The Corporation of the Township of Billings

Council Meeting Agenda

February 20th, 2024 7:00 p.m.

Kagawong Park Centre

Council
Bryan Barker, Mayor
David Hillyard, Deputy Mayor
Vince Grogan, Councillor
Michael Hunt, Councillor
Ian Anderson, Councillor

Staff
Emily Dance, CAO/Clerk
Tiana Mills, Deputy Clerk
Harmony Hancock, Director of Finance/Treasurer
Todd Gordon, Municipal Project Manager

1. **Call to Order**
   Mayor Bryan Barker to call the meeting to order.
2. **Approval of Agenda**
   2.1. Confirm approval of the agenda.
3. **Delegation**
   3.1. Island Wide Waste Management Resource Committee Delegation
4. **Disclosure of Pecuniary Interest**
5. **Adoption of Minutes**
   Motion to adopt the minutes of the following meetings of Council:
   5.1. Regular Council Meeting – January 16th, 2024
   5.2. Special Council Meeting – January 29th, 2024
   5.3. Special Council Meeting – Strategic Plan Town Hall Afternoon Session – February 1st, 2024
   5.4. Special Council Meeting – Strategic Plan Town Hall Evening Session – February 1st, 2024
   5.5. Special Council Meeting – Strategic Plan Workshop – February 2nd, 2024
   5.6. Special Council Meeting – Strategic Plan Workshop – February 3rd, 2024
   5.7. Regular Council Meeting – February 6th, 2024
6. **Committee Reports**
   6.1. Members of Council are provided with an opportunity to report on Committee and Board meetings.
      6.1.1. Community Policing Advisory Committee (CPAC) Minutes - November 8th, 2023

7. Staff Reports

7.1. PW-2024-02-03 Annual Monitoring, Reporting and Well Improvement Program Proposal

7.2. TR-2024-02-04 Council Remuneration, 2023

7.3. TR-2024-02-05 2024 Insurance Proposal

7.4. MPM-2024-02-02 91 Main Kagawong Fitness Centre (2)

7.5. MPM-2024-02-03 Old Mill Road Bridge Replacement– Tender Results

7.6. CLK-2024-02-01 Committee Appointment

7.7. CLK-2024-02-02 Ad-Hoc Committee – Municipal Owned Water System

7.8. CLK-2024-02-03 Rural Economic Development Program

8. Correspondence Requiring Direction

9. Information

9.1. Gore Bay Fish and Game Club Thank You Letter

9.2. Manitoulin Phragmites Results of 2023 Work

9.3. Association of Ontario Roads Supervisors (AORS) Skills Development Fund

9.4. The Township of Greater Madawaska Support for Bill C-310

9.5. The Township of Wainfleet Cemetery Transfer/Abandonment Administration & Management Support Request

9.6. Oil, Gas and Salt Resources Act, Changes for Special projects and Well Security

9.7. Manitoulin-Sudbury District Services Board: Support of the National Housing Accord

9.8. Public Health Sudbury and Districts: Household Food Insecurity

9.9. Governance Structure Review of Boards of Management for Territorial District Homes

9.10. Town of Mono Road Safety Emergency

9.11. Community Safety and Policing Act Notice

9.12. County of Renfrew Affordability of Water and Wastewater Systems

10. Accounts for Payment

10.1. Accounts for Payment – January 18th, 2024 & February 8th, 2024

11. By-Laws and Agreements

11.1. 2024-09 Amend Speed Limit

11.2. 2024-10 Video Monitoring Policy

11.3. 2024-11 Encroachment Agreement – 736 Lakeshore Rd

12. Notice of Motions

13. Closed Session

13.1. THAT the Township of Billings Council hereby moves into Closed Session pursuant to [s. 239(2)(b)] Personal matters about an identifiable individual (2) – Volunteer Fire Fighter Application, and an identifiable individual; and pursuant [s. 239(2)(d)] Labour relations or employee negotiations CAO/Clerk recruitment; AND pursuant to [s. 239(2)(i)] Third-party information supplied in confidence to the

municipality of a technical and commercial nature – Fiber Optic AND FURTHER returns to open session upon completion.

14. Confirmatory By-Law

14.1. By-Law No. 2024-13 Being the February 20th, 2024 Confirmatory By-Law

15. Adjournment

15.1. Motion to Adjourn

Document Accessibility

The Township of Billings is committed to providing information in the format that meets your needs. We have made every attempt to make documents for this meeting accessible but there may still be difficulty in recognizing all the information. Please contact us if you require assistance and we will make every attempt to provide this information in an alternative format.

Please note that third party documents received and found within this document will not be converted to an accessible format by the Township of Billings. However, upon request, we will attempt to obtain these documents in an appropriate accessible format from the third party.

For assistance or to make a request please call (705) 282-2611 or email tmills@billingstwp.ca

Township of BILLINGS

Delegation Request Form

The Clerk of the Township of Billings reserves the right to refuse or defer any delegation at any time. Delegations appear strictly for information purposes only. Any discussion or decision will be at the discretion of Council. Material provided will be uploaded to the public agenda subject to rules of procedure.

Request for Delegation (please print)

- ○ on my own behalf; or
- ◉ on behalf of a group / organization / association, if so please state name of group/ organization / association below.

Name(s) of Group/ Organization / Association: Island Wide Waste Resource Committee

Name(s) of Speaker(s) (Maximum 2): Vince Grogan, Dale Scott

Subject / Title of Presentation: Island Wide Waste Solution

Please describe below, the subject matter of the delegation

See below

Equipment Required (projector, screen, laptop): Virtual Meeting

Contact Information (will not be posted publically):

Address: Vince Grogan

Telephone: _____ Email: _____

Signature: _____

OFFICE USE ONLY

[redacted]

Island Wide Waste Committee Draft 2024 Action Plan

MISSION STATEMENT

- Seek positive environmental alternatives for all waste and look for opportunities to turn waste into profit.
- Educate and motivate people to become more environmentally responsible.

Goal 1: To garner participation and financial commitment from all island communities

- Deliver presentations to all communities to get representation plus financial contributions to support a staff person

Committee Responsibilities

- Act as delegates to deliver presentations to each community

Goal 2: Hire a Project Manager to administer the project

Project Manager Responsibilities

- To apply for funding to conduct a feasibility study on waste disposal solutions
  - Pending approval, oversee RFP and project management of feasibility study
- Develop an educational strategy directed to island residents on ways to reduce waste
- Collaborate with economic development agencies to advocate on economic opportunities for businesses to divert waste to new products
- Communicate with all member communities on progress of the Island Wide Waste Committee

Committee Responsibilities

- Create an HR subcommittee to oversee the hiring process, in conjunction with the Township of Billings
- Support the Project Manager to be successful in defined deliverables.

Goal 3: Explore Waste Reduction Strategies

Committee Responsibilities

- Identify all waste streams and determine responsibly, be municipality or producer and research processing solutions for Tires, Glass, Plastics, Paper Corrugated, Textiles as well as Household trash (Biodegradable and compostables)
- Identify multiple solution for each waste stream
- Discuss all possible solutions and create an appropriate action plan based on quick wins to more in depth solutions

Developing a Waste Management Plan for Manitoulin Island

We seek
Manitoulin wide
community driven
innovative solutions

Benefits of a Common Waste Management Group

- Savings
- Scalable
- Circular
- Responsible

Recycling by itself is no longer a good option


Glass


Plastic


Organic


Metal


Paper


E-waste

Did you know?

AMO Report Sept 2023 Executive Summary

Together we can overcome the growing waste mountain

Achieving cost effectiveness

Combining our efforts

- Transportation
- Collection
- Storage
- Funding outreach
- Value added waste investments

Why do it alone?

It is hard

It is a lonely road

It is Expensive

It is inefficient

Let us find sustainable and environmentally sound solutions together

A communal circular waste economy considers little as actual waste

Circular, value added economies makes sense and can create jobs

Did You Know?

35kg of 100kg is compostable!

Who we need at the table

- First Nation communities
- Municipalities
- Local businesses
- Agricultural community
- Institutions (Schools, Hospitals, Elder & Child care)
- Funders
- Innovators
- Members of the public
- Industry

Funding sources for waste management infrastructure and project coordination

- Federal
- Provincial
- Municipal
- Community Donations
  - $2-5/person in each community

How these funds will be used

1. Hire a committee coordinator
2. Seek applicable funding opportunities
3. Process necessary documentation
4. Accessorial costs

Island Wide Money Spent On Waste

	2023	2024
Aundeck Omni Kaning	$	$
M'Chigeeng	$	$
Sheguiandah	$	$
Sheshegwaning & Zhiibaahaasing	$	$
Wikwemikoong	$	$
NEMI	$	$
Central Manitoulin	$	$
Assiginack	$	$
Tehkummah	$	$
Billings	$	$
Gordon Barrie Island	$	$
Gore Bay	$	$
Dawson & Robinson	$	$
Burpee Mills	$	$

We need all communities to join this group to help achieve Island-wide environmental sustainable solutions with an economic benefit for all.

Thank you for giving us the time to present to you

Island Wide Waste Management Mandate:

Seek positive environmental alternatives for all waste and look for opportunities to turn a waste into profit.
Educate and motivate people to become more environmentally responsible.

Current Island Wide Waste Management Chair : Vince Grogan

Initiated and supported by the

Township of BILLINGS

Correspondence
E-mail
vgrogan@billingstwp.ca

PowerPoint by
Maja Mielonen & Chris Theijsmeijer

Good day Mayor and Council

Our committee has requested an opportunity to present our proposal with the sole mission of bringing all of our Island in on finding sustainable cost-effective environmental solutions to our waste and recycling problem.

In a show of good faith, we would like to introduce two initiative's that are cost free to communities and will divert both hazardous and non-hazardous products from our landfill sites and transfer stations.

1) Call2Recycle.
   These people offer boxes for your neighbours to use to deposit their dead batteries. Call2Recycle will provide the box's as well as look after all transportation to their facility in Southern Ontario with NO COST to any community.

2) Sic Sox Circular.
   The IWWRC is very proud to announce a partnership with these folks whose mission is to divert textiles, clothing, bedding and other material products for our landfill and transfer stations. We have made a commitment for 7 receptacles to be strategically placed through-out our island to reduce the travel necessary for your neighbours to take full advantage of making the right choice easily.

   Please reach out to our committee for any other information, or if your community wishes to participate in either initiative, please let us know. We have to coordinate with our partners to make sure we are not duplicating or complicating their logistics and strategically placing receptacles to allow all to benefit from these great solutions.

   This is just a taste of what our committee is hoping to bring to you folks with our sole mission to be cost-effective environmental solutions to protect our precious Island., and reduce "OUR" carbon footprint.

   Thank you for your attention.

Sincerely
The IWWRC
Vince Grogan
Chair of the Island Wide Waste Resource Committee
vgrogan@billingstwp.ca
519-277-0482

The Corporation of the Township of Billings

Council Meeting Minutes

January 16th, 2024 7:00 p.m.

Virtual Meeting

Council
Bryan Barker, Mayor
David Hillyard, Deputy Mayor
Vince Grogan, Councillor
Michael Hunt, Councillor

Staff
Emily Dance, CAO/Clerk
Tiana Mills, Deputy Clerk
Harmony Hancock, Director of Finance / Treasurer
Todd Gordon, Municipal Project Manager
Arthur Moran, Health and Safety/By-Law Enforcement Officer

1. **Call to Order**
   Mayor Barker called the meeting to order at 7:03pm.

2. **Approval of Agenda**
   2.1. Confirm approval of the agenda.
   The CAO/Clerk brought forward a request to add an item to the agenda under Section 8 Correspondence requiring direction. The Gore Bay Fish and Game Club and Community Fish Hatchery in Gore Bay have made a request for a donation of $1,000.

   2024-1
   Moved by Grogan Seconded by Hillyard
   THAT the Township of Billings Council hereby approves the agenda as amended.
   Carried.

3. **Delegation**
   None.

4. **Disclosure of Pecuniary Interest**
   I, Mayor Bryan Barker, declare a direct pecuniary interest on Agenda Item No.: 8.5 Item Title: Gore Bay Game & Fish Club for the following reason: I am a member of the Gore Bay Game & Fish Club.

5. Adoption of Minutes

Motion to adopt the minutes of the following meetings of Council:

5.1. Regular Council Meeting – December 19, 2023

2024-2

Moved by Grogan Seconded by Hillyard

THAT the December 19th, 2023, Regular Council Meeting minutes be adopted as presented.

Carried.

6. Committee Reports

6.1. Members of Council are provided with an opportunity to report on Committee and Board meetings.

Councillor Grogan gave a verbal update about the Island Wide Waste Resource Citizen Committee Meetings.

Deputy Mayor Hillyard gave a verbal update about the Parks, Recreation and Wellness Committee Meeting.

6.1.1. October 18, 2023 Manitoulin Municipal Association Minutes

2024-3

Moved by Hillyard Seconded by Grogan

THAT the Township of Billings Council hereby receives for information all items listed in Section 6.

Carried.

7. Staff Reports

7.1. BP 2024-01-01 Building Report – 2023

2024-4

Moved by Hillyard Seconded by Grogan

THAT the Township of Billings Council hereby receives for information Report BP2024-01-01.

Carried.

7.2. HS 2024-01-01 Security Camera & Video Monitoring Policy

2024-5

Moved by Grogan Seconded by Hillyard

THAT the Township of Billings Council hereby approves Report HS-2024-01-01 AND FURTHER

1. Authorize bringing forward $16,000 for the purchase and installation of security cameras during 2024 budget deliberations
2. Approves the Video Monitoring Policy AND FURTHER approves the appropriate By-Law coming forward.

Carried.

7.3. PW-2024-01-01 Vulnerable Road User Campaign (Sudbury District Health Unit)

2024-6

Moved by Hillyard Seconded by Grogan

THAT the Township of Billings Council hereby approves Report PW-2024-01-01 AND approves partnering with Sudbury and District Health Unit in the vulnerable road user campaign.

Carried.

7.4. PW-2024-01-02 Monument Road Petition (2)

2024-7

Moved by Hunt Seconded by Hillyard

THAT the Township of Billings Council hereby approves Report PW-2024-01-02 AND approves the reduced speed from 80km/h to 60km/hr for the 3 km section of Monument Road between John Street to the Central Manitoulin boundary AND FURTHER authorize the appropriate By-Law coming forward.

Carried.

2024-8

Moved by Hunt Seconded by Grogan

THAT Council directs staff to look into costing of purchasing marked speed signs on the roads with the Slow-Moving Vehicles signs for the 2024 budget considerations.

Carried.

7.5. MPM 2024-01-01 Firehall Project Completion / Infrastructure Ontario Loan

2024-9

Moved by Hunt Seconded by Hillyard

THAT the Township of Billings Council hereby approves Report MPM-2024-01-01 / TR-2024-0104 AND approves the OILC Debenture in the amount in the amount of $890,198.93, at an interest rate of 4.53% p.a (compounded semi-annually) for a term of

30 years closing on February 1, 2024 AND FURTHER authorizes the appropriate By-Law coming forward on tonight's agenda.

Carried.

7.6. TR 2024-01-01 Water System Financial Plan Report (Old Mill Road Waterline)

2024-10

Moved by Grogan Seconded by Hunt

THAT the Township of Billings Council hereby receives for information Report TR-2024-01 -01.

Carried.

7.7. TR 2024-01-02 Old Mill Road Waterline Project (3)

2024-11

Moved by Grogan Seconded by Hunt

THAT the Township of Billings Council hereby approves Report TR-2024-01-01 AND FURTHER approves the Old Mill Waterline Capital Cost Recovery By-Law coming forward on tonight's agenda.

Carried.

2024-12

Moved by Grogan Seconded by Hillyard

THAT the Township of Billings Council hereby approves the creation of a Sub Committee for the purpose of the creation of a Municipal Owned Water System Policy

Carried.

7.8. TR 2024 01-03 Tax Levy & Borrowing By-Law

2024-13

Moved by Hillyard Seconded by Grogan

THAT the Township of Billings Council hereby approves Report TR-2024-01-03 AND authorizes a By-Law to levy amounts on the assessment of property in the Township of Billings for local municipal purposes as authorized by the Municipal Act AND FURTHER authorizes the Mayor and Treasurer to borrow from time to time by way or promissory note, such sums necessary to meet current expenditures AND FURTHER authorizes the appropriate By-Laws coming forward on tonight's agenda.

Carried.

7.9. CAO 2024-01-01 Strategic Plan Update (2)

2024-14

Moved by Grogan Seconded by Hunt
THAT the Township of Billings Council hereby receives for information Report CAO-2024-01-01.

Carried.

8. Correspondence Requiring Direction

8.1. Manitoulin Streams Request for Funding Support for 2024 Stream Restoration Initiatives
2024-15
Moved by Hunt Seconded by Grogan
THAT the Township of Billings Council hereby receives the letter from Manitoulin Streams dated December 13, 2023 AND includes $3,500 in donations in the 2024 Budget.

Carried.

8.2. Manitoulin Fine Arts Association 2024 Request for Reduced Park Centre Rental Fee
2024-16
Moved by Hillyard Seconded by Hunt
THAT the Township of Billings Council hereby receives the letter from Diane Carriere of the Manitoulin Fine Arts Association dated January 2, 2024 AND authorizes in-kind support for the 2024 Manitoulin Fine Arts Association 2024 Art Tour in the form of a reduced rental fee of the Park Centre July 19-21, 2024 of $300 + HST (regular value of $600 + HST).

Carried.

8.3. Gore Bay Airport – Request for Funding 2023
2024-17
Moved by Hillyard Seconded by Hunt
THAT the Township of Billings Council hereby receives the e-mail from the Gore Bay airport dated January 4, 2024 AND approves an unbudgeted donation amount of $5,000 for the Gore Bay Manitoulin Airport for 2023.

Carried.

8.4. Town of Gore Bay – Request for Funding – Arena 2023
2024-18
Moved by Hillyard Seconded by Hunt

THAT the Township of Billings Council hereby receives the letter from the Town of Gore Bay dated December 31, 2023, AND approves an unbudgeted donation amount of $2,500 for the Gore Bay Memorial Arena for 2023

Carried.

8.5. Gore Bay Fish and Game Club / Community Fish Hatchery

2024-19

Moved by Grogan Seconded by Hunt

THAT the Township of Billings Council hereby receives the letter from the Gore Bay Fish and Game Club and the Community Fish Hatchery AND includes a $1,000 in donation in the 2024 Budget.

Carried.

9. Information

9.1. 2024 Annual FONOM Conference May 14th – May 16th, 2024

Mayor Barker and Councillor Grogan requested to attend the conference.

9.2. Provincial Cemetery Management Support Request - Tay Township

9.3. 988 Suicide Crisis Helpline

2024-20

Moved by Grogan Seconded by Hillyard

THAT the Township of Billings Council hereby receives for information all items listed in Section 9.

Carried.

10. Accounts for Payment

10.1. Accounts for Payment: December 22, 2023 and January 10, 2024

2024-21

Moved by Hunt Seconded by Hillyard

THAT the Township of Billings Council hereby approves, ratifies, and confirms the December 22, 2023 and January 10th, 2024 Accounts for Payment as presented.

Carried.

11. By-Laws and Agreements

11.1. 2024-01 Temporary Borrowing By-Law

2024-22

Moved by Hunt Seconded by Hillyard

THAT By-Law No. 2024-01 being the Temporary Borrowing By-Law be read a first, second, and third time and finally passed this 16th day of January, 2024.

Carried.

11.2. 2024-02 Infrastructure Ontario Debenture (Firehall) By-Law

2024-23

Moved by Hunt Seconded by Grogan

THAT By-Law No. 2024-02 being the by-law to authorize the borrowing upon amortizing debentures in the principal amount of $890,198.93 towards the cost of the Township of Billings Fire Hall be read a first, second, and third time and finally passed this 16th day of January, 2024.

Carried.

11.3. 2024-03 Interim Tax Levy By-Law

2024-24

Moved by Grogan Seconded by Hunt

THAT By-Law No. 2024-03 being the by-law to provide for an interim tax levy be read a first, second, and third time and finally passed this 16th day of January, 2024.

Carried.

11.4. 2024-04 Cost Recovery (Old Mill Road Waterline) By-Law

2024-25

Moved by Grogan Seconded by Hunt

THAT By-Law No. 2024-04 being the by-law to recover the capital costs related to the construction and improvement of the Old Mill Road Waterline for those receiving a present or future from the Kagawong Water System be read a first, second, and third time and finally passed this 16th day of January, 2024.

Carried.

12. Notice of Motions

None noted.

13. Closed Session

None.

14. Confirmatory By-Law

14.1. By-Law No. 2024-05 Being the January 16th, 2024 Confirmatory By-Law

2024-26

Moved by Grogan Seconded by Hunt

THAT By-Law No. 2024-05 being the January 16th, 2024 Confirmatory By-Law be read a first, second and third time AND finally passed this 16th day of January, 2024.

Carried.

15. Adjournment

15.1. Motion to Adjourn

2024-27

Moved by Hunt Seconded by Grogan

THAT the Township of Billings Council hereby adjourns at 9:11p.m.

Carried.

_____ _____

Mayor Bryan Barker CAO/Clerk Emily Dance

Manitoulin Streams

25B Spragge St. Box 238
Manitowaning, ON P0P 1N0
Ph: (705) 859-1653
manitoulinstreams@gmail.com
www.manitoulinstreams.com

Dec 13, 2023

Municipality of Billings
15 Old Mill Road P.O. Box 34
Kagawong, ON P0P 1J0

Re: Request for Funding Support for 2024 Stream Restoration Initiatives

Dear Council,

Manitoulin Streams Improvement Association's Board of Directors appreciates the continued support by the Township of Billings in regards to their commitment toward our 2023 stream restoration initiatives. Manitoulin Streams has enjoyed our relationship with Billing, through its in-kind and cash contributions over the years.

In the past, Billings has generously donated $2500 to Manitoulin Streams, which has provided us with continuity in our efforts to revitalize the sport fishing industry and improve water quality on Manitoulin Island. Your donations towards our programs also help to prove that there is local support for our efforts, which in turn allows us to leverage funds from other funding sources. We have been committed to contributing toward our Island communities by providing stream tours and educational presentations to community members, tourists and school groups, participating in community events like, guided river hikes, log jam removals, community garbage clean-ups, tree planting, and providing economic stimulus to local businesses that can provide us materials and supplies for our restoration efforts. We wish to thank you for your continued support and hope you will consider the continuity of your $2500 donation on an annual basis for our program which benefits future restoration projects along the Kagawong River, waterfront and adapting the community for future climate change hazards.

This year we are attempting to replace the formerly held LAMBAC Manitoulin Trade Fair with an outdoor/angling trade fair show in Kagawong. The event will be held on the May long weekend and will draw tourists to the island and particularly the west end. Similarly, it will encourage locals to come to Billings and explore Manitoulin Island while providing advertising and sales opportunities for businesses from across Manitoulin as well as in Kagawong.

Thank you for your time. Any contributions toward our efforts would be greatly appreciated!

Sincerely,

Seija Deschenes
Project Coordinator

From: Diane Carriere
To: Diane Carriere; Tiana Mills
Subject: Request for the Park Centre for 3 days July 19, 20 and 21 2024 for the annual Art Tour
Date: January 2, 2024 3:19:26 PM

Hi Tiana, Happy New Year to all.

Please forward to appropriate committee:

As a resident of Kagawong and a member of the Manitoulin Fine Arts Association, I am requesting the fee for the Park Centre to be waived on the dates above please. (You would be the sponsor as advertised).

If you cannot waive the fee, I would request the minimum fee please similar to last year $333.00. You would be a sponsor with other additional sponsors.

From previous years' experience, having many artists in one place is very appreciated by all visitors.
Thank you very much,
Diane Carriere

From: Robert Colwell
To: Emily Dance
Subject: RE: Billings Airport Contribution.
Date: January 4, 2024 3:03:12 PM

Hi Emily,

It was nice meeting you over the phone today Emily. Thank you for taking my call.

It's disappointing that the annual airport contribution from Billings was inadvertently dropped from your budget. But I realize with a change of council and administration it is easy for this to happen. The fact that this amount is not invoiced and a standing order was assumed by us, as in other municipalities, did not help the matter either. Sadly, this figure remained in our budget and was removed from yours.

Many thanks,

Robert J. Colwell, Mgr.
Gore Bay-Manitoulin Airport, C-YZE

P.O. Box 236
Gore Bay, ON
P0P 1H0
tel/fax: 705.282.2101
cell: 705.282.7281

GORE BAY - MANITOULIN AIRPORT
Est. 1947

Municipal Office
15 Water Street
Telephone (705) 282-2420
Fax (705) 282-3076

CORPORATION OF THE TOWN OF GORE BAY
FARMING TOURISM JUDICIAL SEAT OF MANITOULIN
MANITOULIN ISLAND
Incorporated 1890

Postal Box 590
Gore Bay, Ontario
P0P 1H0

Office of the
Town Manager

December 31, 2023

Township of Billings
15 Old Mill Rd.,
P.O. Box 34
Kagawong, ON
P0P 1J0

Re: Gore Bay Memorial Arena Donation

Dear Council,

Your past support up to 2022 to the Gore Bay Memorial Arena has been greatly appreciated in helping to maintain and operate the facility. I am writing on behalf of the Town of Gore Bay to support 2023 funding for this facility.

As you are aware, the Gore Bay Memorial Arena is a valuable recreational outlet for the citizens of Western Manitoulin. Children and adults from Gore Bay, Billings, Gordon Barrie Island and Burpee Mills utilize this facility each year. Participating in minor hockey, figure skating and public skating benefits all our citizens.

Unfortunately, providing these services does come at a cost. Like most arenas, it is heavily subsidized by local taxpayers due to the costs for the arena manager wages, heat, hydro, plant, and maintenance costs.

We are hoping all the Western Manitoulin municipalities will consider a regular annual contribution to the Gore Bay Memorial Arena. If you would like further information to help reach a decision, please feel free to contact my office.

Your contribution is greatly appreciated.

Yours truly,

Harry Schlange
Town Manager

Tiana Mills

To: Emily Dance
Subject: RE: Assistance request for the Gore Bay Community Fish Hatchery

-----Original Message-----
From: Ian Anderson [redacted]
Sent: Friday, January 5, 2024 2:54 PM
To: Emily Dance <edance@billingstwp.ca>; Carrie Lewis <clerk@gordonbarrieisland.ca>; Denise Deforge <ddeforge@centralmanitoulin.ca>
Subject: Assistance request for the Gore Bay Community Fish Hatchery

Dear Mayor/Reeve and Council

I am writing you today on behalf of the Gore Bay Fish and Game Club and our Community Fish Hatchery located at Gore Bay.

Since 1986 our club has been actively involved in collecting fish eggs and rearing fish through a permitting system provided by the Ministry of Natural Resources and Fire (MNRF), Sudbury District office.

To date our hatchery has planted approximately 3 million fish in and around Manitoulin Island which has greatly contributed to our tourist based economy and ultimately benefited all municipalities.

Over the past 10 years we have shifted our efforts to walleye stocking in Lake Kagawong in the hopes of establishing either a self reproducing fishery or an ongoing put and take fishery. Walleye and yellow perch are the two most sought after fish by anglers in Ontario.

Lake Kagawong, as Manitoulin's second largest inland lake, forms part of your municipality and has historically been a destination angling location and popular vacation water body.Our stocking efforts will ultimately benefit everyone.

Annually our clubs operating expenses related to the hatchery average $4500:00. All of the considerable time and labour associated with raising summer pond fingerlings to an advanced stocking size is donated by a small group of dedicated volunteers.

The Town of Gore Bay has been a partner of our club since our hatcheries started in 1986, (we are currently at our second location).
Their annual contributions of in kind support providing no cost rent and administration saves our club at least an additional $1500:00 each year.

The Ontario Federation of Anglers and Hunters (OFAH) administers a province wide Community Hatchery Program funded in part by the MNRF.

Our club applies each year and on average receives just over $1000:00 per year to help off set our annual hatchery operating costs.

Annually we need to raise at least several thousand dollars to continue with our stocking program for Lake Kagawong, which we believe ultimately benefits everyone around the lake.

Today, our club respectively asks that your municipality consider an annual donation of $1000:00 to allow us to continue our efforts in enhancing our local sports fishery.
Sincerely,

Ian Anderson, secretary,
for,
Chris Robinson
President
Gore Bay Fish and Game Club,
Box 590, Gore Bay
P0P 1H0
705-282-3081

The Corporation of the Township of Billings

Council Special Meeting Minutes

Monday January 29, 2023 3pm

Park Centre – 39 Henry Drive, Kagawong

Council Present
Bryan Barker, Mayor
David Hillyard, Deputy Mayor
Vince Grogan, Councillor
Michael Hunt, Councillor – *arrived at 4:06 pm*

Staff Present
Emily Dance, CAO/Clerk

1. **Call to Order**
   Mayor Barker called the meeting to order at 3:01 p.m.

2. **Approval of Agenda**
   2024-28
   Moved by Grogan Seconded by Hillyard
   THAT the Township of Billings Council hereby approves the agenda as presented.
   Carried.

3. **Disclosure of Pecuniary Interest**
   None noted

4. **Item for which the Special Meeting was called.**
5. **Closed Session**
   2024-29
   Moved by Grogan Seconded by Hillyard
   THAT the Township of Billings Council hereby moves into Closed Session pursuant to [s. 239(2)(b)] Personal matters about an identifiable individual (2 items) AND FURTHER returns to open session upon completion.
   Carried.

6. **Report out of Closed Session**
   2024-35
   Moved by Grogan Seconded by Hunt

THAT Mayor Barker reported a closed meeting was held regarding personal matters about an identifiable individual (2 items) where information was received and direction given.

Carried.

2024-36
Moved by Hillyard Seconded by Barker
THAT the Township of Billings Council hereby accepts with regret the resignation of Emily Dance from the CAO/Clerk position with the last day of work being April 18, 2024. AND FURTHER approves the moving forward with the recruitment process including engaging with a consultant.

Carried.

7. Confirmatory By-Law

7.1. By-Law No. 2024-06 being the January 29th, 2024, Confirmatory By-Law

2024-37
Moved by Grogan Seconded by Hillyard
THAT By-Law No. 2024-06 being the January 29th, 2024, Confirmatory By-Law be read a first, second, third time AND FINALLY passed this 29th day of January 2024.

Carried.

8. Adjournment

8.1. Motion to Adjourn

2024-38
Moved by Hunt Seconded by Grogan
THAT the Township of Billings Council hereby adjourns at 4:24 p.m.

Carried.

_____ _____

Mayor Bryan Barker CAO/Clerk Emily Dance

The Corporation of the Township of Billings
Town Hall Meeting Minutes
Park Centre – Henry Drive, Kagawong
Thursday February 1, 2024 Afternoon Session

Members of Council:
Mayor Bryan Barker
Councillor Vince Grogan

Staff:
Todd Gordon, Municipal Project Manager
Tiana Mills, Deputy Clerk

Members of the Public:
17

1. **Call to Order**
   Mayor Barker called the meeting to order at 2:00pm.

2. **Item for which the Special Meeting was Called – Township of Billings Strategic Plan**
   Steve Lichty, Capital Park Consulting, facilitated the Town Hall meeting and posed questions to the public in attendance.

3. **Questions from the Public**
   Members of the public in attendance were given the opportunity to ask questions to Mr. Lichty.

4. **Questions to the Public**
   Mr. Lichty posed the following questions to the members of the public in attendance.
   a) What kind of community do you want the Township of Billings to become?
   b) What innovative ideas or opportunities would you like the Township of Billings to pursue?
   c) What would you change if you could improve or modify anything about the Township of Billings?

   Discussion was had regarding the questions above.

5. **Closing remarks and adjournment**
   Mayor Barker adjourned the meeting at 3:30pm.

Township of BILLINGS

_____
Mayor Bryan Barker

_____
CAO/Clerk Emily Dance

The Corporation of the Township of Billings

Town Hall Meeting Minutes

Park Centre – Henry Drive, Kagawong

Thursday February 1, 2024 Evening Session

Members of Council:
Mayor Bryan Barker
Deputy Mayor David Hillyard
Councillor Michael Hunt
Councillor Vince Grogan

Staff:
Todd Gordon, Municipal Project Manager
Tiana Mills, Deputy Clerk

Members of the Public:
3

1. **Call to Order**
   Mayor Barker called the meeting to order at 6:00pm.

2. **Item for which the Special Meeting was Called – Township of Billings Strategic Plan**
   Steve Lichty, Capital Park Consulting, facilitated the Town Hall meeting and posed questions to the public in attendance.

3. **Questions from the Public**
   Members of the public in attendance were given the opportunity to ask questions to Mr. Lichty.

4. **Questions to the Public**
   Mr. Lichty posed the following questions to the members of the public in attendance.
   a) What kind of community do you want the Township of Billings to become?
   b) What innovative ideas or opportunities would you like the Township of Billings to pursue?
   c) What would you change if you could improve or modify anything about the Township of Billings?

   Discussion was had regarding the questions above.

5. Closing remarks and adjournment

Mayor Barker adjourned the meeting at 7:40pm.

_____ _____

Mayor Bryan Barker CAO/Clerk Emily Dance

The Corporation of the Township of Billings

Strategic Plan Working Session Minutes

Park Centre – Henry Drive, Kagawong

February 2, 2024 9am

Council
Bryan Barker, Mayor
David Hillyard, Deputy Mayor
Vince Grogan, Councillor

Staff
Emily Dance, CAO/Clerk
Todd Gordon, Municipal Project Manager
Tina Beckerton, Accounts Payable / Tax Clerk

1. **Call to Order**
   Mayor Barker called the meeting to order at 9:10 am.

2. **Approval of the Agenda**
   2024-39
   Moved By GroganSeconded By Hillyard
   THAT the Township of Billings Council hereby adopt the February 2, 2024 agenda as presented.

   Carried.

3. **Item for which the Special Meeting was Called – Township of Billings Strategic Plan**
   Steve Lichty, Capital Park Consulting provided an overview of the planning session.
   The first day's session included:
   - Discussing the contents of Interim Reports 1 and 2
   - Report on the input from the Town hall meetings
   - Review of best practices in strategic planning
   - Analyzing approximately six strategic plans from similar municipalities
   - Reviewing the vision statement in the current strategic plan
   - Reviewing best practices for Mission and Value Statements and determined a new mission statement and vision would be beneficial in the new strategic plan
   - Conducting SWOT analysis

4. Adjournment

2024-40

Moved By Grogan Seconded By Hillyard

THAT the Township of Billings Council hereby adjourns at 3:58 pm

Carried.

_____ _____

Mayor Bryan Barker CAO/Clerk Emily Dance

The Corporation of the Township of Billings

Strategic Plan Working Session Minutes

Park Centre – Henry Drive, Kagawong

February 3, 2024 9am

Council
Bryan Barker, Mayor
David Hillyard, Deputy Mayor
Vince Grogan, Councillor
Michael Hunt, Councillor
Staff
Emily Dance, CAO/Clerk
Todd Gordon, Municipal Project Manager
Tina Beckerton, Accounts Payable / Tax Clerk

1. **Call to Order**
   Mayor Barker called the meeting to order at 9:00 am.

2. **Approval of the Agenda**
   2024-41
   Moved By GroganSeconded By Hunt
   THAT the Township of Billings Council hereby adopt the February 3, 2024 agenda as presented.

   Carried.

3. **Item for which the Special Meeting was Called – Township of Billings Strategic Plan**
   Steve Lichty, Capital Park Consulting provided an overview of the planning session from the prior day.
   The second day's session included:
   - Continuing discussion on vision, mission and/or values statements
   - SOAR Analysis (Strengths, Opportunities, Aspirations and Results)
   - Strategic Priorities
   - Measuring and Reporting
   - Next steps

4. **Adjournment**
   2024-42
   Moved By Hunt Seconded By Grogan

THAT the Township of Billings Council hereby adjourns at 4:00 pm

Carried.

_____ _____

Mayor Bryan Barker CAO/Clerk Emily Dance

The Corporation of the Township of Billings

Council Meeting Minutes

February 6, 2024 7:00 p.m.

Kagawong Park Centre – 39 Henry Drive, Kagawong

Council
Bryan Barker, Mayor
David Hillyard, Deputy Mayor
Vince Grogan, Councillor
Michael Hunt, Councillor

Staff
Emily Dance, CAO/Clerk
Tiana Mills, Deputy Clerk
Todd Gordon, Municipal Project Manager

1. **Call to Order**
   Mayor Bryan Barker to called the meeting to order at 7:00pm.
   Mayor Barker made a short statement of the purpose of the meeting and the general order of proceedings to be followed.

2. **Disclosure of Pecuniary Interest**
   None.

3. **Vacancy on the Township of Billings Council**
   3.1. List of Certified Candidates
   The list of certified candidates in alphabetical order:
   Ian Anderson 580 Newburn Road Kagawong, ON P0P 1J0
   William Gerald Concannon 10483 Highway 540 Gore Bay, P0P 1H0
   Mark Anthony DiLello 141 Maple Drive Kagawong, ON P0P 1J0
   Deborah Flaxman 78 Old Mill Road Kagawong, ON P0P 1J0
   John Foster 627A Newburn Road Kagawong, ON P0P 1J0
   Michael Toppazzini 16 Serendipity Lane Kagawong, ON P0P 1J0

   3.2. Nomination of Candidates
   2024-43
   Moved by Hunt Seconded by Hillyard
   THAT the following individuals, who have signified in writing that they are legally

qualified to hold office and consented to accept the office if they are appointed to fill the vacancy, be considered for appointment to fill the Council vacancy:
Ian Anderson
William Gerald Concannon
Mark Anthony DiLello
Deborah Flaxman
John Foster
Michael Toppazzini

Carried.

3.3. Review of Candidates and Qualifications

Each of the candidates were afforded the opportunity to address Council for a period of not more than ten (10) minutes. The speaking order drawn was determined by lot.
The speaking order drawn by the Clerk was as follows:

1. Anderson
2. Foster
3. Concannon
4. Toppazzini
5. Flaxman
6. Di Lello

3.4. Vote for Candidate to be Appointed

The voting procedures Council used to determine the Candidate to be appointed are outlined in the "Appoint an Eligible Elector to Fill a Vacancy Procedure" which was adopted by Council on December 19, 2023.
The voting order drawn by the Clerk was as follows:

1. Mayor Barker
2. Councillor Grogan
3. Councillor Hunt
4. Deputy Mayor Hillyard

3.5. Clerk to Announce Successful Candidate

The Clerk announced that the candidate receiving more than one half the numbers of voting members to fill the vacant seat of Council was Ian Anderson.

3.6. By-Law to Appoint new Council Member

2024-44
Moved by Grogan Seconded by Hunt

THAT By-Law No. 2024-07 being the appoint Ian Anderson to Council By-Law be read a first, second, third time and finally passed this 6th day of February, 2024.

Carried.

3.7. Declaration of Office

Councillor Anderson read aloud the declaration of Office for the Corporation of the Township of Billings.

3.8. Oath of Code of Conduct

Councillor Anderson signed the oath of the Code of Conduct.

4. Confirmatory By-Law

4.1. By-Law No. 2024-08 Being the February 6 2024 Confirmatory By-Law

2024-45

Moved by Grogan Seconded by Hunt

THAT By-Law No. 2024-08 Being the February 6 2024 Confirmatory By-Law be read a first, second, third time and finally passed this 6th day of February, 2024.

Carried.

5. Adjournment

5.1. Motion to Adjourn

2024-46

Moved by Hunt Seconded by Anderson

THAT the Township of Billings Council hereby adjourn at 8:38p.m.

Carried.

_____ _____

Mayor Bryan Barker CAO/Clerk Emily Dance

MINUTES
COMMUNITY POLICING ADVISORY COMMITTEE MEETING
Wednesday 08 November 2023
CENTRAL MANITOULIN COUNCIL CHAMBERS, MUNICIPAL OFFICE, MINDEMOYA ON 7:00 P.M.

PRESENT: A /Insp. Robert WALSH – OPP
Al BOYD – NEMI
Jack BOULD – GORDON / BARRIE ISLAND
Frank KLODNICKI – ASSIGINACK
Steve SHAFFER – CENTRAL MANITOULIN
Steve WOOD – TEHKUMMAH
Bryan BARKER - BILLINGS

REGRETS: Kelly CHAYTOR – GORE BAY
Kim MIDDLETON – BURPEE/MILLS

PUBLIC: Tom SASVARI – Manitoulin Expositor

Minutes Taken by Allan Boyd - NEMI

CALL MEETING TO ORDER
Al BOYD called a meeting to order at 6:57 pm and welcomed all in attendance.

ADOPTION OF AGENDA
Al BOYD asked if there were any changes or additions to the agenda. None were present.

Moved by Bryan BARKER and seconded by Jack BOULD that the agenda be adopted. CARRIED.

ADOPTION OF MINUTES
Al BOYD asked for any additions, corrections, or changes to the last meeting 13 September 2023 minutes.
None were present.

Moved by Steve SHAFFER and seconded by Steve WOOD that the agenda be adopted. CARRIED.

BUSSINESS ARISING

WELCOME

Al BOYD welcomed all members to the meeting and advised will move the meeting along as weather is nasty outside.

POLICE SERVICES BOARD UPDATE

Al BOYD advised that he has heard nothing more on the PSB advancement. Inspector WALSH and the rest of the board said they had heard nothing further either. CPAC will move ahead as status quo until committee hears otherwise.

NEW BUSINESS

OPP DETACHMENT COMMANDER COMMENTS

Det. Commander R. WALSH advised that the new pilot OPP Service Delivery Model is going extremely well for the Manitoulin Espanola Detachment. One new officer has started as of this past Sunday. 4 more new officers expected in January, and 3 more will be stationed here as of the next recruit class at the Ontario Police College in Aylmer Ontario.

The total compliment of the officers on Manitoulin Detachment is now at 65 with 25 of them being onboarded with this new program. Other detachments are envious of our compliment. Many officers are new, and this is challenging at times, however they are very enthusiastic and are quick to learn.

There are now 8 new cruisers with all the latest equipment installed, cameras, plate recognition. Also 2 new plain vehicles can now be used when officers are away on course this relieves having a black & white vehicle tied up at the college for a week or two while the officer is away.

Manitoulin is embarking on the new Cambrian College Student program for placement for the summer. These students can be used for many tasks in detachment operation. Inspector Walsh also advised that the calls for service have decreased across Manitoulin, not sure why, however, less crime is always a good thing.

Steve SHAFFER asked with this new Police Service Delivery Programs with all these extra officers coming to the island where is the money coming from to pay for this is this being downloaded on the municipalities. Inspector Walsh advised that the provincial policing budget is paying for this program, and it will not affect municipalities.

COMMUNITY SERVICE PROVIDER PRESENTATIONS

Al BOYD asked the CPAC committee members with the recent incidents of domestic violence, drugs and mental health incidents that are plaguing our communities would the committee be interested in inviting community partners from various organization to inform our members on what the trends are and what they are seeing. This information may be extremely helpful in bringing back information to our councils. These presentations will be short at the start of the CPAC meeting, 15 to 20 minutes max with Q&A.

All agreed.

FESTIVE RIDE CAMPAIGN:

Inspector WALSH advised the local RIDE program kicks off 15 November until after January 1st. Each shift will be conducting RIDE checks at all locations across Manitoulin and North Shore during this time. Targeting times of Christmas parties and other major events. The Inspector went on and advised that the RIDE program is done all year round and has yielded many positive enforcement issues. The following stats were given to CPAC since May to October this year on Manitoulin the following took place.

- 212 RIDE Checks with over hundreds of vehicles checked.
- 7 Under suspension drivers charged.
- 5 Criminal Code Bail violations
- 3 disqualified drivers arrested.
- 1 impaired driver
- 1 over .80 mgs of alcohol
- 1 refuse to give breath sample.
- All kinds of drug seizures 1 where 200 grams of cocaine seized street value of $40,000.
- Large drug seizure of fentanyl street value of $362,000

ROUND TABLE

Steve SHAFFER – Central Manitoulin – Has seen an increase as to patrols within town and along the school zone. Has mentioned that he has seen an increase in aggressive driving, passing on curves etc. Inspector WALSH advised his officers to be out there and watch. There have been 163 charges laid to date this year in this area. He also advised that Traffic Stops this year compared to last year are up by 78% last year 2700 stops this year so far over 5000.

Kelly CHAYTOR - Gore Bay – Sent regrets nothing mentioned to report.

Jack GOULD – Gordon/Barrie Island – No community concerns brought forward.

Frank KLODNICKI – **Assiginack –** Advised the S.S. Norisle departed town and wanted to thank the Inspector for the police presence with no events. Saw the RIDE programs during the Halloween haunted events. He asked about what can be done with noise complaints. They are having a barking dog issue. Inspector WALSH mentioned by-laws help. Last resort call police and they can have a talk with the owner.

Bryan BARKER – Billings – Thanked police for an issue they had with a subject at town council meetings.

Kim MIDDLETON – Burpee Mills – Sent her regrets nothing mentioned to report.

Steve WOOD – Tehkummah – No community concerns, asked who the community services officer is. Inspector WALSH advised John Hill was the CSO he has transferred to other duties he is now with the PLT Provincial Liaison Team dealing with First Nation Issues. They are searching for a new officer, in the meantime Jessica GILBERTSON in Espanola can be reached.

Al BOYD – NEMI – Some issues within town speeding that our town council is looking that with suggestions of speed bumps however research is being done. No other issues mentioned.

FINAL REMARKS

Al BOYD Thanked everyone for attending and commented it was great to have more police officers in the Manitoulin detachment.

MEETING AJOURNED

Meeting was adjourned at 7:48 pm

DATE and TIME OF NEXT MEETING.

Wednesday January 10, 2024 – 7 p.m., Central Manitoulin Council Chambers Mindemoya

COUNCIL REPORT
Department: Public Works
Date: February 20, 2024
Report Number PW-2024-02-03
File: 2024 Annual Monitoring and Reporting Kagawong Landfill
Attachment: 2023 Annual Monitoring and Summary Report and 2024 -2026 Monitoring Proposal

Staff Recommendation:

THAT the Township of Billings Council hereby approves report PW-2024-02-03 AND receives for information the 2023 annual monitoring report for the Kagawong Landfill AND FURTHER accepts the proposal from Pinchin for the 2024-2026 monitoring and summary report for the Kagawong Landfill AND FURTHER authorizes the appropriate By-Law coming forward.

Background:

On September 5, 2023, Council passed By-Law 2023-89 authorizing entering into an agreement with Pinchin for the 2023 Annual monitoring and reporting for the Kagawong Landfill. The scope of work for the project is to provide the required MECP annual reports that include an overview of the respective sites' environmental monitoring, environmental compliance and operations summaries as well as provide all technical elements related to water quality aspects.

Discussion:

Attached is a copy of the 2023 annual monitoring report and summary. On Page 10 bullet four Pinchin recommended repairing the BH1 well as the monitoring well was damaged leaving approximately 0.10m of PVC at the surface - Pinchin has agreed to include the cost of extending the PVC pipe, and adding protective casing at BH1, as well as add protective casing to BH3, completed by Pinchin staff. Repair to the monitoring infrastructure are required to be overseen by a licensed well tech in accordance with O.Reg. 903.

Also attached is a proposal for monitoring from 2024 to 2026. Pinchin has been providing monitoring services for the past years and it is beneficial to continue to engage their services.

Financial Impacts:

The estimated costs for the completion of the annual monitoring and reporting program for the Kagawong Landfill is
2024- $ 13,990
2025 - $13,990
2026 - $15,795 (includes a Triennial monitoring report)
The expense is included in the annual Township of Billings budget under contracts.

Alignment to Strategic Plan:

5. Continue to improve municipal waste site efficiency including waste diversion and recycling.
6. Improve the 'visitor' waste management situation (i.e., access to waste and recycling bins/receptacles).

Alignment to the CEEP:

N1: Increase local capacity, knowledge sharing and educational opportunities by teaming up with local partners to deliver grant application support and services for local businesses to sequester more carbon and protect, preserve, and enhance natural spaces.

Respectfully Submitted by:

Emily Dance, CAO/Clerk

January 16, 2024

Township of Billings
PO Box 34
Kagawong, Ontario P0P 1J0

E-mail: edance@billingstwp.ca

Attention: Emily Dance, CMO, AOMC
Clerk/CAO

Re: 2023 Water Quality Summary Report
Kagawong Waste Disposal Site Kagawong, Ontario
Pinchin File: 229152.005

Pinchin Ltd. (Pinchin) was retained through an Authorization to Proceed signed by Emily Dance of Township of Billings (Client) to conduct a Groundwater Monitoring and Sampling Program at the Kagawong Waste Disposal Site in Kagawong, Ontario (hereafter referred to as the Site). The Site location is indicated on Figure 1 (all Figures are provided in Appendix I). A detailed Site Location Plan illustrating the configuration of the current monitoring well network locations are provided on Figure 2.

1.0 BACKGROUND

Pinchin reviewed the following reports in relation to the Site:

- Report entitled *"2016-2017 Water Quality Monitoring Assessment, Township of Billings Kagawong Landfill, Kagawong, Ontario"* completed by Pinchin, dated March 30, 2017 (2016 Report);
- Report entitled "*2017 Water Quality Monitoring Assessment, Township of Billings Kagawong Landfill, Kagawong, Ontario*" completed by Pinchin, dated January 16, 2018 (2017 Report);
- Report entitled *"2016-2018 Water Quality Monitoring Assessment, Township of Billings Kagawong Landfill, Kagawong, Ontario"* completed by Pinchin, dated March 28, 2019 (2016-2018 Report);
- Report entitled "*2019 Water Quality Monitoring Summary Report, Kagawong Waste Disposal Site, Kagawong, Ontario"* completed by Pinchin, dated December 19, 2020;
- Report entitled "*2020 Water Quality Monitoring Summary Report, Kagawong Waste Disposal Site, Kagawong, Ontario*" completed by Pinchin, dated December 23, 2020;
- Report entitled "*2019-2021 Water Quality Monitoring Assessment, Township of Billings Kagawong Landfill, Kagawong, Ontario*" completed by Pinchin, dated March 29, 2022 (2019-2021 Report); and

- Report entitled "*2022 Water Quality Summary Report, Kagawong Waste Disposal Site, Kagawong, Ontario, Township of Billings*" completed by Pinchin, dated January 17, 2023.

2.0 SCOPE OF WORK

The objectives of the monitoring program as requested by the Client included the following scope of work:

- Mobilization of Pinchin personnel to the Site during the fall of 2023 and collection of groundwater samples from the existing well network locations on Site;
- Submission of the groundwater samples to an accredited analytical laboratory for analysis; and
- Preparation of a report outlining the 2023 field work completed and the analytical results and an evaluation of the results.

The investigation methodology was also conducted in general accordance with, and reference is made to the following regulatory and guidance documents:

- MECP document entitled "*Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*", dated December 1996 (MECP Sampling Guideline);
- MECP document entitled "*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*", dated March 9, 2004, amended July 1, 2011 (Analytical Methods);
- Ontario Regulation 169/03 "*Ontario Drinking Water Quality Standards" under the Safe Drinking Water Act*, dated 2002;
- MECP document entitled "*Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines*", dated June 2003 (ODWQS Guideline);
- MECP document entitled "*Incorporation of the Reasonable Use Concept into MOEE Groundwater Management Activities, Guideline B-7 (formerly 15-08)*" (Guideline B-7), dated April 1994;
- MECP document entitled "*Determination of Contaminant Limits and Attenuation Zones, Procedure B-7-1*", (formerly referenced by 15-08); and
- Ontario Regulation 903 R.R.O. 1990 "*Wells*", under the Ontario Water Resources Act.

3.0 GROUNDWATER MONITORING PROCEDURES

3.1 Standard Operating Procedures

Pinchin field personnel followed the Groundwater Sampling Pinchin Standard Operating Procedure (SOP) for this project. All Pinchin monitoring SOPs have been developed in accordance with the MECP Sampling Document and are consistent with standard engineering practices.

3.2 Water Quality Monitoring Activities

3.2.1 Groundwater Monitoring Activities

To perform the groundwater water monitoring activities, the following tasks were conducted:

- Pinchin notified the Client prior to field activities, and subsequently mobilized staff from the local Sudbury office to the Site on October 12, 2023.
- Static groundwater levels were collected using a Solinst™ water level tape. Measurements were collected from the top of riser pipe;
- During the monitoring events, groundwater from each monitoring well was purged prior to the collection of the sample using a moderate-flow sample methodology via high-density polyethylene (HDPE) 3/8” tubing and a Waterra™ inertial foot valve system. The HDPE system was chosen as an approved method to minimize sediment/particulate within each sample and to minimize sample agitation and well trauma in accordance with the MECP Sampling Document. Pinchin purged a minimum of three well volumes to a maximum of six well volumes using the inertial pump system until the well volume column was representative of the surrounding formation. During purging activities, additional groundwater monitoring parameters were collected from each monitoring well using an YSI-556 water quality meter for measurement of field parameters. Sample residual was disposed of onto the ground surface on-Site and up-gradient within the landfill confines;
- Groundwater samples were collected using the HDPE system in accordance with the MECP Sampling Document. Dissolved metals were field-filtered using a dedicated in-line 0.45-micron disposable filter. Upon completion of field sampling and monitoring activities, all samples collected were submitted to the project laboratory, SGS Canada Inc. (SGS) in Lakefield, Ontario. All parameters were analyzed by the project laboratory using MECP approved procedures and are consistent with the analytical methods prescribed in the Analytical Methods document; and
- The groundwater samples collected were analyzed at the project laboratory for the list of parameters provided by the client. Groundwater sample results were compared to the applicable ODWQS.

4.0 ASSESSMENT, INTERPRETATION, AND DISCUSSION

4.1 Depth to Groundwater

The measured depths to groundwater and the corresponding calculated groundwater elevations at each of the monitoring wells are presented in Table 1 for the fall 2023 monitoring event (all tables are included in Appendix II). Groundwater flow at the Site has historically been inferred to flow towards the southeast. Current elevations suggest that groundwater is flowing northeast to southeast beyond background site BH110, northeast along the landfill site and southeast with increasing distance downstream of operations. Groundwater elevations range from 240.60 mREL at source well BH1 to 217.89 mREL at downgradient well BH108.

The 2019-2021 Report also indicated that potential localized groundwater “mounding” is occurring beneath the waste fill area, which may be impacting groundwater elevations in the “near source” wells, BH1 and BH3. This interpretation is reflected in the current groundwater elevations observed in 2023, based on local exceedances in total dissolved solids, chloride, sulphate, sodium, iron and manganese.

Furthermore, upon observation, source well BH1 has been damaged, leaving approximately 0.10m of PVC at the surface. Pinchin recommends repairing the well; repairs may consist of adding a PVC to the top in order to extend the well above ground and the installation of a lockable metal casing around it to assist with its protection. It is also recommended to add a metal casing to well BH3 as it has no protective casing and consists of only the PVC. Considering both are source wells, adding a casing will also help preserve these wells as long-term monitors for the Site.

4.2 Groundwater Quality Monitoring Results

The analytical data for each well in comparison to the applicable regulatory criteria (ODWQS) is provided in Tables 2 to 13. Copies of the laboratory certificates of analysis are presented in Appendix III.

All groundwater monitoring wells at the Site were monitored during the fall 2023 sampling event.

4.2.1 Background Water Quality

Groundwater monitoring wells BH101 and BH102 located to the north and west of the landfill area, respectively, are interpreted to be hydraulically upgradient of the fill area and have been designated as background monitoring wells at the Site. A new monitoring well, BH110 was installed to the west of the landfill area during 2018 and is also considered representative of background water quality. BH101 continues to be utilized as the source of background water quality when comparing to Guideline B-7.

Background water quality conditions at the Site is generally characterized by moderate levels of landfill indicator parameters such as conductivity, hardness, total dissolved solids (TDS), alkalinity, chloride, sodium and sulphate exhibited since 2012. This indicates that elevated levels of the typical landfill

leachate indicator parameters are naturally occurring in this area. Therefore, these concentrations at the downgradient wells must be assessed in comparison to the background concentrations to provide situational context.

During 2023, ODWQS exceedances were quantified at the background monitoring wells for manganese, DOC, TDS and chloride which is consistent with the historical monitoring record.

4.2.2 Source and Downgradient Groundwater Quality Monitoring Results

A review of the sample dataset for the fall 2023 groundwater monitoring program identified the following parameters that exceeded the ODWQS standards:

Parameter	ODWQS (mg/L)	Monitoring Station ID
Dissolved Organic Carbon	5	BH1, BH102 (and BH102D), BH103 and BH106
Sulphate	500	BH109
Total Dissolved Solids	500	BH1, BH3, BH101, BH102 (and BH102D) BH103, BH104, BH105 (and BH105), BH106, BH107, BH108, BH109 and BH110
Chloride	250	BH1, BH103, BH104, BH105 (and BH105), BH106, BH107, BH108, BH109 and BH110
Nitrate (as N)	10	BH107
Sodium	200	BH103, BH104, BH105D, BH106, BH107, BH108, BH109 and BH110
Boron	5	BH103, BH105, BH107, BH108 and BH109
Iron	0.3	BH1, BH103, BH104, BH105D, BH106 and BH110
Manganese	0.05	BH1, BH103, BH104, BH105 (and BH105D), BH106, BH107, BH108, BH109 and BH110

Notes: mg/L – milligrams per litre

Additionally, the concentration of nitrite quantified at BH109 during the fall 2023 monitoring event was below the laboratory reportable detection limit; however, the laboratory RDL (3 mg/L) is higher than the ODWQS for nitrite (1 mg/L); therefore, this concentration is inconclusive for an ODWQS exceedance.

4.2.3 Guideline B-7 Results

The analytical data for each monitoring well in comparison to the Guideline B-7 criteria calculated using BH101 as the background monitoring well is provided in Table 14.

A review of the data set for 2023 identified the following Guideline B-7 exceedances at the downgradient monitoring wells:

Parameter	Cm Value (mg/L)	Monitoring Station ID
Chloride	147	BH104, BH105, BH106, BH107 and BH108
Sodium	104.26	BH104, BH106, BH107 and BH108
DOC	4.75	BH106
Nitrate (as N)	2.57	BH107
Nitrite (as N)	0.2988	BH104
Boron	1.46	BH104, BH106, BH107 and BH108
Iron	0.197	BH104, BH106 and BH108
Manganese	0.030	BH104, BH105, BH106, BH107 and BH108

Additionally, concentrations of nitrite quantified at downgradient monitoring locations BH104, BH105, BH107 and BH108 during the fall 2023 monitoring event were below the laboratory reasonable detection limit (RDL); however, the laboratory RDL is higher than the Guideline B-7 values for nitrite at wells BH104 (0.3 mg/L), as well as at BH105, BH107 and BH108 (each at 0.75 mg/L); therefore, these concentrations are inconclusive for Guideline B-7 exceedances.

Monitoring wells BH103, BH104, BH105 and BH106 are located approximately 200 m east of the Site and monitoring wells BH107 and BH108 are located further downgradient, approximately 500 m east southeast of the Site. According to the 2023 analytical results and the historical monitoring record at these locations, concentrations of TDS, chloride and boron were quantified at higher concentrations at the further downgradient wells BH107 and BH108 in comparison to the levels quantified at the wells closer to the landfill area (i.e., BH103, BH104, BH105 and BH106). Furthermore, BH107 concentrations of manganese and nitrate (as N) were greater than in those four near-field wells. Both BH107 and BH108 had higher sodium and manganese concentrations than the near-field wells, excluding well BH105 for both parameters. However, of the parameters in exceedance at the Site, those four near field wells did each have higher concentrations of sulphate, iron and dissolved organic carbon (except for BH105 which was similarly below the detection limit) than wells BH107 and BH108. These elevated concentrations contradict typical observations in landfill water quality monitoring as leachate impacts originating from the Site typically attenuate to lower levels with further distance from the landfill area.

Therefore, it is interpreted that these elevated concentrations are not landfill-derived and are originating from another source. It is likely that these concentrations are reflective of impacts associated with the preparation and storage of winter sand/salt from the adjacent property to the east. Similar observations were made in the 2020, triennial 2019-2021 and 2022 Report. Further investigations are required in order to confirm this interpretation.

Additional Guideline B-7 exceedances were quantified at the further downgradient monitoring wells (BH107 and BH108) for alkalinity (low). These parameters are either operational guidelines and/or aesthetic objectives for drinking water systems set by the ODWQS and are not considered to be a significant environmental concern originating from the Site.

4.2.4 Groundwater Field Measurements Results

At the time of sample collection, field readings for the parameters of temperature, pH, conductivity, oxidation reduction potential (ORP) and dissolved oxygen (DO) were measured using a YSI-556 water quality meter. The recorded measurements for the fall 2023 sampling events are presented in Tables 2 through 13.

Downgradient wells BH107 and BH108 had the highest electrical conductivity readings, two of the three lowest pH readings (BH09 had the lowest pH reading at 6.66, BH108 had a pH reading of 6.93, lower than 6.96 at BH107) at the entire site, as well as the highest ORP levels, excluding BH109. Well BH108 also had the lowest DO reading at 2.26 mg/L, although the DO at BH107 was the second highest below background well BH101. This suggests that such changes in these parameters are being influenced from a nearby source. Background values of conductivity at electrical conductivity at background wells BH101 and BH102 (though not BH110) are the lowest recorded at the site suggesting that these values should not be naturally elevated unless emanating from a contamination source.

The DO readings ranged from 4.15 mg/L at well BH1 to 9.55mg/L at background well BH101. Downgradient wells BH108 and BH107 had the highest electrical conductivity readings, 27,118 uS/cm, and 25,612uS/cm, respectively. Following the later was BH103 at 13950uS/cm. Background values of conductivity at background wells BH101 and BH102 (though not BH110) are the lowest recorded at the site (815 uS/cm and 305 uS/cm, respectively) suggesting that these values should not be naturally elevated unless emanating from a contamination source. BH108 and BH107 also had two of the three lowest pH readings (BH09 had the lowest pH reading at 6.66, BH108 had a pH reading of 6.93, lower than 6.96 at BH107) at the entire site, as well as the highest ORP levels (BH108 with a reading of 165.2mV and BH107 at 106.1), excluding BH109 with a reading of 91.4mV; the lowest ORP reading was BH3 at -69.4mV. This suggests that such changes in these parameters are being influenced from a nearby source.

4.3 Assessment for the Need for Implementation of Contingency Measures

There are currently no set trigger levels designed for the groundwater monitoring locations. Continued monitoring may indicate that trigger levels may be required in the future. At this time, Pinchin does not recommend any need or implementation for contingency measures as groundwater appears to be naturally attenuating within the property boundaries.

5.0 QA/QC PROTOCOLS

Various quality assurance/quality control (QA/QC) protocols were followed during the Groundwater Monitoring and Sampling Program to ensure that representative groundwater samples were obtained, and that representative analytical data were reported by the laboratory.

Field QA/QC protocols that were employed by Pinchin included the following:

- Water samples were placed in laboratory-supplied glass sample jars;
- The monitoring wells were purged to remove stagnant water prior to sample collection, so that representative groundwater samples could be obtained. Dedicated equipment was used for monitoring well purging and sampling to minimize the potential for cross-contamination;
- Water samples were placed in coolers on ice immediately upon collection with appropriate sample temperatures maintained prior to submission to the laboratory;
- Dedicated and disposable nitrile gloves were used for sample handling;
- Non-dedicated monitoring and sampling equipment was cleaned before initial use and between uses to minimize the potential for cross-contamination by washing with an Alconox™/potable water mixture followed by a deionized water rinse; and
- Sample collection and handling procedures were performed in general accordance with the *MECP Sampling Guideline*, the *APGO Guideline* and Pinchin's SOPs for groundwater sampling.

SGS's internal laboratory QA/QC consisted of the analysis of laboratory duplicate, method blank, matrix spike and spiked blank samples, an evaluation of relative percent difference calculations for laboratory duplicate samples and an evaluation of surrogate recoveries. The sample matrix had some influence on specific parameters resulting in the change of some laboratory procedures such as the RDLs for nitrate and nitrite were raised for some of the samples. All laboratory-measured samples were delivered to the laboratory upon receipt below the 10°C maximum during both sampling periods. The temperature of the samples upon arrival to the lab were recorded to be 13°C.

5.1 Field Duplicate Samples

In addition to the above QA/QC measures, Pinchin also collected field duplicate groundwater samples for the fall event for analysis to assess the suitability of field sampling methods and laboratory performance. The field duplicate samples were collected immediately following collection of the regular samples. The frequency of field duplicate sample analysis complied with the requirement that one field duplicate sample

is analyzed for every ten regular samples submitted for analysis. The following field duplicate pairings were collected during the fall 2022 monitoring event:

Duplicate ID	Original ID
GW DUP 1	BH105
GW DUP 2	BH102

The quality of the analytical results was evaluated by calculating the relative percent difference (RPD) for the original and field duplicate sample. The RPDs were calculated using the following equation:

$$RPD = \frac{(\text{Original Concentration} - \text{Duplicate Concentration}) \times 100}{(\text{Original Concentration} + \text{Duplicate Concentration})/2}$$

RPDs were not calculated unless the parameter concentration in both the original and duplicate sample had detectable concentrations above the corresponding practical quantitation limit (PQL) for the parameter which is equal to five times the lowest laboratory reportable detection limit (RDL).

The calculated RPDs for the original and field duplicate groundwater samples for the 2023 monitoring period have been compared to the performance standards considered acceptable by Pinchin (i.e., 50%) as presented in Table 15. Each of the calculated RPDs met the corresponding performance standard with the exception of Sodium (RPD=85.27%) at well BH102, additionally Calcium (RPD = 130.18%), Magnesium (RPD = 133.12%), Potassium (RPD= 133.88%), Barium (RPD = 105.88%), Boron (RPD = 114.83%), Iron (RPD = 179.47%), Manganese (RPD = 75.38%) and Sodium (RPD = 154.47%) at well BH105. It is Pinchin's opinion that these exceedances are likely a result of the heterogeneity within the groundwater sample and is unlikely to influence the overall sample integrity. Upon review of the QA/QC results for the 2023 sampling program, Pinchin has not identified any significant concerns that would warrant the invalidation of any of the field or laboratory data; therefore, considers the data generated as part of this program to be reliable.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the work completed, the following is a summary of the activities and findings of the Fall 2023 Groundwater Monitoring Program:

- All groundwater monitoring wells at the Site were monitored during the fall 2023 sampling event;
- Groundwater samples were submitted for laboratory analysis of parameters identified by the client;

- Based on site-specific information, the groundwater quality was assessed and compared to the ODWQS;
- During 2023, ODWQS exceedances were quantified at the background monitoring wells (BH101, BH102 and BH110) for manganese, DOC, TDS and chloride which is consistent with the historical monitoring records. BH110 has been in exceedance for iron and sodium for the last three years and further monitoring is recommended;
- Localized groundwater “mounding” is occurring beneath the waste fill area which may be impacting groundwater elevations in the “near source” wells, BH1 and BH3 as evident by exceedances in DOC, total dissolved solids, chloride, sulphate, sodium, iron and manganese.
- Pinchin recommends repairing the BH1 well as the monitoring well has been damaged leaving approximately 0.10m of PVC at the surface. Repairs may consist of adding a PVC to the top in order to extend the well above ground and a lockable metal casing around it to assist with its protection. It is also recommended to add a metal casing to well BH3 as it has no protective casing and consists of only the PVC.
- All reported concentrations in the downgradient groundwater samples submitted for analysis satisfied the respective ODWQS standards with the exception of:
    - DOC (at wells BH1, BH102, BH103 and BH106);
    - Sulphate (at well BH109);
    - TDS (at wells BH1, BH3, BH101, BH102, BH103, BH104, BH105, BH106, BH107, BH108, BH109 and BH110);
    - Chloride (at wells BH1, BH103, BH104, BH105, BH106, BH107, BH108, BH109 and BH110);
    - Nitrate (as N) (at well BH107);
    - Sodium (at wells BH103, BH104, BH105, BH106, BH107, BH108, BH109 and BH110);
    - Boron (at wells BH103, BH105, BH107, BH108 and BH109);
    - Iron (at wells BH1, BH103, BH104, BH105, BH106 and BH110);
    - Manganese (at wells BH1, BH103, BH104, BH105, BH106, BH107, BH108, BH109 and BH110); and
    - Exceedances for nitrite (as N) at well BH109 is inconclusive since both this concentration and the ODWQS standard are below the reportable detection limit.

- The reported concentrations in the groundwater samples submitted for analysis satisfied the respective Guideline B-7 limit with the exception of:
  - Chloride at all downgradient wells with the exception of BH103;
  - Sodium at wells BH104, BH106, BH107 and BH108;
  - DOC at well BH106;
  - Nitrate (as N) at well BH107;
  - Nitrite (as N) at well BH104;
  - Boron at wells BH104, BH106, BH107 and BH108;
  - Iron at all wells BH104, BH106 and BH108; and
  - Manganese at all at all downgradient wells with the exception of BH103.
- All QA/QC protocols were in compliance. The sample matrix had some influence on specific parameters resulting in the change of some laboratory procedures such as the RDLs for nitrate and nitrite were raised for some of the samples. Groundwater samples were duplicated at wells BH102 and BH105. Calculated RPDs between the original and duplicate samples did not exceed the corresponding performance standard with the exception of:
  - Sodium (RPD=85.27%) at well BH102;
  - Calcium (RPD = 130.18%), Magnesium (RPD = 133.12%), Potassium (RPD= 133.88%), Barium (RPD = 105.88%), Boron (RPD = 114.83%), Iron (RPD = 179.47%), Manganese (RPD = 75.38%) and Sodium (RPD = 154.47%) at well BH105
  - It is Pinchin's opinion that these exceedances are a result of the heterogeneity within the groundwater sample and is unlikely to influence the overall sample integrity.

In comparison to the historical data, the groundwater parameter concentrations observed during the fall 2023 monitoring program are considered generally consistent and maintaining a similar trend with those observed throughout the historic record. Elevated concentrations of landfill indicator parameters such as TDS, chloride, sodium, manganese and boron which exceeded the Guideline B-7 criteria at the downgradient property boundary in 2023 (except for higher sodium concentrations at well BH109) are interpreted to originate from the preparation and storage of winter sand/salt occurring at the adjacent property to the east. This interpretation should be confirmed during future monitoring investigations at the Site. The continuation of groundwater monitoring once annually (during the fall) is recommended.

7.0 TERMS AND LIMITATIONS

This Groundwater Monitoring and Sampling Program was performed for Township of Billings (Client) in order to investigate potential environmental impacts at the Kagawong Waste Disposal Site in Kagawong, Ontario (Site). The term recognized environmental condition means the presence or likely presence of any hazardous substance on a property under conditions that indicate an existing release, past release, or a material threat of a release of a hazardous substance into structures on the property or into the ground, groundwater, or surface water of the property. This Groundwater Monitoring and Sampling Program does not quantify the extent of the current and/or recognized environmental condition or the cost of any remediation.

Conclusions derived are specific to the immediate area of study and cannot be extrapolated extensively away from sample locations. Samples have been analyzed for a limited number of contaminants that are expected to be present at the Site, and the absence of information relating to a specific contaminant does not indicate that it is not present.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions on a property. Performance of this Groundwater Monitoring and Sampling Program to the standards established by Pinchin is intended to reduce, but not eliminate uncertainty regarding the potential for recognized environmental conditions on the Site and recognizes reasonable limits on time and cost.

This Groundwater Monitoring and Sampling Program was performed in general compliance with currently acceptable practices for environmental site investigations and specific Client requests as applicable to this Site. The scope of work completed by Pinchin as part of this Groundwater Monitoring and Sampling Program is not sufficient (in and of itself) to meet the requirements for the submission of a Record of Site Condition (RSC) in accordance with Ontario Regulation 153/04 (as amended). If an RSC is an intended end product of work conducted at the Site, further consultation and/or work will be required.

This report was prepared for the exclusive use of the Client subject to the terms, conditions, and limitations contained within the duly authorized work plan for this project. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

If additional parties require reliance on this report, written authorization from Pinchin will be required. Pinchin disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs. No other warranties are implied or expressed. Furthermore, this report should not be construed as legal advice. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law.

Pinchin makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and these interpretations may change over time.

CLOSING REMARKS

We trust that the foregoing information is satisfactory for your present requirements.

Should you have any questions about the report or require additional information, please contact the undersigned.

Pinchin Ltd.

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Encl. Appendix I – Figures
Appendix II – Tables
Appendix III – Laboratory Certificates of Analysis

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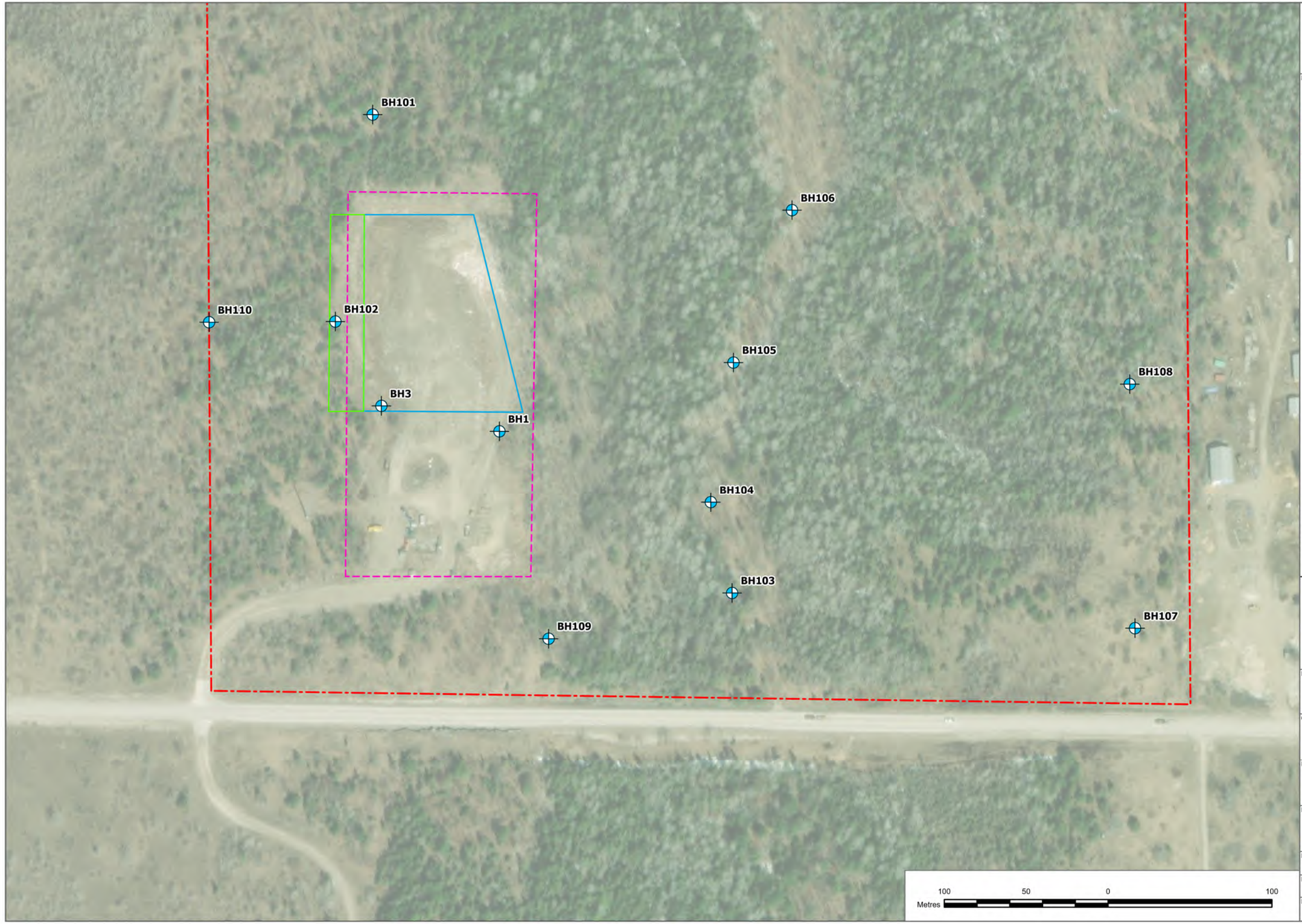
Template: Groundwater Monitoring Report Template, EDR, May 28, 2019

APPENDIX I
Figures

PINCHIN

PROJECT NAME:	SUMMARY REPORT				
CLIENT NAME:	TOWNSHIP OF BILLINGS				
PROJECT LOCATION:	KAGAWONG WASTE DISPOSAL SITE, KAGAWONG, ONTARIO				
FIGURE NAME:	KEY MAP				FIGURE NUMBER: 1
PROJECT NUMBER: 229152.005	SCALE: AS SHOWN	DRAWN BY: CF	REVIEWED BY: AV	DATE: JANUARY 2024	



N

LEGEND

- GROUNDWATER MONITORING WELL
- CURRENT LANDFILL SITE BOUNDARY
- PROPOSED LANDFILL SITE BOUNDARY
- SITE BOUNDARY
- CERTIFICATE OF APPROVAL BOUNDARY

NOTES:
1) Proprietary information may not be reproduced or divulged without prior written consent of Pinchin Ltd.
2) This drawing may have been reduced. All scale notations indicated are based on a 11"x17" format drawings.
3)Legend is color dependent. Non-colour copies may alter interpretation.
4) Coordinate system: NAD 1983 CSRS UTM Zone 17N.
5) Source: Pinchin Ltd., Maxar, Microsoft.

PINCHIN

PROJECT NAME
SUMMARY REPORT

CLIENT NAME
TOWNSHIP OF BILLINGS

PROJECT LOCATION
KAGAWONG WASTE DISPOSAL SITE, KAGAWONG, ONTARIO

FIGURE NAME
SITE AND SURROUNDING LAND USE PLAN

PROJECT NUMBER:	SCALE
229152.005	AS SHOWN
DRAWN BY: CF	REVIEWED BY: AV
DATE: JANUARY 2024	FIGURE NUMBER: 2

APPENDIX II
Tables

TABLE 1
Groundwater Monitoring Location Data
Kagawong Landfill
Kagawong, Ontario

Well ID Number	Date (dd-mm-yyyy)	Ground Surface Elevation (mREL)	TOC Elevation (mREL)	Height of TOC from Ground Surface (m)	Water Level Measurement from TOC (m)	Total Well Depth from TOC (m)	Depth to Groundwater (mbgs)	Calculated Water Level Elevation (mREL)	UTM Coordinates			Comments
									Zone	Easting (m)	Northing (m)	
BH1	30/10/2014	241.00	242.60	0.56	2.34	14.22	1.78	240.26	17T	400138	50835339	Grey colour, sulphur odour, and ok recovery. The well was pumped dry. The bedrock well is in poor condition, it is missing a casing, the PVC has sank making it difficult to locate and take a measurment from the ground to TOC as the TOC is almost non-exhistant. Furthermore It is missing a cap for the PVC.
	18/11/2015				2.45		1.89	240.15				
	19/10/2016				2.07		1.51	240.53				
	17-10-2017				2.41		1.85	240.19				
	04/08/2018				3.67		3.11	238.93				
	30/10/2018				2.64	14.15	2.08	239.96				
	09-11-2019				3.68	14.18	3.12	238.92				
	08-10-2020			0.52	2.28	14.23	1.76	240.32				
	19-10-2021				2.25	14.17	1.73	240.35				
	19-09-2022			0.45	2.22	14.21	1.77	240.38				
	12-10-2023			0.10*	2.00	13.97	1.90	240.60				
BH3	30/10/2014	242.85	243.47	0.62	2.53	14.28	1.91	240.94	17T	400057	5083548	Clear water, sulphur odour, and ok recovery. The well was pumped dry. Bedrock well with no casing was observed to be in good condition.
	18/11/2015				2.98		2.36	240.49				
	19/10/2016				2.43		1.81	241.04				
	17-10-2017				3.15		2.53	240.32				
	04/08/2018			0.66	4.29	14.30	3.63	239.18				
	30/10/2018				3.50	14.25	2.84	239.97				
	09-11-2019			0.56	3.62	14.27	3.06	239.85				
	08-10-2020			0.61	3.95	14.20	3.34	239.52				
	19-10-2021			0.66	4.01	14.29	3.35	239.46				
	19-09-2022			0.65	4.03		3.38	239.44				
	12-10-2023			0.64	3.93	14.27	3.29	239.54				
BH101	30/10/2014	243.81	244.89	1.08	5.70	9.62	4.62	239.19	17T	400054	5083775	Cloudy water, no odour, and recovery was ok. The well was pumped dry. Bedrock well was observed to be in good condition.
	18/11/2015				5.74		4.66	239.16				
	19/10/2016				3.13		2.05	241.76				
	17-10-2017				5.69		4.61	239.20				
	04/08/2018			1.04	6.08	8.96	5.04	238.81				
	30/10/2018				5.73	8.97	4.69	239.16				
	09-11-2019			0.98	6.04		5.06	238.85				
	08-10-2020			1.07	5.73	8.93	4.66	239.16				
	19-10-2021				5.74	7.99	4.67	239.15				
	19-09-2022			1.03	5.90	9.02	4.87	238.99				
	12-10-2023			1.04	5.69	8.93	4.65	239.20				
BH102	30/10/2014	242.80	242.84	0.04	3.83	8.68	3.79	239.01	17T	400028	5083603	Clear water and sulphur odour. Bedrock well was observed to be in good condition.
	18/11/2015				4.02		3.98	238.82				
	19/10/2016				4.04		4.00	238.80				
	17-10-2017				3.94		3.90	238.90				
	04/08/2018			1.22	4.60	7.55	3.38	238.24				
	30/10/2018				4.12	8.54	2.90	238.72				
	09-11-2019			0.04	4.48	8.43	4.44	238.36				
	08-10-2020				4.15	8.60	4.11	238.69				
	19-10-2021			1.22	4.18	8.61	2.96	238.66				
	19-09-2022				4.43	8.66	3.21	238.41				
	12-10-2023				4.15	8.52	2.93	238.69				
BH103	30/10/2014	221.95	222.86	0.91	2.02	5.03	1.11	220.84	17T	400284	5083438	Grey colour, no odour, and recovery is ok. Well was pumped dry. Bedrock well was observed to be in ok condition.
	18/11/2015				1.26		0.35	221.60				
	19/10/2016				2.11		1.20	220.75				
	17-10-2017				2.20		1.29	220.66				
	04/08/2018			0.97	3.37	5.02	2.40	219.49				
	30/10/2018				2.54	4.47	1.57	220.32				
	09-11-2019			0.90	3.41	4.97	2.51	219.45				
	08-10-2020			0.97	2.57		1.60	220.29				
	19-10-2021				2.41	5.04	1.44	220.45				
	19-09-2022			0.99	3.17		2.18	219.69				
	12-10-2023			0.99	2.89	5.06	1.90	219.97				
BH104	30/10/2014	222.35	223.25	0.90	2.41	5.32	1.51	220.84	17T	400276	5083489	Grey colour, sulphur odour, and slow recovery. Well was pumped dry. Bedrock well was observed to be in good condition.
	18/11/2015				2.60		1.70	220.65				
	19/10/2016				1.82		0.92	221.43				
	17-10-2017				2.52		1.62	220.73				
	04/08/2018			0.86	3.35	5.31	2.49	219.90				
	30/10/2018				2.87	5.22	2.01	220.38				
	09-11-2019			0.84	3.53	5.26	2.69	219.72				
	08-10-2020			0.88	3.00	5.30	2.12	220.25				
	19-10-2021				2.80	5.28	1.92	220.45				
	19-09-2022			0.87	3.40	5.32	2.53	219.85				
	12-10-2023			0.86	3.13	5.36	2.27	220.12				
BH105	30/10/2014	224.13	225.02	0.89	1.92	7.21	1.03	223.10	17T	400284	5083574	Grey colour, no odour, and ok recovery. Bedrock well was observed to be in good condition.
	18/11/2015				2.44		1.55	222.58				
	19/10/2016				3.14		2.25	221.88				
	17-10-2017				1.90		1.01	223.12				
	04/08/2018			0.98	3.02	7.09	2.04	222.00				
	30/10/2018			0.96	2.41		1.45	222.61				
	09-11-2019			0.92	3.09		2.17	221.93				
	08-10-2020			0.95	2.42	7.20	1.47	222.60				
	19-10-2021				2.22		1.27	222.80				
	19-09-2022			0.97	3.07	7.27	2.10	221.95				
	12-10-2023			0.97	3.07	7.28	2.10	221.95				
BH106	30/10/2014	223.01	224.07	1.06	2.68	7.08	1.62	221.39	17T	400319	5083660	Grey colour, sulphur odour, and ok recovery. Well was pumped dry. Bedrock well was observed to be in good condition.
	18/11/2015				3.01		1.95	221.06				
	19/10/2016				3.74		2.68	220.33				
	17-10-2017				2.87		1.81	221.20				
	04/08/2018			1.07	3.42	7.09	2.35	220.65				
	30/10/2018				2.98	7.02	1.91	221.09				
	09-11-2019			0.98	3.45	7.03	2.47	220.62				
	08-10-2020			1.07	3.00	7.10	1.93	221.07				
	19-10-2021				2.83	7.11	1.76	221.24				
	19-09-2022			1.05	3.42	7.10	2.37	220.65				
	12-10-2023			1.06	3.40	7.12	2.34	220.67				
BH107	04/08/2018	218.67	219.57	0.94	6.36	7.38	5.42	213.21	17T	400538	5083401	Grey colour, no odour, and slow recovery. Well was pumped dry. Bedrock well was observed to be in good condition.
	10/30/2018			0.88	3.94	7.34	3.06	215.63				
	09-11-2019			0.82	1.67	7.35	0.85	217.90				
	08-10-2020			0.91	1.47	7.37	0.56	218.10				
	19-10-2021				1.30	7.40	0.39	218.27				
	19-09-2022			0.88	1.66	7.42	0.78	217.91				
	12-10-2023			0.88	1.58	7.46	0.70	217.99				
BH108	04/08/2018	219.29	220.14	0.93	2.17	7.17	1.24	217.97	17T	400555	5083521	Grey colour, no odour, slow recover. Well was pumped dry. Bedrock well was observed to be in good condition.
	10/30/2018			0.96	2.02	7.18	1.06	218.12				
	09-11-2019			0.77	2.07	7.21	1.30	218.07				
	08-10-2020			0.92	1.90	7.20	0.98	218.24				
	19-10-2021				1.93		1.01	218.21				
	12-10-2023			0.91	2.25	7.29	1.34	217.89				
BH109	04/08/2018	233.43	234.30	0.82	NW	10.23	-	-	17T	400165	5083400	Grey colour, no odour, and ok recovery. Well was pumped dry. Bedrock well was observed to be in good condition.
	10/30/2018			0.83	10.06	10.20	9.23	224.24				
	09-11-2019			0.78	9.23	10.26	8.45	225.07				
	08-10-2020			0.85	8.23	10.41	7.38	226.07				
	19-10-2021				8.57	10.24	7.72	225.73				
	19-09-2022				9.06	10.20	8.21	225.24				
	12-10-2023			0.86	8.76	10.23	7.90	225.54				
BH110	04/08/2018	242.44	243.50	1.06	4.17	7.45	3.11	239.33	17T	399995	5083601	Cloudy water, no odour, and ok recovery. Well was pumped dry. Bedrock well was observed to be in good condition.
	10/30/2018				3.49	7.42	2.43	240.01				
	09-11-2019			0.96	4.22	7.43	3.26	239.28				
	08-10-2020			1.03	3.45	7.47	2.42	240.05				
	19-10-2021				3.39	7.44	2.36	240.11				
	19-09-2022			1.01	4.07	7.51	3.06	239.43				
	12-10-2023			1.05	3.48	7.48	2.43	240.02				

Notes:
mREL - Indicates Groundwater Elevation (metres) Relative to Site Benchmark
ND - Not Detected
mbgs - metres below ground surface
TOC - Top of Casing
NA - Not Applicable or Not Attainable
NW - No Water
* - Well conditions were poor, small amount of PVC observed making it difficult to get a exact measurment.
" -" - No data available

TABLE 2
Groundwater Quality Results - BH1
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation												ODWQS
			Sample Collection Date (dd-mm-yyyy)												
			BH1												
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*17-10-2017*	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*19-09-2022 (DUP)*	*12-10-2023*	
			Downgradient												
Conductivity	uS/cm	2	4320	19800	13200	6160	11800	4090	4480	2710	3260	6220	3380	3500	5300	-
pH	pH Units	0.05	8.02	7.70	7.77	7.88	7.56	7.91	7.91	7.82	8	7.73	7.61	7.55	7.66	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**7100**	**4800**	**2580**	**4290**	**1720**	**1540**	-	-	-	-	-	-	80 - 100
Total Dissolved Solids	mg/L	30	**3500**	**7940**	**3890**	**8770**	**7970**	**2980**	**2920**	**3340**	**5620**	**4590**	**2820**	**2980**	**3820**	500
Alkalinity (as CaCO3)	mg/L	2	215	129	169	231	204	209	179	211	234	204	210	211	222	30 - 500
Chloride	mg/L	1	**1260**	**6150**	**4640**	**1340**	**3420**	**863**	**958**	**673**	**2260**	**2000**	**920**	**930**	**710**	250
Nitrate as N	mg/L	0.06	<0.05	<5	<10	<5	<2.5	<2.5	<1.0	3.2	<1.0	0.1	0.24	0.24	0.25	10
Nitrite as N	mg/L	0.03	<0.05	<5	<10	<5	<2.5	<2.5	<1.0	<1.0	<1.0	<0.3	< 0.3	< 0.3	< 0.03	1
Sulphate	mg/L	2	**807**	**1300**	**1440**	**1000**	**1310**	**864**	**649**	297	**1320**	**1400**	**700**	**710**	270	500
Ammonia as N	mg/L	0.04	6.22	10.3	12.2	15.4	15.8	7.8	3.44	7.42	13.80	10.60	11.4	11	4	-
Total Phosphorus	mg/L	0.03	0.05	0.30	0.36	17.6	0.07	0.18	0.33	<0.02	0.06	0.22	0.12	0.12	0.73	-
Total Kjeldahl Nitrogen	mg/L	0.5	7.00	9.75	11.7	0.09	15.0	8.3	4.09	7.80	14.10	8.85	8.75	8.24	9.5	-
Chemical Oxygen Demand	mg/L	8	24	44	40	76	50	48	9	12	676	46	26	19	24	-
Dissolved Organic Carbon	mg/L	1	2.9	1.5	2.2	2.2	3.1	3.8	3	3.4	**6.9**	4.0	2	2	**5.5**	5
Phenols	mg/L	0.002	0.016	0.051	0.013	0.082	0.012	0.003	0.002	0.003	0.045	0.009	0.006	0.004	< 0.002	-
Calcium	mg/L	0.01	539	1880	1320	782	1200	540	455	270	589	796	739	921	150	-
Magnesium	mg/L	0.001	117	583	365	153	313	91.4	98.5	60.9	117.0	134.0	136	161	38.2	-
Sodium	mg/L	0.01	**250**	**1410**	**871**	**346**	**787**	200	**231**	138	**316**	**373**	**391**	**473**	112	200
Potassium	mg/L	0.009	66.3	231	174	90.8	178	62.3	71.4	48.4	87.2	120.0	109	139	27.2	-
Aluminum	mg/L	0.004	0.005	<0.004	0.008	0.005	0.006	0.016	0.015	-	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	0.003	**0.040**	<0.003	**0.011**	**0.011**	0.004	<0.003	0.010	0.005	0.001	0.0007	0.0004	0.0009	0.01
Barium	mg/L	0.00002	0.011	0.026	0.012	0.019	0.019	0.014	0.011	0.009	0.011	0.013	0.0158	0.0182	0.0209	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-		-
Boron	mg/L	0.002	3.44	**15.9**	3.90	**10.9**	**10.1**	2.57	3.17	2.79	3.82	3.48	3.38	3.51	0.864	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.0001	0.000006	0.000003	< 0.000003	0.000007	0.005
Chromium	mg/L	0.00008	0.003	0.003	<0.003	0.006	<0.003	<0.003	0.004	<0.003	<0.002	0.00021	0.00046	0.00075	0.0003	0.05
Cobalt	mg/L	0.001	-	-	0.002	0.002	0.001	<0.001	<0.001	-	-	-	-	-		-
Copper	mg/L	0.0002	<0.003	0.006	<0.003	0.010	0.005	<0.003	<0.003	<0.003	<0.001	0.0003	0.0004	< 0.0002	0.0013	1
Iron	mg/L	0.007	<0.010	<0.010	0.062	0.021	0.014	0.028	0.081	0.083	0.241	**0.523**	**3.06**	**3.32**	**0.746**	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	0.0006	<0.00009	< 0.00009	< 0.00009	0.00027	0.01
Manganese	mg/L	0.00001	0.025	0.033	0.019	0.019	0.016	0.019	0.017	0.020	**0.055**	**0.055**	**0.0898**	**0.109**	**0.0751**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	< 0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.001	-	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	0.005	**0.35**	**0.083**	**0.031**	<0.004	-	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	7.13	19.6	18.4	6.0	5.89	-	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.0003	-	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	0.041	0.04	0.024	0.008	0.015	-	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	0.002	0.005	<0.002	<0.002	0.006	-	-	-	-	-	-	-
Zinc	mg/L	0.002	<0.005	0.009	<0.005	<0.005	0.005	0.007	0.048	<0.005	<0.005	0.003	< 0.002	< 0.002	0.003	5
% Difference/ Ion Balance	-	0.1	-	1.6	8.3	-	0.893	1.27	-	-	-	-	-	-	-	-
Field Measurements																
Temperature	°C	-	9.6	8.2	9.5	10.1	12.9	10.4	9.8	11.3	11.8	13.8	12.6	-	10.9	-
pH	pH Units	-	7.42	7.92	6.95	7.37	7.27	7.03	7.38	7.36	7.51	7.35	6.97	-	7.18	-
Conductivity	uS/cm	-	1490	1467	1116	4108	1115	9160	3564	3346	2966	5460	1715	-	1804	-
Oxidation Reduction Potential	mV	-	-34	-52	-203	-206	-91	-252	-98	-12	-105	-128	-16.3	-	-8.0	-
Dissolved Oxygen	mg/L	-	4.1	2.8	1.4	2.3	1.0	4.4	8.0	6.8	11.0	3.4	5.82	-	4.15	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 "Ontario Drinking Water Quality Standards" under the Safe Drinking Water Act", dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines", dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

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TABLE 3
Groundwater Quality Results - BH3
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation													ODWQS
			Sample Collection Date (dd-mm-yyyy)													
			BH3													
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*17-10-2017*	*30/10/2018*	*09/11/2019*	*08/10/2020*	*08-10-2020 (DUP)*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Crossgradient													
Conductivity	uS/cm	2	2240	5450	2760	3370	3850	2110	2920	1800	2240	2220	2730	1800	2050	-
pH	pH Units	0.05	8.15	7.89	7.85	7.71	7.53	8.08	8.22	7.91	8.1	8.1	7.93	7.86	7.79	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**1900**	**905**	**1340**	**1730**	**830**	**1050**	-	-	-	-	-	**-**	80 - 100
Total Dissolved Solids	mg/L	30	**1520**	**6010**	**1420**	**3740**	**3150**	**1450**	**1800**	**1240**	**1800**	**1940**	**2050**	**1370**	**1500**	500
Alkalinity (as CaCO3)	mg/L	2	272	284	-	246	295	280	243	269	274	275	297	283	264	30 - 500
Chloride	mg/L	1	**484**	**1270**	**577**	**758**	**672**	**397**	**469**	239	**407**	**415**	**420**	**280**	200	250
Nitrate as N	mg/L	0.06	<0.05	<2.5	<1.0	<1.0	<1.0	0.9	<0.5	<0.25	<0.5	<0.5	0.18	0.38	0.73	10
Nitrite as N	mg/L	0.03	<0.05	<2.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.25	<0.5	<0.5	<0.03	< 0.03	< 0.03	1
Sulphate	mg/L	2	395	**811**	430	**481**	**954**	390	**518**	341	**719**	**726**	**700**	**520**	310	500
Ammonia as N	mg/L	0.04	5.68	9.5	9.6	10.2	7.18	1.6	5.19	3.78	3.49	3.78	4.05	2.75	1.63	-
Total Phosphorus	mg/L	0.03	0.15	0.80	0.18	10.3	0.22	0.42	1.96	0.04	0.22	0.30	0.15	0.18	0.16	-
Total Kjeldahl Nitrogen	mg/L	0.5	6.56	9.12	9.19	0.47	7.51	2.1	5.38	5.77	3.95	4.14	4.02	2.97	5.7	-
Chemical Oxygen Demand	mg/L	8	14	68	63	57	39	27	13	10	29	27	21	< 8	10	-
Dissolved Organic Carbon	mg/L	1	3.7	4.2	3.1	4.1	4.3	4	**6.8**	3.2	4.8	4.5	3.0	3	2.8	5
Phenols	mg/L	0.002	<0.001	0.070	0.070	0.031	0.018	0.002	<0.001	<0.001	0.006	0.005	<0.002	< 0.002	< 0.002	-
Calcium	mg/L	0.01	249	534	245	374	522	240	308	210	385	380	490	287	165	-
Magnesium	mg/L	0.001	68.4	137	71.2	97.7	104	56.1	68.8	47.0	69.8	68.2	72.4	48	37.3	-
Sodium	mg/L	0.01	119	**291**	127	188	186	98.8	128	61.5	113	111	120	59.8	31.6	200
Potassium	mg/L	0.009	43.3	82.0	45.2	62.1	68.6	41.6	53	30.7	48.3	47.6	60.2	32.3	19.6	-
Aluminum	mg/L	0.004	0.010	0.004	0.006	0.005	0.010	0.022	0.015	-	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	<0.003	**0.018**	<0.003	0.004	0.004	<0.003	0.004	0.006	<0.001	<0.001	0.000	0.002	0.0006	0.01
Barium	mg/L	0.00002	0.020	0.030	0.021	0.018	0.023	0.017	0.013	0.015	0.021	0.020	0.019	0.013	0.0072	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-		-
Boron	mg/L	0.002	3.68	**12.7**	**5.35**	**7.83**	**6.55**	2.28	2.31	2.39	2.34	2.29	2.16	1.48	0.851	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.0001	<0.0001	<0.000003	< 0.000003	0.000003	0.005
Chromium	mg/L	0.00008	0.003	0.004	<0.003	0.004	<0.003	<0.003	0.003	<0.003	<0.002	<0.002	0.00015	0.00029	0.00013	0.05
Cobalt	mg/L	0.001	-	-	0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-		-
Copper	mg/L	0.0002	<0.003	0.004	<0.003	0.005	<0.003	<0.003	<0.003	<0.003	<0.001	<0.001	<0.0002	0.0006	0.001	1
Iron	mg/L	0.007	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	0.229	0.100	0.078	0.015	0.013	0.01	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	0.0006	0.0006	<0.00009	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	0.031	0.012	0.011	0.008	0.012	0.012	0.022	0.043	0.040	0.033	0.031	0.022	0.00835	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	0.004	-	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	**0.043**	**0.191**	**0.129**	**0.017**	<0.004	-	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	6.73	8.00	7.57	3.1	3.5	-	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.0003	-	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	0.031	0.023	0.015	0.003	0.011	-	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	0.002	0.002	0.004	<0.002	0.006	-	-	-	-	-	-	-
Zinc	mg/L	0.002	0.019	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	0.002	< 0.002	< 0.002	5
% Difference/ Ion Balance	-	0.1	-	4.5	8.3	-	0.299	6.19	-	-	-	-	-	-	-	-
Field Measurements																
Temperature	^{o}C	-	9.6	8.6	9.2	10.2	9.5	10.8	8.5	11.3	10.5	-	13.4	12.1	11.1	-
pH	pH Units	-	7.77	8.23	7.40	7.47	7.66	7.53	7.75	7.56	7.35	-	7.35	7.13	7.41	-
Conductivity	uS/cm	-	1880	1706	1359	1743	2608	2440	3129	1691	2036	-	2390	1215	1028	-
Oxidation Reduction Potential	mV	-	-51	-37	-32	-110	-188	-233	50	72	189	-	-146	15.7	-69.4	-
Dissolved Oxygen	mg/L	-	5.2	1.9	3.1	5.7	2.0	2.3	10.7	9.2	5.7	-	2.5	6.81	7.70	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 “Ontario Drinking Water Quality Standards” under the Safe Drinking Water Act”, dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines”, dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

PINCHIN

TABLE 4
Groundwater Quality Results - BH101
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation												ODWQS
			Sample Collection Date (dd-mm-yyyy)												
			BH101												
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*17-10-2017*	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Background												
Conductivity	uS/cm	2	492	602	642	1250	1550	779	1090	654	618	758	616	1040	-
pH	pH Units	0.05	8.07	7.87	7.85	8.01	7.47	7.98	8.03	7.6	8.14	8.05	7.82	7.97	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**312**	**331**	**590**	**762**	**392**	**465**	-	-	-	-	**-**	80 - 100
Total Dissolved Solids	mg/L	30	316	368	274	**1960**	**1170**	**548**	**562**	400	358	494	351	**1160**	500
Alkalinity (as CaCO3)	mg/L	2	223	252	225	239	237	237	194	228	292	255	250	235	30 - 500
Chloride	mg/L	1	7.10	10.1	22.4	122	165	50.2	94.8	27.0	40.7	65.0	30	180	250
Nitrate as N	mg/L	0.06	<0.05	<0.10	<0.25	<0.25	<0.25	<0.10	<0.25	0.33	0.16	0.12	0.07	0.12	10
Nitrite as N	mg/L	0.03	<0.05	<0.10	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	<0.10	0.04	< 0.03	0.1	1
Sulphate	mg/L	2	54.6	59.8	86.4	258	383	131	171	73.2	92.3	93.0	73	140	500
Ammonia as N	mg/L	0.04	0.03	0.06	0.18	1.55	1.67	0.3	0.23	0.19	0.16	0.31	0.19	0.9	-
Total Phosphorus	mg/L	0.03	0.17	0.06	0.95	1.87	0.48	0.14	0.08	<0.02	0.04	0.06	< 0.03	0.09	-
Total Kjeldahl Nitrogen	mg/L	0.5	0.31	0.25	0.37	0.14	1.99	1.4	0.8	0.49	0.47	0.42	0.44	5.2	-
Chemical Oxygen Demand	mg/L	8	12	19	19	8	8	21	8	9	27	13	< 8	14	-
Dissolved Organic Carbon	mg/L	1	3.6	4.4	**5.5**	3.2	2.3	**6.0**	**5.1**	3.5	4.8	4.8	**13**	3.3	5
Phenols	mg/L	0.002	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.002	< 0.002	< 0.002	-
Calcium	mg/L	0.01	66.3	73.2	79.3	161	218	100	122	76.8	96.3	95.4	89.2	134	-
Magnesium	mg/L	0.001	29.5	31.3	32.3	45.6	52.9	34.6	39	31.4	34.6	36.7	33	49.2	-
Sodium	mg/L	0.01	1.50	2.32	4.00	26.8	35.2	9.59	19.1	4.97	10.20	6.94	5.3	32.4	200
Potassium	mg/L	0.009	1.39	1.78	2.10	11.5	15.4	4.96	8.23	3.67	4.86	4.02	4.04	12.5	-
Aluminum	mg/L	0.004	0.006	0.005	<0.004	0.006	<0.004	0.013	<0.004	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.001	0.0011	0.0005	0.0005	0.01
Barium	mg/L	0.00002	0.040	0.065	0.038	0.046	0.037	0.044	0.044	0.028	0.036	0.020	0.025	0.0404	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-		-
Boron	mg/L	0.002	0.054	0.091	0.071	1.34	0.789	0.276	0.444	0.220	0.277	0.365	0.229	0.785	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.0001	<0.000003	0.000006	< 0.000003	0.005
Chromium	mg/L	0.00008	<0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.002	0.00017	0.00016	0.00012	0.05
Cobalt	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-		-
Copper	mg/L	0.0002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.002	0.0009	0.0015	0.0013	1
Iron	mg/L	0.007	<0.010	0.015	0.049	**1.330**	**0.791**	**0.30**	0.204	0.061	0.217	0.046	0.013	0.232	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	0.0009	<0.00009	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	0.009	0.008	0.007	0.021	0.014	0.008	0.01	0.011	0.010	0.007	0.0061	0.0168	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.001	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	<0.004	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	2.21	7.37	5.08	3.7	4.26	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.0003	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	0.002	0.012	0.005	<0.002	0.004	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-
Zinc	mg/L	0.002	0.015	0.011	<0.005	<0.005	0.006	0.009	0.018	0.014	0.009	0.006	0.003	0.002	5
% Difference/ Ion Balance	-	0.1	-	1.5	0.6	-	0.247	2.80	-	-	-		-	-	-
Field Measurements															
Temperature	^{o}C	-	9.6	8.8	9.2	9.9	10.9	11.6	9.8	11.2	10.1	13.3	11.3	10.6	-
pH	pH Units	-	8.06	8.31	7.30	7.45	7.08	7.39	7.56	7.44	7.48	7.33	6.75	7.55	-
Conductivity	uS/cm	-	400	413	684	761	2016	302	722	459	433	660	468.1	815	-
Oxidation Reduction Potential	mV	-	-65	-135	14	-194	-35	-121	2	90	-8	-31	224.5	-9.6	-
Dissolved Oxygen	mg/L	-	7.7	5.1	4.3	3.9	1.8	4.5	5.4	9.1	13.8	6.3	6.28	9.44	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 “Ontario Drinking Water Quality Standards” under the Safe Drinking Water Act”, dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines”, dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

TABLE 5
Groundwater Quality Results - BH102
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation																	ODWQS
			Sample Collection Date (dd-mm-yyyy)																	
			BH102																	
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*19-10-2016 (DUP)*	*17-10-2017*	*30/10/2018*	*09/11/2019*	*08/10/2020*	*08-10-2020 (DUP)*	*19/10/2021*	*19-10-2021 (DUP)*	*19-09-2022*	*19-09-2022 (DUP)*	*12-10-2023*	*12-10-2023 (DUP)*	
			Background																	
Conductivity	uS/cm	2	461	621	591	1140	917	953	485	512	562	534	540	706	531	584	660	464	431	-
pH	pH Units	0.05	7.96	7.77	7.74	8.07	7.56	7.79	8.06	7.99	7.66	8.19	8.19	7.85	7.88	7.83	7.80	7.84	7.84	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**338**	**305**	**459**	**405**	**417**	**268**	**235**	-	-	-	-	-	-	-	-	-	80 - 100
Total Dissolved Solids	mg/L	30	258	332	238	404	460	**502**	246	258	314	304	298	369	429	289	254	**731**	**503**	500
Alkalinity (as CaCO3)	mg/L	2	223	330	282	337	395	417	277	202	246	333	337	337	325	257	268	209	202	30 - 500
Chloride	mg/L	1	14.1	5.06	15.0	157	67.1	70.0	3.6	5.13	9.85	1.97	1.96	5.00	4.00	9	11	25	25	250
Nitrate as N	mg/L	0.06	<0.05	0.16	<0.25	<0.25	<0.25	<5	0.08	0.16	0.47	0.09	0.09	<0.06	<0.06	0.08	0.08	0.4	0.39	10
Nitrite as N	mg/L	0.03	<0.05	<0.10	<0.25	<0.25	<0.25	<5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	< 0.03	< 0.03	0.1	0.09	1
Sulphate	mg/L	2	21.1	8.40	10.2	10.4	14.4	20.0	4.13	7.73	24.0	2.4	2.2	<2	<2	35	34	14	16	500
Ammonia as N	mg/L	0.04	<0.02	1.26	1.05	6.70	6.68	7.48	0.2	2.63	4.16	0.20	0.20	1.16	1.07	1.96	2.06	2.82	2.84	-
Total Phosphorus	mg/L	0.03	<0.05	0.61	0.44	7.96	2.17	2.72	0.84	1.25	0.05	0.21	0.20	0.18	0.19	0.16	0.17	0.25	0.28	-
Total Kjeldahl Nitrogen	mg/L	0.5	0.45	1.83	1.42	1.90	7.54	7.72	0.2	3.22	5.82	0.61	0.57	1.40	1.56	2.44	2.54	7.4	5.9	-
Chemical Oxygen Demand	mg/L	8	7	24	23	33	15	20	15	18	9	25	<5	15	17	< 8	11	16	15	-
Dissolved Organic Carbon	mg/L	1	2.6	4.2	4.0	4.6	**6.2**	**5.9**	**5.7**	**7.6**	3.0	**6.3**	**6.6**	**6.0**	**6.0**	3	3	**7.4**	**5.7**	5
Phenols	mg/L	0.002	<0.001	0.006	<0.001	0.006	0.002	<0.001	<0.001	0.007	0.006	0.003	0.006	0.007	0.004	< 0.002	< 0.002	< 0.002	< 0.002	-
Calcium	mg/L	0.01	50.0	69.9	62.1	97.7	88.9	91.7	54.6	48.4	53.8	60.7	60.4	66.4	62.6	66.5	66.5	47.8	49.2	-
Magnesium	mg/L	0.001	28.1	39.6	36.3	52.3	44.4	45.7	31.9	27.7	29.5	34.8	34.5	39.7	37.5	34.8	33.2	26	29.7	-
Sodium	mg/L	0.01	5.61	2.30	3.98	34.6	16.4	18.0	1.3	2.07	3.31	0.40	0.42	1.12	1.66	3.11	2.99	0.74	1.84	200
Potassium	mg/L	0.009	2.94	2.07	2.59	17.5	10.5	11.4	1.12	1.59	3.06	0.44	0.44	0.88	0.89	3.27	2.83	0.89	0.916	-
Aluminum	mg/L	0.004	0.016	0.005	<0.004	0.016	0.010	0.010	0.020	0.015	-	-	-	-	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	<0.003	<0.003	<0.003	<0.003	<0.003	0.004	<0.003	<0.003	<0.003	<0.001	<0.001	0.0014	0.0009	0.007	0.0081	0.0005	0.0006	0.01
Barium	mg/L	0.00002	0.013	0.012	0.008	0.023	0.017	0.019	0.012	0.012	0.009	0.007	0.012	0.009	0.009	0.0132	0.0125	0.0068	0.0069	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-
Boron	mg/L	0.002	0.258	0.097	0.062	0.487	0.286	0.336	0.027	0.051	0.073	<0.010	0.051	0.019	1.310	0.107	0.147	0.013	0.02	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.0001	<0.0001	<0.000003	0.000007	0.00004	0.000027	0.000009	0.000006	0.005
Chromium	mg/L	0.00008	<0.003	0.004	<0.003	0.003	<0.003	<0.003	<0.003	0.005	<0.003	<0.002	<0.002	0.00037	0.00033	0.0002	0.00041	0.00027	0.00038	0.05
Cobalt	mg/L	0.001	-	-	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	0.0002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.003	<0.003	0.001	0.001	0.001	0.0007	0.0008	0.0004	0.0019	0.0023	1
Iron	mg/L	0.007	<0.010	**0.609**	0.287	**2.31**	**0.871**	**0.960**	0.122	**0.622**	**0.343**	0.220	0.169	0.283	0.270	**0.938**	**0.56**	0.242	0.268	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.001	<0.0005	0.0006	<0.0009	<0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	0.007	**0.163**	**0.053**	**0.129**	**0.085**	**0.088**	0.019	**0.083**	**0.178**	0.026	0.026	0.039	0.038	**0.453**	**0.383**	0.0404	0.0406	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	<0.004	<0.004	<0.004	0.006	<0.004	<0.004	-	-	-	-	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	0.262	1.85	1.25	1.35	0.1	0.151	-	-	-	-	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.006	<0.0003	-	-	-	-	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	<0.002	<0.002	<0.002	0.004	<0.002	0.012	-	-	-	-	-	-	-	-	-	-
Zinc	mg/L	0.002	0.031	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.033	<0.005	<0.005	0.005	0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.002	5
% Difference/ Ion Balance	-	0.1	-	0.4	0.9	-	2.80	3.83	2.56	-	-	-	-	-	-	-	-	-	-	-
Field Measurements																				
Temperature	^{0}C	-	10.3	9.7	9.7	10.2	12.2	-	11.7	10.4	11.2	13.0	-	13.0	-	12.7	-	11.2	11.2	-
pH	pH Units	-	8.00	8.06	7.40	7.42	7.21	-	7.26	7.49	7.31	7.39	-	7.34	-	7.07	-	7.38	7.38	-
Conductivity	uS/cm	-	360	367	324	578	613	-	230	490	406	432	-	448	-	466.9	-	305	305	-
Oxidation Reduction Potential	mV	-	-62	-22	26	-174	-4	-	-142	21	-	45	-	-56	-	25.2	-	-60.1	-60.1	-
Dissolved Oxygen	mg/L	-	7.4	2.6	7.5	5.7	1.0	-	3.9	4.4	6.4	6.7	-	3.2	-	8.42	-	6.44	6.44	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 "Ontario Drinking Water Quality Standards" under the Safe Drinking Water Act", dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines", dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

TABLE 6
Groundwater Quality Results - BH103
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation													ODWQS
			Sample Collection Date (dd-mm-yyyy)													
			BH103													
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*17-10-2017*	*17-10-2017 (DUP)*	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Downgradient													
Conductivity	uS/cm	2	13500	10000	2140	13000	19500	22300	21800	8340	15200	12000	12500	10300	17700	-
pH	pH Units	0.05	7.70	7.77	7.67	7.63	7.07	7.42	7.53	7.97	7.37	7.74	7.52	7.24	7.43	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**3700**	**734**	**6890**	**7540**	**9320**	**9230**	**2660**	-	-	-	-	**-**	80 - 100
Total Dissolved Solids	mg/L	30	**10600**	**6530**	**5000**	**15700**	**12200**	**14000**	**11200**	**5360**	**9270**	**8320**	**8080**	**10500**	**13000**	500
Alkalinity (as CaCO3)	mg/L	2	220	386	**742**	294	226	248	266	223	220	297	380	266	231	30 - 500
Chloride	mg/L	1	**5900**	**3010**	**433**	**6460**	**7370**	**9450**	**9280**	**2590**	**6290**	**4760**	**3900**	**5500**	**6900**	250
Nitrate as N	mg/L	0.06	<0.50	<5	<0.5	<10	<5	<10	<10	<2.5	<10	<5	<0.6	< 0.6	< 0.6	10
Nitrite as N	mg/L	0.03	<0.50	<5	<0.5	<10	<5	<10	<10	<2.5	<10	<5	<0.3	< 0.3	< 0.3	1
Sulphate	mg/L	2	270	120	46.2	192	239	239	241	111	168	143	140	180	190	500
Ammonia as N	mg/L	0.04	8.15	7.88	0.42	10.0	13.1	8.2	8.8	3.8	7.08	5.28	5.34	7.49	8.37	-
Total Phosphorus	mg/L	0.03	<0.05	2.05	1.26	11.6	0.22	0.29	0.35	0.28	<0.02	<0.02	0.13	0.12	0.08	-
Total Kjeldahl Nitrogen	mg/L	0.5	9.21	7.73	0.66	0.16	12.1	8.8	9.0	4.5	7.64	5.43	2.09	3.19	11.7	-
Chemical Oxygen Demand	mg/L	8	70	63	17	74	60	330	378	38	53	89	59	43	120	-
Dissolved Organic Carbon	mg/L	1	2.1	4.1	3.5	2.8	2.0	3.3	3.9	**6**	2.2	3.7	2.0	**20**	**6.9**	5
Phenols	mg/L	0.002	<0.001	0.074	<0.001	0.012	<0.001	<0.001	<0.001	0.003	0.032	0.003	<0.02	< 0.02	< 0.002	-
Calcium	mg/L	0.01	1220	793	166	1470	1590	2000	1980	567	1150	970	1360	1330	1756	-
Magnesium	mg/L	0.001	713	418	77.7	783	868	1050	1040	301	646	496	853	698	842	-
Sodium	mg/L	0.01	**933**	**564**	94.1	**1060**	**1150**	**1440**	**1440**	**462**	**942**	**694**	**950**	**942**	**1171**	200
Potassium	mg/L	0.009	94.9	56.4	8.4	106	116	142	142	49.9	101	66.6	126	112	119	-
Aluminum	mg/L	0.004	0.016	<0.004	<0.004	0.005	<0.004	0.019	0.017	0.004	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	0.003	**0.016**	0.003	**0.015**	**0.024**	<0.003	<0.003	<0.003	**0.079**	0.004	0.003	0.0026	0.0003	0.01
Barium	mg/L	0.00002	0.097	0.036	0.024	0.038	0.043	0.046	0.056	0.021	0.031	0.033	0.040	0.0343	0.0496	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-		-
Boron	mg/L	0.002	**6.80**	2.74	1.77	**5.13**	**7.40**	2.59	3.78	2.48	4.14	4.00	4.72	**5.09**	**6.25**	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.0001	0.000008	< 0.000003	0.00001	0.005
Chromium	mg/L	0.00008	<0.003	0.004	<0.003	0.008	<0.003	<0.003	<0.003	0.007	<0.003	<0.002	0.00039	0.00769	0.0005	0.05
Cobalt	mg/L	0.001	-	-	0.003	0.003	0.002	0.003	0.003	<0.001	-	-	-	-		-
Copper	mg/L	0.0002	0.003	<0.003	<0.003	0.005	0.003	0.004	0.009	0.004	<0.003	0.004	0.0008	0.0018	0.0027	1
Iron	mg/L	0.007	**2.08**	**0.906**	0.263	**1.24**	**1.27**	**0.55**	**0.82**	**0.474**	**0.527**	**0.327**	0.107	**0.975**	**0.65**	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.0005	0.00021	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	**0.474**	**0.295**	**0.084**	**0.171**	**0.174**	**0.110**	**0.169**	**0.060**	**0.103**	**0.095**	**0.105**	**0.141**	**0.197**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.003	0.008	<0.003	<0.003	<0.003	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	0.009	**0.272**	0.006	<0.004	<0.004	<0.004	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	8.58	26.9	37.5	24.7	42.2	12.7	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.006	<0.0003	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	0.005	0.007	0.006	0.003	0.004	0.003	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	<0.002	<0.002	0.020	<0.002	<0.002	<0.002	-	-	-	-	-	-
Zinc	mg/L	0.002	0.021	0.051	0.020	<0.005	0.008	0.012	0.014	0.017	0.007	<0.005	0.006	0.004	0.007	5
% Difference/ Ion Balance	-	0.1	-	2.7	8.7	-	3.04	4.46	4.01	-	-	-	-	-	-	-
Field Measurements																
Temperature	^{o}C	-	9.8	8.1	9.6	9.7	11.0	11.0	-	9.6	-	11.4	13.6	14.9	11.4	-
pH	pH Units	-	7.31	7.82	7.00	6.84	6.99	6.74	-	7.33	-	6.76	7.01	6.63	7.15	-
Conductivity	uS/cm	-	1148	776	3096	1359	2182	9000	-	8095	-	9324	10750	12816	13950	-
Oxidation Reduction Potential	mV	-	-34	-88	-5	-155	-10	-9	-	242	-	58.80	-14.90	0.9	34.6	-
Dissolved Oxygen	mg/L	-	11.9	6.3	6.4	8.1	1.7	6.2	-	9.8	-	8.95	6.64	7.75	8.68	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 "Ontario Drinking Water Quality Standards" under the Safe Drinking Water Act", dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines", dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

PINCHIN

TABLE 7
Groundwater Quality Results - BH104
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation												ODWQS
			Sample Collection Date (dd-mm-yyyy)												
			BH104												
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*17-10-2017*	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Downgradient												
Conductivity	uS/cm	2	12100	833	1180	13000	8760	1140	4170	9710	8790	6080	7900	10300	-
pH	pH Units	0.05	7.76	7.94	7.71	7.67	7.28	8.16	7.84	7.48	7.79	7.76	7.30	7.58	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**360**	**461**	**4780**	**2890**	**488**	**1240**	-	-	-	-	-	80 - 100
Total Dissolved Solids	mg/L	30	**7440**	328	**710**	**4360**	**5190**	**580**	**2620**	**6610**	**5280**	**3900**	**7750**	**7190**	500
Alkalinity (as CaCO3)	mg/L	2	217	278	284	217	222	339	198	198	258	325	206	219	30 - 500
Chloride	mg/L	1	**5020**	90.1	215	**4790**	**2920**	185	**1140**	**3570**	**3380**	**3000**	**3800**	**3700**	250
Nitrate as N	mg/L	0.06	<0.50	<0.25	<0.25	<5	<2.5	<0.25	<1.0	<2.5	<5	<0.6	< 0.6	2.1	10
Nitrite as N	mg/L	0.03	<0.50	<0.25	<0.25	<5	<2.5	<0.25	<1.0	<2.5	<5	<0.3	< 0.3	0.74	1
Sulphate	mg/L	2	148	13.8	15.4	138	108	19.2	86.4	107	119	96	130	140	500
Ammonia as N	mg/L	0.04	10.9	0.09	0.28	6.73	9.26	0.3	3.55	8.58	7.81	7.32	11	8.64	-
Total Phosphorus	mg/L	0.03	0.66	1.79	0.72	6.77	0.78	0.12	1.78	<0.02	0.02	0.19	0.18	0.16	-
Total Kjeldahl Nitrogen	mg/L	0.5	12.3	0.47	0.82	0.27	9.25	0.6	3.83	9.65	8.29	4.31	4.81	12.5	-
Chemical Oxygen Demand	mg/L	8	40	21	25	34	56	27	40	35	74	57	44	37	-
Dissolved Organic Carbon	mg/L	1	1.9	**5.8**	**5.7**	3.3	2.3	**7.0**	**7.6**	2.6	3.9	**6.0**	1	2.9	5
Phenols	mg/L	0.002	<0.001	<0.001	<0.001	0.007	0.012	<0.001	0.004	0.002	0.004	0.021	< 0.02	< 0.002	-
Calcium	mg/L	0.01	986	75.1	96.1	1020	613	105	266	700	752	404	962	768	-
Magnesium	mg/L	0.001	536	41.9	53.6	542	331	54.9	139	368	394	185	459	408	-
Sodium	mg/L	0.01	**936**	20.2	37.7	**860**	**540**	36.7	**223**	**632**	**682**	**279**	**808**	**701**	200
Potassium	mg/L	0.009	145	5.41	7.48	127	93.9	7.42	41.5	111	106	52.1	147	108	-
Aluminum	mg/L	0.004	0.011	0.005	<0.004	0.006	<0.004	0.010	0.009	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	**0.017**	<0.003	<0.003	0.006	0.008	<0.003	<0.003	**0.044**	<0.001	0.003	0.0009	0.0005	0.01
Barium	mg/L	0.00002	0.050	0.011	0.014	0.030	0.040	0.016	0.026	0.031	0.037	0.011	0.0322	0.041	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-
Boron	mg/L	0.002	4.48	0.054	0.165	2.06	2.85	0.179	1.9	2.65	3.68	1.20	4.06	3.53	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.0001	<0.000003	0.000003	0.000003	0.005
Chromium	mg/L	0.00008	<0.003	0.004	<0.003	0.006	<0.003	<0.003	0.007	0.003	<0.002	0.000	0.00089	0.00069	0.05
Cobalt	mg/L	0.001	-	-	<0.001	0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-
Copper	mg/L	0.0002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.002	0.0007	0.0003	0.0011	1
Iron	mg/L	0.007	**1.74**	<0.010	<0.010	**1.51**	**1.32**	<0.010	0.238	**0.830**	**0.627**	0.098	**0.865**	**0.379**	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.0005	<0.00009	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	**0.148**	<0.002	**0.104**	**0.464**	**0.841**	0.024	**0.285**	**0.411**	**0.407**	**0.137**	**0.213**	**0.177**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.001	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	<0.004	**0.116**	<0.004	<0.004	<0.004	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	0.598	12.4	15.1	0.9	8.55	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.0003	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	<0.002	0.004	0.002	<0.002	0.003	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	0.002	0.002	<0.002	<0.002	0.003	-	-	-	-	-	-
Zinc	mg/L	0.002	0.017	<0.005	<0.005	<0.005	0.007	<0.005	0.005	0.009	<0.005	0.006	< 0.002	0.007	5
% Difference/ Ion Balance	-	0.1	-	1.1	4.4	-	2.73	3.52	-	-	-	-	-	-	-
Field Measurements															
Temperature	^{0}C	-	8.6	5.9	9.0	9.2	11.6	11.4	9.3	-	11.0	13.8	14.8	11.7	-
pH	pH Units	-	7.15	7.77	7.23	7.17	7.10	7.05	7.13	-	6.77	6.98	6.58	7.15	-
Conductivity	uS/cm	-	971	346	1056	5509	4640	2440	5313	-	8212	8770	9330	7267	-
Oxidation Reduction Potential	mV	-	-21	-77	11	-170	9	-96	175	-	30.60	-28.50	-8.2	12.7	-
Dissolved Oxygen	mg/L	-	11.9	4.8	3.1	4.0	2.2	2.9	7.9	-	8.42	6.49	3.86	7.77	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 “Ontario Drinking Water Quality Standards” under the Safe Drinking Water Act”, dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines”, dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

TABLE 8
Groundwater Quality Results - BH105
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation														ODWQS
			Sample Collection Date (dd-mm-yyyy)														
			BH105														
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*17-10-2017*	*30/10/2018*	*30-10-2018 (DUP)*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	*12-10-2023 (DUP)*	
			Transgradient														
Conductivity	uS/cm	2	1900	669	1070	38700	36200	3740	8570	9950	10100	6490	32300	15500	21800	21800	-
pH	pH Units	0.05	8.10	8.00	7.83	7.35	6.98	8.00	7.99	8.03	7.57	7.89	7.45	7.44	7.44	7.46	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**316**	**416**	**15100**	**13000**	**1190**	**2460**	**3250**	-	-	-	-	**-**	**-**	80 - 100
Total Dissolved Solids	mg/L	30	**1740**	358	416	**9190**	**24300**	**3610**	**5030**	**6330**	**10500**	**2640**	**22100**	**15800**	**15800**	**16800**	500
Alkalinity (as CaCO3)	mg/L	2	266	309	284	157	180	243	189	190	205	240	177	217	213	216	30 - 500
Chloride	mg/L	1	**507**	22.2	148	**16300**	**14500**	**1160**	**2720**	**3290**	**3510**	**2370**	**15000**	**11000**	**12000**	**9600**	250
Nitrate as N	mg/L	0.06	<0.05	<0.10	<0.25	<25	<50	<1.0	<2.5	<2.5	<5	<2.5	<0.6	< 0.6	< 0.6	< 0.6	10
Nitrite as N	mg/L	0.03	<0.05	<0.10	<0.25	<25	<50	<1.0	<2.5	<2.5	<5	<2.5	<0.75	< 0.75	< 0.75	< 0.75	1
Sulphate	mg/L	2	87.2	18.4	33.0	332	376	48.4	88.8	120	91	72.4	340	250	280	240	500
Ammonia as N	mg/L	0.04	1.75	<0.02	0.46	36.3	41.2	5.3	7.51	4.84	5.00	13.00	30.60	35.6	24.6	24.7	-
Total Phosphorus	mg/L	0.03	2.85	<0.05	1.06	37.2	0.25	2.26	1.37	0.34	<0.02	<0.02	0.38	0.52	0.91	0.88	-
Total Kjeldahl Nitrogen	mg/L	0.5	1.86	0.18	0.61	1.00	42.0	6.2	8.52	4.89	5.55	13.30	4.67	6.45	26.5	24.3	-
Chemical Oxygen Demand	mg/L	8	17	19	11	170	189	57	40	45	42	122	150	30	250	292	-
Dissolved Organic Carbon	mg/L	1	3.2	2.6	2.0	2.3	2.4	4.1	**5**	**5.6**	2.4	3.2	2.0	< 1	2.2	2.1	5
Phenols	mg/L	0.002	<0.001	<0.001	<0.001	0.036	<0.001	<0.001	0.002	0.002	<0.001	0.003	0.08	0.051	< 0.002	< 0.002	-
Calcium	mg/L	0.01	199	79.3	102	3410	2950	280	559	673	713	2560	3200	3230	181	856	-
Magnesium	mg/L	0.001	79.3	28.7	39.2	1600	1370	120	258	381	331	1170	1250	1360	79.7	397	-
Sodium	mg/L	0.01	121	18.1	36.6	**3560**	**3000**	**242**	**569**	**549**	**693**	**2710**	**2910**	**3160**	107	**833**	200
Potassium	mg/L	0.009	20.4	3.15	9.48	429	380	40.8	86.2	58.6	97.4	330.0	583.0	399	20.2	102	-
Aluminum	mg/L	0.004	0.016	<0.004	<0.004	0.017	<0.004	0.011	0.023	<0.004	-	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	<0.003	<0.003	<0.003	**0.04**	**0.052**	<0.003	0.005	<0.003	**0.122**	**0.039**	0.002	0.0022	0.0003	0.0005	0.01
Barium	mg/L	0.00002	0.013	0.010	0.013	0.213	0.205	0.019	0.037	0.022	0.146	0.174	0.139	0.144	0.0156	0.0507	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-
Boron	mg/L	0.002	0.368	0.092	0.237	**5.18**	**6.56**	0.398	1.58	3.03	**5.26**	**6.51**	**7.48**	**6.7**	0.514	1.9	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.002	<0.002	<0.004	<0.0001	0.000005	0.00001	0.000006	0.000005	0.005
Chromium	mg/L	0.00008	<0.003	0.003	<0.003	0.010	0.003	<0.003	0.007	0.006	0.008	<0.002	0.000	0.00383	0.00044	0.0006	0.05
Cobalt	mg/L	0.001	-	-	0.001	0.007	0.005	<0.001	0.002	0.001	-	-	-	-	-	-	-
Copper	mg/L	0.0002	<0.003	<0.003	<0.003	0.008	0.006	<0.003	<0.003	<0.003	<0.006	<0.001	0.0005	0.0033	0.0021	0.0015	1
Iron	mg/L	0.007	<0.010	<0.010	**0.031**	**11.00**	**6.65**	**0.76**	**0.388**	**0.475**	**6.54**	**12.70**	**8.34**	**7.67**	0.132	**2.44**	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.001	<0.001	<0.002	0.0006	<0.00009	< 0.00009	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	**0.122**	<0.002	**0.084**	**0.669**	**0.615**	0.045	**0.172**	**0.064**	**0.263**	**0.402**	**0.390**	**0.319**	**0.07467**	**0.165**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.00001	0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.004	<0.002	<0.002	0.002	<0.001	-	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.006	0.020	<0.003	<0.003	<0.003	-	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	<0.004	**0.693**	**0.012**	**0.019**	<0.004	<0.004	-	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	0.738	69.6	76.7	3.1	13.2	15.5	-	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.0003	<0.0003	-	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	0.003	0.014	0.009	<0.002	0.004	0.004	-	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	<0.002	<0.004	0.044	<0.002	0.005	0.005	-	-	-	-	-	-	-
Zinc	mg/L	0.002	<0.005	0.009	0.005	<0.010	0.011	0.006	0.006	<0.005	0.012	<0.005	0.004	0.004	0.003	0.003	5
% Difference/ Ion Balance	-	0.1	-	<0.1	2.8	-	2.13	3.78	-	-	-	-	-	-	-	-	-
Field Measurements																	
Temperature	°C	-	8.7	7.8	9.2	9.9	9.9	10.9	9.7	-	14.2	10.2	10.8	12.2	10.9	10.9	-
pH	pH Units	-	7.89	7.67	7.32	7.19	6.88	7.21	7.12	-	7.20	6.73	6.88	6.44	7.60	7.60	-
Conductivity	uS/cm	-	138	450	672	7456	4181	2620	3956	-	9613	23483	20990	27633	1446	1446	-
Oxidation Reduction Potential	mV	-	-56	-70	17	-133	24	-45	250	-	183	-36	-38	30.6	36.7	36.7	-
Dissolved Oxygen	mg/L	-	10.4	7.7	2.9	5.0	1.7	2.0	14.7	-	8.3	7.6	8.4	7.71	7.13	7.13	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 “Ontario Drinking Water Quality Standards” under the Safe Drinking Water Act”, dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines”, dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

TABLE 9
Groundwater Quality Results - BH106
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation													ODWQS
			Sample Collection Date (dd-mm-yyyy)													
			BH106													
			25/07/2012	*21/11/2013*	*30/10/2014*	*18/11/2015*	*19/10/2016*	*17-10-2017*	*30-10-2018*	*30-10-2018 (DUP)*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Transgradient													
Conductivity	uS/cm	2	4760	2160	5640	17500	12000	4210	3190	2660	8070	1170	6460	5940	8350	-
pH	pH Units	0.05	8.09	7.94	7.70	7.69	7.26	7.96	7.92	8.08	7.56	8.13	7.67	7.43	7.73	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	**760**	**1800**	**15100**	**3880**	**1370**	**924**	**770**	-	-	-	-	**-**	80 - 100
Total Dissolved Solids	mg/L	30	**3260**	**1260**	**6360**	**5490**	**8880**	**2860**	**2000**	**844**	**5820**	**2220**	**4180**	**5360**	**6070**	500
Alkalinity (as CaCO3)	mg/L	2	212	265	228	181	227	252	206	194	219	395	336	283	262	30 - 500
Chloride	mg/L	1	**1810**	**466**	**1910**	**6560**	**4190**	**1300**	**843**	**631**	**3000**	**459**	**2900**	**2900**	**2900**	250
Nitrate as N	mg/L	0.06	<0.05	<1.0	<2.5	<10	<2.5	<2.5	<0.5	<0.5	<2.5	<0.25	<0.6	< 0.6	1.01	10
Nitrite as N	mg/L	0.03	<0.05	<1.0	<2.5	<10	<2.5	<2.5	<0.5	<0.5	<2.5	<0.25	<0.3	< 0.3	< 0.3	1
Sulphate	mg/L	2	78.2	69.6	137	150	127	74.4	51.5	35.8	54.6	30.6	71.0	65	150	500
Ammonia as N	mg/L	0.04	14.6	1.13	5.4	20.0	19.8	3.29	2.87	0.99	10.4	0.6	9.3	6.87	8.4	-
Total Phosphorus	mg/L	0.03	1.03	0.29	0.31	21.8	0.85	1.08	1.2	0.44	<0.02	0.08	0.25	0.36	0.19	-
Total Kjeldahl Nitrogen	mg/L	0.5	15.9	1.37	5.18	0.27	19.1	4.51	3.19	2.32	10.9	1.1	5.4	5.29	13.9	-
Chemical Oxygen Demand	mg/L	8	59	21	25	95	98	45	19	19	43	34	61	30	68	-
Dissolved Organic Carbon	mg/L	1	3.5	3.7	2.7	3.0	**5.4**	**5.5**	**7.4**	**8.9**	4.1	**7.6**	5.0	4	**7.4**	5
Phenols	mg/L	0.002	0.001	<0.001	<0.001	0.032	0.001	<0.001	0.015	0.003	0.005	0.003	0.006	0.007	0.006	-
Calcium	mg/L	0.01	405	187	426	1330	946	341	234	193	631	696	630	723	734	-
Magnesium	mg/L	0.001	171	71.1	178	556	369	126	82.5	69.9	229	248	195	250	280	-
Sodium	mg/L	0.01	**334**	106	**335**	**1413**	**799**	**255**	179	139	**552**	**606**	**431**	**553**	**613**	200
Potassium	mg/L	0.009	64.3	26.9	77.1	260	165	56.5	42.1	36.4	127	116	104	125	114	-
Aluminum	mg/L	0.004	0.009	0.008	<0.004	0.005	0.006	0.01	<0.004	0.034	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	0.003	<0.003	<0.003	**0.014**	0.009	<0.003	<0.003	0.004	**0.030**	**0.013**	0.003	0.0008	0.0013	0.01
Barium	mg/L	0.00002	0.084	0.010	0.019	0.057	0.049	0.02	0.022	0.03	0.044	0.069	0.039	0.0521	0.0475	1
Beryllium	mg/L	0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-
Boron	mg/L	0.002	3.83	0.679	1.81	4.02	2.77	0.731	0.48	0.657	1.96	2.18	1.66	1.98	1.85	5
Cadmium	mg/L	0.000003	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.0001	<0.000003	0.000004	< 0.000003	0.005
Chromium	mg/L	0.00008	<0.003	0.003	<0.003	0.005	<0.003	<0.003	0.007	0.005	<0.003	<0.002	0.00045	0.00093	0.00087	0.05
Cobalt	mg/L	0.001	-	-	0.002	0.002	<0.001	<0.001	<0.001	0.001	-	-	-	-	-	-
Copper	mg/L	0.0002	<0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.002	0.0004	0.0006	0.0007	1
Iron	mg/L	0.007	**2.24**	0.285	**1.55**	**5.22**	**4.16**	**0.884**	**0.494**	**0.579**	**1.81**	**3.45**	**3.04**	**3.31**	**2.42**	0.3
Lead	mg/L	0.00009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	0.0033	0.00033	0.0004	< 0.00009	0.01
Manganese	mg/L	0.00001	**0.274**	0.034	**0.097**	**0.184**	**0.155**	**0.056**	**0.082**	**0.115**	**0.085**	**0.186**	**0.256**	**0.192**	**0.168**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00001	0.00002	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.001	0.001	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	0.007	**0.238**	0.005	**0.024**	<0.004	<0.004	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	7.03	23	15.9	3.74	1.84	3.14	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	<0.006	<0.0003	<0.0003	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	0.008	0.006	0.003	<0.002	<0.002	0.003	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	0.002	0.003	0.002	<0.002	0.005	<0.002	-	-	-	-	-	-
Zinc	mg/L	0.002	0.017	<0.005	<0.005	<0.005	0.011	0.006	0.016	0.005	0.006	0.008	0.004	0.003	< 0.002	5
% Difference/ Ion Balance	-	0.1	-	1.6	7.4	-	3.07	3.73	-	-	-	-	-	-	-	-
Field Measurements																
Temperature	^{o}C	-	8.3	8.4	9.6	9.8	10.3	10.9	9.6	-	-	10.58	14.00	12.5	10.2	-
pH	pH Units	-	7.52	8.24	7.01	7.11	7.00	7.18	7.66	-	-	6.99	7.07	6.84	7.22	-
Conductivity	uS/cm	-	842	1048	3154	6163	1990	2500	2383	-	-	8173	7060	1742	6356	-
Oxidation Reduction Potential	mV	-	-38	-113	-45	-171	22	-8	232	-	-	19.5	-61	-14.3	32.4	-
Dissolved Oxygen	mg/L	-	8.5	4.1	2.1	3.3	1.9	3.3	8.6	-	-	8.31	6.34	3.62	8.85	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 "Ontario Drinking Water Quality Standards" under the Safe Drinking Water Act", dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines", dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

PINCHIN

TABLE 10
Groundwater Quality Results - BH107
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation							ODWQS
			Sample Collection Date (dd-mm-yyyy)							
			BH107							
			04/08/2018	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Downgradient							
Conductivity	uS/cm	2	38500	37000	32300	35400	34000	14800	33500	-
pH	pH Units	0.05	7.07	7.54	7.22	7.41	7.31	7.15	7.28	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	**13200**	**13200**	-	-	-	-	-	80 - 100
Total Dissolved Solids	mg/L	30	**21400**	**23400**	**22700**	**27000**	**23500**	**23700**	**25100**	500
Alkalinity (as CaCO3)	mg/L	2	86	87	114	118	130	138	140	30 - 500
Chloride	mg/L	1	**15300**	**14600**	**14700**	**16800**	**17000**	**14000**	**16000**	250
Nitrate as N	mg/L	0.06	<25	<50	<10	<25	8.46	**11.3**	**11.4**	10
Nitrite as N	mg/L	0.03	<25	<50	<10	<25	<0.75	< 0.75	< 0.75	1
Sulphate	mg/L	2	240	220	119	130	110	110	130	500
Ammonia as N	mg/L	0.04	35.9	39	36.2	38.9	30.7	30.2	31	-
Total Phosphorus	mg/L	0.03	6.3	2.38	<0.02	2.84	0.7	0.77	1.86	-
Total Kjeldahl Nitrogen	mg/L	0.5	43.2	47.8	37.6	41.0	7.6	6.42	30.7	-
Chemical Oxygen Demand	mg/L	8	169	156	103	714	113	124	270	-
Dissolved Organic Carbon	mg/L	1	2.3	4.7	1.9	2.1	3.0	< 1	1.3	5
Phenols	mg/L	0.002	0.017	0.011	0.014	-	<0.02	0.047	< 0.002	-
Calcium	mg/L	0.01	2750	2750	2520	2860	3030	2630	2798	-
Magnesium	mg/L	0.001	1540	1530	1370	1500	1390	1280	1270	-
Sodium	mg/L	0.01	**2960**	**3070**	**2710**	**3100**	**2889**	**2610**	**2865**	200
Potassium	mg/L	0.009	524	517	442	473	474	424	440	-
Aluminum	mg/L	0.004	0.016	0.006	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.006	<0.003	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	<0.006	**0.037**	**0.138**	**0.051**	**0.001**	0.002	0.0005	0.01
Barium	mg/L	0.00002	0.847	0.362	0.342	0.494	0.252	0.187	0.216	1
Beryllium	mg/L	0.001	<0.002	<0.001	-	-	-	-	-	-
Boron	mg/L	0.002	**11.1**	**13.3**	**13.7**	**19.5**	**14.6**	**11.3**	**13.6**	5
Cadmium	mg/L	3E-06	<0.004	<0.002	<0.004	<0.0001	<0.00003	0.0001	0.00003	0.005
Chromium	mg/L	0.00008	<0.006	0.005	0.007	<0.002	0.000	0.00271	0.0009	0.05
Cobalt	mg/L	0.001	0.069	0.05	-	-	-	-	-	-
Copper	mg/L	0.0002	0.008	0.009	0.008	0.003	0.004	0.004	0.0017	1
Iron	mg/L	0.007	<0.020	<0.010	0.099	0.191	0.080	0.03	0.02	0.3
Lead	mg/L	0.00009	<0.002	<0.001	<0.002	0.0006	<0.00009	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	**0.738**	**0.544**	**0.384**	**0.471**	**0.396**	**0.361**	**0.355**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	<0.002	<0.001	-	-	-	-	-	-
Nickel	mg/L	0.003	0.206	0.109	-	-	-	-	-	-
Selenium	mg/L	0.004	**0.012**	<0.004	-	-	-	-	-	0.01
Silver	mg/L	0.002	<0.004	<0.002	-	-	-	-	-	-
Strontium	mg/L	0.005	89.8	98.2	-	-	-	-	-	-
Thallium	mg/L	0.006	0.0013	0.0007	-	-	-	-	-	-
Titanium	mg/L	0.002	0.009	0.011	-	-	-	-	-	-
Vanadium	mg/L	0.002	<0.004	<0.002	-	-	-	-	-	-
Zinc	mg/L	0.002	0.032	0.035	0.024	0.009	0.008	0.008	0.01	5
% Difference/ Ion Balance	-	0.1	3.53	-	-	-	-	-	-	-
Field Measurements										
Temperature	^{o}C	-	13.8	10.4	-	-	11.9	16.1	12.1	-
pH	pH Units	-	6.38	6.18	-	-	6.88	6.57	6.96	-
Conductivity	uS/cm	-	39813	36208	-	-	26300.00	27536	25612	-
Oxidation Reduction Potential	mV	-	221	277	-	-	51.10	78.0	106.1	-
Dissolved Oxygen	mg/L	-	6.5	8.4	-	-	6.88	7.96	8.07	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 “Ontario Drinking Water Quality Standards” under the Safe Drinking Water Act”, dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines”, dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

PINCHIN

TABLE 11
Groundwater Quality Results - BH108
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation								ODWQS
			Sample Collection Date (dd-mm-yyyy)								
			BH108								
			04/08/2018	*04-08-2018 (DUP)*	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Downgradient								
Conductivity	uS/cm	2	35200	35400	37500	39600	33400	36000	16900	35700	-
pH	pH Units	0.05	7.26	7.22	7.53	7.18	7.45	7.45	7.08	7.3	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	**12000**	**11600**	**13100**	-	-	-	-	-	80 - 100
Total Dissolved Solids	mg/L	30	**20200**	**20300**	**24700**	**23600**	**27000**	**29100**	**27500**	**26700**	500
Alkalinity (as CaCO3)	mg/L	2	103	104	87	102	106	110	117	110	30 - 500
Chloride	mg/L	1	**13600**	**13500**	**14500**	**17700**	**15500**	**18000**	**15000**	**18000**	250
Nitrate as N	mg/L	0.06	<25	<25	<50	<50	<25	<0.6	< 0.6	< 0.6	10
Nitrite as N	mg/L	0.03	<25	<25	<50	<50	<25	<3	< 0.75	< 0.75	1
Sulphate	mg/L	2	<50	<50	<100	<100	<50	43	37	36	500
Ammonia as N	mg/L	0.04	30.6	30.6	36.9	36.0	36.6	35.6	37.2	37.9	-
Total Phosphorus	mg/L	0.03	7.8	7.1	2.68	<0.02	0.36	0.61	0.51	< 0.03	-
Total Kjeldahl Nitrogen	mg/L	0.5	35	34.8	42	38.2	37.5	6.3	7.68	37.1	-
Chemical Oxygen Demand	mg/L	8	95	95	117	101	1400	265	90	305	-
Dissolved Organic Carbon	mg/L	1	1.6	1.7	2.6	1.1	1.8	2.0	< 1	1.1	5
Phenols	mg/L	0.002	0.015	0.01	0.007	0.012	0.002	0.048	0.053	0.003	-
Calcium	mg/L	0.01	2450	2380	2690	2940	2610	3010	3020	3074	-
Magnesium	mg/L	0.001	1420	1380	1540	1640	1450	1430	1520	1544	-
Sodium	mg/L	0.01	**2580**	**2500**	**2950**	**3110**	**2800**	**2620**	**2920**	**3181**	200
Potassium	mg/L	0.009	402	388	444	453	401	445	437	445	-
Aluminum	mg/L	0.004	0.011	0.018	0.005	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.006	<0.006	<0.003	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	<0.006	<0.006	**0.05**	**0.160**	**0.062**	**0.001**	0.0016	0.0007	0.01
Barium	mg/L	0.00002	0.625	0.65	0.449	0.327	0.313	0.210	0.218	0.233	1
Beryllium	mg/L	0.001	<0.002	<0.002	<0.001	-	-	-	-	-	-
Boron	mg/L	0.002	**7.56**	**7.48**	**11.4**	**12.5**	**15.2**	**12.6**	**9.99**	**12**	5
Cadmium	mg/L	3E-06	<0.004	<0.004	<0.002	<0.004	<0.0001	0.00007	0.00002	0.00003	0.005
Chromium	mg/L	0.00008	<0.006	<0.006	0.006	0.007	<0.002	<0.00008	0.00369	0.00136	0.05
Cobalt	mg/L	0.001	0.023	0.022	0.016	-	-	-	-	-	-
Copper	mg/L	0.0002	0.008	0.008	0.008	<0.006	0.001	0.0016	0.0034	0.0013	1
Iron	mg/L	0.007	<0.020	<0.020	<0.010	0.269	**0.301**	0.060	**0.33**	**0.34**	0.3
Lead	mg/L	0.00009	<0.002	<0.002	0.001	<0.002	0.0007	0.00021	0.00033	0.00032	0.01
Manganese	mg/L	0.00001	**0.285**	**0.275**	**0.374**	**0.357**	**0.373**	**0.242**	**0.274**	**0.274**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	<0.002	<0.002	<0.001	-	-	-	-	-	-
Nickel	mg/L	0.003	0.02	0.019	0.021	-	-	-	-	-	-
Selenium	mg/L	0.004	**0.018**	0.008	<0.004	-	-	-	-	-	0.01
Silver	mg/L	0.002	<0.004	<0.004	<0.002	-	-	-	-	-	-
Strontium	mg/L	0.005	86.5	87.3	105	-	-	-	-	-	-
Thallium	mg/L	0.006	<0.0006	<0.0006	<0.0003	-	-	-	-	-	-
Titanium	mg/L	0.002	0.008	0.008	0.007	-	-	-	-	-	-
Vanadium	mg/L	0.002	<0.004	<0.004	<0.002	-	-	-	-	-	-
Zinc	mg/L	0.002	0.024	0.028	0.023	0.014	0.008	0.004	0.006	0.005	5
% Difference/ Ion Balance	%	0.1	2.96	4.07	-	-	-	-	-	-	-
Field Measurements											
Temperature	^{o}C	-	10.7	-	10.0	18.6	10.4	11.8	13.7	11.3	-
pH	pH Units	-	6.68	-	6.93	6.75	6.29	6.79	6.43	6.93	-
Conductivity	uS/cm	-	37060	-	5904	38759	26373	28670	29318	27118	-
Oxidation Reduction Potential	mV	-	161	-	272	295	106	36	99.0	165.2	-
Dissolved Oxygen	mg/L	-	6.2	-	12.0	7.6	7.8	3.9	2.26	7.92	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 "Ontario Drinking Water Quality Standards" under the Safe Drinking Water Act", dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines", dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

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TABLE 12
Groundwater Quality Results - BH109
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation							ODWQS
			Sample Collection Date (dd-mm-yyyy)							
			BH109							
			04/08/2018	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-09-2022*	*12-10-2023*	
			Downgradient							
Conductivity	uS/cm	2	DRY	DRY	DRY	66000	60000	66200	62800	-
pH	pH Units	0.05	-	-	-	7.23	7.47	7.13	7.06	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	-	-	-	-	-	-	-	80 - 100
Total Dissolved Solids	mg/L	30	-	-	-	**66300**	**52300**	**50700**	**50300**	500
Alkalinity (as CaCO3)	mg/L	2	-	-	-	94	110	100	111	30 - 500
Chloride	mg/L	1	-	-	-	**34100**	**32000**	**32000**	**32000**	250
Nitrate as N	mg/L	0.06	-	-	-	<50	<1.5	< 1.5	0.71	10
Nitrite as N	mg/L	0.03	-	-	-	<50	<3	< 3	< 3	1
Sulphate	mg/L	2	-	-	-	**1230**	**1600**	**1500**	**1300**	500
Ammonia as N	mg/L	0.04	-	-	-	51.7	48.6	51.7	47.1	-
Total Phosphorus	mg/L	0.03	-	-	-	1	0.93	0.26	0.12	-
Total Kjeldahl Nitrogen	mg/L	0.5	-	-	-	55	5.76	18.8	32	-
Chemical Oxygen Demand	mg/L	8	-	-	-	2430	148	93	590	-
Dissolved Organic Carbon	mg/L	1	-	-	-	2.8	-	---	1.8	5
Phenols	mg/L	0.002	-	-	-	0.007	<0.002	---	0.023	-
Calcium	mg/L	0.01	-	-	-	7780	6360	7190	6856	-
Magnesium	mg/L	0.001	-	-	-	2780	2060	2420	2303	-
Sodium	mg/L	0.01	-	-	-	**5700**	**5440**	**5560**	**5816**	200
Potassium	mg/L	0.009	-	-	-	580	537	573	573	-
Aluminum	mg/L	0.004	-	-	-	-	-	-	-	0.1
Antimony	mg/L	0.003	-	-	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	-	-	-	**0.078**	0.0027	0.0079	0.0021	0.01
Barium	mg/L	0.00002	-	-	-	0.391	0.149	0.134	0.117	1
Beryllium	mg/L	0.001	-	-	-	-	-	-	-	-
Boron	mg/L	0.002	-	-	-	**31**	**18.9**	**18.5**	**20.1**	5
Cadmium	mg/L	3E-06	-	-	-	<0.0001	-	< 0.000003	0.00002	0.005
Chromium	mg/L	0.00008	-	-	-	0.002	0.00115	0.0006	0.00346	0.05
Cobalt	mg/L	0.001	-	-	-	-	-	-	-	-
Copper	mg/L	0.0002	-	-	-	0.009	0.0037	0.0123	0.0011	1
Iron	mg/L	0.007	-	-	-	**2.45**	0.04	**1.41**	0.07	0.3
Lead	mg/L	0.00009	-	-	-	0.002	0.00067	0.00058	< 0.00009	0.01
Manganese	mg/L	0.00001	-	-	-	**2.13**	**0.665**	**0.895**	**0.625**	0.05
Mercury	mg/L	0.00001	-	-	-	<0.0001	-	-	< 0.00001	0.001
Molybdenum	mg/L	0.002	-	-	-	-	-	-	-	-
Nickel	mg/L	0.003	-	-	-	-	-	-	-	-
Selenium	mg/L	0.004	-	-	-	-	-	-	-	0.01
Silver	mg/L	0.002	-	-	-	-	-	-	-	-
Strontium	mg/L	0.005	-	-	-	-	-	-	-	-
Thallium	mg/L	0.006	-	-	-	-	-	-	-	-
Titanium	mg/L	0.002	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.002	-	-	-	-	-	-	-	-
Zinc	mg/L	0.002	-	-	-	0.016	0.009	0.029	0.008	5
% Difference/ Ion Balance	-	0.1	-	-	-	-	-	-	-	-
Field Measurements										
Temperature	°C	-	-	-	-	-	13.00	-	11.60	-
pH	pH Units	-	-	-	-	-	7.05	-	6.66	-
Conductivity	uS/cm	-	-	-	-	-	51200	-	49311	-
Oxidation Reduction Potential	mV	-	-	-	-	-	-5.5	-	91.4	-
Dissolved Oxygen	mg/L	-	-	-	-	-	5.04	-	7.36	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 “Ontario Drinking Water Quality Standards” under the Safe Drinking Water Act”, dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines”, dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

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TABLE 13
Groundwater Quality Results - BH110
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation								ODWQS
			Sample Collection Date (dd-mm-yyyy)								
			BH110								
			04/08/2018	*30/10/2018*	*09/11/2019*	*08/10/2020*	*19/10/2021*	*19-10-2021 (DUP)*	*19-09-2022*	*12-10-2023*	
			Background								
Conductivity	uS/cm	2	2930	3210	3420	3170	3470	3480	2750	3770	-
pH	pH Units	0.05	8.13	8.31	7.9	8.03	7.82	7.84	7.66	7.66	6.5 - 8.5
Total Hardness (as CaCO3)	mg/L	0.5	**961**	**972**	-	-	-	-	-	**-**	80 - 100
Total Dissolved Solids	mg/L	30	**1640**	**2170**	**2160**	**2250**	**2200**	**2170**	**2030**	**2790**	500
Alkalinity (as CaCO3)	mg/L	2	244	185	221	227	214	213	219	216	30 - 500
Chloride	mg/L	1	**718**	**762**	**941**	**935**	**920**	**920**	**880**	**930**	250
Nitrate as N	mg/L	0.06	<1.0	<1.0	<1.0	<1.0	0.25	0.24	0.29	0.28	10
Nitrite as N	mg/L	0.03	<1.0	<0.5	<1.0	<1.0	<0.3	<0.3	< 0.3	< 0.3	1
Sulphate	mg/L	2	182	172	195	186	260	260	240	230	500
Ammonia as N	mg/L	0.04	0.74	1.67	2.14	1.81	1.95	2.02	1.54	2.02	-
Total Phosphorus	mg/L	0.03	0.79	1	<0.02	0.05	0.17	0.16	0.14	0.21	-
Total Kjeldahl Nitrogen	mg/L	0.5	1.86	2.12	2.39	2.30	1.46	1.38	1.54	5.1	-
Chemical Oxygen Demand	mg/L	8	<5	6	10	27	10	8	8	21	-
Dissolved Organic Carbon	mg/L	1	2.1	2.1	1.4	1.9	2.0	2.0	2	1.3	5
Phenols	mg/L	0.002	<0.001	<0.001	0.002	0.003	0.006	-	0.006	< 0.002	-
Calcium	mg/L	0.01	221	227	255	251	365	384	344	348	-
Magnesium	mg/L	0.001	99.4	98.3	105	102	110	116	113	113	-
Sodium	mg/L	0.01	141	169	174	178	189	**204**	181	**203**	200
Potassium	mg/L	0.009	27.9	31.2	31.1	29.7	37.5	39.4	36	34.8	-
Aluminum	mg/L	0.004	<0.004	0.042	-	-	-	-	-	-	0.1
Antimony	mg/L	0.003	<0.003	<0.003	-	-	-	-	-	-	0.006
Arsenic	mg/L	0.0002	<0.003	0.006	0.013	0.007	0.002	0.002	0.002	0.0015	0.01
Barium	mg/L	0.00002	0.177	0.136	0.109	0.099	0.087	0.090	0.0984	0.0867	1
Beryllium	mg/L	0.001	<0.001	<0.001	-	-	-	-	-	-	-
Boron	mg/L	0.002	1.41	1.5	2.03	1.88	1.45	2.31	1.61	1.89	5
Cadmium	mg/L	3E-06	<0.002	<0.002	<0.002	<0.0001	0.000007	0.00001	0.000015	0.000003	0.005
Chromium	mg/L	0.00008	0.004	0.007	<0.003	<0.002	<0.00008	0.00017	0.00063	0.00049	0.05
Cobalt	mg/L	0.001	0.002	0.002	-	-	-	-	-		-
Copper	mg/L	0.0002	<0.003	<0.003	<0.003	0.001	<0.0002	0.0006	0.0009	0.0009	1
Iron	mg/L	0.007	<0.010	0.074	0.145	0.151	0.154	0.115	**0.476**	**0.445**	0.3
Lead	mg/L	0.00009	<0.001	<0.001	<0.001	0.0007	<0.00009	<0.00009	< 0.00009	< 0.00009	0.01
Manganese	mg/L	0.00001	**0.103**	**0.163**	**0.140**	**0.063**	**0.069**	**0.065**	**0.0826**	**0.06906**	0.05
Mercury	mg/L	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	< 0.00001	< 0.00001	0.001
Molybdenum	mg/L	0.002	0.004	0.003	-	-	-	-	-	-	-
Nickel	mg/L	0.003	0.008	0.007	-	-	-	-	-	-	-
Selenium	mg/L	0.004	<0.004	<0.004	-	-	-	-	-	-	0.01
Silver	mg/L	0.002	<0.002	<0.002	-	-	-	-	-	-	-
Strontium	mg/L	0.005	15.9	16.8	-	-	-	-	-	-	-
Thallium	mg/L	0.006	<0.0003	<0.0003	-	-	-	-	-	-	-
Titanium	mg/L	0.002	0.002	0.006	-	-	-	-	-	-	-
Vanadium	mg/L	0.002	<0.002	<0.002	-	-	-	-	-	-	-
Zinc	mg/L	0.002	0.009	0.007	0.005	0.012	<0.002	<0.002	0.002	< 0.002	5
% Difference/ Ion Balance	-	0.1	5.14	-	-	-	-	-	-	-	-
Field Measurements											
Temperature	°C	-	11.1	10.0	11.5	10.8	14.5	-	12.5	10.4	-
pH	pH Units	-	7.03	7.39	7.20	7.39	7.26	-	6.74	7.17	-
Conductivity	uS/cm	-	2922	3047	2616	2400	2980	-	2580	2741	-
Oxidation Reduction Potential	mV	-	187	39	75	62	-45	-	73.7	-21.1	-
Dissolved Oxygen	mg/L	-	2.4	11.3	6.1	9.7	4.4	-	5.41	4.34	-

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03 “Ontario Drinking Water Quality Standards” under the Safe Drinking Water Act”, dated 2002, and "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines”, dated June 2003.
BOLD	Exceeds ODWQS
Lightly Shaded	RDL exceeds ODWQS
RDL	Reportable Detection Limit
NA	Not Applicable - Criteria excluded as the parameter is based on operational guidelines (OG) as defined as Operational Guidelines for filtration processes are performance criteria in the Procedure for Disinfection of Drinking Water in Ontario.
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
-	No data available

TABLE 14
2023 Reasonable Use Criteria Assessment
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	Sample Designation						ODWQS	Guideline B-7 Calculation			
			Sample Collection Date (dd-mm-yyyy)							Cm = Cb + x (Cr - Cb)			
			BH103	BH104	BH105	BH106	BH107	BH108		Cb	x	Cr	Cm
			12-10-2023	*12-10-2023*	*12-10-2023*	*12-10-2023*	*12-10-2023*	*12-10-2023*					
pH	pH Units	0.05	7.79	7.58	7.44	7.73	7.28	7.3	6.5 - 8.5	7.90	0.5	6.5 - 8.5	7.20-8.20
Total Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-	80 - 100	451	0.5	80 - 100	NC
Total Dissolved Solids*	mg/L	30	**1500**	**7190**	**15800**	**6070**	**25100**	**26700**	500	542	0.5	500	NC
Alkalinity (as CaCO3)	mg/L	2	264	219	213	262	140	110	30 - 500	238	0.5	30 - 500	133.9-368.9
Chloride	mg/L	1	200	**3700**	**12000**	**2900**	**16000**	**18000**	250	44.4	0.5	250	147
Nitrate as N	mg/L	0.06	0.73	2.1	< 0.6	1.01	**11.4**	< 0.6	10	0.098	0.25	10	2.57
Nitrite as N	mg/L	0.03	< 0.03	**0.74**	< 0.75	< 0.30	< 0.75	< 0.75	1	0.065	0.25	1	0.2988
Sulphate	mg/L	2	310	140	280	150.0	130	36	500	112	0.5	500	306
Dissolved Organic Carbon	mg/L	1	2.8	2.9	2.2	**7.4**	1.3	1.1	5	4.50	0.5	5	4.75
Sodium	mg/L	0.01	31.6	**701**	107	**613**	**2865**	**3181**	200	8.52	0.5	200	104.26
Aluminum	mg/L	0.004	-	-	-	-	-	-	0.1	0.0041	0.5	0.1	0.052
Antimony	mg/L	0.003	-	-	-	-	-	-	0.006	0.0015	0.25	0.006	0.0026
Arsenic	mg/L	0.0002	0.0006	0.0005	0.0003	0.0013	0.0005	0.0007	0.01	0.0011	0.25	0.01	0.0033
Barium	mg/L	0.00002	0.007	0.041	0.016	0.05	0.216	0.233	1	0.0369	0.25	1	0.278
Boron	mg/L	0.002	0.85	**3.53**	0.51	**1.85**	**13.6**	**12**	5	0.274	0.25	5	1.46
Cadmium	mg/L	3E-06	0.000003	0.000003	0.000006	< 0.000003	0.00003	0.00003	0.005	0.0001	0.25	0.005	0.0014
Chromium	mg/L	0.00008	0.00013	0.00069	0.00044	0.00087	0.0009	0.00136	0.05	0.0009	0.25	0.05	0.0131
Copper	mg/L	0.0002	0.001	0.0011	0.0021	0.00070	0.0017	0.0013	1	0.0015	0.5	1	0.501
Iron	mg/L	0.007	0.010	**0.379**	0.13	**2.42**	0.02	**0.34**	0.3	0.093	0.5	0.3	0.197
Lead	mg/L	0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	0.00032	0.01	0.0004	0.25	0.01	0.0028
Manganese	mg/L	0.00001	0.008	**0.177**	**0.07467**	**0.168**	**0.355**	**0.274**	0.05	0.0100	0.5	0.05	0.0300
Mercury	mg/L	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.001	0.00003	0.25	0.001	0.00027
Selenium	mg/L	0.004	-	-	-	-	-	-	0.01	0.002	0.25	0.01	0.004
Zinc	mg/L	0.002	< 0.002	0.007	0.003	< 0.002	0.01	0.005	5	0.0064	0.5	5	2.50

Notes:

Ontario Drinking Water Quality Standards*	Ontario Regulation 169/03
BOLD	Exceeds RUC (Guideline B-7) or above RUC (Guideline B-7) Range Maximum
BOLD	Below RUC (Guideline B-7) Range Minimum
Lightly Shaded	RDL exceeds the Cm
RDL	Reportable Detection Limit
*	Cm not calculated
Units	All Units in mg/L Unless Otherwise Noted.
Cb	Background Concentration
Cr	Maximum Acceptable Contaminant Concentration
x	Reduction Constant
Cm	Maximum Off-Site Acceptable Contaminant Concentration
*	Non-calculable as background exceeds RU calculation, background concentration taken as Cm value.
-	No data available

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TABLE 15
Duplicate Results 2023
Kagawong Landfill
Kagawong, Ontario

Parameter	Units	RDL	PQL	Fall 2023					
				BH105	BH105 (DUP 1)	Relative Percent Difference (%)	BH102	BH102 (DUP 2)	Relative Percent Difference (%)
Conductivity	uS/cm	2	10	21800	21800	0.00	464	431	7.37
pH	pH Units	0.05	0.25	7.44	7.46	0.27	7.84	7.84	0.00
Total Hardness (as CaCO3)	mg/L	0.5	2.5	-		-	-	-	-
Total Dissolved Solids	mg/L	30	150	15800	16800	6.13	731	503	36.95
Alkalinity (as CaCO3)	mg/L	2	10	213	216	1.40	209	202	3.41
Chloride	mg/L	1	5	12000.00	9600.00	22.22	25	25	0.00
Nitrate as N	mg/L	0.06	0.3	< 0.6	< 0.6	NC	0.4	0.39	NC
Nitrite as N	mg/L	0.03	0.15	< 0.75	< 0.75	NC	0.1	0.09	NC
Sulphate	mg/L	2	10	280.0	240.0	15.38	14	16	13.33
Ammonia as N	mg/L	0.04	0.2	24.60	24.70	0.41	2.82	2.84	0.71
Total Phosphorus	mg/L	0.03	0.15	0.91	0.88	3.35	0.25	0.28	11.32
Total Kjeldahl Nitrogen	mg/L	0.5	2.5	26.50	24.30	8.66	7.40	5.90	22.56
Chemical Oxygen Demand	mg/L	8	40	250	292	NC	16	15	NC
Dissolved Organic Carbon	mg/L	1	5	2.2	2.1	NC	7.4	5.7	25.95
Phenols	mg/L	0.002	0.01	< 0.002	< 0.002	NC	< 0.002	< 0.002	NC
Calcium	mg/L	0.01	0.05	181.0	856.0	**130.18**	47.8	49.2	2.89
Magnesium	mg/L	0.001	0.005	79.7	397.0	**133.12**	26	29.7	13.29
Sodium	mg/L	0.01	0.05	107.00	833.00	**154.47**	0.74	1.84	**85.27**
Potassium	mg/L	0.009	0.045	20.20	102.00	**133.88**	0.9	0.9	2.88
Aluminum	mg/L	0.004	0.02	-		-	-	-	-
Antimony	mg/L	0.003	0.015	-		-	-	-	-
Arsenic	mg/L	0.0002	0.001	0.0003	0.0005	NC	0.001	0.001	NC
Barium	mg/L	0.00002	0.0001	0.016	0.051	**105.88**	0.007	0.007	NC
Beryllium	mg/L	0.001	0.005	-		-	-	-	-
Boron	mg/L	0.002	0.01	0.514	1.900	**114.83**	0.01	0.02	42.42
Cadmium	mg/L	3E-06	1.5E-05	0.000006	0.000005	NC	0.000009	0.000006	NC
Chromium	mg/L	0.00008	0.0004	0.00044	0.0006	NC	0.00027	0.00038	NC
Cobalt	mg/L	0.001	0.005	-		-	-	-	-
Copper	mg/L	0.0002	0.001	0.0021	0.0015	NC	0.0019	0.0023	NC
Iron	mg/L	0.007	0.035	0.132	2.440	**179.47**	0.242	0.268	10.20
Lead	mg/L	0.00009	0.00045	< 0.00009	< 0.00009	NC	< 0.00009	< 0.00009	NC
Manganese	mg/L	0.00001	0.00005	0.075	0.165	**75.38**	0.040	0.041	0.49
Mercury	mg/L	0.00001	0.00005	< 0.00001	< 0.00001	NC	< 0.00001	< 0.00001	NC
Molybdenum	mg/L	0.002	0.01	-	-	-	-	-	-
Nickel	mg/L	0.003	0.015	-	-	-	-	-	-
Selenium	mg/L	0.004	0.02	-	-	-	-	-	-
Silver	mg/L	0.002	0.01	-	-	-	-	-	-
Strontium	mg/L	0.005	0.025	-	-	-	-	-	-
Thallium	mg/L	0.006	0.03	-	-	-	-	-	-
Titanium	mg/L	0.002	0.01	-	-	-	-	-	-
Vanadium	mg/L	0.002	0.01	-	-	-	-	-	-
Zinc	mg/L	0.002	0.01	0.003	0.003	NC	< 0.002	< 0.002	NC
% Difference/ Ion Balance	-	0.1	0.5	-	-	-	-	-	-

Notes:

BOLD	Exceeds industry standard (50%)
ITALICS	Exactly equal to industry standard (50%)
Units	All Units in mg/L Unless Otherwise Noted.
RDL	Reportable Detection Limit
PQL	Practical Quantification Limit
SHADED	Below either PQL or RPL
NC	Not Calculable as one or more parameter concentrations are quantified below the RDL or PQL

APPENDIX III
Laboratory Certificates of Analysis

FINAL REPORT

CA15551-OCT23 R1

229152.003, Kagawong Landfill

Prepared for

Pinchin Ltd

FINAL REPORT

CA15551-OCT23 R1

First Page

CLIENT DETAILS		LABORATORY DETAILS	
Client	Pinchin Ltd	Project Specialist	Maarit Wolfe, Hon.B.Sc
		Laboratory	SGS Canada Inc.
Address	662 Falconbridge Rd, Unit 3 Sudbury, ON P3A 4S4. Canada	Address	185 Concession St., Lakefield ON, K0L 2H0
Contact	Meagan Bradley	Telephone	705-652-2000
Telephone	705-521-0560	Facsimile	705-652-6365
Facsimile		Email	Maarit.Wolfe@sgs.com
Email	mbradley@Pinchin.com	SGS Reference	CA15551-OCT23
Project	229152.003, Kagawong Landfill	Received	10/16/2023
Order Number		Approved	11/03/2023
Samples	Ground Water (14)	Report Number	CA15551-OCT23 R1
		Date Reported	11/03/2023

COMMENTS

Temperature of Sample upon Receipt: 13 degrees C
Cooling Agent Present: Yes
Custody Seal Present: Yes

Chain of Custody Number: n/a

NO2+NO3 RL raised for some samples due to sample matrix

NH3 > TKN due to sample matrix

Condu does not get spiked, SPK RPD should be 0

SIGNATORIES

Maarit Wolfe, Hon.B.Sc

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FINAL REPORT

CA15551-OCT23 R1

Client: Pinchin Ltd
Project: 229152.003, Kagawong Landfill
Project Manager: Meagan Bradley
Samplers: Daniel H. Adam D

MATRIX: WATER

L1 = ODWS_AO_OG / WATER / - - Table 4 - Drinking Water - Reg O.169_03

L2 = ODWS_MAC / WATER / - - Table 1,2 and 3 - Drinking Water - Reg O.169_03

Parameter	Units	RL	L1	L2	Sample Number 7	8	9	10	11	12	13	14
					Sample Name BH1	BH3	BH101	BH102	BH103	BH104	BH105	BH106
					Sample Matrix Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
					Sample Date 12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023
					Result	Result	Result	Result	Result	Result	Result	Result
General Chemistry												
Alkalinity	mg/L as CaCO3	2	500		222	264	235	209	231	219	213	262
Total Dissolved Solids	mg/L	30	500		3820	1500	1160	731	13000	7190	15800	6070
Conductivity	uS/cm	2			5300	2050	1040	464	17700	10300	21800	8350
Chemical Oxygen Demand	mg/L	8			24	10	14	16	120	37	250	68
Total Kjeldahl Nitrogen	as N mg/L	0.5			9.5	5.7	5.2	7.4	11.7	12.5	26.5	13.9
Ammonia+Ammonium (N)	as N mg/L	0.04			4.00	1.63	0.90	2.82	8.37	8.64	24.6	8.40
Dissolved Organic Carbon	mg/L	1.0	5		5.5	2.8	3.3	7.4	6.9	2.9	2.2	7.4
Metals and Inorganics												
Phosphorus (total)	mg/L	0.03			0.73	0.16	0.09	0.25	0.08	0.16	0.91	0.19
Sulphate	mg/L	2	500		270	310	140	14	190	140	280	150
Nitrite (as N)	as N mg/L	0.03		1	< 0.03	< 0.03	0.10	0.10	< 0.3↑	0.74	< 0.75↑	< 0.3↑
Nitrate (as N)	as N mg/L	0.06		10	0.25	0.73	0.12	0.40	< 0.6↑	2.10	< 0.6↑	1.01
Nitrate + Nitrite (as N)	as N mg/L	0.06			0.25	0.73	0.22	0.49	< 0.6↑	2.84	< 0.75↑	1.01
Arsenic (dissolved)	mg/L	0.0002		0.01	0.0009	0.0006	0.0005	0.0005	0.0003	0.0005	0.0003	0.0013
Barium (dissolved)	mg/L	0.00002		1	0.0209	0.0072	0.0404	0.0068	0.0496	0.0410	0.0156	0.0475
Boron (dissolved)	mg/L	0.002		5	0.864	0.851	0.785	0.013	6.25	3.53	0.514	1.85
Calcium (dissolved)	mg/L	0.01			150	165	134	47.8	1756	768	181	734
Cadmium (dissolved)	mg/L	0.000003		0.005	0.000007	0.000003	< 0.000003	0.000009	0.000010	0.000003	0.000006	< 0.000003
Chromium (dissolved)	mg/L	0.00008		0.05	0.00030	0.00013	0.00012	0.00027	0.00050	0.00069	0.00044	0.00087
Copper (dissolved)	mg/L	0.0002	1		0.0013	0.0010	0.0013	0.0019	0.0027	0.0011	0.0021	0.0007
Iron (dissolved)	mg/L	0.007	0.3		0.746	0.010	0.232	0.242	0.650	0.379	0.132	2.42
Potassium (dissolved)	mg/L	0.009			27.2	19.6	12.5	0.890	119	108	20.2	114

Client: Pinchin Ltd
Project: 229152.003, Kagawong Landfill
Project Manager: Meagan Bradley
Samplers: Daniel H. Adam D

MATRIX: WATER

L1 = ODWS_AO_OG / WATER / - - Table 4 - Drinking Water - Reg O.169_03

L2 = ODWS_MAC / WATER / - - Table 1,2 and 3 - Drinking Water - Reg O.169_03

					Sample Number	7	8	9	10	11	12	13	14
					Sample Name	BH1	BH3	BH101	BH102	BH103	BH104	BH105	BH106
					Sample Matrix	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
					Sample Date	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023
Parameter	**Units**	**RL**	**L1**	**L2**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Metals and Inorganics (continued)													
Magnesium (dissolved)	mg/L	0.001			38.2	37.3	49.2	26.0	842	408	79.7	280
Manganese (dissolved)	mg/L	0.00001	0.05		0.0751	0.00835	0.0168	0.0404	0.197	0.177	0.07467	0.168
Sodium (dissolved)	mg/L	0.01	200	20	112	31.6	32.4	0.74	1171	701	107	613
Lead (dissolved)	mg/L	0.00009		0.01	0.00027	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Zinc (dissolved)	mg/L	0.002	5		0.003	< 0.002	0.002	< 0.002	0.007	0.007	0.003	< 0.002
Other (ORP)													
pH	No unit	0.05	8.5		7.66	7.79	7.97	7.84	7.43	7.58	7.44	7.73
Chloride	mg/L	1	250		710	200	180	25	6900	3700	12000	2900
Mercury (dissolved)	mg/L	0.00001		0.001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Phenols													
4AAP-Phenolics	mg/L	0.002			< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.006

Client: Pinchin Ltd
Project: 229152.003, Kagawong Landfill
Project Manager: Meagan Bradley
Samplers: Daniel H. Adam D

MATRIX: WATER

L1 = ODWS_AO_OG / WATER / - - Table 4 - Drinking Water - Reg O.169_03

L2 = ODWS_MAC / WATER / - - Table 1,2 and 3 - Drinking Water - Reg O.169_03

Parameter	Units	RL	L1	L2	Sample Number: 15	16	17	18	19	20
					Sample Name: BH107	BH108	BH109	BH110	GW Dup 1	GW Dup 2
					Sample Matrix: Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
					Sample Date: 12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023
					Result	Result	Result	Result	Result	Result
General Chemistry										
Alkalinity	mg/L as CaCO3	2	500		140	110	111	216	216	202
Total Dissolved Solids	mg/L	30	500		25100	26700	50300	2790	16800	503
Conductivity	uS/cm	2			33500	35700	62800	3770	21800	431
Chemical Oxygen Demand	mg/L	8			270	305	590	21	292	15
Total Kjeldahl Nitrogen	as N mg/L	0.5			30.7	37.1	32.0	5.1	24.3	5.9
Ammonia+Ammonium (N)	as N mg/L	0.04			31.0	37.9	47.1	2.02	24.7	2.84
Dissolved Organic Carbon	mg/L	1.0	5		1.3	1.1	1.8	1.3	2.1	5.7
Metals and Inorganics										
Phosphorus (total)	mg/L	0.03			1.86	< 0.03	0.12	0.21	0.88	0.28
Sulphate	mg/L	2	500		130	36	1300	230	240	16
Nitrite (as N)	as N mg/L	0.03		1	< 0.75↑	< 0.75↑	< 3↑	< 0.3↑	< 0.75↑	0.09
Nitrate (as N)	as N mg/L	0.06		10	11.4	< 0.6↑	0.71	0.28	< 0.6↑	0.39
Nitrate + Nitrite (as N)	as N mg/L	0.06			11.4	< 0.75↑	< 3↑	< 0.3↑	< 0.75↑	0.48
Arsenic (dissolved)	mg/L	0.0002		0.01	0.0005	0.0007	0.0021	0.0015	0.0005	0.0006
Barium (dissolved)	mg/L	0.00002		1	0.216	0.233	0.117	0.0867	0.0507	0.0069
Boron (dissolved)	mg/L	0.002		5	13.6	12.0	20.1	1.89	1.90	0.020
Calcium (dissolved)	mg/L	0.01			2798	3074	6856	348	856	49.2
Cadmium (dissolved)	mg/L	0.000003		0.005	0.000030	0.000030	0.000020	0.000003	0.000005	0.000006
Chromium (dissolved)	mg/L	0.00008		0.05	0.00090	0.00136	0.00346	0.00049	0.00060	0.00038
Copper (dissolved)	mg/L	0.0002	1		0.0017	0.0013	0.0011	0.0009	0.0015	0.0023
Iron (dissolved)	mg/L	0.007	0.3		0.020	0.340	0.070	0.445	2.44	0.268
Potassium (dissolved)	mg/L	0.009			440	445	573	34.8	102	0.916

Client: Pinchin Ltd
Project: 229152.003, Kagawong Landfill
Project Manager: Meagan Bradley
Samplers: Daniel H. Adam D

MATRIX: WATER

L1 = ODWS_AO_OG / WATER / - - Table 4 - Drinking Water - Reg O.169_03

L2 = ODWS_MAC / WATER / - - Table 1,2 and 3 - Drinking Water - Reg O.169_03

					Sample Number	15	16	17	18	19	20
					Sample Name	BH107	BH108	BH109	BH110	GW Dup 1	GW Dup 2
					Sample Matrix	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
					Sample Date	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023	12/10/2023
Parameter	**Units**	**RL**	**L1**	**L2**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Metals and Inorganics (continued)											
Magnesium (dissolved)	mg/L	0.001			1270	1544	2303	113	397	29.7
Manganese (dissolved)	mg/L	0.00001	0.05		0.355	0.274	0.625	0.06906	0.165	0.0406
Sodium (dissolved)	mg/L	0.01	200	20	2865	3181	5816	203	833	1.84
Lead (dissolved)	mg/L	0.00009		0.01	< 0.00009	0.00032	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Zinc (dissolved)	mg/L	0.002	5		0.010	0.005	0.008	< 0.002	0.003	< 0.002
Other (ORP)											
pH	No unit	0.05	8.5		7.28	7.30	7.06	7.66	7.46	7.84
Chloride	mg/L	1	250		16000	18000	32000	930	9600	25
Mercury (dissolved)	mg/L	0.00001		0.001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Phenols											
4AAP-Phenolics	mg/L	0.002			< 0.002	0.003	0.023	< 0.002	< 0.002	< 0.002

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	ODWS_AO_OG / WATER / - - Table 4 - Drinking Water - Reg O.169_03 L1	ODWS_MAC / WATER / - - Table 1,2 and 3 - Drinking Water - Reg O.169_03 L2
BH1					
Total Dissolved Solids	SM 2540C	mg/L	3820	500	
Iron (dissolved)	SM 3030/EPA 200.8	mg/L	0.746	0.3	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.0751	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	112		20
Dissolved Organic Carbon	SM 5310B	mg/L	5.5	5	
Chloride	US EPA 325.2	mg/L	710	250	
BH3					
Total Dissolved Solids	SM 2540C	mg/L	1500	500	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	31.6		20
BH101					
Total Dissolved Solids	SM 2540C	mg/L	1160	500	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	32.4		20
BH102					
Total Dissolved Solids	SM 2540C	mg/L	731	500	
Dissolved Organic Carbon	SM 5310B	mg/L	7.4	5	
BH103					
Total Dissolved Solids	SM 2540C	mg/L	13000	500	
Boron (dissolved)	SM 3030/EPA 200.8	mg/L	6.25		5
Iron (dissolved)	SM 3030/EPA 200.8	mg/L	0.650	0.3	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.197	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	1171	200	20
Dissolved Organic Carbon	SM 5310B	mg/L	6.9	5	
Chloride	US EPA 325.2	mg/L	6900	250	
BH104					
Total Dissolved Solids	SM 2540C	mg/L	7190	500	
Iron (dissolved)	SM 3030/EPA 200.8	mg/L	0.379	0.3	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.177	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	701	200	20
Chloride	US EPA 325.2	mg/L	3700	250	
BH105					
Total Dissolved Solids	SM 2540C	mg/L	15800	500	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.07467	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	107		20
Chloride	US EPA 325.2	mg/L	12000	250	

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	ODWS_AO_OG / WATER / - - Table 4 - Drinking Water - Reg O.169_03 L1	ODWS_MAC / WATER / - - Table 1,2 and 3 - Drinking Water - Reg O.169_03 L2
BH106					
Total Dissolved Solids	SM 2540C	mg/L	6070	500	
Iron (dissolved)	SM 3030/EPA 200.8	mg/L	2.42	0.3	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.168	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	613	200	20
Dissolved Organic Carbon	SM 5310B	mg/L	7.4	5	
Chloride	US EPA 325.2	mg/L	2900	250	
BH107					
Nitrate as Nitrogen	EPA300/MA300-Ions1.3	as N mg/L	11.4		10
Total Dissolved Solids	SM 2540C	mg/L	25100	500	
Boron (dissolved)	SM 3030/EPA 200.8	mg/L	13.6		5
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.355	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	2865	200	20
Chloride	US EPA 325.2	mg/L	16000	250	
BH108					
Total Dissolved Solids	SM 2540C	mg/L	26700	500	
Boron (dissolved)	SM 3030/EPA 200.8	mg/L	12.0		5
Iron (dissolved)	SM 3030/EPA 200.8	mg/L	0.340	0.3	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.274	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	3181	200	20
Chloride	US EPA 325.2	mg/L	18000	250	
BH109					
Nitrite as Nitrogen	EPA300/MA300-Ions1.3	as N mg/L	< 3		1
Total Dissolved Solids	SM 2540C	mg/L	50300	500	
Boron (dissolved)	SM 3030/EPA 200.8	mg/L	20.1		5
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.625	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	5816	200	20
Chloride	US EPA 325.2	mg/L	32000	250	
Sulphate	US EPA 375.4	mg/L	1300	500	
BH110					
Total Dissolved Solids	SM 2540C	mg/L	2790	500	
Iron (dissolved)	SM 3030/EPA 200.8	mg/L	0.445	0.3	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.06906	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	203	200	20
Chloride	US EPA 325.2	mg/L	930	250	
GW Dup 1					
Total Dissolved Solids	SM 2540C	mg/L	16800	500	

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	ODWS_AO_OG / WATER / - - Table 4 - Drinking Water - Reg O.169_03 L1	ODWS_MAC / WATER / - - Table 1,2 and 3 - Drinking Water - Reg O.169_03 L2
GW Dup 1 (continued)					
Iron (dissolved)	SM 3030/EPA 200.8	mg/L	2.44	0.3	
Manganese (dissolved)	SM 3030/EPA 200.8	mg/L	0.165	0.05	
Sodium (dissolved)	SM 3030/EPA 200.8	mg/L	833	200	20
Chloride	US EPA 325.2	mg/L	9600	250	
GW Dup 2					
Total Dissolved Solids	SM 2540C	mg/L	503	500	
Dissolved Organic Carbon	SM 5310B	mg/L	5.7	5	

QC SUMMARY

Alkalinity

Method: SM 2320 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Alkalinity	EWL0393-OCT23	mg/L as CaCO3	2	< 2	0	20	100	80	120	NA		

Ammonia by SFA

Method: SM 4500 I Internal ref.: ME-CA-IENVISFA-LAK-AN-007

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Ammonia+Ammonium (N)	SKA0145-OCT23	mg/L	0.04	<0.04	ND	10	100	90	110	95	75	125
Ammonia+Ammonium (N)	SKA0159-OCT23	mg/L	0.04	<0.04	ND	10	102	90	110	75	75	125

QC SUMMARY

Anions by discrete analyzer

Method: US EPA 325.2 | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-026

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Chloride	DIO5072-OCT23	mg/L	1	<1	0	20	105	80	120	101	75	125
Sulphate	DIO5072-OCT23	mg/L	2	<2	10	20	104	80	120	98	75	125
Chloride	DIO5078-OCT23	mg/L	1	<1	ND	20	100	80	120	101	75	125
Sulphate	DIO5078-OCT23	mg/L	2	<2	ND	20	101	80	120	103	75	125
Chloride	DIO5081-OCT23	mg/L	1	<1	1	20	101	80	120	102	75	125
Sulphate	DIO5081-OCT23	mg/L	2	<2	ND	20	104	80	120	105	75	125
Chloride	DIO5083-OCT23	mg/L	1	<1	ND	20	101	80	120	103	75	125

QC SUMMARY

Anions by IC

Method: EPA300/MA300-Ions1.3 | Internal ref.: ME-CA-[ENVIIC-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Nitrate + Nitrite (as N)	DIO0469-OCT23	mg/L	0.06	<0.06	NA		NA			NA		
Nitrite (as N)	DIO0469-OCT23	mg/L	0.03	<0.03	ND	20	98	90	110	102	75	125
Nitrate (as N)	DIO0469-OCT23	mg/L	0.06	<0.06	1	20	98	90	110	101	75	125
Nitrate + Nitrite (as N)	DIO0489-OCT23	mg/L	0.06	<0.06	NA		NA			NA		
Nitrite (as N)	DIO0489-OCT23	mg/L	0.03	<0.03	ND	20	98	90	110	102	75	125
Nitrate (as N)	DIO0489-OCT23	mg/L	0.06	<0.06	0	20	98	90	110	96	75	125
Nitrate + Nitrite (as N)	DIO0496-OCT23	mg/L	0.06	<0.06	NA		NA			NA		
Nitrite (as N)	DIO0496-OCT23	mg/L	0.03	<0.03	1	20	97	90	110	102	75	125
Nitrate (as N)	DIO0496-OCT23	mg/L	0.06	<0.06	0	20	99	90	110	86	75	125
Nitrate + Nitrite (as N)	DIO0498-OCT23	mg/L	0.06	<0.06	NA		NA			NA		
Nitrite (as N)	DIO0498-OCT23	mg/L	0.03	<0.03	ND	20	98	90	110	90	75	125
Nitrate (as N)	DIO0498-OCT23	mg/L	0.06	<0.06	0	20	99	90	110	78	75	125
Nitrite (as N)	DIO0508-OCT23	mg/L	0.03	<0.03	0	20	97	90	110	105	75	125
Nitrate (as N)	DIO0508-OCT23	mg/L	0.06	<0.06	0	20	100	90	110	103	75	125
Nitrate + Nitrite (as N)	DIO0528-OCT23	mg/L	0.06	<0.06	NA		NA			NA		
Nitrite (as N)	DIO0528-OCT23	mg/L	0.03	<0.03	5	20	98	90	110	102	75	125
Nitrate (as N)	DIO0528-OCT23	mg/L	0.06	<0.06	0	20	100	90	110	101	75	125

QC SUMMARY

Carbon by Combustion/Oxidation

Method: SM 5310B | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-023

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Dissolved Organic Carbon	EWL0428-OCT23	mg/L	1.0	<1.0	ND	20	100	90	110	101	75	125
Dissolved Organic Carbon	EWL0460-OCT23	mg/L	1.0	<1.0	0	20	100	90	110	100	75	125

Chemical Oxygen Demand

Method: HACH 8000 | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-009

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Chemical Oxygen Demand	EWL0372-OCT23	mg/L	8	<8	4	20	112	80	120	100	75	125
Chemical Oxygen Demand	EWL0373-OCT23	mg/L	8	<8	13	20	108	80	120	98	75	125
Chemical Oxygen Demand	EWL0377-OCT23	mg/L	8	<8	8	20	114	80	120	108	75	125
Chemical Oxygen Demand	EWL0403-OCT23	mg/L	8	<8	2	20	120	80	120	108	75	125
Chemical Oxygen Demand	EWL0442-OCT23	mg/L	8	<8	5	20	102	80	120	101	75	125
Chemical Oxygen Demand	EWL0533-OCT23	mg/L	8	<8	ND	20	96	80	120	104	75	125

QC SUMMARY

Conductivity

Method: SM 2510 I Internal ref.: ME-CA-[ENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Conductivity	EWL0393-OCT23	uS/cm	2	< 2	0	20	0	90	110	NA		

Mercury by CVAAS

Method: EPA 7471A/SM 3112B I Internal ref.: ME-CA-[ENVISPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Mercury (dissolved)	EHG0034-OCT23	mg/L	0.00001	< 0.00001	0	20	116	80	120	107	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-IENVISPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Arsenic (dissolved)	EMS0136-OCT23	mg/L	0.0002	<0.0002	ND	20	93	90	110	96	70	130
Barium (dissolved)	EMS0136-OCT23	mg/L	0.00002	<0.00008	ND	20	97	90	110	98	70	130
Boron (dissolved)	EMS0136-OCT23	mg/L	0.002	<0.002	ND	20	100	90	110	96	70	130
Calcium (dissolved)	EMS0136-OCT23	mg/L	0.01	<0.01	13	20	99	90	110	100	70	130
Cadmium (dissolved)	EMS0136-OCT23	mg/L	0.000003	<0.000003	ND	20	96	90	110	94	70	130
Chromium (dissolved)	EMS0136-OCT23	mg/L	0.00008	<0.00008	ND	20	95	90	110	108	70	130
Copper (dissolved)	EMS0136-OCT23	mg/L	0.0002	<0.0002	ND	20	93	90	110	98	70	130
Iron (dissolved)	EMS0136-OCT23	mg/L	0.007	<0.007	ND	20	102	90	110	100	70	130
Potassium (dissolved)	EMS0136-OCT23	mg/L	0.009	<0.009	ND	20	101	90	110	102	70	130
Magnesium (dissolved)	EMS0136-OCT23	mg/L	0.001	<0.001	ND	20	101	90	110	105	70	130
Manganese (dissolved)	EMS0136-OCT23	mg/L	0.00001	<0.00001	ND	20	95	90	110	97	70	130
Sodium (dissolved)	EMS0136-OCT23	mg/L	0.01	<0.01	16	20	100	90	110	103	70	130
Lead (dissolved)	EMS0136-OCT23	mg/L	0.00009	<0.00009	ND	20	101	90	110	104	70	130
Zinc (dissolved)	EMS0136-OCT23	mg/L	0.002	<0.002	ND	20	95	90	110	NV	70	130
Arsenic (dissolved)	EMS0173-OCT23	mg/L	0.0002	<0.0002	1	20	99	90	110	100	70	130
Barium (dissolved)	EMS0173-OCT23	mg/L	0.00002	<0.00008	1	20	104	90	110	101	70	130
Boron (dissolved)	EMS0173-OCT23	mg/L	0.002	<0.002	0	20	92	90	110	91	70	130
Calcium (dissolved)	EMS0173-OCT23	mg/L	0.01	<0.01	2	20	96	90	110	94	70	130
Cadmium (dissolved)	EMS0173-OCT23	mg/L	0.000003	<0.000003	13	20	100	90	110	103	70	130
Chromium (dissolved)	EMS0173-OCT23	mg/L	0.00008	<0.00008	12	20	98	90	110	97	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS (continued)

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Copper (dissolved)	EMS0173-OCT23	mg/L	0.0002	<0.0002	7	20	95	90	110	103	70	130
Iron (dissolved)	EMS0173-OCT23	mg/L	0.007	<0.007	9	20	93	90	110	75	70	130
Potassium (dissolved)	EMS0173-OCT23	mg/L	0.009	<0.009	0	20	103	90	110	85	70	130
Magnesium (dissolved)	EMS0173-OCT23	mg/L	0.001	<0.001	2	20	103	90	110	97	70	130
Manganese (dissolved)	EMS0173-OCT23	mg/L	0.00001	<0.00001	1	20	95	90	110	73	70	130
Sodium (dissolved)	EMS0173-OCT23	mg/L	0.01	<0.01	2	20	95	90	110	83	70	130
Lead (dissolved)	EMS0173-OCT23	mg/L	0.00009	<0.00009	2	20	95	90	110	94	70	130
Zinc (dissolved)	EMS0173-OCT23	mg/L	0.002	<0.002	4	20	98	90	110	89	70	130

pH

Method: SM 4500 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
pH	EWL0393-OCT23	No unit	0.05	NA	0		100			NA		

QC SUMMARY

Phenols by SFA

Method: SM 5530B-D | Internal ref.: ME-CA-[ENVISFA-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
4AAP-Phenolics	SKA0135-OCT23	mg/L	0.002	<0.002	ND	10	101	80	120	111	75	125

Phosphorus by SFA

Method: SM 4500-P J | Internal ref.: ME-CA-[ENVISFA-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Phosphorus (total)	SKA0153-OCT23	mg/L	0.03	<0.03	2	10	100	90	110	98	75	125
Phosphorus (total)	SKA0166-OCT23	mg/L	0.03	<0.03	3	10	101	90	110	103	75	125

QC SUMMARY

Solids Analysis

Method: SM 2540C | Internal ref.: ME-CA-IENVIEWL-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Dissolved Solids	EWL0394-OCT23	mg/L	30	<30	1	20	100	80	120	NA		
Total Dissolved Solids	EWL0396-OCT23	mg/L	30	<30	0	20	102	80	120	NA		
Total Dissolved Solids	EWL0430-OCT23	mg/L	30	<30	16	20	100	80	120	NA		

Total Kjeldahl Nitrogen by SFA

Method: SM 4500-N C/4500-NO3- F | Internal ref.: ME-CA-IENVISFA-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Kjeldahl Nitrogen	SKA5098-OCT23	as N mg/L	0.5	<0.5	1	20	96	80	120	89	75	125

QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate laboratory accuracy with sample matrix effects.

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.

Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS Insufficient sample for analysis.
RL Reporting Limit.
↑ Reporting limit raised.
↓ Reporting limit lowered.
NA The sample was not analysed for this analyte
ND Non Detect

Results relate only to the sample tested.
Data reported represent the sample as submitted to SGS. Solid samples expressed on a dry weight basis.
"Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.
Analysis conducted on samples submitted pursuant to or as part of Reg. 153/04, are in accordance to the "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" published by the Ministry and dated March 9, 2004 as amended.

SGS provides criteria information (such as regulatory or guideline limits and summary of limit exceedances) as a service. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. Comparison to the most current criteria is the responsibility of the client and SGS assumes no responsibility for the accuracy of the criteria levels indicated.

SGS Canada Inc. statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

This report supersedes all previous versions.

-- End of Analytical Report --

SGS

Request for Laboratory Services and CHAIN OF CUSTODY (General)

SGS Environmental Services - Lakefield: 185 Concession St., Lakefield, ON K0L 2H0 Phone: 705-652-2000 Toll Free: 877-747-7658 Fax: 705-652-6365 Web: www.ca.sgs.com {4}

SGS Environmental Services - London: 657 Consortium Court, London, ON, N6E 2S8 Phone: 519-672-4500 Toll Free: 877-848-8060 Fax: 519-672-0361 Web: www.ca.sgs.com {4}

Laboratory Information Section

Received Date (mm/dd/yyyy): OCT 14 2023

LAB LIMS #: OCT 135511

Received Time (After Hours Only): __:__

Temperature Upon Receipt (°C): 13°x3

Billing & Reporting Information

Invoice/Receipt to {3}:

Company: Pinchin

Attention: Keri Bernard

Address: 662 Falconbridge Rd, Unit 3
Sudbury, Ontario
P3A 4S4

Email: kbernard@pinchin.com

Project Name/Number: 229152.003 Kagawong Landfill

P.O. #:

Quote #: 2022 1033

Attached Parameter List: ☐ YES ☐ NO

Turnaround Time

Is *Rush Turnaround Time Required? ☐ YES ☒ NO

Specify:

* Rush TA Requests Require Lab Approval

Client Information/Report To:

Client Lab #:

Company Name:		**Phone Number:**	705-521-0560
Contact Name:		**Fax Number:**	
Address:		**E-mail:**	
Copy to:			

Sample Information

Analysis Requested
(please enter the analysis required below and check off which analysis applies to each sample)

Sample Identifier	Date Sampled (mm/dd/yy)	Time Sampled	# of Bottles	Field Filtered	Field Temp (°C)	Field pH		Fall GW Package			
BH1	10/12/23	P.M.	8	X				X			
BH3	↓	↓	8	X				X			
BH101			8	X				X			
BH102			8	X				X			
BH103			8	X				X			
BH104			8	X				X			
BH105			8	X				X			
BH106			8	X				X			
BH107			8	X				X			
BH108			8	X				X			
BH109			8	X				X			
BH110			8	X				X			
GW Dup 1			8	X				X			
GW Dup 2	↓	↓	8	X				X			

Sampled By {1}:	(Name) Daniel H. Adam D.	(Signature)		Date:	10/12/23 (mm/dd/yy)
Relinquished by {2}:	(Name) Daniel H. Adam D.	(Signature)		Date:	10/12/23 (mm/dd/yy)

Note: {1} Submission of samples to SGS is acknowledgement that you have been provided direction on sample collection/handling and transportation of samples. {2} Submission of samples to SGS is considered authorization for completion of work. Signatures may appear on this form or be retained on file in the contract, or in an alternative format (e.g. shipping documents). {3} Results may be sent by email to an unlimited number of addresses for no additional cost. Fax is available upon request. {4} Completion of work may require the subcontracting of samples between the London and Lakefield laboratories.

Revision #: 2.3
Date of Issue: 24 Jun. 2014

10:30

SAT - 334336724 26
334320857066

January 23, 2024

Township of Billings
15 Old Mill Road, PO Box 34
Kagawong, Ontario P0P 1J0

E-mail: edance@billingstwp.ca

Attention: Emily Dance, CMO, AOMC
CAO/Clerk

Re: Proposal for 2024 to 2026 Annual Monitoring, Reporting and Well Improvement Program
Kagawong Landfill Site, Kagawong, Ontario
Pinchin File: 229152.007

Pinchin Ltd. (Pinchin) is pleased to provide this proposal to complete the 2024 to 2026 Annual Monitoring, Reporting and Well Improvement Program at the Kagawong Landfill Site. We have provided a technical scope and associated pricing information. Pinchin is well qualified to take on this work and we trust our proposal meets your expectations. We look forward to discussing the project in more detail. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

Pinchin Ltd.

Prepared by:

Meagan Bradley, B.A.
Project Manager
705.521.0560
mbradley@pinchin.com

Reviewed by:

Tim McBride, B.Sc., P.Geo., QP_{ESA}
Practice Specialist – Hydrogeology
Director, Landfill & Municipal Services
Director, Northern Ontario
705.521.0560
tmcbride@pinchin.com

Proposal for the 2024 to 2026 Annual Monitoring, Reporting and Well Improvement Program

Kagawong Landfill Site, Kagawong, Ontario

Prepared for:

Township of Billings
15 Old Mill Road, PO Box 34
Kagawong, Ontario P0P 1J0

Attn: Emily Dance

January 23, 2024

Pinchin File: 229152.007

Issued to:	**Township of Billings**
Issued on:	**January 23, 2024**
Pinchin File:	**229152.005**
Issuing Office:	**Sudbury, ON**
Primary Contact:	**Meagan Bradley, B.A.**

Author:
Meagan Bradley, B.A.
Project Manager
705.521.0560
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Reviewer:
Tim McBride, B.Sc., P.Geo., QP_{ESA}
Practice Specialist – Hydrogeology
Director, Landfill & Municipal Services
Director, Northern Ontario
705.521.0560
tmcbride@pinchin.com

TABLE OF CONTENTS

APPENDICES

1.0 EXECUTIVE SUMMARY

Pinchin Ltd. (Pinchin) is a multidisciplinary consulting firm that provides a wide range of engineering, geosciences, environmental and occupational health and safety solutions across Canada.

The scope of work that Pinchin routinely fulfills for our landfill projects includes:

- Sampling groundwater, surface water and leachate/condensate;
- Recording field observations including water levels and field measurements;
- Comparing sample values against applicable criteria including applicable Ministry of the Environment, Conservation and Parks (MECP – formerly known as the Ministry of the Environment and Climate Change - MOECC) standards;
- Preparing interim reports that include description of sampling locations, sampling methodology, results, recommendations, figures and drawings;
- Preparing final reports that incorporate the information of the interim reports along with trend analysis; and
- Project management meetings and progress updates.

Additionally, Pinchin has provided training services in leachate sampling and analysis and remediation design planning for landfills. Pinchin is experienced in developing and implementing residential well sampling programs, including notification and consultation with affected residents prior to sampling and after each sampling event and communication with the responsible government agency.

Notably, Pinchin regularly presents at a number of high-profile environmental conferences such as the RemTech conference in Banff and Science Advisory Board on Contaminated Sites workshop in Vancouver, on innovative methods for conducting on-site investigation and remediation activities.

Pinchin has extensive experience conducting environmental sampling at contaminated sites across Canada. The project staff dedicated to this project have significant background in landfill projects, particularly for groundwater, surface water, leachate and landfill gas monitoring. Each of the landfills operated within a Certificate of Approval or Environmental Compliance Approval, and each project was completed on time and on budget.

2.0 PROPONENT PROFILE AND CORPORATE EXPERIENCE

2.1 Profile Summary

From St. John's to Victoria, Pinchin is staffed by a team of over 900 skilled and experienced professional engineers, scientists, industrial hygienists, geologists, technologists, project managers and support staff to offer you localized solutions to complex problems. In Ontario, Pinchin is a member in good standing of both the Professional Engineer of Ontario (PEO) and Association of Professional Geoscientist of Ontario (APGO).

2.2 Corporate History

Established in 1981 by Dr. Don Pinchin, whose specialized expertise and knowledge in the asbestos abatement industry became the solid foundation for a company that now provides services in these areas:

- Landfill Assessment and Compliance Monitoring;
- Environmental Due Diligence and Remediation;
- Sustainability and Building Science;
- Emissions Reduction and Compliance;
- Environmental Laboratory Services (Asbestos, Lead, Mould, Odour);
- Indoor Air Quality and Mould;
- Hazardous Materials (Asbestos, Lead); and
- Occupational Health and Safety.

Pinchin continues to build on our reputation as a highly trusted consulting firm that is responsive and sure-footed for our customers in today's rapidly shifting economic, environmental, social and political terrain. From a thorough understanding of our indoor environments and the hazards that can affect both people and profits, to up-to-date expertise on assessing a company's carbon footprint, Pinchin looks forward to working with an increasingly diverse range of customers to provide innovative and effective services and solutions.

2.3 Subcontractors

Pinchin will use its own forces for this project and not use any subcontractors, aside from the services of an accredited analytical laboratory.

Pinchin has worked with numerous analytical laboratories over the years. Although Pinchin does not endorse one single lab we have requested, received and reviewed quotes from analytical laboratories that are accredited by the Canadian Association for Laboratory Accreditation (CALA) and provide an excellent level of service.

Pinchin proposes to utilize the services provided by SGS Canada Inc. (SGS) in Lakefield, Ontario for laboratory analysis of samples collected by Pinchin during the monitoring program. SGS has an established quality assurance and quality control (QA/QC) program, is a member of CALA and is accredited by the Standards Council of Canada (SCC) for specified environmental analyses. SGS's internal laboratory QA/QC consisted of the analysis of laboratory duplicate, method blank, matrix spike and spiked blank samples, an evaluation of relative percent difference calculations for laboratory duplicate samples, and an evaluation of surrogate recoveries for the method blank, matrix spike and spiked blank samples.

Additionally, all parameters will be tested using Ministry of the Environment, Conservation and Parks (MECP) approved procedures and the analytical methods prescribed in the "*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*" dated March 9, 2004, amended July 1, 2011.

2.4 Corporate Experience

Pinchin has been actively involved in landfill management since its inception over 40 years ago and possesses significant experience in all aspects of landfill engineering, monitoring and closure for both non-hazardous and hazardous waste disposal facilities. Pinchin is currently (i.e. during the 2023 monitoring year alone) responsible for the completion of annual monitoring for groundwater, surface water and landfill gas at over 75 landfill and sewage lagoon sites across Ontario. Of these monitoring programs, approximately half are multi-year contracts with lengths ranging from three to five years. In addition to these annual monitoring programs, Pinchin is currently involved in various landfill projects requiring regular liaison with regulators including the MECP, as well as other government agencies such as the Ministry of Transportation and the Ministry of Natural Resources and Forestry. For various sites at which Pinchin conducts annual monitoring, Pinchin also assists with capacity assessments, amendments to ECAs, Development and Operations Plans, Closure Plans, financial assurance estimates and other documents to be submitted to the MECP in addition to the annual monitoring reports.

Examples of relevant projects being carried out and/or completed by Pinchin in Ontario, limited to the last five years, include the following:

Ministry of Natural Resources and Forestry

Timmins District Office, PO Box 3080, Highway 101, South Porcupine, Ontario

Megan Kilgour, 705-235-1150

Contract Value $145,000.00/year (44 landfills, including analytical fees)

"2018 to 2022 Northeastern Ontario Annual Waste Disposal Site Groundwater & Surface Water Monitoring & Reporting Project"

Township of Jocelyn

3670 5th Side Road, Jocelyn, Ontario

Janet Boucher, 705-246-2025

Contract Value $32,000.00 (1 landfill annually for six years, including analytical fees)

"2016-2022 Jocelyn Township Annual Waste Disposal Site Monitoring & Reporting Project"

Township of Spanish & Sables Rivers

PO Box 70, 8 Trunk Road, Spanish, Ontario

Kim Sloss, 705-844-2300

Contract Value $107,000.00 (5 landfills annually, including analytical fees)

"2016-2022 Spanish Sables Townships Annual Waste Disposal Site Monitoring & Reporting Project"

Township of McGarry / Virginiatown

27 Webster Street, McGarry, Ontario

Clermont Lapointe, 705-634-2145

Contract Value $12,500.00 / year (1 landfill annually, including analytical fees)

"2015-2022 McGarry Annual Waste Disposal Site Monitoring & Reporting Project"

2.5 Supplier Diversity

Pinchin does not have a formal diversity policy in terms of suppliers; however, Pinchin has onboarded a variety of vendors that help us maintain a diverse portfolio of suppliers and subcontractors.

3.0 ORGANIZATION AND PROJECT TEAM

With over 40 years combined experience in Landfill Assessment, Monitoring, Permitting and Planning, Pinchin's project team shall consist of the following experienced environmental personnel who have significant experience with landfill sites and meet the requirements of the Competent Environmental Practitioners.

Tim McBride, B.Sc., P.Geo., QPESA, Practice Specialist – Hydrogeology, Director, Landfill and Municipal Services, Director, Northern Ontario

Mr. McBride will be designated as the Project Manager for the project. Mr. McBride is a graduate of the University of Waterloo, Bachelor of Science - Applied Earth Sciences (Cooperative Program) and has over twenty-five years of experience in environmental site assessments (Phase I, II and Ill ESAs), environmental impact monitoring, production and observation well installations, geotechnical and environmental drilling, groundwater modeling, hydrogeological evaluations, landfill siting and monitoring, soil and groundwater assessments, sub watershed studies, water well interference studies, remedial planning and development and implementation of decommissioning plans. His experience includes the provision of technical expertise for a wide variety of closure and remediation investigations, including a hydrogeological assessment and installation of an interception well system for a landfill derived leachate plume, several pre-development baseline environmental investigations for consideration during closure planning and numerous annual monitoring reports for various sites across Northern Ontario.

Mr. McBride has supervised and reviewed many different kinds of projects, including waste management planning studies, federal environmental assessments, waste disposal site hydrogeological studies, D&O Plans, landfill monitoring (municipal and wood-waste with comparison to Guideline B-7), large diameter well installations (for drinking water, process water and landfill leachate collection), hauled sewage site monitoring and reporting, well-head protection studies, mine tailings assessments, designated substance surveys, geotechnical investigations, soil and ground water inspections and drinking water inspections in both residential and municipal settings.

Meagan Bradley, B.A., Project Manager

Meagan Bradley is a Project Manager in the Environmental Due Diligence and Remediation (EDR) group and has been employed by Pinchin since 2018. As the Project Manager, Meagan will be responsible for leading the field team in the sampling and collection of representative field data and the compilation/interpretation of data as a contributing author to the annual monitoring reports.

Meagan's landfill monitoring experience includes field data collection, analysis and reporting of data through annual monitoring reports. She has experience with the development and implementation of decommissioning plans for industrial establishments, environmental site assessments (ESAs) (Phase I

and II) and remediation. Additionally, her field experience includes working with landfill gas monitoring, leachate collection systems and placement and capping of waste mounds.

As the designated account representative and lead Client liaison, Meagan will be responsible for the project implementation, project budget and ensuring the timelines for the project will be adhered.

Alana Valle, B.Eng., EIT., Project Manager

Ms. Alana Valle is a Project Coordinator with the Environmental Due Diligence & Remediation group at Pinchin Ltd. and has been employed by Pinchin Ltd. since 2019. Alana holds a Bachelor of Engineering in Environmental Engineering from the University of Guelph and is an Engineering Intern with Professional Engineers Ontario.

Alana has over 5 years of environmental consulting experience and has completed many projects on behalf of Pinchin Ltd., including landfill monitoring and reporting, hydrogeology assessments, waste capacity assessments and waste management plans and ESAs. This experience extends to industrial, commercial and government projects. Alana has been responsible for a variety of projects in which soil, ground water and surface water quality in relation to regulatory standards and compliance evaluations were investigated, analyzed and reported upon. Alana is currently coordinating the landfill monitoring and reporting program requirements for over 20 waste management sites in Ontario, including scheduling the field work, ensuring all required analytical components are achieved, completing the data review and compilation and reporting.

For additional details regarding qualifications and experience, refer to **Appendix I – Pinchin Resumes**.

4.0 PROPOSED SYSTEM

4.1 Pinchin Project Team Management

Pinchin's Project Manager will provide overall responsibility for the project, the Project Team and will also be the key point of contact for the Township. The Project Manager has autonomy to assign and retain team members that best suit project delivery. This process empowers efficient project delivery and efficient Client liaison. The Project Manager, with possible assistance from a Project Coordinator, will also be responsible for the development and implementation of the project schedule and supervision of field personnel. The Project Manager will ensure that all of the resources required by the project (including senior document review and additional personnel if required) are available and are utilized in the most efficient way possible in order to optimize the project's approved budget and to ensure that deadlines and project requirements are met.

4.2 Integration of Pinchin's Team with the Client's Team

At the project outset, Pinchin will develop a system of communication to ensure that all pertinent information pertaining to the project is communicated to the Township in a timely manner and in a fashion acceptable to the Township (telephone, email, etc.). Information communicated to Pinchin by the Township may be sent directly to Pinchin's Project Manager for communication to staff engaged in project activities. Pinchin's Project Manager will be available to the Township at all times during the project to provide status updates, schedule information and to answer questions regarding the work.

4.3 Notification of Award and Project Initiation

Upon receipt of notification of award, Pinchin's Project Manager will enter the project details into our project management software system ("*Vision*") which will assist in tracking project costs and schedule. All of the appropriate project, Client and billing information will be entered allowing for project personnel to appropriately track project costs (consulting labour and disbursements) in a manner allowing for easy preparation of financial updates and status reports on an as-needed basis.

4.4 Project Kick Off Meeting

Critical to the success of the project will be the seamless transfer of information between Pinchin and the Township. It will be the responsibility of the Pinchin Project Manager to help make sure that this happens. At the commencement of the project, the Pinchin Project Manager will meet with the Township's Project Manager (via conference call) and any other required members of the Project Team for introductions to receive a thorough understanding of the makeup of the Project Team and the roles and responsibilities of all parties and to establish communication pathways that will be used throughout the project. The project kick-off meeting will also confirm project objectives and scheduling and establish appropriate methods for data transfer. This meeting may be held via teleconference if deemed appropriate by all parties.

Upon completion of our kick-off meeting with the Township, Pinchin's Project Team will meet to fully review the project's scheduling, scope of work, technical and health and safety requirements and Client expectations. A Hazard Assessment document will be prepared for the project to identify the potential hazards, assess risk and develop adequate controls to eliminate or control the hazards. The Hazard Assessment is reviewed and signed off by all Project Team members prior to site work/visit.

5.0 WORK PLAN AND DELIVERABLES

The following sections detail the methodology and scope of work for each deliverable of the assignment.

The purpose of completing the monitoring program for the Site is to provide the required MECP annual reports that include an overview of the respective Sites' environmental monitoring, environmental

compliance and operations summaries, as well as provide all technical elements related to water quality aspects. Pinchin proposes to complete these environmental monitoring and reporting requirements as a compliance requirement under the site-specific ECA for the Site and in compliance with the applicable regulatory requirements.

In addition to the Site-specific requirements, Pinchin proposes to carry out the monitoring program at the Sites in accordance with the following documents:

- Ontario Regulation (O.Reg.) 232/98, "*Landfilling Sites*", under the Environmental Protection Act;
- MECP, January 2012, "*Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites*" (MECP Landfill Standards);
- O.Reg. 101/07 Waste Management Projects and MECP, March 2007, "*Guide to Environmental Assessment Requirements for Waste Management Projects*", under the Environmental Assessment Act;
- MECP, April 1994, "*Incorporation of the Reasonable Use Concept into MOEE Groundwater Management Activities, Guideline B-7 (formerly 15-08)*" (Guideline B-7); and "*Determination of Contaminant Limits and Attenuation Zones, Procedure B-7-1*", (formerly referenced by 15-08);
- O.Reg. 347/00 R.R.O. 1990, "*General – Waste Management*", under the Environmental Protection Act;
- O.Reg. 903 R.R.O. 1990, "*Wells*", under the Ontario Water Resources Act;
- O.Reg. 169/03, "*Ontario Drinking Water Quality Standards*" (ODWQS), under the Safe Drinking Water Act, 2002;
- MECP, June 2003, revised June 2006, "*Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines*";
- MECP, November 2010, "*Monitoring and Reporting for Waste Disposal Sites, Groundwater and Surface Water, Technical Guidance Document*"; and
- MECP, December 1996, "*Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*" (Sampling Document).

Pinchin shall complete the proposed tasks in accordance with the above-mentioned applicable landfill standards and documents to ensure consistency with generally applied professional practices, including the recently released MECP guidance for Monitoring and Reporting for Waste Disposal Sites, Groundwater and Surface Water, Technical Guidance Document.

5.1 Sampling and Data Collection Program

Pinchin will conduct an environmental monitoring program which will consist of the collection of 12 groundwater samples from the existing monitoring well network. It is proposed that the environmental monitoring be completed in the fall (September/October) of 2024, 2025 and 2026.

The scope of work for the environmental monitoring program will consist of the following activities:

Groundwater Monitoring

Pinchin will review the Site-specific monitoring well locations and will notify the Client prior to field activities. Pinchin will subsequently mobilize staff to the Sites for field monitoring activities;

- A series of samples shall be collected from multiple locations using standard purging and sampling equipment an effort will be made to minimize potential for cross-contamination by initiating sampling at the lesser-contaminated monitoring well installations and progress to locations with higher potential levels of contamination;
- An inspection will be completed of each groundwater monitoring well installation for damage and/or compliance with O.Reg. 903. Confirmatory measurements of the well construction details will be collected to confirm the well installation details;
- Static groundwater levels shall be collected at all monitoring well locations during the monitoring event using a 100-metre water level tape. Measurements will be collected from the top of the riser pipe and will be utilized to determine hydraulic vectors and gradients and to determine whether rising or falling groundwater elevations significantly affect contaminant migration. At a minimum, two replicate readings shall be collected no less than three minutes apart to ensure level stabilization;
- Each monitoring well shall be purged during the sampling event prior to the collection of sample. Monitoring wells shall be purged using new or existing 3/8” High Density Polyethylene (HDPE) tubing sampling equipment which will be replaced where required (Pinchin is to unsure that existing tubing is reliable in both performance and quality and may need to be replaced). Pinchin shall purge a minimum of three (3) well volumes to a maximum of six (6) well volumes using new Pinchin-supplied sampling equipment until the well volume column is representative of the surrounding formation;
- During purging activities, additional groundwater monitoring parameters shall be collected from each monitoring well using a calibrated YSI-556 water quality meter for real-time in-situ measurement of field parameters including:
    - Dissolved Oxygen (DO);

- Conductivity;
- pH;
- Temperature;
- Total Dissolved Solids (TDS); and
- Oxidation-Reduction Potential (ORP).

- Groundwater samples shall be collected from each groundwater monitoring installation in accordance with the MECP Sampling Document. Dissolved parameters will be field-filtered using an in-line 0.45 micron disposable filter. Upon completion of field sampling and monitoring activities, all samples collected shall be submitted for analyses to a laboratory accredited by the Canadian Association for Laboratory Accreditation (CALA) in accordance with the International Standards ISO/IEC 17025 "*General Requirement for the Competence of Testing and Calibration Laboratories*", dated December 15, 1999. All parameters will be tested using MECP approved procedures and the analytical methods prescribed in the "*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*" dated March 9, 2004, amended July 1, 2011;
- All groundwater samples will be analysed during the monitoring event at the pre-determined monitoring well locations for the parameters listed in the ECA and the previous annual monitoring report. Although some laboratory packages may include additional testing parameters, Pinchin will only report parameter analyses results as per the supplied parameter lists;
- Groundwater sample results will be compared to the applicable Ontario Drinking Water Quality Standards and/or reasonable groundwater usage parameters and shall be further assessed using Guideline B-7 to establish and determine levels of contaminant discharges to the groundwater formation, which would be considered acceptable by the MECP for naturally attenuating landfill sites; and
- Pinchin shall collect and submit one groundwater field duplicate per ten or less samples recovered for quality assurance and quality control purposes (QA/QC) per sampling event.

5.2 Triennial Monitoring Report

Following completion of water sampling and analysis, Pinchin will prepare the 2022-2024 Triennial Monitoring Report for the Site in accordance with Conditions 6.5 and 6.6 of the Site's amended ECA No. A550501. The report will be prepared by a qualified person and will include the following mandatory provisions:

- A plan of the Site depicting all monitoring locations and site features;
- A summary of any complaints or operational problems encountered at the Site during the monitoring period;
- A summary of static groundwater levels and associated inferred flow directions (inclusive of groundwater contour mapping);
- A summary of the physical and hydrogeological setting;
- A summary of site inspections and status of all monitoring wells with respect to compliance with Regulation 903;
- A summary of the monitoring program and sampling methods;
- Tables summarizing all available historical and current analytical results for all parameters for groundwater samples;
- An assessment of the groundwater quality in comparison to the applicable ODWQS and MECP Guideline B-7 requirements;
- Trend analysis for groundwater key landfill performance indicators;
- A discussion regarding the QA/QC program and whether relative percent differences and major ion balance percentages are within acceptable limits;
- An interpretation of site performance and compliance with the applicable Conditions of the ECA and applicable regulatory requirements, as well as an assessment of the adequacy of the program and need for contingency measures;
- Recommendations for any amendments to monitoring programs or site design or operations that may be necessary; and
- An MECP "Monitoring and Screening Checklist".

5.3 Annual Summary Memo

Following completion of water sampling and analysis, Pinchin will prepare an Annual Summary Memo for the Site for 2025 and 2026. The memo's will be prepared by a qualified person and will include the following mandatory provisions:

- A review of the groundwater water quality data;
- A comparison to the water quality data to the historical data;
- A discussion regarding the QA/QC program and whether relative percent differences and major ion balance percentages are within acceptable limits;
- Conclusions and recommendations for future monitoring that link the results of current findings to previous studies (provided by the Township); and
- A detailed map indicating the sampling locations (groundwater, surface water and methane monitors).

5.4 Monitoring Well Improvements

The following tasks for the monitoring well infrastructure improvements will be conducted:

- Extend PVC piping and install a well monument around well BH1; and
- Install a well monument around BH3.

6.0 QUALITY ASSURANCE PLAN

Pinchin employs a number of quality management systems and standard operating practices designed to ensure the delivery of every project and complete Client satisfaction. Our quality management systems ensure the consistent delivery of our services, reports and specifications Pinchin has developed for all aspects of our work systems to ensure the consistent quality and delivery of our services, reports and specifications. Some of the most effective are as follows:

- **Standardized Meeting Process:** For all meetings, Pinchin will prepare or contribute to a written agenda to ensure that meetings are kept on point and discussion items are relevant to the meeting objective. For meetings run by Pinchin, we commit to submitting Agendas at least 3-5 business days ahead of time, so participants can adequately prepare for the meeting. Minutes with action items will be forwarded to the meeting participants within 2 business days following the meeting.
- **Standardized, Pre-reviewed Documentation and Report Formats**: It has been recognized by Pinchin for many years that quality control for Clients can be best met by

utilizing the information which specialists within the Company possess. In order to ensure that the information is available to all personnel, Pinchin utilizes master documents which have been developed by key specialists across Canada and reviewed by National “focus groups”. The focus groups meet face to face or by teleconference four times per year. This ensures that our documents remain up to date and they also incorporate local requirements.

- **Senior Review of Documents**: All documents issued by Pinchin are subject to peer review by a specialist in the same group. A signed review checklist sheet is prepared by the report author and submitted to the reviewer with the report who then in turn signs off the review process. This signed review sheet is maintained for all projects within the project file.
- **Equipment Maintenance and Calibration**: All equipment used during project assignments is maintained and calibrated in accordance with our field procedures and manufacturer’s instructions. All calibration records are maintained within the project file.
- **Use of Accredited Laboratories:** Pinchin has agreements with nearly a dozen accredited laboratories in Canada and the United States which ensures the highest level of quality. Pinchin uses only laboratories certified by the Canadian Environmental laboratories Association to test for environmental parameters.
- **Field Audits:** As a performance verification process, Pinchin conducts periodic audits of team members. This includes Project Managers attending field sites to observe activities and verify that expected standards and practices are being followed.

Where applicable, field sampling equipment decontamination will be completed in accordance with accepted protocols. As a minimum, sampling equipment is washed with detergent solution and rinsed with distilled water between samplings. Decontamination procedures will vary depending on the project nature and will be undertaken to prevent any cross-contamination between sampling sites. Screening instruments are calibrated periodically.

For every ten groundwater samples collected, one field duplicate sample will be collected and included in the laboratory submission for analysis. Laboratory blanks and duplicates will also be used to ensure sample integrity. Relative Percent Differences (RPDs) will be calculated and discussed where applicable. Samples will be placed in appropriate sample containers provided by the laboratory and preserved (as required based on type of analysis) until delivered (shipped by courier or hand delivered) to the laboratory for analysis. A chain of custody form will accompany samples at all points of handling.

7.0 COST OF SERVICES

The estimated costs for the completion of the annual monitoring and reporting program for 2024, 2025 and 2026 for the Kagawong Landfill are provided in Appendix II and include a detailed breakdown of fees and disbursements ($11,710, $6,295 and $6,295, respectively). The overall cost to complete the required work program is estimated to be **$24,300.00.** This cost does not include 13% HST.

This cost estimate assumes that Pinchin will pay the laboratory sub-contractor directly. The costs for the work program are based on a time plus disbursements basis and will be invoiced monthly. Incidental disbursements (faxes, photocopies, long distance, computer usage, etc.) will be invoiced at 6% of fees. Out of office disbursements will be charged at cost plus 10% and mileage will be billed at $0.66/km. The overall costs for each Site are to represent a maximum upset limit.

Our estimated cost is based on Pinchin's current knowledge of site conditions and the client's requirements. Should conditions vary during the course of the investigation, Pinchin reserves the right to modify this workplan; however, no budgetary changes will be made without written authorization from the client.

The estimate in this proposal will be honoured for a period of 90 days after which Pinchin reserves the right to review the costing.

The proposed services are subject to the Terms and Conditions given in the "Authorization to Proceed" contract form as attached in Appendix III.

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Template: Groundwater Monitoring and Sampling Proposal Template, EDR, March 23, 2020

APPENDIX I

Pinchin Resumes

Tim McBride, B.Sc., P.Geo. QPESA

Director of Landfill and Municipal Services, Environmental Due Diligence & Remediation, Practice Specialist - Hydrogeology

Professional Summary

Mr. McBride is a graduate of the University of Waterloo, Bachelor of Science - Applied Earth Sciences (Cooperative Program) and has over twenty-five years of experience in environmental site assessments (Phase I, II and Ill ESAs), environmental impact monitoring, production and observation well installations, geotechnical and environmental drilling, groundwater modeling, hydrogeological evaluations, landfill siting and monitoring, soil and groundwater assessments, subwatershed studies, water well interference studies, remedial planning, and development and implementation of decommissioning plans. His experience includes the provision of technical expertise for a wide variety of closure and remediation investigations, including a hydrogeological assessment and installation of an interception well system for a landfill derived leachate plume, several pre-development baseline environmental investigations for consideration during closure planning and numerous annual monitoring reports for various sites across Northern Ontario. Mr. McBride has a strong background in hydrogeology, aquifer development and characterization, landfill assessment, geophysical surveys, shallow combustible gas vapour surveys, lagoon monitoring, and contaminant impact assessment and have supervised the remediation of numerous contaminated properties. This remediation experience includes excavation and off-site disposal (dig and dump), biopile construction, in-situ bioremediation and large interception well systems (pump and treat) for various contaminants including metals, petroleum hydrocarbons and polyaromatic hydrocarbonss.

Education

- Environmental Hydrogeology, University of Waterloo, Waterloo, Ontario, 1997

Professional Designations / Associations

- APGO Association of Professional Geoscientists of Ontario

Professional Development

- Workplace Hazardous Materials Information System (WHMIS) Training, Pinchin Ltd., Annually
- Health and Safety Training, Pinchin Ltd., Annually
- NORCAT: Northern Centre for Applied Technology, Surface Orientation,
- St. John's Ambulance: Emergency First Aid
- Fire Extinguisher Training
- Respirator Fit Test: Soucie Salo Safety, Sudbury,
- Electrical Awareness Training
- Safety, Health & Environment Leadership Training

- Basic Certification Training for Joint Health and Safety Committees (Part 1 & 2)
- Inspired Leadership & S.P.I.R.I.T Development Program

Professional Experience

Director of Landfill and Municipal Services, Environmental Due Diligence & Remediation, Practice Specialist - Hydrogeology, Pinchin Ltd., 2017 to Present

- The role of Director of Landfill Services and Practice Specialist – Hydrogeology for Pinchin Ltd. primarily involves developing the capabilities of our landfill and hydrogeological team to service municipal and industrial clients across Ontario. Mr. McBride focuses on supervising the team and project managers through design and compliance phases.
- Through this role Mr. McBride ensures that clients are in compliance with respect to policies, procedures, and regulations. He cuts through the uncertainty found in all phases of work in the landfill and hydrogeological services by delivering clearly worded reports that meet the needs of all stakeholders. This includes the preparation of technical documents that can be understood by lay people, and ensure that all deadlines are met for reports submitted to government agencies.
- Mr. McBride works hard to identify opportunities to streamline study design and compliance monitoring; providing efficiency and cost savings to clients (both municipalities and private sector) with long-term monitoring requirements, and assisting private clients with the additional requirement of financial assurance, in accordance with provincial regulations.

Environmental Hydrogeologist and Assistant Unit Manager, AMEC Earth & Environmental, 2001 to 2017
Hydrogeologist, Trow Consulting Engineers Ltd., 1997 to 2001
Junior Environmental Analyst, INCO Ltd., Environmental Control Department, 1996 to 1997

Project Experience

Environmental Impact Monitoring

- Weyerhaeuser Lime Mud Disposal Pits, Dryden, Ontario: Responsible for the review field and geochemical data from historical annual groundwater monitoring reports for this industrial waste site. Established a contingency plan and the required trigger parameters and concentrations. Completed an evaluation of current environmental status of the facility, including an assessment of the site against Guideline B-7 contaminant discharge criteria and other applicable provincial standards and objectives. Developed a long-term groundwater and surface water monitoring program to facilitate ongoing environmental impact monitoring.
- Deloro Landfill Site, Timmins, Ontario: Responsible for the collection of field and geochemical data for annual groundwater, residential well and surface water samples from this domestic and industrial waste site. Established a contingency plan and the required trigger parameters and concentrations. Completed an evaluation of current environmental status of the facility, including an assessment of the site against Guideline B-7 contaminant discharge criteria and other applicable provincial standards and objectives. Developed a long-term groundwater and surface water monitoring program to facilitate ongoing environmental impact monitoring.
- German Township Waste Disposal Site, Timmins, Ontario: Responsible for the collection of field and geochemical data for annual groundwater and residential well samples from this domestic waste site. Completed an annual monitoring report, including an assessment of the site against Guideline B-7 contaminant discharge criteria and other applicable provincial standards and objectives.

- Falconbridge, Lockerby Mine, Whitefish, Ontario: Completed an annual groundwater monitoring report, including an assessment of the on-site disposal site versus background conditions, applicable guidelines and Guideline B-7 contaminant discharge criteria.

- Tembec Sawmills, Northern Ontario: Utilized field and geochemical data for ground and surface water samples to complete annual monitoring reports for 8 sites, including an assessment of the on-site woodwaste disposal sites versus background conditions, applicable guidelines and Guideline B-7 contaminant discharge criteria. Each report required individual consideration, in order to address the requirements of the individual Certificates of Approval for each site and evaluate compliance.

Hydrogeological Evaluations

- Detailed Hydrogeological Evaluation of Two Aquifers, Onaping, Ontario: Completed an evaluation, using large scale pumping tests, geochemical analysis and groundwater modelling, to assess the potential of the aquifers to provide suitable and sustainable water quantity and quality for the specified water supply requirements. In addition, this report concluded as to whether the aquifers should be considered as groundwater under the direct influence ("GUDI") of surface water, as defined by the Ministry of the Environment, Conservation and Parks ("MECP") Ontario Drinking Water Standards ("ODWS") and subsequently, whether or not chemically assisted filtration and disinfection was required. Duties involved the coordination of all staff (including field, groundwater modelling, laboratory and office) and subcontractors (drilling, pump testing, particle counting, two geochemical laboratories), the preparation of monthly progress reports, invoicing, budget updates, change orders, data interpretation and presentation of the final study findings and recommendations.

- GUDI Assessment for Larder Lake Water Works, Larder Lake, Ontario: Conducted a GUDI study, as defined by the MECP, in support of a Certificate of Approval application. Based on a review of existing groundwater modelling, geological and chemical data, completed a detailed hydrogeological assessment of the water supply aquifer and provided recommendations for future development and maintenance.

- Preliminary Hydrogeological Evaluation, Killarney, Ontario: Completed a preliminary hydrogeological evaluation in order to assess the bedrock aquifer characteristics with respect to quality and quantity through review of available historical databases and information sources. Based on the estimated water supply requirements, determined the number of necessary wells, the mutual interference profiles, capture zones and potential off-site impacts.

- Preliminary Site Servicing Options Study, Proposed Industrial Park, Earlton, Ontario: Required to investigate servicing options and constraints since the existing infrastructure that supplies water and sewer did not extend to the subject lands. The potential yield of the aquifer was subsequently evaluated in terms of its suitability as a long-term water source for the industrial development. The shallow soil conditions were also reviewed in order to assess the feasibility of individual sewage disposal systems. Based on the estimated development requirements, determined the mutual interference profiles, capture zones and potential off-site impacts.

Site Decommissioning and Remediation Studies

- Vale Crean Hill Mine Landfill Site, Whitefish, Ontario: Completed the closure design and construction management for an industrial landfill site associated with the Crean Hill Mine operations. Prepared a final site grading plan in order to meet the MECP specified slopes, as well as the design of two landfill cap systems (i.e., low permeability soil versus geosynthetic clay liner). Prepared tender documents for the preferred cap system (low permeability soil) and supervised construction of the landfill cap.

- Phase I/II and Ill Environmental Site Assessments, Sudbury Ontario: Conducted a limited Phase I and II ESA to evaluate the environmental condition of four commercial properties in Sudbury. Identified and further delineated the vertical and horizontal extent of petroleum hydrocarbon contamination on-site. Recommended remedial options and directed the remedial effort. Collected the appropriate number of verification samples to evaluate the final environmental status of the site.

- Site Remediation, Hydro Transformer Sub-Station, Sturgeon Falls, Ontario: Directed site remediation activities for an abandoned distribution station, surrounded by residential land, contaminated with polychlorinated biphenyls (PCB). Collected the appropriate number of verification samples to evaluate the final environmental status of the site as per the current guidelines.
- Residential Fuel Spill, Little Current, Ontario: Supervised the removal of residual hydrocarbon contaminated overburden materials and the installation of a free product interception well. Installed a passive petroleum product collection system in the existing on-site bedrock well to recover free phase petroleum product from within the fractured limestone aquifer and conducted indoor air quality sampling to document the final environmental status of the site.

Environmental Investigations

- Phase I Environmental Site Assessments - Bridgestone/Firestone Properties, Northern Ontario: Supervised and assisted staff in conducting site reconnaissance visits, interviews knowledgeable on-site personnel, research of historical land uses and identified areas of actual and potential environmental concern for five Bridgestone/Firestone sites in Northern Ontario. Summarized all findings into concise reports, including off-site concerns. Responsible for data collection, reporting, review, invoicing and client progress reports.
- Phase I Environmental Site Assessment, Home Depot, North Bay, Ontario: Completed a complex Phase I ESA report on five individual parcels, prior to a land transaction for a proposed Home Depot Home Improvement Warehouse in North Bay, Ontario. The land uses varied from a furniture store to a scrap steel and salvage yard. Evaluated the land uses of the five individual lots and the associated potential environmental concerns.
- Phase I/II and Ill Environmental Site Assessments, Petroleum Distributor, Northern Ontario: Conducted Phase I and II ESA's to evaluate the environmental conditions of twenty-five commercial properties across Northern Ontario, including active and former retail fuel outlets and bulk plant facilities. Identified and further delineated the vertical and horizontal extent of petroleum hydrocarbon contamination on-site. Recommended remedial options and directed the remedial effort at fifteen of these sites. Collected the appropriate number of verification samples to evaluate the final environmental status of the site.
- Phase I and II Environmental Site Assessment, North Bay, Ontario: Conducted a Phase I ESA and subsequent Phase II ESA to evaluate the environmental condition of a commercial property in North Bay. Identified potential and actual sources contamination on-site and from adjacent land uses. Responsible for coordinating the intrusive soil and groundwater sampling program, field screening and selection of worst-case samples for laboratory submission. Prepared the final report comparing the findings to the applicable guidelines and provided recommendations for required future investigations.

Meagan Bradley, B.A.

Project Manager, Environmental Due Diligence & Remediation

Professional Summary

Ms. Meagan Bradley is a Project Technician in the Environmental Due Diligence and Remediation (EDR) group and has been employed by Pinchin Ltd. Since 2019. Meagan holds a Bachelor of Art in Geography from Laurentian University and a Post-Graduate Certificate in Environmental Monitoring and Impact Assessment from Cambrian College.

Ms. Bradley has 8 years of environmental consulting experience in environmental site assessments (Phase I, II, III ESA's), environmental impact monitoring, geotechnical and environmental drilling, hydrogeological and geotechnical evaluations, as well as compliance monitoring and reporting as it pertains to waste management facilities for both the industrial, provincial and municipal sectors.

Education

- Post-Graduate Certificate in Environmental Monitoring and Impact Assessments, Cambrian College, 2015
- Bachelor of Arts in Geography, Laurentian University, 2014

Professional Development

- Project Management Training, Pinchin Ltd., 2020
- IHSA basics of supervising, 2022
- MOL worker awareness 4 step and 5 step, 2015
- Workplace Hazardous Materials Information System (WHMIS) Training, Pinchin Ltd., Annually
- Health and Safety Training, Pinchin Ltd., Annually

Professional Experience

Project Manager, Environmental Due Diligence & Remediation, Pinchin Ltd., 2020 to Present

- Project management, overseeing field activities, data review and interpretation while coordinating environmental monitoring and well installation projects
- Develop and maintain daily documentation of projects, recording field sampling/readings, equipment maintenance and calibration to ensure monitoring and records comply with project approval conditions from governing bodies
- Prepare summary reports of regulations, approvals and environmental implementation plans
- Responsible for project and resource scheduling, invoicing, client communication and project specific health and safety plans/documents
- Responsible for proposal submission, project scope, safety, quality assurance, manpower, equipment, and materials coordination. Responsible for the tracking of project budgets and meeting with clients before, during, and after projects

Project Technologist, Environmental Due Diligence, Pinchin Ltd., 2019 to 2020

- Responsible for the execution of numerous field assignments ranging from Phase I and II Environmental Site Assessments to landfill instrumentation, monitoring and reporting. This included the completion of multiple borehole drilling, groundwater and landfill gas monitoring wells/probes, comprehensive sol and groundwater characterization programs for municipal, provincial and private sector clients

Data Planner, Sudbury Student Services Consortium, 2018-2019

- Used GIS, GPS and Mapping programs to set and plan school district boundaries and routes within the Greater Sudbury area

Field Technician, BluMetric Environmental, 2015 – 2018

- Conducted numerous Phase I, II, and III ESAs. Completed multiple borehole drilling, groundwater monitoring well installations, comprehensive soil and groundwater programs, and air sampling programs for municipal, provincial and private sector clients

Project Experience

Rayonier Advanced Materials, Northern Ontario:

- Responsible for the project management and oversight for the collection of field geochemical data for annual groundwater, residential well, and surface water samples for seven orphaned industrial waste sites. As this client's operations are based out of Florida, they are heavily dependant on Pinchin to assist them with maintaining compliance at 5 waste disposal sites and several industrial sewage works that are at unmanned facilities. Duties included the regular compliance monitoring, but also the additional of new wells and action on several other regulator requested issues

EACOM Active Sawmills, Northern Ontario:

- Responsible for the project management and oversight for the collection of field geochemical data for annual groundwater and surface water samples for four industrial waste sites located at four facilities across Northern Ontario. Completed annual monitoring reports, including assessment of the sites against applicable provincial standards

Green First Forest Products, Northern Ontario:

- Responsible for the project management and oversight for the collection of field geochemical data for annual groundwater and surface water samples for four industrial waste sites located at three active sawmills across Northern Ontario. Completed annual monitoring reports, including assessment of the sites against applicable provincial standards. Deliverables included the regular compliance monitoring, but also the additional of new wells and action on several other regulator requested issues

Township of Billings, Kagawong, Ontario:

- Responsible for the project management and oversight for the collection of field geochemical data for annual groundwater and surface water samples for a domestic waste disposal site located in a fractured bedrock setting. Completed annual monitoring reports, including assessment of the sites against applicable provincial standards. Deliverables included the regular compliance monitoring, but also the additional of new wells and action on several other regulator requested items such an updated Design and Operations Plan and an assessment of waste deposits placed beyond the permitted footprint

Vale Sudbury Abandoned Mine Sites, Greater Sudbury Area, Ontario:

- Responsible for the collection of geochemical data for the annual groundwater and surface water for numerous abandoned mine sites for Vale Sudbury operations within the Greater Sudbury Area. Performed numerous

hydrogeological testing (falling head, rising head, slug in, slug out, and packer testing) for individual sites. Completed annual monitoring reports, including assessment of the site against applicable provincial standards

Phase I Environmental Site Assessment, Elliot Lake, Ontario:

- Conducted Phase I ESA to evaluate 2 commercial properties in Elliot Lake. Responsible for coordinating and preforming site visits, historical searches and evaluating results in comparison to standard industry practices. Compared findings to various databases and compiled findings for reporting

Phase I Environmental Site Assessment, Sudbury, Ontario:

- Conducted Phase I ESA to evaluate multiple commercial and residential properties in Sudbury. Responsible for coordinating and performing site visits, historical searches and evaluating results in comparison to standard industry practices. Compared findings to various databases and compiled findings for reporting

Alana Valle, B.Eng., EIT

Project Manager, Environmental Due Diligence & Remediation

Professional Summary

Alana Valle is a Project Manager in the Environmental Due Diligence and Remediation (EDR) group and has been employed by Pinchin Ltd. since 2019. Alana holds a Bachelor of Engineering in Environmental Engineering from the University of Guelph and is an Engineering Intern with Professional Engineers Ontario (PEO).

Alana has over 4 years of environmental consulting experience and has completed many projects on behalf of Pinchin Ltd., including landfill compliance monitoring and reporting, hydrogeology assessments, waste capacity assessments, design & operations plans, landfill closure plans and waste management plans. This experience extends to industrial, commercial and government projects. Alana has been responsible for a variety of projects in which soil, ground water and surface water quality in relation to regulatory standards and compliance evaluations were investigated, analyzed and reported upon. Alana is currently managing and coordinating the landfill monitoring and reporting program requirements for over 30 waste management sites in Ontario, including scheduling the field work, ensuring all required analytical components are achieved, completing the data review and compilation, and reporting.

Education

- Bachelor of Engineering in Environmental Engineering (B.Eng. (Env.)), University of Guelph, 2020

Professional Designations / Associations

- Engineering Intern (EIT), Professional Engineers Ontario (PEO), since 2020

Professional Development

- Pinchin Landfill Training, 2022
- Vale Tier 3 – Central Tailings Area, 2020
- Vale Tier 2 – Mines, 2020
- Vale Tier 2 – Surface Orientation, 2020
- Vale Tier 1 – General Orientation, 2020
- MOL Supervisor Training in 5 Steps, 2020
- MOL Worker Training in 4 Steps, 2020
- Domtar Core 2 Specific Training – Espanola Mill, 2020
- Pinchin EDR Training, 2019
- First Aid and CPR Training, 2021
- Workplace Hazardous Materials Information System (WHMIS) Training, Pinchin Ltd., Annually
- Health and Safety Training, Pinchin Ltd., Annually

Pinchin Ltd.
Mississauga, ON
www.pinchin.com

Professional Experience

Project Manager, Environmental Due Diligence & Remediation, Pinchin Ltd., 2019 to Present

- Completes groundwater, surface water, leachate, potable water and gas environmental compliance monitoring for municipal landfill sites, sawmill sites, mining sites, etc.
- Completes hydrogeological assessments and water quality monitoring reports for over 30 landfill sites, expanding knowledge of:
  - MECP's Guideline B-7;
  - Groundwater elevation contouring;
  - Piper plot analysis; and
  - Water quality trend analysis.
- Completes waste capacity assessments, design & operations plans, landfill closure plans and waste management plans, expanding knowledge in O. Reg. 232/98 and landfill standards and guidelines.
- Assisted in various other landfill monitoring projects, gaining knowledge in:
  - Leachate management studies and remediations;
  - Closure and post-closure liability assessments using MECP's Guideline B-7; and
  - Financial assurance assessments using MECP's Guideline F-15.
- Assisted in environmental compliance assessments (ECA's), gaining knowledge in creating borehole logs, soil sampling and groundwater well installations.
- Liaises with clients and other professionals and develops and maintains positive relationships.
- Manages and coordinates project field work, reporting, budgeting/invoicing and other client requirements as required.

Environmental Technologist (Coop), Wood, 2017 to 2018

- Completed water level, surface water flow, snowpack and air quality monitoring activities for Vale Canada Ltd.'s Copper Cliff operations including the Central Tailings Area, Smelter and Clarabelle Mill.

  Completed groundwater and surface water quality monitoring for various mine sites such as Wallbridge Mining Company's Broken Hammer Mine and Kidd Operations' Kidd Creek Mine.
- Completed technical reports for Permit to Take Water compliance monitoring for various mine sites such as for Harte Gold Corporation.
- Completed technical water monitoring reports for landfill sites, gaining experience in applying the applicable guidelines, most notably MECP's Guideline B-7 compliance assessment procedures and O. Reg. 232/98 landfill guidelines.
- Experienced in environmental monitoring field techniques, including:
  - Groundwater and surface water sampling;

  - Water level and flow monitoring;
  - Landfill gas monitoring;
  - Elevation surveying; and
  - Ambient air particulates sampling.
- High attention to detail and organization skills through completing Excel data entry for professional reports.

Project Experience

- Typical clients: financial institutions, scholastic institutions, government facilities, property managers, developers and private and public facilities.

Template: LastName,FirstName – Resume Master, HO, August 2019

APPENDIX II

Detailed Cost Matrix

2024 DETAILED COST ESTIMATE AND INVOLVEMENT MATRIX BONFIELD

Task and Scope		PINCHIN TEAM					Total Time	Task Total Fees	Disbursements (rounded)		Total Costs
		Senior Hydrogeologist T. McBride $240 per hour	Project Manager M. Bradley $115 per hour	Field Technician $85 per hour	CAD Draftsman $85 per hour	Clerical $70 per hour	hours		Incidental (office & field equip.) (6% of fees)	Major (field expenses, mileage, etc.)	
Task											
1.0	**Spring 2024 Monitoring Event**		2	18		1	**21**	**$ 1,830**	$ 110	$ 1,950	**$ 3,890**
2.0	**Summer 2024 Monitoring Event**		2	20		1	**23**	**$ 2,000**	$ 120	$ 2,231	**$ 4,351**
3.0	**Fall 2024 Monitoring Event**		2	18		1	**21**	**$ 1,830**	$ 110	$ 1,950	**$ 3,890**
4.0	**Annual Summary Report**	2	1	8	4	2	**17**	**$ 1,755**	$ 105		**$ 1,860**
Total Manhours/Cost		**2**	**7**	**64**	**4**	**5**	**82**	**$7,415**	**$445**	**$6,130**	**$13,990**

2025 DETAILED COST ESTIMATE AND INVOLVEMENT MATRIX BONFIELD

Task and Scope		PINCHIN TEAM					Total Time	Task Total Fees	Disbursements (rounded)		Total Costs
		Senior Hydrogeologist T. McBride $240 per hour	Project Manager M. Bradley $115 per hour	Field Technician $85 per hour	CAD Draftsman $85 per hour	Clerical $70 per hour	hours		Incidental (office & field equip.) (6% of fees)	Major (field expenses, mileage, etc.)	
Task											
1.0	**Spring 2024 Monitoring Event**		2	18		1	**21**	**$ 1,830**	$ 110	$ 1,950	**$ 3,890**
2.0	**Summer 2024 Monitoring Event**		2	20		1	**23**	**$ 2,000**	$ 120	$ 2,231	**$ 4,351**
3.0	**Fall 2024 Monitoring Event**		2	18		1	**21**	**$ 1,830**	$ 110	$ 1,950	**$ 3,890**
4.0	**Annual Summary Report**	2	1	8	4	2	**17**	**$ 1,755**	$ 105		**$ 1,860**
Total Manhours/Cost		**2**	**7**	**64**	**4**	**5**	**82**	**$7,415**	**$445**	**$6,130**	**$13,990**

2026 DETAILED COST ESTIMATE AND INVOLVEMENT MATRIX BONFIELD

Task and Scope		PINCHIN TEAM					Total Time	Task Total Fees	Disbursements (rounded)		Total Costs
		Senior Hydrogeologist T. McBride $240 per hour	Project Manager M. Bradley $115 per hour	Field Technician $85 per hour	CAD Draftsman $85 per hour	Clerical $70 per hour	hours		Incidental (office & field equip.) (6% of fees)	Major (field expenses, mileage, etc.)	
Task											
1.0	**Spring 2024 Monitoring Event**		2	18		1	**21**	**$ 1,830**	$ 110	$ 1,950	**$ 3,890**
2.0	**Summer 2024 Monitoring Event**		2	20		1	**23**	**$ 2,000**	$ 120	$ 2,231	**$ 4,351**
3.0	**Fall 2024 Monitoring Event**		2	18		1	**21**	**$ 1,830**	$ 110	$ 1,950	**$ 3,890**
4.0	**Triennial Monitoring Report**	2	1	24	8	2	**37**	**$ 3,455**	$ 210		**$ 3,665**
Total Manhours/Cost		**2**	**7**	**80**	**8**	**5**	**102**	**$9,115**	**$550**	**$6,130**	**$15,795**

APPENDIX III

Authorization to Proceed, Limitation of Liability & Terms of Engagement

Authorization to Proceed, Limitation of Liability & Terms of Engagement

Date: January 19, 2024	Pinchin Project Name: 2024-2026 Annual Monitoring and Reporting – Bonfield Landfill	
Client: Township of Bonfield	Pinchin Project Number: 236957.006	Project Value: **$43,775.00** (plus applicable taxes)
Site Address: Bonfield Waste Disposal Site – 185 Bluesea Road, Bonfield, Ontario	Pinchin Project Manager: Meagan Bradley	
	Pinchin Project Manager e-mail: mbradley@pinchin.com	

This confirms Township of Bonfield (Client) authorizes Pinchin Ltd. (Pinchin) to proceed with the performance of services as outlined in our proposal dated January 19, 2024, for a value of $43,775.00 (plus applicable taxes). The proposal (if any) and the terms of this Authorization to Proceed, Limitation of Liability and Terms of Engagement constitute the entire agreement between Pinchin and Client.

MECP FOI review fees, TSSA archival research fees greater than $100.00 and Opta fees greater than $250.00 are extra.

Please check all boxes that apply:

2024 AMR	$13,990.00	☐
2025 AMR	$13,990.00	☐
2026 AMR	$15,795.00	☐

Terms and Conditions

1. Client is to identify all known actual and potential hazardous conditions that exist within the building, on the property or in the area of work including but not limited to the presence of confined spaces, work at heights, areas causing heat stress, traffic, pinch points and actual or potential environmental contamination. Client is to identify any specific training required for access and entry to the building, property and area of work and to provide any necessary site-specific training at its own cost to Pinchin staff, its contractors and subcontractors. Client must provide safe access to the site and compliance with all applicable safety codes and standards for matters under the control of Client which could affect the safety of Pinchin staff, its contractors and subcontractors on site.

2. Pinchin makes no representations or warranties whatsoever, either expressed or implied, as to its findings, recommendations, plans, specifications or professional advice and including concerning the legal significance of its findings, or as to other legal matters touched on in the report, including but not limited to ownership of any property or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretations and these interpretations may change over time and Pinchin undertakes no, and expressly disclaims, any obligation to advise Client of such change.

3. **In the event of any claim of any nature whatsoever by Client against Pinchin, its staff, officers, directors, shareholders, agents, contractors and subcontractors (collectively "Pinchin"), including but not limited to claims based on negligence and/or breach of contract, the total aggregate liability of Pinchin shall be limited to the lesser of: (i) any actual damages incurred by the client. (ii) all fees actually paid by Client to Pinchin in connection with the specific project in respect of which the claim is being made.**

4. **Pinchin will not be responsible for any consequential, incidental or indirect damages, including but not limited to financial losses, credit and property transactions, financing costs, property values, loss of profit or revenue, permitting/licensing issues, follow-up actions and costs. Pinchin shall not be liable for the failure of any manufactured product or system of components which are supplied by Pinchin to perform in accordance with the manufacturer's specifications or other product literature on which Pinchin reasonably relied. Pinchin will only be liable for direct damages resulting from negligence and/or breach of contract of Pinchin. Pinchin will not be liable for any losses or damage if Client has failed, within a period of two (2) years following the date upon which the claim is discovered, to commence legal proceedings against Pinchin to recover such losses or damage ("Claim Period") unless the laws of the jurisdiction which governs the limitation period which is applicable to such claim provides that the applicable limitation period is greater than the Claim Period and cannot be abridged by this Agreement, in which case the Claim Period shall be deemed to be extended by the shortest additional period which results in this provision being legally enforceable.**

5. If Client brings any form of claim against any third party relating to the work and if the third party claims against Pinchin for contribution and indemnity, Client shall not seek to recover and waives any right to recover from the third party any portion of any losses or damage which may be attributed to the fault or negligence of Pinchin.

6. Pinchin's proposal was prepared for the consideration of Client only. Its contents may not be used by or disclosed to any party without prior written consent from Pinchin.

7. Pinchin's proposal shall be open for acceptance for a period of thirty (30) days from date of issue. The acceptance period may be extended by mutual agreement of the Client and Pinchin in writing. Pinchin reserves the right to revise the proposal beyond the stated acceptance period.

8. Any work performed by Pinchin will be conducted in accordance with generally accepted engineering or scientific practices current in this geographical area at the time the work is performed.

9. Client acknowledges that risks arise from subsurface and hidden conditions that even comprehensive testing and analysis may fail to detect and that actual conditions may differ from those inferred from inspection, testing and analysis. Pinchin can only comment on the conditions observed on the date(s) the assessment is performed.

10. The work will be limited to those locations and/or areas and/or materials of concern identified by Client or scope of work as outlined in our proposal. Other areas of concern may exist but will not be investigated within the scope of this assignment.

11. Any budget and work estimates provided are preliminary and subject to verification and change unless otherwise agreed.

12. Information provided by Pinchin is intended for Client use only. Pinchin will not provide copies of reports, results or information to any party other than Client, unless Client, in writing, requests information to be provided to a third party or unless disclosure by Pinchin is required by law. Unless consented to by Pinchin, which consent may be unreasonably and/or arbitrarily withheld, any use by a third party, of reports or documents authored by Pinchin, or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages, suffered by any third party as a result of decisions made or actions conducted by any party.

13. As used in this Agreement, "Work Product", means without limitation all reports, plans, data, writings, notes, drawings, art work, templates, documents, products, ideas, formulas, inventions, research, programs, derivative works, processes, procedures, techniques, scientific methods, designs, technologies, forms, formulas, discoveries, know-how, improvements and any and all products of any type, including all rights and claims, prepared in part or in full by Pinchin.

14. Pinchin shall exclusively own the copyright and all other intellectual property rights in all "Work Product" including rights to claim Scientific Research and Development Tax Claims. The services and documents provided by Pinchin under the terms of this agreement are "Work Made for Hire" and are the sole and exclusive property of Pinchin; they are provided to Client for one time use only. To the extent that any other Intellectual Property Rights of, or under the control of, Pinchin are embodied or otherwise required to exploit the "Work Product", Pinchin grants Client a revocable worldwide, exclusive, one-time license under all such Intellectual Property Rights as required, in accordance with the terms of this agreement.

15. Notwithstanding any other provision, Pinchin reserves the exclusive right to pool data provided by, or produced for, Client at its sole discretion and to use that data to aid in the completion of any and all future projects. Pinchin will utilize de-identification processes which may include, but are not limited to, pseudonymizing or anonymizing the data to preserve client confidentiality. Pinchin will ensure that all identifiable and pooled data is protected and stored securely through the use of appropriate processes and technologies, which may include, but are not limited to, data encryption and the use of the principle of least privilege.

16. Client agrees to indemnify, defend, and hold harmless Pinchin, its affiliates, and their officers, directors, employees, agents, and subcontractors against all claims, demands, suits, liabilities, costs, expenses (including reasonably incurred legal fees), damages and losses suffered or incurred by Pinchin arising out of any actual or alleged infringement of intellectual property rights arising out of Client's use of "Work Product" or any other items provided by Pinchin to Client.

17. Invoices will be issued monthly or upon project completion unless otherwise agreed. Applicable taxes (GST, HST, QST) are additional. Amounts not received within thirty 30 days of invoice date will bear interest thereafter at a rate of 1.5% per month (18% per annum) until paid.

Acceptance Authorizes:

1. The release, to Pinchin, of information requested in connection with this work. Pinchin undertakes to maintain the confidentiality of all such information ("Information").

2. The release by Pinchin of Information to others necessary to perform the work.
3. Entry and access to all areas of the property and buildings on the property, by Pinchin staff or representatives, as required, to perform the proposed services. Client shall identify limitations, conditions or terms regarding entry and access ("Access Restrictions").

It is understood that Client will be liable for all additional costs incurred by Pinchin in the performance of the proposed work caused by changes to the terms, delays, postponements or cancellations or other unseen or unknown conditions that are beyond the control of Pinchin including, without limitation, delays caused by failure to provide Information on a timely basis or Access Restrictions not revealed to Pinchin prior to the date hereof.

By signing below Client provides authorization to proceed and accepts the terms and conditions outlined above and in the referenced proposal (if applicable). In the event Pinchin provides services requested by Client, in addition to those identified above or in the proposal (where applicable), Client agrees to compensate Pinchin either on a time and material basis using the Pinchin standard rates (in effect at the time the service is provided), or as per a written amendment to the terms and conditions originally agreed upon.

Authorized Representative Acceptance of Contract:

Signature:	
Name, Title:	
Company Name:	
Date:	

Address Pinchin's Invoice to:

PO Number:	
Company Name and Mailing Address:	
Contact Name (responsible for approving the invoice for payment):	
Contact Phone Number:	
Contact Email Address:	
Email Invoice to (if different than contact above e.g. ap@pinchin.com):	

Billing: 2360 Meadowpine Blvd. Unit 2, Mississauga, ON L5N 6S2, | PH: 1.855.746.2446

Pinchin Project Manager: Meagan Bradley	Pinchin Project Number: 236957.006	Project Value: $43,775.00 (plus applicable taxes)

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Template: Master Authorization to Proceed, EDR ONLY, HO, July 12, 2022

Payment Methods Accepted by Pinchin

Pay by Cheque	Pay by EFT or Wire Payments	Pay by Interac E-Transfer
Remit payment to: Pinchin Ltd. 2360 Meadowpine Blvd, Unit 2, Mississauga, ON, L5N 6S2	Remitters in Canada: Pinchin Ltd. Canadian Imperial Bank of Commerce, Meadowvale Banking Centre 6975 Meadowvale Town Centre Circle, Unit N1, Mississauga, ON, L5N 2W7 Account # 6627919 Institution # 010 Transit # 08222 SWIFT/BIC: CIBCCATT Deposit confirmations and/or remittance advice to be sent to accountsreceivable@pinchin.com	Contact Pinchin's Accounts Receivable Coordinator (info below). **The Accounts Receivable Coordinator will send a Request Money link in order to execute this transaction.**

All payment methods must include reference to the **Pinchin Invoice Number** or the **Pinchin File Number**.

For assistance, contact an Accounts Receivable Coordinator accountsreceivable@pinchin.com or 905.363.0678 and option 5.

COUNCIL REPORT

Department: Treasury
Date: February 20, 2024
Report Number: TR-2024-02-04
File: Statement of Council Remuneration and Expenses - 2023

Recommendation:

THAT the Township of Billings Council hereby receives for Information Report TR-2024-02-04.

Background:

The Council remuneration reporting is prepared in accordance with the Municipal Act, 2001 (s) 284 (1) Statement – that the Treasurer of a municipality shall in each year on or before March 31st provide to the Council of the municipality an itemized statement of remuneration and expenses paid in the previous year to:

a) each member of Council in respect of his or her services as a member of the Council or any other body, including a local board, to which the member has been appointed by Council or on which the member holds office by virtue of being a member of Council.

b) each member of Council in respect of his or her services as an officer or employee of the municipality or other body described in clause (a); and

c) each person, other than a member of Council, appointed by the municipality to serve as a member of any body, including a local board, in respect of his or her services as a member of the body. Members of Council that receive a stipend and expenses for sitting on other Boards and Committees are also required to be reported.

A mandatory item of the statement it to identify the By-Law under which the remuneration and or expenses were authorized. Below is a chart that shows remuneration and expenses for members of Council.

Discussion:

Pursuant to Sec 284(1) of the Municipal Act, 2001 as amended, the following remuneration and expenses were paid or accrued by the Township of Billings during the year 2023 as authorized by By-law 2023-104.

Council Expenses are costs reimbursed to Council members for attending events such as training sessions and conferences and forums.

Despite the Municipal Freedom of Information and Protection of Privacy Act, this statement is a public record. Copies of this report and associated chart will be made available in hardcopy to the public upon request through the Clerk.

2023 Statement of Council Remuneration and Expenses

Name	Position	Stipend - Council	Expenses- Council	Stipend – Boards and Committee	Expenses – Boards and Committee	Total
Barker, Bryan	Mayor	10,430.96	3,659.11	0.00	0.00	14,090.07
Cahill, Jim	Councillor	6,425.20	1,587.75	4,377.10	0.00	12,390.05
Grogan, Vince	Councillor	5,327.48	560.65	0.00	0.00	5,888.13
Hillyard, David	Deputy Mayor	5,342.04	0.00	0.00	0.00	5,342.04
Hunt, Michael	Councillor	5,327.48	0.00	0.00	0.00	5,427.60

Financial Impacts

Council remuneration is included in the Township of Billings annual budget.

Alignment to the Strategic Plan

This report is not applicable to the Strategic Plan

Alignment to the Community Energy and Emissions Plan (CEEP)

This report is not applicable to the CEEP

Respectfully Submitted By:

Harmony Hancock, Director of Finance / Treasurer

Reviewed By:

Emily Dance, CAO/Clerk

COUNCIL REPORT

Department: Treasury
Date: February 20, 2024
Report Number: TR-2024-02-05
File: Municipal Insurance Renewal
Attachment: Marsh Canada 2024 Municipal Insurance Renewal Proposal

Recommendation:

THAT the Township of Billings Council hereby approves Report TR-2024-02-05 AND approves the 2024 Municipal Insurance Renewal Proposal with Marsh Canada in the amount of $77,779.

Background:

Township of Billings insurance comes up for renewal every year. Attached is a copy of the Marsh Municipal Insurance Renewal Proposal for 2024 that was received on February 2, 2024, and the insurer requests that confirmation of renewal be received as soon as possible.

Discussion:

The renewal is up 15% from the expiring term (2023 - $65,482). Our insurance provider has provided the following information to explain the factors for the increase:

Municipal General Liability Including EIL:

- Primary GL – 5% increase due to market conditions
- EIL – $875 increase due to market conditions to reach minimum requirement of $5,000
- Umbrella Layers 1 & 2 – 5% increase due to market conditions
- $10,000 Deductible on GL
- $5,000 Deductible on EIL
- Retro date as per expiring policy, subject to being no earlier than November 15, 1993.
- PFAS Exclusion
- Attached Communicable Disease Endorsement to apply with $1m write-back, $25,000 SIR. – Retro date: January 1, 2021
- Absolute Communicable Disease Exclusion per the attached verbiage
- Tanks and landfills not disclosed are not insured
- Coverage on tanks and landfills is subject to schedule held on file. Tanks and Landfills not seen are not insured.
- Coverage on closed landfill is subject to active monitoring and no known leaching

Property

- The premium is up due to the TIV increase. No rate increase has been applied.
- Properties with special exposures are separated from the blanket market.
- Under Combined Physical Damage & Machinery Breakdown, the Blanket POED Limit is **$11,037,878.**

Crime

- No change

Automobile:

- 3% Increase applied due to market conditions

Council Accident/Out of Province:

• 5 members

Volunteer Accident:

• No Change

Volunteer Fire Fighters' Accident:

• No Change

Critical Illness:

• 9 members

Cyber QUOTE:

• Cyber Liability Premium: $2,430 + $150 Policy Fee

Insurance costs continue to rise across the industry, as municipal lawsuits in general continue, premiums are increasing. Due to timing constraints, there is not time for a complete Request for Proposal however, the proposed increase is comparable to the rise across the board for insurance in Ontario. Staff recommends that an RFP be issued for 2025.

The coverage includes cyber insurance. With the increasing threat of cyber-attacks and risks to our privacy. Staff have worked with our IT provider to provide additional security; however, with the low fee staff is recommending that cyber staff recommend that cyber liability be included.

Financial Impacts

The increased premium will be reflected in the 2024 Township of Billings Budget.

Respectfully Submitted By:

Harmony Hancock Director of Finance/Treasurer

Reviewed By:

Emily Dance, CAO/Clerk

MIS MUNICIPAL INSURANCE SERVICES
A DIVISION OF McDOUGALL INSURANCE BROKERS

MARSH

Municipal Insurance Renewal Proposal for The Corporation of the Township of Billings

February 2, 2024

Presented by:
Timothy Hutchison, President

MIS Municipal Insurance Services

A division of McDougall Insurance Brokers Ltd.

In Partnership with

Public Sector Division

Marsh Canada Inc.

Marsh

Corporation of the Township of Billings

Insurance Proposal

Policy Period

03 February 2024 - 03 February 2025

01 February 2024

1

Important – Please Note The Following

Duty of Disclosure

In addition to providing all basic information necessary to enable us to place the risk, you must ensure that you are complying with your legal duty of disclosure of all material matters relating to the risk. In particular, you must satisfy yourself as to the accuracy and completeness of the information you provide to insurers. In this respect, you must provide all information relating to the risk, whether favourable or not, which would influence the judgement of a prudent insurer in determining whether he will take the risk, and, if so, for what premium and on what terms. If all such information is not disclosed by you, insurers have the right to void the policy from its inception which may lead to claims not being paid.

Payment Terms

Premiums are due and payable on receipt of a Marsh invoice. Payment should be made immediately to avoid any possible cancellation for non-payment of premium.

Period of Validity of Quote

This offer remains open for acceptance by the Insured until the expiry of the current Municipal Insurance program policy(ies).

Breach of Warranty or Subjectivity

If any of the terms and conditions contained in this proposal are identified as a “warranty” or as a subjectivity to binding or continuing cover, you should be aware that if the terms of the warranty as stated are breached or the subjectivity is not met, insurers may have the right to void the applicable coverage and deny any resulting or subsequent losses as a result.

Underinsurance

It is important that all policy limits and amounts insured be reviewed carefully and at least annually to be certain they are adequate to provide full recovery in event of a loss.

Underwriting / Binding Authority

Certain portions of this quotation of cover have been provided by Marsh Canada Limited acting in an underwriting capacity on behalf of the Insurer who, under a binding authority agreement, has given us authority to quote and confirm insuring terms, conditions and premiums. Marsh

Canada Limited is not acting as an insurance broker in this instance and is not providing alternative terms or markets for the cover other than as quoted. For covers where Marsh Canada Limited does not act in an underwriting capacity nor has a binding authority agreement with the Insurer, coverage cannot be bound with those Insurers unless a request is made to the Insurer and confirmation of coverage is subsequently received by Marsh Canada Limited from the Insurer.

Material Changes From Expiring Policy

You should carefully note any items identified in the “Changes from Expiry” section under each coverage as they represent material changes in cover from your previous policy.

Risk And Claims Information

This proposal has been based on the risk and claims information provided and/or verified by you to Marsh Canada Limited. If any of this information is not correct or has changed in the interim, you must advise us immediately as the terms quoted may therefore be invalid and cover cannot be bound as quoted.

Taxes Payable By Insureds

The following taxes as prescribed by federal and/or local laws and regulations will apply to all or certain portions of the premiums quoted and will be charged by Marsh Canada Limited in addition to the premiums quoted:

Provincial Sales Tax

Canadian Councils Liability

Limits of Liability:	$	5,000,000	General Liability, including Sudden and Accidental Pollution any one Occurrence
	$	5,000,000	and in the Annual Aggregate for Products and Completed Operations during the Policy Period
Extensions of Coverages:	$	5,000,000	Employers' Liability; any one Claim
	$	5,000,000	Tenant Legal Liability; any one Occurrence
	$	5,000,000	Employee Benefit Liability; any one Claim
	$	5,000,000	*Incidental Medical Malpractice; any one Claim Retroactive Date: November 15, 1993
	$	50,000	Voluntary Medical Payments; any one Claim and in the Annual Aggregate during the Policy Period
	$	2,000,000	Forest Fire Fighting Expense; any one Occurrence and in the Annual Aggregate during the Policy Period
	$	50,000	Voluntary Payment for Property Damage; any one Occurrence and in the Annual Aggregate during the Policy Period
	$	250,000	Incidental Garage Operations; any one Occurrence and in the Annual Aggregate during the Policy Period
	$	100,000	Municipal Marina Legal Liability; any one Pleasure Craft
	$	1,000,000	Municipal Marina Legal Liability; in the Annual Aggregate for Legal Liability for Property Damage during the Policy Period
	$	500,000	Wrongful Dismissal (Legal Expense); any one Claim and in the Annual Aggregate during the Policy Period
	$	100,000	Conflict of Interest Reimbursement Expenses; any one Claim
	$	100,000	Legal Expense, Reimbursement Expenses; any one Claim and
	$	500,000	Legal Expense, Reimbursement Expenses; in the Annual Aggregate during the Policy Period
	$	5,000,000	Non-Owned Automobile (including Contractual Liability for Hired Automobiles); any one Occurrence
	$	250,000	Legal Liability for Damage to Hired Automobiles; any one Occurrence
	$	5,000,000	Wrap-Up Liability – Difference in Conditions and Difference in Limits; any one Occurrence
Endorsements:	$	5,000,000	*Municipal Errors and Omissions Liability; any one Claim and in the Annual Aggregate during the Policy Period Retroactive Date: November 15, 1993
	$	2,500,000	*Environmental Impairment Liability; any one Claim and
	$	5,000,000	Environmental Impairment Liability; in the Annual Aggregate during the Policy Period Retroactive Date: November 15, 1993
	$	250,000	*Abuse / Molestation Liability; any one Claim and
	$	500,000	Abuse / Molestation Liability; in the Annual Aggregate during the Policy Period Retroactive Date: February 3, 2008
	Voluntary Compensation; As per Endorsement No. 4 – Schedule of Benefits		
	$	5,000,000	Police Officer Assault; any one Occurrence
Deductible(s):	$	10,000	Public Entity General Liability; any one Occurrence including Products and Completed Operations, per Claimant in respect of Sewer Back-up
	$	10,000	Extensions of Coverage; per Occurrence / per Claimant for all Extensions of Coverage except;
		NIL	Extensions of Coverage; any one Occurrence with respect to Non-Owned Automobile Liability, Conflict of Interest and Legal Expense Reimbursement As per Endorsement No. 4 – Schedule of Benefits for Voluntary Compensation

	$	1,000	Extensions of Coverage; with respect to Legal Liability for Damage to Hired Autos
	$	10,000	Extensions of Coverage; with respect to Wrongful Dismissal (Legal Expense)
	$	10,000	Municipal Errors and Omissions Liability; any one Claim
	$	5,000	Environmental Impairment Liability; any one Claim
	$	10,000	Abuse / Molestation Liability; any one Claim
	$	10,000	Police Officer Assault; any one Occurrence

*** Claims Made Coverage Note:**	Certain sections of this policy are written on a CLAIMS MADE basis. In order to trigger coverage, a claim must first be made against the insured during the Policy Period or the Extended Reporting Period of 90 days (or longer if purchased) and the act(s), which lead to the claim, must have occurred on or after the Retroactive Date. Furthermore, such claims must also be reported to the insurer during the policy period for coverage to apply. Be aware that late reporting could result in a disclaimer of coverage from the insurer.
Endorsements:	*Communicable Disease Exclusion Endorsement including $1,000,000 write-back Retroactive Date: February 03, 2021 **PERFLUORINATED COMPOUNDS, PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS) EXCLUSION (For use on liability (re)insurance policies)** **The following exclusion applies only to the Insured's water treatment, water supply and firefighting operations:** 1. This POLICY does not cover any claim for actual or alleged loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defence cost, cost, expense or any other amount, directly or indirectly and regardless of any other cause contributing concurrently or in any sequence, originating from, caused by, arising out of, contributed to by, resulting from, or otherwise in connection with any PFAS. 2. For the purposes of this Exclusion, loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defence cost, cost, expense or any other amount, includes, but is not limited to, any cost to clean-up, detoxify, remove, monitor, contain, test for or in any way respond to or assess the effect of any PFAS. 3. PFAS means any organic molecule, salt, free radical or ion, the composition of which includes at least one: a. perfluorinated methyl group (-CF3); or b. perfluorinated methylene group (-CF2-). LMA5595 amended 29 July 2022
Policy Form:	EK2004502 B0509BOWCI2351220
Insurer(s) and Proportion of Participation(s):	Certain Lloyd's Underwriters (Syndicate 1886) – 100%
Subject To:	Environmental Impairment Liability - a) Excluding ASTs >25 years or where not double walled/skinned or has no secondary containment b) Excluding USTs (underground tanks) which are either >20 years old or single skinned Subject to schedule of tanks to be held on file and tanks not seen are not covered Completion of Casualty Questionnaire/Waiver Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**

Canadian Councils Excess Umbrella Liability (1st Layer)

Limit of Coverage:	$ 20,000,000 any one Occurrence General Liability including Sudden and Accidental Pollution and Police Officer Assault Endorsement $ 20,000,000 any one Occurrence in the Annual Aggregate in respect of Products & Completed Operations $ 20,000,000 *any one Occurrence in the Annual Aggregate in respect of Municipal Errors and Omissions Liability $ 20,000,000 any one Occurrence in the Annual Aggregate in respect of Employee Benefits Liability
Excess of Underlying Coverage(s) and Limit(s):	$ 5,000,000 any one Occurrence General Liability including Sudden and Accidental Pollution and Police Officer Assault Endorsement $ 5,000,000 any one Occurrence and in the Aggregate in respect of Products and Completed Operations during the Policy Period $ 5,000,000 *Incidental Medical Malpractice; any one Claim $ 5,000,000 Municipal Errors and Omissions; in the Annual Aggregate $ 5,000,000 Employer's Liability and Tenant's Legal Liability; any one Occurrence $ 5,000,000 Employee Benefits Liability; any one Claim $ 5,000,000 Non-Owned Automobile Liability including Contractual Liability for Hired Automobiles; any one Occurrence $ 5,000,000 Owned Automobile Liability (Aviva Insurance Company of Canada); any one Occurrence
*** Claims Made Coverage Note:**	Certain sections of this policy are written on a CLAIMS MADE basis. In order to trigger coverage, a claim must first be made against the insured during the Policy Period or the Extended Reporting Period of 90 days (or longer if purchased) and the act(s), which lead to the claim, must have occurred on or after the Retroactive Date. Furthermore, such claims must also be reported to the insurer during the policy period for coverage to apply. Be aware that late reporting could result in a disclaimer of coverage from the insurer.
Retained Limit:	$ NIL
Endorsements:	Standard Excess Automobile Liability Policy Follow Form Named Insured, SPF No. 7 Excluding coverage sub-limited within the Primary Excluding Communicable disease absolutely **PERFLUORINATED COMPOUNDS, PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS) EXCLUSION (For use on liability (re)insurance policies)** **The following exclusion applies only to the Insured's water treatment, water supply and firefighting operations:** 1. This POLICY does not cover any claim for actual or alleged loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defence cost, cost, expense or any other amount, directly or indirectly and regardless of any other cause contributing concurrently or in any sequence, originating from, caused by, arising out of, contributed to by, resulting from, or otherwise in connection with any PFAS. 2. For the purposes of this Exclusion, loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defence cost, cost, expense or any other amount, includes, but is not limited to, any cost to clean-up, detoxify, remove, monitor, contain, test for or in any way respond to or assess the effect of any PFAS. 3. PFAS means any organic molecule, salt, free radical or ion, the composition of which includes at least one: a. perfluorinated methyl group (-CF3); or b. perfluorinated methylene group (-CF2-). LMA5595 amended 29 July 2022

Policy Form:	**EK2004498 B0509BOWCI2351184**
Insurer(s) and Proportion of Participations(s):	Certain Lloyd's Underwriters (Syndicate 1886) – 100%
Subject To:	Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**

Canadian Councils Excess Umbrella Liability (2nd Layer)

Limit of Coverage:	$ 25,000,000	any one Occurrence General Liability including Sudden and Accidental Pollution and Police Officer Assault Endorsement
	$ 25,000,000	any one Occurrence in the Annual Aggregate in respect of Products & Completed Operations
	$ 25,000,000	*any one Occurrence in the Annual Aggregate in respect of Municipal Errors and Omissions Liability
	$ 25,000,000	any one Occurrence in the Annual Aggregate in respect of Employee Benefits Liability
Excess of Underlying Coverage(s) and Limit(s):	$ 25,000,000	any one Occurrence General Liability including Sudden and Accidental Pollution and Police Officer Assault Endorsement
	$ 25,000,000	any one Occurrence and in the Aggregate in respect of Products and Completed Operations during the Policy Period
	$ 25,000,000	*Incidental Medical Malpractice; any one Claim
	$ 25,000,000	Municipal Errors and Omissions; in the Annual Aggregate
	$ 25,000,000	Employer's Liability and Tenant's Legal Liability; any one Occurrence
	$ 25,000,000	Employee Benefits Liability; any one Claim
	$ 25,000,000	Non-Owned Automobile Liability including Contractual Liability for Hired Automobiles; any one Occurrence
	$ 25,000,000	Owned Automobile Liability (Aviva Insurance Company of Canada); any one Occurrence
*** Claims Made Coverage Note:**	Certain sections of this policy are written on a CLAIMS MADE basis. In order to trigger coverage, a claim must first be made against the insured during the Policy Period or the Extended Reporting Period of 90 days (or longer if purchased) and the act(s), which lead to the claim, must have occurred on or after the Retroactive Date. Furthermore, such claims must also be reported to the insurer during the policy period for coverage to apply. Be aware that late reporting could result in a disclaimer of coverage from the insurer.	
Retained Limit:	$ NIL	
Endorsements:	Standard Excess Automobile Liability Policy Follow Form Named Insured, SPF No. 7 Excluding coverage sub-limited within the Primary Excluding Communicable disease absolutely **PERFLUORINATED COMPOUNDS, PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS) EXCLUSION (For use on liability (re)insurance policies)** **The following exclusion applies only to the Insured's water treatment, water supply and firefighting operations:** 4. This POLICY does not cover any claim for actual or alleged loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defence cost, cost, expense or any other amount, directly or indirectly and regardless of any other cause contributing concurrently or in any sequence, originating from, caused by, arising out of, contributed to by, resulting from, or otherwise in connection with any PFAS. 5. For the purposes of this Exclusion, loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defence cost, cost, expense or any other amount, includes, but is not limited to, any cost to clean-up, detoxify, remove, monitor, contain, test for or in any way respond to or assess the effect of any PFAS. 6. PFAS means any organic molecule, salt, free radical or ion, the composition of which includes at least one: a. perfluorinated methyl group (-CF3); or b. perfluorinated methylene group (-CF2-). LMA5595 amended 29 July 2022	

Policy Form:	EK2004498 B0509BOWCI2351185
Insurer(s) and Proportion of Participations(s):	Certain Lloyd's Underwriters (Syndicate 1886) – 100%
Subject To:	Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**

Combined Physical Damage & Machinery Breakdown

Coverage:	Property Of Every Description – All Risks of Direct Physical Loss or Direct Physical Damage (Subject to Policy Exclusions)		
Limits of Liability:	$	11,037,878	Blanket Limit of Loss on Property of Every Description including Machinery Breakdown
	$	7,821,956	Total Insured Value
	$	31,963	Log Museum Building - ACV
	$	79,907	Anex Building - ACV
Physical Damage Extensions of Coverage:	The limits for the following extensions of coverage are included in the Blanket Limit shown above:		
	$	500,000	Valuable Papers;
	$	500,000	Extra Expense;
	$	500,000	Accounts Receivable;
	$	500,000	Gross Rentals;
	$	500,000	Computer Media;
	$	25,000	Fine Arts
	The limits for the following extensions of coverage are in addition to the Blanket Limit shown above:		
	$	1,000,000	Newly Acquired Property;
	$	1,000,000	Building in the Course of Construction; Contractors and Consultants
	$	500,000	Property in Transit;
	$	1,000,000	Unnamed Locations;
	$	500,000	Expediting Expense;
	$	300,000	Business Interruption – Profits; Subject to maximum of $25,000 per
	$	1,000,000	Contingent Business Interruption;
	$	100,000	Fire Extinguishing Material and Fire Fighting Expense;
	$	500,000	Professional Fees;
	$	10,000	Master Key;
	$	100,000	Land and Water Pollution Clean Up Expense;
	$	100,000	Stock Spoilage;
	$	100,000	Commercial Property Floater;
	$	1,000,000	Off Premises Service Interruption;
	$	100,000	Exhibition Floater;
	$	100,000 or 10%	Environmental Upgrade;
	$	15,000	Money, Cash Cards and Securities;
	$	15,000	Preservation of Property;
	$	25,000	Technological Advancement;
	$	1,000,000	Demolition and Increased Cost of Construction;
	$	50,000 / $ 100,000	Prevention of Ingress / Egress; 4 weeks
	$	100,000 or 25%	Debris Removal;
	$	15,000	Property of Councillors, Board Members and Employees; any one loss ($25,000 maximum annual policy limit)
Machinery Breakdown:	$	1,000,000	Newly Acquired Property;
	$	500,000	Expediting Expense;

	$ 500,000 Professional Fees; $ 100,000 Consequential Damage; $ 500,000 Hazardous Substance; $ 10,000 Data and Media; $ 500,000 Ammonia Contamination; $ 500,000 Water Escape; $ 10,000 Reproduction Costs; $50,000 / $100,000 Interruption by Civil Authority; 4 weeks
Endorsements:	Automobile Replacement Cost Deficiency Endorsement
Deductible(s):	$ 10,000 each occurrence for all losses except $ 1,000 each Computer/Electronic Data Processing loss $ 1,000 each Fine Arts loss $ 100,000 Each Flood loss 5 % of total insured value or 100,000 minimum, whichever is greater, each Earthquake occurrence
Policy Form:	Municipal Insurance Program - Master Policy (January 1, 2022)
Insurer(s) and Proportion of Participations(s):	**Physical Damage:** Aviva company of Canada -70% Zurich company of Canada - 30% **Machinery Breakdown:** Aviva company of Canada - 100%
Subject To:	A Schedule of Property including Construction, Occupancy, Protection, Exposure, civic address including postal codes for all locations. Schedule of Miscellaneous Tools and Contractors Unlicensed Equipment. All cooking facilities are ULC wet chemical compliant with semi-annual maintenance contract and Class K portable extinguisher. Unless specifically agreed, all heritage properties are covered for Replacement Cost only. For Heritage Replacement Cost, a professional appraisal must be provided for approval by the insurer. All locations may be subject to Engineering Inspection. Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024.**
Changes from Expiring Policy:	

Comprehensive Crime

Limits:	$	1,000,000	Employee Dishonesty – Form A
	$	200,000	Broad Form Loss of Money (Inside Premises)
	$	200,000	Broad Form Loss of Money (Outside Premises)
	$	200,000	Money Orders & Counterfeit Paper Currency
	$	1,000,000	Depositors Forgery
	$	200,000	Professional Fees / Audit Expenses
	$	200,000	Computer Fraud or Funds Transfer Fraud
Deductible(s):	$	NIL	per Loss
Policy Form:	Master Crime Wording (April 2012)		
Insurer(s) and Proportion of Participations(s):	Aviva Insurance Company of Canada – 100%		
Subject To:	Bank Accounts NOT being reconciled by the same person(s) authorized to deposit and withdraw funds. All cheque requisitions and issued cheques containing dual signatures. If the above is not part of your internal Financial controls, please provide explanation(s). Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**		

Automobile Insurance (Ontario)

Limits:	$ 5,000,000 Liability – Bodily Injury / Property Damage Accident Benefits – Basic Benefits; Limits as stated in Policy Accident Benefits – Options; None Selected; Limits as stated in Policy Uninsured Automobile; Limits as stated in Policy Direct Compensation – Property Damage; Limits as stated in Policy **Loss or Damage – All Perils Deductible: $2,500**
Endorsements:	OPCF 3 Drive Government Automobiles Endorsement OPCF 4A Permission to Carry Explosives OPCF 4B Permission to Carry Radioactive Material OPCF 5 Permission to Rent or Lease OPCF 20 Loss of Use Endorsement - Applicable to Light Units per occurrence (Applicable only to Private Passenger Vehicles and Light Commercial Vehicles) OPCF 21B Blanket Fleet Endorsement – No Annual Adjustment OPCF 24 Freezing of Fire-Fighting Apparatus OPCF 31 Non-Owned Equipment OPCF 32 Use of Recreational Vehicles by Unlicensed Drivers OPCF 43R Removing Depreciation Deduction – 24 Months New OPCF 44 Family Protection Endorsement Applicable to Private Passenger Vehicles, Light Commercial Vehicles, Skidoos and All Terrain Vehicles, and Police Vehicles Notice of Cancellation Ninety (90) Days Tarmac Exclusion
Policy Form:	Provincial Statutory Owners Policy
Insurer(s) and Proportion of Participations(s):	Aviva Insurance Company of Canada – 100%
Subject To:	Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024** Provision of updated Vehicles Schedule List to insurer Provision of updated Drivers List to insurer

Councilors' Accident Coverage

Limits of Coverage:	$200,000 Principal Sum
Included Coverage:	Number of Councillors: 5 While on Duty Only Coverage Based on 5 Members Out of Province Emergency Medical Coverage for 15 days including Spouse's Coverage
Policy Form:	Insurers Standard Form
Insurer(s) and Proportion of Participations(s):	AIG Insurance Company of Canada – 100%
Subject To:	$2,500,000 Aggregate Limit of Indemnity Per Accident Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**

Volunteer Fire Fighters' Accident Coverage

Limits of Coverage:	$	100,000	Principal Sum
	$	300	Disability Benefit 1st 4 weeks
	$	500	Disability Benefit after 4 weeks
			While on Duty Only Coverage
Policy Form:	Insurers Standard Form		
Insurer(s) and Proportion of Participations(s):	AIG Insurance Company of Canada – 100%		
Subject To:	Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**		

Municipal Accident Coverage

Limits of Coverage:	$	50,000	Principal Sum – Volunteers of the Policyholder while on Duty Only under the age of 80
	$	1,000,000	Aggregate Limit of Indemnity Per Accident
Policy Form:	Insurers Standard Form		
Insurer(s) and Proportion of Participations(s):	AIG Insurance Company of Canada – 100%		
Subject To:	Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**		

Public Entity Recovery Assistance Plan (Critical Illness)

Sum Insured:	$10,000 Limit for Insured(s) who are age 69 or less 9 Councillors or Volunteer Firefighters
Policy Form:	Insurers Standard Form
Insurer(s) and Proportion of Participations(s):	Sutton Special Risk – 100%
Subject To:	Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024**

Cyber Liability - Quote

Cyber Incident Response:	$1,000,000	Incident Response Costs in the Aggregate
	$1,000,000	Legal and Regulatory Costs in the Aggregate
	$1,000,000	IT Security and Forensic Costs in the Aggregate
	$1,000,000	Crisis Communication Costs in the Aggregate
	$1,000,000	Privacy Breach Management Costs in the Aggregate
System Damage and Business Interruption:	$1,000,000	System Damage and Rectification Costs in the Aggregate
	$1,000,000	Income Loss and Extra Expense in the Aggregate (sub-limited to $1,000,000 in respect of System Failure)
	$1,000,000	Dependent Business Interruption in the Aggregate (sub-limited to $1,000,000 in respect of System Failure)
Network Security and Privacy Liability:	$1,000,000	Network Security Liability Aggregate, including Costs and Expenses
	$1,000,000	Privacy Liability Aggregate, including Costs and Expenses
	$1,000,000	Management Liability Aggregate, including Costs and Expenses
	$1,000,000	Regulatory Fines Aggregate, including Costs and Expenses
	$1,000,000	PCI Fines, Penalties and Assessments Aggregate, including Costs and Expenses
Media Liability:	$1,000,000	Defamation Aggregate, including Costs and Expenses
	$1,000,000	Intellectual Property Rights Infringement Aggregate, including Costs and Expenses
Court Attendance Costs:	$100,000	in the Aggregate (sub-limited to $2,000 per day)
Endorsements:	Cyber Extortion Extension Clause Absolute Theft of Funds Exclusion Clause Choice of Law, Jurisdiction and Service of Suit Condition Amendatory Clause War and Cyber War Exclusion Clause Supply Chain Interruption Events Amendatory Clause	
Deductible:	$75,000	each Claim for All Losses, except:
	$75,000	each Claim, including costs and expenses, for Network Security & Privacy Liability and Media Liability Losses
	$75,000	each Claim for System Damage and Rectification Costs Losses
	NIL	each Claim for Incident Response Costs Losses
	NIL	each Claim for Claim Preparation Costs Losses
	NIL	each Claim for Court Attendance Costs Losses
	NIL	each Claim for Post Breach Remediation Costs Losses
Policy Form:	Cyber, Private Enterprise (CAN) v3.0	
Insurer(s) and Proportion of Participations(s):	CFC Underwriting Ltd. – 100%	
Subject To:	Terms will remain as indicated subject to no claims deterioration as of **February 3, 2024** and **signed within 30 days of Binding.** Satisfactory confirmation that you have downloaded & registered our incident response mobile app, details of which can be found with your policy documents. (30 Days Post Binding).	

Acceptance of Municipal Insurance Program Proposal

To: Marsh Canada Limited

Public Sector Division

120 Bremner Boulevard, Suite 800

Toronto, Ontario Canada M5J 0A8

Telephone: 416 868 2600

Policy Term (mm/dd/yy): **February 03, 2024 - February 03, 2025**

Annual Premium: **$77,779**

We agree with the underwriting and claims information submitted and to the terms quoted in the Municipal Insurance Program proposal. This is your authority to proceed with binding cover(s) as outlined in the Municipal Insurance Proposal effective the date(s) noted above. We have also noted below our choice of any optional items in the Insurance Proposal as well as any specific instructions.

Indicated below are our instructions regarding any optional coverages shown in the insurance proposal.

Optional Coverages / Specific Instructions:

Signed on Behalf of Corporation of the **Township of Billings**

_____ _____

Authorized Signature Date

_____

Please print the name of the person signing above

Implementation of Limit of Liability:

In no event shall either party be liable for any indirect, special, incidental, consequential or punitive damages or for any lost profits arising out of or relating to any services provided by Marsh or its affiliates. The aggregate liability of Marsh, its affiliates and its and their employees to you or your affiliates arising out of or relating to the provision of services by Marsh or its affiliates shall not exceed $10 million. This provision applies to the fullest extent permitted by applicable law.

Marsh Canada Limited
120 Bremner Boulevard, Suite 800
Toronto, Ontario M5J 0A8
+1 416 868 2600

COUNCIL REPORT
Department: Municipal Project Management / Treasury
Date: February 20, 2024
Report Number MPM-2024-02-02
File: 91 Main Kagawong Fitness Centre (2)

Staff Recommendations:

THAT the Township of Billings Council hereby approves Report MPM-2024-02-02, AND FURTHER _____.

Background:

At the regular meeting of Council on December 19th, 2023 (MPM-2023-12- 31), staff recommended conducting a staff-level (Public Works and MPM) review of the condition of 91 Main St. with the purpose of providing more information to Council.

91 Main St. had been placed "out-of-service," as a result of complexities related to the fire hall project – namely, that the building was not safe for occupancy/use once the structural instability of the old fire hall was full realized. In addition, the wastewater connection to the fire hall treatment system was disconnected until the fire hall rebuild was complete. It had also become evident that the sewage lift pump in 91 Main St. – located in the lower floor washroom, was not functioning.

Finally, it was evident that the lower floor washroom itself, used by gym members, and never an ideal installation, had seriously deteriorated and had experienced significant water damage, both from plumbing issues and some exterior water penetration. Thus, the need for further assessment.

Discussion:

The MPM, Public Works Superintendent, and Public Works Lead Operator conducted a preliminary walk-through of the building on January 22nd. This included both levels of the building, as well as an extremely cursory external review. Although brief and not at all in-depth, this visit was enough to confirm simply returning the building to use "as-it-was" will cost several thousand dollars. At the very least, the work required will include the following:

- Complete removal and replacement of the lower floor washroom, including:
    - New floor structure and new flooring
    - New interior surfaces
    - New plumbing and fixtures (toilet, sink, faucet)
    - New sewage pump, and quite possibly a new pump chamber.
    - The existing pump chamber was simply dug into the ground, and sits fairly high – presumably because they installers encountered bedrock. There didn't appear to be any attempt to properly seal the floor. In fact, the entire floor area of the

washroom and adjacent storage area under the stairwell – all of which exists inside a masonry block wall addition to the original building consists of large concrete patio stones, laid close together. In other words, there was no concrete floor pour in this space during the original construction, and therefore no effort to provide moisture or vapour barrier.

- The door to the gym, including the threshold and framing should be replace, because the poor drainage at the front has led to occasional flooding, which has contributed to rot in that area.
- It is highly likely that the gym space needs new flooring, and possibly subfloor work in some areas – particularly near the entrance and also near the entrance to the washroom, because these are too areas definitely affected by moisture.

Theoretically, the work above would return the gym space to usability in a condition similar to what existed previously. This means that the space would still not meet any accessibility standards whatsoever, and with a washroom that, although functional, would be barely so.

To be clear, this work would leave unaddressed the majority of the approximately 30 items identified in the building condition assessment report resulting from the detailed assessment conducted in 2017 – an assessment and report now seven (7) years in the past. All of those recommendations represent best practices, and many are sound maintenance/repair items that really do need to be completed at some point.

Financial Impacts:

Should Council decide to implement the repairs to the lower floor washroom and return the gym to service, then an amount equal to at least the total indicated in Table 1, below, should be brought forward for consideration in the upcoming budget deliberations. Note that this is a Class D+ estimate, meaning an accuracy of no better than +/- 25%. In other words, it is intended to only provide a reasonable range of expenditure for budgetary considerations.

For the sake of illustration of the larger maintenance and repair expenditure situation with respect to 91 Main St., Table 2 provides the major items (or groups of smaller items) from the 2017 condition assessment, with costs from that assessment, and comparative 2024 costs.

Prior to 2023, the upper floor of 91 Main St was being rented for approximately $400.00 per month, or $4800.00 per year. A gym membership (Billings resident) generated $35 per month. The total energy cost for the building in 2023 was approximately $4300.00 – keeping in mind that the building is currently heated by electric baseboards.

Township of BILLINGS

Lower Washroom Repairs (& Associated) Costs - "Class C" Estimate*

Major Category	Sub-Category	Amount
Lower Washroom		
	Sewage pump & chamber	$ 1,200.00
	Toilet, sink, faucet, etc.	$ 750.00
	New floor: structural and flooring	$ 1,000.00
	Interior surfaces: walls and ceiling	$ 1,000.00
	Additional plumbing materials	$ 300.00
Subtotal		$ 4,250.00
Gym Space		
	New exterior door & related	$ 1,250.00
	New flooring	$ 2,250.00
	Electrical allowance	$ 500.00
Subtotal		$ 4,000.00
Total Project		
	Total materials	$ 8,250.00
	Labour	$ 8,250.00
	Subtotal	$ 16,500.00
	25% Contingency	$ 4,125.00
Total		$ 20,625.00
* TMG, MPM		

Table 2: Major Items (Or Item Groups) From 2017 Condition Assessment 2024 Cost Compared to 2017 Costs		
Item	Costing	
	2017	2024*
Roof System	$ 10,000.00	$ 12,200.00
Window Replacement	$ 16,000.00	$ 19,520.00
Other Architectural/Structural	$ 15,000.00	$ 18,300.00
Accessibility Improvements - Exterior	$ 8,500.00	$ 10,370.00
Accessibility Improvements - Interior	$ 8,100.00	$ 9,882.00
Barrier - Free Washroom (Lower Floor)	$ 30,000.00	$ 36,600.00
Propane Furnace	$ 20,000.00	$ 24,400.00
Residential HRV	$ 5,660.00	$ 6,905.20
Electrical Upgrades	$ 4,660.00	$ 5,685.20
Total	$ 117,920.00	$ 143,862.40
*Using an inflation factor of 22%, 2017 to 2024		

Staff seek Council direction on moving forward. Options include:

1. Request a quote on a building assessment report for further details on renovations and upgrades.
2. Investigate options and costing for making the building into a safe state, building remains closed for public use.
3. Investigate options for demolition.

Alignment to Strategic Plan:

Continue to pursue rational, cost-effective, and efficient use of municipal property, buildings, and facilities, to maximize the availability of public space, in the context of the results of the structural condition assessment report.

Alignment to the CEEP:

There is no direct alignment with the CEEP.

Respectfully Submitted by:

Todd Gordon, MPM

Reviewed By:

Emily Dance, CAO/Clerk

COUNCIL REPORT
Department: Municipal Project Management
Date: February 20, 2024
Report Number MPM-2024-02-05
File: Old Mill Rd. Bridge Project (4)
Attachment: Replacement of Old Mill Road Bridge: Proposal Evaluation Report

Staff Recommendations:

THAT the Township of Billings Council hereby approves Report MPM-2024-02-05 AND accepts the proposal from MCA Contracting Ltd., in the amount of $1,252,905.66, for replacement of the Old Mill Road Bridge, AND FURTHER approves the appropriate By-law coming forward at the March 5th, 2024 meeting.

Background:

The window for tender submission for the Old Mill Road Bridge project closed at 2:00 p.m. on February 7th. By the close, proposal packages had been received from six (6) contractors. The proposals were evaluated by the project Engineers, EXP, a per the process outlined in the tender documents (and in the attached evaluation report).

Discussion:

As a result of the evaluation process, EXP has recommended that the Township of Billings engage with MCA Construction Ltd., of Lively Ontario, for construction of the Old Mill Rd. Bridge.

The total upset cost is as indicated - $1,252,905.66 – although staff may be able to find some minor cost savings, with the assistance of the project engineers, in discussion with the contractor.

Financial Impacts:

All five years of the Township's NORDS funding, approximately $384,000.00, has been allocated to this project. The remaining approximately $869,000.00 will have to be funded by the Township and will need to be discussed at the upcoming 2024 budget deliberations. Considerations include a loan from Infrastructure Ontario, a transfer from reserves or a combination of the options.

On June 6, 2023, Council passed By-Law No. 2023-45 authorizing EXP to provide Engineering services for the project in the amount of $64,627 plus HST.

Alignment to Strategic Plan:

1. Continue to develop and implement long-term roads maintenance and improvement.

Alignment to the CEEP:

Climate Change Adaptation and Mitigation - Continuous maintenance of roads, stormwater, and other engineered community assets associated with roads and land-use

Respectfully Submitted by:

Township of BILLINGS

Todd Gordon, MPM

Reviewed By:

Emily Dance, CAO/Clerk

Township of Billings

Replacement of Old Mill Road Bridge

Proposal Evaluation Report

Project Name

Replacement of Old Mill Road Bridge

Project Number

RFP 2024-01

Prepared By: Mark Langille, P.Eng.

EXP Services Inc.
885 Regent St, Sudbury
Ontario, P3E 5M4
Canada

Date Submitted
February 12, 2024

1 Purpose

This report will outline the scoring process executed by EXP's proposal review team for RFP 2024-01 for the Township of Billings

2 Scoring Criteria

The submitting procedure for proponents is the submission of two (2) envelopes. Envelope 1 – Technical Proposal and Envelope 2 – Proposal Form.

The scoring criteria for the purpose of 2024-01 will first have a technical evaluation. The technical evaluation will be scored out of 30 following the criteria shown below in Table 1.

Table 1 : Technical Scoring Criteria

Technical Proposal Evaluation	Point Allocation
Company Experience and Project Management	7
Project Team and Sub-trades	2
Quality Management	3
Environmental Management	3
Safety Management	2
Project Schedule	5
Technical Plan	5
Financial Control	3
Total Technical:	**30**

Once it has been determined that each proponent has received a technical score of 21 or higher, then and only then will each proponent's Proposal Form be opened and evaluated to calculate their total score.

The Proposal Form scoring will be scored out of 70 and follow equation 1 below.

Equation (1)

$$\frac{2 \text{ Times Cost of Lowest Proposal} - \text{Cost of Proposal being Evaluated}}{\text{Cost of Lowest Proposal}} \text{ x Full Weight of Cost Criteria}$$

A total score out of 100 is then summed together from the Technical score and Proposal Form score.

3 Proposal Scoring

Six (6) Proposals were submitted for RFP 2024-01, *Belanger Construction (1981) Inc, Dominion Construction, Denis Gratton Construction LTD, MCA Contracting LTD, Sheppard Custom Building Limited and Teranorth Construction & Engineering Limited*. All six (6) proposals were submitted on time and will all receive a full evaluation.

3.1 Technical Score`

The technical score for each proponent was carefully scored on every aspect of their proposal. The scoring for each section is shown below in Table 2.

Table 2 : Technical Proposal Evaluation

From Table 2 above, each proponent but one (1) has successfully reached the 21 minimum score to be eligible for financial scoring.

Technical Proposal Evaluation						
	Belanger	***Dominion***	***Gratton***	***MCA***	***SCB***	***Teranorth***
Company Experience (7)	6.5	6.5	6	6.5	2	6.5
Project Team (2)	2	2	2	2	1	2
Quality Management (3)	2.5	2.5	2.5	2.5	1.5	3
Enviro. Management (3)	3	2.5	3	3	1	2
Safety Management (2)	2	2	2	2	1	2
Project Schedule (5)	4	5	4	3.5	3.5	5
Tech Plan (5)	4.5	4.5	4	4	4	4
Financial Control (3)	2.5	2.5	2.5	2.5	2	2
Total	***27***	***27.5***	***26***	***26***	***16***	***26.5***

3.2 Financial Score

From the five (5) successful proponent's Envelope 2 - Proposal Form submission, the following total prices were submitted to RFP 2024-01.

Belanger Construction (1981) Inc. - **$ 1,758,321.00**

Dominion Construction. - **$1,308,443.13**

Denis Gratton Construction Ltd. - **$1,734,766.00**

MCA Contracting Ltd. - **$1,252,905.66**

Teranorth Construction & Engineering Limited. - **$1,636,394.76**

***NOTE** – Upon reviewing the Schedule of Prices for each Proposal no calculation errors were found in any of the submissions.*

Each proponent successfully submitted Schedule of Prices, Agreement to Bond,10% Proposal Bond/Deposit and acknowledged Addendum 1,2 &3.

Table 3 : Financial Score

Financial Score	
Belanger Construction (1981) Inc.	41.8
Dominion Construction	66.9
Denis Gratton Construction Ltd.	43.1
MCA Contracting Ltd.	**70.0**
Teranorth Construction & Engineering Limited	48.6

3.3 Total Score

A total score is calculated from the summation of the technical score and financial score shown below in Table 6.

Table 4 : Total Score

Total Score	
Belanger Construction (1981) Inc.	68.8
Dominion Construction	94.4
Denis Gratton Construction Ltd.	69.1
MCA Contracting Ltd.	**96.0**
Teranorth Construction & Engineering Limited	75.1

4 Recommendation

From Table 4 above, it is shown that *MCA Contracting Ltd.* received the highest total score (96.0) out of the five (5) Proposals submitted.

EXP recommends the Township of Billings enter into discussions with *MCA Contracting Ltd.* with the intent to proceed with award and the preparation of the Articles of Agreement for the Replacement of Old Mill Road Bridge Contract 2024-01 for the value of $1,252,905.66 (Excl. HST).

Mark Langille, P.Eng.

Senior Director, Northern Ontario

COUNCIL REPORT

Title: Board and Committee Appointments
Department: Clerks
Date: February 20, 2024
Report Number: CLK2024-02-01
File: C05-Council Committee Appointments 2022-2026

Recommendation: THAT the Township of Billings Council hereby appoints
_____ to the Manitoulin-Sudbury District Services Board
_____ to the Board of Management for the District of Centennial Manor
_____ to The Western Manitoulin Economic Development Committee

Background:

Committee appointments are made at the beginning of the term of Council for the various Boards and Committees for the Township of Billings. On January 17, 2023, Council passed By-Law No. 2023-04 appointing Council members to various Boards and Committees in the Township of Billings.

Discussion:

On December 19, 2023 Council accepted the resignation of Jim Cahill from the Township of Billings Council leaving a vacancy on the following Committees:
Manitoulin-Sudbury District Services Board,
The Board of Management for the District of Centennial Manor,
The Welcome Centre Building Operations Committee (currently on hold) and
The Western Manitoulin Economic Development Committee

It is recommended that a member of Council be appointed to the Committee vacancies as soon as possible to ensure the Township of Billings is represented on the Committee.

Financial Impacts:

Council member attendance at Committee meetings as outlined in the Council Renumeration By-Law.

Alignment to Strategic Plan:

Continue to modify and refine the council committee system to improve organizational effectiveness and communication, and to meet the legislated requirements for council/committee activity.

Alignment to the CEEP:

There is no alignment to the CEEP

Respectfully Submitted By:

Emily Dance, CAO/Clerk

COUNCIL REPORT

Title: Ad-Hoc Committee – Municipal Owned Water System Policy
Department: Clerks
Date: February 20, 2024
Report Number: CLK2024-02-02
File: C05-Ad-Hoc Committee
Attachment: DRAFT Terms of Reference

Recommendation: THAT the Township of Billings Council approves the Terms of Reference for the Municipal Owned Water System Policy Ad-Hoc Committee AND appoints _____ to Chair the Committee AND FURTHER directs staff to advertise to fill the public appointment positions as per current Committee procedures.

Background:

On December 19, 2023, Council directed staff to bring forward a Municipal Owned Water System Policy with respect to the operations and financing of municipal water system in the second quarter of 2024 including engagement with the water users and the financials regarding the "water bank account.

Further on January 16, 2024, Council approved the creation of a Sub-Committee for the purpose of the creation of a Municipal Owned Water System Policy.

Discussion:

There are different types and structures of Sub-Committees for Council consideration, the two main types are Ad-Hoc and Advisory.

Ad-Hoc Committee: is a committee established by resolution of Council to carry out a specific function as mandated in the associated Terms of Reference. They can be created quickly to mobilize a group to address a particular project and may cross functionality with other Boards, Committees, or Departments. Ad hoc committees have a specific end date that coincides with the completion of their mandate and citizen appointments can be made by Council as required.

Advisory Committee: is a committee established to provide advice to Council as mandated in their specific Terms of Reference. Advisory Committees will provide advice to Council through Committee recommendations/resolutions and/or staff reports.

Due to the specific mandate of the Committee, it is recommended that an Ad-Hoc Committee be established with the purpose of creating a Municipal Owned Water System Policy.

Terms of Reference: A terms of reference outlines the responsibilities, role, Committee Structure, reporting requirements and meeting times and procedures of the Committee.

Staff have provided a Draft Terms of Reference for an Ad-Hoc Committee for the creation of a Municipal Owned Water System Policy for the Kagawong Water System.

The key items for consideration include:

- Develop clear procedures on "Capital Projects and Major Upgrades" to the waterlines on the Kagawong Water System;
- Consider if a water system asset management plan and water rate study should be completed and how it could be funded;
- Review the current water levy and consider if the water levy should be broken down into operating and capital projects for the water plant and lift station for transparency;
- Review options for implementing a capital levy that can be used to create a "water capital reserve" to off-set capital costs associated with waterline replacements and upgrades for all benefiting properties;
- Develop communication and public engagement procedures.

There will be an opportunity for the Committee to review the key items and make any necessary amendments or deletions (Subject to Council approval). It is proposed that the Committee meet during regular business hours to ensure Township staff attendance and should the Committee request input from OCWA they too would be available without incurring overtime costs. The date and time can be discussed further once the Committee is formed.

It is very important to acknowledge that the Sub-Committee and their mandate will be independent from the obligations of the Township as it relates to Ontario's Drinking Water Quality Management Standard (DWQMS). This standard sets out a framework for the operating authority (Ontario Clean Water Agency) and the owner (Township of Billings) of a drinking water system to develop a Quality Management System that is relevant and appropriate for the system.

Financial Impacts:

Council member attendance at Committee meetings as outlined in the Council Renumeration By-Law. Staff time in the preparation and attendance at Committee meetings.

Alignment to Strategic Plan:

Continue to modify and refine the council committee system to improve organizational effectiveness and communication, and to meet the legislated requirements for council/committee activity.

Alignment to the CEEP:

There is no alignment to the CEEP

Respectfully Submitted By:

Emily Dance, CAO/Clerk

TERMS of REFERENCE:
Ad-Hoc Committee – Municipal Owned Water System Policy

Date Established by Council:
Resolution:
Type of Committee: Ad Hoc Committee
Expected Duration: The committee is expected to operate during the 2024 Calendar year. The committee's tenure can be extended as required, at the discretion of council.

Roles and Responsibilities

- It is the responsibility of all appointed members to comply with the:
  - The Municipal Conflict of Interest Act
  - The Code of Conduct for Members of Council and Local Boards of the Corporation of the Township of Billings
  - The Township's Workplace Harassment and Discrimination in the Workplace Policy
  - The Township's Accountability and Transparency Policy
  - The Township's Procedural Bylaw
  - Any and all other applicable municipal bylaws
  - The Ontario Municipal Act
  - The Ontario Municipal Freedom of Information and Protection of Privacy Act
- No individual member nor the Committee as a whole, has the authority to make direct representations of the Township to Federal or Provincial governments.
- Members shall abide by the rules outlined within the Municipal Conflict of Interest Act, and shall disclose any pecuniary interest to the chair, and shall remove themselves from meetings for the duration of the discussion and voting (if any) with respect to that matter.

Activities

The following represent the general activities of the committee:

- Develop clear procedures on "Capital Projects and Major Upgrades" to the waterlines on the Kagawong Water System;
- Consider if a water system asset management plan and water rate study should be completed and how it could be funded;
- Review the current water levy and consider if the water levy should be broken down into operating and capital projects for the water plant and lift station for transparency;
- Review options for implementing a capital levy that can be used to create a "water capital reserve" to off-set capital costs associated with waterline replacements and upgrades for all benefiting properties;
- Develop communication and public engagement procedures.

Composition and Structure

The committee will be comprised of the following members, as appointed by council:

- A member of Council (as chair)
- Mayor sitting ex officio, with voting privileges when present;
- Four (4) members of the community. Members must be a resident of Billings and own property that currently derive or in the future derive a benefit from the Kagawong Water System.
- One (1) staff member to assist in committee administration, keep minutes and act as a resource person/liaison.

Resource Person(s)

The CAO/Clerk and Director of Finance/Treasurer will provide support to this committee in the form of advice. Staff from OCWA may be invited from time to time to provide information to the Committee.

Reporting

Any recommendations made by this Committee will be in the form of a written report presented to Council for their consideration. If appropriate, this information may be supported by oral presentation to Council.

Meeting Times and Procedure

It is expected that the committee will meet monthly at the Park Centre or by electronic means at a consistent date and time, during day-time business hours. Meeting notice for this committee, and meeting procedure, will respect the requirements of the Municipal Act and the Township's procedural bylaw.

Terms of Reference

Council may, at its discretion, change the Terms of Reference (TOR) for this Committee at any time. Any changes proposed to these TOR shall be recommended to Council through an appropriate report. The Committee may also be dissolved by resolution of Council.

COUNCIL REPORT

Title: Rural Economic Development Program (RED)
Department: Clerks
Date: February 20, 2024
Report Number: CLK 2024-02-03
Attachment: Letter of Support – February 14, 2024

Recommendation: THAT the Township of Billings Council hereby approves report CLK-2024-02-03 AND provides support to the Town of Gore Bay in their application to the RED program for a marketing plan to raise awareness of the amenities in Gore Bay and the Township of Billings.

Background:

Ontario's Rural Economic Development (RED) program provides cost-share funding to support activities that create strong rural communities in Ontario, and opens doors to rural economic development through:

- funding assistance to address barriers to economic development and labour force challenges, better position rural communities to attract or retain investment, and enhance economic growth
- funding to build community capacity and support for economic development in Ontario's rural communities
- investments in rural communities to help diversify and grow local economies – making economic growth more inclusive so rural Ontario continues to share in the province's economic prosperity

Discussion:

The Town of Gore Bay approached staff with an opportunity to support their application to RED program. The Town of Gore Bay is making an application for the development of a tourism marketing plan to raise awareness on the amenities in Gore Bay and in the Township of Billings including Bridal Veil Falls and the connection trail.

If successful, the tourism marketing plan will include marketing materials that can be promoted on our social media channels, print and other creative avenues.

Staff have drafted a letter of support for the Town of Gore Bay to include in their application.

Financial Impacts:

There are no financial impacts related to supporting the application.

Alignment to Strategic Plan:

Support the "Island-Wide Sustainable Tourism Development' initiative of the MTA as part of a comprehensive and longer-term Township of Billings marketing and promotion campaign.

Alignment to the CEEP:

There is no alignment to the CEEP

Respectfully Submitted By:

Emily Dance, CAO/Clerk

Township of BILLINGS

Province of Ontario
Rural Economic Development

February 14, 2024

RE: Town of Gore Bay Application – Marketing Plan

I am writing this letter on behalf of the Council of the Corporation of the Township of Billings in support of the application from the Town of Gore Bay for the development of a tourism marketing plan to raise awareness of the amenities in Gore Bay and surrounding communities.

The economy of Billings is driven by tourism and nature. Bridal Veil Falls, a 34-meter-tall waterfall, fed by Lake Kagawong one of Manitoulin's' most popular attractions. Visitors can access the falls with an easy hike on the Billings connections train which includes public sculptures and heritage plaques installed as part of the Billings Canada 150 project.

There are souvenir and collectibles shops, eateries, a small chocolate shop, a boating supply and repair facility, a gas station and several tourist resorts. The Wednesday Kagawong market is a must go destination for both visitors travelling by vehicle or by boat.

The development of a tourism marketing plan which includes the Township of Billings will be an economic boost to our community and Manitoulin Island as a whole.

Sincerely,

EDance

Emily Dance, CMO, AOMC
CAO/Clerk
Township of Billings

Tiana Mills

To: Emily Dance
Subject: RE: Thank you

-----Original Message-----
From: Ian Anderson
Sent: Friday, February 2, 2024 1:45 PM
To: Emily Dance <edance@billingstwp.ca>
Subject: Thank you

Emily

Good afternoon!

On behalf of the Gore Bay Fish and Game Club can you please pass on to the entire council our most sincere thanks for this years contribution for our clubs walleye stocking program.

This will be a huge help to our club and enable us to continue our efforts to improve the sports fishery in Lake Kagawong.

Regards,

Ian Anderson
Secretary,
Gore Bay Fish and Game Club

Sent from my iPhone

A volunteer doing the third summer of cutting to control Phragmites at Leask Bay/Hilly Grove.

Phragmites (say “frag-MITE-eeze”) is a very tall, invasive grass that has been spreading aggressively on shorelines and in wetlands in our area. Phragmites grows into dense patches that can eventually wipe out all other vegetation. It is a serious threat to wildlife and fish habitat, recreation, tourism, property values, and aesthetics. Southern Ontario has lost thousands of hectares of natural habitat to this highly invasive species. **The Manitoulin Phragmites Project** was started to make sure this does not happen on Manitoulin Island. The Project has just finished its 8th year of work.

Our Goal: To reduce Phragmites across our landscape to a low level that can be maintained by ordinary people with a little bit of annual effort. **This letter tells all about our work in 2023** toward that goal. A list of all Manitoulin Phragmites sites and their control status begins on page 5.

A scaled-back Project in 2023. We didn't get Ontario funding (the fund's 2023 priorities didn't fit our project well). We did get notice of federal funding in July but didn't get signed paperwork until December. We were able to work thanks to invaluable support from Manitoulin Transport, Manitoulin Streams, and many dedicated volunteers. We didn't have a full time field team, but veteran phraggers Rad Mroz and Sheila Madahbee worked "casual" (which is the wrong word given how hard they worked).

With no team, I focused on work I could do alone, mainly working on sites where herbicide was appropriate (dry ground, ditches, finished sites with a few remaining stems). When there were other people working, we concentrated on maintaining sites in progress to not lose the gains made last year. Given the challenges, I'm happy to say we had a very successful year!

2023 statistics

- 23 sites worked (9 species-at-risk [SAR] habitats, 7 roadside ditches, 2 other shorelines)
- 59.4 hectares of habitat controlled or maintained (52 ha in SAR habitat with 40 ha at Lake Wolsey).
- 122 km of roadside ditches surveyed
- 88 km of shoreline surveyed (all of Lake Manitou plus Jacko Bay and Sims Bay)
- 7 ha of inland wetland surveyed
- 2 additional new sites surveyed for Phragmites work planning
- 2 surveys done to monitor SAR
- 2 house calls made to check sites—no phrag found!

Manitoulin Phragmites Week went ahead. I reminded our 47 Phrag Watchers to check their sites. Almost everyone responded! Newspaper ads urged people to look for Phrag and to report it to us. We made a few house calls to follow up. I presented to 83 enthusiastic people at the Lake Manitou Area Association. This led to many new contacts and a new volunteer who took us by boat to survey all of the Lake Manitou shoreline!

Don't Drive Through Phrag! Phrag is mainly spread by ATVs and machinery. Phrag may spread back into our control sites because the water in Lake Huron continues to drop, and people can drive on the shore again. We continue to advertise (newspaper, radio) the Don't Drive message. Working with Fuel the Fire TV and with extra funding from the Canadian Wildlife Service, we also filmed a more general 30 second commercial about responsible ATV riding. You can see it on the Project's YouTube channel or on FTFTV.

Phrag Watcher shows off after annual clean up at Mac's Bay. Photo: Donna Haynes.

Herbicide is a tough issue. It takes some soul searching to accept that we sometimes have to use a small amount of herbicide or we will lose natural habitats. A lot of effort this year went into getting this message out there, and to work towards approval to use herbicide in Wiikwemkoong Unceded Territory.

Herbicide in Wiikwemkoong? With the help of the WUT Department of Lands and Natural Resources, I presented the proposal for herbicide use to the community. I posted a presentation on our YouTube channel (it's still there if you want to watch it) and the link on the WUT events page. At the WUT open house I spoke with over 150 people about Phrag and herbicide and was interviewed on the community's live feed. Having covered the bases, I presented to chief and council who were receptive. They asked for comment by Wiky Health, a detailed spraying plan, people to do monitoring and oversight, and a survey of medicinal plants in advance—all good ideas. The proposal will likely go back to C & C in early spring.

Work at Lake Wolsey in 2023 was full steam ahead! We contracted the Invasive Phragmites Control Centre's two person spray crew to spray all the patches of Phrag standing on dry ground on the municipal shoreline. I thought this would be a multi-year task, but they were able to get to all the dry-land Phrag in our entire work area! Our people maintained the in-water areas worked in 2022. If all goes as planned, we hope to have the entire 60+ ha shoreline under control when the Project ends in 2025. Yay!!!

Looking ahead Travel time is a significant issue for the Project. This is a big Island and we work all over it, so in each 8 hour day we lose a lot of work time to driving. In 2024, we're going to try a different strategy and work on one half of the Island, leaving the other half for 2025. Depending on the outcome of

the WUT herbicide proposal, 2024 may see us mainly in WUT and 2025 may see us based out of western Manitoulin. We'll see how it goes.

We are hiring! We are looking for some new team members to start in mid-May, especially if you want to work in Wiikwemkoong. Phragging is hard work but very rewarding, and we go to some nice places. If you are interested, email a resume. Because of the travel challenges, our team members must be living on Manitoulin Island during the summer and must have a valid driver's licence.

Help make Manitoulin Island Phrag-free!

- DON'T DRIVE THROUGH PHRAGMITES! Learn to recognize it. If you do drive through it, clean your ATV or vehicle in the yard before going out again.
- WHEN PULLING WEEDS OFF THE BOAT PROP, throw them in the boat for disposal on dry land.
- READ OUR SIMPLE INFO PAMPHLET available on our Facebook page (@manitoulinphrag) or WATCH our YouTube channel (search Manitoulin Phrag).
- KEEP AN EYE OUT FOR PHRAGMITES AT HOME. Contact us if you have some. We'll help you figure out what to do and get you started.
- REPORT PHRAGMITES LOCATIONS TO US. Tell us where you find it so we can take action.
- JOIN US for **Manitoulin Phragmites Week, July 16-21, 2024**. We can host a work bee in your area or make a house call to your property.
- HIRE SUMMER STUDENTS and make Phrag control part of their job. We'll be happy to train them.

The Manitoulin Phragmites Project, 2023-2024, is sponsored by ❤️
The Habitat Stewardship Program (Environment and Climate Change Canada)
Manitoulin Transport
The Invasive Phragmites Control Centre
Manitoulin Streams Improvement Association
Nature Conservancy Canada
Wiikwemkoong Unceded Territory
White's Shell
And a host of local volunteers
THANK YOU!

Phragmites and ATV tracks.

Don't drive through Phrag! Phrag is spread from pieces of plant stuck to vehicles and machinery.

If you drive through Phrag, you help it travel to new places.

The Manitoulin Phragmites Project, P.O. Box 278, Manitowaning, ON P0P 1N0 (705) 859-1027
manitoulinphrag@yahoo.com Facebook.com/manitoulinphrag

List of sites where Phragmites is or has been present; control (**C**), maintenance (**M**) or a survey (**S**) done in 2023; control status; work still needed. Please email us about any Phragmites locations not listed here.
*Species at Risk habitat

SITE NAME (alphabetical by municipality and First Nation)	**Work or Survey in 2023**	**STATUS 2023**	**COMMENTS**
Aundeck Omni Kaning First Nation			
Highway 540 ditches	**S**	Present	Sprayed by MTO in 2019; not killed
Lake Road		Present	Ditches; could maybe be sprayed.
Assiginack			
Bidwell Rd ditch by Scotch Line		Present	Mowed 2016, 2019, 2021. Under control; American race?
Clover Valley* & Leask Bay Shores		Under Control	Landowners are watching the site.
Corbett's Beach Road	**C**	Under control	Sprayed
Highway 6 south and north of Manitowaning	**S**	Present	Sprayed by MTO in 2022; a few small patches remain that should be controlled before they grow
Lake Manitou near Queen's Lane	**S**	Present	Needs landowner contact
Manitowaning Arena ditch	**C**	Eradicated	Follow-up spraying; a few stems left from 2022
Manitowaning dump		Eradicated	
Manitowaning Meredith St ditch		Present	
Manitowaning Michael's Bay Rd	**C**	Eradicated	Follow-up spraying; a few stems left from 2022
Manitowaning public works yard	**C**	Under control	Sprayed; some still remains where too wet to spray
Manitowaning Bay, off Cardwell	**C**	Under control	Follow-up spraying; a few stems left from 2022; still a few more to do where too wet to spray
McLennen's Creek mouth* to Black Rock*	**C**	Under control	Landowners are maintaining part of site. Area near Cowan SR cut but still needs follow up.
Hilly Grove* – Leask Bay*	**C**	Under control	Cutting; spraying; needs follow up in 2024.
Rogers Creek mouth and interior wetlands* (partly in Tehkummah)		Under control	Volunteers are maintaining the site.
Sim's Island and adjacent bay	**S**	Present	Surveyed to plan work for 2024.
Turtle Lake south		Present	Surveyed 2016. Extensive patches and no public access; control probably impossible without machinery and long-term plan.
Billings			
Hideaway Lodge and Cove		Partially under control	Lodge shoreline is under control; shoreline north of lodge needs work
Grandor Rd & Windjammer Rd		Under control	One small cluster of stems needs follow up
Maple Point Road		Eradicated	Volunteers are maintaining the site.
Mud Creek Road*	**M**	Under control	Volunteer is maintaining the site.
Newburn Road ditches / wetland*	**C**	Present	Dry areas sprayed; needs more work; needs survey for Black Ash
Burpee-Mills			
Campbell Bay		Under control	Volunteers are maintaining the site.
Campbell Road ditch		Eradicated	Municipality watching site.
East of Portage Bay*		Eradicated	Adjacent landowners are watching the site.
Portage Bay—Eastern*		Eradicated	Adjacent landowners are watching the site.
Portage Bay—Western*		Eradicated	*Phrag Watcher needed to check on site.*
Lake Wolsey Causeway S		Eradicated	*Phrag Watcher needed to check on site.*
Mac's Bay*	**C**	Under control	Adjacent landowners are maintaining the site.
Marsh Lake		Present	Assessed 2021. Large patches, restricted access. May be American race. Needs genotyping.

Misery Bay*	**C**	Under control	Patches on western alvar sprayed by Ontario Parks
Murphy Harbour*		Under control	Adjacent landowners are watching the site.
Ned Island, bay and shoreline		Present	Surveyed in 2022; large patches; boat access.
Tasker Shoreline East*		Eradicated	Adjacent landowners are watching the site.
Twilight Isle Marsh		Under control	Last worked 2022; needs checking. *Phrag Watcher needed to maintain site.*
Central Manitoulin			
Dean Bay*		Eradicated	*Phrag Watcher needed to check site.*
Dominion Bay*		Under control	Landowners maintaining site.
Hwy 542 ditch W of Gilchrist SR		Present	Partially sprayed by MTO in 2022 but a lot not killed
Hughson Bay		Eradicated	Adjacent landowners are watching the site.
Ketchankookem Trail ditch		Present	Landowner mows area; *Phrag Watcher needed to monitor site.*
Lake Huron Dr & 14th Conc. Rd		Eradicated	Landowner is watching the site
Lake Huron Dr. ditches	**M**	Under control	A few remaining stems were sprayed. Landowner is watching the site
Lake Manitou at Reggie Lane		Present	Needs survey and landowner contact.
Lake Manitou Bell Bay	**S**	Present	May be American race; needs genotyping
Lake Manitou Ben's Bay	**S**	Present	May be American race; needs genotyping
Lake Manitou Moody Bay	**S**	Present	May be American race; needs genotyping
Mindemoya water treatment plant	**C**	Under control	Ditch sprayed
Lake Mindemoya Hwy 551 rest area	**M**	Under control	Volunteer is maintaining the site.
Lonely Bay*		Eradicated	Landowner is watching site
Lougheed's Bay*		Eradicated	*Phrag Watcher needed to check site.*
Mud Lake Fen		Under control	*A few Phrag Watchers needed for occasional maintenance in large natural habitat.*
Providence Bay*		Eradicated	Volunteer is watching the site.
East of Providence Bay		Eradicated	*Phrag Watcher needed to check site.*
Rathburn Bay		Present	Reported to us in 2020; needs survey
Rockville Road near Lucar Pt Rd	**S**	Present	Ditch. Needs work
The Sand Lakes		Under control	Landowner is maintaining the site
Silver Bay Road ditch	**C**	Under control	Follow-up spraying; volunteer is watching the site.
Square Bay*		Eradicated	*Phrag Watcher needed to check on site.*
East of Timber Bay		Eradicated	Adjacent landowners are watching the site.
Cockburn Island Note: Project staff have not worked on Cockburn Island since 2019, but volunteers continue to check sites.			
Weatherbee Bay		Eradicated	Volunteers watching site
SW side of point S of Weatherbee Bay		Eradicated	Volunteers watching site
Sand Bay*		Eradicated	Volunteers watching site
Sand Lake		Under control	*Phrag Watcher needed to maintain site.*
Doc Hewson Bay*		Under control	NCC managing site.
Lakeshore Road (14th) shoreline		Eradicated	NCC managing site.
Mud Bay, Cockburn Island		Under control	NCC managing site.
Cranberry Bog		Present	NCC managing site.
Crossover Road ditches		Under control	NCC managing site.
Pitman Point wetland		Present	NCC managing site.
Ricketts Harbour*		Eradicated	NCC managing site.
Robb Lake			NCC managing site.
Robinson Bay		Eradicated	*Phrag Watcher needed to check site.*

Tolsmaville hydro corridor		Under control	*Phrag Watcher needed to maintain site.*
Tolsmaville: Otter Bay		Eradicated	Volunteers are watching the site
Wagosh Lake		Present	NCC managing site.
Little Wagosh Lake		Present	NCC managing site.
Wagosh North Fen		Present	NCC managing site.
Wagosh Bay*		Eradicated	NCC managing site.
9th Conc. ditches		Eradicated	Volunteers watching site
10th Side Road ditch		Eradicated	Volunteers watching site
12th Conc. ditch west of airstrip		Eradicated	Volunteers watching site
Dawson			
East Belanger Bay*		Present	Needs follow up from 2019
West Belanger Bay*		Under control	Needs checking.
Maple Lake		Under control	NCC managing site.
Twin Lakes*		Present	Large patches; remote location; Ontario Parks managing site.
Vidal Bay	**C**	Under control	NCC managing site.
Gordon-Barrie Island			
10th Line ditches*		Present	Ditches adjacent to wetland. Some patches on dry land. Volunteer is watching the site.
Barrie Island south shore L17 Con 2?		Present	Needs work; needs landowner contact
Campbell Bay at end of Conc. 4		Under control	Needs to be checked. *Phrag Watcher needed to check site.*
Goose Cap Crescent		Present	Large patch, inland, private property. Needs work.
Julia Bay & Comfort Cove	**M**	Partially under control	Volunteers maintained the causeway, swim beach, part of eastern shore. From west to east, ¾ under control.
Ice Lake Causeway*		Under control	Sprayed by MTO.
Lake Wolsey Causeway N		Under control	A few stems; *Phrag Watcher needed to check site.*
Lake Wolsey northern shoreline	**C**	Present	Large area. All on-land patches sprayed in 2023. In water work planned for 2024.
Rozell's Bay/Bayfield Sound	**C**	Partially under control	In progress: on-land patches near the airport were sprayed. Still requires in-water work.
Salmon Bay off Whitetail Dr.*		Under control	*Phrag Watcher needed to maintain site.*
Sturgeon Bay		Partially under control	Several patches in very shallow water and on land.
Town of Gore Bay			
Manitoulin Golf Course		Present	Needs to be checked. Discussed with golf course staff; requested they spray it.
Stream course on 540B east of Wright St.		Present	Needs landowner contact. Needs survey.
M'Chigeeng First Nation			
Highway 540 roadside west of M.S.S.		Present	Not sprayed by MTO because supposedly a natural, native species. Needs genotyping.
Highway 551 pedestrian trail		Present	On land; Waiting for MFN approval for spraying
Lagoon outflow, north of M.S.S.		Present	Large on-land patches; needs survey.
Lake Mindemoya off Lakeshore Rd		Under control	*Phrag Watcher needed to maintain site.*
Northeastern Manitoulin and Islands			
Bass Lake on Town Line Road		Present	Spraying in 2022 approved but not done. *Phrag Watcher needed to maintain site.*
Freer Point western shoreline *		Present	Boat access. Needs work.
Highway 6 across Great Cloche Island*		Present	Extensive patches; control promised in 2022 construction zone but no actions done.
Highway 6 ditch on Ferguson's		Eradicated	Sprayed by MTO

Hill			
Honora shoreline (Freer Point to M'Chigeeng)		Under control	Landowners are maintaining some areas. *Additional Phrag Watchers needed.*
Ironside Road, Sheguiandah		Under control	A few stems on remain on private property
Little Cloche Island at Dinner Point Depot		Present	Reported with photo. Needs survey.
Little Current / Harbour View at beacon	**C**	Present	Requires follow up *Phrag Watcher needed to maintain site.*
Low Island		Under control	A few stems still need follow up. *Phrag Watcher needed to maintain site.*
Strawberry Channel: White's Point to Sheguiandah FN	**M**	Under control	Assisted landowner of one area; Landowners maintaining some areas. *Phrag Watchers needed.*
Trotter's Side Road beside Rolston Quarry		Present	On private property. Landowner contact needed.
Turtle Lake North		Present	Surveyed 2016. Large patches; no public access.
Strawberry Island W shoreline*		Present	Ontario Parks managing site.
Ten Mile Point Road ditch		Eradicated	*Phrag Watcher needed to check site.*
White's Point*		Under control	Landowners are maintaining the site.
Horseshoe Bay, Great Duck Is.*		Eradicated	Not checked recently. *Phrag Watcher needed to check site.*
Old harbour, Great Duck Island		Present	Reported to us; needs survey
Robinson			
Beaver Meadows*		Present	Large patches; difficult access. American race?? NCC and Ontario Parks manage sites.
E of Black (Green) Point*		Eradicated	*Phrag Watcher needed to check site.*
Burnt Island Bay	**C**	Under control	Sprayed. Landowners are maintaining the site.
Burnt Island Harbour east	**C**	Under control	Sprayed *Phrag Watcher needed to maintain site.*
Carroll Wood Bay*		Under control	Needs to be checked. *Phrag Watcher needed to maintain site.*
Christina Bay*		Eradicated	*Phrag Watcher needed to check site.*
Cooks Dock		Present?	Needs survey; seen with binoculars
West of Cooks Dock		Present	Reported to us with photo. Needs survey.
Falls Lake and Young Lake		Present?	Reported to us. Needs survey.
Fisher Bay*		Eradicated	*Phrag Watcher needed to check site.*
Ivan Point*		Eradicated	*Phrag Watcher needed to check site.*
Maple Lake		Present	NCC is managing the site.
Misery Bay W of Ironside Beach*		Eradicated	*Phrag Watcher needed to check site.*
Misery Bay western alvar area		Under control	Sprayed by Ontario Parks
Portage Point*		Under control	Needs follow up; Landowners are maintaining site.
Sand (Hensley) Bay*		Under control	Needs to be checked. *Phrag Watcher needed to maintain site.*
Highway 540 Silver Water ditch		Under control	Sprayed by MTO in 2022.
Vidal Bay	**C**	Under control	NCC is managing the site.
Sheguiandah First Nation			
Highway 6 south of Ogimaa Miikan corner		Under control	Sprayed by MTO 2022
Pow-wow Grounds (part of Sheg Bay site listed in NEMI)		Under control	*Phrag Watcher needed to maintain site.*
Ogimaa Miikan and other roadside ditches in community		Present	Could be sprayed; needs approval of community.
Sheshegwaning First Nation			
Zhiibaahaasing Road ditches	**C**	Partially under control	Several patches; some were spaded; needs follow up

Tehkummah			
Frood Harbour*		Eradicated	Phrag Watchers are watching site.
Highway 6 south of Lakeshore Road	**S**	Present	Surveyed for 2024. Dry land on private property; have landowner consent & approval for herbicide.
Lakeshore Road North		Under control	Ditch sprayed in 2021; still present on private property. Requires landowner contact.
McKim Bay	**C**	Under control	Sprayed; one small patch remains on private prop.
Michael's Bay Manitou R. to Blue Jay Cr.*	**M**	Under control	A few stems left on shore. Phrag Watchers are maintaining the site. Patch present in inland fen.
Michael's Bay south of Blue Jay Creek*	**C**	Under control	Sprayed; a few stems still remain.
Rogers Creek mouth and interior wetlands* (partly in Assiginack)		Under control	Volunteers are maintaining the site.
Royal Michael's Bay area		Under control	Volunteer is maintaining site.
South Baymouth sewage lagoon		Under control	Volunteer is maintaining site.
Wiikwemkoong Unceded Territory			
Ambulance base corner		Present	Large patch in ditch
Andrew's Place beach		Present	Large patches; control started by landowners
Beach Road		Partially under control	New patches in roadside ditch. Shoreline is under control. *Phrag Watcher needed to maintain shore.*
Big Burnt Island; south shore		Present	At least three large patches; boat access only
Buzwah savannahs above 2 O'clock*		Present	Remote area needs several days of work; requires ATV to access
Cape Smith Georgian Bay and Wiky Bay shorelines		Present	Many large patches; boat access only?
Jacko Bay*	**S**	Present	Very large area with multiple patches in water and on land. Requires detailed work plan.
Kaboni Beach*	**M**	Under control	On land patch: one afternoon of work by the team *Phrag Watcher needed to maintain site.*
Kaboni Rd, South Bay Rd* & Wiky Way ditches		Present	Dry land patches; needs coordination with Public Works
King's Bay roadside ditches		Present	On land patch *Phrag Watcher needed to maintain site*
Manitowaning Bay shore near old Eshkibok farm*		Present	Needs survey
M'nishensing*		Eradicated	*Phrag Watcher needed to monitor site.*
Prairie Point*		Partially under control	On-land patches still require work. *Phrag Watcher needed to maintain site.*
Small bays south of Prairie Point		Present	Numerous small patches and a few large ones; boat access only
South Bay: Head of bay: Clover Valley to Pheasant's Creek*		Partially under control	Needs follow-up control from work in 2021.
South Bay Road at Pheasant's Creek*		Under control	One on-land patch still present at south side. *Phrag Watcher needed to maintain site.*
South Bay at the Narrows		Under control	Volunteer maintaining site.
South Bay Community Centre shore	**M**	Under control	A few stems only. *Phrag Watcher needed to maintain site.*
Tamarack Harbour*		Not checked recently	Patches on roadside need work; *Phrag Watcher needed to maintain shoreline.*
Thomas Bay*		Eradicated	*Phrag Watcher needed to monitor site.*
Little Thomas Bay*	**M**	Partially under control	In water area at west side maintained. Large site with big patches both in water and on land.
Water Treatment Plant (marina)		Present	On-land patch in high-traffic area. Needs coordination with Public Works
Wiky (Smith) Bay mouth of Mebine Creek to water treatment plant		Partially under control	Other than water plant, shoreline is under control from marina to "School" Creek. Rest of area needs machinery and long-term management plan

AORS

PROMOTING **KNOWLEDGE**. PURSUING **EXCELLENCE**

January 8, 2024

Dear Head of Council, Deputy Head of Council and Councillors,

Your local Public Works department provides invaluable services within your community. Without the dedicated public works employees that you are fortunate to have, many basic functions in your community would not be able to happen. Without maintained roads, your emergency services (police, fire, and ambulance) would not be able to respond to calls, school buses could not run to get children to school, and your residents would not be able to leave to work, school, appointments, children's extra-curriculars and any other activity important to them. Additionally, as you work with the provincial government to tackle the housing crisis, your communities require more core infrastructure to handle the growth. For the health and safety of our communities it is important we keep our Public Works department staff complement full, and well trained.

Public Works departments across the province have already begun to feel the impacts of labour shortages, and as we will begin to see many retirements across the province, the shortage will become even more exasperated. From a recent survey that AORS completed with public works departments from across Ontario, we know that 91.5% of respondents will be hiring entry level positions in the next three to five years. However, we are already seeing the start of the labour shortage. From our survey, we found that 70% of respondents already reported getting less than five applications for entry level positions when posted, and the top three challenges municipalities are currently facing is a lack of applicants, applicants that do apply not meeting the required qualifications and municipalities having to compete with private sector positions.

Over the last year, AORS has been dedicating much of our advocacy to encouraging youth to consider careers in public works through career fairs, local government presentations to students, developing printed resources for guidance counsellors and much more. AORS has also been working closely with Fanshawe College Corporate Training Solutions to develop a Municipal Operator Course that would train potential municipal equipment operators to come to your municipality with the basic knowledge they need to begin maintaining your core infrastructure. This would be the first course of its kind that would attract potential students from across the Province of Ontario. To fund this endeavor, AORS has applied for a Skills Development Fund through the Province's Ministry of Labour, Training, Immigration and Skilled Trades. We are reaching out to you for your support in our application and your advocacy to the province on why having more – and qualified – applicants to our public works departments are so imperative.

We would ask that you consider passing the following motion:

WHEREAS, municipal public works departments from across the Province of Ontario provide invaluable services to our communities ensuring the health and safety of all residents;

AND WHEREAS, if it was not for our municipal public works employees from across the Province of Ontario maintaining our public roads systems, our communities would not be able to function as

268 Maiden Lane, Suite 206, PO Box 2669, St. Marys, ON N4X 1A4
Tel: 226.661.2002 • Fax: 226.661.2003 • admin@aors.on.ca • www.aors.on.ca

emergency personnel could not respond to calls, school buses could not get our children to school, residents would not be able to get to work, school or appointments and many more basic functions would not be able to happen;

AND WHEREAS, municipal public works departments are already feeling the impacts of a labour shortage, which will only be exasperated over the next three to five years, which will cause levels of service municipalities are able to provide to ensure the health and safety of our residents to decrease;

AND WHEREAS, there is currently no provincial-wide course that properly trains potential municipal public works employees, specifically relating to municipal heavy equipment.

THEREFORE IT BE RESOLVED, that (INSERT MUNICIPALITY NAME) supports the work of the Association of Ontario Road Supervisors to develop a Municipal Equipment Operator Course to address this issue;

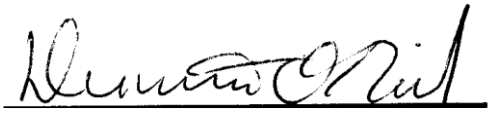
AND THAT, (INSERT MUNICIPALITY NAME) calls on the Province of Ontario's Ministry of Labour, Training, Immigration and Skilled Trades to fully fund the Municipal Equipment Operator Course in 2024 through the Skills Development Fund;

AND THAT, a copy of this resolution be sent to the Minister of Labour, Training, Immigration and Skilled Trades David Piccini, (INSERT MUNICIPALITY'S NAME)'s Member of Provincial Parliament (INSERT LOCAL MPP NAME) and the Association of Ontario Road Supervisors.

We appreciate your on-going support and should you have any questions or concerns, please do not hesitate to contact AORS for all things municipal public works!

Best regards,

John Maheu
AORS Executive Director



Dennis O'Neil
AORS Member Services Coordinator

Christie Little
AORS Training and Programming Coordinator

Kelly Elliott
AORS Marketing and Communications Specialist

THE TOWNSHIP OF
GREATER MADAWASKA

January 22, 2024

Cheryl Gallant
House of Commons
Ottawa, ON K0J 1H0

Sent via email: cheryl.gallant@parl.gc.ca

Re: Support of Bill C-310 and Amendments to Subsections 118.06 (2) & 118.07 (2) of the *Income Tax Act* (Tax Credit for Volunteer Firefighters)

Dear Ms. Gallant,

Please be advised that at the Regular Council Meeting on January 18th 2024, the Township of Greater Madawaska Council passed the following resolution, supporting the attached resolution from the Municipality of Wawa regarding Support of Bill C-310 and Amendments to Subsections 118.06 (2) & 118.07 (2) of the *Income Tax Act* (Tax Credit for Volunteer Firefighters).

Resolution #9-24
Moved by Councillor Thomson
Seconded by Councillor Levesque
That Council support Municipality of Wawa's Resolution #RC23265 in support of Bill C-310 and Amendments to Subsections 118.06 (2) and 118.07 (2) of the Income Tax Act (Tax Credit for Volunteer Firefighters); and
That Council direct staff to share a copy of this resolution with the Association of Fire Chiefs of Ontario, Association of Municipalities of Ontario, all Ontario Municipalities, and Renfrew-Nipissing-Pembroke MP
Carried.

If you have any questions regarding the above motion, please do not hesitate to contact me by phone or email.

Sincerely,

Robin Emon, Clerk
613-752-2229
clerk@greatermadawaska.com

cc: Sent via e-mail
Association of Fire Chiefs of Ontario – info@oafc.on.ca
The Association of Ontario Municipalities (AMO) – resolutions@amo.on.ca
All Ontario Municipalities

THE TOWNSHIP OF GREATER MADAWASKA

Council Resolution Form

Date:	18 Jan 2024	No:	Resolution No.9-24
Moved By:	Councillor Thomson Seconded by Councillor Levesque	Disposition:	CARRIED.
		Item No:	10.1

Description: Volunteer Firefighter Tax Credits - Council Resolution Municipality of Wawa

RESOLUTION:

That Council support Municipality of Wawa's Resolution #RC23265 in support of Bill C-310 and Amendments to Subsections 118.06 (2) and 118.07 (2) of the *Income Tax Act* (Tax Credit for Volunteer Firefighters); and

That Council direct staff to share a copy of this resolution with the Association of Fire Chiefs of Ontario, Association of Municipalities of Ontario, all Ontario Municipalities, and Renfrew-Nipissing-Pembroke MP.

Recorded Vote Requested by:

.....

	Yea	Nay
J. Levesque	____	____
T. Popkie	____	____
L. Thomson	____	____
R. Tripp	____	____
R. Weir	____	____

MAYOR

Declaration of Pecuniary Interest:

.....

Disclosed his/her/their interest(s), vacated he/her/their seat(s), abstained from discussion and did not vote

The Corporation of the Municipality of Wawa

REGULAR COUNCIL MEETING

RESOLUTION

Tuesday, November 7, 2023

Resolution # RC23265	**Meeting Order: 10**
Moved by: Cathy Cannon	**Seconded by:**

WHEREAS Canada has 90,000 volunteer firefighters who provide fire and all hazard emergency services to their communities; in addition, approximately 8,000 essential search and rescue volunteers respond to thousands of incidents every year; and

WHEREAS many of these individuals receive some form of pay on call, an honorarium, or are given some funding to cover expenses, but they do not draw a living wage from firefighting; and;

WHEREAS without volunteer firefighters and search and rescue volunteers, thousands of communities in Canada would have no fire and emergency response coverage; and;

WHEREAS in 2013, the federal government initiated a tax credit recognizing these individuals, and calling on the federal government to increase this tax credit from $3,000 to $10,000; and;

WHEREAS volunteer firefighters account for 71% of Canada's total firefighting essential first responders;

- The tax code of Canada currently allows volunteer firefighters and search and rescue volunteers to claim a $3,000 tax credit if 200 hours of volunteer services were completed in a calendar year;
- This works out to a mere $450 per year, which we allow these essential volunteers to keep of their own income from their regular jobs, $2.25 an hour;
- If they volunteer more than 200 hours, which many do, this tax credit becomes even less;
- These essential volunteers not only put their lives on the line and give their time, training and efforts to Canadians, but they also allow cities and municipalities to keep property taxes lower than if paid services were required;

p.2...

The Corporation of the Municipality of Wawa

REGULAR COUNCIL MEETING

RESOLUTION

- It would also help retain these volunteers in a time when volunteerism is decreasing.

THEREFORE BE IT RESOLVED THAT the Council of the Corporation of the Municipality of Wawa call upon the Government of Canada to support Bill C-310 and enact amendments to subsections 118.06 (2) and 118.07 (2) of the Income Tax Act in order to increase the amount of the tax credits for volunteer firefighting and search and rescue volunteer services from $3,000 to $10,000; and;

FURTHERMORE THAT a copy of the resolution be shared with the Association of Fire Chiefs of Ontario, Algoma Mutual Aid Association, Association of Municipalities of Ontario and all Ontario municipalities.

RESOLUTION RESULT		RECORDED VOTE		
☑	CARRIED	MAYOR AND COUNCIL	YES	NO
☐	DEFEATED	Mitch Hatfield		
☐	TABLED	Cathy Cannon		
☐	RECORDED VOTE (SEE RIGHT)	Melanie Pilon		
☐	PECUNIARY INTEREST DECLARED	Jim Hoffmann		
☐	WITHDRAWN	Joseph Opato		

Disclosure of Pecuniary Interest and the general nature thereof.

☐ Disclosed the pecuniary interest and general name thereof and abstained from the discussion, vote and influence.

Clerk:_____

MAYOR – MELANIE PILON	CLERK – MAURY O'NEILL
M. Pilon	Maury O'Neill

This document is available in alternate formats.

The TOWNSHIP of WAINFLEET

CLERK'S DEPARTMENT
P.O. Box 40, 31940 Highway #3 Wainfleet, ON L0S 1V0
Tel: 905-899-3463 Fax: 905-899-2340
www.wainfleet.ca

January 10, 2024

Hon. Todd McCarthy
Ministry of Public and Business Service Delivery
777 Bay Street, 5th Floor
Toronto ON M5B 2H7

SENT ELECTRONICALLY
Todd.McCarthy@pc.ola.org

Re: Cemetery Transfer/Abandonment Administration & Management Support Request

Please be advised that at its meeting of January 9, 2024, the Council of the Corporation of the Township of Wainfleet passed the following motion:

> "**THAT** the Township of Wainfleet receive C-2023-430 from the Township of Clearwater and C-2023-442 from the Township of Tay regarding cemeteries and that we send a resolution of support for their correspondences to all appropriate parties."

Should you have any questions, please contact me at achrastina@wainfleet.ca or 905-899-3463 ext. 224.

Regards,

A Chrastina

Amber Chrastina
Deputy Clerk

Cc: Jim Cassimatis, BAO Interim CEO/Registrar
MPP Niagara West, Sam Oosterhoff
Ontario Municipalities

Received December 14, 2023
C-2023-430

CLEARVIEW

Staff Report

To:	**Mayor and Council**
From:	**Sasha Helmkay, Clerk/Director of Legislative Services**
Date:	**December 11, 2023**
Subject:	**Report # LS-032-2023 – Cemetery Transfer/Abandonment Administration & Management Support**

Recommendation

Be It Resolved that Council of the Township of Clearview hereby receives Report LS-032-2023 (Cemetery Transfer/Abandonment Administration & Management Support) dated December 11, 2023; and,

Whereas under the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), when a cemetery is declared abandoned by a judge of the Superior Court Justice, the local municipality within whose geographic boundaries the land of the cemetery is located, becomes the owner of the cemetery with all the rights and obligations in respect of the cemetery and the assets, trust funds and trust accounts related to it that the previous owner or operator possessed;

And Whereas over the last decade, there has been an increase in the number of churches and local cemetery boards initiating processes to transfer ownership or abandon their owned and operated cemeteries to the local municipality due to such issues as high maintenance costs, inaccuracy of records, lack of financial and human resources to effectively operate and maintain the cemetery, increased regulatory processes regarding training, selling of interment rights, financial operation of the care and maintenance fund, etc.;

And Whereas municipalities experience the same issues and pressures that churches and local boards experience with the operation and maintenance of cemeteries within its jurisdiction, and additional transfers of cemetery lands only compound the burden on municipal taxpayers;

And Whereas cemeteries are important infrastructure where the reasonable costs for interment rights, burials, monument foundations, corner stones and administration charges do not sufficiently support the general operation of cemeteries;

And Whereas the interest earned from the care and maintenance fund(s) of a cemetery do not provide adequate funding to maintain the cemetery with the rising costs of lawn and turf maintenance contracts and monument restoration;

Now Therefore Be It Resolved that Council of the Township of Clearview requests that the Province through the Ministry of Public and Business Service Delivery and the Bereavement Authority of Ontario (BAO) consider the following to assist municipalities in this growing concern of cemetery transfers:

- Amend the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), to have the Province, through the BAO, identified as the default owner and operator of a cemetery when it is abandoned;
- Provide annual funding (based on the number of cemeteries a municipality owns and operates) to municipalities to assist with the maintenance of inactive and active cemeteries;
- Provide free training opportunities for municipalities regarding cemetery administration; and,
- Investigate and support the design of universal cemetery software for use by municipal cemetery operators that can be offered at an affordable cost.

And that this resolution be circulated to the Hon. Todd McCarthy, Ministry of Public and Business Service Delivery, Jim Cassimatis, BAO Interim CEO/Registrar, MPP Brian Saunderson and all Ontario municipalities.

Background

Under the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), when a cemetery is declared abandoned by a judge of the Superior Court Justice, the local municipality within whose geographic boundaries the land of the cemetery is located, becomes the owner of the cemetery with all the rights and obligations in respect of the cemetery and the assets, trust funds and trust accounts related to it that the previous owner or operator possessed.

Over the last decade there appears to be a trend where cemeteries in Ontario are being transferred, whether through abandonment or a mutually agreed upon transfer, to the care and control of municipalities. This is often seen when there is a breakdown in existing cemetery boards and/or when churches cease operations. For many existing private cemetery boards their board members and volunteers are aging and are unable to assist with the operations and maintenance of the cemetery any longer. Finding new members proves to be difficult for these boards to continue. In addition to aging board members, there are other issues that are contributing to the increase in cemetery transfers:

- high maintenance costs
- inaccuracy of records
- lack of financial and human resources to effectively operate and maintain the cemetery

- increased regulatory processes that require ongoing training for selling of interment rights, and the financial operation of the care and maintenance fund, etc.

Township Owned Cemeteries

The Township of Clearview currently owns and operates nine (9) cemeteries within its geographic boundaries. Out of these nine cemeteries, four (4) are considered active meaning that there are still interment rights to be sold, or burials to take place. Below is a chart outlining these cemeteries and their status:

Cemetery Name	Address	Status
Batteau Hill Cemetery	2670 County Road 124, Duntroon	Inactive
Bethel Union Cemetery	2249 Creemore Avenue, New Lowell	Inactive
Dunedin Union Cemetery	9 Turkeyroost Lane, Dunedin	Active
Duntroon Pioneer Cemetery	2870 County Road 124, Duntroon	Inactive
Lavender Cemetery	827103 Mulmur/Nottawasaga Townline, Creemore	Active
Old Zion Presbyterian Church Cemetery	6130 Highway 26, Sunnidale Corners	Inactive
Second Line Nottawasaga Cemetery	2279 County Road 42, Stayner	Active
Stayner Union Cemetery	7661 Highway 26, Stayner	Active
Zion Presbyterian Church Cemetery	12358 County Road 10, Sunnidale Corners	Inactive

For the Dunedin and Stayner Union Cemetery, the Township looks after the maintenance and burials through a third-party contractor. The maintenance and burials for the Lavender Cemetery are conducted through the Board. For the Second Line Nottawasaga Cemetery all the interment rights have been sold, but there remains one burial to be completed. The cost to maintain an active cemetery is expensive. Although burial costs and the installation of markers, etc. are cost recovery through the purchaser, grounds maintenance is not.

Inactive cemeteries still require consistent grounds maintenance, which includes any monument restoration for health and safety, and record searches for the public register.

Comments and Analysis

When analyzing the number of cemeteries that Clearview Township currently owns and operates, maintenance and administration is a large undertaking. To add any additional cemeteries by way of transfer or abandonment will only compound the issues the Township is already facing. In the past year, the Township has been approached by two separate entities regarding possible cemetery transfers. When a board or cemetery transfers ownership to the municipality, the issues are transferred with it. Municipalities are not immune to the same concerns. It becomes a strain on municipal resources, financially, administratively, and operationally.

Administrative Impact

From an administrative perspective the management of four active cemeteries is both time consuming and complex. No interment is the same, and providing good customer service takes time especially for those making arrangements while also dealing with grief. Administrative tasks include but are not limited to: interment right sales and mapping, burial contracts and scheduling, monument placement, historical record searches, plot and monument staking, fees and charges review, family transfers of interment rights and annual reporting to the Bereavement Authority of Ontario (BAO).

- Incomplete records

Often the records accepted by the Township from a dissolved cemetery board or church are incomplete and disorganized. This is no fault of the previous board members, as they are also often operating with limited resources. However, it does make it difficult to manage the cemetery post-transfer when records are sparse. Understanding which plots are occupied and by who is critical to the sound management of a cemetery. Unfortunately, this is not made possible in all cases because of incomplete records. In addition, records received during a transfer usually are maintained under different records management standards and are often organized and named inconsistently. Adaptation to Township records keeping practices takes time.

- Lack of human resources

Cemetery management is a highly regulated professional field, with the responsibility of which is often placed on public sector employees who may have limited knowledge of cemeteries in general. With reduced resources within municipalities especially rural ones, the management of cemeteries often becomes a secondary responsibility to another position. There is also a lack of affordable training available for municipal employees who are required to abide by regulations set out by the FBCSA and the BAO.

- Increased regulatory processes

Annual reporting requirements of the BAO can be extensive and complex. This includes monitoring the number of interments, the transfers to the Care and Maintenance Fund (C&M), and how the C&M fund can be used. There are also regulations pertaining to maintaining a public register, how sales are to be conducted and strict guidelines on Cemetery By-law approvals, and expansions including the erection of columbaria structures.

- Inconsistent cemetery regulations

Cemeteries can have many different regulations related to plot size, number of burials allowed in a given plot, monument size, what types of flowers/shrubs are allowed to be installed near a headstone etc. The transfer of different cemeteries having inconsistent regulations can make it difficult to adapt management practices in order to maintain original cemetery operational standards.

Operational Impact

Similarly, from an operational perspective the grounds maintenance of cemeteries, whether active or inactive, is both time consuming and complex. A key issue when analyzing the maintenance component of cemetery management is the lack of financial resources to support the operation. Cemetery maintenance includes, but is not limited to: grass cutting (whipper snipping around monuments), tree and shrub maintenance, monument and corner stone maintenance, water pipe and washroom monitoring, and general upkeep of cemetery grounds (removal of debris, etc.).

- High maintenance costs

As with many services, there are rising costs to contend with. Municipalities have adopted different models to address the maintenance of such, with third party contractors being commonly used or it becomes the responsibility of an internal department such as Parks & Recreation. Regardless the model, the costs have increased significantly over the last decade with equipment purchases/upgrades, insurance requirements for third-party contractors, and the time it takes to cut the grass and whipper snip around monuments. To put it into perspective, the Stayner Union Cemetery with the expansion is 25 acres with monuments to manoeuvre around during ground care. Other considerations for maintenance includes monument restoration and ensuring that they are not deteriorated to the point where they are unsafe. This is important for older cemeteries where restoration hasn’t been provided in the past and there are many deteriorating monuments.

- Cost of cemetery management software

Cemetery Management Software can help municipalities manage cemetery records, including plot sale contracts, interment rights certificates, and regulatory reporting.

However, these software solutions are often expensive and require a large amount of staff time to implement especially with incomplete data and records. These software solutions range in price from $5,000 to $100,000 with annual maintenance costs. This investment in software can be a large budget request and one that would need to be supported from taxation with the limited funds in cemetery general accounts.

- Inadequate Care and Maintenance funds

When the Funeral, Burial and Cremation Services Act, 2002 (FBCSA) was enacted, it stipulated that a care and maintenance fund for a cemetery shall be established. A cemetery operator is required to make contributions to the fund from the sale of in-ground graves, crypts, tombs, niches, scattering rights and monument installation. The contribution is prescribed under the FBCSA and differs dependant on the interment type. The idea is that the fund (income earned from the fund - interest) pays for maintenance costs after a cemetery has stopped making sales. In reality, this concept does not produce enough funds to maintain a cemetery. Looking at the Stayner Union Cemetery as an example, for the very basics (grass cutting and whipper snipping) the interest from the care and maintenance fund does not provide enough monies to maintain the cemetery for the 7 months it's required. In addition, the care and maintenance fund is also to be utilized for the stabilization, maintenance and security of markers. Cemeteries are not self funding, and maintenance of such is becoming a larger budget concern.

Support Request

Cemetery transfers and abandonments have been an ongoing concern for Clearview Township for many years. When you look at the large geography of the Township there are many cemeteries within the boundaries that have the potential to be transferred. To gauge the concern of other municipalities on this issue, staff addressed it at a Simcoe County Clerks group discussion. Many neighbouring municipalities expressed that they were dealing with the same issues and have also been approached by different external entities on possible transfers.

As result of the discussion, it was agreed that to assist with the real concerns with transfers and abandonments of cemeteries, it's vital that the Province provide assistance to adequately support this infrastructure. Support can be provided in many different forms, with staff making the following recommendations for the Ministry of Public and Business Service Delivery and the BAO:

- Amend the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), to have the Province, through the BAO, identified as the default owner and operator of a cemetery when it is abandoned;

- Provide annual funding (based on the number of cemeteries a municipality owns and operates) to municipalities to assist with the maintenance of inactive and active cemeteries;
- Provide free training opportunities for municipalities regarding cemetery administration; and,
- Investigate and support the design of universal cemetery software for use by municipal cemetery operators that can be offered at an affordable cost.

There is not one solution to solve all the issues, but at the very least it's important to identify the concerns and have open and real discussions at the provincial level on what support can be provided.

Clearview's Strategic Plan

The above initiative supports the following strategic pillars:

- Governance

Financial Implications

It is difficult to identify an exact dollar amount that can be attributed to a cemetery transfer/abandonment to the municipality. Every transfer is different and depends on a multitude of factors beginning with the cemetery status (active/inactive), acreage, care and maintenance fund (if any), maintenance of records, etc. What is being recommended by staff by way of support from the province is not meant to erase the costs entirely, but rather, to alleviate the financial burden in some capacity.

Report Appendices

Not applicable.

Approvals

Submitted by:	Sasha Helmkay, B.A., Dipl. M.A., AOMC, Clerk/Director of Legislative Services
Reviewed by:	Krista Pascoe, Deputy Clerk
Financial Implications Reviewed by:	Kelly McDonald, Treasurer
Approved by:	John Ferguson, CAO

Clerk's Department
Township of Clearview
Box 200, 217 Gideon Street
Stayner, Ontario L0M 1S0
clerks@clearview.ca | www.clearview.ca
Phone: 705-428-6230

December 12, 2023 File: C00.2023

Hon. Todd McCarthy
Ministry of Public and Business Service Delivery
777 Bay Street, 5th Floor
Toronto ON M5B 2H7

Sent by Email

RE: Cemetery Transfer/Abandonment Administration & Management Support

Please be advised that Council of the Township of Clearview, at its meeting held on December 11, 2023, passed a resolution regarding Cemetery Transfer/Abandonment Administration & Management Support as follows:

> Moved by Councillor Walker, Seconded by Councillor Broderick, Whereas under the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), when a cemetery is declared abandoned by a judge of the Superior Court Justice, the local municipality within whose geographic boundaries the land of the cemetery is located, becomes the owner of the cemetery with all the rights and obligations in respect of the cemetery and the assets, trust funds and trust accounts related to it that the previous owner or operator possessed;
>
> And Whereas over the last decade, there has been an increase in the number of churches and local cemetery boards initiating processes to transfer ownership or abandon their owned and operated cemeteries to the local municipality due to such issues as high maintenance costs, inaccuracy of records, lack of financial and human resources to effectively operate and maintain the cemetery, increased regulatory processes regarding training, selling of interment rights, financial operation of the care and maintenance fund, etc.;
>
> And Whereas municipalities experience the same issues and pressures that churches and local boards experience with the operation and maintenance of cemeteries within its jurisdiction, and additional transfers of cemetery lands only compound the burden on municipal taxpayers;

And Whereas cemeteries are important infrastructure where the reasonable costs for interment rights, burials, monument foundations, corner stones and administration charges do not sufficiently support the general operation of cemeteries;

And Whereas the interest earned from the care and maintenance fund(s) of a cemetery do not provide adequate funding to maintain the cemetery with the rising costs of lawn and turf maintenance contracts and monument restoration;

Now Therefore Be It Resolved that Council of the Township of Clearview requests that the Province through the Ministry of Public and Business Service Delivery and the Bereavement Authority of Ontario (BAO) consider the following to assist municipalities in this growing concern of cemetery transfers:

- Amend the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), to have the Province, through the BAO, identified as the default owner and operator of a cemetery when it is abandoned;
- Provide annual funding (based on the number of cemeteries a municipality owns and operates) to municipalities to assist with the maintenance of inactive and active cemeteries; Page 6 of 7
- Provide free training opportunities for municipalities regarding cemetery administration; and,
- Investigate and support the design of universal cemetery software for use by municipal cemetery operators that can be offered at an affordable cost.

And that this resolution be circulated to the Hon. Todd McCarthy, Ministry of Public and Business Service Delivery, Jim Cassimatis, BAO Interim CEO/Registrar, MPP Brian Saunderson and all Ontario municipalities. Motion Carried.

For reference, please find attached the Staff Report LS-032-2023 that provides background for the above resolution. If you have any questions, please do not hesitate to contact the undersigned.

Regards,

Sasha Helmkay-Playter, B.A., Dipl. M.A., AOMC
Clerk/Director of Legislative Services

cc: Jim Cassimatis, BAO Interim CEO/Registrar
MPP Simcoe Grey, Brian Saunderson
Ontario Municipalities

TAY TOWNSHIP

450 Park Street
PO Box 100
Victoria Harbour, Ontario
L0K 2A0

Received December 21, 2023
C-2023-442

December 21, 2023

Hon. Todd McCarthy
Minister of Public and Business Service Delivery
5th Floor
777 Bay St.
Toronto, ON M7A 2J3

sent via email Todd.McCarthy@pc.ola.org

Dear Hon. Todd McCarthy,

Re: Provincial Cemetery Management Support Request – Tay Township

Tay Township Council passed the following resolution during the December 20, 2023 Council Meeting regarding the Provincial Cemetery Management Support Request:

> Whereas under the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), when a cemetery is declared abandoned by a judge of the Superior Court Justice, the local municipality within whose geographic boundaries the land of the cemetery is located, becomes the owner of the cemetery with all the rights and obligations in respect of the cemetery and the assets, trust funds and trust accounts related to it that the previous owner or operator possessed;
>
> And Whereas over the last decade, there has been an increase in the number of churches and local cemetery boards initiating processes to transfer ownership or abandon their owned and operated cemeteries to the local municipality due to such issues as high maintenance costs, inaccuracy of records, lack of financial and human resources to effectively operate and maintain the cemetery, increased regulatory processes regarding training, selling of interment rights, financial operation of the care and maintenance fund, etc.;
>
> And Whereas municipalities experience the same issues and pressures that churches and local boards experience with the operation and maintenance of cemeteries within its jurisdiction, and additional transfers of cemetery lands only compound the burden on municipal taxpayers;
>
> And Whereas cemeteries are important infrastructure where the reasonable costs for interment rights, burials, monument foundations, corner stones and administration charges do not sufficiently support the general operation of cemeteries;

TAY TOWNSHIP

450 Park Street
PO Box 100
Victoria Harbour, Ontario
L0K 2A0

And Whereas the interest earned from the care and maintenance fund(s) of a cemetery do not provide adequate funding to maintain the cemetery with the rising costs of lawn and turf maintenance contracts and monument restoration;

Now Therefore Be It Resolved that Council of the Township of Tay requests that the Province through the Ministry of Public and Business Service Delivery and the Bereavement Authority of Ontario (BAO) consider the following to assist municipalities in this growing concern of cemetery transfers:

- Amending the Funeral, Burial and Cremation Services Act, 2002 (FBCSA), to have the Province, through the BAO, identified as the default owner and operator of a cemetery when it is abandoned;

- Provide annual funding (based on the number of cemeteries a municipality owns and operates) to municipalities to assist with the maintenance of inactive and active cemeteries;

- Provide free training opportunities for municipalities regarding cemetery administration; and,

- Investigate and support the design of universal cemetery software for use by municipal cemetery operators that can be offered at an affordable cost;

And that this resolution be circulated to the Hon. Todd McCarthy, Ministry of Public and Business Service Delivery, Jim Cassimatis, BAO Interim CEO/Registrar, MPP Jill Dunlop and all Ontario municipalities.

Sent on behalf of Tay Township Council.

Yours truly,

Katelyn Johns, MPPA
Municipal Clerk

Cc: Jim Cassimatis, BAO Interim CEO/Registrar, Hon. Jill Dunlop, Minister of Colleges and Universities/MPP, and all Ontario municipalities.

Ministry of Natural Resources and Forestry

Resources Planning and Development
Policy Branch
Policy Division
300 Water Street
Peterborough, ON K9J 3C7

Ministère des Richesses naturelles et des Forêts

Direction des politiques de planification et d'exploitation des ressources
Division de l'élaboration des politiques
300, rue Water
Peterborough (Ontario) K9J 3C7

January 23, 2024

Subject: *Oil, Gas and Salt Resources Act* regulation changes for special projects and well security

Hello,

Last fall we shared information about proposed regulation changes under the *Oil, Gas and Salt Resources Act* related to:

- Establishing a framework to allow projects to test or demonstrate new or innovative activities in Ontario – called special projects - to pursue authorization under the *Oil, Gas and Salt Resources Act*.
- Well security caps and exemptions for all wells under this act.

Today, we are writing to let you know that a decision has been made to proceed with these changes. The new regulation for special projects will allow businesses interested in pursuing projects to test, assess, pilot or demonstrate carbon storage projects to pursue special project designation, and if designated, apply for authorizations for their project. While this new regulation applies to both private and Crown lands, initially, special projects for carbon storage will only be enabled on private land because further legislative changes will be necessary to access Crown lands for carbon storage.

The changes are being made subject to the following modifications that were made in response to feedback received:

- Municipal source water protection authorities have been included as one of the parties to be circulated on applications for special projects.

- In response to a request from Professional Engineers Ontario (PEO), the qualifications of people that may be approved by the ministry to conduct examinations of special projects has been expanded to include individuals holding a limited licence under the Professional Engineers Act. A limited licence is issued by PEO to an individual who, as a result of at least eight years of specialized experience, has developed competence in a certain area of

professional engineering, and holders may include individuals with academic qualifications other than a university engineering degree.

- The proposed changes that would have eliminated security exemptions and caps where a well licence is transferred were removed to allow more time to assess potential implications identified by operators / industry.

These changes came into effect on January 1, 2024. More details on the decision, the feedback received, and the original proposal can be viewed in in the decision notice on the Environmental Registry of Ontario: https://ero.ontario.ca/notice/019-7507.
Carbon storage is new to Ontario, and we want to ensure the activity is undertaken responsibly. That is why we are taking a phased approach to developing a framework to regulate this activity.

With Phase 2 – Enabling Demonstration – of our roadmap towards regulating geologic carbon storage now complete, the province is now turning to the development of the commercial scale framework and is taking a measured approach as to options for facilitating access to the underground pore space that is used for carbon storage. Ontario aims to have a commercial framework in place by summer 2025, with opportunities for public consultation beginning this year.

If you would like more information or have any questions, please contact Andrew Ogilvie, Manager of Resources Development Section, at 705-761-5815 or through email: Resources.Development@ontario.ca.

Sincerely,

Jennifer Keyes
Director, Resources Planning and Development Policy Branch

Conseil des Services du District de
Manitoulin-Sudbury
District Services Board

210 boul Mead Blvd
Espanola, ON P5E 1R9
Telephone/Téléphone: (705) 862-7850
Fax/Télécopieur: (705) 862-7805
http://www.msdsb.net

January 09, 2024

The Honourable Sean Fraser
Minister of Housing, Infrastructure and Communities Canada
Suite 1100, 180 Kent Street
Ottawa ON K1P 0B6

SENT VIA EMAIL: minister-ministre@infc.gc.ca

Dear Minister Fraser:

The purpose of this letter is to bring to your attention that, at its regular monthly meeting of November 16, 2023, the Manitoulin-Sudbury District Services Board passed Resolution #23-96 in support of the National Housing Accord.

A duly authorized copy of the Manitoulin-Sudbury DSB Resolution # 23-96 is attached. The Manitoulin-Sudbury District Services Board is calling upon the Ministry of Housing, Infrastructure and Communities Canada to take a leadership role in implementing the National Housing Accord.

The Manitoulin-Sudbury District Services Board also advocates that the Ministry of Housing work with the Federal Government to make capital grants available for the construction of new affordable and rent geared to income housing.

We look forward to working with the government in addressing this important issue.

Sincerely,

BRUCE KILLAH

Chair of Manitoulin-Sudbury DSB

cc: The Honourable Paul Calandra, Minister of Housing
NOSDA
AMO
ONPHA
OMSSA
Member Municipalities
MPP Michael Mantha

Conseil des Services du District de
Manitoulin-Sudbury
District Services Board

RESOLUTION 23-96

DATE: November 16, 2023

Moved by: Kevin Burke **Seconded by:** John Deforge

WHEREAS the Manitoulin-Sudbury DSB Board has reviewed the National Housing Accord Issue Report; and

WHEREAS the housing crisis in Canada has reached a critical level, with rapidly rising rents and a shortage of affordable rental units, disproportionately affecting vulnerable populations; and

WHEREAS the National Housing Accord presents a realistic plan with ten key recommendations to address the housing crisis, improve affordability, and reduce homelessness; and

WHEREAS Manitoulin-Sudbury DSB recognizes the importance of affordable housing for the well-being of people in Northern Ontario; and

WHEREAS Manitoulin-Sudbury DSB also recognizes the recommendations within the National Housing Accord cannot be fully successful without capital grants for the construction of new affordable and rent geared to income housing.

BE IT RESOLVED, that Manitoulin-Sudbury DSB supports the National Housing Accord and its ten recommendations as outlined in the National Housing Accord Issue Report; and;

BE IT FURTHER RESOLVED, that Manitoulin-Sudbury DSB supports NOSDA's calls upon the federal government to take a leadership role in implementing the National Housing Accord and working collaboratively with all levels of government and stakeholders to address the housing crisis in Canada; and

BE IT FURTHER RESOLVED, that the Manitoulin-Sudbury DSB supports NOSDA's calls on the federal and provincial government to make capital grants available for the construction of new affordable and rent geared to income housing to all 10 DSSAB's and the City for Greater Sudbury in Northern Ontario.

Carried

BRUCE KILLAM

CHAIR

MEMBER	YEAS	NAYS	MEMBER	YEAS	NAYS
BIGNUCOLO, RYAN			KELLY, ANGELA		
BURKE, KEVIN			KILLAH, BRUCE		
CAHILL, JIM			LANDRY, ROGER		
CAMPBELL, ROB			MACNEVIN, AL		
DEFORGE, JOHN			PORTELANCE-GODIN, DENISE		
DUPLESSIS, KEN			SANTI, DAVID		
GORHAM, VERN			OLSEN, STEVEN		

Public Health
Santé publique
SUDBURY & DISTRICTS

January 24, 2024

VIA ELECTRONIC MAIL

The Honourable Doug Ford
Premier of Ontario
Legislative Building, Queen's Park
Toronto, ON M7A 1A1

Dear Recipient:

Re: Household Food Insecurity

At its meeting on January 18, 2024, the Board of Health carried the following resolution #06-24:

> *WHEREAS food security is a chronic and worsening health issue as documented by annual local data on food affordability and as recognized by multiple Association of Local Public Health Agencies (alPHa) resolutions: AO5-18 (Adequate Nutrition for Ontario Works and Ontario Disability Support Program), A18-02 (Minimum Wage that is a Living Wage), A15-04 (Basic Income Guarantee), and A23-05 (Monitoring Food Affordability in Ontario and the Inadequacy of Social Assistance Rates)*
>
> *THEREFORE BE IT RESOLVED THAT the Board of Health for Public Health Sudbury & Districts call on the provincial government to incorporate local food affordability findings in determining adequacy of social assistance rates to reflect the current costs of living and to index Ontario Works rates to inflation going forward; and*
>
> *THAT in the context of the Public Health Strengthening roles and responsibilities deliberations, the Board of Health urge all health system partners to remain committed to population health assessment and surveillance as it relates to monitoring food environments and, specifically, to monitoring food affordability; and share this motion broadly with local and provincial stakeholders.*

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Sudbury ON P3E 3A3
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f: 705.522.5182

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Unit / Unité 130
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t: 705.522.9200
f: 705.677.9611

Sudbury East / Sudbury-Est
1 rue King Street
Box / Boîte 58
St.-Charles ON P0M 2W0
t: 705.222.9201
f: 705.867.0474

Espanola
800 rue Centre Street
Unit / Unité 100 C
Espanola ON P5E 1J3
t: 705.222.9202
f: 705.869.5583

Île Manitoulin Island
6163 Highway / Route 542
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Mindemoya ON P0P 1S0
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f: 705.377.5580

Chapleau
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Chapleau ON P0M 1K0
t: 705.860.9200
f: 705.864.0820

toll-free / sans frais
1.866.522.9200

phsd.ca

Household food insecurity is one of the strongest predictors of poor health, making it a serious public health issue (PROOF, 2023). Individuals who are food insecure are at higher risk of diet-related diseases like diabetes and are at higher risk for a wide range of chronic conditions such as depression and anxiety disorders, arthritis, and chronic pain. Household food insecurity leaves an indelible mark on children's health and well-being (PROOF, 2023). The experience of food insecurity in childhood is associated with mental health concerns throughout childhood and into early adulthood (PROOF, 2023). In Ontario, the healthcare costs of individuals who are the most food insecure can be more than double that of individuals who are food secure (PROOF, 2023, Tarasuk et al., 2015).

Thank you for your attention to this important issue – the solutions for which will not only help many Ontarians in need but also protect the sustainability of our critical health and social services resources.

Sincerely,

Penny Sutcliffe, MD, MHSc, FRCPC
Medical Officer of Health and Chief Executive Officer

cc: Honourable Michael Parsa, Minister of Children, Community and Social Services
Honourable Peter Bthlenfalvy, Ministry of Finance
Honourable Paul Calandra, Minister of Municipal Affairs and Housing
Honourable Sylvia Jones, Deputy Premier and Minister of Health
France Gélinas, Member of Provincial Parliament, Nickel Belt
Jamie West, Member of Provincial Parliament, Sudbury
Michael Mantha, Member of Provincial Parliament, Algoma-Manitoulin
Dr. Kieran Moore, Chief Medical Officer of Health
Jacqueline Edwards and Jennifer Babin-Fenske, Co-chairs, Greater Sudbury Food Policy Council
Richard Lathwell, Local Food Manitoulin
Colleen Hill, Executive Director, Manitoulin Family Resources
All Ontario Boards of Health
Association of Local Public Health Agencies

PROOF (2023). What are the implications of food insecurity for health and health care? Identifying Policy Options to Reduce Household Food Insecurity in Canada. Retrieved from: https://proof.utoronto.ca/food-insecurity/what-are-the-implications-of-food-insecurity-for-health-andhealth-care/

Tarasuk, V., Cheng, J., de Oliveira, C., Dachner, N., Gundersen, C., Kurdyak, P. (2015. Association between household food insecurity and annual healthcare costs. Canadian Medical Association Journal. 1 87 (14) E429-E436. DOI: https://doi.org/10.1503/cmaj.150234

January 12, 2024

Hon. Stan Cho, Minister of Long-Term Care
Ministry of Long-Term Care
6th Floor, 400 University Avenue
Toronto, Ontario
M5G 1S5

Dear Minister Cho:

Re: Governance Structure Review of Boards of Management for Territorial District Homes

Congratulations on your recent appointment to Minister of Long-Term Care. We wish you all the best with your new portfolio.

We are member municipalities of the District of Nipissing East Home for the Aged (Cassellholme) and represent seven of the nine member municipalities. Our home is one of only six homes in Northern Ontario that fall under Section 128 of Ontario's *Fixing Long-Term Care Act, 2021* as territorial district homes governed by Boards of Management. We are in a unique situation as only 6 homes out of 627 long-term care homes in the province are territorial district homes. We are mostly small, rural municipalities who joined forces with the City of North Bay, the ninth member municipality, in the 1960s to provide care for the eldest population in our communities.

In 2007, the Ministry mandated that Cassellholme be redeveloped to class A beds by 2025. The Board of Management at Cassellholme determined that a brand-new building was the most cost-effective option available to meet class A standards. It took from 2007 to 2022 for the Board of Management to begin construction of the new home. There are likely various reasons as to why it took so long to get shovels in the ground, but what became evident from the onset of redevelopment discussions was that the governance structure of the home is flawed. This is no fault of the Board; it is provincial legislation that dictates the governance structure of our home.

Prior to beginning the redevelopment of Cassellholme, member municipalities went through a long and difficult process of negotiating and finally accepting to proceed with the build which created significant hardships between member municipalities and the Board of Management. To this day, there is a damaged relationship with the Board. This is certainly not how we neighbouring municipalities wanted the process to play out and we are now faced with the outcomes: a strained relationship with the Board and a construction project that ballooned from the initial estimate of approximately $50 million to more than $120 million over time with us having little say over redevelopment decisions. Although our municipalities do not disagree that the home needed to be redeveloped, we disagree with the process by which the Board of Management went ahead with the redevelopment. There were not equal decision-making opportunities for all member municipalities. Because of the governance structure, municipal appointees from the City of North Bay and the provincial appointees (5 out of 7 Board members) were able to dictate the direction and make all development decisions leaving the remaining eight municipalities with very little say. One member municipality and the province made a $120 million decision that the rest of our communities must live with and finance for the next 25 years.

As Cassellholme develops, we small rural communities feel that our concerns for improved representation of our communities and public accountability to our citizens have been largely

ignored. And with the passing of the COVID-19 pandemic, and the recognized impacts on long-term care homes and their residents, we feel that these deserve better attention. We are requesting that you review the governance structure for territorial district homes to allow for permanent municipal representation for all member municipalities.

As per current legislation, the Boards of Management are each made up of a combination of municipal and provincial appointees. Appendix "A" outlines the current structure of the Board of Management for each home. It is not equitable that one or more of the municipalities within a district has several permanent Board seats, and each remaining municipality rotates representation on the Board. On the Board in our home, the City of North Bay has three permanent seats while all other municipalities rotate having a seat every 12 years. Only 33.3% of the municipal owners (3 of 9) of our home have a vote on the governance and direction of seniors' services in our district at any given time. All municipalities pay into the home's costs, each paying equal share per dollar of assessment; therefore, all municipalities should have permanent opportunity to participate in the direction of the home.

There are a few options for amending the Board composition of homes. We are not necessarily asking that the Ministry reduce the number of permanent seats a municipality has. We are asking for all to have a permanent seat. This may mean increasing the number of board members per Board of Management or a combination of additional seats and a reduction or elimination of the number of provincial appointees. Is there a need for provincial appointees? They are not Ministry staff or health care professionals that are on the Board to provide health care expertise or governance skills. The appointees are members of the community not necessarily any different than elective officials who are members of their community.

Although not all municipalities belonging to the 6 district territorial homes may agree with our take on the governance structure for the homes, we have requested their support for the Ministry to review the legislation and provide opportunity for municipalities to be consulted. Our Councils have passed resolutions to this effect. Enclosed are copies of our resolutions. Should the Ministry not proceed with a review of all Boards of management, for our home, the District of Nipissing East Home for the Aged, we are asking you to amend Schedule 3 of O. Reg. 246/22 *under Fixing Long-Term Care Act, 2021* by: (1) removing the Town of Mattawa, Municipality of Mattawan, Township of Calvin, and Township of Papineau-Cameron from the membership of The District of Nipissing East Home for the Aged to support the Algonquin Nursing Home located in the Town of Mattawa; and (2) replacing Schedule 3 as follows:

"The board of management for the District of Nipissing East shall consist of seven members and the areas they represent, and the manner of their appointment shall be as follows:

1. Area 1, represented by three members to be appointed by the municipal council of the City of North Bay.
2. Area 2, represented by one member with one to be appointed by the municipal council of,

    i. the Township of South Algonguin,

3. Area 3, represented by three members with one to be appointed by each of the municipal councils of,

    i. the Township of Bonfield,

ii. the Township of Chisholm,

iii. the Township of East Ferris.”

We thank you in advance for committing to review the governance structure of territorial district homes and should you feel it beneficial, we welcome a meeting, at your earliest convenience, to consult on any proposed changes to the legislation.

Sincerely,

Narry Paquette (Jan 5, 2024 10:09 EST)

Narry Paquette
Mayor
Township of Bonfield

Richard Gould (Jan 8, 2024 13:46 EST)

Richard Gould
Mayor
Municipality of Calvin

Gail Degagne
Mayor
Township of Chisholm

Pauline Rochefort (Jan 9, 2024 12:52 EST)

Pauline Rochefort
Mayor
Municipality of East Ferris

R.A.Belanger (Jan 12, 2024 10:49 EST)

Raymond Belanger
Mayor
Town of Mattawa

Peter Murphy (Jan 18, 2024 17:31 EST)

Peter Murphy
Mayor
Municipality of Mattawan

Robert Corriveau (Jan 24, 2024 10:39 EST)

Robert Corriveau
Mayor
Township of Papineau-Cameron

c.c. John Jordan, Parliamentary Assistant, Ministry of Long-Term Care
Hon. Vic Fedeli, MPP Nipissing
District of Nipissing East Home for the Aged (Cassellholme) Member Municipalities
District of Kenora Home for the Aged (Pinecrest) Member Municipalities
District of Manitoulin Home for the Aged (Manitoulin Centennial Manor) Member Municipalities
District of Nipissing West Home for the Aged (Au Château) Member Municipalities
District of Parry Sound East Home for the Aged (Belvedere Heights) Member Municipalities
District of Parry Sound West Home for the Aged (Eastholme) Member Municipalities

Appendix "A"

District Home	# of Member Municipalities	# of Municipalities Without a Seat on Board	% of Municipalities Without a Seat on Board	# of Municipal Appointees on Board	# of Provincial Appointees on Board	Total # of Board Members
District of Kenora	9	4	44.4%	6	3	9
District of Manitoulin	9	4	44.4%	5	2	7
District of Nipissing East	9	6	66.7%	5	2	7
District of Nipissing West	2	0	00.0%	5	2	7
District of Parry Sound East	14	9	64.3%	5	2	7
District of Parry Sound West	8	4	50.0%	5	2	7

TOWN OF MONO

Sent via email: premier@ontario.ca
minister.mto@ontario.ca

January 15, 2024

Hon. Doug Ford
Premier of Ontario

Hon. Prabmeet Sarkaria
Minister of Transportation

Dear Premier Ford and Minister Sarkaria:

On January 9th, 2024, Council for the Town of Mono passed the following resolution declaring a **Road Safety Emergency**, calling on the province to take action to address traffic safety though measures including public education, increased Highway Traffic Act fines and expanded use of Automated Speed Enforcement.

> *Resolution #4-1-2024*
> *Moved by Elaine Capes, Seconded by Melinda Davie*
>
> ***WHEREAS** road safety is of continuing and increasing concern to Ontarians;*
>
> ***AND WHEREAS**, the number of traffic collisions, injuries and fatalities are at unacceptable levels[i];*
>
> ***AND WHEREAS**, recent statistics and media reports show increasing fatalities and police roadway activities[ii];*
>
> ***AND WHEREAS**, speeding is a leading contributing factor in many accidents including fatalities[iii];*
>
> ***AND WHEREAS**, fines for basic speeding have not increased for three decades or more thus losing at least 50% of their deterrent value through inflation;*
>
> ***AND WHEREAS**, over 60% of all other Highway Traffic Act (HTA) Set Fines remain at $85, an amount also suggesting no increase in decades[iv];*
>
> ***AND WHEREAS**, municipalities are frustrated in their attempt to roll out Automated Speed Enforcement (ASE) with current rules that restrict it to less than 80 km/h speed zones and make it contingent upon declaring Community Safety Zones where not warrant except to use ASE;*

P: 519.941.3599
F: 519.941.9490
E: info@townofmono.com
W: townofmono.com
347209 Mono Centre Road
Mono, ON L9W 6S3

***AND WHEREAS**, Administrative Monetary Penalties (AMPs) are the logical and efficient means of dealing with offences including parking violations, red light camera infractions and ASE charges, the Regulations involving its use are mired in red tape leading to unnecessary complexity and cost.*

***BE IT RESOLVED** that we call on other municipalities and the Province of Ontario to recognize a Road Safety Emergency and take the following actions;*

1. *Launch a province wide road safety educational program to be funded from a portion of monies currently spent by the Ontario Lottery and Gaming Corporation (OLG) to advertise games of chance and lotteries in Ontario.*
2. *Review and increase all HTA fines and penalties to reflect a deterrent amount and consequence that sends a message that driving is a privilege subject to conditions.*
3. *Permit municipalities to deploy ASE in 80 km/h zones or less without having to declare Community Safety Zones and without onerous conditions.*
4. *Establish a Working Group with municipalities to identify and recommend elimination of regulatory red tape associated with the use of ASE and AMPs.*
5. *Develop mechanisms that ensure POA fines and penalties do not lose their deterrent effect over time.*
6. *Work with municipalities to create better means of collecting outstanding POA fines and Victim Surcharge monies estimated to exceed $1 billion as far back as 2011 [v].*

"Carried"

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[i] The Preliminary 2022 Ontario Road Safety Annual Report indicates a total of 25,165 fatal and personal injury collisions and of that, some 530 fatal collisions (3.9 persons per 100,000 in Ontario).

[ii] https://www.caledonenterprise.com/news/map-fatal-collisions-nearly-doubled-in-caledon-in-2023/article_3131acaf-acae-5b21-bee4-a67a33600c33.html. Since publication of this article, the number of Caledon fatalities has increased to nearly 20 last year. The Town of Mono has experienced an explosion of traffic stop occurrences, up over 300% since 2019.

[iii] Speeding convictions account for over 50% of all HTA convictions - see https://www.ontariocourts.ca/ocj/statistics/.

[iv] https://www.ontariocourts.ca/ocj/provincial-offences/set-fines/set-fines-i/schedule-43/.

[v] http://oapsb.ca/wp-content/uploads/2021/05/OAPSB-POA-WHITE-PAPER-FINAL-1-Nov-2011.pdf. This report, prepared by the Ontario Association of Police Services Boards,

suggests a number of effective mechanisms to collect unpaid fines including garnishment of Federal income tax refunds and other payments as is currently done in other provinces.

Respectfully,

Fred Simpson, Clerk

Copy: Minister of Finance
Honourable Sylvia Jones, Dufferin-Caledon MPP
Association of Municipalities of Ontario
All Ontario municipalities

Ontario Provincial Police
Police provinciale de l'Ontario

Municipal Policing Bureau
Bureau des services policiers des municipalités

777 Memorial Ave.
Orillia ON L3V 7V3

777, avenue Memorial
Orillia ON L3V 7V3

Tel: 705 329-6140
Fax: 705 330-4191

Tél. : 705 329-6140
Téléc.: 705 330-4191

File Reference: 612-20

January 30, 2024

Dear Mayor/Reeve/CAO/Treasurer,

April 1, 2024, has been proclaimed as the official date on which the *Community Safety and Policing Act, 2019 (CSPA)* will come into force. At that time, it will repeal and replace the current *Police Services Act, 1990 (PSA)*.

We wish to confirm that the OPP 2024 Annual Billing Statements remain in effect after April 1, 2024, and municipalities will continue to be billed in accordance with costs in the statements.

Under the CSPA, all municipalities policed by the OPP will be subject to Regulation 413/23 *Amount Payable by Municipalities for Policing from Ontario Provincial Police.* This regulation preserves the cost-recovery methodologies currently in effect. The OPP Billing Model cost allocation method remains the same under Reg. 413/23. There are transitional provisions included in the Regulation that stipulate that 2024 annual billing statements will not need to be reissued.

Should you have any further questions about your annual billing statements or any other billing inquiries, please reach out to the OPP Municipal Policing Bureau Financial Services Unit at OPP.MPB.Financial.Services.Unit@opp.ca

Sincerely,

Phil Whitton
Superintendent
Municipal Policing Bureau Commander

c: Detachment Commander

Office of the
County Warden

9 INTERNATIONAL DRIVE
PEMBROKE, ON, CANADA
K8A 6W5
613-735-7288
FAX: 613-735-2081
www.countyofrenfrew.on.ca

January 31, 2024

The Honourable Doug Ford
Premier of Ontario
premier@ontario.ca

DELIVERED VIA EMAIL

RE: Rural and Small Urban Municipalities – Affordability of Water and Wastewater Systems

Dear Premier Ford,
Please be advised that at the Regular Council Meeting on January 31, 2024, The County of Renfrew passed the following resolution:

WHEREAS the Provincial Policy Statement (PPS) (Section 1.6.6.2) states that municipal sewage services and municipal water services are the preferred form of servicing for settlement areas to support protection of the environment and minimize potential risks to human health and safety and that intensification and redevelopment within these settlement areas should be promoted; and

WHEREAS the PPS (Section 2.2.1 (f)) states that planning authorities shall protect, improve, or restore the quality and quantity of water by implementing the necessary restrictions on development and site alternation to protect all drinking supplies and designated vulnerable areas, and protect, improve, or restore vulnerable surface and ground water, sensitive surface water features and sensitive groundwater features, and their hydrologic functions; and

WHEREAS the PPS (Sections 2.2.1(h) and (i)) states that there is consideration of environmental lake capacity as well as stormwater management practices; and

WHEREAS the Ministry of the Environment, Protection and Conservation (MECP) Procedural Guideline B-1-5 Policy 2 provision states that water quality which presently does not meet the Provincial Water Quality Objectives shall not be further degraded and all practical measures shall be undertaken to upgrade the water quality to the Objectives; and

WHEREAS in 2014 the Township of Whitewater Region authorized Jp2gConsultants Inc. to undertake a Municipal Class Environmental Assessment (EA) for the purpose of evaluating viable options to upgrade the 1979 Cobden Wastewater Treatment Plant. This plant did not meet guidelines for effluent flow into Muskrat Lake and Cobden Wetland being highly sensitive, at-capacity, inland lake, and Provincial Significant Wetland (PSW) and acknowledged as one of

the most eutrophic in the province. The plant had ongoing seasonal overflow events, and was operating at maximum capacity; and

WHEREAS in 2018 the Council of the Township of Whitewater Region approved the construction of a new parallel mechanical system that would meet all provincial environmental and regulatory requirements including accommodating future growth. Federal and provincial contributions only covered 50% of the final construction costs, as there was no ability to renegotiate with federal and provincial partners once real costs were known. As a result, the balance of costs ($6M) was debentured over 30 years at interest rates that are slightly punitive to rural and small urban municipalities; and

WHEREAS in 2019 the Council of the Township of Whitewater Region conducted a Water and Wastewater Rate Study that demonstrated the need for rate increases of over 100% to fund the new wastewater treatment plant construction debenture and the significantly increased operating costs for a parallel mechanical system. Rural and small urban municipalities experience very limited growth as federal and provincial policies heavily support growth in urban centers. As there are no other sources of available operational funding, rural and small urban municipalities are expected to fund the construction and operation of these state-of-the-art systems from existing property owners and nominal forecasted growth; and

WHEREAS in 2023 the Township of Whitewater Region combined water and wastewater rates have risen to almost $3,000/year for its five hundred and eleven (511) users and are among the highest in the County of Renfrew and across the Province of Ontario. There are similarly high user rates in the Township of Madawaska Valley as a result of Provincial regulations and a small number of users. Other examples of rapidly increasing rates include the Towns of Deep River, Renfrew, Arnprior, Laurentian Hills, and Petawawa, and the Townships of Bonnechere Valley, Laurentian Valley and Killaloe, Hagarty and Richards, where significant upgrades in short periods of time are making rates unaffordable even with an increased number of users.

NOW, THEREFORE BE IT RESOLVED THAT the Council of the County of Renfrew:

Advocate to the provincial and federal levels of government to make them aware that rural and small urban water and wastewater systems are financially unsustainable; and Advocate to the Association of Municipalities of Ontario (AMO), the Rural Ontario Municipalities Association (ROMA) and the Federation of Canadian Municipalities (FCM) to examine if the unaffordability of water and wastewater system operational costs is systemic provincially and nationally.

AND THAT a copy of this resolution be circulated to The Honourable Doug Ford, Premier of Ontario; the Honourable Kinga Surma, Minister of Infrastructure (Ontario); the Honourable Dominic LeBlanc, Minister of Intergovernmental Affairs, Infrastructure and Communities (Canada); the Honourable Paul Calandra, Minister of Municipal Affairs and Housing, the Honourable Andrea Khanjin, Minister of the Environment, Conservation and Parks (Ontario), Cheryl Gallant, MP, Renfrew-Nipissing-Pembroke, John Yakabuski, MPP, Renfrew-Nipissing-Pembroke and Parliamentary Assistant to the Minister of the Environment, Conservation and Parks; AMO; ROMA; FCM; and all Municipalities in Ontario.

If you have any questions regarding the above resolution, please do not hesitate to contact me.

Sincerely,

Peter Emon, Warden
County of Renfrew
warden@countyofrenfrew.on.ca

cc: Honourable Kinga Surma, Minister of Infrastructure (Ontario)
Honourable Dominic LeBlanc, Minister of Intergovernmental Affairs, Infrastructure and Communities (Canada)
Honourable Paul Calandra, Minister of Municipal Affairs and Housing
Honourable Andrea Khanjin, Minister of the Environment, Conservation and Parks (Ontario), Cheryl Gallant, MP, Renfrew-Nipissing-Pembroke
John Yakabuski, MPP, Renfrew-Nipissing-Pembroke and Parliamentary Assistant to the Minister of the Environment, Conservation and Parks
AMO; ROMA; FCM; and all Municipalities in Ontario.

Accounts for Payment January 18, 2024

Payment	Account	Amount	Description
CC	AMCTO	$405.67	2024 Municipal Finance Forum HH
CC	AMCTO	$960.50	2024 Annual Conference (Blue Mountain)
EFT	Brendan Addison Mobile Mechanical	$742.98	International A26 Plow Truck Maintenance (PW)
8272	Bridal Veil Variety	$323.36	Fuel (PW)
CC	Blue Mountain Resort	$240.89	Deposit Lodging AMCTO Annual Conference ED
8273	EncompassIT	$3,711.49	PC for ED and IT Support
8273	EncompassIT	$403.41	IT Support HH
EFT	EXP Services Inc.	$15,915.88	OM Bridge Replacement Progress Billing Ending December 29
8274	G. Stephen Watt	$791.00	Professional Services
EFT	HRC Bookkeeping	$3,806.73	Professional Services
CC	Municipal Law Enforcement Officers' Association	$174.00	2024 Membership (Annual)
8275	Ontario Clean Water Agency	$1,227.56	Dehumidifier Repair & Chemical Linefor Pre CL2 Injection
8275	Ontario Clean Water Agency	$4,695.90	Backwash Pump Motor
CC	Ontario Municipal Administrators' Association	$702.30	2024 Membership Dues
8276	STOP Restaurant Supply	$92.03	Supplies (PW)
CC	Workplace Safety & Prevention Services	$904.00	Health & Safety Excellence Program (H&S)
CC	Zoom	$144.06	Webinar 500 & Zoom One Pro (Monthly)
EFT	McDougall Energy Inc	$1,421.77	LS Diesel Clear (PW)
Auto	Manulife	$3,743.85	Employee Benefits
Auto	EMPTAX	$12,797.78	Employee Tax (Monthly)
Auto	Elavon	$42.24	Bank Service Fees (Monthly)
Auto	Cash Mgmt Fee BOM	$337.94	BMO Bank Service Fee (Monthly)
Auto	Copr Creditor Bus/Ent	$35.59	Bank Service Fees (Monthly)
Auto	Superior Propane	$31.97	Rental Contaract (Monthly)
Auto	GFL	$9,542.62	Landfill Contract (Monthly)

Total **$63,195.52**

Total Accounts for Payment **$63,195.52**

Accounts for Payment February 08, 2024

Payment	Account	Amount	Description
8278	Ian Anderson	$50.00	Coyote Compensation Claim
EFT	Auto Parts North	$732.10	WW Fluid, Antifreeze, Auto Headlights (PW)
8279	Bridal Veil Variety	$563.60	Fuel (PW)
8280	DataFix	$932.25	Election Management System - Payment #2
8281	EncompassIT	$2,615.11	Office 356 Licences (Quarterly), Monitoring + Security x8
8282	Laurentian Business Products	$212.49	Printer Rental Contract (Monthly)
8283	Len's Clean Air	$310.75	CHD Vehicle Emission Inspection 2016 Western Star (PW)
8284	Manitoulin Streams	$3,500.00	Funding Support for 2024 Stream Restoration
8285	Mindemoya Home Hardware	$145.68	Keys cut, Receptacle, Faucet Non-Freeze (PW)
8286	Ministry of Finance (Policing)	$18,487.00	Local Service Realignment December (Monthly)
8287	The Municipality of Gordon/Barrie Island	$19,539.84	2023 CBO Expenses
8288	Pinchin	$2,012.53	Annual Monitoring Summary Report
8289	Pitney Bowes	$221.23	Postage Meter Lease Agreement (Monthly)
8290	PitneyWorks	$145.00	Postage
8291	Steele's Home Hardware	$29.36	Keys cut, Supplies for Park Centre (PC)
8292	The Manitoulin Expositor	$686.23	Notice of Vacancy - Councillor Advert
8293	Thompson Reuters	$191.10	Ont Mun Law User Manual 2024
8294	Town of NEMI	$2,499.00	Tourist Info Centre 2023
8295	UCCM Building Material Supply	$58.14	Supplies (PW)
WFT	Identifiable Individual	$31.93	Reimbursement for Strategic Plan Session
EFT	Identifiable Individual	$1,009.67	Refund of Tax Overpayment
MC	Northern 911	$166.95	E911 Contract (Monthly)
EFT	McDougall Energy Inc.	$241.21	Payment Overdue
EFT	Gore Bay Fish and Game Club	$1,000.00	GBFGC Contribution
EFT	Gore Bay Manitoulin Airport	$5,000.00	2023 Request for Funding
EFT	Town of Gore Bay	$2,500.00	2024 Gore Bay Arena Contribution
Auto	OCWA	$10,948.00	Service Contract (Monthly)
Auto	OMERS	$3,146.50	Pension Contribution (Monthly)
Auto	CANLIFE	$731.46	RRSP (BiWeekly)
Auto	Hydro One	$7,847.98	Hydro Services
Auto	EastLink	$149.35	Internet Services
Auto	CANLIFE	$755.62	RRSP (BiWeekly)
Auto	LBPC Leasing	$175.00	Printer Contract (Monthly)
Auto	Bell Mobility	$677.10	Cellular Services
Auto	WSIB Sched 1	$4,551.09	Insurance Payment (Quarterly)
Auto	Municipal Property BPY	$8,947.41	Q1 MPAC Municipal Levy (Quarterly)
Auto	Infrastructure MTG	$948.00	BFD Loan Interest Payment (Monthly)
Auto	Superior Propane BPY	$2,732.71	Rental Contract (Monthly)

Total $104,491.39

Total Accounts for Payment $104,491.39

BY-LAW NO 2024-09

BEING A BY-LAW TO AMEND BY-LAW NO 2004-36 BEING A BY-LAW TO CONFIRM SPEED LIMITS OF MUNICIPAL ROADS WITHIN THE TOWNSHIP OF BILLINGS

WHEREAS the Municipal Act S.O. 2001, c 25, Section 5(1), as amended, provides that the powers of a municipal corporation are to be exercised by its Council;

AND WHEREAS the provisions of the Highway Traffic Act, R.S.O. 1990, Chapter H.8, as amended, and the Municipal Act, R.S.O. 2001, S.O. 2001, as amended, authorize Municipal Councils to pass bylaws to regulate and control traffic;

AND WHEREAS the Council of the Corporation of the Township of Billings passed By-Law No. 2004-36 to confirm the speed limits of municipal roads within the Township of Billings;

AND WHEREAS the Council of the Corporation of the Township of Billings deems it expedient to amend By-Law No. 2004-36 to reduce the speed on Monument Road between John Street and the Central Manitoulin Boundary from 80 km/hr to 60km/hr;

NOW THEREFORE the Council of The Corporation of the Township of Billings enacts as follows:

1. THAT By-Law No. 2004-36 be amended to add the following:

   5. Monument Road between John Street and the Central Manitoulin Boundary have a maximum speed of 60 km per hour.

2. THAT all other provisions in By-Law No. 2004-36 remain in full force and effect.

3. THIS By-law shall come into force and effect upon passing.

4. THIS By-Law may be cited as the “Speed Limits of Municipal Roads Amendment (1)”.

READ a **FIRST** and **SECOND TIME** this 20th day of February, 2024

READ a **THIRD TIME** and **FINALLY PASSED** this 20th day of February, 2024

Bryan Barker, Mayor

Emily Dance, CAO/Clerk

BY-LAW NO 2024-10

BEING A BY-LAW TO ADOPT A VIDEO MONITORING POLICY FOR THE TOWNSHIP OF BILLINGS

WHEREAS the Municipal Act S.O. 2001, c 25, Section 5(1), as amended, provides that the powers of a municipal corporation are to be exercised by its Council;

AND WHEREAS the Municipal Act S.O. 2001, c 25, Section 5(3), as amended, provides that a municipal power, including a municipality's capacity rights, powers and privileges under Section 9; shall be exercised by By-law;

AND WHEREAS the Township of Billings deems it expedient to establish policies;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF BILLINGS ENACTS AS FOLLOWS:

1.0 THAT the Corporation of the Township of Billings hereby adopts a Video Monitoring Policy as attached as Schedule 'A' and forming part of this By-Law.

2.0 THIS By-Law shall come into full force and effect upon final passage.

5.0 THIS By-Law may be cited as "Video Monitoring Policy By-Law"

READ a **FIRST** and **SECOND TIME** this 20th day of February, 2024

READ a **THIRD TIME** and **FINALLY PASSED** this 20th day of February, 2024

Bryan Barker, Mayor

Emily Dance, CAO/Clerk

Policy –Video Monitoring Policy

By-Law No: 2024-10
Revision:
Date: February 20, 2024

Coverage

The video monitoring policy will cover all video monitoring systems at Township owned, leased and administered properties and facilities.

Policy Statement

The Township of Billings is committed to the on-going protection of the health and safety of its employees, rate-payers, residents and visitors, as wee as the protection of Township owned or occupied property, both physical and intellectual.

The Township recognizes the need to strike a balance between the Township's responsibilities to promote a safe and secure environment and its responsibility to protect the privacy of individuals.

Legislative Authority

Video monitoring involves the collection, retention, use, disclosure and disposal of personal information. These activities must be in compliance with the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA)

1. **Contents**

Purpose

The purpose of the policy is to ensure that Video Monitoring technology is used for safety, security and operational purposes and that its use is conducted in a manner that reflects MFIPPA and any other relevant legislation.

More specifically, this policy addresses requirements and responsibilities with respect to:

- The installation of video monitoring systems;
- The operation of video monitoring systems
- The use of the information obtained through video monitoring systems; and
- Custody, control and access to records created from video monitoring systems.

2. **Scope**

This policy applies to all properties and facilities owned, leased and administered by the Township of Billings and to all employees, including temporary, contract, elected officials,

appointed to boards and committees, volunteer and any individual retained by the Township or to act on the Township's behalf.

3. Definitions

In this policy:

"Facility" means any building or land that is occupied and administered by the Township of Billings;

"Property" means any building or land that is occupied and administered by the Township of Billings;

"Video monitoring camera" means a camera used to monitor and/or record activities as part of the video monitoring system.

"Video monitoring recording" means information transmitted from the video monitoring system to a storage device which includes video tape, computer disc or drive, compact disk, computer chip or other devise used to store the recorded data or visual, audio or other images captured by the video device system;

"Video monitoring record" means monitoring information that has been extracted from video monitoring recordings; and

"Video monitoring system" refers to a video, physical or other mechanical, electronic, digital or wireless monitoring system or device that enable continuous or periodic video recording. In this policy, the term video monitoring system includes, but is not limited to , an audio device, thermal imaging technology or any other component associated with capturing an image.

4. Use of Video Monitoring System

Video monitoring systems are installed in facilities where a need has been identified by the supervisor, manager or CAO/Clerk for the facility and funding has been approved.

5. Installation of Video Monitoring Cameras

5.1 Location of Video Monitoring Cameras

The Township may employ the use of video monitoring cameras as they offer a reasonably effective deterrent to inappropriate behaviour and activity in assisting in maintain a safe and secure environment. Cameras also allow for effective means to which to manage operations and to remotely address issues such as security alarms that have ben activated.

Each proposed camera position/location will be assessed on a case-by-case basis to determine the effects the video monitoring system may have on personal privacy. The Township will take all reasonable steps to mitigate any adverse effects that may be caused by the camera position/location. No camera will be placed so that it

views into an area where individuals have an expectation of privacy such as washrooms, changerooms or employee lunchrooms.

5.2 Signage

The Township will provide notice that an area is under video monitoring. Signage will be installed in a clearly visible location at all facilities that are subject to monitoring. The signage will advise all persons entering the facility that the facility is under video monitoring, and will provide a contact for more information.

5.3 Approval

All positions/locations for cameras and signs will require the approval of supervisor responsible for the facility in which the video monitoring equipment is located in consultation with the CAO/Clerk.

5.4 Maps and Floor Plans for Video Monitoring Cameras

The supervisor responsible for the facility in which the video monitoring equipment is located will ensure that maps/floor plans are prepared to identify the location of video cameras, video monitoring monitors and other video monitoring equipment located at the facility. The supervisor will retain a copy of such maps and floor plans and provide a copy to the CAO/Clerk.

6. Operation of Video Monitoring System

To ensure the ongoing privacy of employees and the public at large, only authorized persons shall monitor live video monitors. The supervisor of a facility in which video monitoring equipment is located shall designate those persons permitted to monitor live video monitoring recordings and shall maintain a list of all persons so authorized.

A person authorized to view live video monitoring recordings shall not permit members to of the public or other unauthorized persons to view live video monitoring recordings.

If staff authorized to monitor live video recordings have reason to believe that the video recording contains relevant information for law enforcement or public safety purposes, they shall notify the supervisor responsible for the facility immediately, who in turn will advise the CAO/Clerk directly. The CAO/Clerk will make every effort to ensure that the information is protected and not written over.

7. Use of Information Collected

The information collected through video monitoring systems will only be used to:

- Assess the effectiveness of safety and security measures at a particular facility;
- Investigate an incident involving the safety or security of people, facilities or assets;
- Provide law enforcement agencies with evidence related to an incident under police investigation;
- Provide evidence as required to protect the Township's legal rights;
- Respond to a request under MFIPPA
- Investigate an incident or allegation of serious employee misconduct; or
- Investigate an incident involving an insurance claim.

The Township will not use video monitoring systems to monitor or measure productivity of employees. Notwithstanding this, where video monitoring systems disclose that an employee has been involved in an activity that can be reasonable characterized as criminal in nature, may affect the Township's reputation, or may present a possible legislation or policy violation, the Township reserves the right to use the video monitoring recordings to support investigations leading to possible discipline or discharge or as an investigative aid in any investigation arising out of such activity.

8. Record Management

This information collected through video monitoring is managed by the CAO/Clerk. All activities with respect to video monitoring recordings, including access to recordings and storage and disposal of recordings will be documented by the CAO/Clerk.

8.1 Retention of Video Monitoring Recordings

The retention period for video monitoring recording will by facility, number of video monitoring cameras at each facility and the video monitoring hardware used will vary. As storage devises become full, recordings are written over previously recorded information. The maximum standard retention period for video monitoring recordings is forty-five (45) days, unless required for related investigations.

Retention periods will be reviewed regularly to ensure that retention periods are minimized in order to reduce the risk of improper use and disclosure.

8.2 Creation and Retention of Video Monitoring Records

A record will only be created from the video monitoring for the purposes outlined in this policy. No other records will be created or retained. The CAO/Clerk is responsible for determining when a record will be created.

Records created from the video monitoring system shall be labeled, documented and securely stored in an access-controlled area by the CAO/Clerk.

9. Access

9.1 Access Restrictions

In accordance with MFIPPA access to the records created by video monitoring is restricted. Access is limited to:

- Individuals responsible for the management of recordings or records of the video monitoring equipment;
- Individuals who have legitimate need to access the information for one of the purposes listed in the "Use of Information Collected" section of this policy;
- If required by police or in relation to litigation

9.2 Access Procedures

A request to access video monitoring recordings or records must be completed and submitted to the CAO/Clerk.

For all requests related to investigations of serious employee misconduct, the request must be completed and submitted to the CAO/Clerk.

Requests for access to recording or records shall be bound by and subject to MFIPPA and any other relevant legislation.

When access to a record is given, the following information will be logged for audit purposes:

- The date and time at which access was allowed or the date on which disclosure was made;
- The identification of the party who was allowed access or to whom disclosure was made;
- The reason for allowing access or disclosure;
- Details of the information to which access was allowed or which was disclosed including the date of the incident recorded and the location or vehicle number, if applicable, of the incident recorded; and
- Provisions for the return of the record or its destruction.

Anyone who is granted access to any record created through video monitoring systems will be required to sign a written agreement regarding their duties, obligations and responsibilities with respect to the use and disclosure of the record.

9.3 Exceptions to the Access Processes outlined in Section 9 are:
Employees permitted to monitor live video of the workplace, as outlined in Section 6.0 of this policy, as part of their regular ongoing responsibilities. These employees may rewind to view (but not create or record a video record) events within the same calendar day.

In urgent circumstances, supervisors may contact the CAO/Clerk directly requesting access to a video record. A written "Request to Access Video Monitoring Records" form will subsequently be submitted in a timely manner.

10. Ownership of Video Monitoring Recordings

All recordings created by means of video monitoring systems shall be the sole property of the Township of Billings and may not be taken, reproduced or destroyed for any reason without the prior permission of the CAO/Clerk in accordance with the Township's Records Retention Policy.

10.1 Unauthorized Access and/or Disclosure

Any employee having knowledge of unauthorized access or disclosure or video monitoring recording or record created from video monitoring systems must immediately report the incident to the CAO/Clerk.

The CAO/Clerk will report any breaches or privacy and unauthorized viewing or disclosure and take all reasonable actions to recover the record and limit the Township's exposure.

Any breaches of privacy and unauthorized viewing or disclosure of information as set out in this policy may result in disciplinary action up to an including termination of employment.

Appendix 'A' – Law Enforcement Officer Request Form
RELEASE OF RECORD TO LAW ENFORCEMENT AGENCY

Under Section 32 (g) of the Municipal Freedom of Information and Protection of Privacy Act

TO: The Township of Billings

I, _____ of the _____
(Name) (Police Service)

Request a copy of the following record(s):

Time Period: _____ to _____

Township Facility _____

to aid an investigation undertaken with a view to a law enforcement proceeding or from which a law enforcement proceeding is likely to result.

I confirm that the record will be destroyed by _____ after use by the agency.

_____ _____
Signature Date

Return completed original forms to the CAO/Clerk of the Township of Billings, 15 Old Mill Road, Kagawong, ON

Personal information is collected under the authority of the Municipal Act, 2001, S.O. 2001, c.25 for the purpose of creating a record relating to the release of video surveillance record to law enforcement agency. Questions about the collection may be addressed to the Deputy Clerk of the Township of Billings 15 Mill Road, Kagawong (705) 282-2611.

Appendix 'B' – Review of Record by Staff Form
RELEASE OF RECORD TO TOWNSHIP STAFF

Under Section 32 (d) of the Municipal Freedom of Information and Protection of Privacy Act

TO: The Township of Billings

I, _____ of the _____
(Name) (Department)

Request a copy of the following record(s):

Time Period: _____ to _____

Township Facility _____

to aid in a review undertaken to ensure the safety and security of the Township's employees, clients, visitors and property.

Describe the circumstances

_____ _____
Signature Date

Return completed original forms to the CAO/Clerk of the Township of Billings, 15 Old Mill Road, Kagawong, ON

Review Approved _____ Date_____

Personal information is collected under the authority of the Municipal Act, 2001, S.O. 2001, c.25 for the purpose of creating a record relating to the release of video surveillance record to a staff member. Questions about the collection may be addressed to the Deputy Clerk of the Township of Billings 15 Mill Road, Kagawong (705) 282-2611.

BY-LAW NO 2024-11

BEING A BY-LAW TO AUTHORIZE ENTERING INTO AN ENCROACHMENT AGREEMENT WITH LISA CUNNINGHAM-MILLS, STEVEN MILLS, JACOB MILLS, AND SPENCER MILLS

WHEREAS the Municipal Act S.O. 2001, c 25, Section 5(1), as amended, provides that the powers of a municipal corporation are to be exercised by its Council;

AND WHEREAS the Municipal Act S.O. 2001, c 25, Section 5(3), as amended, provides that a municipal power, including a municipality's capacity rights, powers and privileges under Section 9; shall be exercised by By-law;

WHEREAS The Council for The Corporation of the Township of Billings deems it expedient to enter into an encroachment agreement to permit the construction and installation of a waterline in the Lakeshore Road Allowance in the Township of Billings.

NOW THEREFORE the Municipal Council of the Corporation of the Township of Billings enacts as follows:

1.0 That the Township of Billings hereby enters into an encroachment agreement with Lisa Cunningham-Mills, Steven Mills, Jacob Mills and Spencer Mills to permit the construction and installation of a waterline within the Lakeshore Road Allowance which is attached as Schedule "A" and forms part of this by-law.

1.0 That the Mayor and CAO/Clerk are hereby authorized to sign on behalf of the Council for The Corporation of the Township of Billings, any contracts and other documents required to authorize the agreement and to affix the corporate seal of the Township of Billings.

2.0 This By-law shall come into full force and effect upon final passage.

3.0 This by-law may be cited as the "Encroachment Agreement – 736 Lakeshore Road By-Law"

READ a **FIRST** and **SECOND TIME** this 20th day of February, 2024

READ a **THIRD TIME** and **FINALLY PASSED** this 20th day of February, 2024

Bryan Barker, Mayor

Emily Dance, CAO/Clerk

THIS AGREEMENT made this ____ day of _____, 2024

BETWEEN:

CUNNINGHAM – MILLS, LISA LYNN
and
MILLS, STEVEN PAUL
and
MILLS, JACOB COOPER PAUL
and
MILLS, SPENCER REILLY DAVID

(hereinafter called the "**Licensee**")

OF THE FIRST PART

- and -

THE CORPORATION OF THE TOWNSHIP OF

(hereinafter called the "**Township**")

OF THE SECOND PART

WHEREAS the Township is the owner of the road allowance in the Township of , more particularly shown and described in **Schedule "A"** attached hereto (the "**Lakeshore Road Allowance**");

AND WHEREAS the Licensee is the owner of the property known as 736 Lakeshore Road in the Township of Billings, which is more particularly described in **Schedule "B"** attached hereto (the "**Licensee's Property**");

AND WHEREAS in order to service the Licensee's Property, the Licensee desires to construct and install a waterline in the Road Allowance, as shown in **Schedule "C"** (the "**Private Waterline**

AND WHEREAS the Licensee has agreed to construct and install the Waterline within the Road Allowance, to the Township's satisfaction, at the Licensee's sole risk and expense;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the premises and the sum of two ($2.00) Dollars of lawful money of Canada now paid by the Licensee to the Township, and in consideration of an annual fee of two ($2.00) Dollars, the parties agree and covenant as follows:

Recitals

The Township and the Licensee agree that the above-noted recitals are true and form part of this agreement.

Term

1. The Township agrees to allow the Licensee to construct and install the Private Waterline, to the Township's satisfaction, within the Lakeshore Road Allowance, at the specific location shown on **Schedule "C"** (the "**Encroachment**").

2. The Encroachment shall be permitted to exist for a period of twenty (20) years, commencing from the date this agreement has been executed by both parties, unless otherwise terminated in accordance with the provisions of this agreement (the "**Term**").

3. Upon the expiration of the Term, if the Township is of the view that the Encroachment remains necessary, this agreement may be renewed, on the same terms and conditions as outlined herein, for an additional term of twenty (20) years, if the Licensee, submits a written request to the Township at least ninety (90) days in advance of the expiration of the Term.
4. Upon the expiration of the Term, if this agreement is not renewed pursuant to section 4 of this agreement, the Encroachment shall be removed and the Licensee may be required to restore the Encroachment to the condition the Encroachment was in prior to the date of the agreement or as directed by the Township, acting reasonably, at the Licensee's sole expense.

Construction of the Private Waterline

5. The Licensee agrees to obtain all permits necessary to construct and install the waterline within the Lakeshore Road Allowance and to, at all times, comply with all applicable laws, including any federal or provincial laws and municipal by- laws.

6. Following the construction and installation of the waterline within the Lakeshore Road Allowance, the Licensee agrees to repair any damage caused to any existing road, road allowance or existing structure as a result of the construction and installation and shall pay for any costs incurred by the Township in relation to the relocation of existing services such as hydrants, telephone poles, electricity poles etc. which may be necessary because of the construction and installation of the Waterline within the Lakeshore Road Allowance

7. During and following the construction and installation of the waterline within the Lakeshore Road Allowance, the Licensee agrees to dispose of all construction refuse or debris related to the construction or installation, in an orderly fashion, to the Township's satisfaction.

8. In the event the Licensee discovers any waste, contaminants, pollutants, hazardous substances or any other similar substances that may be detrimental to the environment during the construction and installation of the waterline within the Lakeshore Road Allowance, the Licensee agrees to notify the Township immediately and to take all necessary steps and remedial effort required by the Township to fulfill all legislative requirements regulating the removal, transportation and disposal of such waste, contaminants, pollutants, hazardous substances or any other similar substances from the Lakeshore Road Allowance.

Use of Private Waterline

9. The Licensee agrees that it shall only use the waterline to obtain water from Lake Kagawong for personal use for the Licensee's Property and for no other or improper purpose.

No Alterations or Improvements

10. Following the initial construction of the Encroachment by the Licensee to the Township's satisfaction, no alterations or improvements shall be made to the Encroachment by the Licensee, at any time, including, without limitation, the construction, installation, erection of any building or structure, removal of trees, grade changes or the installation of any materials without the prior and express

written consent of the Township. To be clear, the Licensee is responsible for maintaining the Encroachment pursuant to this agreement, which includes maintaining the Encroachment in a state of good working order, condition and repair, but “alteration” or “improvement” of the Encroachment are beyond mere maintenance, and would constitute a material change in the location, direction, size, shape, or physical attributes of the Encroachment, which includes completely replacing the Encroachment.

11. Any alteration or improvements to which the Township has consented shall be performed and completed to the satisfaction of the Township, acting reasonably, at the sole risk and expense of the Licensee.

12. The Licensee agrees that any alterations or improvements made to the Encroachment without the consent of the Township shall be immediately removed, and the Encroachment restored to the state it was in prior to any alterations or improvements, at the Licensee’s sole risk and expense.

13. The Licensee agrees that if the Encroachment is moved, altered or changed by the Licensee in any manner during the Term of this agreement, without the express written consent of the Township, the Township shall have the right to immediately terminate this agreement and, upon termination of the agreement, the Encroachment shall be immediately removed by the Licensee at the Licensee’s sole risk and expense and the Licensee shall repair and make good all damage and disturbance that may be caused to the Encroachment or the Township’s infrastructure, to the satisfaction of the Township, acting reasonably, at the sole expense of the Licensee.

Termination

14. In the event this agreement is terminated, the Licensee shall remove the Encroachment on ninety (90) days’ written notice by the Township. If the Licensee fails to remove the Encroachment within the ninety (90) day period, the Township shall have the right to remove the Encroachment and repair and make good all damage and disturbance that may be caused by the Encroachment to the Encroachment or the Town’s infrastructure at the expense of the Licensee.

15. Upon the removal of the Encroachment from the Lakeshore Road Allowance pursuant to this agreement, the Licensee shall restore the Lakeshore Road Allowance to the condition the Lakeshore Road Allowance was in prior to the date of this agreement or as directed by the Township, acting reasonably, at the Licensee’s sole cost and expense. In the event such restoration is not completed as required herein, the Township may complete such restoration work at the expense of the Licensee.

16. In the case of emergency which would somehow reasonably require the removal of the Encroachment from the Lakeshore Road Allowance, the Township shall have the right to immediately terminate this agreement and remove the Encroachment forthwith, at the Township’s expense.

Maintenance of Encroachment

17. The Licensee shall, at its sole cost and expense, maintain the Encroachment in a state of good working order, condition and repair, to the full satisfaction of the Township, during the Term

18. In maintaining the Encroachment, the Licensee shall, at all times, comply with all federal and provincial laws, as well as all municipal by-laws, including any by-laws, orders or other requirements of the Township.

Fees, Charges & Costs

19. The Licensee agrees to pay to the Township all applicable fees and charges and to reimburse the Township for its costs, including any legal or professional fees, it has incurred in relation to, or as a result of, this agreement, including the costs to prepare this agreement, any title searches and the registration of this agreement on title, if applicable. All costs incurred by the Township will be invoiced to the Licensee. Any unpaid charges shall be added to the tax roll and collected in the same manner as municipal taxes.

Insurance

20. The Licensee shall obtain insurance, in a form satisfactory to the Township, against all damages or claims for damage in an amount of not less than Two Million Dollars ($2,000,000.00) and provide proof of such insurance to the Township, when requested by the Township. The insurance policy shall name the Township as an additional insured and shall contain a cross-liability exclusion clause.

Boundary Lines

21. The parties hereto agree that the boundary lines shall remain the boundary between the Licensee's Property and the Lakeshore Road Allowance, notwithstanding the existence of any Encroachments, and the Licensee shall not acquire title by possession or prescription to any of the Lakeshore Road Allowance upon which the Encroachment will be located. The Lakeshore Road Allowance shall remain and has remained, at all material times, the property of the Township.

Indemnification

22. The Licensee hereby agrees to save harmless and indemnify and keep indemnified the Township, on a solicitor and client basis, against all actions, suits, claims and demands which may be brought against or made upon the Township and from all losses, costs, damages, charges or expenses which may be incurred, sustained or paid by the Township as a consequence of, or arising out of, this agreement. The Licensee hereby grants to the Township full power and authority to settle any such actions, suits, claims, and demands on such terms as the Township may deem advisable and hereby covenants and agrees with the Township to pay the Township, on demand, all moneys paid by the Township in pursuance of such settlement and also such sum as shall represent the reasonable costs of the Township or its solicitor in defending or settling any such actions, suits, claims or demands and this agreement shall not be alleged as a defense by the Licensee in any action by any person of actual damage suffered by reason of the permission hereby granted by virtue of this agreement. The Licensee agrees that all costs, charges and expenses paid by or incurred by the Township as aforesaid shall form and constitute a charge or lien on the Licensee's Property until discharged by payment thereof.

Registration on Title

23. This agreement may be registered on title to the Licensee's Property, at the Township's sole discretion, but at the Licensee's sole cost.

Notification of Transfer of Licensee's Property

24. The Licensee agrees that, prior to transferring or conveying the Licensee's Property or any part thereof, the Licensee shall forthwith notify the CAO/Clerk of the Township, in writing, of such transfer or conveyance together with the name and address of the transferee or purchaser.

Notice

25. The Licensee agrees that any notice required to be given by this agreement may be given to the Licensee by mailing the same, post paid, addressed to the Licensee at the last address known to the Township.

Licensee Default

26. If the Licensee defaults on any term, covenant, provision, requirement, or obligation of this agreement and if such default continues for ten (10) business days after the Licensee receives notice of such default by the Township (or such shorter time as may be required in the cases of an emergency situation being one which the Township reasonably considers to pose an imminent risk to the safety of any persons or property or other urgent matters or as otherwise provided for herein), the Township shall have the right to undertake the completion of such work as the Township deems reasonably necessary at the expense of the Licensee and the Township may immediately terminate this agreement. Such termination shall be by written notice to the Licensee, except in the case of emergency. In the case of emergency, the agreement may be terminated forthwith by the Township. Any waiver by the Township of any breach by the Licensee or any provision of this agreement shall be without prejudice to the exercise by the Township of all or any of its rights or remedies in respect of any continuance or repetition of such breach.

Entire Agreement

27. This agreement and its Schedules constitute the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether written or oral. There are no conditions, covenants, agreements, representations, warranties or other provisions, expressed or implied, collateral, statutory or otherwise, relating to the Encroachment except as provided in this agreement.

Amendment or Waiver

28. Except as expressly provided in this agreement, no amendment or waiver of this agreement shall be binding unless executed in writing by the party to be bound. No waiver of any provision of this agreement shall constitute a waiver of any other provision, nor shall any waiver, even if similar in nature, unless otherwise expressly provided.

Transfer or Assignment

29. This agreement is not transferable or assignable by the Licensee to any third party without the prior written consent of the Township, which consent may be unreasonably withheld. Any attempt to transfer or assign any or all of the rights, duties or obligations of this agreement by the Licensee, without the prior written consent of the Township is void.

Binding

30. This agreement shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns and shall run with the said lands owned by the parties.

Counterparts

31. This agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

Acknowledgments of the Licensee

32. The Licensee acknowledges:

(a) that they have had an adequate opportunity to read and consider this agreement and to obtain such legal and other advice as they consider advisable;

(b) that they understand the agreement and the consequences of signing same; and

(c) that they are signing the agreement voluntarily, without coercion and without reliance on any representation, expressed or implied by the Township.

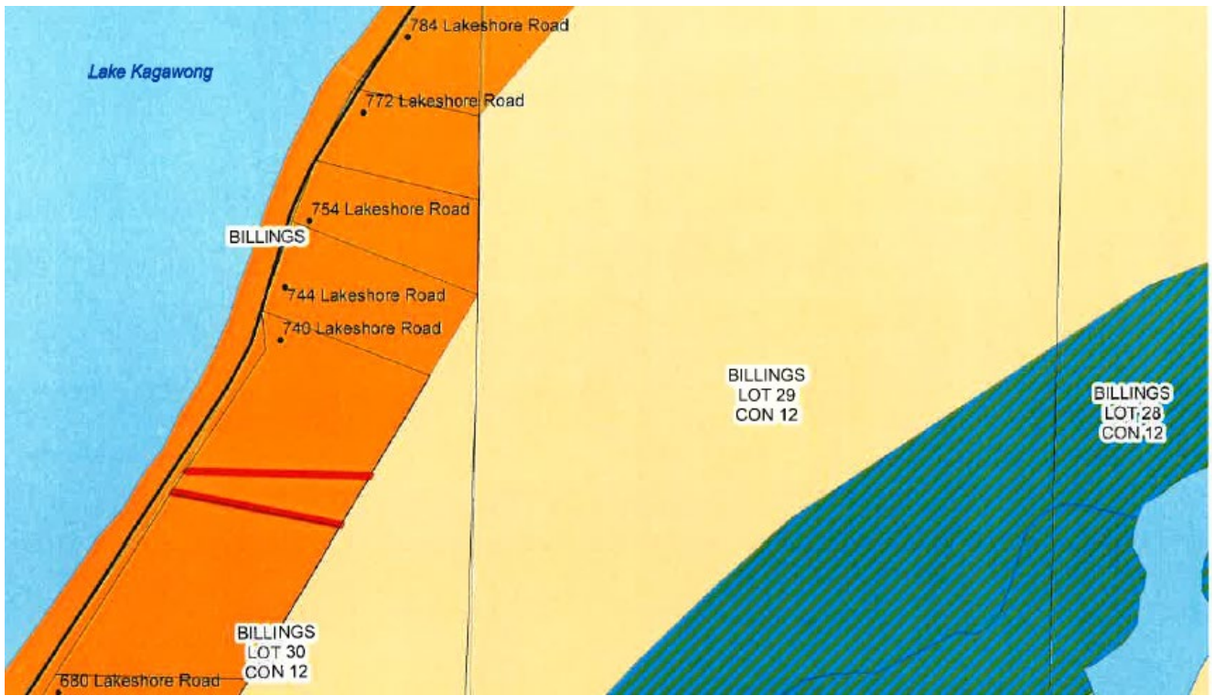
IN WITNESS WHEREOF the Township has hereunto affixed their corporate seal under the hands of their Mayor and CAO/Clerk and the Licensee has hereunto set his hand.

SIGNED, SEALED AND DELIVERED in the presence of	) **THE CORPORATION OF THE TOWNSHIP OF BILLINGS**
	) _____ Bryan Barker, Mayor
	) _____ Emily Dance, CAO/Clerk
	) I/We have the authority to bind the Corporation.
_____ Witness	) _____ LISA LYNN CUNNINGHAM-MILLS
_____ Witness	) _____ STEVEN PAUL MILLS
_____ Witness	) _____ JACOB COOPER PAUL MILLS
_____ Witness	) _____ SPENCER REILLY DAVID MILLS

SCHEDULE “A”

Lake Shore Road Allowance

Part of Shore Road Allowance posted as Lakeshore Road in front of 736 Lakeshore Road



SCHEDULE "B"

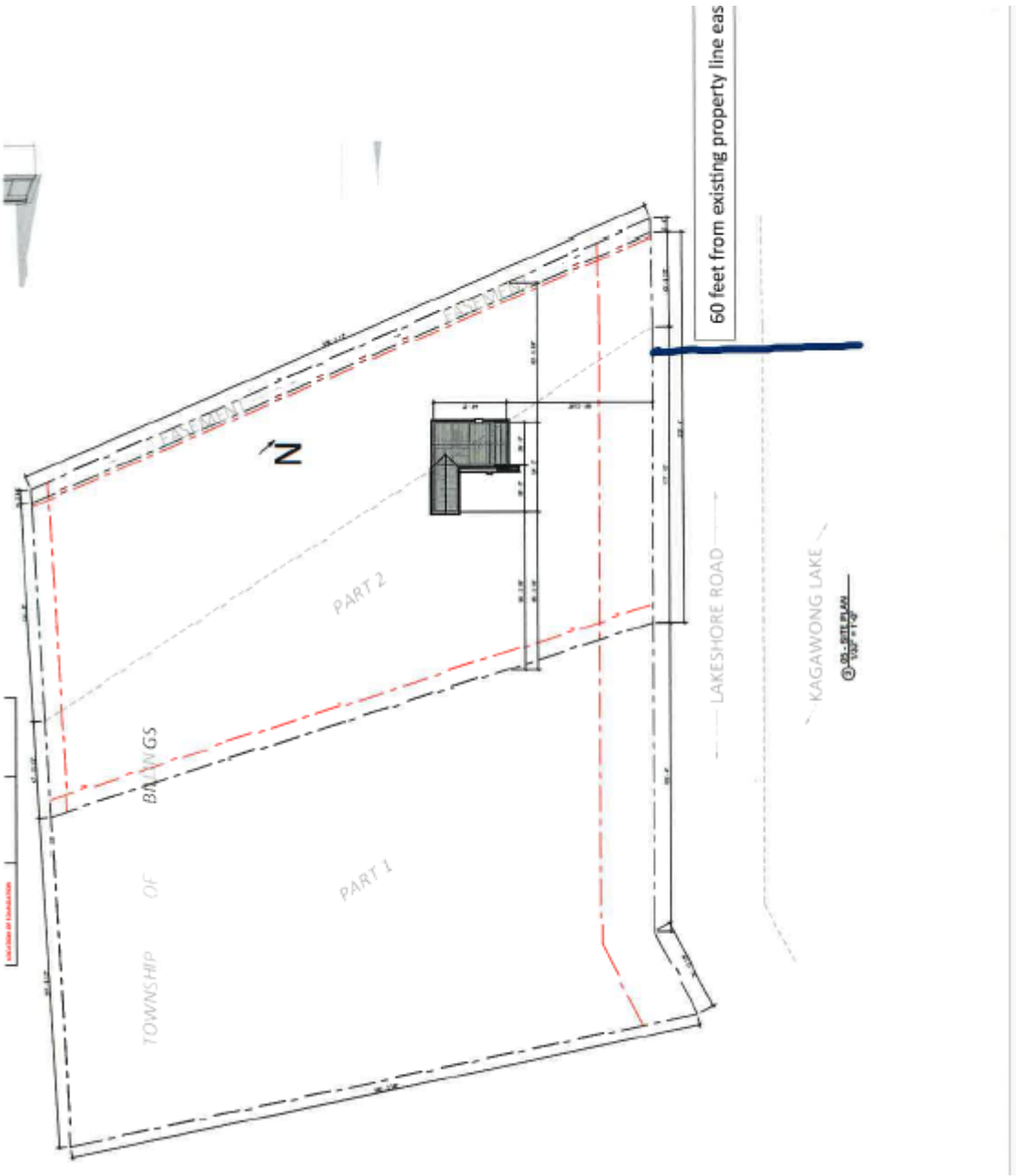
Licensee's Property

Legal Description: PART LOT 30, CONCESSION 12, BILLINGS TOWNSHIP, PARTS 2 & 3, PLAN 31R4102; SUBJECT TO AN ENCROACHMENT OVER PART 3, PLAN 31R4102 IN FAVOR OF PART LOT 30 CONCESSION 12, PART 1, PLAN 31R731 AS IN RM7886; TOWNSHIP OF BILLINGS

PIN: 47118-0312 (LT)

SCHEDULE "C"

Location of Encroachment



BY-LAW NO 2024-13

BEING A BY-LAW TO CONFIRM THE PROCEEDINGS OF THE COUNCIL OF THE TOWNSHIP OF BILLINGS

WHEREAS the Municipal Act S.O. 2001, c 25, Section 5(1), as amended, provides that the powers of a municipal corporation are to be exercised by its Council;

AND WHEREAS the Municipal Act S.O. 2001, c 25, Section 5(3), as amended, provides that a municipal power, including a municipality's capacity rights, powers and privileges under Section 9; shall be exercised by By-Law;

AND WHEREAS The Council for The Corporation of the Township of Billings deems it expedient that the proceedings of meetings of the Council be confirmed and adopted by By-Law;

NOW THEREFORE the Council of The Corporation of the Township of Billings enacts as follows:

1. THAT the actions of the Council of The Corporation of The Township of Billings at its Council Meeting held on February 20, 2024 in respect to each report, motion, resolution, or other actions recorded and taken by Council at its meetings, except where the prior approval of the Ontario Lands Tribunal is required is hereby adopted, ratified, and confirmed as if all such proceedings were expressly embodied in this By-Law.

2. THAT the Mayor and CAO/Clerk, or such other official as deem appropriate are hereby authorized and directed to do all things necessary to give effect to the said action, of Council of the Township of Billings referred to in the proceeding section.

3. THAT the Mayor and CAO/Clerk are hereby authorized and directed to execute all documents necessary on behalf of the Council and to affix the corporate seal of The Corporation of The Township of Billings to all such documents.

4. THIS By-Law shall come into full force and effect upon final passage.

5. THIS By-Law may be cited as the "February 20, 2024 Confirmatory By-Law".

READ a **FIRST** and **SECOND TIME** this 20th day of February, 2024

READ a **THIRD TIME** and **FINALLY PASSED** this 20th day of February, 2024

Bryan Barker, Mayor

Emily Dance, CAO/Clerk