and has not been heard, has spoken on the question, except that a reply shall be permitted only from a Member who has presented the main motion.
 66. A Member may ask a question only for the purpose of obtaining information relating to the matter under discussion and the question shall be stated succinctly and asked only of the Mayor/Chair, the previous speaker, the CAO/Clerk or Department Heads and their designates.
 67. When a Member rises on a point of order, point of privilege or point of personal privilege, the Member shall ask leave of the Mayor/Chair to raise the point. After leave is granted, the Member shall state the point to the Mayor/Chair and then remain silent until the Mayor/Chair has ruled upon the point.
 68. Subject to being overruled by Council on a vote which shall be taken immediately and without debate, the Mayor/Chair shall rule on the point.
 69. Any Member may challenge the ruling of the Mayor/Chair immediately following the ruling.
 70. The Mayor/Chair's ruling is final unless it is challenged.
 71. Council's decision is final if the Mayor/Chair is challenged.
 72. In all unprovided cases in the proceedings of the Council or in the Committee of the Whole, the matter shall be decided by the Mayor or, subject to an appeal to the Council upon a point of order.

POINTS OF ORDER AND PRIVILEGES

73. The Mayor shall preserve order and decide questions of order/privilege when brought forward by any member of Council.
74. The Council, if appealed to, shall decide the question without debate and its decision shall be final.

CONDUCT OF MEMBERS OF COUNCIL

75. No Member in an open or closed meeting, shall speak disrespectfully of the Reigning Sovereign, or any of the Royal Family, or of the Governor-General, the Lieutenant-Governor of any province, of any Member of the Senate, the House of Commons of Canada or the Legislative Assembly of the Province of Ontario.
76. No Member shall,

- (a) in an open or closed meeting, use offensive words or un-parliamentary language in or against the Council or against any Member, staff or guest;
 - (b) speak on any subject other than the subject in debate;
 - (c) criticize any decision of the Council except for the purpose of moving that the questions be reconsidered;
 - (d) disobey the rules of the Council or a decision of the Mayor or of the Council on questions of order or practice or upon the interpretation of the rules of the Council, and in case a Member persists in any such disobedience after having been called to order by the Mayor, the Mayor may forthwith put the question, no amendment, adjournment or debate being allowed, "that such Member be ordered to leave his/her seat for the duration of the meeting of the Council" but if the Member apologizes he/she may, by vote of the Council, be permitted to retake his/her seat.
 - (e) knowingly be absent or leave a meeting without notifying the Clerk, preferably in writing
 - (f) text, email or make phone calls during the Council meeting
77. No person except Members and officers of the Council shall be allowed to come within the bar during the sittings of the Council without permission of the Mayor or the Council upon reference.
78. When the Mayor is putting the question, no Member shall leave or make a disturbance.

SUSPENSION OF RULES

79. Any procedure required by this by-law may be suspended with consent of a majority of the Members of the Council present.

AMENDMENT

80. No amendment or repeal of this by-law or any part thereof shall be considered at any meeting of the Council unless notice of proposed amendment or repeal has been given at a previous regular meeting of the Council. The waiving of this notice by the Council is prohibited.
81. In all matters and under all circumstances the members shall be guided by and shall have regard to the *Municipal Conflict of Interest Act*.
82. Following a regular or new election, the Clerk shall provide each member of Council with a copy of this By-Law, including any amendments thereto.

CONFLICT

83. If there is any conflict between this By-Law and any statute, the provisions of the statute prevail.

NOTICE OF INTENTION TO PASS BY-LAW – NOTICE OF PUBLIC MEETING

84.

Manner of Notice

- (a) Where notice of intention to pass a by-law or notice of a public meeting is required to be given, the Clerk shall cause such notice to be posted on the Township's Website. Council or the Clerk may provide additional notice by direct mail and/or publishing a notice in a newspaper at their discretion.

Time of Notice

- (b) Where notice of intention to pass a by-law or notice of a public meeting is required to be given, such notice shall be provided in the time frame prescribed in the *Act* or its regulations, and if not so prescribed, notice shall be given at least once, not less than 48 hours or more than thirty days prior to the proposed notice of intention to pass a by-law or notice of a public meeting being taken.
- (c) If the proposed by-law is not passed at the Council meeting specified in a notice in Section 84 (a), but consideration of the matter is deferred, no further notice is required under Section 84 (a), if a public statement is made at the meeting that the matter has been deferred and that the municipality now intends to adopt or amend the by-law at a later Council meeting specified in the public statement. This section applies to any further deferrals of the matter.

Form of Notice

- (d) Unless otherwise prescribed in the *Act* or its regulations, where notice of intention to pass a by-law or notice of a public meeting is required to be given, the form of the notice shall include the following information:
 - a. A description of the purpose of the meeting, or the purpose and effect of the proposed by-law;
 - b. The date, time and location of the meeting;
 - c. Where the purpose of the meeting or proposed by-law is related to specific lands with the Township, a key map showing the affected lands;
 - d. The name and address of the person who will receive written comments on the issue that is the subject of the meeting and the deadline for receiving such comments.

Financial

Adoption of Annual Budget

- (e) The notice provisions set out in Sections 84 a), 84 b) & 84 c) shall apply to the discussion, consideration and adoption of the annual budget in total.

Operating Costs Incurred Prior to Budget Approval

- (f) Normal operating costs incurred prior to the adoption of the annual budget shall not require notice, and approval of such expenditures shall be deemed ratified upon the adoption of the annual budget.

Improvements to Service

- (g) Unless otherwise designated by regulation, notice of improvements in the efficiency and effectiveness of the delivery of services by the Township and its local boards; and barriers identified by the Township and its local boards to achieving improvements in the efficiency and effectiveness of the delivery of services by them, shall be posted at the same time as prescribed in the *Act* for the publication of Performance Measures.

General

- (h) Where separate by-laws have been enacted in accordance with provisions contained in the *Act*, the notice provisions set out in such by-laws shall prevail.

- (i) No notice shall be required under this by-law, where the provision of notice will interfere with the ability of Council to conduct business with respect to a matter permitted for a closed session under Section 239 of the *Act*.
- (j) Nothing in this by-law shall prevent the Clerk from using more comprehensive methods of notice or providing for a longer notice period.

Emergency Provision

- (k) If a matter arises, which in the opinion of the Clerk, is considered to be of an urgent or time sensitive nature, or which could affect the health or well-being of the residents of the Township of Melancthon, or if a State of Emergency is declared, or if so advised by a Provincial Ministry, the Clerk shall make his/her best efforts to provide notice of the action as soon as possible following the action and will present a report to Council for ratification.

EFFECTIVE DATE

- 85. This By-Law shall become effective upon the date of the enactment.
- 86. By-Laws 8-2009, 15-2009, 3-2010, 21-2010, 11-2012, 15-2013 and 58-2014 are hereby repealed.

Read a first and second time this day of , 2015.

Read a third time, and finally passed this day , 2015.

.....
MAYOR

.....
CLERK

Denise Holmes

From: Carey Holmes <cholmes@shelburne.ca>
Sent: April-08-15 12:27 PM
To: Jennifer Willoughby; John Telfer; Susan Stone (suestone@amaranth-eastgary.ca); kpearl@amaranth-eastgary.ca; Denise Holmes (dholmes@melancthontownship.ca); Terry Horner (thorner@mulmurtownship.ca); Jackie Pherrill (info@townofmono.com); Keith McNenly (keith@townofmono.com)
Cc: Assistant Account
Subject: ByLaw to Amend Fire Agreement
Attachments: Resolution - Amend Agreement RE Sec Treas.pdf; Fire Agreement Amendment Re Sec Treas.docx

Importance: High

Hello

Attached is a motion that was passed at last night's fire board meeting.

I have also attached a sample copy of the By-Law that each of your respective council will have to pass.

Please send me a copy of the By-Law once it has been passed, as we will be advertising for the position asap.




If you have any questions, please contact me.

Thanks

Carey

Carey Holmes, AMCT

Deputy-Treasurer, Town of Shelburne | Secretary-Treasurer, Shelburne & District Fire Board

 cholmes@shelburne.ca
 519-925-2600 ext 228
 519-925-6134
 <http://www.shelburne.ca>



A People Place. A Change of Pace
SHELburne
ONTARIO, CANADA

 *please consider the environment before printing this e-mail*

This message (including attachments, if any) is intended to be confidential and solely for the addressee. If you received this e-mail in error, please delete it and advise me immediately. E-mail transmission cannot be guaranteed to be secure or error-free and the sender does not accept liability for errors or omissions.



SHELburne & DISTRICT FIRE BOARD

DATE: April 7th, 2015

MOVED BY: Heather Hayes

SECONDED BY: Fred Nix

WHEREAS the Town of Shelburne has given notice regarding the administration responsibilities for the Fire Board to be expired as of the end of March 2015;

AND WHEREAS the sub-committee of the Fire Board have not provided any recommendations to the Fire Board as far as next steps;

AND WHEREAS the Town of Shelburne recommends the Fire Board Agreement be amended to allow administrative duties of the Secretary/Treasurer of the Board to be open to proposals rather than restrictive to participating municipalities' employees only;

AND WHEREAS the advertising of the position of the Secretary/Treasurer needs to be completed to complete the transition of the duties;

NOW THEREFORE BE IT RESOLVED THAT the Board approves the wording to be changed as an amendment to the agreement and brought forward to each Council for ratification at their next Council meeting.

Carried: Tom Egan

THE CORPORATION OF THE TOWN OF SHELBURNE

BY-LAW NUMBER 21 -2015

**BEING A BY-LAW TO AMEND THE FIRE PROTECTION AGREEMENT
AUTHORIZED UNDER BY-LAW 22-1991**

WHEREAS the Council of The Corporation of the Town of Shelburne deems it expedient to amend the agreement authorized by By-law Number 22-1991;

NOW THEREFORE the Council of The Corporation of the Town of Shelburne enacts the following:

- 1. THAT the agreement dated October 15th, 1991 be amended under term 3 of the agreement to delete the following “appointing a Secretary/Treasurer shall be from the administration of one of the participating municipalities” and replace with the following:
“ a Secretary/Treasurer will be appointed by the Fire Board to fulfil the duties as assigned by the Fire Board at the first meeting of the Fire Board each calendar year.”**

THIS BY-LAW READ A FIRST AND SECOND TIME THIS THE 13th DAY OF APRIL, 2015

THIS BY-LAW READ A THIRD TIME AND ENACTED THIS THE 13th DAY OF APRIL, 2015

MAYOR

CAO/CLERK

THE CORPORATION OF THE TOWNSHIP OF MELANCTHON

BY-LAW NUMBER -2015

**BEING A BY-LAW TO AMEND THE FIRE PROTECTION AGREEMENT
AUTHORIZED UNDER BY-LAW 40-1991**

WHEREAS the Council of The Corporation of the Township of Melancthon deems it expedient to amend the agreement authorized by By-law Number 40-1991;

NOW THEREFORE the Council of The Corporation of the Town of Shelburne enacts the following:

1. **THAT** the agreement dated October 15th, 1991 be amended under term 3 of the agreement to delete the following “appointing a Secretary/Treasurer shall be from the administration of one of the participating municipalities” and replace with the following:
“ a Secretary/Treasurer will be appointed by the Fire Board to fulfil the duties as assigned by the Fire Board at the first meeting of the Fire Board each calendar year.”

THIS BY-LAW READ A FIRST AND SECOND TIME THIS THE 16th DAY OF APRIL, 2015

THIS BY-LAW READ A THIRD TIME AND ENACTED THIS THE 16th DAY OF APRIL, 2015

MAYOR

CAO/CLERK



The Corporation of

THE TOWNSHIP OF MELANCTHON

157101 Hwy. 10, Melancthon, Ontario, L9V 2E6

Telephone - (519) 925-5525

Fax No. - (519) 925-1110

Website: www.melancthontownship.ca

Email: info@melancthontownship.ca

CORPORATION OF THE TOWNSHIP OF MELANCTHON

MEMORANDUM

TO: MAYOR WHITE AND MEMBERS OF COUNCIL

FROM: DENISE HOLMES, CAO/CLERK

SUBJECT: AMENDMENT TO CANINE CONTROL BY-LAW

DATE: APRIL 10, 2015

I am currently in the process of reviewing Canine By-laws from other municipalities but I am recommending, in the mean time, that Council amend our current by-law to update the pound keeper fees charged by Olympus – Section 3.9(b). Also, I would like a section added to the By-law that allows the Township to recover costs paid to Olympus for dog complaints where Olympus has had to go to the property and speak to the owner of the dog.

The draft by-law is attached.

CORPORATION OF THE TOWNSHIP OF MELANCTHON

BY-LAW NO. -2015

Being a By-law to amend By-law No. 17-2003 passed in Open Council on June 5, 2003.

Whereas the Council of the Corporation of the Township of Melancthon deems it expedient to amend By-law No.17-2003 which is a By-law to Provide for the licencing, registration and regulation of dogs and kennels and for the determination of compensation to be allowed for impounding and detaining of dogs and to repeal By-law No. 54-1999 in its entirety.

Now Therefore Be it Resolved that the Council of the Corporation of the Township of Melancthon enacts as follows:

That Section 3.9 (b) By-law pertaining to pound keeper fees be amended as follows:
The owner may redeem such dog by paying to the pound keeper the sum of \$25.00 pick up fee + mileage and the boarding rate of \$27.00 per day until the dog has been impounded for 5 days.

That a new Section be added to the By-law for Recovery of Expenses as follows:

3.12 - Recovery of Expenses

- (a) in all cases, the Municipality shall have the right to recover from the owner of the dog, the costs incurred by the Municipality in applying this by-law to the owner's dog;
- (b) in all cases, the costs of the Municipality shall include the actual payments made by the Municipality, together with its reasonable administrative charges.

Should be (c) - ~~(d)~~ the provisions of this by-law shall be enforceable pursuant to the Municipal Act, RSO, 2001.

This By-law shall take effect and come into force on the date of passing.

By-law read a first and second time this day of , 2015.

By-law read a third time and passed this day of , 2015.

MAYOR

CLERK

REPORT TO COUNCIL

TO: Mayor Mills and Members of Council
FROM: Heather Boston, Treasurer
DATE: March 23, 2015
SUBJECT: North Dufferin Recreation Community Centre (NDRCC) User Fee Charges

RECOMMENDATION

THAT Council receive the report of Heather Boston, Treasurer regarding the NDRCC User Fee charges;

THAT Council consider the options available;

AND THAT Council give direction as to what fees are to be charged.

PURPOSE

The purpose of this report is to outline and evaluate the various options for decreasing the arena costs to Mulmur residents.

BACKGROUND & DISCUSSION

The following table outlines the usage and contributions by Township for the 2014 year.

	# of Users	% of Usage	2014 Contributions	Contribution %
Mulmur	37	30%	75,241	89%
Melancthon	46	38%	7,500	9%
Other	39	32%	1,440	2%
	122		84,181	

As shown above Melancthon Township residents use the arena the most at 38%.

Option 1:

- Increase Melancthon's contribution to \$20,000 for the 2015 year only
- Increase Prime & Non-Prime ice rental rates to \$159.29/hr
- Increase Minor Hockey and Figure Skating rates to \$123.89/hr
- Increase the Non-Resident Fee to \$250

Option 2:

- With no contribution from Melancthon
- Increase Prime & Non-Prime ice rental rates to \$159.29/hr
- Increase Minor Hockey and Figure Skating rates to \$123.89/hr
- Increase the Non-Resident Fee to \$350
- Charge Melancthon users a \$350 user fee

Option 3:

- Melancthon continues to contribute \$7,500
- Increase Prime & Non-Prime ice rental rates to \$176/hr
- Increase Minor Hockey and Figure Skating rates to \$123.89/hr
- Increase the Non-Resident Fee to \$320
- Charge Melancthon users a \$160 user fee

It should be noted that for all three options above, Mulmur would contribute \$25,000 plus any deficit.

Below is a breakdown of the approximate costs to Minor Hockey and Figure Skating groups based on the options above and 2014/15 usage.

	Minor Hockey	Option 1	Option 2	Option 3
Mulmur	32	-	-	-
Melancthon	36	-	12,600	5,760
Other	39	9,750	13,650	12,480
Rental Charge	409.5 Hrs	48,923	48,923	48,923
Total Cost		58,673	75,173	67,163
Cost/player	107	548	703	628

	Figure Skating	Option 1	Option 2	Option 3
Mulmur	5	-	-	-
Melancthon	10	-	3,500	1,600
Other	-	-	-	-
Rental Charge	87.5 Hrs	10,454	10,454	10,454
Total Cost		10,454	13,954	12,054
Cost/player	15	697	930	804

All of the above options have a large financial impact on the minor hockey and figure skating groups with Option 1 having the least amount of impact.

FINANCIAL IMPACT

If Council adopts one of the above options the Arena has the potential of having a balanced budget.

Respectfully submitted:

Heather Boston

Heather Boston, CPA, CA, CGA, BComm
Treasurer

General Ledger

Annual Department Budget vs. Actual Comparison Report
Fiscal Year Ending: DEC 31,2015 - From Period 1 To Period 12 Ending DEC 31,2015

Account	Description	Previous Year Total		Current Year To Date		Total Budget
		Actual	Budget	Actual	Budget	
Fund: 01 OPERATING FUND						
Category: 2777						
2000 RECREATION - NDCC						
Revenue						
01-2000-3000	NDCC MULMUR GRANT	19,100.00	0.00	0.00	25,000.00	25,000.00
01-2000-3010	NDCC MELANCTHON GRANT	7,500.00	7,500.00	0.00	7,500.00	7,500.00
01-2000-3030	NDCC MISC RENTALS	340.34	0.00	354.63	150.00	150.00
01-2000-3031	NDCC DONATIONS (CAPITAL)	100.00	0.00	0.00	0.00	0.00
01-2000-3041	NDCC BOOTH RENTAL/HYDRO RE	4,671.18	3,500.00	2,811.00	4,500.00	4,500.00
01-2000-3050	NDCC BARBECUE REVENUE	14,488.15	14,000.00	0.00	14,400.00	14,400.00
01-2000-3061	NDCC HALL RENTAL	2,457.10	3,500.00	929.19	3,500.00	3,500.00
01-2000-3062	NDCC FLOOR RENTALS	675.60	0.00	0.00	0.00	0.00
01-2000-3126	NDCC ICE RENTALS (NON-PRIME)	653.94	1,500.00	1,393.80	0.00	0.00
01-2000-3131	NDCC HON MIN HOCKEY ICE TIME	40,113.00	60,000.00	27,031.92	41,000.00	41,000.00
01-2000-3132	NDCC HON FIG SKATG ICE INC C/	8,720.68	13,400.00	4,716.64	8,500.00	8,500.00
01-2000-3133	NDCC TOURNAMENT ICE TIME BII	1,175.30	2,000.00	0.00	0.00	0.00
01-2000-3134	NDCC ICE RENTALS (PRIME)	37,722.22	35,000.00	34,246.92	37,700.00	37,700.00
01-2000-3141	NDCC FUNDRAISING EVENTS RE	0.00	0.00	0.00	0.00	0.00
01-2000-3151	NDCC MISC-SIGNS/CANDY	4,039.85	4,300.00	4,269.00	4,000.00	4,000.00
01-2000-3177	NDCC - CHILDRENS SUMMER PR	0.00	600.00	0.00	0.00	0.00
01-2000-3180	NDCC TRANSFER IN FROM RESEI	25,127.65	26,332.00	0.00	120,000.00	120,000.00
01-2000-3181	NDCC TRANSFER IN FROM DC'S	170,000.00	170,000.00	0.00	0.00	0.00
Total Revenue		336,885.01	341,632.00	75,753.10	266,250.00	266,250.00
Expense						
01-2000-4001	NDCC BOOTH MAINTENANCE	1,317.80	1,200.00	195.90	1,320.00	1,320.00
01-2000-4010	NDCC BARBEQUE EXPENSES	6,872.61	6,500.00	0.00	7,000.00	7,000.00
01-2000-4012	NDCC FUNDRAISING EVENTS EXF	0.00	200.00	0.00	0.00	0.00
01-2000-4021	NDCC FUEL/ZAMB PROPANE	15,408.02	15,000.00	4,822.30	16,000.00	16,000.00
01-2000-4031	NDCC HYDRO	61,211.06	50,000.00	3,513.76	55,000.00	55,000.00
01-2000-4041	NDCC COMMUNICATION	1,203.93	800.00	297.36	1,205.00	1,205.00
01-2000-4059	NDCC EI/CPP/WSIB/EHT	4,844.02	5,916.00	1,903.95	5,000.00	5,000.00
01-2000-4060	NDCC WAGES	45,522.90	51,051.00	16,733.11	45,000.00	45,000.00
01-2000-4065	NDCC WAGES PUBLIC WORKS	0.00	1,000.00	0.00	0.00	0.00
01-2000-4071	NDCC ICE PLANT/MACH MAINT	4,582.00	7,500.00	288.50	6,000.00	6,000.00
01-2000-4081	NDCC BLDG/GROUNDS MAINTEN	12,225.35	11,600.00	3,576.65	12,000.00	12,000.00
01-2000-4121	NDRCCC PER DIEMS	1,000.00	2,000.00	0.00	0.00	0.00
01-2000-4141	NDCC MISC	382.79	500.00	(86.48)	500.00	500.00
01-2000-4143	NDCC HEALTH & SAFETY	3,208.20	3,000.00	0.00	3,200.00	3,200.00
01-2000-4151	NDCC INSURANCE	18,422.64	20,000.00	5,594.40	24,015.00	24,015.00
01-2000-4161	NDCC AUDIT FEES	1,074.94	1,164.00	0.00	1,089.00	1,089.00
01-2000-4171	NDRCCC SECRETARY/TREASURY	2,080.00	2,080.00	0.00	2,080.00	2,080.00
01-2000-4220	NDCC PROF FEES INC WATER TE	300.00	250.00	0.00	300.00	300.00
01-2000-6001	NDCC CAPITAL EXPENDITURES	0.00	176,332.00	(75,127.65)	120,000.00	120,000.00
01-2000-6010	NDCC TSFR TO RECREATION RE	94,373.65	0.00	0.00	5,000.00	5,000.00
01-2000-7356	NDCC - OFFICE/COMPUTER SUPP	74.75	150.00	0.00	100.00	100.00
01-2000-7365	NDCC ASSET MANAGEMENT	350.00	350.00	0.00	0.00	0.00
Total Expense		274,454.66	356,593.00	(38,288.20)	304,809.00	304,809.00
Dept Excess Revenue Over (Under) Expenditures		62,430.35	(14,961.00)	114,041.30	(38,559.00)	(38,559.00)
Category Excess Revenue Over (Under) Expenditures		62,430.35	(14,961.00)	114,041.30	(38,559.00)	(38,559.00)