REVISED AGENDA

REGULAR MEETING OF COUNCIL

Thursday, December 10, 2020
9:15 a.m.
Via Zoom Meeting
9 James Street, Parry Sound, Ontario

To ensure the practice of proper social distancing measures, and to help prevent the spread of COVID-19 in the community, Council Meetings will be held electronically in accordance with section 238 of the Municipal Act, 2001. All Meetings will be recorded, and posted on the Township website for members of the public to view.

➢ **(Add-on)**

1. CALL TO ORDER

i) National Anthem
ii) Approval of Agenda
iii) Traditional Land Acknowledgement Statement
iv) Announcement of Public Meetings

2. DISCLOSURE OF PECUNIARY INTEREST

3. MINUTES OF THE PREVIOUS MEETING

i) <u>Regular Meeting Of Council</u>

Pages: 1-10

20- NOW THEREFORE BE IT RESOLVED that the Minutes of the Regular Meeting of Council held on November 19, 2020, be approved.

4. DEPUTATIONS

9:30 a.m. <u>Benjamin John, David Bywater and Becky Pollock. Georgian Bay Biosphere (GBB). ICECAP Update & Year End Report</u>

Pages: 11-88

10:00 a.m. **Nadine Hammond and Rob Wood. Museum on Tower Hill**

Pages: 89-107

10:30 a.m. **Staff Recognition Awards**

Maryann Weaver	5 Years
Elke Dyck	15 Years
Doug MacLeod	15 Years
Jane Nawroth	25 Years
Wendy Hawes	40 Years

11:00 a.m. **Greg Mason and Tianna Burke. Georgian Bay Biosphere (GBB). Skerryvore Road – Ecological Monitoring Report and Update**

Pages: 108-112

11:15 a.m. **Rupert Kindersley, Georgian Bay Association. Proposal to Township of the Archipelago, Municipal Official Plans & Comprehensive Zoning By-laws Comparison**

Pages: 113-116

5. CLOSED MEETING

20- **NOW THEREFORE BE IT RESOLVED** that Council move into a CLOSED MEETING at _____ a.m./p.m., pursuant to Section 239(2)(b)(d)(f) of the *Municipal Act, 2001,* S.O. 2001, c.25, as amended, to deal with personal matters about an identifiable individual, including municipal or local board employees; labour relations or employee negotiations; and advice that is subject to solicitor-client privilege including communications necessary for that purpose.

i) **Human Resources Matters**
ii) **EMS Budget and Levy**
iii) **Donation Policies**

OPEN MEETING

20- **NOW THEREFORE BE IT RESOLVED** that Council move out of a CLOSED MEETING at _____ a.m./p.m.

6. UNFINISHED PLANNING BUSINESS

7. OFFICIAL PLAN/ZONING AMENDMENTS

8. CONSENT APPLICATIONS

9. SITE PLAN CONTROL

10. SHORE/CONCESSION ROAD ALLOWANCES

i) **Barrett, Robert and Maxine** G. Walker
190 Healey Lake Water

Pages: 117-118

20- **NOW THEREFORE BE IT RESOLVED** that Council approves the stopping up, closure and conveyance of the original shore road allowance fronting 190 Healey Lake Water on the basis of a straight-line extension of the side lot lines and subject to the applicants submitting a deeming by-law application to have Council pass a deeming by-law to be registered against the applicants' property, thereby allowing the shore road allowance portion to merge on title with the respective lot.

11. CAO REPORT ON COUNCIL DIRECTIONS

Pages: 119

20- **NOW THEREFORE BE IT RESOLVED** that Council receives the December CAO Report on Council Directions, as distributed.

12. REPORT OF TASK FORCES/COMMITTEES

13. CORRESPONDENCE

i) **Council Correspondence**

Pages: 120-122

20- **NOW THEREFORE BE IT RESOLVED** that Council receives the December 2020 Council Correspondence listing.

14. OTHER BUSINESS

i) **2020 Surplus Funds**

20- **WHEREAS** there may be surplus or deficit funds in various departments for 2020; and

WHEREAS these funds should be transferred to/from reserves for future use;

NOW THEREFORE BE IT RESOLVED that any surplus for 2020 be transferred to reserves to offset future expenditures, or if a deficit occurs it will be offset by appropriate reserves.

ii) <u>Consumer Price Index (CPI)</u>

20- **NOW THEREFORE BE IT RESOLVED** that Council approves a cost of living increase to Council, effective January 1, 2021, in the amount of 1% as indicated by the Consumer Price Index.

iii) <u>Development of a new Performance Management Program (2021) and Initiation of an Organizational Review</u>

Pages: 123-124

20- **NOWTHEREFORE BE IT RESOLVED** that Council authorize staff to initiate the development of a Performance Management Plan and Pay for Performance Review; and

FURTHER BE IT RESOLVED that staff be authorized to retain Marianne Love of the firm ML Consulting to conduct the review and prepare appropriate policies.

iv) <u>Bill 229, Schedule 6 and the Conservation Authority Act</u>

Pages: 125-128

20- **WHEREAS** the Provincial Government has embedded amendments to the Conservation Authority Act in Schedule 6 in the Budget that affect the operation of Conservation Authorities and the protection of the environment; and

WHEREAS the Association of Municipalities of Ontario has raised concerns about the impact of Schedule 6 on Conservation Authority Governance and membership, third party appeals of financial operations, curtailment of the role of Conservation Authority in the local development process, including the provision of local science and data as it relates to the impact of development on erosion, flooding hazards and damage to property as well as enforcement of illegal dumping; and

WHEREAS the Association of Municipalities of Ontario has requested the Provincial Government to withdraw Schedule 6 or to not proclaim it until there has been an opportunity to clarify concerns and resolve operational problems that have been identified with respect to the Legislation; and

WHEREAS the Township of The Archipelago has a vested interest in the protection of wetlands, watershed areas and rivers that are integral to the flow of clean water, fish and wildlife habitat and the water levels of Georgian Bay that are managed by Conservation Authorities outside our jurisdiction;

NOW THEREFORE BE IT RESOLVED that Township of The Archipelago support the Policy Statement and positions of AMO that Schedule 6 of Bill 229 be withdrawn or not proclaimed so that a timely review of the proposed amendments to the Conservation Authority Act can take place so that a “collective path forward

that refines certain matters and bolsters the ability to protect the environment in a meaningful way" is achieved;

AND FURTHER BE IT RESOLVED that the Township of The Archipelago inform the Association of Municipalities of Ontario and our local MPP, Norm Miller of this resolution.

v) Departmental Updates

- **PUBLIC WORKS**

  i) Operational Services Updates

  Pages: 129-132

- **PLANNING AND BUILDING**

  i) Building Permit Comparison Summary

  Pages: 133-139

  ii) Zoning By-law Review - Update

  Pages: 140-142

➢

vi) Wellness Centre and Pool Committee (WCPC) Discussion

15. BY-LAWS

i) Shore Road Allowance By-law G. Walker
345 Healey Lake Water (Eichler)

Pages: 143-147

20- Being a By-law to close and stop up those parts of the original shore road allowance laid out along the shores of Healey Lake, in front of Lot 24, Concession 5, and Part of Lot 24, Concession 5, shown as road allowance on registered Plan M-284 in the geographic Township of Conger, designated as Part 2 according to Plan 42R-21493.

ii) Deeming By-law **G. Walker**
345 Healey Lake Water (Eichler)

Page: 148

20- Being a By-law to deem Lot 19 of Plan M-284, in the geographic Township of Conger, not to be a part of a registered plan of subdivision in order that the said lot

will merge on title with the shore road allowance (Part 2 of Plan 42R-21493) being stopped up, closed and conveyed.

iii) <u>Environmental Systems Research Institute (ESRI) Inc. - software Enterprise Licence Agreement for GIS program</u>

Pages: 148-160

20- Being a By-law to authorize the Manager of Corporate Services to execute a Software Enterprise Agreement between Environmental Systems Research Institute Inc. (ESRI) and the Corporation of the Township of The Archipelago.

vi) <u>2020 Borrowing By-law</u>

Pages: 161-162

20- Being a By-law to Authorize Borrowing from Time to Time to Meet Current Expenditures During the Fiscal Year Ending December 31, 2021.

v) <u>2021 Interim Tax Levy and Pre-authorized Payment Plan</u>

Pages: 163-164

20- Being a By-law To Provide for an Interim Tax Levy, for the payment of taxes, and for penalty and interest at 1.25% per month and authorized the Pre-authorized Payment Plan (PAP) and Automatic Tax Installment Withdrawal (ATIW).

16. QUESTION TIME

17. NOTICES OF MOTION

18. CONFIRMING BY-LAW

20- Being a By-law to Confirm the Proceedings of the Regular Meeting of Council held on December 10, 2020.

19. ADJOURNMENT

Corporation of the Township of The Archipelago

MINUTES
MEETING OF COUNCIL

November 19, 2020
9 James Street, Parry Sound, Ontario
Via Zoom Meeting

Council Members Present:	Reeve:	Bert Liverance	
	Councillors:	Greg Andrews	Ward 1
		Laurie Emery	Ward 1
		Peter Frost	Ward 2
		Earl Manners	Ward 3
		Scott Sheard	Ward 3
		David Ashley	Ward 4
		Alice Barton	Ward 4
		Rick Zanussi	Ward 4 (arrived at 10:42 a.m.)
		Ian Mead	Ward 5
		Grant Walker	Ward 6

Staff Present: John Fior, Chief Administrative Officer
Maryann Weaver – Clerk
Joe Villeneuve – Manager of Corporate Services
Cale Henderson – Manager of Development & Environmental Services
Wendy Hawes, Treasurer
Greg Mariotti, Manager of Operational Services

1. CALL TO ORDER

The meeting was called to order at 9:15 a.m., and commenced with the singing of the National Anthem, Roll Call, and a Traditional Land Acknowledgement Statement.

2. APPROVAL OF AGENDA

20-149 **Moved by Councillor Emery**
Seconded by Councillor Mead

NOW THEREFORE BE IT RESOLVED that the November 19, 2020 Revised Council Meeting Agenda, be approved.

Carried.

3. MINUTES OF THE PREVIOUS MEETING

Regular Meeting Of Council

20-150 **Moved by Councillor Barton**
Seconded by Councillor Ashley

NOW THEREFORE BE IT RESOLVED that the Minutes of the Regular Meeting of Council held on October 15, 2020, be approved.

Carried.

Closed Council Meeting Minutes

20-151 **Moved by Councillor Walker**
Seconded by Councillor Andrews

NOW THEREFORE BE IT RESOLVED that the Closed Council Meeting Minutes held on October 15, 2020, be approved.

Carried.

4. DEPUTATIONS

Rita Orr & Tom Lundy. Parry Sound Public Library. Financial Support for the January 1, 2021 to December 31, 2022 Budget

Rita Orr and Tom Lundy presented a new commercial, which highlighted the library's programs and achievements throughout 2020. Ms. Orr summarized the impact that Covid-19 has had on the library.

5. OFFICIAL PLAN/ZONING AMENDMENTS

Gates, Richard
(Agents: John Jackson, Louise and Chris Goulding)
OPA No. 68 and ZBLA No. Z02-20
Lot 40, Concession 3, Parcel 21266 PSSS, Conger

Members of Council expressed their concerns with the application, and asked questions of the Planner.

Staff was directed to provide Council with a progress report on the land supply analysis study at the December or January meeting.

Councillor Manners requested that the proposed motion be deferred. The motion for deferral was seconded by Councillor Barton. A vote was taken, and the motion was defeated.

20-152 **Moved by Councillor Barton**
Seconded by Councillor Walker

WHEREAS the applicants have submitted an Official Plan Amendment and a Zoning By-law Amendment to Council for its consideration;

AND WHEREAS the applicants have requested that the fees for these applications be reimbursed as they are being submitted to facilitate the creation of 4 affordable housing lots to be located in the Woods Bay Neighbourhood;

NOW THEREFORE BE IT RESOLVED that Council receives the Official Plan and Zoning By-law Amendment applications and directs staff to ensure they are complete and notice can be circulated for a future public meeting;

AND FURTHER BE IT RESOLVED that Council will consider the reimbursement of fees for the Official Plan and Zoning By-law Amendment applications, in an effort to support private, affordable housing initiatives.

Carried.

6. PUBLIC MEETING

At 10:27 a.m., Council held a Public Meeting to consider proposed Zoning By-law Amendment Number Z01-20 (Harris).

Reeve Liverance called the meeting to order.

Cale Henderson, Manager of Development & Environmental Services, summarized the proposed application.

The applicant, Robert Harris was in attendance. John Jackson, agent for the applicant, was in attendance and spoke on behalf of the applicant.

Reeve Liverance declared the public meeting closed at 10:48 a.m.

Council recessed for a break at 10:48 a.m. and resumed business at 11:00 a.m.

7. CLOSED MEETING

20-153 **Moved by Councillor Emery**
Seconded by Councillor Sheard

NOW THEREFORE BE IT RESOLVED that Council move into a CLOSED MEETING at 11:00 a.m., pursuant to Section 239(2)(b)(c)(d) of the *Municipal Act, 2001,* S.O. 2001, c.25, as amended, to deal with personal matters about an identifiable individual, including municipal or local board employees; a proposed or pending acquisition or disposition of land by the municipality or local board; and labour relations and employee negotiations.

i) Human Resource Matters
ii) Acquisition of Land

Carried.

OPEN MEETING

20-154 **Moved by Councillor Andrews**
Seconded by Councillor Frost

NOW THEREFORE BE IT RESOLVED that Council move out of a CLOSED MEETING at 1:11p.m.

Carried.

8. OTHER BUSINESS

Departmental Updates

- **ENVIRONMENT**

Georgian Bay Biosphere (GBB) - 2020 Partnership Report

Georgian Bay Biosphere Reserve Staff Greg Mason, David Bywater and Delina Arnold summarized the 2020 Partnership Report.

Township of The Archipelago and Georgian Bay Biosphere GBB) - Proposed 2021 Workplan and Budget

Georgian Bay Biosphere Staff Greg Mason, David Bywater and Delina Arnold presented the 2021 Workplan and Budget.

Georgian Bay Biosphere Staff answered questions from Members of Council.

9. CLOSED MEETING

20-155 **Moved by Councillor Emery**
Seconded by Councillor Sheard

NOW THEREFORE BE IT RESOLVED that Council move into a CLOSED MEETING at 2:29 p.m., pursuant to Section 239(2)(b)(c)(d) of the *Municipal Act, 2001,* S.O. 2001, c.25, as amended, to deal with personal matters about an identifiable individual, including municipal or local board employees; a proposed or pending acquisition or disposition of land by the municipality or local board; and labour relations and employee negotiations.

i) **Human Resource Matters**
ii) **Acquisition of Land**

Carried.

OPEN MEETING

20-156 **Moved by Councillor Emery**
Seconded by Councillor Frost

NOW THEREFORE BE IT RESOLVED that Council move out of a CLOSED MEETING at 2:53 p.m.

Carried.

9. MATTERS ARISING FROM CLOSED MEETING

20-157 **Moved by Councillor Ashley**
Seconded by Councillor Frost

NOW THEREFORE BE IT RESOLVED that Council direct staff to pay out the Pay Equity adjustments, as calculated and presented, in the last pay period for 2020.

Carried.

20-158 **Moved by Councillor Barton**
Seconded by Councillor Manners

NOW THEREFORE BE IT RESOLVED that Council adopt the proposed new salary grid for staff, as presented, for implementation beginning January 1st, 2021.

Carried.

20-159 **Moved by Councillor Zanussi**
Seconded by Councillor Emery

NOW THEREFORE BE IT RESOLVED that Council authorize staff to enter into negotiations for the lease of additional office space located at 11 James Street Parry Sound.

Carried.

20-160 **Moved by Councillor Frost**
Seconded by Councillor Andrews

NOW THEREFORE BE IT RESOLVED that Council approve the provision of office space for the Regional Economic Development Officer, in a Township of The Archipelago facility, for up to 3 years – the term of the contract; and

FURTHER BE IT RESOLVED that Council authorize the Reeve and Clerk to sign a Novation Agreement (substituting a party) between FedNor, the CB&DC and the Township of The Archipelago.

Carried.

10. OFFICIAL PLAN/ZONING AMENDMENTS CONT'D

Des Roches, Jason & Christine
Remove 'H' Holding Provision Z06-19 Part Lot 33, Concession 9, Part 15 on Plan PSR-1516, Shawanaga (Skerryvore)

Cale Henderson summarized the application.

11. SHORE/CONCESSION ROAD ALLOWANCES

STASHUK, Daniel and Barbara
33 Tolpt's Road

20-161 **Moved by Councillor Mead**
Seconded by Councillor Emery

NOW THEREFORE BE IT RESOLVED that Council approves the stopping up, closure and conveyance of the original shore road allowance fronting 33 Tolpt's Road on the basis of a straight-line extension of the side lot lines.

Carried.

CIARAMELLA, Joseph and Patricia
33 Moonlight Court

20-162 **Moved by Councillor Manners**
Seconded by Councillor Sheard

NOW THEREFORE BE IT RESOLVED Council approves the stopping up, closure and conveyance of the original shore road allowance fronting 33 Moonlight Court on the basis of:

a) a straight-line extension of the side lot line between 31 Moonlight Court and 33 Moonlight Court;
b) an angled extension of the side lot line, parallel to the side lot line established by Part 1 of 42R-8904 being the shore road allowance fronting 32 Moonlight Court, such that the public access point on the unopened shore road allowance maintains a minimum width of 66 feet.

Carried.

12. CAO REPORT ON COUNCIL DIRECTIONS

20-163 **Moved by Councillor Walker**
Seconded by Councillor Andrews

NOW THEREFORE BE IT RESOLVED that Council receives the November CAO Report on Council Directions, as distributed.

Carried.

13. CORRESPONDENCE

Council Correspondence

20-164 **Moved by Councillor Barton**
Seconded by Councillor Zanussi

NOW THEREFORE BE IT RESOLVED that Council receives the November 2020 Council Correspondence listing.

Carried.

14. OTHER BUSINESS CONT'D

Rural Ontario Municipal Association (ROMA) – 2021 Virtual Conference, January 25-26, 2021

20-165 **Moved by Councillor Ashley**
Seconded by Councillor Manners

NOW THEREFORE BE IT RESOLVED that the following Members of Council are approved to attend the 2021 ROMA Virtual Conference being held January 25–26, 2021; Councillor Ashley, Councillor Sheard, Councillor Manners, and Councillor Zanussi.

Carried.

Rural Ontario Municipal Association (ROMA) – Request for Delegations

Reeve Liverance advised Members of Council to speak to John Fior if they have any proposals for delegations. David Ashley suggested a delegation to request more support for the West Parry Sound Health Centre.

Staff was directed to reach out to Donald Sanderson for discussion.

Ontario Good Roads Association (OGRA) – 2021 Virtual Conference, February 22-25, 2021

20-166 **Moved by Councillor Sheard**
Seconded by Councillor Frost

NOW THEREFORE BE IT RESOLVED that the following Members of Council are approved to attend the 2021 OGRA Virtual Conference being held February 22 25, 2021; Councillor Walker and Councillor Sheard.

Carried.

Request that Minister Clark review the Municipal Elections Act and provide amendments to provide clearer, stronger wording to assist Municipal Clerks in addressing issues to allow for a more definitive decision to be made when adding names to the voters' list.

20-167 **Moved by Councillor Mead**
Seconded by Councillor Emery

WHEREAS Council has received a request of support of a resolution enacted by Wollaston Township, regarding a request for a review of the Municipal Elections Act;

AND WHEREAS The Township recognizes that the current language in the Municipal Elections Act, with regards to non-resident electors, is weak and ambiguous;

NOW THEREFORE BE IT RESOLVED that Council of the Corporation of the Township of The Archipelago hereby request that the Minister of Municipal Affairs and Housing, the Honourable Steve Clark, review the Municipal Elections Act and provide amendments to provide clearer, stronger wording, to assist Municipal Clerks in addressing issues related to non-resident electors, and to allow for a more definitive decision to be made when adding names to the voters' list;

AND FURTHER BE IT RESOLVED that Council of the Corporation of the Township of The Archipelago request that the Minister of Municipal Affairs and Housing, the Honourable Steve Clark, ensure that there is a clear and accessible way to report election fraud, and ensure the rules described in the Municipal Elections Act are enforceable.

AND FURTHER BE IT RESOLVED that this resolution be sent to the Premier of Ontario, the Minister of Municipal Affairs and Housing, Norm Miller MPP, all Ontario Municipalities and the Association of Municipalities of Ontario.

Deferred.

2021 Schedule of Meetings (January – April 2021)

Council requested that meetings return to normal, as set out in the procedural by-law, starting in January.

20-168 **Moved by Councillor Frost**
Seconded by Councillor Ashley

NOW THEREFORE BE IT RESOLVED that Council hereby approves the following meetings for January to April 2021;

COTW Meetings: January 21st, February 18th, March 11th, and April 15th
Council Meetings: January 22nd, February 19th, March 12th, and April 16th

Carried.

Great Lakes and St. Lawrence Cities Initiative – Call for Resolutions

20-169 **Moved by Councillor Frost**
Seconded by Councillor Ashley

WHEREAS the Township of The Archipelago is located on the eastern shore of Georgian Bay of Lake Huron, and is part of the UNESCO designated Georgian Bay Biosphere;

AND WHEREAS water levels on Lake Michigan, Lake Huron and Georgian Bay have set record unprecedented lows in 2012 & 2013 and unprecedented highs in 2020, causing significant ecological and economic impacts;

NOW THEREFORE BE IT RESOLVED that the Township of The Archipelago hereby requests the Government of Ontario, Government of Canada and the International Joint Commission (IJC) to take appropriate actions to better manage and control the lake levels within Lake Michigan, Lake Huron and Georgian Bay;

AND FURTHER BE IT RESOLVED that staff be directed to submit this resolution to the Great Lakes and St. Lawrence Cities Initiative (GLSLCI) to highlight this significant issue for coastal communities along Lake Michigan, Lake Huron and Georgian Bay.

Carried.

Georgian Bay Forever – Municipal Conference Phragmites Update

20-170 **Moved by Councillor Sheard**
Seconded by Councillor Barton

NOW THEREFORE BE IT RESOLVED that Township staff be directed to work with the Georgian Bay Forever to organize a municipal conference on phragmites.

Carried.

Bill 228, An Act to prohibit unencapsulated expanded or extruded polystyrene in floating docks, floating platforms and buoys

20-171 **Moved by Councillor Zanussi**
Seconded by Councillor Manners

WHEREAS on November 5, 2020, Norm Miller, MPP Parry Sound-Muskoka, introduced Bill 228, Keeping Polystyrene Out of Ontario's Lakes and Rivers Act, a Private Member's Bill designed to reduce polystyrene pollution by requiring that any polystyrene foam use, in the construction of docks and rafts, be fully encapsulated;

AND WHEREAS Reeve Liverance completed a delegation to the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks, at the 2020 Association of Municipalities of Ontario Conference, outlining the importance of banning the use of unencapsulated polystyrene foam products in the water;

NOW THEREFORE BE IT RESOLVED that Council for the Township of The Archipelago hereby commends MPP Norm Miller on his initiative and fully supports Bill 228, Keeping Polystyrene Out of Ontario's Lakes and Rivers Act;

AND BE IT FURTHER RESOLVED that Council for the Township of The Archipelago direct staff to submit this resolution to the Great Lakes and St. Lawrence Cities Initiative to support the bill and to recommend similar initiatives within all other jurisdictions within the watershed of the Great Lakes and waterbodies beyond.

AND BE IT FURTHER RESOLVED that staff send this resolution to Premier of Ontario, and to the Leaders of the Opposition Parties.

Carried.

Council recessed for a break at 3:39 p.m. and resumed business at 3:46 p.m.

Emergency Management Program Annual Review – CEMC Report

20-172 **Moved by Councillor Ashley**
Seconded by Councillor Emery

NOW THEREFORE BE IT RESOLVED that Council acknowledges and confirms that the Township of The Archipelago has completed all the necessary requirements of the Emergency Management and Civil Protection Act and Ontario Regulation 380/04.

Carried.

South Shore Road Speed Limit

20-173 **Moved by Councillor Andrews**
Seconded by Councillor Emery

NOW THEREFORE BE IT RESOLVED that Council maintain the current speed limit of 40km/h and approve up to $4,000 for targeted speed enforcement across The Archipelago for the 2021 budget year.

Carried.

Healey Lake Property Owners Association- Amended Lease Agreements (Trailer Lot and Parking Lot)

Maryann Weaver provided a brief summary on the proposed amended lease agreements.

Departmental Updates

- **PUBLIC WORKS**

Operational Services Updates

Greg Mariotti provided an update on various public works activities and projects.

Council expressed that appreciation to Mr. Mariotti, Mr. Thompson and the entire public works department for their hard work.

- **ADMINISTRATION**

Dates for Wellness Centre and Pool Presentation

John Fior reported that presentations will be made to all 7 Municipalities Councils, and provided possible dates for a potential meeting. The Clerk polled Members of Council, reporting that December 7th worked best for the majority of Members.

Next Connectivity Committee Meeting

John Fior reported that the next Connectivity Committee meeting is scheduled for November 24th at 10:00am.

- **FINANCE**

2020 Budget Update

Wendy Hawes and Councillor Ashley summarized the Revenues and Expenditures for 2020.

15. BY-LAWS

Healey Lake Property Owners Association – Lease Agreement - Trailer Lot

2020-49 **Moved by Councillor Walker**
Seconded by Councillor Barton

That By-law Number 2020-49, being a By-law to authorize the execution of a Lease Agreement between the Corporation of the Township of The Archipelago and the Healey Lake Property Owners Association, be read and finally passed in Open Council this 19th day of November, 2020.

Carried.

Healey Lake Property Owners Association – Lease Agreement - Parking Lot

2020-50 **Moved by Councillor Walker**
Seconded by Councillor Zanussi

That By-law Number 2020-50, being a By-law to authorize the execution of a Lease Agreement between the Corporation of the Township of The Archipelago and the Healey Lake Property Owners Association, be read and finally passed in Open Council this 19th day of November, 2020.

Carried.

Shore Road Allowance By-law
27 Earl's Road (Middleton, Earl & Susan)
29 Earl's Road (Wesner, Heinz & Heiderose)

2020-51 **Moved by Councillor Mead**
Seconded by Councillor Manners

That By-law Number 2020-51, being a By-law to close and stop up those parts of the original shore road allowance laid out along the shores of Healey Lake, in front of Lot 18, Concession 4, in the geographic Township of Conger, designated as Parts 2 and 3 according to Plan 42R-21475, be read and finally passed in Open Council this 19th day of November, 2020.

Carried.

Des Roches, Jason & Christine
Designate as a Site Plan Control Area
Part Lot 33, Concession 9, Part 15 on Plan PSR-1516
Shawanaga (Skerryvore)

2020-52 **Moved by Councillor Ashley**
Seconded by Councillor Sheard

That By-law Number 2020-52, being a By-law to designate Part 15 on Plan PSR-1516, being Parcel 22159 PSSS, in Part Lot 33, Concession 9, in the geographic Township of Shawanaga as a site plan control area, be read and finally passed in Open Council this 19th day of November, 2020.

Carried.

Des Roches, Jason & Christine
Authorize the execution of a development agreement
Part Lot 33, Concession 9, Part 15 on Plan PSR-1516
Shawanaga (Skerryvore)

2020-53 **Moved by Councillor Manners**
Seconded by Councillor Barton

That By-law Number A2050-53, being a By-law to autorize the execution of a development agreement between Jason and Christine DesRoches and the Corporation of the Township of The Archipelago, be read and finally passed in Open Council this 19th day of November, 2020.

Carried.

Des Roches, Jason & Christine
Remove the Holding 'H' symbol

A2095-20 **Moved by Councillor Andrews**
Seconded by Councillor Sheard

That By-law Number A2092-20, being a By-law to amend By-law No. A2000-07 (the Comprehensive Zoning By-law) for Part 15 on Plan PSR-1516, in Part Lot 33, Concession 9, in the geographic Township of Shawanaga, be read and finally passed in Open Council this 19th day of November, 2020.

Carried.

16. QUESTION TIME

Councillor Emery informed Council that Community Support Service and the North Bay Parry Sound District Health Unit are providing virtual covid precaution training sessions, reported that they may contact the Township to inquire about resuming exercise classes at the Pointe au Baril Community Centre.

Councillor Sheard informed Council that he will be reporting on the EMS Budget challenges and potential levy increases at the December meeting.

Councillor Ashley reported about the West Parry Sound Health Centre Foundation letter requesting donations to assist with the budget shortfall and requested if Staff could assist with getting this message out to our residents. John Fior reported that he would reach out to Lynne Atkinson.

Councillor Ashley reported about recent funding announcements regarding broadband internet, and requested that Staff report back to Council on potential funding opportunities, and whether there might be a possibility for the Township to request some support. John Fior reported that this matter will be discussed at the next Connectivity Ad Hoc Committee meeting, which will then be brought forward to Council at their next meeting.

17. CONFIRMING BY-LAW

2020-54 **Moved by Councillor Zanussi**
Seconded by Councillor Mead

That By-law Number 2020-53, being a By-law to Confirm the Proceedings of the Regular Meeting of Council held on November 19, 2020, be read and finally passed in Open Council this 19th day of November, 2020.

Carried.

18. ADJOURNMENT

20-174 **Moved by Councillor Emery**
Seconded by Councillor Ashley

NOW THEREFORE BE IT RESOLVED that the Regular Meeting of Council held on November 19, 2020, be adjourned at 4:35 p.m.

Carried.

TOWNSHIP OF THE ARCHIPELAGO

Bert Liverance, Reeve

Maryann Weaver, Clerk

The Corporation of
The Township of The Archipelago
9 James Street, Parry Sound, Ontario P2A 1T4
Phone: 705-746-4243 • Fax: 705-746-7301

REQUEST FOR DEPUTATION

In accordance with the Procedural By-law, any person desiring to present information orally on matters of fact or to make a request of Council shall submit a request to the Clerk no later than 12:00 noon on the Wednesday of the week prior to the subject meeting. Each deputation as addressed shall be limited to not more than ten (10) minutes. Extensions to these limits will be at the discretion of the majority of Council. There will be no debate of the subject matter presented.

PLEASE PRINT

SUBJECT: ICECAP Update & Year End Report
PREFERRED DATE: Dec 10, 2020 ALTERNATE DATE: Nov 19, 2020
NAME: Benjamin John
EMAIL ADDRESS: climate@gbbr.ca
STREET ADDRESS: 11 James St.
CITY: Parry Sound POSTAL CODE: P2A 1T4
PHONE: (705) 774-0978
NAME OF GROUP OR PERSON(S) BEING REPRESENTED (if applicable), INCLUDING THE PERSON(S) WHO WILL BE SPEAKING AND/OR PRESENT AT THE MEETING: Organization: Georgian Bay Biosphere Reserve Speakers: Becky Pollock, Benjamin John, David Bywater
BRIEF STATEMENT OF PURPOSE OF THE OPEN DEPUTATION:
As per the MOU dated November 7th, 2019, the Georgian Bay Biosphere Reserve
will provide an update and year end report on the Integrated Communities Energy &
Climate Action Plans (ICECAP) partnership.
Staff Liaison: Cale Henderson
Council Liaison: Alice Barton

Personal information on this form is collected under the legal authority of the Municipal Act, S.O. 2001, c.25, as amended. The information is collected and maintained for the purpose of creating a record that is available to the general public pursuant to Section 27 of the Municipal Freedom of Information and Protection of Privacy Act. Questions about this collection should be directed to the Clerk, Township of The Archipelago, 9 James St., Parry Sound, Ontario, P2A 1T4, Telephone 705-746-4243 Ext. 301.

Township of The Archipelago

Corporate Milestone 1

submission to:

Federation of Canadian Municipalities
Partners for Climate Protection Program

Version: 1

Date: October, 2019

Prepared by:

Organization: Georgian Bay Biosphere
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Approved by:

Organization: Township of The Archipelago

Name: Cale Henderson
Position: Manager of Development and Environmental Services
Contact: chenderson@thearchipelago.on.ca

Name: Alice Barton
Position: Councillor
Contact: alice.barton@gmail.com

1. Methodology

1.1 Greenhouse Gas (GHG) Inventory

A greenhouse gas inventory brings together data on community and municipal sources of greenhouse gas emissions to estimate emissions for a given year. Two separate GHG inventories and forecasts have been created for the Township of The Archipelago: one for municipal corporate operations and one for community sources. As per the PCP protocol, the inventories consist of the following sources of GHG emissions.

Corporate	*Community*
-Buildings -Streetlights -Water and sewage treatment -Municipal fleet -Solid Waste	-Residential -Commercial and institutional -Industrial -Transportation -Solid Waste

1.2 Scope

This document will focus solely on ***corporate*** emissions.

1.3 Baseline Year

A baseline year of 2016 was selected because it is the year in which the most recent publicly available municipal greenhouse gas emissions data could be retrieved. 2016 also happens to be the most recent Statistics Canada Census year, providing the most recent data on population statistics. Additional data was gathered from other years as well, where relevant, and was referred to throughout the data analysis process. In the event that actual consumption data could not be collected for the baseline year, assumptions were applied from prior, or successive years where relevant. Establishing a baseline is a useful tool to identify areas for improvement, inform development of a GHG reduction action plan, estimate cost savings from reductions, and serve as a reference point to track improvements.

1.4 Data Collection

Energy and emissions quantities were collected for the Township of The Archipelago and compiled into an internal database for analysis and calculation.

1.5 Data Sources

Corporate energy usage, and emissions were calculated for 2016 and reported by sector (buildings and facilities, fleet vehicles, streetlight, water and wastewater, and corporate solid waste) as well as by emissions source (electricity, natural gas, propane, fuel oil, gasoline, diesel, waste, and wastewater). In some cases, data sources varied depending on the type of expenditure required to calculate emissions. The majority of corporate data was obtained from the Government of Ontario's open data catalogue, 'Energy use and greenhouse gas emissions for the

Broader Public Sector[1],' as reported by each municipality under *O. Reg 397/11*[2]. If the data was unavailable on BPS 2016, Archipelago staff provided the missing data. For a detailed summary of corporate data sources, please refer to Table 1.

Emission Sector	*Municipality*	*Source*	*Quality of Data*	*Notes*
Building/ Facilities	Archipelago	BPS, 2016	High	Actual energy consumption per source, per building.
Streetlights	Archipelago	Municipality, Hydro One	High	Actual energy consumption in kWh.
Fleet	Archipelago	Municipality	High	Actual billed fuel consumption for each fleet vehicle.
Water/ Wastewater	Archipelago	DNE	DNE	The Township of The Archipelago does not provide water or wastewater services.
Solid Waste	Archipelago	Municipality	Medium/ Low	Calculation based on actual waste generated data and assumptions.

Legend for data quality:

-High: Actual usage data covering the period of the inventory year, from a credible data collector/ provider
-Medium: Actual usage data provided, with some assumptions from within or around the geographic boundary, inventory year, or otherwise to fill in data gaps
-Low: Usage data provided, but mainly based on assumptions
-DNE: Does not exist

1.5.1 Buildings and Facilities

Actual energy consumption data by each emission source for each municipal building and facilities was obtained from the Government of Ontario's open data catalogue, 'Energy use and greenhouse gas emissions for the Broader Public Sector[3],' as reported by each municipality under *O.Reg 397/11*.

[1] https://www.ontario.ca/data/energy-use-and-greenhouse-gas-emissions-broader-public-sector
[2] https://www.ontario.ca/laws/regulation/110397
[3] https://www.ontario.ca/data/energy-use-and-greenhouse-gas-emissions-broader-public-sector

1.5.2 Water and Wastewater

The Township of The Archipelago is primarily a water-based municipality. This imposes limitations that make providing water and wastewater services economically unfeasible to the municipality's relatively small population.

1.5.3 Streetlights

Actual energy consumption in kWh was provided by the municipality for all streetlights in the Archipelago. This data was gathered by compiling energy consumption receipts billed to the Archipelago by Hydro One.

1.5.4 Fleet Vehicles

Actual fuel consumption in litres by vehicle was provided by Archipelago staff.

1.5.5 Solid Waste

GHG emissions from solid waste are unique emissions typically quantified by local governments. As a result, this presented difficult reporting, and calculation challenges. These emissions reflect the impact of methane released through the decomposition of organic matter in landfills and can be calculated based on total waste deposited in a landfill. With waste generation data pertaining solely to corporate operations being unavailable, Georgian Bay Biosphere Reserve (GBBR) estimated the quantity of solid waste generated at corporate buildings and facilities based on approximations of the size of garbage bins used, their average fullness, and the frequency of their pickup per the PCP protocol. This was used in combination with actual tonnage of waste sent to the McDougall landfill from the Archipelago Township Office, and information gathered from municipal staff on waste management practices and policies. Waste sent to the McDougall landfill from the Archipelago's various transfer stations is mixed with community waste because no curbside waste collection program exists. This resulted in the tonnage reported to be an inaccurate representation of the Archipelago's waste generation.

2. Calculation Process

2.1 Buildings and Facilities

There is only one formula for calculating building emissions from municipal operations. Fortunately, these emissions have already been calculated and made publicly available as per *O. Reg 397/11*. For reference, a simplified version of the formula for calculating building and facility emissions as per PCP protocol is as follows.

2.1.1 Formula

$$\sum(FC * Cef) + (FC * CHef * CHwp) + (FC * Nef * Nwp)$$

Where:

FC = Amount of fuel by type consumed

Cef = Emission factor for Carbon Dioxide (CO_2)

CHef = Emission factor for Methane (CH_4)

Nef = Emission factor for Nitrous Oxide (N_2O)

CHwp = Global warming potential of Methane

Nwp = Global warming potential of Nitrous Oxide

2.1.2 Assumptions

No assumptions were made in calculating GHG emissions produced by corporate buildings and facilities because actual consumption data was available.

2.1.3 Outcome

The Township of The Archipelago's buildings and facilities produced **41** tonnes of CO^2e in 2016. These emissions were produced by consuming **1,070** GJ of energy.

2.2 Water and Wastewater

The Township of The Archipelago does not provide water or wastewater services to its residents because of geographic and economic limitations. As a result, no GHG emissions are generated through this category and no calculation is warranted. However, for reference, a simplified version of the formula for calculating water and wastewater emissions as per the PCP protocol is as follows.

2.2.1 Formula

$$\sum(FC * Cef) + (FC * CHef * CHwp) + (FC * Nef * Nwp)$$

Where:

FC = Amount of fuel by type consumed

Cef = Emission factor for Carbon Dioxide (CO_2)

CHef = Emission factor for Methane (CH_4)

Nef = Emission factor for Nitrous Oxide (N_2O)

CHwp = Global warming potential of Methane

Nwp = Global warming potential of Nitrous Oxide

2.3 Streetlights

There are multiple formulas that can be used to calculate the emissions produced by streetlights. However, since actual consumption data was provided by municipal staff from Hydro One, the formula corresponding to actual consumption data as per the PCP protocol was used. For reference, a simplified version of the formula for calculating GHG emissions produced by streetlights as per the PCP protocol is as follows.

2.3.1 Formula

$$\sum(FC * Cef) + (FC * CHef * CHwp) + (FC * Nef * Nwp)$$

Where:

FC = Amount of electricity consumed

Cef = Carbon Dioxide (CO_2) emission factor for electricity

CHef = Methane (CH_4) emission factor for electricity

Nef = Nitrous Oxide (N_2O) emission factor for electricity

CHwp = Global warming potential of Methane

Nwp = Global warming potential of Nitrous Oxide

2.3.2 Assumptions

No assumptions were made in calculating GHG emissions produced by streetlights because actual consumption data was available.

2.4.2 Outcome

The Township of The Archipelago's streetlighting produced **0** tonnes of CO^2e in 2016. These emissions were produced by consuming **43** GJ of energy.

2.5 Fleet

Actual fuel consumption data by vehicle was provided by municipal staff. For reference, a simplified version of this formula, as per PCP protocol is as follows.

2.5.1 Formula

$$\sum(FC * VTC) + (FC * VTCHef * CHwp) + (FC * VTNef * Nwp)$$

Where:

FC = Amount of fuel by type consumed

VTC = Emission factor by vehicle type for Carbon Dioxide (CO_2)

VTCHef = Emission factor by vehicle type for Methane (CH_4)

VTNef = Emission factor by vehicle type for Nitrous Oxide (N_2O)

CHwp = Global warming potential of Methane

Nwp = Global warming potential of Nitrous Oxide

2.5.2 Assumptions

No assumptions were made in calculating the emissions produced by the corporate fleet. It should be noted that because the Archipelago is primarily a water-based municipality, reflecting the emissions produced by the Archipelago's boats was necessary. These boats are used for daily operations during the months when water access is available. Unfortunately, the PCP tool does not provide a listing specifically for boats, and were therefore categorized as offroad vehicles.

2.5.3 Outcome

The Township of The Archipelago's fleet produced an estimated **228** tonnes of CO^2e in 2016. These emissions were produced by consuming **3,241** GJ of energy.

2.6 Solid Waste

Since actual data on corporately generated waste is not available, local governments can estimate the quantity of solid waste generated at corporate buildings and facilities, as well as community produced waste that is diverted as part of municipal operations (i.e. parks and sidewalk garbage receptacles). This estimate is determined on the size of garbage bins used, their average fullness at pickup, and the frequency of pickup (PCP Protocol, Approach #2, p.22)[4].

The type of landfill is another determinant of the formula used for estimating emissions from corporate solid waste. For reference, a simplified version of this formula, as per the PCP protocol is as follows.

2.6.1 Formula

$$\sum 21 * (GBC * BF * PU * 2.136) * \left(\left(\frac{16}{12}\right) * MCF * DOC * DOCF * F\right)(1 - MR)(1 - OX)$$

Where:

GBC = garbage bin capacity (m^3)

BF = Approximately how full the bin is when it is emptied (%)

PU = Frequency of pickup (times per month)

MCF = Methane correction factor

DOC = Degradable organic content

DOCF = Fraction of DOC dissimilated

[4] https://data.fcm.ca/Documents/reports/PCP/PCP_Protocol_Canadian_Supplement_EN.pdf

F = Fraction of methane in landfill gas

MR = Methane recovery at landfill (%)

OX = Oxidation Factor

2.6.2 Assumptions

Data on the actual corporate solid waste generated by the Township of The Archipelago in 2016 does not exist. Gaining an understanding of solid waste practices and policies can help to determine some of the factors and coefficients of the formula that are determinant on landfill management and operations.

When solid waste is generated, it is sent to the various transfer stations located throughout the municipality. Once transfer stations have reached capacity, solid waste is then diverted to the McDougall landfill. However, this waste is mixed in with community generated waste as part of the solid waste service the transfer stations provide to residents. As a result, the tonnage of solid waste from the transfer stations reported by the McDougall landfill can only be used as a reference to determine the accuracy of the solid waste estimate.

Staff from the McDougall landfill informed GBBR that no emission capture technology exists. This is because a feasibility study was undertaken, which determined that it was economically unfeasible to purchase the technology and embark on installation. While this technology does not exist, the landfill is still being actively managed. Garbage is compacted daily to reduce its volume and then buried to allow for additional landfill space, and to deter wildlife. The landfill is also classified as engineered. The landfill is lined to capture leachate, which is then removed and sent to an offsite treatment facility for processing. These factors helped to determine assumptions on several of the values required by the formula.

Next was the process of determining the quantity of solid waste produced. Municipal staff mentioned that beginning in 2019, waste from the Township Office was being sent directly to the McDougall landfill and weighed upon arrival. Municipal staff provided this data, but since 2019 is only partially over, an average of this year's waste per month was calculated and applied to the remaining months. While this is not 2016 data, it is the most accurate, and relevant data for this building that can be gathered at this time. Municipal staff also informed GBBR that historically, the Pointe au Baril Community Centre has only had two waste receptacles. These receptacles are continuously monitored and emptied when close to full. During July and August they are generally emptied weekly, and are emptied bi-weekly during May, June, September, and October. This information was then used to create a monthly average which could be applied across the entire year. A similar allocation was given to the Archipelago Works Garage. However, because the Township of The Archipelago has an expansive geographic jurisdiction with only a few waste receptacles, it was assumed that waste generated during daily operations must be held until returning to the works garage at the end of the day to be disposed of. As a result, a 2 cubic yard dumpster was allocated to the Archipelago Works Garage to account for this assumed accumulation of waste.

2.6.3 Outcome

The Township of The Archipelago's solid waste produced an estimated **11** tonnes of CO^2e in 2016.

2.7 Business as Usual

In calculating the business-as-usual (BAU) forecast, the year 2030 was chosen as the forecast year.

2.7.1 Assumptions

In their 2016 Population Census, Statistics Canada reported that the Township of The Archipelago experienced a 6.2% decline in population between the years 2011 and 2016. However, given that the BAU forecast is determined by annual population growth, it was determined that the reported decline in population would be unrepresentative of corporate operations and the projected BAU for the following reasons.

Geographically positioned on the Eastern shoreline of Georgian Bay and in the heart of cottage country, the Township of The Archipelago is a major tourist destination. In fact, the seasonal population in the warmer months raises the population from 531 permanent residents, to over 13,000 seasonal residents. Yet Statistics Canada only accounts for the 531 permanent residents in their 2016 Population Census. As a result, Statistics Canada's population decline is derived from permanent residents, failing to account for the major seasonal population influx. This is problematic and unrepresentative in producing a BAU forecast because the services and amenities provided by corporate operations are not restricted for permanent resident use only. Therefore, as seasonal population grows, so too will corporate operations, and the associated GHG emissions. Essentially, using Statistics Canada's population decline would demonstrate that there would be a natural decrease in GHG emissions as population shrinks, a situation which can logically be assumed to be untrue, given that municipal operations are conducted on behalf of all residents residing in the jurisdiction, not just the permanent ones. As a result, the following methodology and assumptions were considered in producing a growth statistic that would factor seasonal population in producing a BAU forecast.

Data was first retrieved from the Municipal Property Assessment Corporation (MPAC). This data was referenced because it classifies each property in Ontario according to its functional purposes. For example, data entries categorized as a 300 series property are classified as a residential property, including both permanent residences and seasonal residences.

It can be difficult to assume the number of people that are staying at a seasonal residence at any given time. For example, it is common for multiple families to rent a seasonal residence throughout the summer. This produces a high degree of variability in the population of any single seasonal residence, as one week could have 3 residents occupying the premises and the following week could have 8. From a calculation perspective, the most appropriate response would be to use a provincial statistic, such as number of residents per household. However, given that this statistic would have an incredibly low degree of variability between years, such as a matter of one-one hundredth of a person, the calculated growth rate would equate to the same value as if

just the growth rate of property numbers as determined by MPAC was used. Therefore, it was assumed that the growth rate of the number of residential properties and population would be the same, and that municipal operations would grow at a similar rate to match the added demand of municipal services. As a result, the annual growth rate of residential properties was used to determine the BAU forecast.

Given that the BAU forecast was determined by annual residential property growth, multiple years of growth data was used to eliminate the possibility of an outlier skewing the calculation result. With this consideration, the residential property growth rate was calculated for each year from 2011 to 2016, and then averaged. This resulted in an average annual residential property growth rate of 0.26%. Following PCP protocol, this 0.26% growth rate was used to determine the forecasted emissions for the year 2030.

2.7.2 Outcome

Given a 0.26% residential property growth rate forecasted to the year 2030, the Township of The Archipelago is expected to produce 291 tonnes of CO^2e in 2030, representing a 4% increase from baseline levels, if business is to continue as usual.

ICECAP

INTEGRATED COMMUNITY ENERGY & CLIMATE ACTION PLANS

2020 Year End – Work Plan Report

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2020 Year End – Work Plan Report		
ICECAP Program Area	**Status**	**Deliverables / Results**
1. ICECAP Regional Activities		
1.1 Coordination & Governance		
1.1.1 Engaging and convening a multi-stakeholder committee to set workplans, priorities and actions as a regional initiative with individualized outputs.	COMPLETE	4 stakeholder committee meetings 1 planning meeting for 2021
1.1.2 Continue to seek new partners to join the collaborative, for example new municipal and First Nation partners.	COMPLETE	18 community partnerships established
1.2 Communications & Public Engagement		
1.2.1 Educate communities and councils on climate change and ways we can reduce our greenhouse gas (GHG) emissions, the use of fossil fuels, lower our energy consumption, and adapt to our changing climate.	COMPLETE	5 webinars hosted, recordings on YouTube 2 energy videos, recordings on YouTube 4 webpages developed including establishing a web presence for ICECAP: gbbr.ca/climate

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		10+ ICECAP features in newspapers/publications 20+ Social media posts reaching est. 30,000
		5 community presentations delivered
		20,000+ engaged through social media
1.2.2 Explore 'seeding actions' to build community awareness, involvement and ownership of climate change mitigation and resilience actions.	COMPLETE	Developed a carbon calculator tool to collect unique energy consumption data
		500 people engaged through carbon calculator 53% of users provided planning feedback
		Participated in 2 research studies (1 academic and 1 Health Unit)
		30+ community organizations networked to build awareness of ICECAP
		ICECAP logo developed and approved
		Carbon Calculator contest coordinated Aug-Nov
		12 webinars attended by staff and partners

1.3 Adaptation Planning & Reporting		
1.3.1 Develop approaches to include climate change adaptation/resilience as part of ICECAP.	COMPLETE	10+ scoping sessions conducted
2. Municipalities: Partners for Climate Protection (PCP) Program		
2.1 Corporate Milestone 1		
2.1.1 Work with partners to advance through PCP milestones. Access dozens of sources of provincial, municipal, energy partners' data. Analyze GHG emissions by sector, using PCP-standards.	COMPLETE	See attached Corporate Milestone 1 report.
2.2 Community Milestone 1		
2.2.1 Work with partners to advance through PCP milestones. Access dozens of sources of provincial, municipal, energy partners' data. Analyze GHG emissions by sector, using PCP-standards. Enhance available data with local Carbon Calculator data (e.g. recreational vehicles including boats) for a more accurate profile of emissions.	COMPLETE	See attached Community Milestone 1 report.
3. First Nations Climate Action		
3.1 Develop approaches for First Nation communities to engage through/with ICECAP framework, in parallel with PCP milestones.	ONGOING	2 community forums held; 7 First Nations invited to participate; 7 Indigenous Community Energy Plans (ICEP) supported.

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3.2 Work with First Nation and municipal staff on actions to mitigate climate change by integrating climate change considerations within operations, policies and procedures.	ONGOING	Meetings with First Nations staff & Councils.
4. Grants		
4.1 Apply for grants to bring funding to the ICECAP partnership	ONGOING	2 grant applications submitted for a cumulative ask of approx. $230,000. 1 provincial NOHFC internship.

2020 ICECAP Program Budget

2020 EXPENSES	AMOUNT		2020 INCOME	AMOUNT
Salaries & benefits of project team	$57,000		Georgian Bay Biosphere & other sources (46.8%)	$37,500
Travels, meetings & partnership development	$7,315		Township of Georgian Bay* Membership Fee	$2,500
Communications & administration	$15,685		Milestone 1 for all Municipalities, including $2,500 Membership Fee (50%)	$40,000 ($8,000 per Member)
Total Expenses	**$80,000**		**Total Income**	**$80,000**

**ICECAP Members in 2020 include: Townships of Archipelago, Carling, Georgian Bay, McKellar, Seguin and Town of Parry Sound. Township of Georgian Bay is also a member of the Severn Sound Sustainability climate planning process, and have completed Milestones 1-3 and therefore do not require the same services as other members.*

ICECAP

INTEGRATED COMMUNITY ENERGY & CLIMATE ACTION PLANS

Work Plan & Budget for 2021

ICECAP
INTEGRATED COMMUNITY ENERGY & CLIMATE ACTION PLANS

Integrated Community Energy & Climate Action Plans (ICECAP)

ICECAP is a partnership between the Municipalities and First Nations located in the Georgian Bay Biosphere region for the purpose of a collaborative, more cost-effective approach to energy management and the reduction of greenhouse gas emissions for the operations of each corporate stakeholder, for each participating community and for the broader region. This document provides an overview of the proposed work plan and budget for 2021.

The 4 main objectives of ICECAP are to:

1. Encourage the reduction of greenhouse gas emissions
2. Improve energy efficiency
3. Reduce the use of fossil fuels
4. Adapt to a changing climate by building greater resilience

ICECAP's current members are as follows:

- Township of The Archipelago
- Township of Carling
- Township of Georgian Bay
- Township of McKellar
- Town of Parry Sound
- Township of Seguin
- Georgian Bay Biosphere

For more information about ICECAP, visit: gbbr.ca/climate-action

2021 Work Plan	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
ICECAP Regional Activities												
Coordination & Governance												
Networking and building of ICECAP memberships and partnerships												
Coordinate ICECAP multi-stakeholder committees (meetings, (agenda, minutes), workshops, commmunications, etc.)												
Communications & Public Engagement (*Communications and education can be delivered through a number of mediums, which may include social media, webinars, workshops, brochures, informational packages, and more)												
Communications and public engagement can be delivered through a number of mediums, which may include: website, social media, webinars, workshops, brochures, informational packages, Kids in the Biosphere, Lessons in a Backpack,												
Communications and public engagement themes may include: Climate Change, GHG Reduction Strategies, Energy Efficiency, Adaptation Strategies, etc.												
Adaptation Planning & Reporting												
Develop approaches to include adaptation/resilience in coporate and community action plans												
Review projected climate data for environmental implications (to corporate and community) and work with committees to discuss impacts and identify actions												
Work with partners and committees to incorporate into Action Plans												
Work with partners and committees to identify adaptation needs and potential sources of funding (e.g. flood plain mapping, coastal resiliency modelling and studies)												
Municipalities: Partners for Climate Protection Program (budgeted amount assume 5 municipal members)												
Administration of FCM PCP Accounts												
Online administration, coordination with FCM/ICLEI, work plan & budget review with staff, communications to municipal councils, etc.												
Corporate Milestone 2: Setting Corporate Reduction Target												
Review corporate milestone 1												
Review energy systems and procurement strategies												
Identify opportunities for energy and emissions reductions												
Develop a range of scenarios of emissions reduction targets												
Present scenarios to council for consideration												
Council sign emission target commitment												
Submit signed emission target to FCM												
Community Milestone 2: Setting Community Reduction Target												
Review community milestone 1												
Identify opportunities for energy and GHG emissions reductions												
Use Carbon Calculator tool targets to make GHG reduction target scenarios												
Present scenarios to member Council for their consideration												
Council signs emission reduction target commitment												
Submit signed emission target to FCM												
Milestone 3: Climate Change Action Plan												
Stakeholder Engagement												
Form community steering committee(s)												
Form corporate steering committee(s)												
Develop action plan from feedback and recommendations (e.g. public engagement, committees)												
Hold public consultations to refine and further develop action plans												
First Nations Climate Action (budgeted amount assume 3 First Nation members)												
Outreach, engagement, and onboarding, and admin												
Work with partners to determine priorities and needs												
Work with partners to determine scope of work												

2021 ICECAP Work Plan & Budget

ICECAP Work Plan Category & Tasks	Total Amount	Contributors				
		Georgian Bay Biosphere	Municipal	First Nations	Other (Partners/Sponsors /Contributions)	Grants
ICECAP Regional Activities						
Coordination & Governance						
Networking and building of ICECAP memberships and partnerships	**$10,500**	$2,500	$6,000		$2,000	
Coordinate ICECAP multi-stakeholder committees (meetings, (agenda, minutes), workshops, commmunications, etc.)						
Communications & Public Engagement						
Communications and public engagement can be delivered through a number of mediums, which may include: website, social media, webinars, workshops, brochures, informational packages, Kids in the Biosphere, Lessons in a Backpack, etc.	**$24,000**	$8,500	$7,500		$6,500	$1,500
Communications and public engagement themes may include: Climate Change, GHG Reduction Strategies, Energy Efficiency, Adaptation Strategies, etc.						
Adaptation Planning & Reporting						
Develop approaches to include adaptation/resilience in coporate and community action plans	**$9,300**	$1,300	$6,000	$2,000		
Review projected climate data for environmental implications (to corporate and community) and work with committees to discuss impacts and identify actions						
Work with partners and committees to incorporate into Action Plans						
Work with partners and committees to identify adaptation needs and potential sources of funding (e.g. flood plain mapping, coastal resiliency modelling and studies)						
Municipalities: Partners for Climate Protection Program (budgeted amount assumes 5 municipal members)						
Administration of FCM PCP Accounts						
Online administration, coordination with FCM/ICLEI, work plan & budget review with staff, communications to municipal councils, etc.	**$7,500**	N/A	$7,500	N/A		
Corporate Milestone 2: Setting Corporate Reduction Target						
Review corporate milestone 1	**$10,000**		$8,500	N/A		$1,500
Review energy systems and procurement strategies						
Identify opportunities for energy and emissions reductions						
Develop a range of scenarios of emissions reduction targets						
Present scenarios to council for consideration						
Council sign emission target commitment						
Submit signed emission target to FCM						
Community Milestone 2: Setting Community Reduction Target						
Review community milestone 1	**$10,500**		$9,000	N/A		$1,500
Identify opportunities for energy and GHG emissions reductions						
Use Carbon Calculator tool targets to make GHG reduction target scenarios						
Present scenarios to member Council for their consideration						
Council signs emission reduction target commitment						
Submit signed emission target to FCM						
Milestone 3: Climate Change Action Plan						
Stakeholder Engagement	**$28,000**		$28,000			
Form community steering committee(s)						
Form corporate steering committee(s)						
Develop action plan from feedback and recommendations (e.g. public engagement, committees)						
Hold public consultations to refine and further develop action plans						
First Nations Climate Action (budgeted amount assumes 3 First Nation members)						
Outreach, engagement, and onboarding, and admin	**$7,500**	$3,000	?	$3,000		$1,500
Work with partners to determine priorities and needs						
Work with partners to determine scope of work						
Total	**$107,300**	**$15,300**	**$72,500**	**$5,000**	**$8,500**	**$6,000**
		Per Municipal Cost	**$14,500**			

Appendix A - Partners for Climate Protection Milestones

Milestone 2: Set an emissions reduction target

A GHG emissions reduction target sets the tone and direction for emission reduction efforts. Targets should be achievable, while also inspiring ambitious action. PCP encourages the adoption of two targets: one for municipally owned operations (i.e. corporate) and another for community-wide emissions.

In 2021, the ICECAP work plan continues milestone 2 discussions and tasks may include:

Corporate Milestone 2 Tasks

1. Review energy consumption and GHG emissions reported in milestone 1.
    a. Assess baseline year in comparison to years prior, if possible.
2. Compile a list of energy systems and energy procurement procedures.
3. Identify opportunities for energy and GHG emissions reductions.
4. Develop a high/ medium/ low scenario of emissions and energy reduction targets based on collected data.
5. Present scenarios to member Council for their consideration.
6. Have member council sign emission reduction target commitment.
7. Submit signed emission reduction target commitment to FCM.

Community Milestone 2 Tasks

1. Review energy consumption an GHG emissions reported in milestone 1.
2. Identify opportunities for energy and GHG emissions reductions.
3. Develop a high/ medium/ low scenario of emissions and energy reduction targets based on citizen's preferred targets.
4. Present scenarios to member Council for their consideration.
5. Have member Council sign emission reduction target commitment.
6. Submit signed emission reduction target commitment to FCM.

Results:

- Description of your targets, including baseline year, target year and percentage change from baseline year.
- A council resolution that adopts the targets set, including the baseline year, target year and percentage change from baseline year.

Milestone 3: Develop a local action plan

A local action plan outlines how your municipality will achieve its emissions reduction target through municipal operations and community-based initiatives. Stakeholder engagement is critical to your plan's development, and ownership of the plan by municipal staff and the community can help ensure its long-term success.

In 2021, the ICECAP work plan continues milestone 3 discussions and tasks may include:

1. Stakeholder engagement is critical to your plan's development and an important first step is to identify and network with key stakeholders, such as:

   a. ICECAP members and partners
   b. Local businesses (for-profit, non-profit, etc.)
   c. Marinas
   d. Residents (permanent and seasonal)
   e. Organized Groups of Citizens (Cottage Associations, PSAAT, Climate Action Parry Sound, etc.)
   f. Other groups as identified by ICECAP members
2. A local action plan outlines how your municipality will achieve its emissions reduction target through municipal operations and community-based initiatives.
3. Identify and describe planned activities to achieve target reductions set out in Milestone 2:
   a. Form community steering committees to identify and discuss planned activities (to achieve target reductions set out in Milestone 2). ICECAP will form a regional community steering committee to achieve efficiencies and improve opportunities for knowledge sharing, with localized working groups as necessary.
   b. Form corporate steering committees where municipalities and First Nations come together to discuss how they will achieve emissions reduction targets through municipal operations. ICECAP will work with members to determine what types of regional committees are needed for this task, which may include: Public Works, Planning, etc.
4. Develop the action plan using feedback and recommendations obtained from committees.
5. Hold public consultations to refine and further develop the plan.
6. In addition to the above tasks, a key component is to develop approaches to integrate PCP and Indigenous Community Energy Plan (ICEP) frameworks and community action plans. ICECAP brings a regional collaborative approach that identifies synergies, such as: regional priorities, collaborative actions (i.e. multi-partner), and regional funding options.

Feedback from other townships and partners (e.g. Sustainable Severn Sound) that have completed climate action plans is that this process requires time in order to go through multiple staff reviews/versions and council approval.

Results:

- Description of the activities that will help you achieve your target reductions (provide a written report, presentation or website).
- Description of how the public or internal stakeholders participated in developing the plan.
- Description of the costs and funding sources.
- Names of the municipal department(s) or organization(s) responsible for the plan and the actions outlined in it.

Township of The Archipelago

Community Milestone 1

submission to:

Federation of Canadian Municipalities
Partners for Climate Protection Program

Version: 1

Date: November 11, 2020

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Foreword

In addition to participating in the Federation of Canadian Municipalities' Partners for Climate Protection Program, the Township of The Archipelago is a proud member of the Integrated Community Energy and Climate Action Plans (ICECAP) Partnership.

ICECAP is a partnership between the Municipalities and First Nations located in the Georgian Bay Biosphere region for the purpose of a collaborative, more cost-effective approach to energy management and the reduction of greenhouse gas emissions for the operations of each corporate stakeholder, for each participating community and for the broader region.

The 4 main objectives of ICECAP are to:

1. Encourage the reduction of greenhouse gas emissions
2. Improve energy efficiency
3. Reduce the use of fossil fuels
4. Adapt to a changing climate by building greater resilience

By completing this community baseline and inventory, the Township of The Archipelago is also contributing to the achievement of the goals and objectives established by ICECAP. The findings and insights discovered will improve local climate change knowledge by understanding where emissions are coming from in the community. As a result, the information obtained will ultimately inform and provide direction into climate change and energy planning for the Township of The Archipelago, the ICECAP partnership, and the broader region.

ICECAP's current members are as follows:

- Township of the Archipelago
- Township of Carling
- Township of Georgian Bay
- Township of McKellar
- Town of Parry Sound
- Township of Seguin
- Georgian Bay Biosphere

Executive Summary

In their Fifth Assessment Report (2014)[1], the Intergovernmental Panel on Climate Change notes that greenhouse gas (GHG) emission growth continues to accelerate, and that ambitious and aggressive mitigation actions are indispensable in mitigating climate change. By actively managing, monitoring, and taking measures to limit the production of GHG emissions, the impacts of climate change will reduce in severity.

As front-line responders to severe weather events and other climate change impacts, municipalities often experience and witness the financial, environmental, and social repercussions of climate change within their own operations and the community they serve. Municipalities therefore have the ability to be leaders in addressing climate change, as their knowledge of community needs and considerations can guide the successful implementation of initiatives designed to tackle climate change. As the Federation of Canadian Municipalities (2009)[2] has noted, municipal governments have the ability to influence or control nearly half of Canada's GHG emissions. Through efforts to reduce GHG emissions, municipalities can therefore lead the way in climate change mitigation, and protect their residents from future climate change impacts.

By taking the appropriate steps to respond to climate change through mitigation and adaptation, municipal governments also have the opportunity to save money in municipal operations, lower energy costs for residents and businesses, and increase investment in the local economy. Establishing a GHG emission baseline is a useful tool to identify areas for improvement, inform the development of a GHG reduction action plan, estimate cost savings from reductions, and serve as a reference point to track improvements. To do this, many municipalities in Canada have joined the Federation of Canadian Municipalities' Partners for Climate Protection program in an effort to reduce the GHG emissions produced by their operations and community.

What is the Federation of Canadian Municipalities?

The Federation of Canadian Municipalities (FCM) is the national voice for municipal governments in Canada. With a congregation of nearly 2,000 municipal members across the country, FCM advocates for municipalities to ensure their citizen's needs are reflected in federal policies and programs. Through this advocacy the FCM is able to provide funding and programming that help municipalities tackle local challenges, such as climate change, asset management, economic development, and more.

[1] https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_full.pdf

[2] https://fcm.ca/sites/default/files/documents/resources/report/act-locally-municipal-role-fighting-climate-change.pdf

What is the Partners for Climate Protection program?

The Partners for Climate Protection (PCP) program is designed to guide municipalities through the process of reducing greenhouse gas emissions through climate change and energy planning. In partnership with the International Council for Local Environmental Initiatives (ICLEI), the PCP program is administered by the FCM. Since the program's establishment in 1997, nearly 400 municipalities across Canada have joined, with the Township of The Archipelago becoming a participant in 2019. The PCP program consists of a five-step milestone framework that guides municipalities in their efforts to reduce greenhouse gas emissions. The five milestones are as follows:

The Partners for Climate Protection program looks at these milestones from two different perspectives; corporate and community. **Corporate** refers to the greenhouse gas emissions produced as a result of a local government's operations and services. Its purpose is to identify the GHG emissions within a local government's direct control or influence, and for which the local government is accountable as a corporate entity. **Community** refers to the greenhouse gas emissions generated by the residents and businesses of the community in which the local government serves and represents.

To date, a corporate greenhouse gas emission baseline and inventory has been completed by the Township of The Archipelago and approved by FCM and ICLEI. Thus, this report focuses on the community's greenhouse gas emission baseline and inventory.

Community Context

Geographically positioned on the eastern shoreline of Georgian Bay and in the heart of cottage country, the Township of The Archipelago is a major tourist destination. In addition to being a tourist destination, the Township of the Archipelago is primarily a water-based municipality, with many residences being only accessible by water. The Township of The Archipelago thus experiences a massive increase in population during the warmer months, raising the population from 531 permanent residents to thousands of seasonal residents. As a result, the seasonal population has a significant influence over the production of GHG emissions in the Township of The Archipelago, and it is therefore critical to include the GHG emissions they produce, where possible.

While undergoing data collection for the Township of The Archipelago's community GHG emission baseline it was discovered that a number of energy consumption data gaps existed. These data gaps largely stemmed around the inability to acquire actual fuel oil and propane consumption data from local providers, and a lack of relevant statistics for common recreational activities, such as boating. As a result, the Georgian Bay Biosphere developed a comprehensive Carbon Calculator tool to collect actual consumption data from the Township of the Archipelago's community and the broader region. The Carbon Calculator tool has been designed as a survey and is an educational opportunity for the Township of the Archipelago's community to calculate their own personal GHG emission baseline. Where possible, the information from the Carbon Calculator has been used to validate the values obtained through assumptive energy consumption models or as a direct calculation statistic. In both circumstances, data from the Carbon Calculator has been aggregated at the regional level to produce statistical relevant values. This regional aggregation has been carefully considered, and has been assumed to be representative of the energy consumption behaviours in the Township of the Archipelago's community based on the similar activities, geography, and economic activities that occur in the broader region. Furthermore, it should be noted that the Carbon Calculator tool is an on-going project delivered by the Georgian Bay Biosphere, and any statistics or numbers used in the development of the Township of the Archipelago's community GHG emission baseline can be updated as additional entries and better information becomes available. As of November 4th, 2020 the carbon calculator has been completed 191 times in the region, representing the energy consumption behaviours of 478 people. Table A provides an overview of the sources and quality of data used.

Table A: Community Energy & GHG Emission Baseline Data Sources

Emission Sector	Data	Data Source	Data Quality		Notes
			Permanent	Seasonal	
Residential	Electricity Consumption	Hydro One	High	High	Actual electricity consumption in kWh for baseline year.
	Natural Gas Consumption	Enbridge	High	N/A	Actual natural gas consumption in m^3 for baseline year.
	Fuel Oil Consumption	Natural Resources Canada & Government of Ontario & MPAC & Carbon Calculator	Medium	N/A	Actual consumption data and some relevant assumptions.
	Propane Consumption	Natural Resources Canada & Government of Ontario & MPAC & Carbon Calculator	Medium	N/A	Actual consumption data and some relevant assumptions.
	Wood Consumption	Natural Resources Canada & Government of Ontario & Statistics Canada & World Forest Industries & Carbon Calculator	Medium	N/A	Actual consumption data and some relevant assumptions.
Commercial & Institutional	Electricity Consumption	Hydro One	High	N/A	Actual electricity consumption in kWh for baseline year.
	Natural Gas Consumption	Enbridge	High	N/A	Actual natural gas consumption in m^3 for baseline year.

	Fuel Oil Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
	Propane Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
Industrial	Electricity Consumption	Hydro One	High	N/A	Actual electricity consumption in kWh for baseline year.
	Natural Gas Consumption	Enbridge	High	N/A	Actual natural gas consumption in m^3 for baseline year.
	Fuel Oil Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
	Propane Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
Transportation	On-Road Transportation	Statistics Canada & Carbon Calculator	Medium	N/A	Local statistics and some relevant assumptions.
	Waterborne Transportation	WPSGN & Statistics Canada & Carbon Calculator & DMM & Online Forums	Low	Low	Calculation based primarily on assumptions.
	Off-Road Transportation	WPSGN & Statistics Canada & Carbon Calculator & DMM & Online Forums & Natural Resources Canada	Low	Low	Calculation based primarily on assumptions.

Waste	Tonnes of Waste	Municipality	High	High	Actual amount of solid waste produced in tonnes for baseline year.
	Degradable Organic Content	Carbon Calculator	Medium/ Low	Medium/ Low	Calculation based on Carbon Calculator data.
BAU Forecast	Residential Property Growth Rate	MPAC	High	High	Actual residential property numbers for baseline year and multiple consecutive years prior.

* Legend for Data Quality:
- High: Actual usage data covering the period of the inventory year, from a credible data collector/ provider.
- Medium: Actual usage data provided, with some assumptions from within or around the geographic boundary, inventory year, or otherwise to fill in data gaps.
- Low: Usage data provided, but mainly based on assumptions.
- N/A: Not Applicable.

Community Greenhouse Gas Emissions

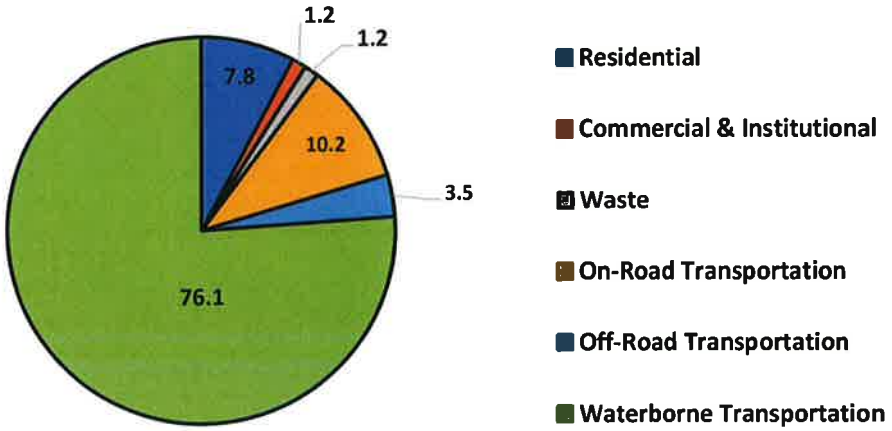
The Township of The Archipelago's community greenhouse gas (GHG) inventory identifies and quantifies the sources of GHG emissions from community activities and establishes a baseline from which future emissions reductions and progress can be measured. With the production of this inventory, the baseline year of 2016 has been established. Table B lists the Township of The Archipelago's emission sectors.

Table B: Township of The Archipelago's GHG Emission Sectors in 2016

GHG Emission Sectors	Metric Tonnes of CO_2e
Residential	1,631
Commercial & Institutional	255
Industrial	N/A
Transportation (total)	18,628
On-Road Transportation	*2,117*
Waterborne Transportation	*15,789*
Off-Road Transportation	*722*
Waste	239
Total Emissions	**20,753**

The transportation sector is by far the largest contributor to GHG emissions in the TOA, accounting for roughly 90% of GHG emissions. This is followed by the residential sector, which produces approximately 7.8% of the TOA's community emissions, and the commercial and institutional sector and waste sector which each produce approximately 1.2% of the TOA's community emissions. Figure A shows the GHG emissions associated with each sector, expressed as a percentage.

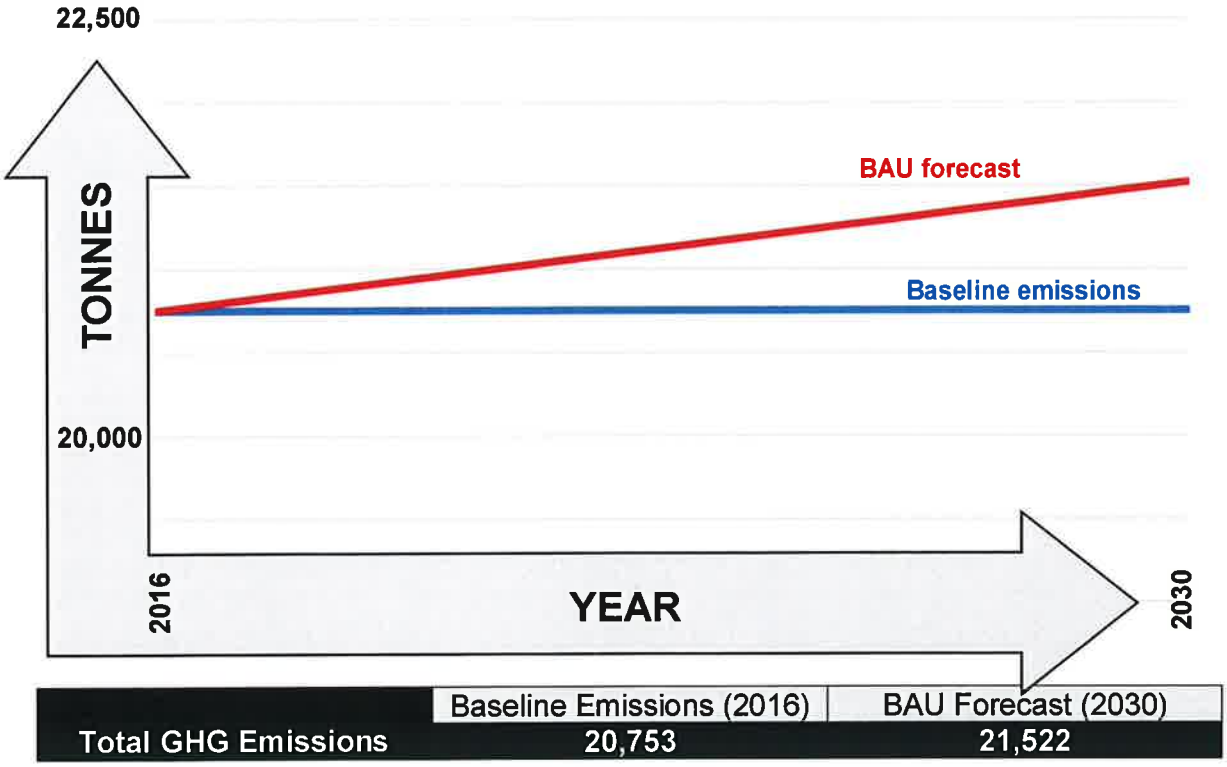
Figure A: GHG Emission Sectors as a Percentage



Business as Usual Forecast

As part of Community Milestone 1, municipalities are also required to forecast GHG emissions to a specified year, based on permanent-resident population growth. However, this is problematic and unrepresentative in producing a business as usual forecast. The Township of the Archipelago is currently experiencing a decline in its population permanent residents (2016)[3]. This population decline would therefore demonstrate that GHG emissions would decrease naturally as the permanent-resident population shrinks, a situation which can logically be assumed to be untrue, given the influence seasonal residents have over the production of GHG emissions in the Township of The Archipelago. As a result, an alternative metric using annual residential property growth rate was developed to capture seasonal resident's influence of community GHG emissions in the Township of The Archipelago. With an average annual residential property growth rate of 0.26%, community GHG emissions are expected to increase 3.7% by 2030 if no actions are taken to reduce GHG emissions. This will result in community GHG emissions totaling 21,522 tonnes of CO_2e in the year 2030. Figure B shows the TOA's expected community GHG emissions growth if business continues as usual.

Figure B: Business as Usual Forecast



[3] https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3549005&Geo2=PR&Code2=35&SearchText=The%20Archipelago&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=3549005&TABID=1&type=0

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1. Methodology Background

1.1 Greenhouse Gas Inventory

A greenhouse gas (GHG) inventory brings together data on community and municipal sources of GHG emissions to estimate emissions for a given year. Two separate GHG inventories and forecasts have been created for the Township of The Archipelago (TOA): one for municipal corporate operations and one for community sources. As per the PCP protocol, the inventories consist of the following sources of GHG emissions.

Corporate	***Community***
• Buildings • Streetlights • Water and Sewage Treatment • Municipal Fleet • Solid Waste	• Residential • Commercial and Institutional • Industrial • Transportation • Solid Waste

1.2 Scope

This document will focus solely on ***community*** GHG emissions.

1.2.1 Scope Context & Background

In the TOA, residents are often classified as year-round or seasonal for the purposes of property assessments, taxes, energy usage and billing, and many other applications. For the purposes of this report, year-round residents are synonymous with permanent residents. Given that residents of the TOA can be classified differently, this baseline has disaggregated data for both resident classifications where necessary and possible. For reporting purposes, these resulting energy consumption quantities and GHG emissions have been aggregated to offer a holistic community perspective. Additionally, the energy consumed and emissions produced by seasonal residents in the TOA are those that occur within its jurisdictional boundaries. Energy and emissions relating to the place of primary residence for seasonal residents have been excluded from this baseline. Only in-boundary emissions (those produced within the TOA's jurisdiction) are considered.

1.3 Baseline Year

Establishing a baseline is a useful tool to identify areas for improvement, inform the development of a GHG reduction action plan, estimate cost savings from reductions, and serve as a reference point to track improvements. A baseline year of 2016 was selected in order to be consistent with the GHG inventory and forecast submitted by the TOA for Corporate Milestone 1. From a methodological perspective, 2016 was selected because it was the year in which the most recent publicly available energy consumption data could be retrieved for some institutions. This also happens to be the year that Statistics Canada released its most recent Census, thereby providing the most current

data on population statistics available for this community inventory. Additional data was gathered from other years as well, where relevant, and was referred to throughout the data analysis process. In the event that actual data could not be collected for the baseline year, assumptions were applied from prior, or successive years where relevant.

1.4 Data Collection

To determine the quantity of GHG emissions produced by the TOA's community, data on energy consumed and solid waste produced by the community during the baseline year must first be gathered. Once gathered, this data was compiled into an internal database for analysis and calculation.

1.5 Data Sources

Community energy consumption and emissions were calculated for 2016 and reported by sector (residential, commercial and institutional, industrial, transportation, and solid waste) as well as by emissions source (electricity, natural gas, propane, fuel oil, wood, gasoline, diesel, and tonnes of solid waste).

Data quality was assessed primarily on its relevance. While data accuracy is also a critical characteristic when assessing data quality, data accuracy received a secondary role. This is because all data was retrieved from reputable and trustworthy sources, such as federal, provincial, and municipal government agencies, utility providers, individuals, and private organizations and can therefore be considered accurate. As a result, determining data quality was not an exercise in determining the accuracy of the data retrieved. Rather, determining data quality was an exercise in determining whether the data retrieved was relevant to the year in which the baseline and business-as-usual forecast was developed, which would in turn produce an accurate estimate of energy consumption.

While undergoing data collection for the TOA's community GHG emission baseline it was discovered that a number of energy consumption data gaps existed. These data gaps largely stemmed around the inability to acquire actual fuel oil and propane consumption data from local providers, and a lack of relevant statistics for common recreational activities, such as boating. As a result, the Georgian Bay Biosphere developed a comprehensive Carbon Calculator tool to collect actual consumption data from the TOA's community and the broader region. The Carbon Calculator tool has been designed as a survey and is an educational opportunity for the TOA's community to calculate their own personal GHG emission baseline. Where possible, the information from the Carbon Calculator has been used to validate the values obtained through assumptive energy consumption models or as a direct calculation statistic. In both circumstances, data from the Carbon Calculator has been aggregated at the regional level to produce statistical relevant values. This regional aggregation has been carefully considered, and has been assumed to be representative of the energy consumption behaviours in the TOA's community based on the similar activities, geography, and

economic activities that occur in the broader region. Furthermore, it should be noted that the Carbon Calculator tool is an on-going project delivered by the Georgian Bay Biosphere, and any statistics or numbers used in the development of the TOA's community GHG emission baseline can be updated as additional entries and better information becomes available. As of November 4th, 2020 the carbon calculator has been completed 191 times in the region, representing the energy consumption behaviours of 478 people.

For a detailed summary of community data sources and quality, please refer to Table 1.

Table 1: Community Energy & GHG Emission Baseline Data Sources

Emission Sector	Data	Data Source	Data Quality		Notes
			Permanent	Seasonal	
Residential	Electricity Consumption	Hydro One	High	High	Actual electricity consumption in kWh for baseline year.
	Natural Gas Consumption	Enbridge	High	N/A	Actual natural gas consumption in m^3 for baseline year.
	Fuel Oil Consumption	Natural Resources Canada & Government of Ontario & MPAC & Carbon Calculator	Medium	N/A	Actual consumption data and some relevant assumptions.
	Propane Consumption	Natural Resources Canada & Government of Ontario & MPAC & Carbon Calculator	Medium	N/A	Actual consumption data and some relevant assumptions.
	Wood Consumption	Natural Resources Canada & Government of Ontario & Statistics Canada & World Forest Industries & Carbon Calculator	Medium	N/A	Actual consumption data and some relevant assumptions.
Commercial & Institutional	Electricity Consumption	Hydro One	High	N/A	Actual electricity consumption in kWh for baseline year.
	Natural Gas Consumption	Enbridge	High	N/A	Actual natural gas consumption in m^3 for baseline year.

Emission Sector	Data	Data Source	Data Quality		Notes
			Permanent	Seasonal	
	Fuel Oil Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
	Propane Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
Industrial	Electricity Consumption	Hydro One	High	N/A	Actual electricity consumption in kWh for baseline year.
	Natural Gas Consumption	Enbridge	High	N/A	Actual natural gas consumption in m^3 for baseline year.
	Fuel Oil Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
	Propane Consumption	Natural Resources Canada & MPAC	Medium	N/A	Provincial consumption levels and some relevant assumptions.
Transportation	On-Road Transportation	Statistics Canada & Carbon Calculator	Medium	N/A	Local statistics and some relevant assumptions.
	Waterborne Transportation	WPSGN & Statistics Canada & Carbon Calculator & DMM & Online Forums	Low	Low	Calculation based primarily on assumptions.

Emission Sector	Data	Data Source	Data Quality		Notes
			Permanent	Seasonal	
	Off-Road Transportation	WPSGN & Statistics Canada & Carbon Calculator & DMM & Online Forums & Natural Resources Canada	Low	Low	Calculation based primarily on assumptions.
Waste	Tonnes of Waste	Municipality	High	High	Actual amount of solid waste produced in tonnes for baseline year.
	Degradable Organic Content	Carbon Calculator	Medium/ Low	Medium/ Low	Calculation based on Carbon Calculator data.
BAU Forecast	Residential Property Growth Rate	MPAC	High	High	Actual residential property numbers for baseline year and multiple consecutive years prior.

* Legend for Data Quality:

- High: Actual usage data covering the period of the inventory year, from a credible data collector/ provider.
- Medium: Actual usage data provided, with some assumptions from within or around the geographic boundary, inventory year, or otherwise to fill in data gaps.
- Low: Usage data provided, but mainly based on assumptions.
- N/A: Not Applicable

1.5.1 Residential

Actual energy consumption data for electricity was provided by Hydro One. Data on the quantity of natural gas consumed in the TOA was provided by Enbridge, however, it should be noted that no residential natural gas consumption takes place in the TOA due to a lack of associated infrastructure. Unfortunately, actual consumption data for private sales of fuel oil, heating oil, and propane were unavailable at this time. The quantities of these fuel sources consumed was therefore estimated using statistics and data from Natural Resources Canada, the Government of Ontario, the Municipal Property Assessment Corporation (MPAC), and the Carbon Calculator. Similarly, actual consumption data on wood could not be obtained at this time. The quantity of wood consumption in the TOA was thus estimated using data from Natural Resources Canada, the Government of Ontario, the Municipal Property Assessment Corporation, World Forest Industries, and the Carbon Calculator.

While the quality of data varies across fuel sources, it can be said with confidence that overall, the GHG emissions and fuel consumption quantities reported under the residential sector for the TOA are accurate.

1.5.2 Commercial & Institutional

Actual energy consumption data for electricity was provided by Hydro One. Data on the quantity of natural gas consumed in the TOA was provided by Enbridge, however, it should be noted that no commercial and institutional natural gas consumption takes place in the TOA due to a lack of associated infrastructure. Unfortunately, actual consumption data for the private sales of fuel oil, heating oil, and propane were unavailable at this time. The quantities of these fuel sources consumed was therefore estimated using statistics and data from Natural Resources Canada and the Municipal Property Assessment Corporation.

While the quality of data varies across fuel sources, it can be said with confidence that overall, the GHG emissions and fuel consumption quantities reported under the commercial and institutional sector for the TOA are accurate.

1.5.3 Industrial

Actual energy consumption data for electricity was provided by Hydro One. Data on the quantity of natural gas consumed in the TOA was provided by Enbridge, however, it should be noted that no industrial natural gas consumption takes place in the TOA due to a lack of associated infrastructure. Unfortunately, actual consumption data for the private sales of fuel oil, heating oil, and propane were unavailable at this time. Due to additional data limitations, the consumption quantities of these fuel sources for the industrial sector could not be estimated.

Overall, it can be said with confidence that the GHG emissions and fuel consumption quantities reported under the industrial sector for the TOA are accurate.

1.5.4 Transportation

Unfortunately, for all aspects of transportation in the TOA (on-road, waterborne, and off-road) actual fuel consumption data was unavailable. The quantities of gasoline and diesel consumed by all types of vehicles in the TOA was therefore estimated using statistics and data from Natural Resources Canada, Municipal Property Assessment Corporation, West Parry Sound Geography Network, the Government of Ontario, Statistics Canada, the District Municipality of Muskoka, the Carbon Calculator, and select online forums.

While the quality of data varies for these sources, it can be said with confidence that overall, the GHG emissions and fuel consumption quantities reported under the transportation sector for the TOA are accurate.

1.5.5 Solid Waste

GHG emissions from solid waste are a unique emission source to be quantified by local governments. These emissions reflect the impact of methane released through the decomposition of organic matter in landfills and can be calculated based on total waste deposited in a landfill.

Located in rural Northern Ontario, a solid waste curbside collection program does not exist for the TOA. Instead, community members bring their waste to a municipally operated transfer station, where the TOA outsources waste removal once the receptacles at the transfer station have reached capacity. The cost associated with outsourcing waste removal is measured in terms of weight being hauled. As a result of providing this service and paying the removal fee, the TOA is the owner of community waste tonnage data, eliminating the data barrier of trying to receive waste data from a private business. Therefore, given that the TOA maintains ongoing records of the tonnage of community-generated solid waste being removed, it can be said with a high degree of confidence that the reported waste tonnage quantity is highly accurate and relevant given the access to actual solid waste production data.

Despite having a record of the total weight of waste being removed, the TOA does not have records of the types of waste being removed. In order to obtain this data, the TOA would need to undergo a comprehensive waste audit. As a result, values obtained from the Carbon Calculator have been used instead of the default North American values provided by the PCP Protocol in order to capture waste generation behaviours particular to the region.

While the quality of data for the waste sector varies, it can be said with confidence that overall, the GHG emissions and values reported under the waste sector for the TOA are accurate.

1.5.6 Business as Usual Forecast

Data on the number of residential properties in the TOA for the baseline year and multiple consecutive years prior was obtained from the Municipal Property Assessment Corporation. As a result, it can be said with a high degree of confidence that the reported residential property growth rate is highly accurate given the access to data on the actual number of residential properties in the TOA.

1.6 Emission Factors & Global Warming Potentials

Emission factors (EF) and global warming potentials (GWP) are a fundamental component of every formula used to determine GHG emissions. An emissions factor is a representative value that attempts to relate the quantity of a pollutant released into the atmosphere with an activity associated with the release of that pollutant. For example, grams (g) of carbon dioxide (CO_2) emitted per kilogram (kg) of biomass consumed. There are many factors that influence the values of emission factors, such as the technology used to consume the fuel source and the end user of that fuel. Therefore, as technologies improve and research on greenhouse gasses develop, the values of EF and GWP change over the years, resulting in both EF and GWP to be variable when compared across years. For an example of how EF and GWP can be variable across years please refer to Table 2.

Table 2: Emission Factor and Global Warming Potential Variability Example

		2011		2016	
Consumption Method	**GHG**	**EF (g/kg fuel)[4]**	**GWP[5]**	**EF (g/kg fuel)[6]**	**GWP[7]**
Residential Biomass Consumption with Conventional Woodstove	Carbon Dioxide	1696	1	1539	1
	Methane	15	21	12.9	25
	Nitrous Oxide	0.16	310	0.12	298
Industrial Biomass Consumption	Carbon Dioxide	840	1	840	1
	Methane	0.09	21	0.09	25
	Nitrous Oxide	0.06	310	0.06	298

For reporting purposes, the PCP tool has automatically programmed the emission factors and global warming potentials into the equation, should fuel consumption quantities be reported. However, in the event that emissions had to be directly reported into the PCP tool, the emission factors and global warming potentials for the baseline year were used. The emission factors and global warming potential values were obtained from the baseline year's edition of Environment Canada's (2016)[8] *National Inventory Report: Greenhouse Gas Sources and Sinks in Canada*.

[4] Environment Canada's National Inventory Report 1990-2011: Greenhouse Gas Sources and Sinks in Canada, Part 2, Annex 8, pp. 205.
[5] Environment Canada's National Inventory Report 1990-2011: Greenhouse Gas Sources and Sinks in Canada, Part 1, Chapter 1, pp. 33.
[6] Environment Canada's National Inventory Report 1990-2016: Greenhouse Gas Sources and Sinks in Canada, Part 2, Annex 6, pp. 225.
[7] Environment Canada's National Inventory Report 1990-2016: Greenhouse Gas Sources and Sinks in Canada, Part 1, Chapter 1, pp. 17.
[8] http://www.publications.gc.ca/site/eng/9.506002/publication.html

1.7 System of Measurement

For the purposes of this report and baseline, GHG emission quantities are expressed in terms of ***carbon dioxide equivalent (CO_2e).***

The concept of global warming potentials mentioned above is used to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. Essentially, GHGs have different capabilities in terms of their ability to impact or influence the atmosphere based on their unique atmospheric lifetime and heat-trapping potential. By factoring these global warming potentials into account, it also allows for a comparison of GHG emissions in terms of how much CO_2 would be required to produce a similar warming effect over a given time period. For example, in 2016, methane had a global warming potential of 25, meaning that over a 100-year period, it would require 25 times the amount carbon dioxide to assert the same atmospheric influence as methane on a unit to unit basis (i.e. gram to gram). In doing so, this normalization into a single unit of measurement enables the quantification of "total community emissions", expressed as CO_2e.

2. Calculation Process and Assumptions

2.1 Residential

To calculate the GHG emissions produced by residential buildings in the TOA, the PCP recommended approach of obtaining actual energy consumption data was pursued, where possible. Where actual energy consumption data was unavailable, the alternative method of estimating energy consumption data was utilized.

2.1.1 Formula for Calculating Residential Building Emissions

There is only one formula for calculating the GHG emissions produced by residential buildings in the TOA. For reference, the formula as determined by the PCP protocol is as follows:

$$CO_2e_a = (x_a * CO_2EF_a) + (x_a * CH_4EF_a * GWP_{CH4}) + (x_a * N_2OEF_a * GWP_{N2O})$$

Where:

- x_a = Amount of energy source 'a' consumed in one year
- CO_2EF_a = The Carbon Dioxide (CO_2) emission factor for energy source 'a'
- CH_4EF_a = The Methane (CH_4) emission factor for energy source 'a'
- N_2OEF_a = The Nitrous Oxide (N_2O) emission factor for energy source 'a'
- a = Energy source (electricity, natural gas, propane, fuel oil)
- GWP_{CH4} = Global warming potential of Methane (CH_4)
- GWP_{N2O} = Global warming potential of Nitrous Oxide (N_2O)
- CO_2e_a = The Carbon Dioxide (CO_2) equivalents of energy source 'a'

2.1.2 Assumptions

No assumptions were made in calculating the GHG emissions produced by electricity consumption in the TOA due to Hydro One's provision of actual electricity consumption for the baseline year. Furthermore, no assumptions were needed for natural gas, district energy, and diesel consumption since residential buildings in the TOA do not consume these fuel sources due to a lack of infrastructure.

In determining the quantity of GHG emissions produced by residential buildings in the TOA, assumptions surrounding the consumption of propane, fuel/ furnace oil, and wood needed to be made because actual consumption data for these fuel sources could not be obtained at this time.

2.1.2.1 Fuel Oil and Propane Assumptions & Consumption Estimate Methodology

Due to a lack of natural gas infrastructure, residential natural gas consumption does not occur in the TOA. As a result, residential dwellings typically consume fuel/ furnace oil, propane, wood, or any combination of these fuel sources for space heating, water heating, cooking, and other purposes. Therefore, estimating the quantity of GHG emissions produced through the consumption of these fuel sources is critical to accurately depict the emissions produced by residential dwellings in the TOA.

The theory of logic behind estimating the residential consumption of propane and fuel/ furnace oil stems from the simplified process of allocating the average residential consumption of these fuel sources to the number of residential dwellings in the TOA that use these fuel sources.

The first assumption derived from determining how many residential dwellings consumed propane or fuel/furnace oil in the baseline year. In determining this amount, residential dwellings that are used seasonally were not considered. Seasonal dwellings were omitted from consideration because according to Natural Resources Canada (2020)[9], roughly 62% of residential energy consumption is used for space heating purposes, with an additional 19% of residential energy consumption used for water heating purposes. The heating properties derived from the combustion of propane and fuel/furnace oil thus make it logical to assume that these fuels are used primarily for space heating purposes. With this is mind, the vast majority of seasonal residences are only occupied during the warmer months when space heating is not required, and therefore eliminates the primary purpose of these fuels. Additionally, since these fuel sources are not needed for their primary purpose, it is not uncommon for seasonal dwellings to have electric water heaters to fill the void of their remaining heating purposes. As a result, only residential buildings that are occupied year-round in the TOA were factored into calculating residential propane and fuel/furnace oil consumption.

[9] https://www.nrcan.gc.ca/science-data/data-analysis/energy-data-analysis/energy-facts/energy-and-greenhouse-gas-emissions-ghgs/20063

To determine this amount, data from Statistics Canada's 2016 Census (2016)[10] on private dwellings occupied by usual residents was chosen over total private dwellings. In looking at Statistics Canada's following definition of total private dwellings, it is evident that a single building can have multiple dwellings within it, such as an apartment building. Under the definition of 'total private dwellings':

> "private dwelling refers to a separate set of living quarters with a private entrance either from outside the building or from a common hall, lobby, vestibule or stairway inside the building. The entrance to the dwelling must be one that can be used without passing through the living quarters of some other person or group of persons."

However, when compared to Statistics Canada's following definition of private dwelling occupied by usual residents, it is evident that there is an important feature missing from the definition of 'total private dwellings'.

> "'Private dwelling occupied by usual residents' refers to a private dwelling in which a person or a group of persons is permanently residing. Also included are private dwellings whose usual residents are temporarily absent."

Comparing the two definitions, it is apparent that 'total private dwellings' does not factor whether people are consistently present in the dwelling or not, where private dwellings occupied by usual residents does. As a result, it was assumed that only dwellings occupied by usual residents would consume fuel oil and propane, since usual residents were assumed to be year-round residents. The rationale behind this is that if a dwelling is typically unoccupied there is no need for thermal control or comfort, and consuming these fuels in an unoccupied dwelling would be financially irresponsible for the owner, a sunk cost that would likely be avoided if possible.

Now that the total number of dwellings using propane or fuel/ furnace oil had been determined, the next step was to determine the precise number of dwellings consuming either of the fuel sources. For this step it was assumed that a dwelling consumed either propane or fuel/furnace oil and never both. This assumption was made based on the rationale that the appliances using these fuels are typically designed to consume one fuel source or the other, and not both.

Using data on the percentage of residential dwellings consuming propane or fuel/ furnace oil in Ontario, a subsequent percentage could be drawn and applied to the number of private dwellings occupied by usual residents in the TOA. For example, it was found that in Ontario, 1.1% of households use propane as their primary fuel source and 6.8% use fuel/ furnace oil. Since it was assumed that households in the TOA use either propane or fuel/furnace oil, 100% of households could be accounted for in the cumulative 7.9% of households in the province using these fuel sources. Considering

[10] https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3549005&Geo2=PR&Code2=35&SearchText=The%20Archipelago&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=3549005&TABID=1&type=0

this cumulative percentage as a holistic total (since it represents 100% of households), the subsequent percentage can then define the ratio of households on propane to fuel/furnace oil. In calculating this ratio, 1.1% equates to 13.92% of 7.9% and 6.8% equates to the remaining 86.08%. These percentages (13.92% and 86.08%) were then applied to the number of private dwellings occupied by usual residents in the TOA to determine how many were consuming propane and how many were consuming fuel/furnace oil.

The next step was to determine how much of each fuel source that each dwelling using that fuel source was consuming. In determining this amount, the average residential consumption quantities for each fuel source in Ontario was used. Although these quantities were reported in terms of gigajoules (GJ) of energy produced, energy conversion ratios allowed for this number to be translated into an amount in litres. It should be noted, however, that the most recent data on the average GJ of energy consumed of each fuel source that could be retrieved was for the year 2011. As a result, the residential consumption growth rate of each fuel source was applied to determine average consumption in the baseline year. In applying this growth rate, it was assumed that the growth rate for the provincial residential consumption of propane and fuel/furnace oil would be similar to the growth rate in the TOA and could be applied to produce a localized quantity of energy consumption for the baseline year. Unfortunately, data from Natural Resources Canada and the Government of Ontario only covers up to the year 2015 and therefore could not be obtained to the baseline year. As a result, the propane and fuel/furnace oil consumption for the year 2015 was reported as the consumption quantities for the 2016 baseline.

While it is best to have consumption data for the precise baseline year, the consumption quantities reported represent the best available data that could be obtained at this point in time. As government data continues to be updated and made publicly available, the calculation process pursued allows for this baseline to be updated quickly to reflect the most up to date information.

For a numeric explanation of the calculation process please see Table 3.

Table 3: Residential Propane and Fuel/Furnace Oil Consumption Calculation Process

CELL	1	2	3	4	5
A	DATA	VALUE	UNIT	CALCULATION STEP	SOURCE
B	% of Ontario Households on Propane	1.1	%		1
C	% of Ontario Households on Oil	6.8	%		1
D	Ontario Households on Oil or Propane	7.9	%	B2 + C2	
E					
F	% of TOA Households on Propane	13.92	%	B2 / D2	
G	% of TOA Households on Oil	86.08	%	C2 / D2	
H					
I	# Occupied private dwellings in TOA	251			3
J	# Occupied private dwellings on Propane	35		F2 * I2	
K	# Occupied private dwellings on Oil	216		G2 * I2	
L					
M	Average propane use per household in Ontario, 2011	26	GJ		2
N	GJ to MJ energy conversion	1 MJ = 0.001 GJ			2
O	MJ per litre of propane	25.3	MJ		2
P	Average propane use per household in Ontario, 2011	1027.668	Litres	(M2 * 1000) / O2	
Q	Residential propane consumption growth, 2011-2015	8.33	%		1 & 4
R	Average propane use per household in Ontario, 2015	1113.273	Litres	(1 + Q2) * P2	
S	Residential Propane use, 2015	38,965	Litres	R2 * J2	
T					
U	Average oil use per household in Ontario, 2011	70	GJ		2
V	GJ to MJ energy conversion	1 MJ = 0.001 GJ			2
W	MJ per litre of oil	38.2			2
X	Average oil use per household in Ontario, 2011	1832.461	Litres	(U2 * 1000) / W2	
Y	Residential oil consumption growth, 2011-2015	-7.7	%		1 & 4
Z	Average oil use per household in Ontario, 2015	1691.361	Litres	(1 + Y2) * X2	
AA	Residential oil use, 2015	365,334	Litres	Z2 * K2	
AB	SOURCES	COLUMN 5 VALUE	RESOURCES		
AC	Natural Resources Canada	1	Comprehensive Energy Use Database		
AD	Natural Resources Canada	2	Households and the Environment: Energy Use		
AE	Statistics Canada	3	2016 Census		
AF	Government of Ontario	4	Fuels Technical Report		

2.1.2.2 Wood

The process of calculating methane and nitrous oxide emissions produced by residential wood consumption in the TOA took a very similar approach as calculating propane and fuel/furnace oil consumption. To begin, it first had to be determined how many private dwellings occupied by usual residents consumed wood as a fuel source. Natural Resources Canada's *Comprehensive Energy Use Database* (n.d.)[11] reported that in the baseline year, 2.3% of households in Ontario were using wood as a fuel source for heating.

Returning back to the assumptions made for calculating propane and fuel/furnace oil consumption, where 100% of households in the TOA are considered in the cumulative 7.9% of Ontario households using these fuel sources, it was assumed that the 2.3% of Ontario households using wood was a supplement to these 7.9% using oil and propane. The rationale behind this assumption is based on Natural Resources Canada (2012)[12] statement that "wood is often used for supplementary heating." This observation is consistent of energy consumption behaviour in the TOA, as it is quite common for households in the TOA to have a wood stove or fireplace in addition to their oil or propane tanks and furnaces. Using this assumption revealed that nearly 40, or 95 households in the TOA used wood as a fuel source.

The next step involved determining how much wood each of household consumed in the baseline year. Unfortunately, actual consumption data for each household was unavailable, so it was assumed that each household consumed the average amount of wood per household in Ontario, as determined by Natural Resources Canada in their *2011 Households and the Environment Survey* (2013)[13].

Even more difficult was determining the density of the wood each household was consuming, since softwood and hardwood species produce vastly different quantities of energy. Therefore, given that the TOA is located on eastern Georgian Bay, a region with a variety of hard and soft wood tree species, it was assumed that there would be even mix of hardwood and softwood consumption. Using this assumption, the energy production per cord of hardwood and softwood was averaged in order to determine the number of cords of wood consumed on average by households in the TOA.

It should be noted, however, that this consumption value corresponds to 2011, five years prior to the baseline in question. Therefore, an effort was made to estimate wood consumption for the baseline year. While 2011 was the latest year on which average household wood consumption data could be obtained, the Government of Ontario kept record of the amount of wood being consumed by the residential sector as a whole up until 2015. This data thus allowed a growth rate to be developed and applied to number of cords consumed per household in the TOA in 2011. Using this growth rate, it was

[11] https://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/showTable.cfm?type=CP&sector=res&juris=on&rn=14&page=0

[12] https://www150.statcan.gc.ca/n1/pub/11-526-s/2010001/part-partie1-eng.htm

[13] https://www150.statcan.gc.ca/n1/en/daily-quotidien/130318/dq130318b-eng.pdf?st=IHFTE373

assumed that the arriving value for 2015 would be the same as 2016. This assumption was made because the behavioural use of wood is incredibly variable in the TOA. Since it is primarily used as a supplement to oil and propane, wood consumption fluctuates as temperatures fluctuate and according to the thermal comfort levels of each individual. Without available data, these factors make it incredibly difficult to estimate for the year 2016. Therefore, the residential wood consumption for 2015 was used for the 2016 baseline because it is the closest year to the baseline for which existing consumption data could be used to make an evidence-based assumption.

Following this step, the quantity of GHG emissions produced during the combustion of wood in the TOA needed to be determined. This required the quantity of wood consumed to be known, which first required the quantity or volume of wood being consumed to be converted into weight. However, depending on the species of tree the wood was harvested from, the weight of a cord of wood can vary due to naturally occurring differences in density.

Using Natural Resources Canada's *Guide to Residential Wood Heating* (2002)[14], common tree species for residential wood heating were cross referenced against the Government of Ontario's *Tree Atlas* to determine which species are found in the eastern Georgian Bay region. It was assumed that only regional tree species would be used for residential wood heating in the TOA because of economic and logistic factors. The seasoned cord weight of tree species found in the region were then averaged.

The final assumption involved determining the technology through which the wood would actually be consumed and the corresponding emission factors. As per Environment and Climate Change Canada's *National Greenhouse Gas Inventory 1990-2016: Greenhouse Gas Sources and Sinks in Canada* (2017)[15], wood consuming technologies have varying emission factors. However, given that wood is primarily used as a supplementary fuel source in the TOA, the majority of households consuming wood do so with a conventional wood stove or fireplace. For calculation purposes, and given that these two consumption technologies have the same emission factors, it was thus assumed that all residential wood was consumed through these two technologies.

The resulting emissions produced from wood consumption were reported as direct emissions under the non-specified sources category because a dedicated location to record residential wood consumption does not exist in the PCP tool.

For a numeric explanation of the calculation process please see Table 4 and 5.

[14] file:///C:/Users/clima/Downloads/GuidetoResidentialWoodHeating%20(5).pdf

[15] http://publications.gc.ca/collections/collection_2018/eccc/En81-4-2016-2-eng.pdf

Table 4: Residential Wood Consumption Calculation Process

CELL	1	2	3	4	5
A	DATA	VALUE	UNIT	CALCULATION STEP	SOURCE
B	% of Ontario Households using Wood	2.3	%		4
C	% of Ontario Households on Oil or Propane	7.9	%		4
D	% Ontario Households supplementing with wood	37.97	%	B2 / C2	
E	# Occupied private dwellings in the TOA	251			2
H	# Occupied private dwellings supplementing w/ wood	95		D2 * E2	
I					
J	Average wood use per household in Ontario, 2011	77	GJ		1
K	GJ to MJ energy conversion	1 MJ = 0.001 GJ			1
L	MJ per cord of softwood	18,700	MJ		1
M	MJ per cord of hardwood	30,600	MJ		1
N	Average MJ per cord of wood	24,650	MJ	(L2 + M2) / 2	
O	Average wood use per household in Ontario, 2011	3.12	cords	(J2 * 1000) / N2	
P	Ontario residential wood consumption growth, 2011-2015	-8.9	%		3 & 4
Q	Average wood use per household in Ontario, 2015	2.85	cords	(1 + P2) * O2	
R	Residential wood consumption, 2015	271	cords	H2 * Q2	
S	Average weight per cord of wood	1459.14	KG		TABLE 5
T	Residential wood consumption, 2015	395,427	KG	R2 * S2	
U					
V	CH4 emission factor for wood burning stoves, 2016	12.9	g/KG		5
W	N20 emission factor for wood burning stoves, 2016	0.12	g/KG		5
X	Tonnes of CH4 emitted from residential wood	5.1	T	(T2 * V2) / 1,000,000	
Y	Tonnes of N20 emitted from residential wood	0.047	T	(T2 * Y2) / 1,000,000	
Z	Tonnes of CO2e from wood consumption	141.64	T	(X2 * 25) + (Y2 * 298)	
AA	SOURCES	COLUMN 5 VALUE		RESOURCES	
AB	Natural Resources Canada	1		Households and the Environment: Energy Use	
AC	Statistics Canada	2		2016 Census	
AD	Government of Ontario	3		Fuels Technical Report	
AE	Natural Resources Canada	4		Comprehensive Energy Use Database	
AF	Environment and Climate Change Canada	5		National GHG Inventory Report 1990-2016	

Table 5: Average Weight Per Cord of Wood

CELL	1	2	3	4	5
A	SPECIES	REGIONAL	SEASONED CORD WEIGHT	UNIT	SOURCE
B	Ironwood	Yes	1765	KG	1 & 2 & 3
C	Rock Elm	No		KG	1 & 2 & 3
D	Hickory	No		KG	1 & 2 & 3
E	Oak	Yes	1704	KG	1 & 2 & 3
H	Sugar Maple	Yes	1704	KG	1 & 2 & 3
I	Beech	Yes	1704	KG	1 & 2 & 3
J	Yellow Birch	Yes	1429	KG	1 & 2 & 3
K	Ash	Yes	1673	KG	1 & 2 & 3
L	Red Elm	No		KG	1 & 2 & 3
M	Red Maple	Yes	1769	KG	1 & 2 & 3
N	Tamarack	Yes	1473	KG	1 & 2 & 3
O	Douglas Fir	No		KG	1 & 2 & 3
P	White Birch	Yes	1448	KG	1 & 2 & 3
Q	Manitoba Maple	No		KG	1 & 2 & 3
R	Red Alder	No		KG	1 & 2 & 3
S	Hemlock	No		KG	1 & 2 & 3
T	Poplar	Yes	1649	KG	1 & 2 & 3
U	Pine	Yes	1014	KG	1 & 2 & 3
V	Basswood	Yes	956	KG	1 & 2 & 3
W	Spruce	Yes	1126	KG	1 & 2 & 3
X	Balsam Fir	Yes	1014	KG	1 & 2 & 3
Y	AVERAGE WEIGHT ALL SPECIES		1459.142857	KG	SUM (B2:X2) / 14
Z					
AA	SOURCES		COLUMN 5 VALUE		RESOURCES
AB	Natural Resources Canada		1		A Guide to Residential Wood Heating
AC	Government of Ontario		2		Tree Atlas
AD	World Forest Industries		3		Firewood BTU Ratings

2.1.3 Outcome

For a summary of the quantities of each fuel source consumed by the residential buildings in the TOA, please see Table 6.

The TOA residential buildings produced **1,631.46 tonnes of CO_2e** in 2016.

Table 6: Residential Consumption Quantities per Fuel Source

Year	Electricity (kWh)	Natural Gas (m^3)	Fuel Oil (L)	Propane (L)	Wood (kg)
2016	11,569,851	0	365,334	38,965	395,427

2.2 Commercial & Institutional

To calculate the GHG emissions produced by commercial and institutional buildings in the TOA, the PCP recommended approach of obtaining actual energy consumption data was pursued, where possible. Where actual energy consumption data was unavailable, the alternative method of estimating energy consumption data was utilized.

2.2.1 Formula for Calculating Commercial & Institutional Building Emissions

There is only one formula for calculating the GHG emissions produced by commercial and institutional buildings in the TOA. For reference, the formula as determined by the PCP protocol is as follows:

$$CO_2e_a = (x_a * CO_2EF_a) + (x_a * CH_4EF_a * GWP_{CH4}) + (x_a * N_2OEF_a * GWP_{N2O})$$

Where:

- x_a = Amount of energy source 'a' consumed in one year
- CO_2EF_a = The Carbon Dioxide (CO_2) emission factor for energy source 'a'
- CH_4EF_a = The Methane (CH_4) emission factor for energy source 'a'
- N_2OEF_a = The Nitrous Oxide (N_2O) emission factor for energy source 'a'
- a = Energy source (electricity, natural gas, propane, fuel oil)
- GWP_{CH4} = Global warming potential of Methane (CH_4)
- GWP_{N2O} = Global warming potential of Nitrous Oxide (N_2O)
- CO_2e_a = The Carbon Dioxide (CO_2) equivalents of energy source 'a'

2.2.2 Assumptions

No assumptions were made in calculating the GHG emissions produced by electricity consumption in the TOA due to Hydro One's provision of actual electricity consumption for the baseline year. However, since data provided by Hydro One was an aggregate of all commercial and institutional electricity consumed in the baseline year, the electricity consumed by the TOA for corporate operations was subtracted from the aggregate as the TOA's consumption can be considered commercial in nature. This was done to avoid double counting as this electricity consumption has already been reported in

Corporate Milestone 1. Furthermore, no assumptions were needed for natural gas, district energy, and diesel consumption since commercial and institutional buildings in the TOA do not consume these fuel sources due to a lack of infrastructure.

In determining the quantity of GHG emissions produced by commercial and institutional buildings in the TOA, assumptions surrounding the consumption of propane, fuel/ furnace oil, and wood needed to be made because actual consumption data for these fuel sources could not be obtained at this time.

2.2.2.1 Fuel Oil and Propane Assumptions & Consumption Estimate Methodology

Due to a lack of natural gas infrastructure, commercial and institutional natural gas consumption does not occur in the TOA. As a result, commercial and institutional buildings typically consume fuel/ furnace oil or propane for space heating, water heating, and auxiliary equipment. Therefore, estimating the quantity of GHG emissions produced through the consumption of these fuel sources is critical to accurately depict the emissions produced by commercial and institutional buildings in the TOA.

Similar to the process of calculating residential fuel/ furnace oil and propane consumption, the process with commercial and institutional buildings began by determining how many buildings were on fuel/ furnace oil and how many were on propane. To make this calculation it was assumed that commercial and institutional buildings only consumed one fuel source to achieve efficiencies in their operations.

Using data on the percentage of energy consumption by fuel source for commercial and institutional buildings in Ontario, a subsequent percentage could be drawn and applied to the number of commercial and institutional buildings in the TOA as per MPAC. For example, it was found that in Ontario, 1% of energy consumption in the commercial and institutional sector came from fuel/ furnace oil, while 4% was from propane. Since it was assumed that either propane or fuel/ furnace oil was used, 100% of commercial and institutional building fuel/ furnace oil and propane consumption in the TOA could be accounted for in the cumulative 5% of energy consumption in the province. Considering this cumulative percentage as a holistic total (since it represents 100% of commercial and institutional buildings), the subsequent percentage can then define the ratio of commercial and institutional buildings on propane to fuel/furnace oil. In calculating this ratio, 1% equates to 20% of 5% and 4% equates to the remaining 80%. These percentages (20% and 80%) were then applied to the number of commercial and institutional buildings that had a heating system that could accommodate fuel/ furnace oil or propane (as per MPAC data) to determine how many were buildings were consuming these fuel sources.

After determining the number of commercial and institutional buildings consuming fuel/ furnace oil or propane the total floor area of the buildings on each respective fuel source was determined. Due to the inability to determine precisely which buildings consumed fuel/ furnace oil versus propane, this was achieved by applying the percentage of

buildings on each fuel source (20% and 80%) to the total floor area of buildings that were consuming either fuel source.

Now that floor area had been determined, the average energy intensity per square metre of floor for Ontario's commercial sector could be applied. However, it is important to note that this average energy intensity by floor area considers all the energy consumed by commercial and institutional buildings in Ontario, and for the purposes of this calculation only fuel/ furnace oil and propane are in consideration. Therefore, to eliminate double counting of other energy sources, such as electricity, the percentage of energy coming from the use of fuel/ furnace oil and propane needed to be determined. Fortunately, Canada's Comprehensive Energy Use Database provides a percentage breakdown of energy end-use. With streetlighting already captured in the TOA's corporate baseline, it was assumed that lighting, space cooling, and water heating were electrically powered. This left the possibility of space heating and auxiliary equipment and motors to be achieved through the consumption of fuel/ furnace oil or propane. However, in reviewing MPAC data for the TOA, most of the commercial and institutional buildings were used for accommodative purposes and lacked the need for auxiliary equipment and motors. As a result, it was assumed that fuel/ furnace oil and propane were only used for space heating, and this percentage was applied to the energy intensity by floor area.

With a refined energy intensity by floor area, the next step was calculating the quantity of each fuel source consumed. After each calculation was made to determine total energy consumed by each fuel source, the appropriate energy conversion to volume value was applied to determine the quantity of fuel/ furnace oil consumed in terms of litres.

For a numeric explanation of the calculation process please see Table 7.

Table 7: Commercial & Institutional Propane and Fuel/ Furnace Oil Calculation Process

CELL	1	2	3	4	5
A	DATA	VALUE	UNIT	CALCULATION STEP	SOURCE
B	fuel oil % of Ontario commercial energy use	1	%		1
C	propane % of Ontario commercial energy use	4	%		1
D	% Ontario commercial energy use from propane or oil	5	%	B2 + C2	
E					
H	% of TOA commercial properties on oil	20	%	B2 / D2	
I	% of TOA commercial properties on propane	80	%	C2 / D2	
J					
K	# of buildings on commercial properties in the TOA	100			2
L	# buildings using heating system with propane or oil	28			2
M	total floor area of buildings w. propane or oil heating	2950.41	m^2		2
N	total floor area of buildings w. propane heating	2360.33	m^2	M2 * I2	
O	total floor area of buildings w. oil heating	590.08	m^2	M2 * H2	
P					
Q	commercial energy intensity by floor area	1.39	GJ/ m^2		1
R	% energy for heating or auxiliary purposes	57.4	%		1
S	GJ to MJ energy conversion	1 MJ = 0.001 GJ			3
T	MJ per litre of propane	25.3			3
U	MJ per litre of oil	38.2			3
V					
W	commercial propane energy consumption	1,883,212.89	MJ	N2 * (Q2 * R2) * S2	
X	commercial propane consumption	74,435.29	Litres	W2 / T2	
Y					
Z	commercial oil energy consumption	470,801.23	MJ	O2 * (Q2 * R2) * S2	
AA	commercial oil consumption	12,324.64	Litres	Z2 / U2	
AB					
AC	SOURCES	COLUMN 5 VALUE		RESOURCES	
AD	Natural Resources Canada	1		Comprehensive Energy Use Database	
AE	West Parry Sound Geography Network	2		MPAC	
AF	Natural Resources Canada	3		Households and the Environment: Energy Use	

2.2.2.2 Wood

It was assumed that the commercial and institutional sector in the TOA did not consume any wood. This assumption was based on the observation that Natural Resources Canada's *Comprehensive Energy Use Database* did not report wood consumption for Ontario's commercial sector for the baseline year. As a result, it was assumed that wood consumption was not reported for the commercial sector because wood was not consumed as an energy source by this sector.

2.2.3 Outcome

For a summary of the quantities of each fuel source consumed by the commercial and institutional buildings in the TOA, please see Table 8.

The TOA's commercial and institutional buildings produced **255.46 tonnes of CO_2e** in 2016.

Table 8: Commercial & Institutional Consumption Quantities per Fuel Source

Year	Electricity (kWh)	Natural Gas (m^3)	Fuel Oil (L)	Propane (L)
2016	2,905,795	0	12,325	74,435

2.3 Industrial

To calculate the GHG emissions produced by industrial buildings in the TOA, the PCP recommended approach of obtaining actual energy consumption data was pursued, where possible. Where actual energy consumption data was unavailable, the alternative method of estimating energy consumption data was utilized.

2.3.1 Formula for Calculating Industrial Building Emissions

There is only one formula for calculating the GHG emissions produced by industrial buildings in the TOA. For reference, the formula as determined by the PCP protocol is as follows:

$$CO_2e_a = (x_a * CO_2EF_a) + (x_a * CH_4EF_a * GWP_{CH4}) + (x_a * N_2OEF_a * GWP_{N2O})$$

Where:

- x_a = Amount of energy source 'a' consumed in one year
- CO_2EF_a = The Carbon Dioxide (CO_2) emission factor for energy source 'a'
- CH_4EF_a = The Methane (CH_4) emission factor for energy source 'a'
- N_2OEF_a = The Nitrous Oxide (N_2O) emission factor for energy source 'a'
- a = Energy source (electricity, natural gas, propane, fuel oil)
- GWP_{CH4} = Global warming potential of Methane (CH_4)
- GWP_{N2O} = Global warming potential of Nitrous Oxide (N_2O)
- CO_2e_a = The Carbon Dioxide (CO_2) equivalents of energy source 'a'

2.3.2 Assumptions

No assumptions were made in calculating the GHG emissions produced by the industrial sector in the TOA. This is because the TOA does not have an industrial sector, as determined by property classification data retrieved from MPAC. While Hydro One reports a small amount of industrial electricity consumption in the baseline year, it should be noted that their classification of industrial is based on the quantity of electricity being consumed, rather than the purpose of the building or property. As a result of this classification discrepancy, MPAC classifications were used as it considers the purpose of the property and building. Industrial electricity consumption reported by Hydro One was thus aggregated with the commercial and institutional sector because the building(s) consuming industrial levels of electricity are classified as commercial by MPAC, and have already been considered in the calculation of other fuel sources, such as propane and fuel/ furnace oil, for the commercial and institutional sector.

2.3.3 Outcome

For a summary of the quantities of each fuel source consumed by the industrial buildings in the TOA, please see Table 9.

Table 9: Industrial Consumption Quantities per Fuel Source

Year	Electricity (kWh)	Natural Gas (m^3)	Fuel Oil (L)	Propane (L)
2016	DNE	DNE	DNE	DNE

*DNE = Does not exist

2.4 Transportation

The transportation section has been split into three categories; on-road transportation, waterborne transportation, and off-road transportation.

2.4.1 On-Road Transportation

To calculate the GHG emissions produced by transportation in the TOA, the vehicle kilometres travelled (VKT) approach was used. The VKT approach was chosen because of its ability to include assumptions into the calculation process. The VKT approach allows for known data to be integrated with evidence-based assumptions to develop a representative transportation model for the TOA.

2.4.1.1 Formula for Calculating On-Road Transportation Emissions

In calculating the VKT for the TOA, the alternative approach and formula as per the PCP protocol was pursued where possible. For reference, the formula as determined by the PCP protocol is as follows:

$$VKT = H * V * D$$

Where:

- VKT = Vehicle Kilometres Traveled
- H = Number of households in the community
- V = Number of light-duty vehicles per household
- D = Average annual distance traveled by light-duty vehicles

2.4.1.2 Assumptions

Determining the amount of fuel consumed by community on-road transportation and the subsequent emissions is arguably the most difficult task in producing a community GHG emission baseline. This is because the task requires the quantification of fuel consumed and the emissions produced within a fixed boundary for a trans-boundary activity. As a result of this difficulty, the Government of British Columbia[16] has noted that there are two theoretical approaches that can be taken when measuring community on-road transportation emissions: Gross Domestic Emissions (GDE) and Gross Resident Emissions (GRE). GDE considers all emissions generated by on-road vehicles in the community, irrespective of whether those vehicles are resident in the community, and GRE considers all emissions generated by vehicles resident to the community, irrespective of whether those emissions are produced within or outside the community's boundaries. In addition to the data available at this time, the GRE method was used for the following reasons.

When thinking of calculating community VKT under the GDE method, the associated PCP protocol approach requires knowledge of road segment lengths and average annual daily traffic on those road segments. In general, roadways in Ontario can be considered municipally-managed and provincially-managed, thereby making a GDE calculation a product of both municipal and provincial roadways in the TOA. The problem with doing so, however, is that the TOA has little to no influence over those roadways which are provincially managed. Therefore, it is safe and reasonable to assume that implemented initiatives will have little impact on VKT on provincial roadways as a result of limited management control.

[16] https://www2.gov.bc.ca/assets/gov/environment/climate-change/z-orphaned/ceei/ceei-comparison-study.pdf

Conversely, by taking the GRE approach the TOA has greater management control over the emissions produced by on-road transportation, since they are produced solely by its residents. With greater management control also comes the possibility of greater results, since metrics are meaningful and relevant. For example, any strategies implemented to reduce on-road transportation emissions can target, and be developed for TOA residents. The performance of these programs can thus be measured through the Carbon Calculator, community feedback, and other metrics.

In taking the GRE approach the calculation process was completed with data from the Carbon Calculator and Statistics Canada. Should additional data become available through the Carbon Calculator the GHG emissions reported in this baseline inventory will be updated.

For a numeric explanation of the calculation process please see Table 10.

Table 10: On-Road Transportation VKT Calculation Process

CELL	1	2	3	4	5
A	DATA	VALUE	UNIT	CALCULATION STEP	SOURCE
B	Private dwellings occupied by usual residents	251			1
C	Vehicles per household	1.55			2
D	Average annual VKT	16,072	KM		2
E	VKT	6252812	KM	B2 * C2 * D2	
F					
G	SOURCES	COLUMN 5 VALUE		RESOURCES	
H	Statistics Canada	1	2016 Census		
I	Georgian Bay Biosphere	2	Carbon Calculator		

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2.4.1.2 Outcome

On-road Transportation in the TOA produced **2,116.48 tonnes of CO_2e** in 2016.

2.4.2 Waterborne Transportation

Including waterborne transportation is critical to producing an accurate and representative emissions baseline for the TOA. This is because the TOA is a primarily water-based municipality, with many residences being only accessible by water. Furthermore, due to the water-based nature of the TOA, boating is a common recreational activity in the TOA.

2.4.2.1 Formula for Calculating Waterborne Transportation Emissions

Unfortunately, the PCP protocol does not provide direction on how to calculate the fuel and GHG emissions consumed by recreational watercraft. As a result, the formula for calculating the GHG emissions produced from gasoline and diesel consumption in the on-road transportation sector was used as these fuel sources are also consumed by waterborne vehicles. It should also be noted that the appropriate emission factors have been obtained from Canada's *National Inventory Report: Greenhouse Gas Emissions and Sinks* (2017)[17]. GHG emissions from waterborne transportation have been directly reported in the PCP tool. For reference, the general formula is as follows:

$$CO_2e_a = (x_a * CO_2EF_a) + (x_a * CH_4EF_a * GWP_{CH4}) + (x_a * N_2OEF_a * GWP_{N2O})$$

Where:

- x_a = Amount of energy source 'a' consumed in one year
- CO_2EF_a = The Carbon Dioxide (CO_2) emission factor for energy source 'a'
- CH_4EF_a = The Methane (CH_4) emission factor for energy source 'a'
- N_2OEF_a = The Nitrous Oxide (N_2O) emission factor for energy source 'a'
- a = Energy source (electricity, natural gas, propane, fuel oil)
- GWP_{CH4} = Global warming potential of Methane (CH_4)
- GWP_{N2O} = Global warming potential of Nitrous Oxide (N_2O)
- CO_2e_a = The Carbon Dioxide (CO_2) equivalents of energy source 'a'

2.4.2.2 Assumptions

To determine the quantity of gasoline or diesel consumed by waterborne vehicles a considerable number of assumptions needed to be made. These assumptions were made while determining the quantity of fuel consumed by waterborne vehicles. For example, based on data gathered through the Carbon Calculator, it was assumed that for the purposes of this baseline, only gasoline was consumed by waterborne vehicles.

It should be noted that as better information becomes available this portion of the baseline and its assumptions will be reviewed and any applicable changes made.

[17] http://publications.gc.ca/collections/collection_2018/eccc/En81-4-2016-2-eng.pdf

2.4.2.2.1 Gasoline Assumptions & Consumption Estimate Methodology

To calculate the quantity of gasoline consumed by waterborne vehicles, it first needed to be determined how many waterborne vehicles were in the TOA. This was achieved by conjoining data on the number of permanent and seasonal residences and the average number of average waterborne vehicles for each respective residence type.

Next, the average fuel efficiency of waterborne vehicles needed to be calculated. This process was discovered in boating forums and magazines providing guidance on how to estimate the amount of fuel a boat will consume given the size of its motor. In assessing the applicability of this method, further boating forums were researched that validated our recommended approach. As a result, it was assumed that this is a consist method for estimating the fuel consumed by waterborne vehicles and would be relevant in the production of this baseline.

After the average fuel efficiency of waterborne vehicles was calculated, it was multiplied by the average annual operating hours each vehicle was in operation and the number of waterborne vehicles in the TOA. The average annual operating hours was used because in comparison to on-road vehicles, waterborne vehicles measure fuel consumption as a function of time, rather than distance. This value was obtained through entries in the Georgian Bay Biosphere's Carbon Calculator, and was assumed to be representative at this time since no other data could be found to suggest otherwise. Should more data become available, this value can be updated to improve the accuracy of the gasoline consumption and subsequent GHG emissions reported.

It should be noted that this calculation is limited in its ability to only consider the fuel consumed by waterborne vehicles that are associated with a residence in the TOA. In reality, many individuals residing outside of the TOA will launch their waterborne vehicles at public boat launches or marinas in the TOA to obtain access to Georgian Bay. As a result, the fuel consumption and subsequent GHG emissions reported in this baseline is considered to be a conservative estimate.

For a numeric explanation of the calculation process please see Table 11.

2.4.2.3 Outcome

Waterborne transportation in the TOA produced **15,789.2 tonnes of CO_2e** in 2016.

Table 11: Waterborne Transportation Gasoline Consumption Calculation Process

CELL	1	2	3	4	5
A	DATA	VALUE	UNIT	CALCULATION STEP	SOURCE
B	# of permanent residences	251			1 & 2
C	# of seasonal residences	2987			1
D	average # of watercraft per permanent residence	0.31			3
E	average # of watercraft per seasonal residence	1.8			4
F	# of watercraft in Archipelago	5455		(B2 * D2) + (C2 * E2)	
G					
H	average gasoline engine horsepower	109	HP		3
I	average annual watercraft operating time	36.67	Hours		3
J	gasoline consumption rate	0.5	lbs/ HP		5
K	gasoline weight by volume	6.1	lbs/ gallon		5
L					
M	average watercraft gasoline consumption efficiency	8.934	GPH	(J2 * H2) / K2	5
N	average watercraft gasoline consumption	328	Gallons	I2 * M2	
O	total watercraft gasoline consumption	1,789,240	Gallons	F2 * N2	
P	gallon to litre conversion	3.78541	Litres per Gallon		
Q	watercraft gasoline consumption	6,773,007	Litre	O2 / P2	
R					
S	CO2 emission factor for watercraft gasoline	2307	g/L		6
T	CH4 emission factor for watercraft gasoline	0.22	g/L		6
U	N2O emission factor for watercraft gasoline	0.063	g/L		6
V	Tonnes of CO2 emitted from watercraft	15,625	T	(Q2 * S2) / 1,000,000	
W	Tonnes of CH4 emitted from watercraft	1.49	T	(Q2 * T2) / 1,000,000	
X	Tonnes of N2O emitted from watercraft	0.426	T	(Q2 * U2) / 1,000,000	
Y	Tonnes of CO2e emitted from watercraft	15,789.2	T	V2 + (W2 * 25) + (X2 * 298)	
Z					
AA	SOURCES	COLUMN 5 VALUE		RESOURCES	
AB	West Parry Sound Geography Network	1	MPAC		
AC	Statistics Canada	2	2016 Census		
AD	Georgian Bay Biosphere	3	Carbon Calculator		

AE	District Municipality of Muskoka
AF	Boating Magazine
AG	Natural Resources Canada
4	Muskoka Second Home Study
5	Calculating Boat Fuel Consumption
6	National Inventory Report: GHG Sources and Sinks

2.4.3 Off-Road Transportation

In addition to being a primarily water-based municipality, the TOA is a rural municipality. Due to its ruralness, off-road vehicles are often used for recreation and transportation via extensive trail networks, as well as on Georgian Bay when it freezes over in the winter months. As a result, including off-road transportation is critical to producing an accurate and representative GHG emissions baseline for the TOA.

2.4.3.1 Formula for Calculating Off-Road Transportation Emissions

Unfortunately, the PCP protocol does not provide direction on how to calculate the GHG emissions produced by off-road vehicles. As a result, the formula for calculating the GHG emissions produced from gasoline and diesel consumption in the on-road transportation sector was used as these fuel sources are also consumed by off-road vehicles. It should also be noted that the appropriate emission factors have been obtained from Canada's *National Inventory Report: Greenhouse Gas Emissions and Sinks* (2017)[18]. GHG emissions from off-road vehicles have been directly reported in the PCP tool. For reference, the general formula is as follows:

$$CO_2e_a = (x_a * CO_2EF_a) + (x_a * CH_4EF_a * GWP_{CH4}) + (x_a * N_2OEF_a * GWP_{N2O})$$

Where:

- x_a = Amount of energy source 'a' consumed in one year
- CO_2EF_a = The Carbon Dioxide (CO_2) emission factor for energy source 'a'
- CH_4EF_a = The Methane (CH_4) emission factor for energy source 'a'
- N_2OEF_a = The Nitrous Oxide (N_2O) emission factor for energy source 'a'
- a = Energy source (electricity, natural gas, propane, fuel oil)
- GWP_{CH4} = Global warming potential of Methane (CH_4)
- GWP_{N2O} = Global warming potential of Nitrous Oxide (N_2O)
- CO_2e_a = The Carbon Dioxide (CO_2) equivalents of energy source 'a'

2.4.3.2 Assumptions

To determine the GHG emissions produced by off-road transportation in the TOA, assumptions surrounding the quantity of gasoline or diesel consumed by off-road vehicles needed to be made. For example, based on data gathered through the Carbon Calculator, it was assumed that for the purposes of this baseline, only gasoline was consumed by off-road vehicles.

It should be noted that as better information becomes available this portion of the baseline and its assumptions will be reviewed and any applicable changes made.

[18] http://publications.gc.ca/collections/collection_2018/eccc/En81-4-2016-2-eng.pdf

2.4.3.2.1 Gasoline Assumptions & Consumption Estimate Methodology

The first step in calculating the GHG emissions produced by off-road vehicles was to determine the number of off-road vehicles operated by residents in the TOA. To do this, data on the number of permanent and seasonal residences and the average number of off-road vehicles for each respective residence type was considered. However, it is important to note that while off-road vehicles are similar in classification, they differ in their engine classification as being either 2-stroke or 4-stroke. It is important to differentiate these engine types as they have different emission factors associated with them when calculating GHG emissions. As a result, data from the Carbon Calculator on the percentage of off-road vehicles as 2-stroke versus 4-stroke was applied to determine the number of 2-stroke and 4-stroke off-road vehicles.

The next step was to determine the average amount of fuel each off-road vehicle consumed. It was assumed that off-road vehicles only consumed gasoline, as this is the most common fuel source consumed by these vehicles, and no information could be found on off-road diesel consumption at this time. Since off-road vehicles measure their use in terms of operating hours, the average amount of fuel consumed could be calculated by multiplying the average operating hours of all off-road vehicles by the average fuel efficiency.

Some assumptions were required in order to determine off-road fuel efficiency. At first, little information could be found on the process of measuring fuel efficiency for off-road vehicles. As a result, the process for measuring fuel efficiency for boats was applied to this situation. It was assumed that this allocation would be relevant because the process only considers fuel and engine aspects and doesn't include environmental considerations that would make this process irrelevant to off-road vehicles. Moving into the details of the process, off-road vehicle engines are often described in terms of cubic centimetres (CCs) rather than horsepower. Therefore, a conversion ratio was needed to measure CCs in terms of horsepower. Through extensive research it was discovered that the general rule of thumb is that 1 horsepower is equal to a range between 15 and 17 CCs. Due to the differences in power and torque between 2-stroke and 4-stroke engines it was assumed that the 2-stroke and 4-stroke conversions would respectively be 15 and 17 CCs to 1 horsepower.

After the average fuel efficiency was calculated, it was multiplied by the average annual operating hours of each off-road vehicle and the number of 2-stroke and 4-stroke off-road vehicles to get total gasoline consumption. GHG emissions were then calculated based on this fuel consumption. It should be noted that the average annual operating hours was obtained from the Georgian Bay Biosphere's Carbon Calculator, and was assumed to be representative at this time since no other data could be found. Should more data become available, this value can be updated to improve the accuracy of the gasoline consumption and subsequent GHG emissions reported.

For a numeric explanation of the calculation process please see Table 12.

Table 12: Off-Road Transportation Gasoline Consumption Calculation Process

CELL	1	2	3	4	5
A	DATA	VALUE	UNIT	CALCULATION STEP	SOURCE
B	# of permanent residences	251			1 & 2
C	# of seasonal residences	2987			1
D	average # of off-road vehicles per permanent residence	0.377			3
E	average # of off-road vehicles per seasonal residence	0.267			3
F	# of off-road vehicles	892		(B2 * D2) + (C2 * E2)	
G					
H	% of off-road vehicles as 2-stroke	35.9	%		3
I	% of off-road vehicles as 4-stroke	64.1	%		3
J	# of 2-stroke off-road vehicles	320		H2 * F2	
K	# of 4-stroke off-road vehicles	572		I2 * F2	
L					
M	average 2-stroke engine CCs	490	CC		3
N	average 4-stroke engine CCs	566	CC		3
O	2-stroke CC to horsepower ratio	15	CC per HP		4
P	4-stroke CC to horsepower ratio	17	CC per HP		4
Q	average 2-stroke engine HP	32.67	HP	M2 / O2	
R	average 4-stroke engine HP	33.29	HP	N2 / P2	
S	average annual off-road operating time	31.597	Hours		3
T	gasoline consumption rate	0.5	lbs/ HP		5
U	gasoline weight by volume	6.1	lbs/ gallon		5
V					
W	average 2-stroke fuel efficiency	2.678	GPH	(Q2 * T2) / U2	5
X	average 4-stroke fuel efficiency	2.729	GPH	(R2 * T2) / U2	5
Y	average 2-stroke fuel consumption	84.617	Gallons	W2 * S2	
Z	average 4-stroke fuel consumption	86.228	Gallons	X2 * S2	
AA	total 2-stroke gasoline consumption	27,077	Gallons	Y2 * J2	
AB	total 4-stroke gasoline consumption	49,322	Gallons	Z2 * K2	
AC	gallon to litre conversion	3.78541	Litres per Gallon		
AD	off-road 2-stroke vehicle gasoline consumption	102,498	Litres	AA2 * AC2	
AE	off-road 4-stroke vehicle gasoline consumption	186,704	Litres	AB2 * AC2	

AF					
AG	CO2 emission factor for off-road (2 & 4-stroke) gasoline	2307	g/L		6
AH	CH4 emission factor for 2-stroke gasoline	10.61	g/L		6
AI	CH4 emission factor for 4-stroke gasoline	5.08	g/L		6
AJ	N2O emission factor for 2-stroke gasoline	0.013	g/L		6
AK	N2O emission factor for 4-stroke gasoline	0.064	g/L		6
AL	Tonnes of CO2 emitted from off-road vehicles	667.2	T	((AD2 * AG2) + (AE2 * AG2)) / 1,000,000	
AM	Tonnes of CH4 emitted from off-road vehicles	2.04	T	((AD2 * AH2) + (AE2 * AI2)) / 1,000,000	
AN	Tonnes of N20 emitted from off-road vehicles	0.013	T	((AD2 * AJ2) + (AE2 * AK2)) / 1,000,000	
AO	Tonnes of CO2e emitted from off-road vehicles	722.07	T	AL2 + (AM2 * 25) + (AN2 * 298)	
AP					

	SOURCES	COLUMN 5 VALUE	RESOURCES
AR	West Parry Sound Geography Network	1	MPAC
AS	Statistics Canada	2	2016 Census
AT	Georgian Bay Biosphere	3	Carbon Calculator
AU	Off-Road Vehicle Online Forum	4	How to Convert CC to HP
AV	Boating Magazine	5	Calculating Boat Fuel Consumption
AW	Natural Resources Canada	6	National Inventory Report: GHG Sources and Sinks

2.4.3.3 Outcome

Off-road transportation in the TOA produced **722.07 tonnes of CO_2e** in 2016.

2.5 Solid Waste

To calculate the GHG emissions produced by the TOA's community, the methane commitment model was used. This decision was made since the landfill the TOA sends its community's waste to does not have an LFG system in place. For reference, a simplified version of this formula, as per the PCP Protocol, is as follows:

2.5.1 Formula for Calculating Solid Waste Emissions

$$CO_2e = 25 * M * \left(\left(\frac{16}{12}\right) * MCF * DOC * DOC_F * F\right) * (1 - f_{rec}) * (1 - OX)$$

Where:

- M = Quantity of solid waste in tonnes sent to landfill in inventory year
- 16/12 = Stoichiometric ratio between methane and carbon
- MCF = Methane correction factor
- DOC = Degradable organic carbon
- DOC_F = Fraction of DOC dissimilated
- F = Fraction of methane in landfill gas
- f_{rec} = fraction of methane emissions recovered at the landfill
- OX = Oxidation factor

2.5.2 Assumptions

Data on the actual tonnage of solid waste generated by the TOA's community was provided by municipal staff. However, the actual tonnage of solid waste generated is a cumulative total that includes the waste produced during corporate operations. As a result, the reported corporate solid waste generation was subtracted from the total to determine the quantity produced by the community. Gaining an understanding of solid waste practices and policies can help to determine some of the factors and coefficients of the formula that are determinant on landfill management and operations.

Municipal staff explained that when solid waste is generated by the community, it is sent to the various transfer stations. Once the transfer stations have reached capacity, solid waste is then diverted to the McDougall landfill. Staff from the McDougall landfill informed the Georgian Bay Biosphere that no emission capture technology has been installed. This is because a feasibility study was undertaken, which determined that it was economically unfeasible to purchase the technology and embark on installation. While this technology does not exist, the landfill is still being actively managed. Garbage is compacted daily to reduce volume and then buried to allow for additional landfill space, and to deter wildlife. The landfill is also classified as engineered. The landfill is lined to capture leachate, which is then removed and sent to an offsite treatment facility for processing. These factors helped to determine assumptions on several of the values required by the formula.

The next step was to determine the degradable organic content of the community generated waste. While the PCP protocol provides these values, they were determined to be unrepresentative of the TOA because of the differences in waste management that exist between the TOA and other communities. As a result, data from the Carbon Calculator was used to determine the waste composition values. It was assumed that data from the Carbon Calculator would be more representative because it considers the waste composition for the TOA's region in particular, thereby considering those waste management differences. It should be noted that as more data from the Carbon Calculator becomes available, the reported solid waste composition values in this baseline can be updated.

2.5.3 Outcome

Solid waste in the TOA produced **238.95 tonnes of CO_2e** in 2016.

2.6 Business as Usual

In calculating the business-as-usual (BAU) forecast, the year 2030 was chosen as the forecast year.

2.6.1 Assumptions

In their 2016 Population Census, Statistics Canada reported that the TOA experienced a 6.2% decline in population between the years 2011 and 2016. However, given that the BAU forecast is determined by annual population growth, it was determined that the reported decline in population would be unrepresentative of community GHG emissions and the projected BAU for the following reasons.

Geographically positioned on the eastern shoreline of Georgian Bay and in the heart of cottage country, the TOA is a major tourist destination. As a result of this tourism, a massive increase in population occurs during the warmer months, raising the population from 531 permanent residents to thousands of seasonal residents. Yet Statistics Canada only accounts for the 531 permanent residents in their 2016 Population Census. As a result, Statistics Canada's population decline is derived from permanent residents, failing to account for the major seasonal population influx. This is problematic and unrepresentative in producing a BAU forecast because the seasonal population has a significant influence over the production of GHG emissions in the TOA. It is also fair and reasonable to assume that given the influence seasonal resident's have on GHG production in the TOA, as the seasonal population grows, so too will community GHG emissions. Thus, by using Statistics Canada's population decline it would demonstrate that there would be a natural decrease in GHG emissions as population shrinks. As a result, the following methodology and assumptions were considered in producing a growth statistic that would factor seasonal population in producing a BAU forecast.

Data was first retrieved from the MPAC. This data was referenced because it classifies each property in Ontario according to its functional purposes. For example, data entries

categorized as a 300 series property are classified as a residential property, including both permanent residences and seasonal residences.

It can be difficult to assume the number of people that are staying at a seasonal residence at any given time. For example, it is common for numerous different families to rent a single seasonal residence throughout the summer. This produces a high degree of variability in the population of any single seasonal residence, as one week could have 3 residents occupying the premises and the following week could have 8. From a calculation perspective, the most appropriate response would be to use a provincial statistic, such as the average number of residents per household. However, using a statistical average such as the average number of residents per household results in a static number, and shifts the aspect of variability to the object it represents, which in this case is the household. Therefore, accounting for seasonal population in an annual population growth rate would require calculating the growth rate of the number of residential properties as determined by MPAC.

Based on the static nature of the number of residents per household, it was assumed that the growth rate of the number of residential properties would be the same as population. As a result, the annual growth rate of residential properties was used to determine the BAU forecast.

Given that the BAU forecast was determined by annual residential property growth, multiple years of data was used to eliminate the possibility of an outlier skewing the calculation result. With this consideration, the residential property growth rate was calculated for each year from 2010 to 2016, and then averaged. This resulted in an average annual residential property growth rate of 0.26%. Following the PCP protocol, this 0.26% growth rate was used to determine the forecasted emissions for the year 2030.

2.6.2 Outcome

Given a 0.26% annual residential property growth rate forecasted to the year 2030, community emissions in the TOA are expected to be 21,521.95 tonnes of CO2e in 2030, representing a 3.7% increase from baseline levels, if business is to continue as usual.

Appendix

List of Acronyms

BAU = Business as Usual (in context of emissions forecasts)

EF = Emission Factor

FCM = Federation of Canadian Municipalities

GDE = Gross Domestic Emissions

GHG = Greenhouse Gas

GWP = Global Warming Potential

ICECAP = Integrated Community Energy and Climate Action Plans

ICLEI = International Council for Local Environmental Initiatives

MPAC = Municipal Property Assessment Corporation

PCP = Partners for Climate Protection

TOA = Township of the Archipelago

VKT = Vehicle Kilometres Travelled

List of Key Definitions

Business as Usual	A scenario for predicting future emissions and energy use activity which assumes there will be no major changes in technology, policy, economics, and human activity/attitudes.
Baseline	The reference conditions against which change is measured.
Climate	Long-term averages of temperature, rainfall, and humidity. Long-term may be the span of seasons, years, or decades.
Climate Change	The long-term shift in global or regional climate patterns, usually in the context of rising global temperatures due to human-caused changes in atmospheric composition or in land use.
Emissions	In the context of climate change, refers to greenhouse gases that are released from human activities such as burning fossil fuels, deforestation, and food production.
Greenhouse Gas	Gases that trap heat in the Earth's atmosphere, creating a warmer-than-usual condition similar to the effect of a greenhouse. Examples include carbon dioxide and methane.
Mitigation	The act of limiting or reducing the harmful effects of something.

The Corporation of

The Township of The Archipelago

9 James Street, Parry Sound, Ontario P2A 1T4
Phone: 705-746-4243 • Fax: 705-746-7301

REQUEST FOR DEPUTATION

In accordance with the Procedural By-law, any person desiring to present information orally on matters of fact or to make a request of Council shall submit a request to the Clerk no later than 12:00 noon on the Wednesday of the week prior to the subject meeting. Each deputation as addressed shall be limited to not more than ten (10) minutes. Extensions to these limits will be at the discretion of the majority of Council. There will be no debate of the subject matter presented.

PLEASE PRINT

SUBJECT: 2021 Annual Contribution

PREFERRED DATE: Dec. 10 ALTERNATE DATE: January 2021

NAME: Nadine Hammond

EMAIL ADDRESS: manager@museumontowerhill.com

STREET ADDRESS: 17 George St. ~~PSEF~~

CITY: Parry Sound POSTAL CODE: P2A 2X4

PHONE: 705-746-5365

NAME OF GROUP OR PERSON(S) BEING REPRESENTED (if applicable), INCLUDING THE PERSON(S) WHO WILL BE SPEAKING AND/OR PRESENT AT THE MEETING:

West Parry Sound District Museum
Rob Wood • Nadine Hammond

BRIEF STATEMENT OF PURPOSE OF THE OPEN DEPUTATION:

Request for funding in 2021

Personal information on this form is collected under the legal authority of the Municipal Act, S.O. 2001, c.25, as amended. The information is collected and maintained for the purpose of creating a record that is available to the general public pursuant to Section 27 of the Municipal Freedom of Information and Protection of Privacy Act. Questions about this collection should be directed to the Clerk, Township of The Archipelago, 9 James St., Parry Sound, Ontario, P2A 1T4, Telephone 705-746-4243 Ext. 301.

The West Parry Sound District Museum
17 George Street P.O. Box 337
Parry Sound, ON P2A 2X4 Canada
Phone: (705)746-5365

Monday, November 23, 2020

Township of The Archipelago
9 James Street,
Parry Sound, ON, P2A 1T4

Re: 2021 Contribution to the Museum

Dear Reeve Liverance and Council,

The West Parry Sound District Museum respectfully requests that the Township of The Archipelago contribute $29,000 toward the continued operation of the West Parry Sound District Museum. This is a 5% increase, over 2020's contribution.

Moving into 2021 the Museum is facing a shortfall of approximately $40,000 in our operational budget. In addition to the operational shortfall we have an unfunded reserve fund that is $200,000 short. A 5% increase in funding from all municipalities would go a long way toward addressing the operational shortfall, and allow staff and the Board to focus on programming for the community and addressing the reserve fund.

Like everyone else the Museum is coming off an incredible challenging year. We are still learning how to navigate our new reality safely. Careful planning had given us a great sense of optimism heading into the year. We are particularly proud of the development of an escape room experience based on Adam Brown's efforts to get home for Christmas in 1903. It is an exciting interactive experience that was only possible due to the Georgian Bay Software and Team Marshall and community members that contributed villages and artificial trees to the effort.

We do understand that this year has been a challenge for everyone. If a 5% increase is not feasible we request that you continue to contribute at the same level as in 2020 ($27,612.00) or at an increase that is comfortable for the Township of the Archipelago.

Sincerely,

Nadine Hammond
Curator/Manager

Email: info@museumontowerhill.com
www.museumontowerhill.com

Attendance

	2020 (Jan - Oct)	2019	2018
People through the door	825	7,235	6,955
Total Admission Revenue	$1,142	$7,238	$7,611
Total Gift Shop Revenue	$1,696	$8,099	$7,208
Total Rental Revenue	$847	$6,078	$4,978

Outreach, Marketing and Social Media

- Increased Facebook followers to 1338, an increase of 166
- Increased Twitter followers to 587, an increase of 45

2020 Exhibitions

What's New Exhibition
January 8 to Feb 16

The annual *What's New* exhibition showcased the latest additions to the Museum's permanent collection from the previous year.

Avro Arrow: A Dream Denied
Feb 20 to March 29

The story of the Avro Arrow is well-known, and a tribute to what could have been for Canada's aerospace industry. The supersonic jet was designed to intercept missiles but the project was eventually cancelled on February 20, 1959.

Logging: A History
March 4 to December 20

The logging industry in Ontario began around 1860, with American lumber companies moving north to expand their markets after removing much of the timber along the lake states. As more companies began to situate themselves near prominent waterways, the scale of the operations grew and more sawmills were erected, turning the lumber industry into one of the most profitable for the Canadian export trade, next to the fur trade.

Our Community: A History of the West Parry Sound District
July 16 to October 10

With the E. Roy Smith Gallery under renovations, we wanted to continue to teach you the West Parry Sound District's heritage. And what better way than to recreate the gallery! We hope you enjoy our re-imagined history of the area.

The Adam Brown Adventure: An Escape Room Experience
November 18 to December 20

This is a digital, touchless experience where teams of up to 6 individuals bring their own smart device (smart phone or tablet) to solve puzzles hidden throughout the gallery. Based on a true story of a local Parry Sounder, the escape room will take you on the journey of Adam Brown - Red Rock Lighthouse keeper from 1897-1937.

2020 Special Events/Projects

Genealogy Club

This lecture series features presenters with a variety of expertise ranging from linguistics, conservation, and archival research. Meetings are held on the second Wednesday of the month.

Staff Development

Through various grants the Museum has been able to employ the following individuals in 2020:

- Karen Albrecht, NOHFC Communications Intern

Maintenance and Capital Expenses

In March a sprinkler pipe froze and burst. As a result the following repairs to the building were conducted:

- Attic spaces were sealed against rodents, the insulation removed and new insulation blown in.
- Lights and ceiling tiles were replaced in hallways on the north side of the building.
- The carpet in the Lion's Room was replaced with laminate.
- A significant portion of the dry sprinkler system pipe was replaced.

West Parry Sound District Museum
Financial Statements
For the Year Ended December 31, 2019

West Parry Sound District Museum
Financial Statements
For the Year Ended December 31, 2019

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BDO

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BDO Canada LLP
300 Lakeshore Drive
Suite 300
Barrie, ON L4N 0B4
Canada

Independent Auditor's Report

To the Board of Directors of West Parry Sound District Museum

Qualified Opinion

We have audited the financial statements of West Parry Sound District Museum (the Museum), which comprise the statement of financial position as at December 31, 2019, the statements of changes in net assets, operations and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, except for the possible effects of the matter described in the *Basis for Qualified Opinion* section of our report, the accompanying financial statements present fairly, in all material respects, the financial position of the Museum as at December 31, 2019, and its results of operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Qualified Opinion

In common with many not-for-profit organizations, the Museum derives revenue from fundraising activities and donations, the completeness of which is not susceptible to satisfactory audit verification. Accordingly, our verifications of the cash that the Museum derives from fundraising activities and donations was limited to the amounts recorded in the records of the Museum. Therefore, we were not able to determine whether any adjustments might be necessary to revenues, deficiency of revenues over expenses, and cash flows from operations for the years ended December 31, 2019 and 2018, current assets as at December 31, 2019 and 2018, and net assets as at January 1 and December 31 for both the 2019 and 2018 years. Our audit opinion on the financial statements for the year ended December 31, 2018 was modified accordingly because of the possible effects of this limitation in scope.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Museum in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Museum's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Museum or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Museum's financial reporting process.

BDO Canada LLP, a Canadian limited liability partnership, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

BDO

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Museum's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Museum's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Museum to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

BDO Canada LLP

Chartered Professional Accountants, Licensed Public Accountants

Barrie, Ontario
May 28, 2020

West Parry Sound District Museum
Statement of Financial Position

December 31	2019	2018
Assets		
Current		
Cash (Note 3)	$ 30,443	$ 8,384
Short-term investments (Note 4)	-	10,925
Accounts receivable	22,646	12,009
Gift shop inventory	8,682	8,613
Prepaid expenses	7,181	7,112
	68,952	47,043
Capital assets (Note 5)	805,624	867,233
Collections	1	-
	$ 874,577	$ 914,276
Liabilities and Net Assets		
Current		
Accounts payable and accrued liabilities (Note 6)	$ 16,247	$ 14,340
Wages and source deductions payable (Note 7)	17,397	16,414
Deferred contribution	16,600	-
	50,244	30,754
Long-term debt - Town of Parry Sound (Note 8)	23,269	23,740
Deferred contributions for capital assets (Note 9)	707,944	748,951
	731,213	772,691
Commitments (Note 12)		
Net Assets		
Internally restricted net assets	10,147	10,028
Unrestricted	82,973	100,803
	93,120	110,831
	$ 874,577	$ 914,276

The accompanying notes are an integral part of these financial statements.

West Parry Sound District Museum
Statement of Changes in Net Assets

For the year ended December 31	Internally Restricted	Unrestricted	2019 Total	2018 Total
Balance, beginning of the year	$ 10,028	$ 100,803	$ 110,831	$ 144,567
Excess (deficiency) of revenues over expenses	119	(17,830)	(17,711)	(33,736)
Balance, end of the year	$ 10,147	$ 82,973	$ 93,120	$ 110,831

The accompanying notes are an integral part of these financial statements.

West Parry Sound District Museum
Statement of Operations

For the year ended December 31	2019	2018
Revenue		
Municipal contributions	$ 120,050	$ 113,927
Grants (Note 10)	61,336	46,270
Fundraising and donations	34,756	11,643
Museum admissions	7,212	7,984
Gift shop	8,105	7,069
Rental	6,011	5,630
Memberships, research, programs and other revenue	10,675	3,986
Interest income	284	198
Amortization of deferred contributions related to capital assets	54,107	52,482
Surcharge on membership for funds internally restricted for maintenance	239	106
	302,775	249,295
Expenses		
Salaries and benefits	141,053	130,064
Curatorial and exhibition	21,896	1,060
Utilities and rent (Note 12)	24,974	19,826
Repairs, maintenance and contractor costs	20,568	21,837
Insurance	9,079	8,885
Gift shop purchases	7,014	5,034
Fundraising and program (recovery) expenses	6,031	(548)
Professional fees	5,441	10,494
Office, general, telephone and internet	5,416	9,560
Advertising and promotion	1,426	2,097
Professional development	1,720	903
Interest and bank charges	685	1,004
Amortization of capital assets	75,183	72,815
	320,486	283,031
Deficiency of revenues over expenses	$ (17,711)	$ (33,736)

The accompanying notes are an integral part of these financial statements.

West Parry Sound District Museum
Statement of Cash Flows

For the year ended December 31	2019	2018
Cash flows from operating activities		
Deficiency of revenues over expenses for the year	$ (17,711)	$ (33,736)
Items not affecting cash:		
Amortization of capital assets	75,183	72,815
Amortization of deferred contributions related to capital assets	(54,107)	(52,482)
	3,365	(13,403)
Changes in non-cash working capital:		
Accounts receivable	(10,637)	7,350
Gift shop inventory	(69)	(1,566)
Prepaid expenses	(69)	(2,786)
Accounts payable and accrued liabilities	1,907	(3,093)
Wages and source deductions payable	983	5,207
Deferred contribution	16,600	-
	12,080	(8,291)
Cash flows from investing activities		
Purchase of capital assets	(13,574)	(47,467)
Decrease in short-term investments	10,925	9,959
Collections	(1)	-
	(2,650)	(37,508)
Cash flows from financing activities		
Deferred capital contributions related to capital assets received	13,100	12,600
Repayment of long-term debt - Town of Parry Sound	(471)	(635)
	12,629	11,965
Net increase (decrease) in cash during the year	22,059	(33,834)
Cash, beginning of the year	8,384	42,218
Cash, end of the year	$ 30,443	$ 8,384

The accompanying notes are an integral part of these financial statements.

1. Nature and Purpose of Organization

The West Parry Sound District Museum (the Museum) is a not-for-profit organization incorporated without share capital under the laws of Ontario. The Museum operates as a museum at its location on tower hill in Parry Sound, Ontario.

The Museum provides educational programs and exhibits for research and for the benefit of the present and future generations of the West Parry Sound District.

The Museum is a registered charity and as such is exempt from tax under the Canadian Income Tax Act.

2. Significant Accounting Policies

Basis of Accounting

The financial statements have been prepared using Canadian accounting standards for not-for-profit organizations.

Inventories

Gift shop inventory is stated at the lower of cost and net realizable value. Cost is determined on a weighted average cost basis.

Capital Assets

Capital assets are stated at cost less accumulated amortization. One half of the amortization is recorded in the year of purchase. Amortization is provided on capital assets based on their estimated useful lives using the following rates and methods:

Building	- 40 years straight-line basis
Geothermal equipment	- 10 years straight-line basis
Furniture and equipment	- 20% declining balance basis
Computer equipment and software	- 30% declining balance basis

2. Significant Accounting Policies (continued)

Revenue Recognition

The Museum follows the deferral method of accounting for contributions. Under this method restricted contributions are recognized as revenue in the year the corresponding expenditure is incurred.

Unrestricted contributions are recognized as revenue when they are received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Contributions restricted for the purchase of capital assets are recognized as revenue in the same manner that the corresponding assets are amortized.

Gift shop sales are recognized as revenue when the goods are sold.

Revenues from memberships, museum admissions, rental, research and other activities are recognized when the related service has been provided.

Interest income is recognized as it is earned.

Use of estimates

Management reviews the carrying amounts of items in the financial statements at each balance sheet date to assess the need for revision or any possibility of impairment. Management determines these estimates based on assumptions that reflect the most probable set of economic conditions and planned courses of action.

These estimates are reviewed periodically and adjustments are made to net income as appropriate in the year they become known.

Items subject to significant management estimates include accounts receivable, accrued liabilities, deferred revenues, and deferred contributions.

Contributed Materials and Services

The Board of Directors and volunteers contribute time and materials to assist the Museum in carrying out its activities. Because of the difficulty of determining their fair value, contributed services and materials are not recognized in the financial statements.

2. Significant Accounting Policies (continued)

Financial Instruments

The Museum considers any contract creating a financial asset, liability or equity instrument as a financial instrument, except in certain limited circumstances. The Museum accounts for the following as financial instruments:

- cash
- accounts receivable
- accounts payable

A financial asset or liability is recognized when the Museum becomes party to contractual provisions of the instrument.

The Museum initially measures its financial assets and financial liabilities at fair value, except for certain non-arm's length transactions which are measured at the exchange amount.

The Museum subsequently measures its financial assets and financial liabilities at amortized cost. Changes in fair value are recognized in net income.

Financial assets measured at amortized cost include cash and accounts receivable.

Financial liabilities measured at amortized cost include accounts payable and accrued liabilities and government remittances payable.

Financial assets measured at cost are tested for impairment when there are indicators of impairment. Previously recognized impairment losses are reversed to the extent of the improvement provided the asset is not carried at an amount, at the date of the reversal, greater than the amount that would have been the carrying amount had no impairment loss been recognized previously. The amounts of any write-downs or reversals are recognized in net income.

2. Significant Accounting Policies (continued)

Financial Instruments (continued)

Transactions in financial instruments may result in an entity assuming or transferring to another party one or more of the financial risks described below. The required disclosures provide information that assists users of financial statements in assessing the extent of risk related to financial instruments. Unless otherwise noted, there has been no change in risk from the prior year.

(a) Credit risk

The Museum has credit risk with respect to its accounts receivable which has a net balance of $22,646 (2018 - $12,009). Credit risk is the risk that one party to a transaction will fail to discharge an obligation and cause the other party to incur a financial loss. In the opinion of management, the credit risk exposure to the Museum is low and is not material.

(b) Liquidity risk

The Museum has a liquidity risk with respect to its accounts payable and accrued liabilities which has a balance of $16,247 (2018 - $14,340). Liquidity risk is the risk that the Museum cannot repay its obligations when they become due to its creditors. In the opinion of management, the liquidity risk exposure is low and is not material.

Collections

The Museum was created to collect, conserve, research, house, exhibit and interpret those objects that best serve to illustrate the history of the West Parry Sound District. These objects comprise the Museum's permanent collection and relate to human history, settlement, industry, transportation, recreation and natural history.

The Museum's collections are capitalized in the statement of financial position at nominal value and are not subject to amortization. Contributions of collection items are recorded at a nominal value. For purchased items the difference between the purchase price and nominal value is expensed in the period the items are acquired.

The cost of these objects is not determinable and accordingly, is stated at a nominal value.

3. Cash

The Museum's bank accounts are held at one credit union and earn interest at variable rates dependant on average monthly balances.

The Museum has an unused authorized line of credit through its credit union with a maximum draw of $15,400 (2018 - $15,400) bearing interest at the credit union's prime lending rate plus 1% and secured by a general security agreement. As at December 31, 2019, the amount being drawn on this line of credit was $NIL (2018 - $NIL).

4. Short-term Investment

The Museum's short-term investment consisted of a Guaranteed Investment Certificate earning interest at a rate of 1.50% that matured on February 26, 2019.

5. Capital Assets

	2019		2018	
	Cost	Accumulated Amortization	Cost	Accumulated Amortization
Building	$ 1,992,896	$ 1,322,702	$ 1,992,896	$ 1,272,880
Geothermal equipment	230,567	110,573	230,567	87,516
Furniture and equipment	156,538	141,895	142,964	139,930
Computer equipment and software	1,903	1,110	1,903	771
	2,381,904	1,576,280	2,368,330	1,501,097
		$ 805,624		$ 867,233

6. Accounts Payable and Accrued Liabilities

	2019	2018
Trade accounts payable	$ 9,097	$ 8,508
Accrued liabilities	7,000	5,832
Deposits on hand	150	-
	$ 16,247	$ 14,340

7. Wages and Source Deductions payable

Included in wages and source deductions payable are government remittances payable of $3,309 (2018 - $5,013).

8. Long-term Debt - Town of Parry Sound

The long-term debt to the Town of Parry Sound consists of a loan payable bearing interest at 1.1%. As the loan has no fixed terms of repayment, it has been classified as a long-term liability on the statement of financial position.

9. Deferred Contributions for Capital Assets

Deferred contributions for capital assets represent grants received for capital asset purchases. The changes in the deferred contributions for capital assets are as follows:

	2019	2018
Balance, beginning of year	$ 748,951	$ 788,833
Contributions received	13,100	12,600
Amounts recognized as revenue	(54,107)	(52,482)
Balance, end of the year	$ 707,944	$ 748,951

10. Grant Revenue

The Museum received grant revenue from the following sources:

	2019	2018
Canadian Museum Association	$ 42,679	$ 28,299
Northern Ontario Heritage Fund	13,019	13,019
Federal	5,161	4,400
Provincial	477	552
	$ 61,336	$ 46,270

11. Economic Dependence

The Museum receives 61% (2018 - 64%) of its revenue from grants and municipal contributions and is dependent on this funding to operate.

12. Commitments

The Museum leases its land from the Town of Parry Sound under a long-term lease, expiring October 2026, for a nominal annual rental amount.

13. Comparative Figures

Certain comparative figures have been reclassified to conform with the financial statement presentation adopted for 2019.

14. Subsequent Events

A global pandemic was declared in March 2020 by the World Health Organization associated with the novel coronavirus (COVID-19). The situation is in its infancy and the future effects are not determinable at this time. As a result of the COVID-19 pandemic and health authority recommendations, the Museum closed to the public on March 18, 2020 and will re-open once further information from the health authority permits the Museum to open. Management and the Museum's Board of Directors are working on re-opening plans, cashflow analysis and reviewing and applying, where possible, for various government subsidy programs to continue to meet its obligations as they come due. The Museum's overall response to COVID-19 continues to focus on the health and safety of its employees. Furthermore, this development has had no impact on the 2019 financial statements.

On March 21, 2020, the Museum experienced water damage to the south side of the building as a result of a burst in its fire suppression system pipes. The damaged was contained to this area and contractors were brought in, through the Museum's insurance company, to clean-up the damage and complete the repairs. The total costs are estimated to be $100,000, which will be covered by the Museum's insurance policy and is expected to be completed by mid-May 2020.

United Nations Educational, Scientific and Cultural Organization

GEORGIAN BAY BIOSPHERE
MNIDOO GAMII
Spirit of the Water

MEMO: Skerryvore Road – Ecological Monitoring Report and Update

To: Township of The Archipelago
From: Georgian Bay Biosphere – on behalf of Community Nominated Priority Place Project
Greg Mason & Tianna Burke

Summary Request:

Georgian Bay Biosphere, on behalf of the Community Nominated Priority Place is asking for consideration toward costs in the following manners:

1) That resurfacing of the road occur in a manner that reduces/eliminates loose/sandy materials on the shoulders to reduce the attraction of road edges for turtle nesting.
    a. Ideally, this would occur throughout the entire road;
    b. Second option would be for shoulder to shoulder paving in the wetland areas (i.e. from 100 on either side of 'riprap' installed on the side banks of wetlands).

2) That ideally, timing of resurfacing be directed to May or beginning of September outside of turtle nesting/hatching season (occurring from end of May to Mid-late August).
    a. Option: invest in turtle nesting surveys, nest excavation and incubation for that field season to mitigate turtle nest loss.

Background:

In 2020, Township of The Archipelago undertook to replace a number of culverts on Skerryvore Rd. As part of this project, support was provided by the Coastal Priority Places Project in the following manners:

1) Road Surveys in lieu of temporary exclusion fencing to monitor for species at risk (SAR) use of road in advance and during construction;
2) Excavation of turtle nests, incubation of eggs, and release back to adjacent habitat;
3) Training of road construction crews on SAR needs;
4) Available for 'immediate' SAR response to support construction crews;
5) Begin implementation of SAR (turtle) nest mitigation strategies;
6) Data gathering through road surveys that help us understand where reptile mortality and crossing is highest on the road, to help inform mitigation options and recommendations.

Some of this work replaced requirements that the Township of The Archipelago would have had to implement including: exclusion fencing, ecological surveys and ecologist availability for site inspections. We feel that the methods used this past summer provided a higher quality strategy for conservation of turtles at a comparable cost.

Results:

A draft infographic is attached and an article can be found through this link (https://www.gbbr.ca/news/a-tale-of-a-thousand-turtles/) which outlines some of the key results. A summary of that is as follows:

Road Ecologist Effort Summary:

- 94 Daily Surveys undertaken from June 8 to October 3rd
- Biking distance – 2,181 km – Carbon Emissions saved – 297 kg
- 1 SAR training day with Road Construction Crew
- 7 call-outs from Road Construction crew to ecologists
- 8 Public Turtle release days/7 Turtle Hatchery Tours

Road Monitor's Anecdote: Quote from Construction Crew:

"Just finished up there today and wanted to say it was a different experience working there but I think we all did our job as well as found some snakes snake eggs turtle eggs and such. Just wanted to say thanks I told the guy on the bike to pass that along to all of you thanks for working with us on this project I finished today the first there the last to leave. Dump site is rehabbed just a couple pieces of equipment to move out. As for me I'm getting sent to the other end of the world now to work Gravenhurst starting tomorrow thanks again was cool little project!"
- Irwin

Ecological Summary

- 137 nests observed
- 44 nests excavated in construction zones
- 1,113 eggs collected and incubated
- 1,014 hatchlings released (91% success rate).

2020 Road Mitigation Summary:

In an effort to reduce Turtles nesting along road side edges, and with an attempt to try to eliminate the need for permanent exclusion fencing, in 2020, approximately 600 metres of the banks of the road in areas adjacent to wetlands were layered with rock rip rap. It is thought and hoped that rip rap will act as a deterrent to turtles climbing out of the wetlands to road side edges. This was done at a cost of $98,371 paid by the CNPP project funds.

Cost Summary:

2020 Ecological Survey and Hatchery

Cost Assessment: $55,435
(Includes, Road surveys, travel, equipment, hatchery care and release time and costs)
NOTE: These costs were paid through the CNPP project.

Riprap Installation Costs: $98,371

Note: ECCC Funding provided for coastal SAR work coordinated through Georgian Bay Biosphere).

Offset Municipal Costs Assessment:

The following costs would have been incurred by the municipality as part of normal road construction costs. These costs were replaced and/or curtailed by the approach taken of active monitoring and turtle nest excavation, hatching and release program.

Required Temporary Exclusion Fencing

- Approximately 1500 metres of fencing required
  $45,000 - $75,000 (estimate $30 - $50 per metre)
- Typical maintenance of temporary exclusion fencing throughout season (due to storm events etc)
  $4,500

Mandated Ecological Site Consulting Work to oversee Road Work

Normal road work would have required the following ecological work be undertaken by a consulting ecologist:

1) Training and SAR familiarization with road construction crew;
2) Review and monitoring of road work for presence of turtles and other SAR and removal of same
3) Attend on site when SAR sited and removal of same;

Cost Estimate for ecological retainer: $15,000 - $35,000

Projected Total Road Ecology Costs - $64,500 - $114,500

Next Steps – 2021 and beyond:

To complete the project, and further mitigate the roads use by turtles we are hoping that the following activities can be undertaken:

Shoulder to Shoulder Resurfacing

Option 1) Paving/Resurfacing of roads from shoulder to shoulder for entire length of road. This will reduce the availability of loose sandy debris sought by turtles for nesting purposes.

Option 2) Focus shoulder to shoulder repaving only in the areas of the rip rap (plus 100 metres on either side)

Artificial Turtle Nesting Habitats

Create 2 to 4 artificial turtle nesting mounds away from road edges in the wetland areas to encourage turtles to nest away from road edges.

Research and Road Surveys

A Master's student has been hired through Laurentian University to undertake an assessment of the RipRap road mitigation technique in 2021.

Regular road mortality surveys will be undertaken in 2021 and likely 2022 to further assess road use by reptiles and evaluate the success of road mitigation techniques.

Results will be shared and incorporated into adapting Best Management Practices/Approaches for road construction/maintenance.

Summary:

A high level of ecological effort has been placed into mitigating harm of construction in the 2020 year with a high level of success including successful protection and release of over 1000 turtles into adjacent wetlands. We estimate the ecological success of this effort to be comparable if not significantly better than standard road construction mitigation techniques at a comparable if not reduced overall cost. Moreover, the greater intensity of ecological effort provides a solid data set with which to guide road management and ecological monitoring in years to come and aids in overall creation of Best Management Practices for road construction and road monitoring in the Eastern Georgian Bay area.

Savings to Township of The Archipelago in 2020 for the construction cost range from $64,500 to $114,500. We respectfully are asking the Township to consider a comparable financial contribution to proposals in 2021 to complete the road mitigation strategy.

Skerryvore Community Road
Reptile Ecology Surveys

Staff from the Georgian Bay Biosphere and Shawanaga First Nation conducted road ecology surveys by bicycle on Skerryvore Community Road in the summer of 2020. This project was in partnership with the Township of the Archipelago, Tatham Engineering, and Hall Construction. The goal is to identify sections of road that are 'hot spots' areas for reptiles and study techniques to keep reptile populations safe and healthy wherever they are affected by roads.

PEDAL POWER

2,181 km
Total distance biked by road monitors

94
Surveys completed (June 15–October 3)

297 kg
Total carbon dioxide emissions **saved** by using bikes instead of cars

Say it in Anishinaabemowin

Snapping Turtle = **Mshiikenh** (ma-she-kenh)

Painted Turtle = **Miskwaadesi** (mis-kwa-des-i)

Snake = **Gnebig** (g-ne-big)

Snakes

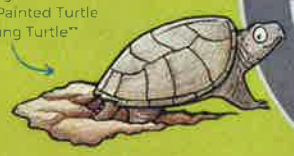
234 individuals of 9 species

DeKay's Brownsnake
Eastern Gartersnake
Eastern Ribbonsnake**
Massasauga Rattlesnake**
Milksnake
Northern Ring-necked Snake
Northern Watersnake
Red-bellied Snake
Smooth Greensnake

Turtles

55 individuals of 3 species:

Blanding's Turtle**
Midland Painted Turtle
Snapping Turtle**



137 nests observed
44 nests rescued from construction zones
1,113 eggs collected & incubated
1,014 hatchlings released (91% success rate!)

Did You Know?

In the wild, it takes about **1,500** eggs for an individual Snapping Turtle to replace itself.

** = Species at Risk

HELPING LOCAL REPTILES

Road studies and improved techniques, including fencing and safe crossings, can help keep reptile populations safe and healthy. However, we all have a role to play in preventing reptile and wildlife encounters on roads!

Drive cautiously ALL times of the day

Avoid distractions -- eyes on the road!

Help wildlife off/across the road if it's safe

GEORGIAN BAY BIOSPHERE
MNIDOO GAMII

GEORGIAN BAY
ASSOCIATION
SINCE 1916

Proposal to Township of the Archipelago (ToA)

Topic: Municipal Official Plans & Comprehensive Zoning By-laws Comparison

Background

Following discussions in 2019 on how the coastal Georgian Bay communities on the east coast might address their shared objective of protecting the natural landscape and environment along the coast, the Georgian Bay Association (GBA) decided that it would be beneficial to develop certain "Coastal Protection" projects that involve collaboration with municipalities. One of these concerns is comparing Municipal Strategic Plans, Official Plans and Comprehensive Zoning By-laws.

The coastal municipalities are:

Town of North East Manitoulin and Islands (NEMI)
Municipality of Killarney
Township of the Archipelago
Township of Carling
Township of Georgian Bay

Purpose

The purpose of this initiative is to establish base data on the current status and main features of each municipality's Strategic Plan, Official Plan (OP) and Comprehensive Zoning By-laws (CZB), compare them and then share information on the results with the partners in the project. The focus will be on the OP policies, and CZB regulations that apply to the coastal area of the municipalities. We expect that this exercise will surface both commonalities and key differences in the planning policies and regulations, which can be analyzed to identify core principles, and how the policies and regulations might be made more consistent, if appropriate for various municipalities. After the findings are shared, the partners could discuss potential sound or best practice approaches.

The goal will be to focus on the more significant planning issues rather than drilling down into the fine details, in particular developing data on planning and land use policies and regulations to improve preservation and protection of the east and north coasts of Georgian Bay.

This will primarily be a research project aimed at gathering knowledge and then sharing key insights and important information. Key to the project's success will be establishing and maintaining good communications among the partners in the project, including GBA and participating municipalities.

Benefits

The key benefits to the project partners and residents will be:

- Identify the main commonalities and differences in the content of OPs and CZBs, for the information and consideration of municipal planning departments and Councils.
- Develop a basis for discussion of potential ways to develop more consistent planning and land use policies and regulations throughout the coast, including identifying and sharing information on sound procedures and best practices.
- Serve as a platform for potential future discussion and information sharing among municipalities.
- Develop communications material for residents and GBA members to better inform them on the policies and regulatory requirements in their municipalities.

The partners may think of more benefits or uses for the results as the project unfolds.

Action Steps

GBA suggests that the project commence with a review of the official plans, followed by a review of the key zoning by-law regulations. We are aware that ToA has adopted certain guiding principles to inform the development of an updated Strategic Plan. At this point we suggest that the main steps would be:

1. Assemble copies of the current OPs and CZBs.
2. Develop a list of significant planning policies and regulations that should be compared.
3. Put together a comparison chart that clearly identifies commonalities and differences.
4. Determine which differences are significant and which are less important from a planning and coastal protection standpoint.
5. Carry out further research on the significant differences to determine how the policies and regulations might be made more consistent, and to identify potential best practices.
6. Communicate the findings to all municipalities.

The goal could be to complete these steps by the end of 2021, but the timeline should be adjusted as appropriate as the project proceeds, or if requested by municipalities, particularly given the current impact of COVID-19 on the availability of municipal staff.

Requested Assistance from Municipalities

- Provide a staff resource to work with GBA and other municipalities to pursue the above action points, including participating in discussions on items 4 and 5.
- GBA would welcome receiving input and ideas from Municipal Councils and planning departments to help guide this project as it proceeds.
- We also request that each municipality consider appointing a representative to the GBA Coastal Protection Committee. The mandate of the Committee is attached. We will follow up to provide details of what is involved.

Costs

GBA has established that funding is available for most of the costs of employing an intern to carry out the majority of the initial work required for this project. Therefore, it is anticipated that only some minor staff time will be required from municipalities at this time. We will review requirements as this project proceeds.

February 25, 2020

Coastal Protection Advisory Committee Mandate

Mandate

- Provide advice and guidance to the GBA board on GBA coastal protection projects and other coastal protection matters.
- Liaise with member associations and municipalities to seek input on GBA coastal protection projects and other coastal protection matters.

Chair

- The President will be the Chair of the Committee.

Membership

- Minimum of 8 members; maximum of 15
- Members: the President, Executive Director, and representatives from the Georgian Bay archipelago* communities to be nominated by the Chair and approved by the Board. In addition, each of the municipalities in the region will be invited to appoint a representative to the Committee.
- Members are appointed for 1-year terms, renewable for the duration of the Committee.

Meetings

- Meetings held at the call of the Chair.
- To be held at least quarterly.

Accountabilities

- Strategy – Develop strategy for GBA coastal protection projects and other coastal protection matters, recommend policy positions and provide written reports for board consideration.
- Identify and draft for board approval key messages to be presented to stakeholders.
- Liaison – Each member to liaise with member associations, the relevant coastal municipalities and other stakeholders in the areas that they will represent.

- Feedback – Each member to provide feedback on recommendations, issues and concerns raised through the liaison process.
- Responses – Committee to provide direct responses to recommendations, issues and concerns raised through the liaison process, or refer such matters to the board, as appropriate.

Authorities

- The Committee Chair reports to the Board on behalf of the Committee. A report on the Committee's activities during the past month should be provided at each Board meeting.
- Proposals or matters that require a decision of the Board should be referred to the next Board meeting.
- Issues of strategy and GBA policy must be referred to the full Board for a decision.

Record Keeping and Reporting

- The Committee will report to the Board on its activities at each Board meeting.
- Minutes will be taken of all Committee meetings and distributed to the Committee members for review within 1 week of meetings.
- All relevant documentation and external correspondence of the Committee will be added to the centralized document database when finalized.

** Georgian Bay Archipelago shall mean the archipelago of islands that extends from the south end of the east coast of Georgian Bay across the north coast and into the east end of the North Channel – Bay of Islands.*

TOWNSHIP OF THE ARCHIPELAGO REPORT FORM

Target

Date of Council: December 2, 2020	**Prepared by:** Joyce Crookshank

Subject: Shore Road Allowance Application – Robert and Maxine Barrett
190 Healey Lake Water

Information & Analysis

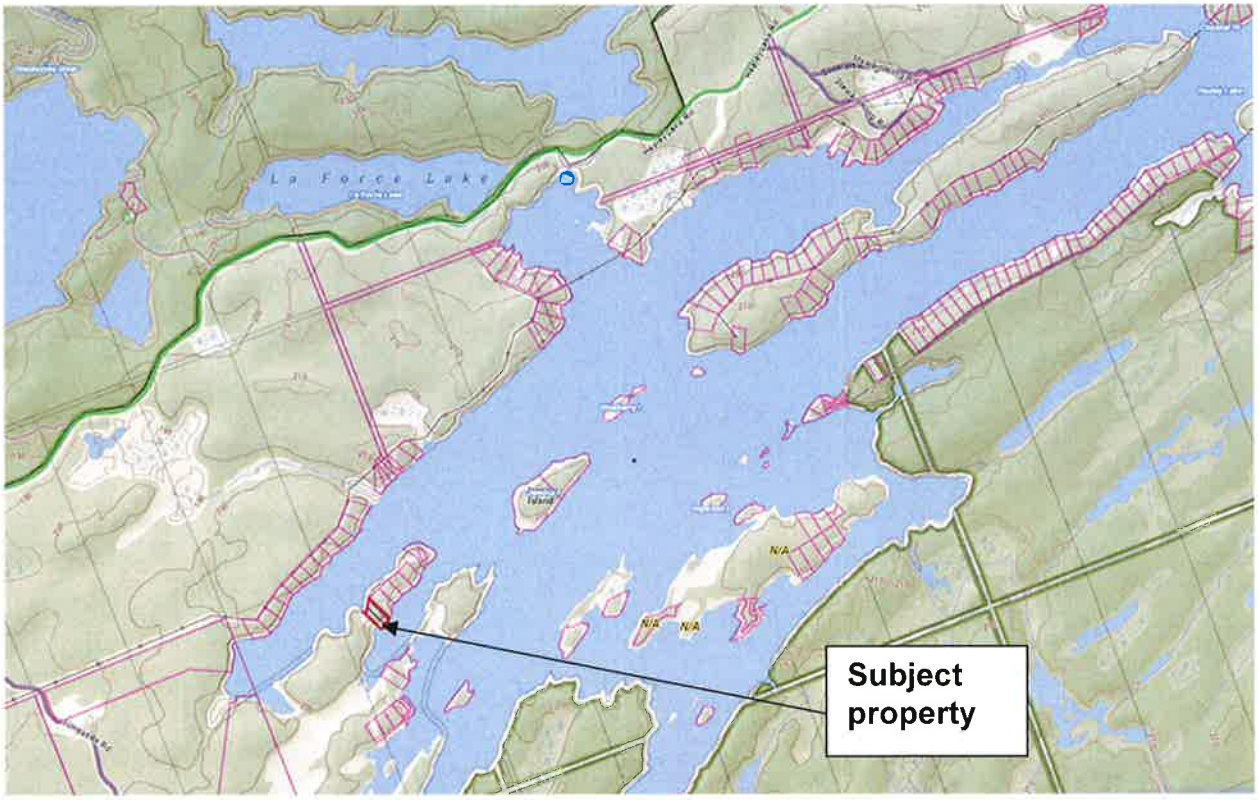
Please find attached a key map and aerial photo identifying the applicants' property located at 190 Healey Lake Water. There is no environmentally sensitive area or fish habitat fronting the subject land. Crown land abuts the property to the west and to the back of the property, and staff at the MNRF has signed a Preliminary Consent confirming that the Ministry has no objection to the proposed sale.

The abutting owners at 191 Healey Lake Water own the shore road allowance fronting their property, thereby establishing the side lot line and have also signed a Preliminary Consent form confirming no objection to the proposed sale.

The applicants' Lot 17 on registered plan of subdivision M-284. Pursuant to the Planning Act, land cannot be added to a lot on a registered plan of subdivision. To resolve this, it is recommended that the approval be conditional upon Council passing a deeming by-law to deem the subject property <u>not</u> to be a lot on a registered plan of subdivision. The deeming by-law would subsequently be registered at the local Land Registry Office to enable the shore road allowance portion to merge with the respective lot.

Recommendation

That Council approves the stopping up, closure and conveyance of the original shore road allowance fronting 190 Healey Lake Water on the basis of a straight-line extension of the side lot lines and subject to the applicants submitting a deeming by-law application to have Council pass a deeming by-law to be registered against the applicants' property, thereby allowing the shore road allowance portion to merge on title with the respective lot.


La Force Lake
Subject property

Crown land

CAO REPORT on COUNCIL DIRECTION - December 2020

Council Date	Department	Item	Update / Status	Date to return to
July 16, 2020	CAO	Council's Strategic Principles/Strategic Plan Review	Draft background document prepared. Council endorsed Amalgamation Paper to be added. Package and Information Report to Council to follow.	1/21/2021
July 16, 2020	CAO	OPP/EMS Response Concerns	Completed. Information included in Newsletter; further discussions with OPP/EMS after summer season.	Ongoing
August 20, 2020	Clerk	Letter of support to Town of Parry Sound regarding tax exempt properties	In progress - Further discussions with Town initiated to determine support required.	Ongoing
August 20,2020	Operations	Boat Speed/Wakes	Final draft prepared - survey to be released in January	February 21
September 17, 2020	Operations	Skerryvore Road Traffic Calming Measures	Looking at setting up radar unit on side of road (as long as snow plowing not an issue)	Ongoing
September 17, 2020	Development/Operations	Lookout Lane	Rocks at end of Lookout Lane returned to original location, continuing to monitor. No change.	Closed out
September 17, 2020	Corporate Services	Connectivity	Plan, land, agreements, communication	Ongoing
October 20, 2020	Clerk	Request review and amendment to the Municipal Elections Act	Bring forward a resolution requesting Minister Clark to review and provide amendments the Municipal Elections Act to provide Clerks with a clearer definition for non-resident tenants.	11/19/2020
October 20,2020	Environment	Seabins	Following up with GBF for update on program and funding opprotunites.	12/11/2020
November 19, 2020	Environment	Unencapsulated Polystyrene Dock Foam	Resolution passed to support of *Bill 228, Keeping Polystyrene Out of Ontario's Lakes and Rivers Act* and forwarded to Premiere, leaders of opposition and GLSLCI. Added information on website.	completed
November 19, 2020	Environment	Water Levels of Georgian Bay	Resolution passed and forwarded to GLSLCI.	completed
November 19, 2020	Clerk	Request review and amendment to the Municipal Elections Act	Work with Councillors Manners and Barton to bring a clear resolution to Council for their consideration	1/22/2021
November 19, 2020	Development/Operations	Phragmites workshop	Resolutions forwarded to Georgian Bay Forever, further discussions with GBF required.	1/22/2021

Township of The Archipelago

COUNCIL CORRESPONDENCE

Regular Meeting of Council
December 10, 2020

REQUESTS FOR SUPPORT

[A]

FEDERAL GOVERNMENT

[01]

PROVINCIAL GOVERNMENT

[02] MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS
RE: Thank You - Provincial Day of Action on Litter – Waste Reduction Week

MUNICIPALITIES

[03] TOWNSHIP OF ESSA
RE: Bill 229 "Protect, Support and Recover from COVID19 Act – Schedule 6 – Conservation Authorities Act"

[04] MUNICIPALITY OF GREY HIGHLANDS
RE: Bill 229 "Protect, Support and Recover from COVID19 Act – Schedule 6 – Conservation Authorities Act"

[05] HOWICK TOWNSHIP
RE: Requesting Amendments to the Agricultural Tile Drainage Installation Act

[06] TOWNSHIP OF LARDER LAKE
RE: Requesting Funding Support & Training Resources for 0. Reg 191/11 under the Accessibility for Ontarians with Disabilities Act

[07] TOWNSHIP OF MCKELLAR
RE: Pool Issues for Consideration – Nov 20

[08] TOWN OF MONO
RE: Bill 229 "Protect, Support and Recover from COVID19 Act – Schedule 6 – Conservation Authorities Act"

[09] TOWN OF SHELBURNE
RE: Bill 229 "Protect, Support and Recover from COVID19 Act – Schedule 6 – Conservation Authorities Act"

[10] CITY OF GREATER SUDBURY
RE: Bill 229 "Protect, Support and Recover from COVID19 Act – Schedule 6 – Conservation Authorities Act"

FIRST NATIONS

[11]

RATEPAYERS' ASSOCIATIONS

[12] LOUISE GOULDING
RE: Moon River – Proposed Official Plan Amendment No. 61 for The Township of The Archipelago

RATEPAYERS/OTHERS

[13]

AGENCIES

[14] FEDERATION OF NORTHERN ONTARIO MUNICIPALITIES (FONOM)
RE: FONOM to Hold 2021 Annual Conference Virtually

[15] MUSEUM ON TOWER HILL
RE: December E-newsletter

[16] NORTH BAY PARRY SOUND DISTRIC HEALTH UNIT (NBPSDHU)
RE: Health Unit Monitoring COVID-19 Activity and is Ready to Change Levels if Needed

[17] WEST PARRY SOUND HEALTH CENTRE FOUNDATION
RE: Surplus Linens to Angola, Support for Mobile xRay and MASKS, MASKS, MASKS

PLANNING

[18]

PLANNING BOARD

[19]

ENVIRONMENT

[20]

MISCELLANEOUS

[21] CONNECTIVITY AD HOC COMMITTEE
RE: Minutes, October 5, 2020
RE: Minutes, October 19, 2020

[22] WARD 3 COUNCILLORS EARL MANNERS & SCOTT SHEARD
RE: Bay Notes, November 24, 2020

Township of The Archipelago

Recommendation Report to Council

Report No.: CAO-2020-09 Date: December 10, 2020

Originator: John B. Fior, CAO

Subject: Human Resources Studies

RECOMMENDATION

1. That Council authorize staff to initiate the development of a Performance Management Plan and Pay for Performance Review; and

2. That staff be authorized to retain Marianne Love of the firm ML Consulting to conduct the review and prepare the appropriate policies.

BACKGROUND/HISTORY

There have been discussions with Council over the past few years regarding the need to complete a pay equity/compensation review; develop a new performance management plan and review our pay for performance policy; and, to conduct an organizational review. Council recently approved the pay equity/compensation study conducted in 2020 and the resultant new pay grid prepared by Marianne Love of ML Consulting. In her conclusions, she has recommended that we first proceed with the development of a performance management plan and at the same time review our pay for performance policy. Once completed she has recommended that we then proceed with an organizational review.

ANALYSIS/OPTIONS

1. Proceed with the projects.

   Our current performance management plan is dated and difficult to implement. The work that we have completed and which we propose to undertake will assist our corporation with the attraction, retention and development of our staff; make our municipality more efficient and effective; and, ensure that there is fairness and equity throughout our organization.

Now is the time to proceed with the projects. Information that was recently gathered for the pay equity/compensation review is current and fresh in our minds.

2. Do not proceed with the projects.

   This is not recommended as the work that has been completed and which is proposed will establish a solid foundation for our organization for the future.

FINANCIAL IMPLICATIONS

The estimated cost associated with the development of a new Performance Management Plan and review of our Pay for Performance Policy is $20,000. This was included in the 2020 budget.

Staff will request a formal proposal and costing and bring forward an additional report prior to initiation of the Organizational Review.

CONCLUSION

It is recommended that Council authorize staff to initiate the development of a Performance Management Plan and a review of our Pay for Performance Policy, and, that staff be further authorized to retain the firm of ML Consulting to conduct the project.

Respectfully Submitted,

John B. Fior
Chief Administrative Officer

Association of Municipalities Ontario

Office of the President

Sent via email to: comm-financeaffairs@ola.org

November 30, 2020

Standing Committee on Finance and Economic Affairs
c/o Julia Douglas, Committee Clerk
99 Wellesley Street West
Room 1405, Whitney Block
Queen's Park
Toronto, ON
M7A 1A2

Dear Chair Sandu and Committee Members:

Bill 229, *Protect, Support and Recover from COVID-19 Act (Budget Measures), 2020*

Schedule 6, *Conservation Authorities Act*

On behalf of the Association of Municipalities of Ontario (AMO) and our members, we would raise a growing number of serious concerns regarding changes introduced in Schedule 6.

While there was preliminary consultation in general terms about updating certain aspects of the *Conservation Authorities Act*, these specific changes were not subject to greater consultation and do not reflect what the majority of municipal governments were seeking. In fact, many municipal governments have identified several of these proposed amendments have the potential to create a breakdown in conservation authority (CA) governance and stymie operations so that the mandate and goals of conservation authorities may be frustrated.

Conflict in Law (Duties of Members Clause 14.1 of the Act, Section 3 of Schedule 6):

If approved as is, this draft legislation may create a conflict between the fiduciary duty of all board members to put the interest of the conservation authority first, and the proposed amendment requiring board members to act on behalf of their municipal councils. This governance change on how CA Board members are to conduct themselves and whose interests they are representing is a fundamental administrative law change. It may cause more conflict on the board as the fiduciary duty to work together in a common direction is no longer clear and may decrease the ability of the board to manage its role and responsibility effectively.

200 University Ave. Suite 801 | www.amo.on.ca | Tel 416.971.9856 | Toll Free in Ontario
Toronto, ON, M5H 3C6 | amo@amo.on.ca | Fax 416.971.6191 | 877.426.6527

It also raises the question of whether each municipal representative would need to get local council approval on agenda items prior to voting at the conservation authority (CA) Board. Finally, the core basis for a conservation authority is that there are environmental matters that need to be dealt with across jurisdictions in a holistic watershed manner, rather than in the distinct interest of individual municipal councils.

CA Board Composition and Terms of Chair/Vice Chair (Subclauses within Clauses 14 and 17 of the Act, Sections 2 and 5 Schedule 6):

Municipal council members have raised concerns about the proposed 'up to two-year' term of the chair/vice chair which we understand is to be taken in rotation. While there is agreement one municipality or individual should not dominate the chair indefinitely, a restriction on the number of multi-year terms would be preferable. This way, the CA Board members could choose their chair based on skill, capacity, and their demonstrated fairness.

Further, smaller councils have indicated that the ability to appoint non-council members to CA Boards has been helpful. In some places, there are a large number of committee obligations for council members, and they simply do not have the person hours to be at all the boards and committees they should attend. Having the option of appointing a non-council member to a CA has been one way to relieve this problem.

There is reference to the Minister being able to over-ride local memoranda of understanding between municipal governments and conservation authorities for locally desired services. Although this ministerial ability may never be used, its existence causes concern. This clause should be removed as these are local agreements about local matters and paid for locally.

Where CAs encompass rural lands and agriculture is prominent, generally there are CA Board members who are also farmers, so agriculture is represented. In the areas where additional agricultural insights are needed, the best practice is to have an agricultural advisory committee reporting to the CA Board. If the intent is to have municipal influence over the CA Board, it is unclear why the addition of a non-municipal representative is proposed rather than striking agricultural advisory committees.

Fees (Subsection 21.2 of the Act, Schedule 6 Section 11):

AMO supports clearly defensible fees and that they should be available publicly. Conservation Authorities have made improvements in this regard over the past couple of years. We are concerned that, under the proposed amendments, third parties would be able to appeal or adjust those fees. The CA Board should be able to set fees that reflect the value of the service. If fees are not fully realized, because of third party appeals, then the municipal contributions may increase. This seems to go against the thrust of protecting municipal interests and managing financial costs.

Development Approvals (Various changes to Section 28 and Section 30.4 of the Act, Schedule 6 Sections 16 ,17 and 20):

There are a number of changes to development approvals that are also creating questions. While we appreciate the One Window approach for the province to manage its own interests, CAs have several roles in the development approval process. CAs normally provide advice to municipal governments on how specific development applications are impacted by the Provincial Policy Statement. Should decisions of councils on applications be appealed, municipal governments need to be able to call on CA staff as their witnesses at the Local Planning Appeal Tribunal. While removing CAs as a public body may assist with one of the roles CAs take in the development process, it may frustrate other roles.

It is vital that development decisions be based on good local science and data. Some of the proposed amendments have raised questions about the potential to circumvent this important lens. In times when people need to abide by the limitations on a property's uses due to erosion or flooding hazards, we must do all we can to rely on science and ensure we are not facilitating losses or damages to properties. It is increasingly difficult to find insurance for certain properties. In some cases, emergency services cannot attend properties in storm conditions. Local science-based development approvals and permits are essential to protect people and property.

The removal of the unproclaimed "stop work order" clause is also of concern. Illegal dumping of soils is a significant problem. This clause was intended to harmonize conservation authority and municipal by-laws and powers to close loopholes. While great strides are being made by the Ministry of Environment, Conservation and Parks on the management of excess soils, local ability to enforce is needed. Both municipalities and CAs need this power to allow quick action on this illegal activity without adding administrative burden to either.

Other:

There are a number of changes which bring about more transparency and bring administrative practices to current standards which are supported by AMO. These include: Section 4, amending Clause 15 of the Act to make public minutes and agendas, Sections 7 and 8, amending Clauses 20 and 21 of the Act to harmonize clauses in the Act and Section 13 which adds Ministerial oversight (Clause 23.2 of the Act).

Recommendation:

AMO and our members are seeking clarity on these matters which will take time. At the same time, we are mindful that the Schedule is a part of the Budget Bill, which we know must proceed swiftly.

- Our preferred option would be to withdraw Schedule 6 from Bill 229 and work on these matters separately.
- If withdrawal of Schedule 6 is not possible, we ask that the proclamation of Schedule 6 is delayed until these matters can be clarified and any operational problems can be resolved.

Any changes to the *Conservation Authorities Act* are very important to municipal governments. Municipal governments **are the key funders** of Conservation Authorities. Municipal governments and conservation authorities both are open to meeting with the government to reach a workable outcome. Over the past number of years, tremendous effort has been put forward by municipal governments to find a collective path forward that refines certain matters and bolsters the ability to protect the environment in a meaningful way. Municipalities were looking for needed refinements, not this proposed wholesale change.

We need a system that is workable, not one that attempts accommodation to the extent it is ineffective. We understand that 'one size does not fit all'. Changes must create a framework that allows for local circumstances and avoids a structure which frustrates core business.

At a time when the public is very concerned about climate change and increased flooding and storm events, there are a substantial number of questions and concerns are coming from municipal governments about implementing these changes effectively. It is critical that we make sure that the changes to the *Conservation Authorities Act* are a positive step forward, without unintended consequences.

Sincerely,

Graydon Smith
AMO President
Mayor of the Town of Bracebridge

cc. The Honourable Steve Clark, Minister, Municipal Affairs and Housing
The Honourable Jeff Yurek, Minister, Environment, Conservation and Parks

200 University Ave. Suite 801 | www.amo.on.ca | Tel 416.971.9856 | Toll Free in Ontario
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The Township of The Archipelago

Information Report to Council

Report No.: Operational Services 2020-005 **Date:** 10th December 2020

Originator: Greg Mariotti, Manager of Operational Services

Subject: Operational Services Update

Blue Box Transition

Letter signed by municipalities of the West Parry Sound Area and submitted to the Minister of the Environment, Conservation and Parks requesting that the area transition in 2024 and not 2025. Modelling created by the CIF (Continuous Improvement Fund), shows that transitioning in 2025 may cost The Archipelago an additional $285,000 over the next ten years (to 2030) compared with transitioning in 2024. Transitioning in 2025 brings additional concerns highlighted in the letter (attached to Councillor Package).

Bridge and Culvert Inspections

Steenhof Building Services Group was retained to carry out a biennial inspection of Blackstone Road Bridge, Kapikog Lake Road Culvert and Skerryvore Road Culvert per Ontario regulation. The inspection flagged a health and safety item at Skerryvore Road Culvert, namely failing wooden posts holding the steel wire barriers in place. Immediate repairs are being undertaken by a specialist contractor.

Wellness Clinic

West Parry Sound EMS reached out, offering The Archipelago an opportunity to hold a Wellness Clinic in Pointe au Baril. The clinic would be focused towards assisting seniors and others with multiple morbidity. This service would take place once a month in December, January, February and March and would be by prior appointment only. The Chamber of Commerce has been volunteered as a good, safe location for the clinic.

Payroll System

We have had discussions with ADP (Automatic Data Processing Inc.), to assist the department and Treasurer with automating time-sheet entries and payroll. This will be discussed further internally and with the Finance Committee.

Ontario Trillium Foundation Grant Submission

A grant has been submitted under the "Resilient Communities Fund" of the Ontario Trillium Foundation. The grant application is requesting $85k to purchase and commission an HRV (heat recovery ventilator), system for the Community Centre. This would allow for energy efficient fresh air exchanges within the building, in light of Covid-19. Completion of this project is contingent on receiving the above mentioned funding.

Staffing

Final in-person interviews are planned for the Operational Services Administrator position.
The preferred candidate for the Heavy Equipment Operator position (12 month contract), has verbally accepted an offer.

Plowing Agreement

Operational Services has entered into a plowing agreement with Seguin Township to assist with a section of road from Black Road in Seguin Township to Blackstone Crane Lake Road. Archipelago staff will plow that stretch of road if Seguin Township has not done so already. Seguin Township holds The Archipelago harmless of any issues that may arise from our assistance and they will also compensate The Archipelago at the end of the season. This is another example of cross-municipal co-operation.

Respectfully Submitted,

Greg Mariotti
Manager of Operational Services

I concur with this report,

John B. Fior
Chief Administrative Officer

Hon. Jeff Yurek
Minister of the Environment, Conservation and Parks
College Park 5th Floor
777 Bay St, Toronto, ON.
M7A 2J3

December 1, 2020

Dear Minister Yurek,

Re: West Parry Sound Blue Box Transition Year
Comment on the Draft Proposal ERO# 019-2579

The area municipalities of West Parry Sound, including the Town of Parry Sound, the Township of The Archipelago, Seguin Township, the Township of McKellar, the Municipality of McDougall, the Township of Carling and the Municipality of Whitestone, are all requesting that the Ministry of the Environment, Conservation and Parks reconsider our blue box transition year and change it from 2025 to **2024**.

Several of these West Parry Sound Municipalities had requested that transition take place in 2023, however the Ministry has proposed that all the West Parry Sound Municipalities transition in 2025. We collectively request a **2024** transition year for the following reasons:

The West Parry Sound Municipalities currently process their blue box materials at a recycling centre located in Bracebridge, in the District Municipality of Muskoka. The District Municipality of Muskoka is transitioning in 2024 and it supplies the largest share of materials processed at this facility. We are concerned about issues that may be created if we transition at a later point. Should the recycling centre not be successful in retaining the District Municipality of Muskoka's business through the transition to full producer responsibility, the recycling centre may not be viable from a business perspective and may close, leaving the West Parry Sound Municipalities with no recycling facility. Also, we understand the District Municipality of Muskoka is in the process of reviewing the option to build its own transfer facility, creating further uncertainties.

One of the advantages of the blue box transition will be the ability to offer an expanded list of recyclable commodities. The Greater Toronto Area (GTA) is transitioning in 2023 and this may create challenges when GTA residents migrate north for the summer and expect to recycle the same list of acceptable items. This may cause contamination in our waste systems because we will not have transitioned yet. A delay of one year will be a challenge, but a delay of two years will cause additional incremental costs due to contamination.

The West Parry Sound Municipalities have varied programs, ranging from curbside pick-up to depots, including some unique collection methods on island based transfer stations that barge blue box recyclables back to the mainland. An earlier transition would enable producer responsibility organizations to quickly test different program settings and apply this unique learning to other municipalities.

In closing, we respectfully request that the Ministry consider transitioning the blue box program in the year **2024** for the West Parry Sound Municipalities, and not 2025.

Sincerely,

Reeve Bert Liverance
Township of the Archipelago

Mayor Jamie McGarvey
Town of Parry Sound

Mayor Ann MacDiarmid
Seguin Township

Mayor Dale Robinson
Municipality of McDougall

Mayor Peter Hopkins
Township of McKellar

Mayor Mike Konoval
Carling Township

Mayor George Comrie
Municipality of Whitestone

cc Hon. Doug Ford, Premier of Ontario
Hon. Steve Clark, Minister of Municipal Affairs and Housing
Norm Miller, MPP, Parry Sound – Muskoka
Jamelia Alleyne, Resource Recovery Policy Branch

Seguin Township
5 Humphrey Drive
Seguin, ON
P2A 2W8
705.732.4300

Town of Parry Sound
52 Seguin Street
Parry Sound, ON
P2A 1B4
705.746.2101

Municipality of McDougall
5 Barager Blvd
McDougall, ON
P2A 2W9
705.342.5252

Township of the Archipelago
9 James Street
Parry Sound, ON
P2A 1T4
705.746.4243

Carling Township
2 West Carling Bay Rd
Nobel, ON
P0G 1G0
705.342.5856

Township of McKellar
PO Box 69
701 Highway 124.
McKellar, ON
P0G 1C0
705.389.2842

Municipality of Whitestone
21 Church Street
Dunchurch, ON
P0A 1G0
705.389.2466

TOWNSHIP OF THE ARCHIPELAGO REPORT FORM

TARGET

Presented to

COUNCIL X ADMINISTRATION / FINANCE ☐ COMMUNICATIONS ☐ ENVIRONMENT ☐

HUMAN RESOURCES ☐ PLANNING ☐ PUBLIC WORKS ☐ STRATEGIC PLANNING & IMPLEMENTATION ☐

CAO ☐ OTHER ☐

Date Presented November 11/20	**Presented by** Rob Farrow C.B.O.	**Report #**

Subject **Building Permit Comparison Summary**

RECOMMENDATION

The Building Permit Summary be accepted by council as presented.

INFORMATION & ANALYSIS

Although Covid-19 has had a very negative impact to many industries the building industry in the Township of the Archipelago appears to be on par with previous years.
2019 was the highest total permit value the Archipelago has experienced since 1980.
To give an idea of trending, 2018 total permit value was $13,384,210.00 and 2017 total permit value was $12,079,625.00

DIRECTION

Accept Recommendation as Reported ☐
Do Not Accept Recommendation – No Further Direction ☐
Other Direction as Follows ☐

Signature of Chairperson

Permit Comparison Summary

Issued For Period JAN 1,2020 To NOV 30,2020

	Previous Year			Current Year		
	Permit Count	Fees	Value	Permit Count	Fees	Value
-ACCESSORY BUILDING	5	10,436.00	948,800.00	5	2,853.00	259,400.00
-BOATHOUSE	1	330.00	30,000.00	3	4,235.00	385,000.00
-BUILDING RELOCATION	1	385.00	35,000.00	0	0.00	0.00
-COMMERCIAL BUILDING	1	2,200.00	200,000.00	0	0.00	0.00
-DECK	13	2,645.00	232,220.00	15	3,979.00	341,600.00
-DEMOLITION	27	1,350.00	0.00	21	1,050.00	19,400.00
-DOCK	27	1,350.00	509,400.00	30	1,500.00	520,126.00
-FIREPLACE/WOODSTOVE	0	0.00	0.00	1	100.00	1,000.00
-FOUNDATION	0	0.00	0.00	1	110.00	10,000.00
-GARAGE/STORAGE BUILDING	12	5,276.00	479,800.00	18	12,234.00	1,096,400.00
-GAZEBO	0	0.00	0.00	1	237.00	21,600.00
-LIVING ADDITION	17	27,831.00	2,530,520.00	20	18,436.00	1,676,460.00
-RENOVATION	8	7,799.00	709,000.00	8	6,193.00	552,895.00
-SCREENED PORCH	2	1,232.00	112,000.00	2	817.00	74,310.00
-SEASONAL DWELLING	22	90,023.00	8,184,240.00	17	72,566.00	6,560,510.00
-SEWAGE CLASS 2	6	1,050.00	25,000.00	2	350.00	10,000.00
-SEWAGE CLASS 4	55	25,850.00	1,045,000.00	52	24,900.00	1,040,000.00
-SEWAGE CLASS 5	4	1,000.00	40,000.00	2	500.00	20,000.00
-SINGLE FAMILY DWELLING	2	3,630.00	330,000.00	0	0.00	0.00
-SLEEPING CABIN	23	22,747.00	2,068,235.00	13	12,938.00	1,176,435.00

	Previous Year	Current Year
Total Permits Issued	226	211
Total Dwelling Units Created	25	17
Total Permit Value	17,479,215.00	13,765,136.00
Total Permit Fees	205,134.00	162,998.00
Total Compliance Letters Issued	23	32
Total Compliance Letter Fees	0.00	0.00

Township of The Archipelago

Permit Comparison Summary

Issued For Period JAN 1,2020 To NOV 30,2020

Name	Type	Number	Property
PETERS, ROBERTA GOOCH	-DOCK	2020-0001	1 B217 ISLAND
HAY, JOHN ALEXANDER	-GARAGE/STORAGE BUILDING	2020-0002	65 COWPER RD
TYLER-NEHER, JOYCE	-DEMOLITION	2020-0003	394 HEALEY LAKE
TYLER-NEHER, JOYCE	-BOATHOUSE	2020-0004	394 HEALEY LAKE
BENT, WALTER	-DOCK	2020-0005	50 KAPIKOG SOUTH RD
LI, JANICE CHIA-YEN	-DOCK	2020-0006	10 B207 ISLAND
BEACON MARINE LTD	-RENOVATION	2020-0007	60 SOUTH SHORE RD
HARTNETT, TRUSTEE, VALERIE	-DEMOLITION	2020-0008	63 HEALEY LAKE RD
COLE, JAMES	-DOCK	2020-0009	243 GEORGIAN BAY
PAL, DAVID JAMES ALEXANDER	-SEASONAL DWELLING	2020-0010	HARRISON PLAN 42M602 LOT 11
CROWE, JAMES ROBERT	-SLEEPING CABIN	2020-0011	44 KAPIKOG SOUTH RD
MCCLINTOCK, EMILY NORD	-DEMOLITION	2020-0012	1 A212 ISLAND
MCCLINTOCK, EMILY NORD	-SEASONAL DWELLING	2020-0013	1 A212 ISLAND
IRON CITY FISHING CLUB	-SEASONAL DWELLING	2020-0014	632 GEORGIAN BAY
MUNFORD, ROBERT DAVID THOMA	-LIVING ADDITION	2020-0015	26 STEWART-KING RD
EATON, FREDRIK D'ARCY	-DEMOLITION	2020-0016	1 B431 ISLAND
TIFFIN, BRUCE	-DEMOLITION	2020-0017	45 RAILROAD LANE
SIMPSON, DOUGLAS	-DEMOLITION	2020-0018	49 B717 ISLAND
MARLIN, DAVE	-SEWAGE CLASS 4	2020-0019	
GARNER, SUSAN ANN	-SEWAGE CLASS 4	2020-0020	4 A258 ISLAND
CLEMENT, GUY EUGENE	-LIVING ADDITION	2020-0021	33 FOX BACK RD
HEAD, CLIFFORD GRANT	-LIVING ADDITION	2020-0022	1 B641 ISLAND
BUB, KEVIN ASHLEY	-LIVING ADDITION	2020-0023	23 B207 ISLAND
GRANT, LESLIE RILEY	-DOCK	2020-0024	1 B816 ISLAND
HENSCHEL, ROBERT TODD	-LIVING ADDITION	2020-0025	46 NORTH FORK RD
FURNISS, KIMBERLY	-DOCK	2020-0026	1 B201 ISLAND
JACKSON, NATHANIEL	-SEWAGE CLASS 5	2020-0027	1 A1029 ISLAND
BRADFORD III, CHARLES COZAD	-SEWAGE CLASS 4	2020-0028	1 A72 ISLAND
KJB LANDSCAPING INC.	-SLEEPING CABIN	2020-0029	42 SOUTH FORK RD
DE ROSNAY, JANINE	-GARAGE/STORAGE BUILDING	2020-0030	28 NORTH FORK RD
TUPHOLME, BRIAN	-SEWAGE CLASS 4	2020-0031	1 B90 ISLAND
CROWE, JAMES ROBERT	-GARAGE/STORAGE BUILDING	2020-0032	44 KAPIKOG SOUTH RD
HEWITT, THOMAS GIER	-SLEEPING CABIN	2020-0033	113 BLACKSTONE LAKE
HEWITT, THOMAS GIER	-SEWAGE CLASS 2	2020-0034	113 BLACKSTONE LAKE
OLDFIELD, TERRI	-DOCK	2020-0035	31 CHANNEL DR
EICHLER, HANS	-SEWAGE CLASS 4	2020-0036	345 HEALEY LAKE
BECHTEL, GARTH	-LIVING ADDITION	2020-0037	1 B487 ISLAND
CARRICK, JOHN	-SEWAGE CLASS 4	2020-0038	
SZAMBOR, ANTHONY	-RENOVATION	2020-0039	80 HEALEY LAKE
SAKER, SHANE	-GAZEBO	2020-0040	15 B207 ISLAND
SAKER, SHANE	-SLEEPING CABIN	2020-0041	15 B207 ISLAND
DEHOOP, LARRY	-DECK	2020-0042	1 A666 ISLAND
MARCHAND, BRETT	-DECK	2020-0043	1 B394 ISLAND
GIFFIN, DONALD JOHN PROCTOR	-SEWAGE CLASS 4	2020-0044	1 B639 ISLAND

Permit Comparison Summary

Issued For Period JAN 1,2020 To NOV 30,2020

GIFFIN, DONALD JOHN PROCTOR	-DEMOLITION	2020-0045	1 B639 ISLAND
GIFFIN, DONALD JOHN PROCTOR	-ACCESSORY BUILDING	2020-0046	1 B639 ISLAND
GIFFIN, DONALD JOHN PROCTOR	-SLEEPING CABIN	2020-0047	1 B639 ISLAND
GIFFIN, DONALD JOHN PROCTOR	-SEASONAL DWELLING	2020-0048	1 B639 ISLAND
BEAMISH, WILLIAM	-SEWAGE CLASS 4	2020-0049	522 SKERRYVORE COM RD
ROGERS, JOHN	-DECK	2020-0050	422 BLACKSTONE CRA RD
HALL, CLAYTON ERNEST	-SEASONAL DWELLING	2020-0051	3 GEORGIAN BAY
HALL, CLAYTON ERNEST	-GARAGE/STORAGE BUILDING	2020-0052	3 GEORGIAN BAY
HALL, CLAYTON ERNEST	-RENOVATION	2020-0053	3 GEORGIAN BAY
STRATOS LIMITED	-LIVING ADDITION	2020-0054	1 A400 ISLAND
MCALLISTER, JOHN	-DOCK	2020-0055	6 B686 ISLAND
PHILP, CAROL ANNE	-SEWAGE CLASS 4	2020-0056	7 B710 ISLAND
BELL, ANDREW	-SEWAGE CLASS 4	2020-0057	
MINER, DARLENE	-SEWAGE CLASS 4	2020-0058	
MARCHAND, CRAIG	-LIVING ADDITION	2020-0059	32 B207 ISLAND
MARCHAND, CRAIG	-DOCK	2020-0060	32 B207 ISLAND
PICKUP, ANDREW MILES	-LIVING ADDITION	2020-0061	171 B704 ISLAND
HALL, CLAYTON ERNEST	-DOCK	2020-0062	3 GEORGIAN BAY
GUNBY, MATHEW DAVID	-DOCK	2020-0063	115 HEALEY LAKE
SMITH, AMY	-DOCK	2020-0064	33 RAMSEY-JOHNSTO RD
CHARETTE, MARCEL	-SEWAGE CLASS 4	2020-0065	
HERBERT, DANIEL FRANKLIN	-SEWAGE CLASS 4	2020-0066	1 B65 ISLAND
RIES, BENJAMIN	-SEWAGE CLASS 2	2020-0067	COWPER PLAN M346 LOT 3 PT
RIES, BENJAMIN	-SEASONAL DWELLING	2020-0068	COWPER PLAN M346 LOT 3 PT
RIES, BENJAMIN	-DOCK	2020-0069	COWPER PLAN M346 LOT 3 PT
LAVALLEY, GERALD	-SEWAGE CLASS 4	2020-0070	
DERMOTT, JAMES	-SEWAGE CLASS 4	2020-0071	454 GEORGIAN BAY WATE
REDMOND, LEONARD	-SEWAGE CLASS 4	2020-0072	46 A11 ISLAND
GRAPER, JEFFREY BLAKE	-LIVING ADDITION	2020-0073	484 BLACKSTONE-CRA RD
GRAPER, JEFFREY BLAKE	-GARAGE/STORAGE BUILDING	2020-0074	484 BLACKSTONE-CRA RD
SZAMBOR, ANTHONY	-LIVING ADDITION	2020-0075	80 HEALEY LAKE
SCHELL, STEVEN GORDON	-DECK	2020-0076	101 HEALEY LAKE WATER
HOFMANN, WENDY MALONE	-LIVING ADDITION	2020-0077	1 B985 ISLAND
FIEBRICH, ROY GUNTHER	-DECK	2020-0078	14 STEWART-KING RD
HAANS, PETER	-DEMOLITION	2020-0079	414 GEORGIAN BAY
HAANS, PETER	-GARAGE/STORAGE BUILDING	2020-0080	414 GEORGIAN BAY
WOODFORD, RALPH FULTON	-SEWAGE CLASS 4	2020-0081	1 B466 ISLAND
WOODFORD, RALPH FULTON	-SEASONAL DWELLING	2020-0082	1 B466 ISLAND
WOODFORD, RALPH FULTON	-ACCESSORY BUILDING	2020-0083	1 B466 ISLAND
WOODFORD, RALPH FULTON	-DEMOLITION	2020-0084	1 B466 ISLAND
R.A.S. MANAGEMENT (CDN) INC.	-DEMOLITION	2020-0085	295 HIGHWAY 529A
STEVENSON, MARY	-DEMOLITION	2020-0086	293 HIGHWAY 529A
MERKEL, SIEGRID	-DOCK	2020-0087	49 RICHWOOD DR
MERKEL, SIEGRID	-GARAGE/STORAGE BUILDING	2020-0088	49 RICHWOOD DR
ALLEN, MARK	-SEWAGE CLASS 4	2020-0089	CONGER CON 6 PT LOT 43 RP

Permit Comparison Summary

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ALLEN, MARK	-SEASONAL DWELLING	2020-0090	CONGER CON 6 PT LOT 43 RP
REDMOND, LEONARD	-DEMOLITION	2020-0091	46 A11 ISLAND
REDMOND, LEONARD	-SEASONAL DWELLING	2020-0092	46 A11 ISLAND
QUINN, NORMA MAY	-DOCK	2020-0093	355 BLACKSTONE-CRA RD
BERRY, MICHAEL	-SEWAGE CLASS 4	2020-0094	1 B649 ISLAND
BERRY, MICHAEL	-LIVING ADDITION	2020-0095	1 B649 ISLAND
KEITH, WILLIAM	-DECK	2020-0096	1 B283 ISLAND
KEESMAAT, JENNIFER	-LIVING ADDITION	2020-0097	7 B273 ISLAND
YOUNGER, ALEXANDER NICHOLAS	-DOCK	2020-0098	1 B571 ISLAND
STEELE, ERIC	-SEWAGE CLASS 5	2020-0099	
BUITENHUIS, BRIAN	-SEWAGE CLASS 4	2020-0100	
BARKS, CECELIA	-LIVING ADDITION	2020-0101	1 B686 ISLAND
ANDERSON, LORRAINE	-DEMOLITION	2020-0102	8 THREE LEGGED LAKE
ANDERSON, LORRAINE	-SEASONAL DWELLING	2020-0103	8 THREE LEGGED LAKE
ROBINSON, JULIANNE PAMELA	-GARAGE/STORAGE BUILDING	2020-0104	12 WOODS BAY LANE
SIMPSON, DOUGLAS	-DEMOLITION	2020-0105	48 B717 ISLAND
ADAMSON, PETER	-DECK	2020-0106	12 A1143 ISLAND
ETHERINGTON, MICHAEL F	-DECK	2020-0107	11 B470 ISLAND
JENKINS, PHILIP MYLES	-SEWAGE CLASS 4	2020-0108	1 A438 ISLAND
CHARRON, JOHN	-SEWAGE CLASS 4	2020-0109	HARRISON ISLAND 566A LEITH
SHAVER, JAMES	-SEWAGE CLASS 4	2020-0110	149 CRANE LAKE
HODSON, TRACY	-RENOVATION	2020-0111	10 B690 ISLAND
HODSON, TRACY	-SEASONAL DWELLING	2020-0112	10 B690 ISLAND
BOON, JOHN	-GARAGE/STORAGE BUILDING	2020-0113	88 PENN RD
MORRIS, TRUSTEE, BETTY	-DOCK	2020-0114	1 A532 ISLAND
JAMIESON, BRADLEY GORDON DA\	-DECK	2020-0115	136 CRANE LAKE
JAMIESON, BRADLEY GORDON DA\	-SCREENED PORCH	2020-0116	136 CRANE LAKE
DE ROSNAY, JANINE	-DOCK	2020-0117	28 NORTH FORK RD
MACLEOD, DANIEL JOHN	-ACCESSORY BUILDING	2020-0118	89 FOX BACK RD
OMAR ISLAND INC	-SEWAGE CLASS 4	2020-0119	1 B8 ISLAND
HANSSON, KENTH MARTIN	-DEMOLITION	2020-0120	3 A850 ISLAND
HANSSON, KENTH MARTIN	-BOATHOUSE	2020-0121	3 A850 ISLAND
BOSCH, MICHAEL	-SEWAGE CLASS 4	2020-0122	413 GEORGIAN BAY WATE
BOSCH, MICHAEL	-GARAGE/STORAGE BUILDING	2020-0123	413 GEORGIAN BAY WATE
READ, MARK CHRISTOPHER	-SEASONAL DWELLING	2020-0124	TAMARACK DRIVE
BLACK, GEORGINA HELEN	-LIVING ADDITION	2020-0125	32 ARMSTRONG-JACK RD
PICKUP, ANDREW MILES	-SLEEPING CABIN	2020-0126	171 B704 ISLAND
PICKUP, ANDREW MILES	-SLEEPING CABIN	2020-0127	171 B704 ISLAND
PICKUP, ANDREW MILES	-SLEEPING CABIN	2020-0128	171 B704 ISLAND
MCNAMARA, ADAM	-DOCK	2020-0129	113 HEALEY LAKE
MCNAMARA, DAVID RUSSELL	-DOCK	2020-0130	314 HEALEY LAKE
CHRISTOPHER, CATHERINE	-SEWAGE CLASS 4	2020-0131	1 A26 ISLAND
BACHE, RALPH	-DECK	2020-0132	45 LAGOON DR
SCHONENBERGER, FRED	-DECK	2020-0133	46 RABY'S RD
OMAR ISLAND INC	-SEASONAL DWELLING	2020-0134	1 B8 ISLAND

Permit Comparison Summary

Issued For Period JAN 1,2020 To NOV 30,2020

HELLER, LINDA VALERIE	-DOCK	2020-0135	333 GEORGIAN BAY
BROWN, DEREK	-SEWAGE CLASS 4	2020-0136	1386 GEORGIAN BAY
GRANT, LESLIE RILEY	-SEWAGE CLASS 4	2020-0137	1 B816 ISLAND
SCOTT, ALEXANDER NORMAN	-SEWAGE CLASS 4	2020-0138	250 HEALEY LAKE
FOSTER, CYNTHIA	-DOCK	2020-0139	18 SOUTH FORK RD
SANGER, MATTHEW	-LIVING ADDITION	2020-0140	9 A530 ISLAND
MUELLER, RENE	-GARAGE/STORAGE BUILDING	2020-0141	60 NORTH FORK RD
TONNOS WELLNESS CLINIC INC.	-SLEEPING CABIN	2020-0142	1 B303 ISLAND
HEINO, SHARLENE	-RENOVATION	2020-0143	412 GEORGIAN BAY
KOHN, MARY	-GARAGE/STORAGE BUILDING	2020-0144	441 GEORGIAN BAY WATE
SHAVER, JAMES	-RENOVATION	2020-0145	149 CRANE LAKE
SHIRER, ROBERT	-DECK	2020-0146	111 GEORGIAN BAY WATE
GILCHRIST, JAMES	-DEMOLITION	2020-0147	425 HEALEY LAKE
GREEN, MICHAEL JOHN	-SEWAGE CLASS 4	2020-0148	1 B295 ISLAND
GREEN, MICHAEL JOHN	-SEWAGE CLASS 4	2020-0149	1 B295 ISLAND
COX, JOHN	-SEWAGE CLASS 4	2020-0150	411 HEALEY LAKE RD
EMERY, CARMAN J	-SEWAGE CLASS 4	2020-0151	11 HEMLOCK DR
CAMPBELL, GLEN DAVID	-DOCK	2020-0152	3 B227 ISLAND
MACKAY, ALISON ROSE	-DOCK	2020-0153	80 SOUTH CRANE LA RD
MILLAR, BRENDA	-DEMOLITION	2020-0154	1 B294 ISLAND
HALL, CLAYTON ERNEST	-DEMOLITION	2020-0155	3 GEORGIAN BAY
GRANT, LESLIE RILEY	-LIVING ADDITION	2020-0156	1 B816 ISLAND
GRANT, LESLIE RILEY	-SLEEPING CABIN	2020-0157	1 B816 ISLAND
COX, JOHN	-DEMOLITION	2020-0158	411 HEALEY LAKE RD
COX, JOHN	-GARAGE/STORAGE BUILDING	2020-0159	411 HEALEY LAKE RD
BONISE, FRANK	-SEWAGE CLASS 4	2020-0160	
ANDREWS, ROBERT JAMES	-SEWAGE CLASS 4	2020-0161	9 A11 ISLAND
WILDMAN, ELIZABETH	-SEWAGE CLASS 4	2020-0162	1 B919 ISLAND
MAJOR, DOUGLAS	-SEWAGE CLASS 4	2020-0163	15 B717 ISLAND
HUNKIN, JOHN BRADLEY	-FOUNDATION	2020-0164	1 B269 ISLAND
RUTLEDGE, BROCK	-SEWAGE CLASS 4	2020-0165	11 THREE LEGGED LAKE
RUTLEDGE, BROCK	-SLEEPING CABIN	2020-0166	11 THREE LEGGED LAKE
LARUE, HEATHER	-SEWAGE CLASS 4	2020-0167	270 B704 ISLAND
ANDREWS, BRIAN PATRICK	-SEWAGE CLASS 4	2020-0168	1488 GEORGIAN BAY WATE
BERTOLLO, PAULA JUDY	-DECK	2020-0169	15 TAMARACK DR
SHCHERBAKOV, OLEKSANDR	-FIREPLACE/WOODSTOVE	2020-0170	44 LAGOON DR
CHARRON, JOHN PAUL	-SEASONAL DWELLING	2020-0171	HARRISON PT ISLAND 571A RP
SCOTT, YVONNE	-ACCESSORY BUILDING	2020-0172	4 GRISDALE'S RD
PULCHINSKI, EDEN DAVID	-SEWAGE CLASS 4	2020-0173	32 PAYNES RD
SYMONS, RYERSON	-SEWAGE CLASS 4	2020-0174	1 A490 ISLAND
CHAPMAN, GEORGE	-DEMOLITION	2020-0175	1 B662 ISLAND
HOOKER, THOMAS	-SEWAGE CLASS 4	2020-0176	25 CRANE LAKE WATER
REID, CHRISTOPHER CHARLES	-GARAGE/STORAGE BUILDING	2020-0177	64 CRANE-WALKER RD
DRNAC, ANDREJ	-ACCESSORY BUILDING	2020-0178	115 WOODS BAY LANE
BIRTHELMER, ALBERT	-DOCK	2020-0179	34 STEWART-KING RD

Permit Comparison Summary

Issued For Period JAN 1,2020 To NOV 30,2020

DURAS, NINA	-SLEEPING CABIN	2020-0180	20 A510 ISLAND
DURAS, NINA	-DOCK	2020-0181	20 A510 ISLAND
GARDNER, ERIC	-SEWAGE CLASS 4	2020-0182	HARRISON PLAN 42M602 LOT 12
WRIGHT, DOUGLAS	-SEWAGE CLASS 4	2020-0183	
REAMAN, ROBERT	-SEWAGE CLASS 4	2020-0184	1550 GEORGIAN BAY
MCCAUL, THOMAS RUSSELL	-GARAGE/STORAGE BUILDING	2020-0185	35 MUNRO DR
SULKERS, PAUL RUSSELL	-RENOVATION	2020-0186	8 WOODS BAY LANE
CRESS, MICHAEL	-SEWAGE CLASS 4	2020-0187	CONGER CON 10 AND 11 PT LOTS
KATERBERG, TIMOTHY	-SEWAGE CLASS 4	2020-0188	
REECE, CADI	-SLEEPING CABIN	2020-0189	590 GEORGIAN BAY
COWAN, TODD	-DECK	2020-0190	1 A357 ISLAND
COWAN, TODD	-DECK	2020-0191	1 A357 ISLAND
PINKNEY, MARK	-SEWAGE CLASS 4	2020-0192	6 A25 ISLAND
WEIR, SCOTT	-RENOVATION	2020-0193	1550 GEORGIAN BAY
MACDONALD, ROBERT BRUCE	-SEWAGE CLASS 4	2020-0194	1 A247 ISLAND
CRESS, MICHAEL	-SEASONAL DWELLING	2020-0195	CONGER CON 10 AND 11 PT LOTS
CRESS, MICHAEL	-SCREENED PORCH	2020-0196	CONGER CON 10 AND 11 PT LOTS
CRESS, MICHAEL	-GARAGE/STORAGE BUILDING	2020-0197	CONGER CON 10 AND 11 PT LOTS
CRESS, MICHAEL	-DOCK	2020-0198	CONGER CON 10 AND 11 PT LOTS
BELL, DENNIS	-GARAGE/STORAGE BUILDING	2020-0199	40 B717 ISLAND
SUSAN ARMITAGE	-BOATHOUSE	2020-0200	3 A139 ISLAND
BECHTEL, GARTH	-LIVING ADDITION	2020-0201	1 B487 ISLAND
HOOKER, THOMAS	-DEMOLITION	2020-0202	25 CRANE LAKE WATER
HOOKER, THOMAS	-DOCK	2020-0203	25 CRANE LAKE WATER
JONES, RICHARD COLEMAN	-SEWAGE CLASS 4	2020-0204	3 GB461 ISLAND
GARDNER, ERIC	-SEASONAL DWELLING	2020-0205	HARRISON PLAN 42M602 LOT 12
COWAN, TODD	-GARAGE/STORAGE BUILDING	2020-0206	1 A357 ISLAND
SAINT, MARIA	-LIVING ADDITION	2020-0207	409 BLACKSTONE-CRA RD
DOMAGALSKI, ADAM	-SEWAGE CLASS 4	2020-0208	CONGER CON 6 PT LOT 43 PT
DOMAGALSKI, ADAM	-SEASONAL DWELLING	2020-0209	CONGER CON 6 PT LOT 43 PT
SHERRATT, CORY	-DOCK	2020-0210	114 S CRANE LAKE RD
GIFFIN, DONALD JOHN PROCTOR	-DOCK	2020-0211	1 B639 ISLAND

The Township of The Archipelago

Information Report to Committee

Report No.: PLANNING-2020 **Date:** December 10, 2020

Originator: Cale Henderson, MCIP RPP
Manager of Development & Environmental Services

Subject: Zoning By-Law Review - Update

BACKGROUND

The review of the Comprehensive Zoning By-law was initiated in 2019, following the approval of the Township's Official Plan Review in December 2018. The principal purpose of the review is to comply with Section 26(9) of the *Planning Act*, which requires that the Comprehensive Zoning By-law be updated to implement and ensure conformity with the updated Official Plan. In addition, during the Official Plan Review process, there were a number of issues raised that were more associated with the Zoning By-law rather than the Official Plan and direction was made that these issues would be reviewed during the Zoning By-law Review process. Furthermore, the Zoning By-law Review allows us to make housekeeping changes and revisions that are needed to ensure the By-law continues to be efficient and appropriate.

As Council will recall, in the summer of 2019, three public open houses were held in different locations throughout the Township to initiate this project and obtain public input. The comments received at those sessions were summarized for the Planning & Building Committee in September, 2019. In addition, further public engagement was undertaken through an interactive session at the Deerhorn Conference held in Parry Sound on October 5th, 2019. The results of this session were also presented to the Committee in February 2020. Finally, seven (7) additional submissions were received and presented to the Committee in February and August of 2020.

Consultation with Indigenous Communities was initiated and a letter was sent from the Reeve to all Indigenous communities on February 28, 2020; however, due to the pandemic, this process has not substantially progressed and may need to be revisited.

UPDATE

Originally, the project timeline had planned for a second round of public engagement sessions in the summer of 2020, including the required Open House, per Section 34(12)(b) of the *Planning Act* and the statutory public meeting with public and agency notification. However, due to the pandemic, shifting priorities and inability to hold public meetings, the project was put on hold and the engagement sessions were postponed. During this time, the Province extended timelines within the *Planning Act*.

Furthermore, due to unforeseen circumstances with, Township staff are now working with our consultants, Planscape Inc., to inform, update and onboard a new team of planning consultants to lead and complete this project.

As requested, below is a draft updated work program, derived from the original work plan (attached as appendix A) presented and approved to Council in 2019. The updated work program is in draft for the consideration of Council and for discussions and confirmation of resources and capacity with the new team at Planscape Inc.

Updated Draft Work Program

Task 1 Review of background info and public input with consultants. (December 2020 – February 2021)

Work with new planning consultants to ensure complete understanding of the Township, the Official Plan Review, and the public input received thus far.

Task 2 Draft Preliminary Zoning By-law (February – June 2021)

A preliminary draft of the new Comprehensive Zoning By-law will be prepared based on the input information collected in 2019 & 2020. The preliminary version of the by-law is intended as an internal document that will be reviewed by staff and Council prior to being revised and released for public comment.

The draft Comprehensive Zoning By-law will be presented to Council. Once in a form acceptable to Council, the proposed Zoning By-law will be circulated to the various agencies in order to obtain specific input from those agencies. The By-law will be posted on the Township's website and made available at to the public.

Task 3 Public Open House (July – August 2021)

Initially, this task was intended to be in-person open house at the Township office in accordance with Section 34(12)(b) of the *Planning Act*. However, due to continued health restrictions and office closures, this will most likely need to be held "virtually". Details and logistics for a virtual open house will need to be developed to ensure effective and efficient public engagement.

The purpose of this task is to identify as many concerns as possible to inform the public of the proposed regulations and mapping and allow participants to ask property specific questions.

Task 4 Analysis and Resolution of Comments (September – October 2021)

Any issues raised at the public open house and through other public comments will be reviewed. A brief report, usually produced in table format, will be prepared for Township staff and Council to review. The report will identify specific concerns raised through the public processes, and review and recommend respond to those concerns.

Task 5 Final Draft of Zoning By-law (November 2021)

Based on Council input, the comments received at the Public Open House and from the circulated agencies, a final draft of the By-law will be produced, for presentation at the statutory public meeting.

Task 10 Formal Planning Act Public Meeting (December 2021)

Prior to approval of the new Comprehensive Zoning By-law, a formal public approval process which includes public and agency notification and statutory public meeting procedures as outlined in the Planning Act, must be completed. Final planning on meeting format, virtual vs. in person, will need to be made closer to date of meeting.

Task 11 Analysis and Resolution (January/February 2022)

Any additional issues raised at the statutory public meeting and through other public comments will be reviewed. A brief report (usually produced in table format) will be prepared for Town staff and Council to review. The report will identify specific concerns raised through the public processes, and review and recommend responses to those concerns. These will form the basis for the preparation of the new Zoning By-law regulations and mapping that will be submitted to the Town for approval.

Task 12 Approval of new Comprehensive Zoning By-law (March 2022)

The final task is the approval of the new Comprehensive Zoning By-law by Council, and notification of the passage of the Zoning By-law. Once approved, staff will need to deal with potential appeals to the Local Planning Appeal Tribunal.

Respectfully Submitted,

Cale Henderson, MCIP RPP
Manager of Development &
Environmental Services

John Fior
CAO

THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO

BY-LAW NO. 20-

TO CLOSE AND STOP UP THAT PART OF THE ORIGINAL SHORE ROAD ALLOWANCE ALONG THE SHORES OF HEALEY LAKE, IN FRONT OF LOT 24, CONCESSION 5 AND PART OF LOT 24, CONCESSION 5 SHOWN AS ROAD ALLOWANCE ON REGISTERED PLAN M284, IN THE GEOGRAPHIC TOWNSHIP OF CONGER, IN THE TOWNSHIP OF THE ARCHIPELAGO, DISTRICT OF PARRY SOUND, DESIGNATED AS PART 2, PLAN 42R21493 AND TO SELL PART 2, ACCORDING TO PLAN 42R21493
(EICHLER)

WHEREAS it is deemed expedient in the interest of THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO, hereinafter called the Corporation, that the original unopened shore road allowance described in Schedule A hereto be closed, and thereafter Part 2, Plan 42R21493 be sold and conveyed to the adjacent owners;

AND WHEREAS the adjacent owners have made a request to the Corporation for the purchase of part of the said unopened shore road allowance being designated as Part 2 according to Plan 42R21493;

AND WHEREAS public notice of the intention of the Corporation to close the said portion of the said shore road allowance has been published in accordance with the municipality's by-laws regarding the same;

AND WHEREAS no persons have objected in writing to the closing or appeared before the Council claiming that his, her or its lands will be prejudicially affected by this By-law;

AND WHEREAS no person uses the road allowance for motor vehicle access to or from the person's land;

AND WHEREAS the road allowance does not abut land owned by the Crown in right of Canada or lead to or abut on the bridge, wharf, dock, quay or other work owned by the Crown in right of Canada;

NOW THEREFORE BE IT ENACTED as a By-law of the Council of THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO as follows:

1. THAT upon and after the passing of this By-law that part of the original unopened shore road allowance described in Schedule "A" hereto, be and the same is hereby closed and stopped up.

2. THAT upon and after passing of this By-law that part of the road allowance designated as Part 2, Plan 42R21493, be sold and conveyed by the Corporation to the adjacent owner or owners forthwith after this By-law comes into effect for other lawful consideration and the sum of Two Dollars ($2.00).

3. THAT the road allowance described in Schedule "A" hereto is declared surplus.

4. THAT the Reeve and Clerk be and they are hereby authorized and directed to sign all such conveyances as may be necessary and expedient for carrying out the provisions of this By-law, and to affix to such conveyances the Corporate Seal of the municipality.

5. THERE shall be attached to this By-law as Schedule "B" a Statutory Declaration of Maryann Weaver, Clerk of the Corporation of the Township of The Archipelago setting out the procedures taken for the publishing of the said Notice pursuant to the provisions of *The Municipal Act, 2001*, ante, and reciting that no one has objected or appeared before the Council claiming that his, her or its lands will be prejudicially affected by this By-law.

This By-law shall come into force and take effect on the day of the final passing thereof.

READ and **FINALLY PASSED** in **OPEN COUNCIL** this 10th day of December, 2020.

THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO

BERT LIVERANCE, REEVE	**MARYANN WEAVER, CLERK**

SCHEDULE "A"

Part of the original shore road allowance along the shores of Healey Lake, in front of Lot 24, Concession 5 and Part of Lot 24, Concession 5 shown as road allowance on registered plan M284, in the Geographic Township of Conger, in the Township of The Archipelago, District of Parry Sound, designated as Part 2, Plan 42R21493.

SCHEDULE "B"

STATUTORY DECLARATION AS TO FACTS

PROVINCE OF ONTARIO DISTRICT OF PARRY SOUND	)	IN THE MATTER OF By-law 20- passed by the Council of the Township of The Archipelago stopping up and closing Part of the original shore road allowance along the shores of Healey Lake, in front of Lot 24, Concession 5 and Part of Lot 24, Concession 5 shown as Road Allowance on Registered Plan M284, in the Geographic Township of Conger, in the Township of The Archipelago, District of Parry Sound, designated as Part 2, Plan 42R21493 and authorizing the sale of Part 2 Plan 42R21493 to the abutting owner

I, MARYANN WEAVER, of the Township of The Archipelago, in the District of Parry Sound, in the Province of Ontario, do solemnly declare:

I. THAT I am the Clerk of the Corporation of the Township of The Archipelago and as such have knowledge of the facts hereinafter declared.

2. THAT the described portion of the original shore road has not been previously closed.

3. THAT notice of the municipality's intention to pass the By-law was published in the North Star a newspaper published in the Town of Parry Sound, in the District of Parry Sound on November 19, 2020 and November 26, 2020.

4. THAT the publication described above complies with the municipality's by-laws respecting the giving of public notice of the passage of the by-law.

5. THAT no persons objected to the closing in writing, or appeared before the Council claiming that his, her or its lands will be prejudicially affected by this By-law.

6. THAT no person uses the road allowance for motor vehicle access to or from the person's land.

7. THAT the said By-law was passed by the Council of The Corporation of the Township of The Archipelago on the 10th day of December, 2020.

8. THAT all of the requirements of the Municipal Act with regard to the closing and stopping up of roads have been complied with.

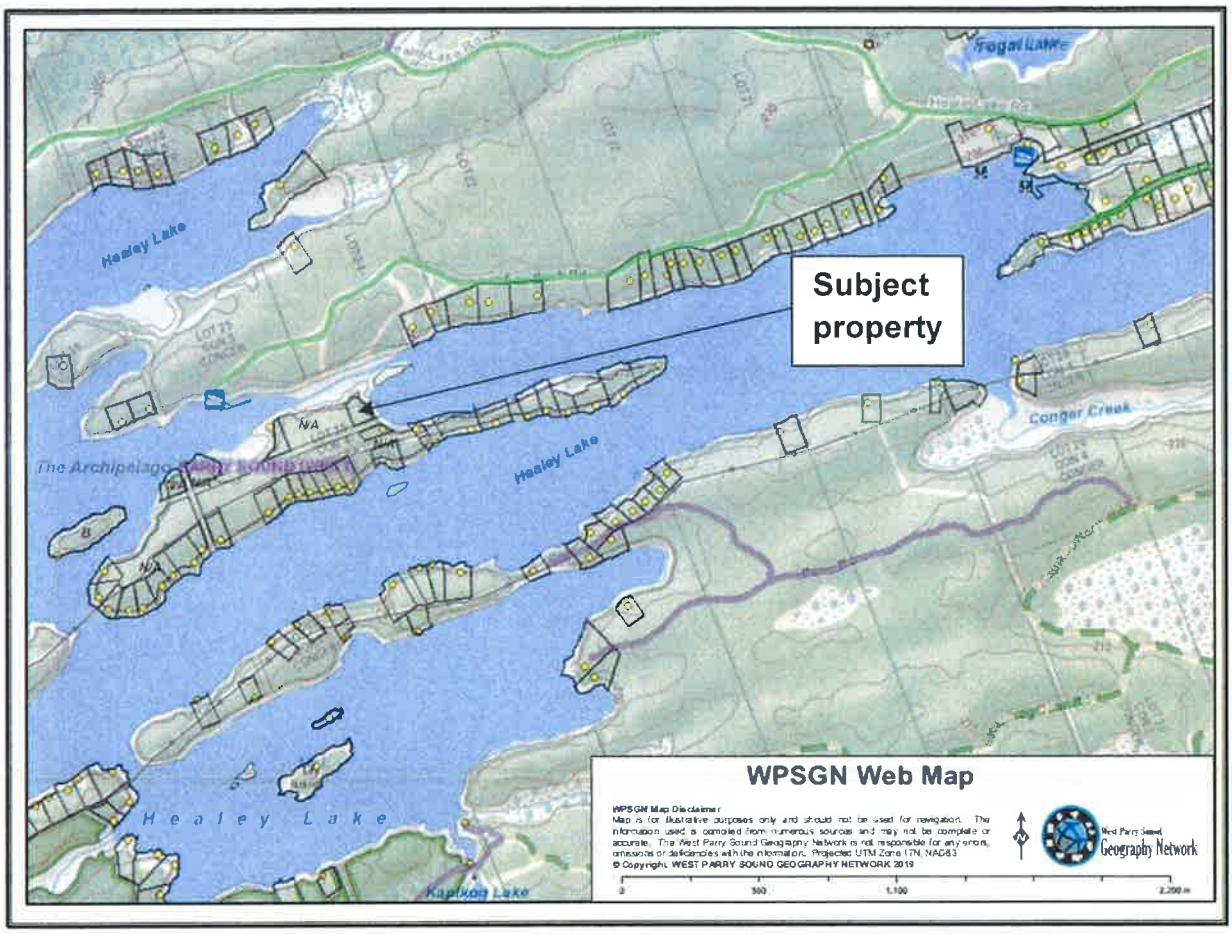
I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath, and by virtue of "The Canada Evidence Act".

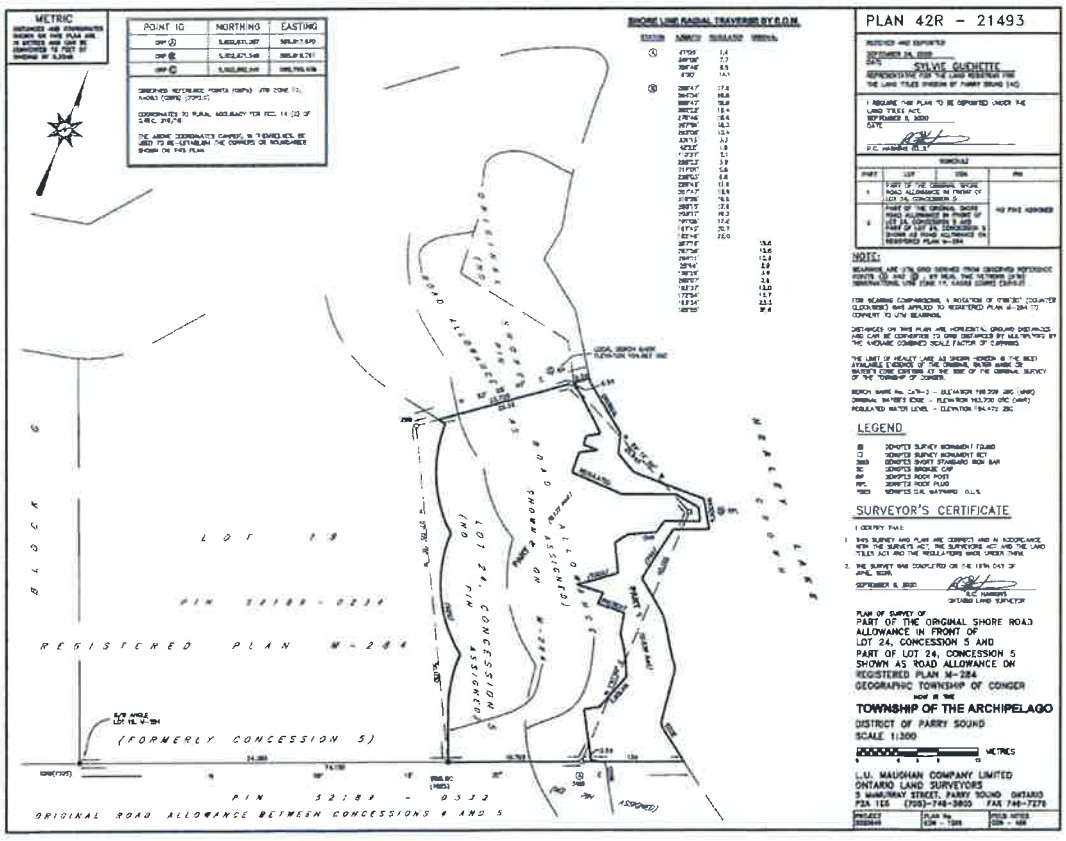
AFFIRMED before me at the Town of Parry Sound, in the District of Parry Sound, this day of December, A.D. 2020

MARYANN WEAVER, CLERK

A Commissioner, etc.

Shore Road Allowance and Deeming By-law
345 Healey Lake Water (Eichler, Jurgen and Sandra)





CORPORATION OF

THE TOWNSHIP OF THE ARCHIPELAGO

BY-LAW NO. 20-

To deem Lot 19 of Plan M-284, in the geographic Township of Conger, not to be a part of a registered plan of subdivision (Eichler, 345 Healey Lake Water)

WHEREAS Section 50(4) of the Planning Act, R.S.O. 1990, c.P.13, as amended, authorizes municipalities to enact by-laws to deem any plan of subdivision or part thereof, that has been registered for eight years or more, not to be a registered plan of subdivision;

AND WHEREAS the owners of Lot 19 of M-284, in the geographic Township of Conger, has applied to purchase the shore road allowance fronting their property on Healey Lake;

AND WHEREAS the owners have requested that Council deems the lot not to be a part of a registered plan of subdivision in order that the said lot will merge on title with the shore road allowance being stopped up, closed and conveyed;

AND WHEREAS Plan M-284 has been a registered plan of subdivision for more than eight years;

NOW THEREFORE BE IT ENACTED as a By-law of the Council of the Corporation of the Township of The Archipelago as follows:

1. That Lot 19 of Plan M-284, in the geographic Township of Conger is hereby deemed not to be a part of a registered plan of subdivision.

2. The Solicitor for The Corporation of the Township of The Archipelago shall hereby be authorized and directed to sign, deliver and/or register electronically an *"Application By-law Deeming Plan Not A Plan"* on behalf of The Corporation of the Township of The Archipelago.

This By-law shall come into force and take effect on the day of the final passing thereof.

READ and **FINALLY PASSED** in **OPEN COUNCIL** this 10th day of December, 2020.

BERT LIVERANCE, REEVE	**MARYANN WEAVER, CLERK**

The Corporation of the

TOWNSHIP OF THE ARCHIPELAGO

By-Law No. 20-

Being a By-law to authorize the Manager of Corporate Services to execute a software Enterprise Licence Agreement between Environmental Systems Research Institute, Inc. (ESRI) and the Corporation of the Township of The Archipelago

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WHEREAS pursuant to the Municipal Act, 2001, S.O. 2001, c.25, as amended, a municipality may pass by-laws respecting matters within its jurisdiction;

AND WHEREAS the Council for the Township of The Archipelago deems it appropriate to enter into a software ELA agreement with ESRI for the use of software to support its business needs and the software interests of the West Parry Sound Geography Network – an initiative the township administers;

NOW THEREFORE BE IT ENACTED as a By-law of the Council of the Corporation of the Township of The Archipelago as follows:

1. That the Manager of Corporate Services is hereby authorized to execute and affix the Corporate Seal to an Enterprise Agreement between Environmental Systems Research Institute, Inc. (ESRI) and the Corporation of the Township of The Archipelago;

2. That this By-law shall come into force and take effect on the day of the final passing thereof.

READ and **FINALLY PASSED** in **OPEN COUNCIL** this **10th** day of **December, 2020**.

THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO

Bert Liverance, Reeve	Maryann Weaver, Clerk

The Township of The Archipelago

Recommendation Report to Council

Report No.: Corp Services-2020-04 **Date:** November 26, 2020

Originator: J Villeneuve, Manager of Corporate Services / Coordinator of the WPSGN

Subject: Software Licensing Agreement Renewal (Administration of West Parry Sound Geography Network)

RECOMMENDATION

1. That Council approve a renewal of software licensing that supports GIS program interests for the Township and the West Parry Sound Geography Network (WPSGN). And, that staff be authorized to execute ESRI's Regional Government Enterprise Agreement for software use.

BACKGROUND / HISTORY

The current GIS software Enterprise Licence Agreement (executed though the Archipelago) provides for the organization's use of the software and for conducting the objectives of the WPSGN. The expiring agreement also provided for extending the use of the software to the municipal members of the West Parry Sound Geography Network. The term of the current agreement is 3 years and concludes at the end of 2020 and thus needs renewing – a subsequent 3 year term.

Addressing each entity's geomatic needs through the umbrella of WPSGN is efficient and advantageous for all members, specifically surrounding common needs on software licencing and data interests. Staff continues to evaluate and pursue cost saving solutions on its GIS interests and for that of the WPSGN program and its members.

ESRI's Regional Government Enterprise Agreement provides excellent value and affords the municipalities a significant savings over individual pursuits on software usages.

ANALYSIS/OPTIONS

1. Option 1
   Proceed with renewing the term for another 3 years and executing ESRI's Regional Government Enterprise Agreement for software use.

2. Option 2
   Further address any concerns with the Agreement and/or any due diligence items.
3. Option 3
   Council may choose not to accept the recommendation, resulting in the Township searching for other means to address its software needs and the administration of many WPSGN services. In exercising this option, having to restructure the services by the WPSGN would be disruptive and likely result in new annual costs to the program exceeding what each member currently experience.

FINANCIAL IMPLICATIONS

No impacts on the township's Operating Budget. Funds have already been allocated to WPSGN by the member's contributions to support the software usage that corresponds with the renewal proposal.

Note, this software agreement has a term of 3 years at an average of $32,823 per year.

CONCLUSION

There is a solid subscription interest with in the WPSGN to warrant renewing the new ELA with significant cost savings to each partner. Strengthens and supports WPSGN. It is recommended that Council authorize staff to execute the software renewal agreement.

Respectfully Submitted,

Joe Villeneuve
Manager of Corporate Services

I concur with this report
and recommendation

John B. Fior
Chief Administrative Officer

Enc. ESRI's Regional Government Enterprise Agreement for software use.

esri Canada

BEST MANAGED COMPANIES

November 16, 2020

Joe Villeneuve
Manager, Corporate Services
Township of the Archipelago
9 James Street
Parry Sound, ON P2A 1T4

Esri Regional Government Enterprise Agreement Quote #: 00023109

Dear Mr. Villeneuve,

Thank you for your interest in Environmental Systems Research Institute, Inc. (Esri) software at your organization. As follow up to our discussions on establishing an Esri Regional Government Enterprise Agreement (RG-EA) for the Township of the Archipelago and its affiliates, I am pleased to provide you with our proposal outlining Esri's RG-EA program offering.

The Esri RG-EA is a three-year agreement that grants your organization access to the Esri software listed below on an unlimited basis including maintenance and unlimited technical support provided by Esri Canada on all software offered through the ELA for the term of the agreement. The Esri RG-EA will be effective on December 31, 2020 and will require a firm, three-year commitment.

Based on our and Esri's work with several organizations similar to yours, we know there is significant potential to apply geographic information system (GIS) technology in many operational and technical areas within your organization. For this reason, we believe that your organization will greatly benefit from an Esri RG-EA. An RG-EA will provide your organization with numerous benefits including:

- A lower cost per unit for licensed software.
- Substantially reduced administrative and procurement expenses.
- Maintenance on all Esri software deployed under the agreement.
- Complete flexibility to deploy software products when and where needed.

The Esri RG-EA program includes unlimited access by your organization during the term of the agreement to the Esri software listed below. Licenses are valid for the term of the RG-EA.

ArcGIS for Desktop Software - Advanced, Standard and Basic.

ArcGIS for Desktop Extensions - 3D Analyst, Spatial Analyst, Geostatistical Analyst, Publisher, Network Analyst, Schematics, Workflow Manager, Data Reviewer.

ArcGIS Enterprise - Advanced and Standard (Enterprise and Workgroup).

ArcGIS Enterprise Extensions - 3D Analyst, Spatial Analyst, Geostatistical Analyst, Workflow Manager, Network Analyst.

ArcGIS Enterprise Additional Capability Server - Image Server.

ArcGIS Monitor

ArcGIS Engine

ArcGIS Engine Extensions - 3D Analyst, Spatial Analyst, Geodatabase Update, Network Analyst, Schematics.

ArcGIS Runtime - Standard.

ArcGIS Runtime Analysis Extension

The Esri SG-EA program includes limited licenses of the following Esri software including the additional benefits listed below during the term of the SG-EA:

ArcGIS Developer Subscription - One (1) annual Professional subscription to ArcGIS Developer.

Esri CityEngine - Two (2) Single Use Licenses.

ArcGIS Online User Type - 50 Viewer, 50 Creator.

ArcGIS Online Service Credits - 10,000.

ArcGIS Enterprise User Type - Unlimited Viewer, 50 Creator.

ArcGIS Insights - Two (2) Licenses.

Insights in ArcGIS Enterprise - Two (2) Licenses.

Tracker for ArcGIS Online - Five (5) Licenses.

Tracker for ArcGIS Enterprise - Five (5) Licenses.

ArcGIS Parcel Fabric User Type Extension for ArcGIS Enterprise - Two (2) Licenses.

ArcGIS Utility Network User Type Extension for ArcGIS Enterprise - Two (2) Licenses.

Esri International User Conference Registration Passes - Two (2) complimentary registrations for Esri International User Conference for each year the SG-EA is in effect.

Authorized Technical Support Callers - Two (2) named callers for technical support.

Self-Paced e-Learning (Web training) - Uncapped access to the Esri training site included during agreement term, as covered under standard maintenance. during agreement term, as covered under standard maintenance.

The ELA fee for your earmarked 3-year period is a lump sum of **$ 98,050.00** which is payable in annual installments as follows:

Year 1	Year 2	Year 3
December 31, 2020	**December 31, 2021**	**December 31, 2022**
$ 32,110.00	$ 32,680.00	$ 33,260.00

Note: Applicable taxes are not included.

All current departments, employees, and in-house contractors of the organization will be eligible to use the Esri software and services listed above.

The following key business terms and conditions will apply:

- For existing users of Esri software, your organization must be current in maintenance to initiate an Esri RG-EA if those products are part of the agreement.
- If your organization wishes to acquire and/or maintain any Esri software during the term of the Esri RG-EA that is not included in this proposal, it may do so separately from the RG-EA at the current pricing that is available for your organization for software and maintenance.
- The Esri software and services included in this proposal may only be deployed and used by the departments and employees licensed to participate in the Esri RG-EA.
- In addition to the Township of the Archipelago, the following communities are included in the Esri RG-EA:
    1. Township of Carling
    2. Town of Parry Sound
    3. Municipality of McDougall
    4. Township of Sequin
    5. Township of McKellar
    6. Municipality of Whitestone

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- Esri technology that may be embedded in third-party products that your organization licensed or may acquire is not included under the Esri RG-EA.
- Your organization will establish a single point of contact for orders and deliveries and will be responsible for redistribution to eligible users.
- The first annual installment payment of the RG-EA will be due within 30 days of the effective date of the Esri RG-EA. The annual installment payments will be due within 30 days of the anniversary date of the effective date of the RG-EA.
- Your organization will establish a Tier 1 support center to field calls from internal users of Esri software. The organization may designate up to two (2) individuals who may directly contact Esri Canada for Tier 2 technical support.
- Your organization will provide an annual report of installed Esri software to Esri Canada.
- Esri software and updates that your organization is licensed to use will be available for download automatically as they become available.
- Your organization will act as an Esri reference site and will permit Esri to publicize its use of Esri software and services.
- Licenses are valid for the term of the RG-EA.
- The RG-EA entitlements and benefits available to your organization are conditional upon your organization being current in its payments of the applicable annual RG-EA fee installments.

This offer is valid until December 30, 2020. To accept this proposal, please have this proposal and the enclosed Esri RG-EA signed by an authorized signatory of your organization and return a signed copy of both the proposal and the whole Esri RG-EA to my attention.

By accepting this proposal your organization unconditionally acknowledges and agrees that in addition to the terms and conditions set out under this proposal, the order arising from this proposal is governed by the terms and conditions of the applicable Esri RG-EA and that no additional or different terms or conditions other than those expressly approved in writing by Esri and Esri Canada shall be binding on this order.

I appreciate the opportunity to present you with this proposal. If you have any questions or require additional information, please contact me at 705-585-1831 or email at kmurdoch@esri.ca. Otherwise, I will follow up with you within the next few weeks.

Thank you very much for your consideration.

Best regards,

DocuSigned by:
Kyle Murdoch
20137133A7A8419...
Kyle Murdoch
Account Manager

DocuSign Envelope ID: 16F15CF0-6E91-4E8D-962B-FB8A15F4E0C3

This Esri Regional Government Enterprise Agreement Proposal is Accepted and Agreed on behalf of The Township of the Archipelago:

By: _____
Authorized Signature

Name: _____

Title: _____

Date: _____

Esri Use Only:
Cust. Name _____
Cust. # _____
PO # _____
Esri Agreement # 00291239.0

REGIONAL GOVERNMENT ENTERPRISE AGREEMENT (RG1I)

This Agreement is by and between Township of the Archipelago (**"Managing Customer"**) and **Environmental Systems Research Institute, Inc.** (**"Esri"**); and the Authorized Distributor listed on the signature page (**"Authorized Distributor"**).

This Agreement sets forth the terms for Managing Customer's use of Products and incorporates by reference (i) the Quotation and (ii) the Master Agreement. Should there be any conflict between the terms and conditions of the documents that comprise this Agreement, the order of precedence for the documents shall be as follows: (i) the Quotation, (ii) this Agreement, and (iii) the Master Agreement. The modifications and additional rights granted in this Agreement apply only to the Products listed in Table A.

Table A
List of Products

Uncapped Quantities

Desktop Software and Extensions (Single Use)
ArcGIS Desktop Advanced
ArcGIS Desktop Standard
ArcGIS Desktop Basic
ArcGIS Desktop Extensions: ArcGIS 3D Analyst, ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS Publisher, ArcGIS Network Analyst, ArcGIS Schematics, ArcGIS Workflow Manager, ArcGIS Data Reviewer

Enterprise Software and Extensions
ArcGIS Enterprise and Workgroup (Advanced and Standard)
ArcGIS Monitor
ArcGIS Enterprise Extensions: ArcGIS 3D Analyst, ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS Network Analyst, ArcGIS Schematics, ArcGIS Workflow Manager

Enterprise Additional Capability Servers
ArcGIS Image Server

Developer Tools
ArcGIS Engine
ArcGIS Engine Extensions: ArcGIS 3D Analyst, ArcGIS Spatial Analyst, ArcGIS Engine Geodatabase Update, ArcGIS Network Analyst, ArcGIS Schematics
ArcGIS Runtime (Standard)
ArcGIS Runtime Analysis Extension

Limited Quantities
One (1) Professional subscription to ArcGIS Developer
Two (2) ArcGIS CityEngine Single Use Licenses
50 ArcGIS Online Viewers
50 ArcGIS Online Creators
10,000 ArcGIS Online Service Credits
50 ArcGIS Enterprise Creators
2 ArcGIS Insights in ArcGIS Enterprise
2 ArcGIS Insights in ArcGIS Online
5 ArcGIS Tracker for ArcGIS Enterprise
5 ArcGIS Tracker for ArcGIS Online
2 ArcGIS Parcel Fabric User Type Extensions (Enterprise)
2ArcGIS Utility Network User Type Extensions (Enterprise)

OTHER BENEFITS

Number of Esri User Conference registrations provided annually	2
Number of Tier 1 Help Desk individuals authorized to call Esri	2
Maximum number of sets of backup media, if requested*	1
Five percent (5%) discount on all individual commercially available instructor-led training classes at Esri facilities purchased outside this Agreement	

*Additional sets of backup media may be purchased for a fee

Managing Customer may accept this Agreement by signing and returning the whole Agreement with (i) the Quotation attached, (ii) a purchase order, or (iii) another document that matches the Quotation and references this Agreement (**"Ordering Document"**). **ADDITIONAL OR CONFLICTING TERMS IN MANAGING CUSTOMER'S PURCHASE ORDER OR OTHER DOCUMENT WILL NOT APPLY, AND THE TERMS OF THIS AGREEMENT WILL GOVERN.** This Agreement is effective as of the date of Authorized Distributor's or Esri's receipt of an Ordering Document, unless otherwise agreed to by the parties (**"Effective Date"**). An executed Agreement transmitted through electronic means, such as fax or e-mail, is valid and binding even if an original paper document bearing each party's original signature is not delivered.

This Agreement authorizes the entities listed in Attachment 1 (each an **"Authorized Entity"**) to use Products listed in Table A, provided Authorized Entity signs and returns an executed Authorized Entity Acknowledgment Statement and agrees to be bound by the terms and conditions of this Agreement. Managing Customer may not Deploy any Products to an Authorized Entity until Managing Customer has received and sent to Authorized Distributor and Esri the executed Authorized Entity Acknowledgment Statement.

Term of Agreement: Three (3) years, December 31, 2020 - December 30, 2023

This Agreement supersedes any previous agreements, proposals, presentations, understandings, and arrangements between the parties relating to the licensing of the Products. Except as provided in Article 4—Product Updates, no modifications can be made to this Agreement.

Accepted and Agreed:

Township of the Archipelago
(Managing Customer)

By: _____
Authorized Signature

Printed Name: _____

Title: _____

Date: _____

Esri Canada Limited
(Authorized Distributor)

By: _____
Authorized Signature

Printed Name: _____

Title: _____

Date: _____

MANAGING CUSTOMER CONTACT INFORMATION

Contact: _____

Address: _____

City, State, Postal Code: _____

Country: _____

Quotation Number (if applicable): _____

Telephone: _____

E-mail: _____

ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE, INC.
(Esri)

By: _____
Authorized Signature

Printed Name: William C. Fleming

Title: Director, Contracts and Legal

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1.0—Additional Definitions

In addition to the definitions provided in the Master Agreement, the following definitions apply to this Agreement:

"Case" means a failure of the Software or Online Services to operate according to the Documentation where such failure substantially impacts operational or functional performance.

"Customer" means Managing Customer and Authorized Entity.

"Deploy", "Deployed" and "Deployment" mean to redistribute and install the Products and related Authorization Codes within Customer's organization(s).

"Fee" means the fee set forth in the Quotation.

"Maintenance" means Tier 2 Support, Product updates, and Product patches provided to Managing Customer during the Term of Agreement.

"Master Agreement" means the applicable master agreement for Esri Products incorporated by this reference that is (i) found at https://www.esri.com/en-us/legal/terms/full-master-agreement and available in the installation process requiring acceptance by electronic acknowledgment or (ii) a signed Esri master agreement or license agreement that supersedes such electronically acknowledged master agreement.

"Product(s)" means the products identified in Table A—List of Products and any updates to the list Authorized Distributor or Esri provides in writing.

"Quotation" means the offer letter and quotation provided separately to Managing Customer.

"Technical Support" means the technical assistance for attempting resolution of a reported Case through error correction, patches, hot fixes, workarounds, replacement deliveries, or any other type of Product corrections or modifications.

"Tier 1 Help Desk" means Managing Customer's point of contact(s) to provide all Tier 1 Support within Customer's organization(s).

"Tier 1 Support" means the Technical Support provided by the Tier 1 Help Desk.

"Tier 2 Support" means the Technical Support provided to the Tier 1 Help Desk when a Case cannot be resolved through Tier 1 Support. Customer will receive Tier 2 Support from the Authorized Distributor.

2.0—Additional Grant of License

2.1 Grant of License. Subject to the terms and conditions of this Agreement, Esri grants to Customer a personal, nonexclusive, nontransferable license solely to use, copy and Deploy quantities of the Products listed in Table A—List of Products for the Term of Agreement (i) for the applicable Fee and (ii) in accordance with the Master Agreement. Additionally, Esri grants to Managing Customer the right to Deploy for Customer's internal use, provided prior to Deploying to an Authorized Entity, Authorized Distributor and Esri receive a signed copy of the Authorized Entity Acknowledgment Statement.

2.2 Consultant Access. Esri grants Customer the right to permit Customer's consultants or contractors to use the Products exclusively for Customer's benefit. Customer will be solely responsible for compliance by consultants and contractors with this Agreement and will ensure that the consultant or contractor discontinues use of Products upon completion of work for Customer. Access to or use of Products by consultants or contractors not exclusively for Customer's benefit is prohibited. Customer may not permit its consultants or contractors to install Software or Data on consultant, contractor, or third-party computers or remove Software or Data from Managing Customer locations, except for the purpose of hosting the Software or Data on Contractor servers for the benefit of Customer.

3.0—Term, Termination, and Expiration

3.1 Term. This Agreement and all licenses hereunder will commence on the Effective Date and continue for the duration identified in the Term of Agreement, unless this Agreement is terminated earlier as provided herein. Customer is only authorized to use Products during the Term of Agreement. For an Agreement with a limited term, Esri does not grant Customer an indefinite or a perpetual license to Products.

3.2 No Use upon Agreement Expiration or Termination. All Product licenses, all Maintenance, and Esri User Conference registrations terminate upon expiration or termination of this Agreement.

3.3 Termination for a Material Breach. Either party may terminate this Agreement for a material breach by the other party. The breaching party will have thirty (30) days from the date of written notice to cure any material breach.

3.4 Termination for Lack of Funds. For an Agreement with government or government-owned entities, either party may terminate this Agreement before any subsequent year if Managing Customer is unable to secure funding through the legislative or governing body's approval process.

3.5 Follow-on Term. If the parties enter into another agreement substantially similar to this Agreement for an additional term, the effective date of the follow-on agreement will be the day after the expiration date of this Agreement.

3.6 Termination of an Individual Authorized Entity. Authorized Distributor and Esri may terminate the license rights of a particular Authorized Entity for material breach without terminating this Agreement with Managing Customer. The breaching Authorized Entity will be given a period of thirty (30) days from the date of written notice to cure any material breach. Upon the termination of an Authorized Entity, all Products Deployed to the Authorized Entity will also terminate. Managing Customer shall reasonably cooperate with Authorized Distributor and Esri in termination of an Authorized Entity for material breach of this Agreement, including enforcement of the Agreement with respect to such Authorized Entity. There will be no reduction in the Fee if an Authorized Entity's rights are terminated. The terminated Authorized Entity will have no further access to any benefits, entitlements, rights, or other items included in or otherwise related to this Agreement.

3.7 Termination by Authorized Entity. If an Authorized Entity no longer desires to participate in this Agreement, the Authorized Entity may terminate; however, there will be no decrease in the Fee as a result.

4.0—Product Updates

4.1 Future Updates. Esri reserves the right to update the list of Products in Table A—List of Products by providing written notice to Managing Customer. Customer may continue to use all Products that have been Deployed, but support and upgrades for deleted items may not be available. As new Products are incorporated into the standard program, they will be offered to Managing Customer via written notice for incorporation into the Products schedule at no additional charge. Customer's use of new or updated Products requires Customer to adhere to applicable additional or revised terms and conditions in the Master Agreement.

4.2 Product Life Cycle. During the Term of Agreement, some Products may be retired or may no longer be available to Deploy in the identified quantities. Maintenance will be subject to the individual Product Life Cycle Support Status and Product Life Cycle Support Policy, which can be found at https://support.esri.com/en/other-resources/product-life-cycle. Updates for Products in the mature and retired phases may not be available. Customer may continue to use Products already Deployed, but Managing Customer will not be able to Deploy retired Products.

5.0—Maintenance

The Fee includes standard maintenance benefits during the Term of Agreement as specified in the most current applicable Authorized Distributor software maintenance policy as modified by this Article 5.0—Maintenance. At Esri's sole discretion, Esri may make patches, hot fixes, or updates available for download. No Software other than the defined Products will receive Maintenance. Customer may acquire maintenance for other Software outside this Agreement.

a. Tier 1 Support

1. Managing Customer will provide Tier 1 Support through the Tier 1 Help Desk to all Customer's authorized users.
2. The Tier 1 Help Desk will be fully trained in the Products.

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3. At a minimum, Tier 1 Support will include those activities that assist the user in resolving how-to and operational questions as well as questions on installation and troubleshooting procedures.

4. The Tier 1 Help Desk will be the initial point of contact for all questions and reporting of a Case. The Tier 1 Help Desk will obtain a full description of each reported Case and the system configuration from the user. This may include obtaining any customizations, code samples, or data involved in the Case.

5. If the Tier 1 Help Desk cannot resolve the Case, an authorized Tier 1 Help Desk individual may contact Tier 2 Support. The Tier 1 Help Desk will provide support in such a way as to minimize repeat calls and make solutions to problems available to Customer's organization.

6. Tier 1 Help Desk individuals are the only individuals authorized to contact Tier 2 Support. Managing Customer may change the Tier 1 Help Desk individuals by written notice to Authorized Distributor.

b. Tier 2 Support

1. Tier 2 Support will log the calls received from Tier 1 Help Desk.

2. Tier 2 Support will review all information collected by and received from the Tier 1 Help Desk including preliminary documented troubleshooting provided by the Tier 1 Help Desk when Tier 2 Support is required.

3. Tier 2 Support may request that Tier 1 Help Desk individuals provide verification of information, additional information, or answers to additional questions to supplement any preliminary information gathering or troubleshooting performed by Tier 1 Help Desk.

4. Tier 2 Support will attempt to resolve the Case submitted by Tier 1 Help Desk.

5. When the Case is resolved, Tier 2 Support will communicate the information to Tier 1 Help Desk, and Tier 1 Help Desk will disseminate the resolution to the user(s).

6.0—Endorsement and Publicity

This Agreement will not be construed or interpreted as an exclusive dealings agreement or Customer's endorsement of Products. Either party may publicize the existence of this Agreement.

7.0—Administrative Requirements

7.1 OEM Licenses. Under Esri's OEM or Solution OEM programs, OEM partners are authorized to embed or bundle portions of Esri products and services with their application or service. OEM partners' business model, licensing terms and conditions, and pricing are independent of this Agreement. Customer will not seek any discount from the OEM partner or Esri based on the availability of Products under this Agreement. Customer will not decouple Esri products or services from the OEM partners' application or service.

7.2 Annual Report of Deployments. At each anniversary date and ninety (90) calendar days prior to the expiration of this Agreement, Managing Customer will provide the Authorized Distributor with a written report detailing all Deployments. Upon request, Customer will provide records sufficient to verify the accuracy of the annual report.

8.0—Mergers, Acquisitions, or Divestitures

If Customer is a commercial entity, Customer will notify Authorized Distributor and Esri in writing in the event of (i) a consolidation, merger, or reorganization of Customer with or into another corporation or entity; (ii) Customer's acquisition of another entity; or (iii) a transfer or sale of all or part of Customer's organization (subsections i, ii, and iii, collectively referred to as **"Ownership Change"**). There will be no decrease in Fee as a result of any Ownership Change.

8.1 If an Ownership Change increases the cumulative program count beyond the maximum level for this Agreement, Authorized Distributor and Esri reserve the right to increase the Fee or terminate this Agreement and the parties will negotiate a new agreement.

8.2 If an Ownership Change results in transfer or sale of a portion of Customer's organization, that portion of Customer's organization will transfer

the Products to Customer or uninstall, remove, and destroy all copies of the Products.

8.3 This Agreement may not be assigned to a successor entity as a result of an Ownership Change unless approved by Authorized Distributor and Esri in writing in advance. If the assignment to the new entity is not approved, Customer will require any successor entity to uninstall, remove, and destroy the Products. This Agreement will terminate upon such Ownership Change.

ATTACHMENT 1
AUTHORIZED ENTITY LIST

1. Authorized Entity Name: Township of Carling
   Contact Name: _____
   Address: _____
   _____
   Phone: _____
   E-mail: _____

2. Authorized Entity Name: Town of Parry Sound
   Contact Name: _____
   Address: _____
   _____
   Phone: _____
   E-mail: _____

3. Authorized Entity Name: Municipality of McDougall
   Contact Name: _____
   Address: _____
   _____
   Phone: _____
   E-mail: _____

4. Authorized Entity Name: Township of Seguin
   Contact Name: _____
   Address: _____
   _____
   Phone: _____
   E-mail: _____

5. Authorized Entity Name: Township of McKellar
   Contact Name: _____
   Address: _____
   _____
   Phone: _____
   E-mail: _____

6. Authorized Entity Name: Municipality of Whitestone
   Contact Name: _____
   Address: _____
   _____
   Phone: _____
   E-mail: _____

Prior to any Deployment to an Authorized Entity, Managing Customer shall require each such entity to be contractually bound to applicable terms and conditions by executing an Authorized Entity Acknowledgment Statement. Managing Customer shall keep a copy of the signed original acknowledgment for its records and forward a copy of the signed original to Authorized Distributor and Esri. Authorized Distributor and Esri may pursue remedies against Managing Customer or an individual Authorized Entity for material breach. Only Managing Customer has a right to Deploy.

AUTHORIZED ENTITY ACKNOWLEDGMENT STATEMENT

Environmental Systems Research Institute, Inc. (**"Esri"**), _Esri Canada Limited _ (**"Authorized Distributor"**), and _Township of the Archipelago_ (**"Managing Customer"**), have entered into an Agreement for licensing certain rights to use and Deploy Products and to receive maintenance for the term of the Agreement, subject to payment of fees and adherence to the terms and conditions of this Agreement. Esri has authorized Managing Customer to Deploy Products to Authorized Entity provided Authorized Entity signs and returns this Authorized Entity Acknowledgment Statement.

Accordingly, Authorized Entity, as a Customer, represents it has received and read the Agreement, and understands and agrees to be bound by the Agreement, for use of Products received from Managing Customer. Authorized Entity agrees that Authorized Distributor and Esri may pursue remedies against Authorized Entity for material breach of the Agreement. All Deployments made by Managing Customer to Authorized Entity shall be made through Managing Customer's centralized point of contact. Tier 1 Help Desk will provide Maintenance to Authorized Entity. Authorized Entity grants Managing Customer the right to unilaterally sign amendments to this Agreement, which shall be binding on Authorized Entity.

No other rights are granted to Authorized Entity under this acknowledgment.

Accepted and Agreed:

Township of Carling
(Authorized Entity)

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Prior to any Deployment to an Authorized Entity, Managing Customer shall require each such entity to be contractually bound to applicable terms and conditions by executing an Authorized Entity Acknowledgment Statement. Managing Customer shall keep a copy of the signed original acknowledgment for its records and forward a copy of the signed original to Authorized Distributor and Esri. Authorized Distributor and Esri may pursue remedies against Managing Customer or an individual Authorized Entity for material breach. Only Managing Customer has a right to Deploy.

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No other rights are granted to Authorized Entity under this acknowledgment.

Accepted and Agreed:

Municipality of McDougall
(Authorized Entity)

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Prior to any Deployment to an Authorized Entity, Managing Customer shall require each such entity to be contractually bound to applicable terms and conditions by executing an Authorized Entity Acknowledgment Statement. Managing Customer shall keep a copy of the signed original acknowledgment for its records and forward a copy of the signed original to Authorized Distributor and Esri. Authorized Distributor and Esri may pursue remedies against Managing Customer or an individual Authorized Entity for material breach. Only Managing Customer has a right to Deploy.

AUTHORIZED ENTITY ACKNOWLEDGMENT STATEMENT

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No other rights are granted to Authorized Entity under this acknowledgment.

Accepted and Agreed:

Township of McKellar
(Authorized Entity)

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Prior to any Deployment to an Authorized Entity, Managing Customer shall require each such entity to be contractually bound to applicable terms and conditions by executing an Authorized Entity Acknowledgment Statement. Managing Customer shall keep a copy of the signed original acknowledgment for its records and forward a copy of the signed original to Authorized Distributor and Esri. Authorized Distributor and Esri may pursue remedies against Managing Customer or an individual Authorized Entity for material breach. Only Managing Customer has a right to Deploy.

AUTHORIZED ENTITY ACKNOWLEDGMENT STATEMENT

Environmental Systems Research Institute, Inc. (**"Esri"**), _Esri Canada Limited _ (**"Authorized Distributor"**), and _Township of the Archipelago_ (**"Managing Customer"**), have entered into an Agreement for licensing certain rights to use and Deploy Products and to receive maintenance for the term of the Agreement, subject to payment of fees and adherence to the terms and conditions of this Agreement. Esri has authorized Managing Customer to Deploy Products to Authorized Entity provided Authorized Entity signs and returns this Authorized Entity Acknowledgment Statement.

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No other rights are granted to Authorized Entity under this acknowledgment.

Accepted and Agreed:

Town of Parry Sound _____
(Authorized Entity)

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Prior to any Deployment to an Authorized Entity, Managing Customer shall require each such entity to be contractually bound to applicable terms and conditions by executing an Authorized Entity Acknowledgment Statement. Managing Customer shall keep a copy of the signed original acknowledgment for its records and forward a copy of the signed original to Authorized Distributor and Esri. Authorized Distributor and Esri may pursue remedies against Managing Customer or an individual Authorized Entity for material breach. Only Managing Customer has a right to Deploy.

AUTHORIZED ENTITY ACKNOWLEDGMENT STATEMENT

Environmental Systems Research Institute, Inc. (**"Esri"**), Esri Canada Limited (**"Authorized Distributor"**), and _Township of the Archipelago_ (**"Managing Customer"**), have entered into an Agreement for licensing certain rights to use and Deploy Products and to receive maintenance for the term of the Agreement, subject to payment of fees and adherence to the terms and conditions of this Agreement. Esri has authorized Managing Customer to Deploy Products to Authorized Entity provided Authorized Entity signs and returns this Authorized Entity Acknowledgment Statement.

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No other rights are granted to Authorized Entity under this acknowledgment.

Accepted and Agreed:

Township of Seguin _____
(Authorized Entity)

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Prior to any Deployment to an Authorized Entity, Managing Customer shall require each such entity to be contractually bound to applicable terms and conditions by executing an Authorized Entity Acknowledgment Statement. Managing Customer shall keep a copy of the signed original acknowledgment for its records and forward a copy of the signed original to Authorized Distributor and Esri. Authorized Distributor and Esri may pursue remedies against Managing Customer or an individual Authorized Entity for material breach. Only Managing Customer has a right to Deploy.

AUTHORIZED ENTITY ACKNOWLEDGMENT STATEMENT

Environmental Systems Research Institute, Inc. (**"Esri"**), _Esri Canada Limited (**"Authorized Distributor"**), and _Township of the Archipelago_ (**"Managing Customer"**), have entered into an Agreement for licensing certain rights to use and Deploy Products and to receive maintenance for the term of the Agreement, subject to payment of fees and adherence to the terms and conditions of this Agreement. Esri has authorized Managing Customer to Deploy Products to Authorized Entity provided Authorized Entity signs and returns this Authorized Entity Acknowledgment Statement.

Accordingly, Authorized Entity, as a Customer, represents it has received and read the Agreement, and understands and agrees to be bound by the Agreement, for use of Products received from Managing Customer. Authorized Entity agrees that Authorized Distributor and Esri may pursue remedies against Authorized Entity for material breach of the Agreement. All Deployments made by Managing Customer to Authorized Entity shall be made through Managing Customer's centralized point of contact. Tier 1 Help Desk will provide Maintenance to Authorized Entity. Authorized Entity grants Managing Customer the right to unilaterally sign amendments to this Agreement, which shall be binding on Authorized Entity.

No other rights are granted to Authorized Entity under this acknowledgment.

Accepted and Agreed:

Municipality of Whitestone _____
(Authorized Entity)

Signature: _____

Printed Name: _____

Title: _____

Date: _____

The Corporation of the

TOWNSHIP OF THE ARCHIPELAGO

BY-LAW NO. 20-

To Authorize Borrowing from Time to Time to Meet Current Expenditures
During the Fiscal Year Ending December 31, 2021

WHEREAS Section 407 (1) of the *Municipal Act, 2001*, S.O. 2001, c. 25, provides that a municipality may authorize temporary borrowing, until the taxes are collected and other revenues are received, of the amounts that the municipality considers necessary to meet the expenses of the municipality for the year and of the amounts, whether or not they are expenses for the year, that the municipality requires in the year for specified purposes;

AND WHEREAS the total amount that may be borrowed from all sources at any one time to meet the current expenditures of the Corporation, except with the approval of the Ontario Municipal Board, is limited by section 407 (2) of the *Municipal Act, 2001*, S.O. 2001, c. 25;

NOW THEREFORE BE IT ENACTED as a By-Law of the Council of The Corporation of the Township of The Archipelago as follows:

1. That the Head of Council, the Chief Administrative Officer and the Treasurer are hereby authorized to borrow from time to time by way of letter of agreement and or any amending agreement or bankers' acceptance during the year 2021 (hereinafter referred to as the current year) such sums as may be necessary to meet, until the taxes are collected, and until other revenues are received, the current expenditures of the Corporation and the other amounts that are set out in subsection 407(1) of the Municipal Act.

2. A letter of agreement and any amending agreement or bankers' acceptance made under Section 1 shall be signed by the head of Council or the Chief Administrative Officer or designate and by the Treasurer.

3. The lenders from whom amounts may be borrowed under authority to this by-law shall be the TD Canada Trust and such other lender(s) and reserve funds of the municipality as may be determined from time to time by resolution of the Council.

4. The total amount which may be borrowed at any one time under this by-law, together with the total of any similar borrowings that have not been repaid, shall not exceed, from January 1st to September 30th of the current year, 50 percent of the estimated revenues of the Corporation as set out in the budget adopted for the year. Such borrowing shall not exceed, from October 1st until December 31st of the current year, 25 percent of the total estimated revenues of the Corporation as set out in the budget adopted for the year. For purposes of this by-law the estimated revenues of the Corporation shall not include revenues derived from

   (a) any borrowing, including through any issue of debentures;
   (b) a surplus, including arrears of taxes, fees or charges; or
   (c) a transfer from the capital fund, reserve funds or reserves.

5. The Treasurer shall, at the time when any amount is borrowed under this by-law, ensure that the lender is or has been furnished with a certified copy of this by-law.

6. If the estimates for the current year have not been adopted at the time an amount is borrowed under this by-law, the limits upon borrowing under subsection (2) shall temporarily be calculated using the estimated revenues of the municipality set out in the budget adopted for the previous year.

7. All or any sums borrowed under this by-law shall, with interest thereon, be a charge upon the whole of the revenues of the Corporation for the current year and for any preceding years as and when such revenues are received but such charge does not defeat or affect and is subject to any prior charge then subsisting in favour of any other lender.

8. The Treasurer is hereby authorized and directed to apply in payment of all or any sums borrowed under this by-law, together with interest thereon, all or any of the money hereafter collected or received, either on account of or realized in respect of the taxes levied for the current year and preceding years or from any other source, which may lawfully be applied for such purpose.

9. This by-law shall come into force upon the final passing thereof.

READ and **FINALLY PASSED** in **OPEN COUNCIL** this 10th day of **December**, **2020**.

THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO

Bert Liverance, Reeve	Maryann Weaver, Clerk

The Corporation of the

TOWNSHIP OF THE ARCHIPELAGO

BY-LAW NO. 20-

Being a By-Law to provide for an Interim Tax Levy, for the payment of taxes, and for penalty and interest at 1.25% per month and authorize the Pre-authorized Payment Plan (PAP) and Automatic Tax Installment Withdrawal (ATIW)

WHEREAS Section 317 of The Municipal Act, 2001, S.O. 2001, c. 25 as amended, provides that the Council of a local municipality may before the adoption of the estimate for the year, pass a by-law to levy an interim tax bill based on 50% of the total taxes billed for 2020 for local municipal and school board purposed subject to certain restrictions. Part year adjustments will be annualized for purposes of determining a property's previous year's tax;

AND WHEREAS Section 317 of The Municipal Act, 2001, S.O. 2001, c. 25 as amended, provides that the Council of a local municipality must not exceed 50 percent of the previous year's taxes billed for all purposes in each property class;

AND WHEREAS the Council of the Corporation of the Township of The Archipelago deems it advisable and expedient that such a levy should be made;

NOW THEREFORE BE IT ENACTED as a By-law of the Council of the Corporation of the Township of The Archipelago as follows:

1. That for the year 2021, 50% of the previous year's taxes billed on all applicable properties, shall be levied, raised and collected on all real property taxable within all classes and liable to pay the same according to the last year's taxes billed.

2. The said interim tax levy shall become due and payable in two installments as follows:
   50% of the interim levy rounded upwards to the next whole cent shall become due and payable on the 23rd day of February, 2021; and the balance of the interim levy shall become due and payable on the 26th day of March, 2021.

3. On all taxes of the interim levy, which are in default on the due date, a penalty of 1.25% shall be added and thereafter a penalty of 1.25% per month will be added on the day of each and every month the default continues, until December 31st, 2021.

4. On all other taxes in default on January, 2021, interest shall be added at the rate of 1.25% per month or fraction thereof, and all by-laws and parts of by-laws inconsistent with this policy are hereby rescinded.

5. Pre-Authorized Payment Plan (PAP) – Notwithstanding the due date referred to in section 2, the due dates for any taxes due for real property, the owner of which has elected pre-authorized payments, shall be deemed to be the 15th day of each month of the year, or the last day of each month starting February for a period of 10 months. The first 5 monthly payments are approximately one tenth of your previous year's total taxes and the next 5 months will be re-calculated based on the current year's total taxes minus the first 5 payments that were previously made.

6. Automatic Tax Installment Withdrawal (ATIW) – Notwithstanding the due date referred to in section 2, the due dates for any taxes due for real property, the owner of which elected automatic tax installment withdrawal from either option one or two. The first option is the 2-Installment Plan will be the due date in

March for the Interim tax bill full amount and in July for the final tax bill full amount. The second option is the 4-Installment Plan will be the due dates of the Interim tax bill and final tax bill (two installments per tax bill).

7. The Pre-Authorized Payment Plan (PAP) and Automatic Tax Installment Withdrawal (ATIW) shall be made available to ratepayers who are not in arrears of taxes.

8. Penalties and interest added on all taxes of the interim tax levy in default shall become due and payable and shall be collected forthwith as if the same had originally been imposed and formed part of such unpaid interim tax levy.

9. That from time to time, there may be charges, fees, costs or other expenses added onto the tax roll, as set forth in the Assessment Act and Municipal Act and any other applicable Acts and the by-laws in force in this municipality. Such charges, fees, costs or other expense shall be deemed to be taxes, collected as taxes, or collected in the same manner as municipal taxes, or dealt with in such fashion as may be specifically authorized by the applicable statute.

10. The Treasurer or delegate may mail or cause the same to be mailed to the residence or place of business of such person indicated on the last revised assessment roll, a written or printed notice specifying the amount of taxes payable.

11. The taxes are payable at the Township of The Archipelago, 9 James Street, Parry Sound, Ontario, or at the T.D. Business Bankline, or the C.I.B.C. Linkup, or Bank of Montreal, or Telpay, or the Royal Bank of Canada-Telebanking, or the Nova Scotia-Telescotia electronic Bill payment service or Credit Union Central of British Columbia or Credit Union Central of Ontario, E-Transfer, Pre-Authorized Payment Plan or Automatic Tax Installment Withdrawal Plan or the Online Payments and eCommerce found on our website.

READ and **FINALLY PASSED** in **OPEN COUNCIL** this **10th** day of **December, 2020**.

THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO

Bert Liverance, Reeve	Maryann Weaver, Clerk