



# AGENDA

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## Town of Lunenburg Council Meeting

Tuesday, January 14, 2020 at 5:15 p.m.

Lunenburg Town Hall, 2<sup>nd</sup> Floor, 120 Townsend Street

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1. Agenda - *motion to approve.*
2. December 10, 17 and 19, 2019 Council meeting minutes - *motion to approve.*
3. Public Hearings and Presentations
  - a. Presentation by Jan Hull, President, Lunenburg Art Gallery Society, respecting a supplementary 2019/20 Grant application for an Earl Bailly collection display (*see also: #7. New Business for Council consideration*).
4. Correspondence
  - a. Department of Municipal Affairs and Housing “12 month notice letter” regarding proposed Police Act Regulation changes to extend the public complaint filing limitation period from six months to one year which aligns with the Royal Canadian Mounted Police Act – *information only.*
5. Committee Meeting Minutes and Recommendations
  - a. Comprehensive Community Plan Project Steering Team December 11, 2019 meeting minutes - *2 x recommendations, Chair Councillor Risser;*
  - b. Recreation/Lunenburg War Memorial Community Centre Committee December 11, 2019 – *3 x recommendations, Chair Councillor Bachman;* and
  - c. Lunenburg Harbour Health Advisory Group November 6, 2019 draft meeting notes.
6. Unfinished Business
  - a. Corporate Services
    - i. Proposed appointment of a Chair to the 2020 Waste Reduction Strategy Working Group and approval of draft Guidelines – *motions to appoint and approve.*
  - b. Public Works
    - i. Solar Summit 2019 conference – *staff report;*

- ii. Dillon Consulting Engineering “peer review” report of CBCL Consulting Engineering’s Wastewater Treatment Plant process upgrade recommendations – *Council discussion deferred from December 17 report presentation; and*
- iii. Splash Pad alternative process for the issuance of a Request for Proposals for its design and construction at a pre-selected location – *Council discussion deferred from December 10 staff report presentation.*

~ Recess ~

7. New Business

a. Corporate Services

- i. Lunenburg Art Gallery Society 2019/20 supplementary Grant application – *(\$1373. 2019/20 balance) motion to consider;*
- ii. Draft Complaints Process Policy – *staff report/draft Policy for Council consideration and possible notice of motion for approval; and*
- iii. Letter from the Municipality of the District of Barrington to all NS Municipalities requesting support for their application to the Provincial Department of Education and Early Childhood Development “to provide a personal development credit to students who join a volunteer fire department and complete the required training” – *motion to consider.*

b. Public Works

- i. Region 6 Solid Waste Resource Management Committee draft 2020/21 Budget (\$139.35/7.5% increase from 2019/20 for the Town of Lunenburg, total 2020/21 expenditure \$1,997.35) - *motion to consider;*
- ii. Additional Pump Station Capital Upgrade Requirement for Fiscal 2019/20 - *motion to consider; and*
- iii. November 2019 Water and Wastewater Plants treatment test results – *staff information report.*

c. Fire Department

- i. LDFD request for Council and Districts 1 and 2 Fire Commission approval to donate surplus firefighting turn out gear to other Lunenburg County Fire Departments, etc. as is where is - *motion to consider.*

8. Adjournment – *motion to adjourn.*

*Agenda items awaiting staff reports, etc. for further consideration*

<u>Agenda Item</u>	<u>Department</u>	<u>Council Meeting Assigned</u>	<u>Status</u>
Proposed amendments to Hack and Trolley Bylaw #56 and #65 Street Encroachment for Building Access Bylaw	Council and Corporate Services	May 28, 2019	Awaiting additional Bylaw housekeeping amendments before advertising second reading and public submissions
Council remuneration and succession recommendations	Corporate Services	December 10, 2019	Staff report being prepared for January 16 General Government Committee meeting
NSFM property assessment "CAP" elimination	Corporate Services	October 10, 2019	Staff report will be prepared
Tannery Road seawall proposed landscaping sketch revised plan with connecting walking path detail	Public Works	September 10, 2019	Public Works preparing a more detailed sketch and will confer with Coastal Action Foundation
Falkland Street pedestrian access	Public Works	June 11, 2019	Staff report to be prepared
Source Water Protection Plan update	Public Works and Engineering Consultant	November 26, 2019	Consultant's Plan updates will be completed by end of January 2020
2020 Recreation/LWMCC resident application advertisement for Council consideration	Corporate Services	December 10, 2019	Vacancy will be advertised for applications

**TOWN COUNCIL MEETING MINUTES**

**TUESDAY, DECEMBER 10, 2019 AT 5:15 P.M.**

**(LUNENBURG TOWN HALL)**

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**PRESENT:** Mayor Rachel Bailey  
Deputy Mayor John McGee  
Councillor Ronnie Bachman  
Councillor Danny Croft  
Councillor Peter Mosher  
Councillor Matt Risser

**ALSO PRESENT:** Paul Bracken, Facilities Superintendent  
Patrick Burke, Q.C., Town Solicitor  
Kelly Cunningham, Recreation Director  
Lisa Dagley, CPA, CGA, Finance Director  
Heather McCallum, Assistant Municipal Clerk  
Bea Renton, Chief Administrative Officer  
Ian Tillard, P.Eng., Consulting Town Engineer

**ABSENT:** Councillor Joseph Carnevale

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The Mayor called the meeting to order at 5:15 p.m.

She expressed appreciation on behalf of Council to the many Lunenburg Board of Trade volunteers who organized the highly successful Yuletide in Lunenburg events over the past two weekends.

1. Agenda

Motion: moved by Councillor Risser, seconded by Councillor Bachman to approve the agenda. Motion carried.

2. November 26, 2019 Council meeting minutes

Motion: moved by Deputy Mayor McGee, seconded by Councillor Mosher to approve the November 26, 2019 minutes. Motion carried.

3. Public Hearings and Presentations

a. Jan Hull, Lunenburg Art Gallery Society President, information presentation

Ms. Hull presented to Council regarding upcoming gallery activities (**Schedule "A"**), including a name change for Paint Sea on Site to Paint Lunenburg Art Festival. She thanked Council for their financial support with this event. Members of the Lunenburg Art Gallery Society in attendance each displayed one of their artworks.

- b. Ben Buckwold, Director, Bikeways and Blue Route Implementation, Bicycle Nova Scotia, "Bikeway Concept Designs, Cross-Town Connector and North-South Link, Phase 3 of the Blue Route Hubs Bikeway Project in the Town of Lunenburg"

Mr. Buckwold presented a summary of their findings along with their full report and route designs for a "cross town connector" route (**Schedule "B"**). Lunenburg is one of three communities that had studies conducted by Bicycle Nova Scotia along with Antigonish and Glace Bay. He noted that their design and plan contain short and long term capital project suggestions and budget estimates for Council to consider in upcoming budgets.

- c. Vicki Savoie, Sustainable Development Director, East Coast, Cermaq Canada Ltd., information presentation regarding proposed Pollock Point to New Harbour Point options to lease South Shore waters for salmon farming and review of regulatory process

Ms. Savoie presented some information about their company and potential plans for a proposed salmon farming leases in Mahone Bay and St. Margaret's Bay from Pollock to New Harbour Points and two other locations in Nova Scotia ocean waters (**Schedule "C"**). The "option to lease" allows Cermaq to collect biophysical data, determine suitability for their operations, and understand the socio-economic context of Nova Scotia.

She explained that Cermaq's options to lease will expire in early 2020 at which time the company will decide whether to proceed with an application to the Department of Fisheries and Aquaculture, to be reviewed under a 2015 regulatory framework. If successful, the application would then go to a network review with Federal counterparts and other Provincial departments. There will be further public engagement opportunities. The final decision making body is an aquaculture review board. If all approvals are met, their operations would begin in several years.

#### 4. Correspondence

The following correspondence was included for information.

- a. Invitation from the Minister Responsible for the Accessibility Act to a December 3 "announcement on accessibility planning by municipalities, post-secondary institutions and other public sector bodies"
- b. Thank you email and report from the Lunenburg Lyme Association for support of their November 16-17 Lyme Conference
- c. Property Valuation Services Corporation (PVSC) report to NSFM Annual Conference 2019

#### 5. Committee Meeting Minutes and Recommendations

The following committee meeting minutes were included for information.

- a. Lunenburg County Regional Emergency Management Organization meeting minutes November 25, 2019

The meeting included a review of the impact of Hurricane Dorian impact with recommendations.

- b. Lunenburg County Seniors' Safety Program information November 2019
- c. Active Transportation Sub-Committee meeting minutes November 27, 2019

- d. Region 6 Solid Waste Management Inter- Municipal Committee meeting minutes September 27, 2019 and December 2019 Board Brief
- e. Joint Occupational Health and Safety Committee November 7, 2019

6. Unfinished Business

a. Corporate Services

i. 2020 Committee appointments confirmation

Committee members subject to re-appointment have all been contacted and most have agreed to re-serve (Schedule "D").

Council will defer discussion of Committee appointments and structures to the General Government Committee of January 16, 2020.

Motion: moved by Councillor Croft, seconded by Councillor Risser that the vacant Committee position(s) be advertised immediately. Motion carried.

Council requested by consensus that a staff report regarding Council remuneration and succession planning be prepared for the January 16, 2020 General Government Committee meeting since the sub-committee to study this has not yet been activated.

ii. Municipal and School Board Election 2016 cost summary

The Finance Director presented her report (Schedule "E"). With the elimination of elected School Boards it was noted that there will be no School Board elections in October 2020. This will impact the former School Board's financial contributions to offset the cost of running their elections, but may somewhat reduce election expenses with reduced advertisement costs.

b. Public Works

i. Scheduling of a future report presentation by Dillon Consulting Engineering regarding their "peer review" of CBCL Engineering's Wastewater Treatment Plant process upgrade recommendations

The report from Dillon Consulting Engineering is due to be received and circulated to Council shortly. A suggested presentation date of December 17, 2019 at 2:00 p.m. is not feasible for all Council members. Staff were asked to find another meeting time and/or date.

ii. Proposed Splash Pad Construction Request for Proposals alternative process

The Facilities Superintendent provided an overview of the staff report (Schedule "F") recommending site selection of the 250<sup>th</sup> Anniversary Park upper above the existing playground as opposed to an engineering site selection analysis and draft RFP or tender terms of reference as budgeted. Council discussed the various sites evaluated in the staff report and relative merits of these sites.

Motion: moved by Councillor Mosher, seconded by Councillor Croft that Council proceed with Option 1 in the staff report (Schedule "F") – use an RFP for the procurement of a splash pad

with the Community Centre instead of the 250<sup>th</sup> Anniversary Park, as the choice location. Splash pad to be built during the 2020/2021 fiscal year pending funding from Lunenburg Community Development Group. Motion defeated. Councillors Bachman and Risser and Mayor Bailey voted in the negative.

Council agreed to: refer this matter to the Comprehensive Community Plan Steering Team meeting tomorrow for consideration; and leave this item on the January 14, 2020 Council agenda.

- iii. “Bikeway Concept Designs, Cross-Town Connector and North-South Link, Phase 3 of the Blue Route Hubs Bikeway Project in the Town of Lunenburg”

Council commented on the benefits of this study for infrastructure enhancement planning and budgeting purposes. Elements could potentially be incorporated in capital repair and replacement projects on a phased-in basis.

Linda Mills, who serves on the Lunenburg County Joint Accessibility Committee, noted that the Province is seeking to make all public places accessible and this report makes recommendations that will serve to improve access wheelchairs, scooters, walkers, etc.

Motion: moved by Councillor Risser, seconded by Councillor Mosher that Council refer the Bikeway Concept Designs report (Schedule “B”) to the Comprehensive Community Plan Project Steering Team for review. Motion carried.

Motion: moved by Councillor Croft, seconded by Councillor Mosher that Council refer the Bikeway Concept Designs report to the Active Transportation Sub-Committee for consideration during their active transportation strategy review, and to Public Works for future capital project consideration. Motion carried.

7:19 p.m. - 7:30 p.m. – Council recessed.

## 7. New Business

### a. Corporate Services

- i. Lunenburg Tennis Club - Lunenburg Athletic Facility Fund (LAFF) Application for \$2000 for tennis court capital repairs

Staff provided an overview of LAFF’s purpose and criteria for capital project consideration only at certain identified facilities in Town.

Motion: moved by Councillor Croft, seconded by Councillor Risser that Council approve the application from the Lunenburg Tennis Club for tennis court capital repairs (Schedule “G”). Motion carried.

- ii. Draft Staff Report Writing Guide for Council and Committee meetings

The CAO provided a summary of the draft Guide (Schedule “H”) as requested by Council.

Motion: moved by Councillor Risser, seconded by Councillor Bachman that the Guide for Writing Staff Reports be adopted as a standard (Schedule “H”). Motion carried.

b. Public Works

- i. Wastewater collection pump station repair requirements and proposed amendment to 2019 Capital budget to fund

The Town Engineer and Finance Director presented their report (**Schedule "I"**), laying out a schedule of capital repairs over the next two fiscal years.

**Motion:** moved by Councillor Risser, seconded by Councillor Croft approval of the following wastewater pump stations expenditures:

- a. \$34,000 including net HST in the 2019/20 budget year for repairs to pumps in 6 lift stations, to be funded from Sewer Reserves.
- b. Pre-approve in the 2020/21 budget year the following amounts:
- i. \$34,000 including net HST for pump repairs not addressed in 6 lift stations, to be funded from Gas Tax;
  - ii. \$21,000 including net HST for repairs to the pumps in the 4 un-assessed lift stations, to be funded from Gas Tax; and
  - iii. \$4,200 including net HST for routine assessment and maintenance by the pump manufacturer's representative as an annual allowance. This operating expense will be funded from Sewer Rates beginning in 2020/21.
- c. Pre-approve in the 2021/22 budget year the following amount:
- i. \$45,000 including net HST for the purchase of 5 rotating assembly spares, one for each pump type, to be funded from Gas Tax. (Schedule "I"). **Motion carried.**

8. Motion to meet in camera

**Motion:** moved by Councillor Risser, seconded by Councillor Bachman to meet in camera to consider contract negotiations, the sale and lease of Town lands and personnel matters pursuant to section 22 of the Municipal Government Act. **Motion carried.**

7:40 p.m. – Council recessed and met in camera.

9. Consideration of any Council in camera meeting recommendations

Council reconvened in public session at 9:41 p.m. with no recommendations.

10. Adjournment

**Motion:** moved by Councillor Risser, seconded by Councillor Bachman to adjourn the meeting. **Motion carried.**

The meeting was adjourned at 9:42 p.m.

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Bea Renton, CAO and  
Heather McCallum, Assistant Municipal Clerk

## TOWN COUNCIL MEETING MINUTES

TUESDAY, DECEMBER 17, 2019 AT 3:30 P.M.

(LUNENBURG TOWN HALL)

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**PRESENT:** Mayor Rachel Bailey (left at 5:02 p.m.)  
Deputy Mayor John McGee  
Councillor Danny Croft  
Councillor Peter Mosher  
Councillor Matt Risser

**ALSO PRESENT:** Lisa Dagley, CPA, CGA, Finance Director  
Heather McCallum, Assistant Municipal Clerk  
Bea Renton, CAO  
Ian Tillard, P.Eng., Consulting Town Engineer

**ABSENT:** Councillor Ronnie Bachman  
Councillor Joseph Carnevale

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The Mayor called the meeting to order 3:36 p.m.

### 1. Agenda

**Motion:** moved by Councillor Risser, seconded by Deputy Mayor McGee, to approve the agenda. **Motion carried.**

### 2. Presentation by Kyle MacIntyre, P. Eng., and David McKenna, P. Eng., Dillon Consulting Engineering, regarding Wastewater Treatment “peer review” of CBCL Consulting Engineering wastewater treatment system upgrade and outfall extension report

The engineers from Dillon presented their report (**Schedule “A”**).

Dillon noted that the Lunenburg Wastewater Treatment Plant (WWTP) is currently 16 years old, and has a much longer lifespan ahead of it with upgrades.

### 3. Questions and answers of Dillon Consulting Engineering

In response to Council questions, the engineers provided the following additional information in summary:

- CBCL did a very technical approach in their recommendations, which doesn't mean there aren't more options. For example, some large municipalities have clusters of smaller plants, which is very capital cost intensive, and had to go through costly rocky excavations. It depends on the risk tolerance of the municipality – some want newer technology solutions, which come with operational and economic risk. Dillon generally recommends proven technologies as well.

- In response to a question about possible tighter Federal and Provincial guidelines in future, Dillon responded that the current WWTP can be upgraded to consistently meet or better current guidelines.
- In response to a question about odours, Dillon explained that odours can come from the headworks which are pumped to the Biofilter which has reduced odours. In regards to the cause of the smell, Dillon explained that some commercial operations release high concentration organic wastewater or oil and grease which needs to be addressed.
- Sea water intrusion is likely to continue with tidal water getting into storm sewers and road salt.
- Dillon recommends that with any treatment system upgrade Council decides on, the treated effluent outfall extension should be done. There would be an environmental risk assessment involved in deciding where to move it. Pumping the effluent farther away from shore may also require new pumps.
- It was not in their scope of work to review the Town's existing Sewer Discharge Bylaw, but updates may be advisable.
- The existing treatment system can be adjusted for expansion.
- Their costing is very preliminary (+/- 30%) and based on similar projects. The more the design is fine-tuned the more accurate cost estimates will be.

5:02 p.m. - Mayor Bailey left the meeting and Deputy Mayor McGee took over as Chair.

#### 4. Discussion regarding next steps

Council agreed that the peer review has been extremely helpful, and has also opened up more options for consideration. They agreed by consensus to defer further discussion on next steps until they can digest today's information and all Councillors are present.

#### 5. Adjournment

Motion: moved by Councillor Risser, seconded by Councillor Mosher, to adjourn the meeting. Motion carried.

The meeting was adjourned at 5:06 p.m.

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Bea Renton, CAO and  
Heather McCallum, Assistant Municipal Clerk

**LUNENBURG TOWN COUNCIL MEETING MINUTES**

**THURSDAY, DECEMBER 19, 2019 AT 1:30 P.M.**

**(LUNENBURG TOWN HALL)**

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**PRESENT:** Mayor Rachel Bailey  
Deputy Mayor John McGee  
Councillor Ronnie Bachman  
Councillor Danny Croft  
Councillor Peter Mosher (arrived 1:35 p.m.)  
Councillor Matt Risser

**ALSO PRESENT:** Lisa Dagley, CPA, CGA Finance Director  
Bea Renton, CAO

**ABSENT:** Councillor Joseph Carnevale

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The Mayor called the meeting to order at 1:34 p.m.

1. Agenda

Motion: moved by Councillor Risser, seconded by Deputy Mayor McGee to approve the agenda. Motion carried.

2. Motion to meet in camera

Motion: moved by Councillor Risser, seconded by Deputy Mayor McGee to meet in camera to consider contract negotiations and matters subject to solicitor-client privilege pursuant to section 22, Municipal Government Act. Motion carried.

1:35 p.m. – Councillor Mosher arrived and Council recessed to meet in camera.

3. Resumption of Council meeting in public session

Council reconvened in public session at 3:05 p.m. with one recommendation to consider.

Motion: moved by Councillor Risser, seconded by Councillor Bachman approval of the expenditure of \$125,000 from the 2019/20 Capital budget to install Brook Street overflowing piping. Motion carried.

4. Adjournment

Motion: moved by Councillor Risser, seconded by Councillor Mosher to adjourn the meeting. Motion carried.

The meeting was adjourned at 3:05 p.m.

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Bea Renton, CAO

Schedule "A"

**TOWN OF LUNENBURG  
COMMUNITY GRANTS PROGRAM APPLICATION FORM**

Please review the attached Town of Lunenburg Procedural Policy: Community Grants Program before completing this Application. Attach all the additional information requested before submitting your application. Applications must be received by **March 31<sup>st</sup>**.

Name of Non-Profit Organization: Lunenburg Art Gallery Society

Primary Contact Person: Jan Hull, President

Daytime phone number ( Work  Cell  Home): 902-644-3756

Mailing Address: PO Box 1418, Lunenburg B0J 2C0

Fax Number: \_\_\_\_\_ E-mail Address: president@lunenburgartsociety.ca

Organization Website: www.lunenburgartgallery.com

1. Amount of funding requested: \$ 1,000.00

In-kind Town of Lunenburg services requested: —

2. The organization is a:

NS registered society name Lunenburg Art Gallery Society

Registered National Charity name## N/A

Other (please describe) \_\_\_\_\_

3. The geographic area serviced by the organization is: Lunenburg Town and surrounding area

4. Please describe, in detail, the specific use of the funds requested. Attach additional sheet if needed.

We will build a fixed display unit within our Gallery to display some of the art and artifacts of Earl

Bailly, on a rotating basis. This display will show Bailly's fine artwork, while illustrating some of the  
challenges he worked with. It will also be a focal point for appeals for development of the Bailly Collection.

5. How will the community benefit from the funds received?

Earl Bailly was honoured as a Prominent Citizen of the Town of Lunenburg, and his art has

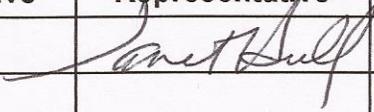
been praised internationally. Development of the Bailly Collection will once again permit the community

to admire his work and share his story. The developed Collection will be a major tourist draw.

**Please include the following information with your completed application:**

- Financial Statements from your last fiscal year.
- Budget for the current fiscal year.
- Project budget and funding sources summary.
- Previous post grant report confirming use of earlier approved grant monies (if applicable).

I/we, the undersigned, hereby state that, to the best of our knowledge, all information contained in this application form and any attachments are a true representation of our proposed project and I/we will comply with the terms and conditions of an approved Town grant.

Printed Name of Authorized Representative	Signature of Authorized Representative	Position Held in Organization	Date MM / DD / YY
Jan Hull		President	12/10/19

Please return this form and all requested information by mail, fax, email or in person to:

**Community Grant Program**  
 Town of Lunenburg - Finance Director  
 PO Box 129  
 119 Cumberland Street  
 Lunenburg, NS B0J 2C0  
 (Fax): 902-634-4416, [ldagley@explorelunenburg.ca](mailto:ldagley@explorelunenburg.ca)

# LUNENBURG ART GALLERY SOCIETY 2018 FINANCIAL STATEMENT

3 of 5

Income	Total
Gallery Sales	31,441.00
Workshops	6,160.00
PSOS	24,644.15
ABOAC	200.00
High Tea	1,103.00
Membership	3,735.00
Donations	11,767.95
Grant receipts	1,125.00
Other income	2,759.64
<b>Total income</b>	<b>82,935.74</b>

Expenses	Total
Rent	8,850.00
Power & Water	1,704.06
Insurance	2,025.50
Renovations	4,275.79
Office	28,403.28
Advertising	780.57
Supplies openings	410.04
Payments to artists	31,292.46
Gallery exps	493.37
Workshop exp	4,753.95
PSOS expenses	2,025.68
Refunds	340.00
High tea	180.87
ABOC	855.00
Purchases	60.00
<b>Total expenses</b>	<b>86,450.57</b>

**Income less expenses (3,514.83)**

2019 FORECAST

A	B	C	D	E	F	G	H	I	J
1	<b>ACCOUNTS</b>	<b>2018 ACTUAL</b>	<b>COMMENTS</b>		<b>2019 FORECAST</b>	<b>COMMENTS</b>		<b>*NOTES</b>	
2	<b>Income</b>				<b>Income</b>				
3	Gallery Sales	31,441.00			24,000	8% increase in sales		1	
4	GIFTED gift shop	-	New		10,000	"		1	
5	Workshops	6,160.00			0	Discontinued		3	
6	PSOS	24,644.15			24,000	At capacity; no increase expected		2	
7	ABOAC	200.00			0	Discontinued		4	
8	High Tea	1,103.00			0	Discontinued		4	
9	Membership	3,735.00	125 @ \$30		5,000	125 @ \$40 dues			
10	Donations	11,767.95	\$10k bequest		2,000	Developing donors list		5	
11	Grant receipts	1,125.00			5,500			6	
12	Other income	2,759.64			2,000	Fundraising		4	
13	<b>Total income</b>	<b>82,935.74</b>			<b>72,500</b>	13% reduction			
14									
15									
16	<b>Expenses</b>				<b>Expenses</b>				
17	Rent	8,850.00			9,600	\$800/mo ( + HST recoverable)			
18	Power & Water	1,704.06			2,400				
19	Insurance	2,025.50			2,300	Tenant, D&O, Special events			
20	Renovations	4,275.79			1,600	Maintenance & display costs			
21	Office	28,403.28			14,000	Payroll + office expenses		7	
22	Advertising	780.57			1,500	Marketing brochures + advt		8	
23	Supplies openings	410.04			1,200	Refreshments for 8 openings			
24	Payments to artists	31,292.46	Combined		23,800	70% of Gallery sales		1, 2	
25	Payments PSOS sales		New		11,000	50% of PSOS net sales		2	
26	Gallery exps	493.37			0	Incl in Office			
27	Workshop exp	4,753.95			0	Discontinued		3	
28	PSOS expenses	2,025.68			2,500	Rental, signs, advt		2	
29	Refunds	340.00			0				
30	High tea	180.87			0	Discontinued		4	
31	ABOAC	855.00			0	Discontinued		4	
32	Earl Bailly Collection	-	New		1,000	Collecting, cataloguing, display		9	
33	ArtBUS	-	New		1,500	One-day schoolbus rental		10	
34	Purchases	60.00			0				
35	<b>Total expenses</b>	<b>86,450.57</b>			<b>72,400</b>	16% reduction			
36	<b>Income less expenses</b>	<b>(3,514.83)</b>			<b>100</b>				
37									
38	<b>NOTES to 2019:</b>								
39	With a significant shortfall confronting us for 2019, we plan to curtail spending.								
40	We will also curtail workshops and any other projects that call volunteers away from our primary								
41	responsibility of operating the Galleries, Paint Lunenburg (PSOS), and outreach events.								
42	We are confident of this Budget.								
43	1. <b>GALLERY SALES:</b> includes Members' and Exhibitions galleries plus the renewed and renamed GIFTED shop.								
44	2. <b>PSOS:</b> Paint Lunenburg Art Festival is our plein air painting event July 20-21 in Lunenburg. 70 artists.								
45	3. <b>WORKSHOPS:</b> earned \$1400 but volunteer demands were too great. We won't sponsor any in 2019.								
46	4. <b>FUNDRAISING:</b> 2018 events netted \$268 after many volunteer hours. New F/R methods are planned for 2019								
47	5. <b>DONATIONS:</b> one bequest for over \$10,000 saved 2018 from catastrophe. We are cultivating a donor list.								
48	6. <b>GRANTS:</b> includes Lunenburg Foundation for the Arts \$600 for 2019 School Show; MODL bal of 2018 AO grant								
49	7. <b>PAYROLL 2019:</b> reduced operating hours by 40% to avoid losses; members will volunteer for weekend shifts.								
50	8. <b>MARKETING PROGRAM - NEW:</b> brochures, advts, to increase awareness in Hfx and other centres, to grow sales								
51	9. <b>EARL BAILLY - NEW:</b> our volunteer Curator of this historic art collection is taking steps to house and promote it								
52	10. <b>ARTCaravan - NEW:</b> A focus on outreach: pop-up art shows in rural MODL neighbourhoods								

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# LUNENBURG Art SOCIETY

LUNENBURG ART GALLERY SOCIETY  
194B Lincoln Street | PO Box 1418 Lunenburg NS B0J 2C0  
(902) 640-4044 info@lunenburgartsociety.ca  
www.lunenburgartgallery.com

## EARL BAILLY DISPLAY PROJECT 2019 BUDGET

### EXPENSES

Construction materials	\$ 500
Labour	\$ 800
Electrician	\$ 500
Display décor	\$ 400
TV/DVD player	<u>\$ 250</u>
<b>TOTAL COST</b>	<b>\$2450</b>

### REVENUE

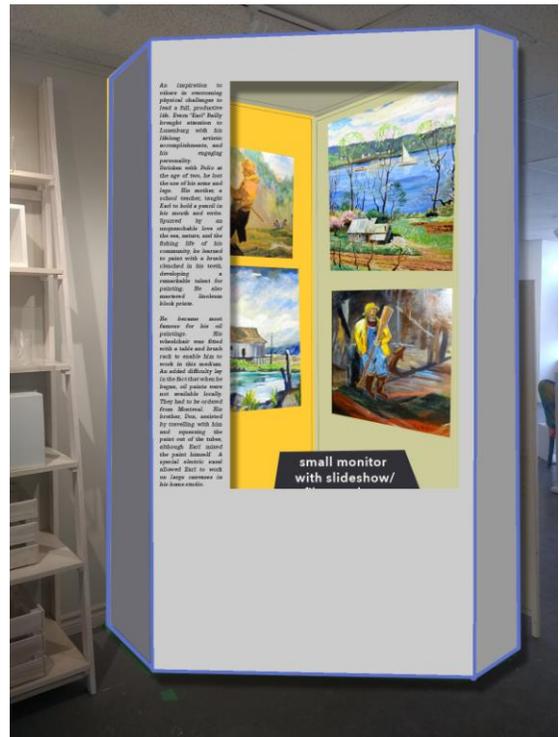
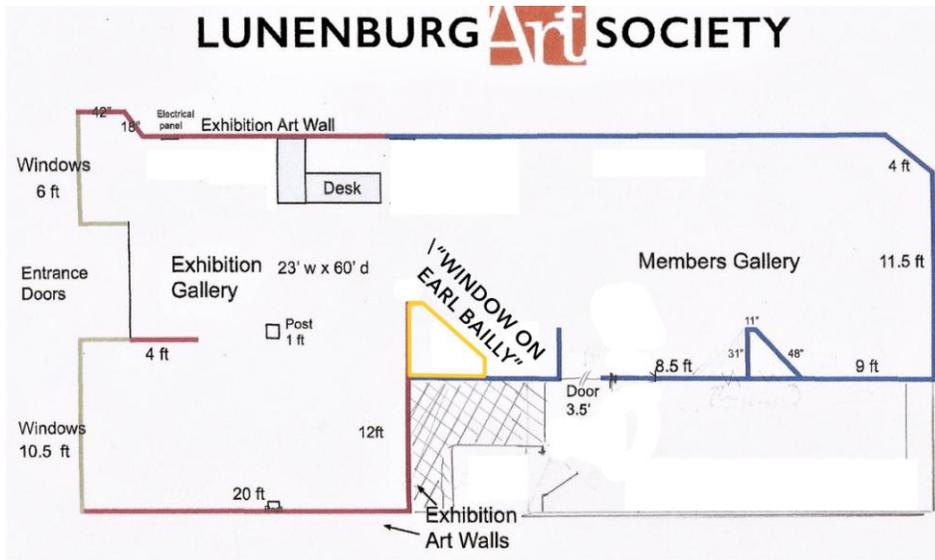
Labour	\$ 800	LAGS members
Display décor	\$ 400	LAGS members
TV/DVD	<u>\$ 250</u>	Donated
<b>TOTAL REVENUE</b>	<b>\$1450</b>	

<b>BALANCE</b>	<b>(\$1000)</b>	<b>Grant requested from Town of Lunenburg</b>
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# LUNENBURG Art SOCIETY

LUNENBURG ART GALLERY SOCIETY  
 194B Lincoln Street | PO Box 1418 Lunenburg NS B0J 2C0  
 (902) 640-4044 info@lunenburgartsociety.ca  
 www.lunenburgartgallery.com

## EARL BAILLY DISPLAY SKETCHES (subject to minor alterations)



## Ann Covey

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**Subject:** 4 Coun Jan 14 20 Department of Municipal Affairs 12 month notice letter regarding proposed Police Act Regulation changes to extend the complaint filing limitation period from six months to one year

**Attachments:** 12 month notice - MGA and Police Act.pdf

**From:** Bezanson, Andrea [<mailto:Andrea.Bezanson@novascotia.ca>]

**Sent:** December-19-19 11:29 AM

**To:** Atwood, Tammy <[clerk@clarksharbour.com](mailto:clerk@clarksharbour.com)>; Beaudin, Erin <[ebeaudin@wolfville.ca](mailto:ebeaudin@wolfville.ca)>; Berthier Sampson, Darlene <[cao@townofmulgrave.ca](mailto:cao@townofmulgrave.ca)>; Bogle, Dale <[dbogle@stewiacke.net](mailto:dbogle@stewiacke.net)>; Boyd, Jennifer <[jboyd@town.middleton.ns.ca](mailto:jboyd@town.middleton.ns.ca)>; Brooks, Victoria <[victoria@district.yarmouth.ns.ca](mailto:victoria@district.yarmouth.ns.ca)>; Brown, Linda <[linda.brown@westville.ca](mailto:linda.brown@westville.ca)>; Bugley, Rennie <[rbugley@cumberlandcounty.ns.ca](mailto:rbugley@cumberlandcounty.ns.ca)>; Carroll, Barry <[bcarroll@modg.ca](mailto:bcarroll@modg.ca)>; Conrad, Sherry <[sherry.conrad@modl.ca](mailto:sherry.conrad@modl.ca)>; Conrod, Scott <[sconrod@countyofkings.ca](mailto:sconrod@countyofkings.ca)>; Crowell, Debra <[dcrowell@kentville.ca](mailto:dcrowell@kentville.ca)>; Cullen, Brian <[brian.cullen@munpict.ca](mailto:brian.cullen@munpict.ca)>; Cyr, Stephane <[cao@municipality.clare.ns.ca](mailto:cao@municipality.clare.ns.ca)>; Dolter, Mike <[mdolter@truro.ca](mailto:mdolter@truro.ca)>; Doyle, Terry <[tdoyle@townofph.ca](mailto:tdoyle@townofph.ca)>; Dube, Jacques <[dubej@halifax.ca](mailto:dubej@halifax.ca)>; Ferguson, John <[cao@annapoliscounty.ca](mailto:cao@annapoliscounty.ca)>; Fraser, Linda <[lfraser@municipality.digby.ns.ca](mailto:lfraser@municipality.digby.ns.ca)>; Frotten, Chris <[cfrotten@barringtonmunicipality.com](mailto:cfrotten@barringtonmunicipality.com)>; Gushue, Jeffrey <[cao@townofyarmouth.ca](mailto:cao@townofyarmouth.ca)>; Heide, Dylan <[dylan.heide@townofmahonebay.ca](mailto:dylan.heide@townofmahonebay.ca)>; Herrett, Greg <[gherrett@amherst.ca](mailto:gherrett@amherst.ca)>; Higdon, Susan <[susan.higdon@stellarton.ca](mailto:susan.higdon@stellarton.ca)>; Horne, Glenn <[glenn.horne@antigonishcounty.ns.ca](mailto:glenn.horne@antigonishcounty.ns.ca)>; Jones, Rachel <[CAO@oxfordns.ca](mailto:CAO@oxfordns.ca)>; Lawrence, Jeffery <[jlawrence@townofantigonish.ca](mailto:jlawrence@townofantigonish.ca)>; Laycock, Martin <[mlaycock@westhants.ca](mailto:mlaycock@westhants.ca)>; MacDonald, Keith <[keith.macdonald@invernesscounty.ca](mailto:keith.macdonald@invernesscounty.ca)>; MacDonald, Lisa <[lisa.macdonald@newglasgow.ca](mailto:lisa.macdonald@newglasgow.ca)>; MacDonald, Marvin <[marvin.macdonald@saint-marys.ca](mailto:marvin.macdonald@saint-marys.ca)>; MacEachen, Leanne <[leanne.maceachen@countyvictoria.ns.ca](mailto:leanne.maceachen@countyvictoria.ns.ca)>; MacEwan, Tom <[tom.macewan@modl.ca](mailto:tom.macewan@modl.ca)>; Marchand, Don <[dmarchand@richmondcounty.ca](mailto:dmarchand@richmondcounty.ca)>; McDougall, Dan P. <[dmcdougall@chester.ca](mailto:dmcdougall@chester.ca)>; McNeill, Chris <[cmcneill@regionofqueens.com](mailto:cmcneill@regionofqueens.com)>; Mitchell-MacEwan, Sheralee <[smacewan@easthants.ca](mailto:smacewan@easthants.ca)>; Muise, Alain <[admuisse@munargyle.com](mailto:admuisse@munargyle.com)>; Ossinger, Tom <[eossinger@digby.ca](mailto:eossinger@digby.ca)>; Payne, Michael <[mpayne@berwick.ca](mailto:mpayne@berwick.ca)>; Phillips, Mark <[MPhillips@westhants.ca](mailto:MPhillips@westhants.ca)>; Ramsay, Kim <[cao@easthants.ca](mailto:cao@easthants.ca)>; Bea Renton <[brenton@explorelunenburg.ca](mailto:brenton@explorelunenburg.ca)>; Rice, Kelly <[cao@kentville.ca](mailto:cao@kentville.ca)>; Richard, Todd <[todd.richard@town.windsor.ns.ca](mailto:todd.richard@town.windsor.ns.ca)>; Shupe, Darren <[cao@town.shelburne.ns.ca](mailto:cao@town.shelburne.ns.ca)>; Simonds, Rob <[rsimonds@colchester.ca](mailto:rsimonds@colchester.ca)>; Smith, Ken <[ken.smith@municipalityofshelburne.ca](mailto:ken.smith@municipalityofshelburne.ca)>; Teasdale, Wayne <[Wayne.Teasdale@trenton.ca](mailto:Wayne.Teasdale@trenton.ca)>; Town of Truro Admin <[jgallant@truro.ca](mailto:jgallant@truro.ca)>; Troke, Dan <[dan.troke@townofpictou.ca](mailto:dan.troke@townofpictou.ca)>; Walsh, Marie <[mjwalsh@cbrm.ns.ca](mailto:mjwalsh@cbrm.ns.ca)>; Wilson, Tammy (Crowder) <[tammy.crowder@bridgewater.ca](mailto:tammy.crowder@bridgewater.ca)>; Young, Joyce <[townoflockeport@ns.sympatico.ca](mailto:townoflockeport@ns.sympatico.ca)>

**Cc:** Amanda Bell <[abell@nsfm.ca](mailto:abell@nsfm.ca)>

**Subject:** 12 month notice

Good morning,

Please find attached a 12 month notice letter from the Office of Municipal Affairs and Housing, sent on behalf of Minister Chuck Porter.

Andrea Bezanson  
Office Administrative Coordinator  
Department of Municipal Affairs and Housing  
8N-1505 Barrington Street

 (902) 424-2862

 (902) 424-0821



**Municipal Affairs and Housing  
Office of the Minister**

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PO Box 216, Halifax, Nova Scotia, Canada B3J 2M4 • Telephone 902-424-5550 Fax 902-424-0581 • novascotia.ca

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DEC 19 2019

Juanita Spencer  
Chief Executive Officer  
Nova Scotia Federation of Municipalities  
Suite 1304, 1809 Barrington Street  
Halifax, NS  
B3J 3K8

Dear Ms. Spencer:

**Re: Notice under Section 519 of the *Municipal Government Act* of Regulations under the *Police Act***

Please accept this letter as official notice to the Nova Scotia Federation of Municipalities under Section 519 of the *Municipal Government Act* of anticipated changes to the *Police Regulations* made under the *Police Act*. These changes were discussed with you at a meeting on October 24, 2019 with representatives from the Departments of Justice and Municipal Affairs and Housing. While the effective date of this regulatory change has yet to be determined, it will be at least one year from the date of this letter to ensure the required notice is provided.

The Minister of Justice has sought an amendment to Section 29 of the *Police Regulations* made under the *Police Act* to extend the timeframe for filing a public complaint against municipal police from 6 months to one year, with the ability for the Police Complaints Commissioner to further extend the timeline where the Commissioner considers there to be good reasons for doing so and it is not contrary to the public interest. This change will align with that for RCMP officers in the *Royal Canadian Mounted Police Act*. This change is prospective in effect and will not permit complaints where the conduct complained of was more than one year before the date the regulatory amendment takes effect.

The change was formally requested by the Halifax Board of Police Commissioners following Dr. Scot Wortley's report on street checks issued earlier this year which stated the 6-month timeframe was identified as a concern during community consultations. The independent Office of the Police Complaints Commissioner has also requested this timeframe be extended. At its core, the current timeframe of 6 months for a public complaint against municipal police is an issue of access to justice for those who wish to file a complaint because of alleged police misconduct, and an amendment is relevant province-wide.

The Office of the Police Complaints Commissioner currently tracks the number of complaints denied for being outside the existing 6-month filing timeframe. For 2016-2018 the following outlines the number of total complaints and the number denied as untimely:

.../2

- 2016 – 121 public complaints filed within the 6-month timeframe; four complaints not processed due to being filed outside of the 6-month timeframe;
- 2017 – 154 public complaints filed within the 6-month timeframe; 10 complaints filed outside of the 6 months were not processed;
- 2018 – 197 public complaints filed within the 6-month timeframe; nine complaints filed outside of the 6 months were not processed.

We understand additional costs are not incurred for most complaints as these are investigated by the Chief or delegate. Costs are primarily incurred when:

- A complaint results in a meeting of the police agency and the member under Section 44(3) of the *Police Regulations* following the police chief's determination that there *may* be some merit to the allegation as a member is entitled to legal representation at this meeting (may be provided by union legal counsel);
- A complaint is advanced to the Review Board and a hearing takes place;
- A complaint is advanced to the Review Board but a settlement is negotiated prior to a hearing taking place;
- A complaint involves a police chief and is investigated by a barrister instead of another police chief.

Costs associated with Review Board hearings can vary considerably based on the complexity and length of the hearings and what, if any, settlement discussions take place. Other costs relate to the provision of legal representation to members at disciplinary meetings; this expense is often limited as members are frequently represented by legal counsel for their union. Of the total number of public complaints filed each year, few proceed to a Review Board hearing. Between 2016 and 2018, 472 public complaints were filed but only three Review Board hearings were held. There were two hearings in 2016, one hearing in 2017, none in 2018, and five heard or pending for 2019.

It is possible that increasing the time frame for filing a public complaint will result in increased expenditures to municipalities, but the extent of increase may be difficult to predict. Representatives of the Department of Justice discussed this regulatory change with members of the Association of Municipal Administrators during a call on July 18, 2019. Following the call, municipal CAO's provided the following breakdown of costs by municipality as provided by the CAO's for 2016-2018. Several municipalities did not provide any costing to support the number of complaints listed and the costs provided included both public and internal complaints, however, the proposed amendment will only apply to public complaints.

Municipality	# Public Complaints	# Internal Complaints	Total Complaints (2016-18)	Cost
Cape Breton	58	20	78	\$156,493
Halifax	340	78	418	
Amherst	13	9	22	
Annapolis Royal*	0	0	0	
Bridgewater**	1	2	3	\$65,000
Kentville	8	0	8	
New Glasgow	8	18	26	
Stellarton	17	1	18	
Truro	21	13	34	
Westville	4	0	4	
<b>Total</b>	<b>470</b>	<b>141</b>	<b>611</b>	

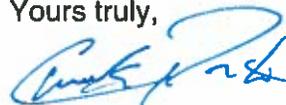
\* No hearings in 2016-18 but paid \$150,000 over 5 years ago (\$30,000 paid by municipality, \$120,000 under insurance policy). \*\* Covers costs from 2014-2018.

In addition, HRM and CBRM have collective agreements (CA) addressing costs paid by the municipalities toward public complaints. Section 30.01 of the CBRM CA requires the employer to provide a solicitor at no cost to the employee where a public complaint has been filed under the *Police Act*. Article 23, section 10 of the HRM CA requires the municipality to pay a maximum of \$75,000 per fiscal year, cumulatively, for legal representation on all public complaints under the *Police Act* for which the complaint is not sustained.

I trust this information sufficiently identifies the anticipated changes to the *Police Regulations* and the potential associated costs. I ask that you please bring this letter to the attention of the Board of Directors of the Nova Scotia Federation of Municipalities at your earliest opportunity.

Should you require further information please do not hesitate to contact Wanda Fletcher, Department of Justice at 424-3178 regarding this important issue.

Yours truly,



Chuck Porter  
Minister

- c. Honourable Mark Furey, Attorney General and Minister of Justice  
Mark Peck, Executive Director, Municipal Affairs and Housing  
Wanda Fletcher, A/Executive Director, Department of Justice

**Comprehensive Community Plan**  
**Project Steering Team Meeting**  
**Wednesday, December 11, 2019**  
**Recommendations**

1. That it be recommended to Council that Council not accept any additional Municipal Planning Strategy amendments until the CCPSPT project is complete.
2. To recommend to Council to adopt option 2.5:

***2.5. Complete Project Lunenburg, then check Heritage Conservation District Plan and By-law for alignment.***

*Wait until Project Lunenburg is complete prior to adoption of the new Heritage Conservation Plan and By-law. The architectural control areas would have to remain in the new MPS and be removed via an amendment later. The proposed Heritage Conservation District Plan and By-law would be reviewed for alignment with the CCP. This could be carried out in house or by the consultant, who is most familiar with all of the background data and strategic directions. This would be a change in scope, which would have budget implications.*

## MEETING NOTES

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### Comprehensive Community Plan

### Project Steering Team Meeting

Wednesday, December 11, 2019 at 3:00 p.m.

Lunenburg Town Hall, 2<sup>nd</sup> Floor, 120 Cumberland  
Street

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#### **PRESENT:**

##### **Voting members of the Steering Team:**

Councillor Matt Risser, Chair  
Deputy Mayor John McGee  
Councillor Peter Mosher  
Peter Goforth, Qualified Expert (arrived at 4:21 p.m.)  
Cheryl Lamerson, Citizen Representative  
Bill Rice, Citizen Representative  
Gerry Rolfsen, Qualified Expert  
Susan Sanford, Qualified Expert

##### **Non-voting, ex-officio members:**

Dawn Sutherland, Planning and Development Manager (PDM), CCP Project Manager  
Mayor Rachel Bailey  
Terry Drisdelle, Senior Planner, Develop Nova Scotia

**ALSO PRESENT:** Erica Brook, UPLAND Planning and Design Studio

**REGRETS:** Norma Schiefer, Development Officer, Municipality of the District of Lunenburg  
Arthur MacDonald, Heritage Manager  
Ian Tillard, Consulting Engineer

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The Chair called the meeting to order at 3:01 pm.

#### 1. Agenda

**Motion:** moved and seconded that the agenda be approved as amended to include 4.f. Discussion on new MPS applications and special projects that come before Council. Motion carried.

#### 2. Review of notes from previous meetings

Motion: moved and seconded that the minutes of October 9, 2019 be approved as circulated with an additional notation about communication with stakeholders. Motion carried.

### 3. Unfinished Business

#### a. UPLAND's upcoming Stakeholder engagement activities

Ms. Brook advised that the stakeholder meetings are in process and are going well. She recently met with the Lunenburg Waterfront Association and will be meeting with the Lunenburg Heritage Society in the near future.

#### b. Discussion on Metrics (Prioritization) updated "Prioritization Framework" document (if necessary)

Nothing further to report at this time. It was agreed to remove this item from the next meeting agenda.

### 4. New Business

#### a. Review of Progress Report

The PDM reviewed the November Progress Report and the financial costs to date (Schedule "A").

#### b. Update on Town engagement activities

It was agreed to remove this item from the next meeting agenda as Town Staff carry out the same duties each month.

#### c. What we have heard so far

Ms. Brook advised that the "What We Heard" report for Arts and Culture will be sent out to Steering Team members next week. In reference to the Environment and Sustainability document, she explained that conservation zoning was akin to an environmental conservation area where certain activities would be prohibited or highly regulated.

#### d. Engagement Work Plan – Enhanced Meeting Reporting

The next community engagement session will be on economic development. Neil Lovitt of Turner Drake and Partners Ltd. will lead with a presentation with a workshop following.

There will be another public session at on January 9 regarding economic development and January 23 about governance and collaboration.

Uplands will be conducting surveys of the hospitality and tourism sector as well as with developers.

e. Discussion on how Project Lunenburg and the Heritage Conservation District Plan and By-law work together

The PDM provided an overview of her staff report (**Schedule “B”**) regarding this group’s potential review of the draft Heritage Conservation District Plan and By-law in view of the perspective of Project Lunenburg. The Built Heritage and Streetscape What We Heard Report noted a significant theme related to divergent views on architectural preservation with total heritage preservation on one side and less regulation and permitting of modern development on the other side. The timing of the process and approvals of Project Lunenburg and the proposed Heritage Conservation District Plan and By-law were discussed. It is important that there be an alignment between the documents of Project Lunenburg and the proposed Heritage Conservation District Plan and By-law.

Gerry Rolfsen explained the reasoning behind the acceptance of modern, subordinate additions to heritage properties. It is suggested that new construction in Old Town should not look like fake old buildings and additions. The current work of the Heritage Advisory Committee in revising the Town’s Heritage Conservation Plan and By-law could be of concern because it may not provide for a fuller opportunity for modern additions to existing buildings and new construction. It was not based upon all the public engagement that has been part of Project Lunenburg

The group discussed the options put forth in the staff report including possibly aligning the CCPPST and Heritage Conservation District By-law and Guidelines.

It was agreed by consensus to proceed with option 2.5 in the staff report which provides: “Complete Project Lunenburg by recommending this to Council.

***2.5. Complete Project Lunenburg, then check Heritage Conservation District Plan and By-law for alignment.***

*Wait until Project Lunenburg is complete prior to adoption of the new Heritage Conservation Plan and By-law. The architectural control areas would have to remain in the new MPS and be removed via an amendment later. The proposed Heritage Conservation District Plan and By-law would be reviewed for alignment with the CCP. This could be carried out in house or by the consultant, who is most familiar with all of the background data and strategic directions. This would be a change in scope, which would have budget implications.*

4.f. Discussion on new MPS applications and special projects that come before Council.

The PDM shared information with steering team regarding proposed cycling infrastructure upgrades and the construction of a splash pad in the community which Town Council considered at their meeting last night (**Schedule “C”**) and whether Uplands should comment on these proposed projects, e.g., site location or other issues? Ms. Brook advised that Uplands is already working with Bicycle NS who prepared the Town Council report so they are familiar with their cycling recommendations in the preparation of their own report. As well, they are aware of the discussion about a splash pad, but their report will not be so specific as to state where it should be located. Uplands prepared a recreation facility report

that can be reviewed by Council for background information. A copy of the splash pad staff report will also be shared with Uplands for their information.

Motion: moved and seconded that it be recommended to Council that Council not accept any additional Municipal Planning Strategy amendments until the CCPSPT project is complete. Motion carried.

5. Correspondence

- a. Email from Virginia Stephen, Lunenburg Foundation for the Arts, dated 28 November 2019

The email was received for information.

6. In camera portion

Motion: moved and seconded to meet in camera to discuss a potential contract negotiation matter. Motion carried.

Ms. Brook left the meeting room.

7. Resumption of Council meeting in public session

The Steering team resumed their meeting in public session.

Motion: moved and seconded to recommend to Council to adopt option 2.5. Motion carried.

Mr. Goforth arrived at 4:21 p.m.

8. Next Meeting Dates

- a. Steering Team meeting: Wednesday, 8 January 2020, 3 pm, Council Chambers
- b. ECONOMIC DEVELOPMENT Community Workshop, Thursday, 9 January, 6:00–8:00 pm, Lunenburg Fire Hall.
- c. GOVERNANCE AND COLLABORATION Community Workshop, Thursday 23 January 6:00-8:00 pm, Lunenburg Fire Hall  
COMMUNITY WORKSHOP STORM DATE: Thursday, 30 January 2020

9. Adjournment

Motion: moved and seconded that the meeting be adjourned. Motion carried.

The meeting adjourned at 4:34 p.m.

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Bea Renton, Chief Administrative Officer

**LUNENBURG WAR MEMORIAL COMMUNITY CENTRE COMMITTEE MEETING**

**DECEMBER 11, 2019 – RECOMMENDATIONS**

1. It is recommended that Town Council investigate the installation of “Share the Road” signage for cycling safety as noted in the AT Strategic Plan (Schedule “A”).
2. It is recommended that Town Council send a letter of support for “The Great Trail Loop” (Schedule “B”).
3. It is recommended that Town Council pre-approve a propane ice resurfacer purchase in fiscal 2020/21 estimated at \$125,000 plus HST to be funded through a fundraising campaign and the ice resurfacer reserve fund (Schedule “E”).

**LUNENBURG WAR MEMORIAL COMMUNITY CENTRE MEETING MINUTES**

**WEDNESDAY, DECEMBER 11, 2019 AT 5:15 P.M.**

**(LUNENBURG TOWN HALL)**

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**PRESENT:** Councillor Ronnie Bachman, Chair  
Councillor Danny Croft  
Councillor Matt Risser  
Councillor Errol Knickle, Municipality of the District of Lunenburg  
Debbie Dauphinee  
Kimberly Hanlon  
Allan Richards

**ALSO PRESENT:** Mayor Rachel Bailey (ex-officio)  
Kelly Cunningham, Recreation Director  
Heather McCallum, Assistant Municipal Clerk

**ABSENT:** Councillor Joseph Carnevale

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The Chair called the meeting to order at 5:17 p.m.

1. Agenda

Motion: moved and seconded to approve the agenda. Motion carried.

2. October 9, 2019 Meeting Minutes

Motion: moved and seconded to approve the October 9, 2019 meeting minutes. Motion carried.

3. Public Presentations

Nil.

4. Unfinished Business

Nil.

5. New Business

a. Confirmation of 2020 Committee membership

The Chair confirmed that all Committee members have agreed to reserve in 2020 with the exception of Mr. Richards who was thanked for his years of volunteerism on the

Committee. Council has directed that this citizen position on the Committee be advertised for applications to be selected in early 2020.

Ms. Dauphinee agreed to be the LWMCC Committee representative serving on the Active Transportation Sub-Committee, replacing Mr. Richards.

b. Active Transportation Sub-Committee

The Sub-Committee wishes to proceed with cycling safety signage located on the main entries into Lunenburg: Victoria Road, Green Street, Dufferin Street, and Maple Street.

Motion: moved and seconded to recommend to Lunenburg Town Council to investigate installation of "Share the Road" signage for cycling safety as noted in the AT Strategic Plan (Schedule "A"). Motion carried.

The RD advised that there is still a \$1,000 line item for trail signage in the 2019/20 Recreation budget which may be able to be used for this, or for additional signage on the Back Harbour Trail pending Mr. Richards' assessment.

The RD reported on a letter received from the Nova Scotia Trails Federation inviting the Back Harbour Trail to be part of a larger brand, the "Great Trail Loop" (Schedule "B"), and potentially have access to funding.

Motion: moved and seconded to recommend to Lunenburg Town Council to send a letter of support for "The Great Trail Loop" (Schedule "B"). Motion carried.

The RD will draft a letter of response for Council's review at the January 14, 2020 Council meeting when this recommendation will be considered.

c. Recreation Director's Departmental activity update

The RD reviewed her report (Schedule "C"). In response to a question from the Committee, the RD confirmed the humidifier unit above the canteen has a routine maintenance schedule. She will follow up with recreation staff regarding the air filters.

d. Winter Recreation Guide 2020

The Winter Recreation Guide was circulated for information (Schedule "D").

In response to a question from the Committee, the RD explained that PRO Kids programs are per municipality. An applicant applies to the municipality in which they reside. Program administrators will refer to the correct municipality if they receive an application in error.

e. Ice Resurfacers Capital 2020/21 Purchase

The RD reviewed her report ([Schedule "E"](#)). She noted that the lead time from purchase to delivery is at least five to six months, and can be longer.

Councillor Knickle noted that the Municipality of the District of Lunenburg (MODL) Council had earlier agreed to provide a grant for the replacement of the ice resurfacers of \$40,000, over and above the annual Recreation operating grant. [The Councillor asked to be copied on the two grant request letters to MODL.](#)

The Committee discussed the pros and cons of electric vs. propane ice resurfacers.

[Motion:](#) moved to defer a decision until possible green grants for an electric ice resurfacers are investigated. [Failed motion](#) in the absence of a seconder.

[Motion:](#) moved and seconded to recommend to the Lunenburg Town Council to pre-approve a propane ice resurfacers purchase in fiscal 2020/21 estimated at \$125,000 plus HST to be funded through a fundraising campaign and the ice resurfacers reserve fund (Schedule "E"). [Motion carried.](#)

The Committee discussed possible fundraising opportunities and [agreed to form a working group for fundraising.](#) The RD will coordinate a meeting between staff and the interested Committee members - Councillors Bachman and Croft, and Ms. Dauphinee to determine how to move forward.

6. Next Meeting Dates

- [LWMCC Committee](#) – *Wednesdays, February 12, March 11 (budget review), April 8, June 10, August 12, October 14, and December 9, 2020 at 5:15 p.m.*

Councillor Bachman noted that the [March 11, 2020 Committee meeting](#) is to review the Recreation Capital and Operating Budgets. He asked that Committee members come prepared for some discussion on this topic at their next meeting of February 12, 2020.

- [Active Transportation Sub-Committee](#) – *Wednesdays, February 5, May 27, August 26, and November 25, 2020 at 12:00 p.m.*

7. Adjournment

[Motion:](#) moved and seconded to adjourn the meeting. [Motion carried.](#)

The meeting was adjourned at 6:11 p.m.

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Heather McCallum, Assistant Municipal Clerk



# Town of Lunenburg Active Transportation Strategic Plan



## FINAL REPORT

Prepared for Town of Lunenburg  
Prepared by CBCL Limited

November 15, 2013  
Project # 131252.00



**CBCL LIMITED**  
Consulting Engineers



Active Transportation • Genetic Change • Sustainable Communities

Final Report	<i>Mary Bishop</i>	11/15/2013	<i>[Signature]</i>
<b>Issue or Revision</b>	<b>Reviewed By:</b>	<b>Date</b>	<b>Issued By:</b>
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15 November 2013

Mr. Robin Scott  
Recreation Director  
Town of Lunenburg  
PO Box 129  
119 Cumberland Street  
Lunenburg, NS  
B0J 2C0

Dear Mr. Scott:

*RE: Final Report: Town of Lunenburg Active Transportation Plan*

77 Westmorland Street, #110  
PO Box 451  
Fredericton, NB  
Canada E3B 4Z9

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[www.cbcl.ca](http://www.cbcl.ca)

**Solving  
today's  
problems  
with  
tomorrow  
in mind**

**ISO 9001**  
Registered Company

CBCL Limited and Michael Haynes are pleased to submit this Final Report for the Town of Lunenburg Active Transportation Plan.

Thank you for the opportunity to work on this interesting project. As mentioned previously, we found the week that we spent in Lunenburg working closely with you to be very enjoyable as well as informative and we are pleased that you found it to be a good process.

I trust this report meets your needs at this time, but if you have any questions, please do not hesitate to contact me.

Yours very truly,

CBCL Limited

Gordon Smith, CSLA, MCIP  
Principal and Group Leader – Planning and Landscape Architecture  
Direct: (902) 421-7241 x2488  
E-Mail: [gordons@cbcl.ca](mailto:gordons@cbcl.ca)

/encl.

Project No: 131252.00

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## CHAPTER 1 INTRODUCTION

By creating a well-connected, safe and functional Active Transportation Plan, the Town of Lunenburg can encourage a more active, healthy lifestyle. Active transportation enhances quality of life, attracts business and knowledge workers to a community and contributes to economic development. Active transportation includes walking and biking, but also in-line skating, jogging, skateboarding and the use of motorized personal mobility devices such as powered wheelchairs or medical scooters.

The Active Transportation Plan for the Town of Lunenburg provides:

- the planning principles that were applied in the development of the plan;
- a plan showing the overall network and hierarchy of routes;
- an inventory of existing active transportation infrastructure; and
- opportunities and design guidelines for future active transportation infrastructure; an opinion of probable costs (to be completed and sent under separate cover); and a phasing plan.

The plan is based on an analysis of local conditions, a review of existing policies and by-laws, best case active transportation practices, and community consultation.



## CHAPTER 2 **POTENTIAL IMPACTS AND BENEFITS**

In 2005, 62% of adults and 27% of teens in Lunenburg County were overweight or obese<sup>1</sup>. According to the Canadian Fitness and Lifestyle Research Institute, 62% of Nova Scotians are currently too inactive to reap the health benefits of regular physical activity. This physical inactivity costs society \$354 million comprised of direct health care costs including private expenditures of \$107 million a year and \$247 million a year from indirect productivity losses due to premature death and disability. The 2002 study shows that if just 10% more Nova Scotians were physically active, the Province could save an estimated \$7.5 million in total health care spending and an estimated \$17 million in productivity gains.

Health Canada recommends that adults accumulate 150 minutes of moderate physical activity per week while children obtain at least 60 minutes per day. By making physical activity a key component of their transportation habits, individuals can easily achieve this target while carrying out their daily tasks.<sup>2</sup>

Over the last 10 years, the concept of Active Transportation has been gaining popularity because the health, social, environmental, economic and tourism benefits are so substantial. There is clear evidence of the benefits associated with designing cycling and pedestrian friendly communities and encouraging people to be more active by walking and biking more often, for both recreation and utilitarian purposes. Promoting active transportation, especially through the development of an integrated on and off-road system that provides transportation and recreation options, is a simple and obvious strategy that can encourage people to reduce their use of the personal automobile and create sustainable, more liveable, safe and active communities.

These benefits include improved health, fitness, quality of life, and social interaction for citizens, a cleaner environment resulting from more sustainable means of transportation, and economic benefits related to new tourism opportunities and diversified transportation options to shops and services for workers and patrons.

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<sup>1</sup> Lunenburg County Community Health Board. Community Health Plan 2007 – 2010., Accessed on 27 September 2013 at <http://www.hpclearinghouse.ca/pdf/LCHB%20HEALTH%20PLAN.%2007-10.pdf>

<sup>2</sup> [http://kn.fcm.ca/ev.php?URL\\_ID=2175&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201&URL\\_PAGINATION=20&reload=1107286064](http://kn.fcm.ca/ev.php?URL_ID=2175&URL_DO=DO_TOPIC&URL_SECTION=201&URL_PAGINATION=20&reload=1107286064), reviewed on 1 February 2005.

Creating an active transportation network requires government leadership to establish a range of policies and programs that support opportunities for people of all ages and abilities to engage in routine daily physical activity. These policies might address:

- Bicycle and pedestrian oriented design;
- Mixed-use development;
- Ample recreational facilities;
- Locating schools in walkable neighborhoods; and
- Funding and promoting active living programs.<sup>3</sup>

Further information on the case for active transportation can be found in Appendix A.

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<sup>3</sup> <http://www.activelivingleadership.org/aboutal.htm>, reviewed on 1 February 2005

## CHAPTER 3 **EXISTING CONDITIONS**

Lunenburg is an extremely walkable community. Although its topography, featuring numerous hills – occasionally steep – creates some challenges, its relatively compact scale means that it does not take much time to proceed from one end of the community to the other on foot. Moreover, the grid system layout of the majority of its streets means that relatively direct routes are possible from any point to the other within the Old Town, and also within the New Town.

Connections between the two halves of the community are somewhat more limited, with access essentially restricted to the Dufferin/Lincoln/Falkland intersection. Both the Front Harbour and the Back Harbour Trail create off-road linkages between the Old and New Towns, but the latter is practical only for recreational uses.

The Old Town is a UNESCO World Heritage site, one of the few urban locations to be so designated North America. Because of Lunenburg’s exceptional scenic qualities and historical importance, it is a major tourism destination. Consequently, its streets, particularly in the narrow lanes of Old Town, experience both high automobile and pedestrian traffic volumes during the summer months.

Lunenburg has many very good pieces of infrastructure that partially meet the needs of an active transportation system. The key issues with the system are a number of gaps where connections have not been made, and the need to address the unique safety challenges in the Old Town created by its tourist congestion. The sections below describe existing conditions.

### **3.1 Walkability**

#### **3.1.1 Sidewalks and Walkways**

The sidewalk system in Lunenburg is often in quite good condition, with evidence of substantial new work having been undertaken in nearly every part of the community. Generally, however, the Old Town has a far greater percentage of its streets serviced by sidewalks than the New Town, although outside of the core area bordered by Kaulbach/Townsend/Kempt streets these are often older and more rundown.

In addition, even in the Old Town there are notable gaps, although sometimes quite small, where the network is broken by the absence of designated walkway on either side of the street. However, within the main tourism/business district, a well-integrated network of sidewalks in good condition exists. There are also several connecting walkways: Lincoln to Kaulbach, Bluenose to Montague and the Front Harbour Trail from Broad to Linden.

In the New Town, sidewalks along Dufferin, Broad, and Brook do not extend the full length of these streets, and important destinations such as the Hospital and Provincial Government buildings are not connected to the rest of the community by sidewalks. None of the East/West streets in the New Town have paved walkways.

Excellent work has been done to the sidewalks and crosswalks in the vicinity of the Bluenose Academy, at least as far as Victoria Road, and walking connections between the Community Centre and the downtown have been similarly recently improved.



On Victoria Road, near the commercial businesses just past Hall Street, there are serious weaknesses in the walking infrastructure on both sides of the street, despite attempts to improve pedestrian safety with the installation of an asphalt walkway and two crosswalks.

### **3.1.2 Crosswalks**

In the Old Town, the majority of crosswalks are found in the area bounded by Kaulbach/Townsend/Kempt Streets. On the streets outside this core area, there are far fewer designated crossings, particularly in the area farther from the Waterfront. Here, almost no crosswalks may be found. However, even in the core area, there has been some reduction in crosswalk painting in recent years, resulting in a number of intersections where only two crossings are marked. In a few cases, these do not match with the existing sidewalks.

In the New Town, far fewer crosswalks exist. However, substantial work has been done to install and maintain multiple designated crossings on busy Victoria Street, Falkland Street, and Maple/Dufferin. This has created the situation where there are several crosswalks that do not connect to sidewalks, but these at least provide signed pedestrian crossings of high traffic roadways.

### **3.1.3 Trails**

There are three principal off-road connections in Lunenburg. The most heavily used by pedestrians is the Front Harbour, which connects Broad Street to Linden Avenue, and borders the waterfront. This is an important commuting and tourism path.

Less well-used by walkers is the Back Harbour Trail, particularly the section from Kissing Bridge Road to Sawpit Road, which some consider too isolated. The Back Harbour Trail is primarily a recreational pathway.

Very few pedestrians use the Bay to Bay Trail, although some recreational users enter it from the Maple Avenue access stairwell.

## 3.2 Bikeability

### 3.2.1 On-Road Bikeability

Cyclists face significant challenges in Lunenburg. The extremely hilly terrain significantly reduces the number of roads practical for any but the very fit. In the majority of cases, these few remaining streets also feature high traffic volumes, creating significant safety concerns for both automobile drivers and bikers. Further, there are at least two key road connections, at the intersection of Dufferin / Lincoln / Falkland, and at the Lincoln / Linden, Lincoln / Lower, Lincoln / Pelham splits that are especially uncomfortable for cyclists.



The town currently has no designated cycling routes, no paved shoulders / striping, and no designated bike lanes or cycle tracks. Although there are a few bike racks in the community: Bluenose Academy, library, Community Centre, for example, there is a shortage of dedicated, secure bike parking.

### 3.2.2 Off-Road Bikeability

Off-road usually means on trails or pathways, but in Lunenburg a significant number of those who cycle regularly use sidewalks to permit them to avoid the worst of the busy roadways and challenging intersections/splits. Although it is common in every community to have cyclists combine on-road and sidewalk components whichever is easiest, in Lunenburg it appears to be done by the majority as a method of managing unsafe roads and choke points.

The Front Harbour Trail is extensively used by cyclists coming from the New Town to the Old Town.

Recreational cyclists use the Back Harbour Trail, but few use it for utilitarian purposes because of its circular route around the community and the small number of connections with the road network.

Few cyclists, apparently, use the Bay-to-Bay Trail within the town boundaries. Several comments were made about the challenges of finding the connection across Maple Avenue, and about that section's safety.

### 3.3 Other Uses

#### 3.3.1 Wheeling

Topography also imposes limits to the ability of wheelchair users to easily access all parts of the community, although with the shift to motorized mobility devices, this is being largely mitigated. Curb cuts have been installed in all recent sidewalk additions, and a substantial number of older curb cuts exist at many intersections in Old Town. An extended accessible pathway exists linking Lincoln Street to Kaulbach Street, and there is an excellent 'Stramp' (Ramp and stairway combined) connecting Bluenose to Montague at the base of Duke Street.

The challenges noted are:

- Many of the older curb cuts are narrow and surfaced with crumbling asphalt ramps;
- Crosswalks with newer sidewalks on one side only do not have matching curb cuts: i.e., Kaulbach and Fox;
- Several important crosswalks are completely inaccessible for wheeling: i.e. Victoria Road at Hall Street;
- No facilities in New Town, although the streets are wide and traffic volumes relatively light; and
- There is limited access to the Front Harbour and Back Harbour trails because of the surface, while there is no access available to the Bay to Bay Trail from Maple because there is a staircase.

#### 3.3.2 Skateboarding

While there is an excellent and well-used skate park at the Community Centre, skateboarders are not permitted to ride on either streets or sidewalks. Therefore, Active Transportation by skateboarding is not possible in Lunenburg.

No Safe Skateboarding classes are currently being offered.

#### 3.3.3 Inline Skating

There are no provisions for inline skating in Lunenburg, although skaters are permitted to use the Skateboarding Park. As with skateboarders and Wheelchair users, the crushed stone surface on the community's trails do not enable inline skating.



### 3.3.4 Winter Activities

Comments about winter AT activities related mostly to the community's trails and their lack of maintenance. Even walking was considered quite difficult once the trail was snow covered, nor was cross-country skiing considered a good option.

Residents suggested that the majority of the community's streets are walkable, although biking during the winter months was not judged to be practical for most cyclists.

### 3.3.5 Water-Based Active Transportation

As a waterfront community with a long history of water-borne activity, potential opportunities exist for water-based active transportation. However, given that the community is only located on one side of the harbour and that there are very few places of origin or destination across harbour, the use of water-based active transportation is limited. To encourage people, locals and visitors, to use the waterfront infrastructure is recommended. People are more likely to use the waterfront for recreation and utilitarian purposes if a boat launch was made accessible to the public. This could have economic spinoff as well as increase the profile of Lunenburg's historic waterfront.



## 3.4 Destinations

Active transportation for utilitarian purposes is inherently destination-oriented travel. The identification of destinations in the Town that might attract frequent active transportation usage provides a good indication on where infrastructure improvements may be most effective. The likelihood of people walking to school or work is heavily influenced by travel distance to these destinations, and the safety of the connections between origin and destination.

The key destinations in the Town of Lunenburg identified were:

1. The Waterfront;
2. Old Town (Kaulbach/Townsend/Kempt);
3. Bluenose Academy;
4. Tim Hortons;
5. Community Centre;
6. Back Harbour Trail; and
7. Dog Park (future).



## 3.5 Barriers

There are both natural and human-created obstacles to walking and cycling. Among others, natural barriers include

bodies of water and topographic features; man-made barriers include highways, rail lines, high traffic streets and traditional large-lot or big box developments.

The major physical barriers to Active Transportation in Lunenburg were identified as:

1. The Dufferin/Lincoln/Falkland intersection;
2. The hilly terrain;
3. Victoria Road;
4. Old Town's narrow streets and seasonally high traffic volumes in areas close to the Waterfront;  
and
5. Lack of sidewalks in the New Town.

## CHAPTER 4 **RECOMMENDATIONS**

The following recommendations lay out a plan for the ultimate development of an active transportation network and activities for the Town of Lunenburg. While the plan may take up to 15 to 20 years to complete, it denotes areas where immediate actions could have a significant impact on improving active transportation conditions in the Town. It is important to show the ultimate plan, to allow opportunities for improvements in lower priority areas to be recognized and exploited if and when they become available.

It is also recognized that some of the on-road improvements require cooperation and investment by the Nova Scotia Ministry of Transportation and Infrastructure Renewal who control the numbered highways that occur within Town limits.

### **4.1 Priority Projects and Opinion of Probable Costs**

Priority projects are shown on Figure 4.1 entitled Priority Projects Map which designates Immediate, short, medium and long term projects. The numbers on the map link to the descriptions provided below. These recommendations have been established based on prioritizing projects that will have an immediate benefit to safety conditions in Town especially for children and seniors.

Opinions of probable costs for each recommendation are provided in Figure 4.2.

#### **4.1.1 Immediate Projects**

These projects should occur in the next two years.

28. Along Victoria Road, upgrade sidewalk from SaveEasy to Homeport Motel and Cottages' driveway and provide crosswalk across Homeport's driveway. Improve sidewalk on north side of Victoria Road from Hall Street past Irving Gas Station. Move crosswalk across Victoria Road from just north of the Irving Gas Station to north side of driveway to Lunenburg Hardware;

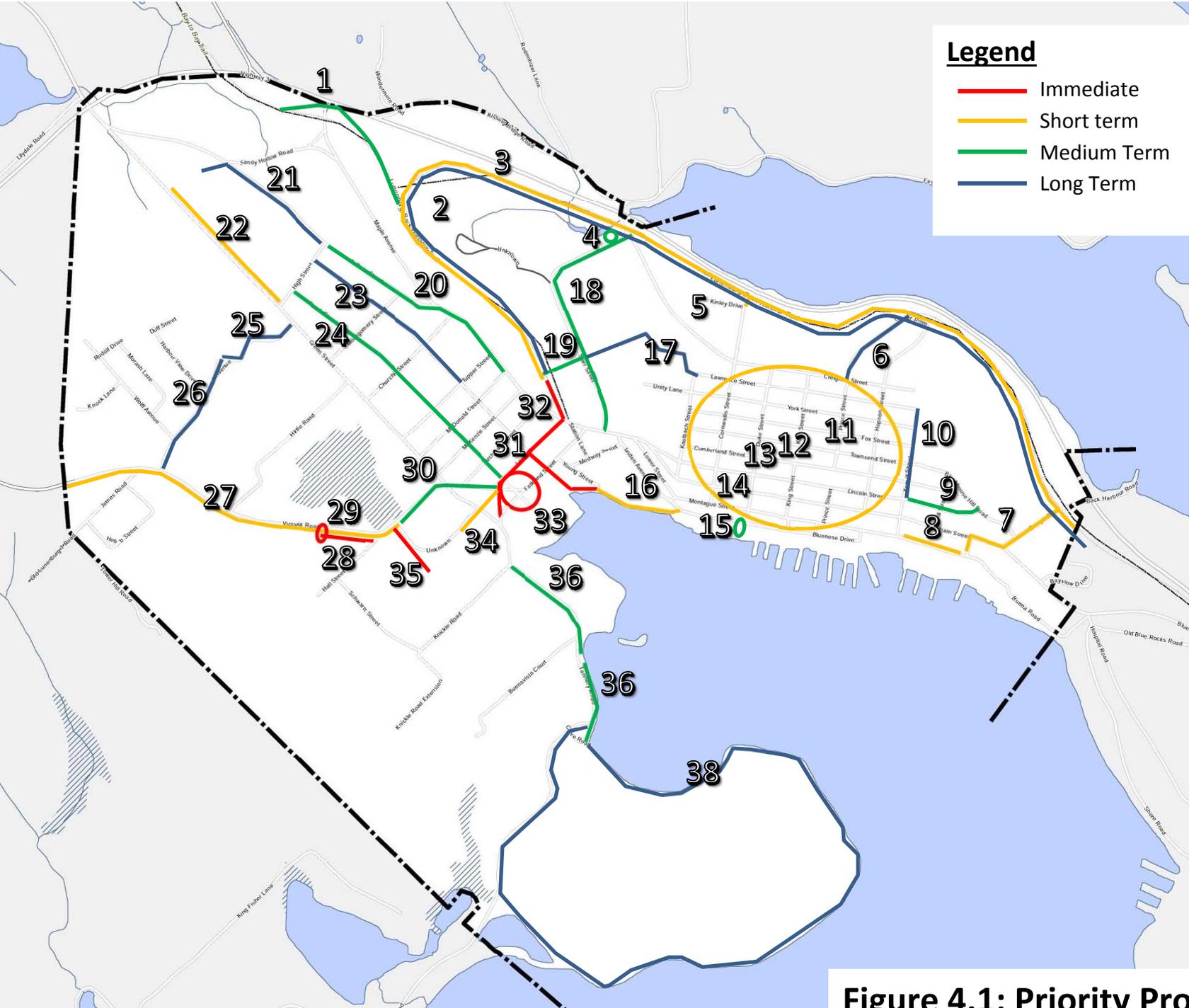


Figure 4.1: Priority Projects

## Town of Lunenburg Active Transportation Plan

### Figure 4.2: Opinion of Probable Capital Costs

Date: 11 October 2013  
CBCL Project No.: 131252.00

This opinion of probable costs is presented on the basis of experience, qualifications, and best judgement. It has been prepared in accordance with acceptable principles and practices. Sudden market trend changes, non-competitive bidding situations, unforeseen labour and material adjustments and the like are beyond the control of CBCL Limited. We cannot warrant or guarantee that actual costs will not vary significantly from the opinion provided.

These costs are in 2013 dollars. They are for capital construction only and do not allow for contingencies (typically 25% at this stage) and engineering fees (typically 10%).

Immediate Projects					
No.	Item	Quantity	Units	Unit Cost	Cost
28	Victoria Road Upgrades				
	Upgrade sidewalk on south side from SaveEasy to Homeport Motel and Cottages Driveway	210	metres	\$135	\$28,350
	Relocate crosswalk near Irving to Lunenburg Hardware	1	lump sum	\$1,800	\$1,800
	Improve sidewalk on north side from Hall Street past Irving Gas Station	170	metres	\$135	\$22,950
29	Work with Bluenose Academy to develop a crossing guard program		staff time		n/a
31	Improve linkage from Train Station entrance (Back Harbour Trail head) to Front Harbour Trail				
	Install sidewalk on south side of Lorne Street from Dufferin Street to Victoria Road	260	metres	\$135	\$35,100
	Paint bi-directional bike lane on south side of Lorne Street from Dufferin Street to Victoria Road	260	metres	\$10	\$2,600
	Paint bi-directional bike lane on Broad Street from Lorne Street from Falkland Street	75	metres	\$10	\$750
	Provide crosswalk at Lorne Street across Dufferin Street	1	lump sum	\$2,000	\$2,000
	Improve Falkland / Dufferin intersection as per Genivar Concept		not applicable under this initiative		
	Provide Signage	3	each	\$750	\$2,250
32	Improvements at Back Harbour Trailhead				
	Extend Back Harbour Trail along face of Train Station to Dufferin Street	100	metres	\$190	\$19,000
	Move trail sign to street	1	lump sum	\$1,500	\$1,500
33	Reconfigure Victoria / Falkland intersection as per Atlantic Road and Traffic Management Concept		not applicable under this initiative		
35	provide shared use trail along northern edge of Community Centre parking lot				
	Stripe trail	200	metres	\$10	\$2,000
	Provide curb stops	40	each	\$50	\$2,000
39	Establish a trails group to assist with fundraising, maintenance, promotion, etc.		staff time		n/a
	Annual maintenance (4% of capital costs)			add	\$7,200 per year

Town of Lunenburg Active Transportation Plan

Figure 4.2: Opinion of Probable Costs

Short Term Projects					
No.	Item	Quantity	Units	Unit Cost	Cost
3	Improve signage on Back Harbour Trail, including signs at Cornwallis Street and Prince Street.	9	each	\$750	\$6,750
5	Extend sidewalk along Cornwallis from seniors residence to Kinley Drive	90	metres	\$135	\$12,150
	Provide link between Kinley Drive and Back Harbour Trail	50	metres	\$135	\$6,750
7	Provide sidewalk along Pelham & Sawpit from Shipyard Hill Road to Back Harbour Trail	280	metres	\$225	\$63,000
8	Extend sidewalk along Montague to Foodland store and up Shipyard Hill Road to Pelham				
	Provide sidewalk with curb along Montague to Foodland Store	200	metres	\$225	\$45,000
	Provide sidewalk without curb up shipyard Hill Road	55	metres	\$135	\$7,425
11	Fill in gaps in sidewalks in Old Town (start short term but extend through all time periods)	100	metres	\$225	\$22,500 per year
12	Relocate poorly sited existing crosswalks at intersections in Old Town and fill in gaps.	2	each	\$500	\$1,000 per year
13	Improve wayfinding signage in Old Town	8	each	\$750	\$6,000 per year
14	Provide bike racks throughout Old Town	2	each	\$1,000	\$2,000 per year
16	Pave Front Harbour Trail	480	metres	\$190	\$91,200
22	Extend sidewalk on Green Street from High Street to Provincial Building	390	metres	\$135	\$52,650
27	Provide paved shoulders along Victoria from Municipal Boundary to entry to Community Centre	975	metres	\$150	\$146,250
34	Provide trail connection from Community Centre to downtown along Front Harbour Trail				
	Provide bike lanes in entrance to Community Centre Parking from Green Street	50	metres	\$10	\$500
	Provide marked crosswalk across Green Street (including painting and signs)	1	lump sum	\$1,250	\$1,250
	Provide shared use trail from entrance of Community Centre to crosswalk on Victoria	110	metres	\$190	\$20,900
	Provide sidewalk along Falkland in front of Foundry	100	metres	\$225	\$22,500
	Signage	10	each	\$750	\$7,500
	Consider ways to improve Community Centre Parking Lot to make it safer		staff / volunteer time		n/a
	Annual maintenance (4% of capital costs)			add	\$20,000 per year

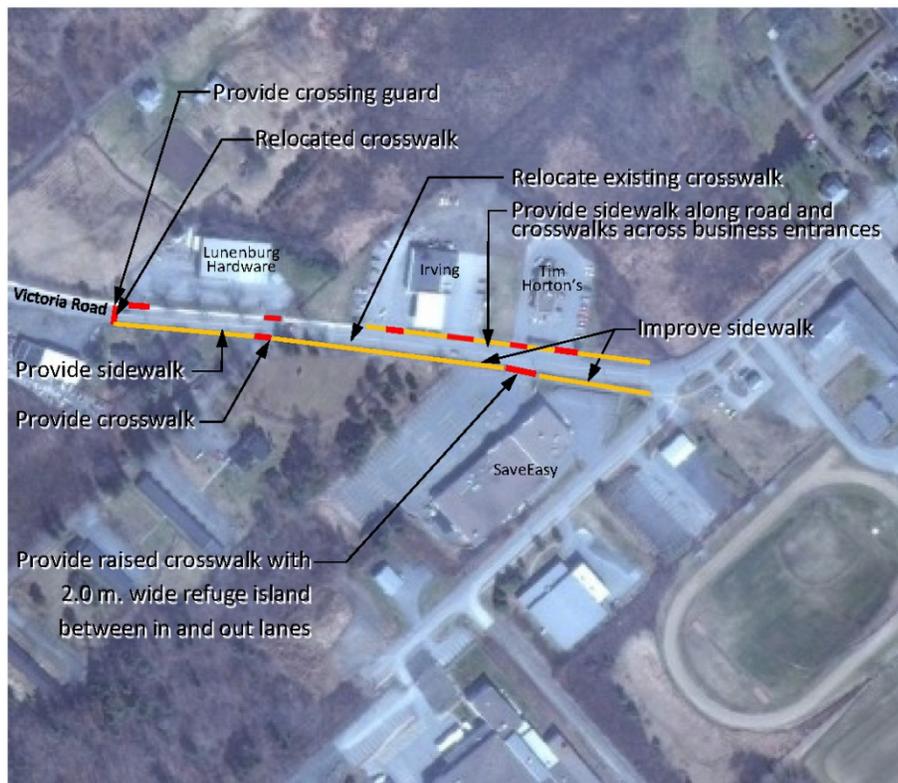
Town of Lunenburg Active Transportation Plan

Figure 4.2: Opinion of Probable Costs

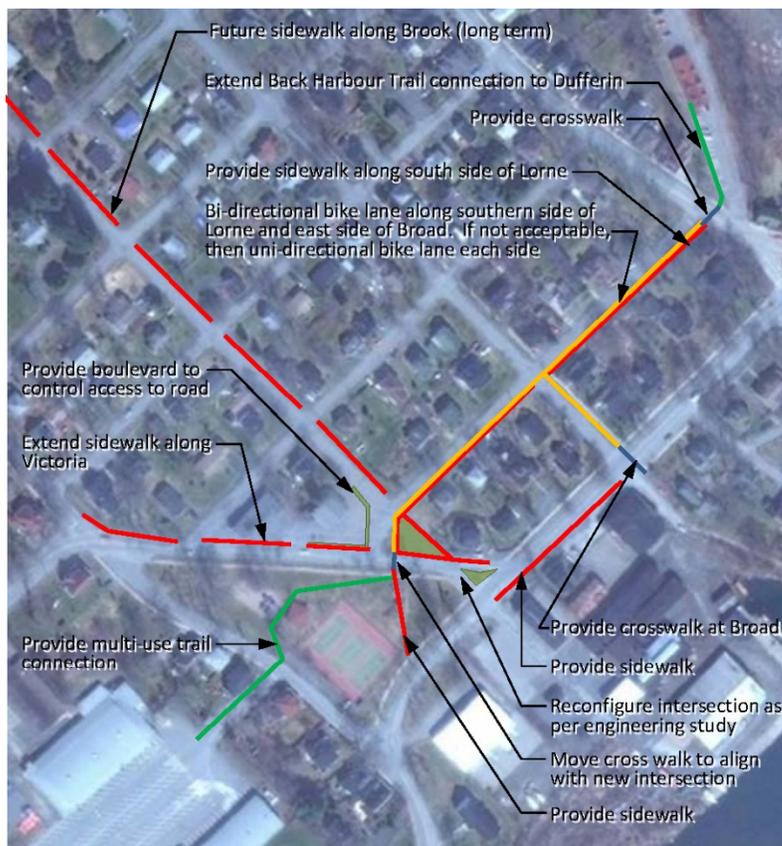
Medium Term Projects					
No.	Item	Quantity	Units	Unit Cost	Cost
1	Fix Bay to Bay Trail connection over Maple Avenue				
	Grade and build stone dust trail	450	metres	\$40	\$18,000
	Upgrade trail exiting Bay to Bay Trail	175	metres	\$40	\$7,000
	Paint crosswalks	1	lump sum	\$2,000	\$2,000
	Provide signage	6	each	\$750	\$4,500
4	Expand parking area at Starr Street and Kissing Bridge Road (gravel surface)	60	sq. metres	\$30	\$1,800
9	improve link along Lincoln from Blockhouse Hill Road to Hill Street				
	Provide sidewalk along Lincoln from Blockhouse Hill Road to Hill Street	90	metres	\$225	\$20,250
	Provide edge, sidewalk & controlled entrance to parking area at Lincoln/Blockhouse intersection	1	lump sum	\$20,000	\$20,000
15	Provide bicycle parking structure in parking lot of Fisheries Museum	1	lump sum	\$30,000	\$30,000
18	Paint bike / walk lane on Starr Street from Back Harbour Trail to Lincoln Street	700	metres	\$10	\$7,000
19	Create trail link from Back Harbour Trail along edge of Dog Park to Starr Street (including bridge)				
	Stonedust trail	180	metres	\$40	\$7,200
	Small pedestrian / cycle bridge over creek	1	lump sum	\$20,000	\$20,000
20	Extend sidewalk on Dufferin Street from south of Churchill Street to High Street	475	metres	\$135	\$64,125
24	Extend sidewalk on Brook Street from Lorne Street to High Street	740	metres	\$135	\$99,900
30	Paint bike lanes along Victoria Road from entry road to Community Centre to Lorne Street	325	metres	\$10	\$3,250
36	Improve link along Tannery Road from Falkland /Knickle intersection to look-off area				
	Slow speed limit and provide speed bumps at tight corner	1	lump sum	\$25,000	\$25,000
	Negotiate with ABCO to provide an off road trail / sidewalk along front of their property		staff / volunteer time		n/a
	If successful with ABCO, provide off road trail / sidewalk	350	metres	\$190	\$66,500
37	Improve walkabilty of water side of Tannery road from look-off to entrance to golf course	300	metres	\$190	\$57,000
	Annual maintenance (4% of capital costs)			add	\$18,000 per year
Long Term Projects					
No.	Item	Quantity	Units	Unit Cost	Cost
2	Pave Back Harbour Trail from Dufferin Street to Kissing Bridge Road	1,500	metres	\$190	\$285,000
6	Provide sidewalk on Prince Street from Creighton to Oxner Drive	250	metres	\$135	\$33,750
10	Provide sidewalk along Kempt Street from Lawrence Street to Lincoln Street	230	metres	\$135	\$31,050
17	Provide connection from Lawrence Street through Lunenburg Academy and cemetery to Dog Park	500	metres	\$190	\$95,000
21	Extend sidewalk along Dufferin Street from High Street to Sandy Hollow	350	metres	\$135	\$47,250
	Provide trail connection to Provincial Building	150	metres	\$40	\$6,000
23	Extend sidewalk on Broad Street from McDonald Street to High Street	600	metres	\$135	\$81,000
25	Provide sidewalk on Centennial Avenue from Green Street to apartment building	250	metres	\$135	\$33,750
26	Provide sidewalk on Centennial Avenue from Victoria Road to apartment building	350	metres	\$135	\$47,250
38	Develop walking route around Kaulbach Head / golf course	2,000	metres	\$20	\$40,000
	Annual maintenance (4% of capital costs)			add	\$28,000 per year

29. Working closely with the Bluenose Academy, develop a crossing guard program for the relocated crosswalk across Victoria Road on north side of driveway to Lunenburg Hardware, the crosswalk across Victoria Road at Hall Street and Victoria Road between Lorne and Falkland. Consider establishing a “walking school guard” program as an alternative;

31. Improve linkage from Train Station entrance (Back Harbour Trail head) to Front Harbour Trail. Install sidewalk on south side and paint in a bi-directional bike lane on Lorne Street from Dufferin Street to Victoria Road. Paint in a bi-directional bike lane on Broad Street from Lorne Street to Falkland Street. Provide crosswalk at Lorne Street across Dufferin Street to connect to head of Back Harbour Trail at Train Station. Improve Falkland / Dufferin intersection as per Genivar Figure 2 Concept B Sketch dated 7 May 2013 (see Figure next page);



Recommended Sidewalk Improvements along Victoria Road



Recommended Active Transportation Improvements in Victoria / Lorne / Dufferin Area



Genivar Figure 2 Concept B Sketch dated 7 May 2013

- 32. Improvements at Back Harbour Trailhead. Extend Back Harbour Trail along face of Train Station to Dufferin Street. Bend connection to connect to new crosswalk and facilities on Lorne Street (see Figure at bottom of previous page). Move trail sign to street;
- 33. Reconfigure Victoria Road and Falkland Street intersection as per Figure B-4 in Atlantic Road and Traffic Management report of 2009 (see Figure at right and also Figure at bottom of previous page); and
- 35. Provide shared use trail along northern edge of Community Centre parking lot to connect path from school/pool to Victoria Road (see Figure at bottom of previous page).



Figure B-4 in Atlantic Road and Traffic Management report of 2009

#### 4.1.2 Short Term Projects

These projects should occur in the next three to six years.

3. Improve signage on Back Harbour Trail, including signs at Cornwallis Street and Prince Street;
5. Extend sidewalk from seniors residence along Cornwallis Street from seniors residence to Kinley Drive and provide formal linkage to Back Harbour Trail;
7. Provide sidewalk along Pelham/Montague Street Sawpit Road from Shipyard Hill Road to Back Harbour Trail at Sawpit Road;
8. Extend sidewalk along Montague to Foodland store and up Shipyard Hill Road to Pelham;
11. Fill in gaps in sidewalks in Old Town (program will start in short term but will extend through all time periods). Start in Front Harbour to Townsend Street and work towards Back Harbour. Special consideration should be given to Pelham Street and Kaulbach Street at the Library;
12. In Old Town, relocate poorly sited existing crosswalks at intersections to connect to existing sidewalks and fill in gaps;
13. Improve wayfinding signage in Old Town. Also include directional sign at Blockhouse Hill Campground and Visitor Centre;
14. Provide five new bike spots per year throughout Old Town (on a bike rack or individual spots). Work with local cyclists to determine priority locations over a 10 year period. Consider adding bicycle parking rings on meters;
16. Pave Front Harbour Trail;
22. Extend sidewalk on Green Street from High Street to Provincial Building;
27. Provide paved shoulders along Victoria Road from the municipal boundary to entry road to Community Centre; and
34. Provide a great trail connection and signage from Community Centre to downtown along Front Harbour Trail to allow Community Centre parking lot to act as “overflow” parking for downtown. Provide sidewalk along Falkland in front of Foundry. Consideration could also be given to using the parking area behind the Fire Hall as ‘overflow parking’ as well. Signage should direct people coming into Town to these free parking areas. The parking lot is adequate by current standards, but with students traversing the area and as traffic increases, it may be prudent to consider ways to reconfigure the parking to make it more pedestrian friendly.



Example of Relocation of Crosswalk

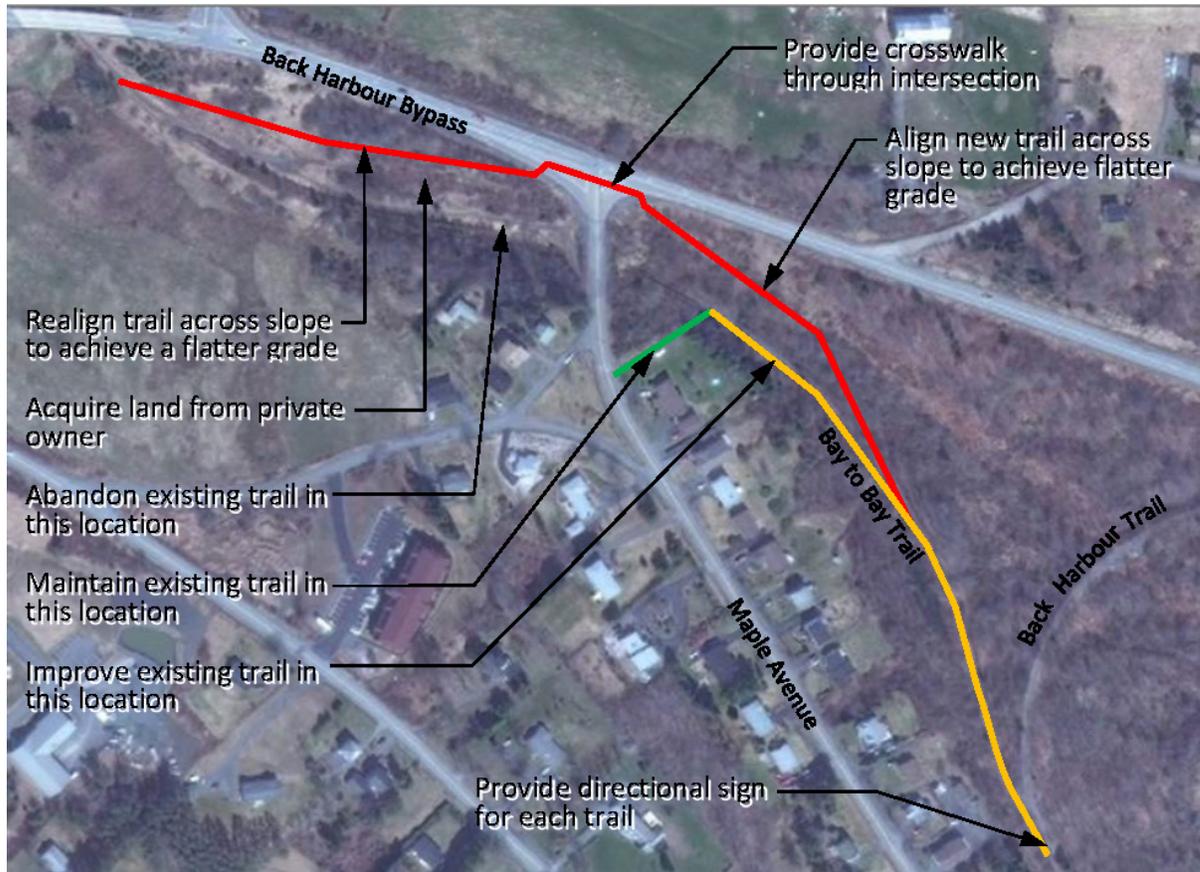


Example of Bike Rack Mounted on Sign or Parking Meter Pole

### 4.1.3 Medium Term Projects

These projects should occur in the next seven to 12 years.

1. Fix Bay to Bay Trail connection over Maple Avenue. Extend trail up slope on either side of road and cross at intersection of Highway 332 and Maple Avenue. Fix up trail to connect to Back Harbour Trail. Get started on funding and land acquisition in short term;



Recommended Improvements to Bay to Bay Trail at Maple Avenue

4. Expand parking area at Starr Street and Kissing Bridge Road;
9. Provide sidewalk along Lincoln from Blockhouse Hill Road to Hill Street. Fix intersection at Lincoln and Blockhouse by providing an edge with sidewalk and controlled entrance to parking area from street;
15. Provide bicycle parking structure in parking lot of Fisheries Museum;
18. Create bike / walk lane on Starr Street from Back Harbour Trail to Lincoln Street;
19. Create trail link from Back Harbour Trail along edge of Dog Park to Starr Street;
20. Extend sidewalk on Dufferin Street from south of Churchill Street to High Street. Provide crosswalks at Maple Avenue and High Street;



Bike Parking Structure at Fisheries Museum

- 24. Extend sidewalk on Brook Street from Lorne Street to High Street;
- 30. Provide bike lane along Victoria Road from entry road to Community Centre to Lorne Street;
- 36. Improve link along Tannery Road from Falkland / Knickle intersection to look-off area. Slow speed limit and provide removable speed bumps (similar to those in the entrance to the Community Centre) at the tight corner. Negotiate with ABCO to provide an off road trail / sidewalk inside of tree line along front of their property; and
- 37. Improve walkability of water side of Tannery road from look-off to entrance to golf course.

**4.1.4 Long Term Projects**

- 2. Pave Back Harbour Trail from Dufferin Street to Kissing Bridge Road;
- 6. Provide sidewalk on Prince Street from Creighton to Oxner Drive;
- 10. Provide sidewalk along Kempt Street from Lawrence Street to Lincoln Street;
- 17. Provide connection from Lawrence Street through Lunenburg Academy and cemetery to Dog Park;
- 21. Extend sidewalk along Dufferin Street from High Street to Sandy Hollow and provide trail connection to Provincial Building;
- 23. Extend sidewalk on Broad Street from McDonald Street to High Street;
- 25. Provide sidewalk on Centennial Avenue from Green Street to apartment building;
- 26. Provide sidewalk on Centennial Avenue from Victoria Road to apartment building; and
- 38. Develop walking route around Kaulbach Head / golf course.



Connection from Lawrence Street through Lunenburg Academy and cemetery to Dog Park

**4.2 Recommended Project Prioritization Process**

The number and scope of proposed AT infrastructure projects will often exceed the financial capacity of the community to carry out in any given budget period. To assist Council and staff to decide which projects to undertake, and in what order, we suggest that all proposals be reviewed using the following two-step process: 1) Safety; and 2) Strategic Relevance.

**4.2.1 Safety**

All transportation infrastructure projects should be examined through the prism of their effect on safety for pedestrians and cyclists. For any road/works project to be approved by Council, it must be judged to improve, or at least not reduce, the safety of pedestrians and cyclists.

- *Example 1:* A sewer upgrade project on a main street requires removing an existing sidewalk. Council would not permit this to proceed unless a suitable alternative for pedestrians was included as part of the plan; and
- *Example 2:* A crosswalk is proposed across an arterial road. However, no sidewalk is included as part of the project, and pedestrians would be required to walk along a busy stretch. This could not be considered to adequately protect their safety, and so should not be approved by Council.

**Safety Principle 1:** Once projects have been judged to improve the overall safety of pedestrians and cyclists, they will be evaluated on the basis of whom they primarily benefit. Priority will be assigned to those projects that target safety solutions for young people and/or seniors most – projects that fit the “8-80” standard of community accessibility.

- *Example:* Two new crosswalk/sidewalk projects are proposed. One is at Prince and Creighton Streets, the other is at Victoria Road and Lorne Street. Priority would be given to the Victoria/Lorne project, as it is an important route for children heading to/from the Bluenose Academy.

**Safety Principle 2:** Projects evaluated as being of equivalent ranking after step 1 should next be examined for the traffic volume on their respective streets, with priority being given to the project work on roads which possess the highest number of daily vehicle trips.

- *Example:* A sidewalk/crosswalk infill is proposed for Kaulbach Street between Lincoln and Pelham, while another proposes similar improvements on Cornwallis Street from Creighton to Kinley Drive. The Kaulbach Street project would have priority, because of its greater traffic volume.

#### **4.2.2 Meeting Community Goals**

The second stage of the prioritization process, for Active Transportation infrastructure improvement projects, is to evaluate the purpose each proposed project fills, and how well it meets the overall strategic goals of the community. That may be to connect existing AT facilities to each other by ‘filling the gaps’, to expand the walking/cycling network by extending existing facilities or adding new routes, to improve facilities that will benefit the largest number of pedestrians, cyclists, or other users, or whether a project improves the ability of non-motorized citizens to better access their community to travel to work or school, or for play.

**Community Goal 1:** We propose that priority should be given to projects that link existing facilities to each other over those that represent extensions or additions.

- *Example:* Two proposals are brought before Council. One is to build a sidewalk on Green Street from High Street to the Provincial Building; the other is to complete a sidewalk on Victoria Road between the crosswalk at Hall Street and the Irving. Priority would be given to the work on Victoria Road, because it connects the sidewalk facilities from the Irving to Centennial Avenue to the existing sidewalk on Victoria Road from Hall Street.

Although we recommend that connecting existing AT facilities to each other should normally be conferred priority above extending the system to areas where facilities are not currently present, there will be occasions when an augmentation to the limits of the present network may have priority over infill.

If recommended by staff to Council, a proposed expansion project will continue to be evaluated against other projects through the subsequent steps. If the expansion project satisfies these criteria better than other proposed projects, the expansion will be assigned priority for completion.

**Community Goal 2:** If multiple proposals are still judged as being equal after steps one through four, consideration should then be given to the number of pedestrians/cyclists that the project will benefit, with priority being given to the one that will provide improved assistance to the larger number.

- *Example:* There are two proposals to better link the Back Harbour Trail to the community: a sidewalk on Sawpit Road to Pelham Street, or a sidewalk up Prince Street. A community survey finds that more residents say they will use the link on Prince Street. That project will receive priority.

**Community Goal 3:** The final evaluation criteria relates to the project's intended uses. Priority should be given to plans that improve travel for work/school commuting and other utilitarian purposes over those that are primarily recreational.

- *Example:* Two proposals are made to improve walking and cycling on Starr Street. One is to create an off-road link from the Back Harbour Trail parking area to the Dog Park, and from then an on-road link on Starr Street to the trailhead at Kissing Bridge Road. The other is to develop a pedestrian / cycling connection on Starr Street from Maple Street to Kissing Bridge Road. The latter, entirely on-road, facility would receive priority ahead of the Back Harbour Trail connection.

#### **4.2.3 Summary**

Proposed AT infrastructure projects should be assessed first according to how they address safety for the most vulnerable members of the community, on its busiest streets and road, and according to how well they satisfy the strategic goals of the community, and should be assigned a priority of undertaking based upon the following criteria:

- Project improves, or does not diminish, the safety of pedestrians/cyclists;
- Project most improves walkability/bikeability for youth and/or seniors;
- Project is on/adjacent to roadways with the highest traffic count;
- Project connects existing infrastructure facilities, rather than expands the network\*;
- Project will be used by the largest number of pedestrian/cyclists; and
- Project is more utilitarian than recreational.

\*Note: If projects to expand the network are being evaluated against other projects to establish priority, do so using steps 2 through 6, in that order, skipping step 4.

### **4.3 Programs**

Making improvements to infrastructure is only one component of improving Active Transportation in any community. While providing a safe place to walk, cycle, or use other forms of human-powered transportation is essential, so is the need to both promote community improvements, and to educate the public on how to navigate their streets safely.

The barriers to Active Transportation are often explained as being the result of inadequate infrastructure. In reality, and more importantly, the barriers exist in the culture of a community and the attitudes of its population. To change these attitudes will require continuous and effective programs of education, promotion, and advocacy.

### 4.3.1 Education

Education is one of the most important components of this plan. Active transportation users need to be instructed in on and off-road operating procedures and etiquette in order to support a safe and inviting environment.

Motorists must be made aware of the need to be aware of and share the road with walkers and cyclists and – most important of all – to operate their vehicles more safely and appropriately.

Parents must be convinced of the value of increasing the amount of walking and cycling undertaken by their children and that their children’s safety will be assured while doing so.

Given the wide range of educational opportunities available nationally and provincially, it is important to remember that the Municipality does not have to shoulder educational initiatives on its own.

#### Ed.1: **Share the Road:**

This program is an important, low cost infrastructure education tool for all road and trail users including motorists, pedestrians and cyclists. “Share the Road” is an initiative that makes roadways safer and more efficient for both motorists and cyclists by reminding everyone that cyclists are a legitimate road use and one likely to be encountered on roads in the community.

In Lunenburg, Share the Road signs should be positioned on Victoria Road, from the town boundary as far as Lorne Avenue. In addition, signs should be placed on Maple/Dufferin as far as the Lincoln Street intersection.

Green Street, from the town boundary to Victoria Road, should also be considered for Share the Road signage, as should Sawpit Road, particularly near where the Back Harbour Trail crosses.



One interesting and successful variation of the program occurs in Annapolis County, where bright yellow T-shirts with the “Share the Road” symbol are regularly given as draw prizes during municipal events. Share the Road often becomes a shorthand for ‘bike friendly.’

#### Ed.2. **Safe Cycle/Skateboarding Training:**

The Town Recreation department should develop and offer ongoing low or (preferably) no-cost programs that provide education on bicycle safety, including the value of wearing helmets, and etiquette for sharing road and trail space. Because of its proximity to the Bluenose Academy, the community centre is ideally sited to provide a wide range of AT educational programs for youth.

There are a number of acceptable possible programs that could be adopted, including the bike rodeos currently provided by the RCMP and the CAN-BIKE program operated by the Canadian Cycling Association. The town should investigate the possibility of supplementing the efforts of the RCMP by assisting people to become qualified instructors of one, or both, of these programs.

The first priority of these training courses should be for youth, but consideration should be given for eventually providing safe-biking courses for seniors and other people as well.

Offering skateboarding instructional programs will provide the opportunity to access another group of youth different from cyclists. One instructional component that can and should be added is how to be a safe on-street/sidewalk skater, and the AT/health benefits of longboarding.



(Photo: André Bouchard)

One program offered by the Ecology Action Centre, Making Tracks, is about making active transportation safe for children and youth in Nova Scotia by giving them the skills they need to do it safely. Using a train-the-trainer model, the program enlists the help of adults and youth in teaching safety skills to other youth and children. Making Tracks focuses on skill-based, experiential workshops. It offers walking, cycling, in-line skating and skateboarding safety skills.

### Ed.3. Active and Safe Routes to School:

This is a school-based initiative that strives to create an environment that is conducive and supportive of safe walkable communities. It is a world-wide program that encourages children of all ages to utilize Active Transportation to travel to and from school, with a primary focus on walking. The program is comprised of several activities and initiatives that can be utilized by schools including the Walking School Bus, Walking Wednesdays, iWalk (International Walk to School Week/Day), Walk a Block, Neighbourhood Walkabout, Walking Buddies, No Idling at School, and Classroom Mapping.

Blunose Academy students can conduct safety audits of their neighbourhoods. Parent associations can work with parents, students and teachers, organizing public meetings to review the walkability/bikeability situation around all routes to and from the school. These meetings can determine what are the safest routes currently, and more importantly areas where improvements to the infrastructure network are required. Students should be asked to identify destinations that they currently access from their schools so that these may be also audited for walkable/bikeable safety.

#### Ed.4. **Heart&Stroke OneStep:**

Heart&Stroke OneStep is an extracurricular resource featuring pedometers and activities for junior high students to support girls to be physically active through walking. Resources are available in both English and French. OneStep is one resource that schools can use to complement existing activities to encourage and support activity among youth.

Ed.5. **Information Flyers** should be sent to households along with utility bills or recycling information, at least twice every year: in the spring, when the weather begins to improve, and in the fall, when children return to school. The flyers can be designed to provide safety tips for AT users - and motorists - addressing the common causes of conflicts and how to avoid them

In addition, household flyers provide a venue for regularly updating residents on additions or changes to the sidewalk/trail network.

Ed.6. **Crosswalk Education Signs** erected at all important crosswalks in the community, particularly those used by school children. These provide simple and concise directions on how to behave in crosswalks and to safely cross busy streets. These should be positioned at a level where they can be easily read by children.

Priority should be given to crosswalks on busier streets frequently used by school children, such as those on Victoria Road, but consideration should be given to eventually positioning signage on both sides of every crosswalk.



#### **4.3.2 Promotion**

From many years of experience, the public has developed the perception that walking and cycling on roads is unsafe. It will be inadequate to simply build infrastructure. In order to have more people walking and cycling, it will be necessary to engage in a range of promotional activities to shift public opinion and encourage them to use the new AT infrastructure that will be developed.

P.1. **Create a permanent Active Transportation Webpage** on the Town's Website. This should include all the information available about the community benefits of using AT, the most up-to-date information about the condition of the paths and sidewalks, maps of the currently existing and planned primary and secondary walking/cycling networks, educational information about etiquette and safety, and links to provincial, national, and neighbouring community's AT Website. This should be updated regularly, paying particular attention to seasonally unique issues.

P.2. **Brand the Primary Trail/Road Network** –Create distinctive signage to identify the network for motorists and walkers/cyclists. Consider creating a loop route, i.e. Back Harbour Trail to Sawpit Street, to Pelham, to Bluenose, along Front Harbour Trail to Broad Street, then along Lorne to Back Harbour, and mark with on and off-road signage.

**P.3. Support the development of a Lunenburg walking club**, a cycling club, and a snowshoe / ski club. Encourage regular activities that can be advertised to the public. Support existing groups to recruit new members.

**P.4. Support the development of a volunteer trail development group** that will monitor and inspect the Back Harbour Trail. Members of this group can become trained by the NS Trails Federation Trail Patrol and provide education to users about trail etiquette, repair / replace signage, and report on maintenance issues. Specific activities should be developed related to Active Transportation (e.g., bicycle safety day or festival) or this aspect could be built into other community events (e.g., bicycle derby).

**P.5. Open Street Days:** Consideration should be given to a program of ‘Open Street’ days in the Old Town during the peak tourist season. On Open Street days, vehicle access is prohibited, and only AT uses are permitted. The recommended area for open streets is within the Kaulbach / Townsend / Kempt core area.

If instituted, Open Street days should be coordinated with the business community to ensure the minimum disruption for commercial establishments. . Weekends are the least likely to be disturbing.

Initially, Open Street days might be coordinated with civic events or National Holidays, such as Canada Day. Consideration should be given to expanding the number of Open Days each year, promoting it as an additional attraction for visitors.

Additional information on similar events can be found at the following websites or by searching the web for “Cyclovia” or “Open Streets”:

- <http://www.8-80cities.org/resources/ciclovia-open-streets.html>
- <http://www.eventbrite.com/e/new-brunswick-ciclovia-lecture-reception-tickets-8391809127>

#### **4.3.3 Advocacy**

The public needs to be informed about the many health and safety benefits of participating in active transportation. In present-day North American culture, travel by automobile is not only the dominant means of transportation, but in many people’s perception, the only one. Consequently, spending on AT may be resisted by the majority because of the opinion that they are frivolous and costly public investments that benefit only special interest populations.

Advocacy programs, in some respects, are quite similar to those for promotion purposes, but tend to be directed at the wider community, not just those who currently use AT.

Several influential elements of the community will require frequent updates on the status of Active Transportation initiatives. They will tend not to participate in the planning stages, but react – often



unfavourably – once a particular project is announced. Rather than respond to concerns and complaints at this stage, the Active Transportation Steering Committee should conduct an outreach program, particularly in advance of significant infrastructure projects, designed both to educate interest groups about the benefits of AT, and to identify potential concerns before they become public disagreements.

**A.1. Host an annual Active Transportation evening**, where groups interested in cycling, walking and other active transportation activities can meet with Council, neighbouring municipalities departments and the NS Department of Transportation and Infrastructure Renewal to talk about accomplishments over the last year, look at possible improvements that can be made to infrastructure and programs in the coming year, discuss sharing of resources, exchange other information, and forge partnerships. Keeping / publishing a report card will assist in measuring progress.

**A.2. Present to Board of Trade:** Arrange to present about the new AT Plan to the Board of Trade, and to the Lunenburg Waterfront Association, at one of their general membership meetings, explaining its importance and obtaining their feedback.

**A.3. Present to Bluenose Academy:** This should be done at a meeting of the School Advisory Council, where teachers, parents and staff are able to learn about the AT Plan and suggest ways in which the school can participate. It is valuable to speak to all three groups: parents, teachers, and staff together. In addition, if possible, have someone from the AT Steering Committee present about AT activities to the entire student body, especially once a series of educational programs has been established.

**A.4. Liaise with RCMP** and conduct an annual review of bicycle and pedestrian accidents to determine if there are unidentified ‘hot spots’ on the roads where infrastructure improvements need to be made to improve safety.

**A.5. Meet regularly with the Active Transportation Coordinator for the District of Lunenburg** to compare notes, coordinate projects and seek mutually supportive activities. This will be particularly important with regard to residents living in adjacent areas such as Blue Rocks, Rhodenizer Lane, and First Peninsula Road.

**A.6. Work with supportive agencies** such as the Nova Scotia Department of Health and Wellness, the Atlantic Health Promotion Research Centre, the Nova Scotia Heart and Stroke Foundation, and other health services and promotion organisations to promote the health benefits of active transportation.

There are a wide range of organizations with supportive programs that will complement the implementation of AT policies, programs, and projects. Work with them to make the Town of Lunenburg a leader in transforming itself into a walk and bike friendly community.

#### **4.4 Maintenance**

Maintenance is key in providing an appropriate level of service and user-friendly, safe and efficient transportation solutions. **Preventative maintenance** includes road, sidewalk and shoulder sweeping and preventative tree pruning. **Corrective maintenance** includes sealing pavement cracks and potholes, repairing markings, pruning trees after a storm and grading crusher dust surfaces.

**Replacement** is necessary when something has reached the end of its lifetime. **Winter maintenance** includes snow clearing from sidewalks and paths.

The level of required maintenance depends on the specific facility. Appropriate maintenance cycles should be put in place by the Municipality to ensure a minimum upkeep.

#### **4.5 Additional Municipal Policies to Encourage Active Transportation**

The implementation of the Active Transportation Plan will be an incremental process over its twenty year period, with infrastructure programs being completed as funding becomes available. The large number of projects recommended provides the plan with a built-in degree of flexibility, which allows the Municipality to adapt to changes in priorities, funding options, and public acceptance.

However, it will be paramount for the success of this plan that municipal policies be adopted to ensure that the long-term community objective of creating a healthier, happier, place to live and work, based upon making walking and cycling safe and attractive options.

##### **4.5.1 Reducing Speed Limits**

The Town of Lunenburg received its UNESCO World Heritage Site designation because its Old Town has retained the look and feel of a pre-industrial fishing community. The town has long been a tourist destination, and the numbers of tourists continues to grow.

The streets on the Old Town are narrow, restricting traffic flow and creating challenges for parking. Various mitigations have been attempted, and some of the projects suggested in this report are intended to improve the walking and cycling linkages between the waterfront and parking outside the Old Town.

This high traffic flow represents a safety risk for pedestrians and cyclists. In addition, the large number of walking tourists is often a significant hazard to motorists.

In many similarly-designed communities in Europe, particularly those with narrow streets, the speed limit has been reduced from 50kph to 30kph. (In the United Kingdom, this movement is known as “20 is plenty”). The reasons are clear: the fatality rate for pedestrians struck by a vehicle travelling under 30 kph is only five percent. At 50 kph, the fatality rate increases to 45 percent and at 60 kph to 85 percent.

We recommend:

- That the Town advocate to the Province to enable “speed zoning” or the reduction of the speed limit on all streets of the Old Town, beginning from the Lincoln/Dufferin intersection, to 30 kph. Not included in this policy would be Kissing Bridge Road from Cornwallis to Starr, Sawpit Road.



Currently, the Nova Scotia *Motor Vehicle Act* implies that the lowest speed limit that can be set is 50 kph. However, recent changes have enabled speed limits in school zones to be reduced to 30 kph. The Nova Scotia Department of Transportation and Infrastructure Renewal is thinking about the implications of allowing speed zoning for other locations and the Town of Lunenburg should get a seat at the table to advocate for changes that will allow them to adjust the speed limit in important Old Town areas.

Because of high traffic volumes and narrow streets, reducing the speed limit in the Old Town will not seriously impede vehicle flow, but will improve the safety of both motorists and pedestrians.

The Town should work with Nova Scotia Transportation and Infrastructure Renewal to try to implement this policy as soon as possible, and certainly within the next three to five years.

#### **4.5.2 Street Lighting**

During the public meetings, Lunenburg was frequently cited as not only a walkable community in scale, but one that was safe for night-time walking. However, particularly in the New Town, where most streets have no sidewalks, lack of adequate street-lighting limits the ability of some people, notably seniors, to walk without risk of tripping and falling. Improved lighting will also make pedestrians and cyclists more visible to motorists.

Many of the projects recommended in this study have been proposed so that they will eventually create a variety of interconnecting routes, combining on-street sidewalks and/or off-road trails, throughout the community. Although improvements to the walking surface is critical in encouraging more people to walk and cycle, improvements to the lighting on these routes can extend their usefulness to a larger number of residents and visitors over a longer period of every day.

We recommend:

- That the Town regularly conduct a review of the principal walking/cycling routes throughout the community and ensure there is adequate street lighting;
- As sidewalks are extended, adequate street-lighting will be installed to ensure their ability to be used safely at night-time; and
- Important crosswalks over busy streets will have overhead street-lighting provided.
- All current and future trail access points: Dufferin Street, Kissing Bridge Road, Sawpit Road, Cornwallis Street, and Prince Street, should have street lighting provided.

This policy should be implemented within the first year of the adoption of this plan.

### **4.5.3 Curb Cuts**

As a major tourist destination and as a principle of inclusiveness, the Town should apply the 8 to 80 approach and consider principles of universal access. As with many communities in Nova Scotia, the population of Lunenburg is aging. Also, looking at the retirement of the baby-boom generation, many tourists are, and are going to continue to be, seniors.

As populations age, mobility is reduced, and an increasing number of seniors are using mobility assistance devices. Typically, these move on sidewalks, and curb-cuts at street crossings have increasingly been added to permit access by wheelchairs, both motorized and non-motorized. Applying the 8 to 80 approach, if it is good for mobility impaired people, it is good for everyone.

Considering these trends in the community, we recommend:

- Town staff review all existing curb-cuts and street crossings, accompanied by a member of the disabled community, to develop a plan to improve those crossings that are inadequate and provide new ones where required; and
- This review should be conducted annually, with the Town's policy being to make all Lunenburg's walking routes accessible to those using mobility assistance devices.

This policy should be implemented within the first year of the adoption of this plan.



### **4.5.4 Pedestrian/Cycling Surveys and Counts**

Without baseline data on walking and bicycling trips, it is difficult to determine whether efforts to improve the Active Transportation links are helpful or effective. Knowing how much pedestrians and bicyclists are exposed to risk, or are perceived to be at risk in the community, also makes it possible to determine the timing for projects to improve infrastructure. Counting Active Transportation modes of travel also helps to highlight their needs, making it harder to simply ignore them.

We recommend:

- The Town conduct regular and ongoing 'traffic' counts of AT modes of travel. This may be done through surveys or self-reporting forms; subjective data can be gathered as well as raw counts.

What should be measured:

- The number of bicyclists or pedestrians on specific streets;
- "Cordon counts" (counts of trips in and out of a particular district) by counting at natural bottlenecks such as between Old Town and New Town;
- Demographics (age, ethnicity, income) and gender of walkers and cyclists;
- Helmet and light use by bicyclists;
- Child and family participation;
- Trends - growth or retraction over time;
- Facility choice - why here;
- Mode choice - why walking or bicycling vs. another mode;
- What users would like to see improved;
- Factors that make the route appealing; and
- Behavior change, i.e., reported shifts from another mode.

#### **4.5.5 Trail Group**

The Town should work with interested volunteers to establish a trails group to assist with fundraising, identification and maintenance of areas requiring attention, promotion of trail etiquette, etc. It might be possible to obtain funding from the Nova Scotia Department of Health and Wellness, Physical Activity, Sport and Recreation or other departments to obtain funding and training. This group should work with Baby to Bay and other trails group in the District of Lunenburg.

## CHAPTER 5 **GENERAL GUIDING PRINCIPLES**

For the Town of Lunenburg Active Transportation Plan to have the greatest chance of success, staff, Council, and the AT Steering Committee should use the following general guiding principles whenever reviewing future activities related to its implementation.

### **1. Raise Awareness**

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*Raising awareness is a critical component in increasing active transportation participation levels and greater walker/cyclist safety through motorist awareness.*

#### **Guiding principles:**

##### **GP 1.1 Improve signage**

Provide adequate municipality-wide signage and identification of the active transportation network. All crossings should be provided with signs identifying the road crossed and the trail/route name. Provide signs along routes, where appropriate, that indicate distances to destinations and directions to local services of interest to Active Transportation users. Provide signs at parking areas with access to trails and other active transportation infrastructure.

##### **GP 1.2 Develop itineraries and mapping**

Itineraries and maps should be widely disseminated amongst residents and visitors. Different pamphlets and maps can be created around different themes. Distribute the materials widely, especially to tourist information centres and local businesses that can benefit from having such information available, such as bike shops, B&B's, hotels, etc. There should be an Active Transportation page on the Municipal Website

##### **GP 1.3 Create / coordinate partnerships**

The Town should meet regularly with people and organizations involved in active transportation to coordinate and create opportunities to improve AT infrastructure. New projects such as trail creation and improvements or the development of a program should be used to foster partnerships among individuals, NGOs, and departments of government, the RCMP, local businesses and other interest groups.

#### **GP 1.4 Participate in and organize local events**

Use these venues as an opportunity to promote active transportation by handing out maps, pamphlets and itineraries, as well as by teaching AT etiquette. Organize group AT activities, such as trail walking for fitness or walking school buses. Create an active transportation component to existing municipal activities (e.g. Canada Day).

## **2. Educate**

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*Programs to encourage active transportation are as important as infrastructure investments for safety.*

#### **Guiding principles:**

##### **GP 2.1 Promote a shift in public attitudes**

Education is one of the most important components of this plan. Through publications, events, training programs, and other activities, tolerance and safe interaction between all transportation modes should be promoted. Individuals and decision makers should be made aware of the costs and benefits of transportation and land use choices. Residents should be enabled to learn how they can reduce their transportation footprint through AT use for short trips.

##### **GP 2.2 Raise a new generation of active transportation users**

Child and youth-based education programs and activities should present active transportation as an easy and potentially safe option for young people. Give priority to the development of infrastructure networks in neighbourhoods where there is a concentration of youth. Develop activities and education programs that will encourage young people to view active transportation as a viable alternative to driving.

## **3. Improve Infrastructure**

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*Improved active transportation infrastructure will encourage increased active transportation usage.*

#### **Guiding principles:**

##### **GP 3.1 Adequately maintain existing on and off-road facilities**

Existing facilities must be maintained to a mandated standard, and new facilities should be added to the existing system only when it is assured that they can be properly maintained.

##### **GP 3.2 Improve both on-road and off-road facilities**

Infrastructure improvements should be a combination of on and off-road facilities, with priority given to creating a connected and fully integrated AT network.

##### **GP 3.3 Accept incremental improvements**

Given that much of the work to improve active transportation infrastructure involves retrofitting existing situations, the Town should accept that it may only be able to initially implement partial solutions, such as the installation of a crusher dust surface where ultimately a paved surface is desired or the development of only a partial or incomplete route. By eventually stringing together the pieces, the ultimate goal of developing a fully connected AT network solution may be achieved. In addition, the creation of partial solutions can encourage use that will develop impetus for further expansion of the network.

#### **GP 3.4 Encourage active transportation friendly built environments**

There is a strong connection between the spatial distribution of the built environment and the overall physical activity of residents. New developments should be required to create walkable and bikeable areas by considering origin and destination patterns of users and providing suitable infrastructure connecting important locations. Existing developments should be retrofitted for active transportation usage and new developments should be designed to suit self-propelled modes of transportation. Active transportation routes and land use should continue to be better integrated.

#### **GP 3.5 Provide year-round safety**

Walking and biking should be safe for all ages and abilities in all seasons. Surface repair and patching, snowplowing, clearing of ice, flood-proofing, and the filling of low spots and potholes are important maintenance considerations.

#### **GP 3.6 Liaise with Nova Scotia Department of Transportation and Infrastructure Renewal**

The Municipality should meet with TIR staff at least once a year to ensure that the Department and the Municipality are aware of each other's plans. Subsequently, each can build off the others' proposed future plans, as they relate to improving and maintaining AT infrastructure.

### **4. Create Interconnectivity**

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*Active transportation networks are effective only if they are interconnected. If there are gaps between origins and destinations, the network will only be marginally utilized.*

#### **Guiding principles:**

##### **GP 4.1 Create linkages and extensions between existing and proposed AT infrastructure**

The Town already contains many good facilities that can be built upon to create an overall active transportation network, but there are some important gaps. For example, there are several situations where sidewalks end suddenly, neither connecting with another route nor ending at a logical destination. Extending some facilities, such as the sidewalk on Maple Street, or connecting separated facilities, such as the Back Harbour Trail with the Front Harbour Trail, will exponentially increase their value.

##### **GP 4.2 Create opportunities for utilitarian trips through the development of improved recreational routes**

Active transportation improvements in the Town should be closely connected to recreational facilities. This will allow investments to meet immediate perceived needs while allowing the evolution of an overall network that will support utilitarian trips. Linking these activities will provide a better return on investment and will allow different sources of funding to be tapped. In addition, people will be able to use the active transportation facilities not only in their daily life running errands, but also for recreational activities.

#### **GP 4.3 Synchronize new infrastructure with surrounding municipalities**

The rails to trails network serves as a good example for inter-municipal connections beyond the borders of the Town. The Town should always be alert to developments in the surrounding area and look for opportunities to create or allow for future connections into region-wide active transportation infrastructure. The Town should meet regularly with the District of Lunenburg and the NS Department of Transportation and Infrastructure Renewal to compare notes on active transportation initiatives and to try to coordinate actions.

## **5. Implement the Plan**

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*Implementation will move this plan from concept to physical realization.*

### **Guiding principles:**

#### **GP 5.1 Get the best return on investment**

Concentrate efforts in areas where investment will have the biggest impact.

#### **GP 5.2 Focus on low cost-high impact items first**

There are some easily implemented and relatively low cost items such as improved signage that could have an immediate impact.

#### **GP 5.3 Look for correspondence with potential partners' interests**

Various departments of government and non-governmental organizations have different areas of focus like health, recreation, economic development, etc. When seeking funding for a particular piece of infrastructure or program, review potential partners and tailor the request for funding to match their particular areas of interest. Different organizations may support the same initiative for vastly different reasons.

#### **GP 5.4 Be opportunistic**

While this plan provides suggestions for priorities for implementation take advantage of making improvements to existing related facilities like rails to trails. Take advantage of opportunities that come up such as the development of new subdivisions or commercial areas, the resurfacing of roads, or new funding opportunities to create infrastructure, even if it is not on the priority list. However, recognizing Guiding Principle 5.1, it is important to balance efforts to make sure that low-impact items are not siphoning energy and effort from higher impact items.

#### **GP 5.5 Implement controversial changes gradually**

Some Active Transportation improvements will generate resistance, due to concerns about the cost, the perception that automobile traffic flow will be impaired, or the disagreement of adjacent land-owners. If possible, adopt a gradual approach to new infrastructure, such as by using temporary, low-cost infrastructure (i.e., bollards and posts instead of curbs) or through the introduction of the changes as pilot projects.

#### **GP 5.6 Plan for incremental improvements**

This will be a 20 year plan, so incremental improvements will be the norm. Recognizing Guiding Principle 3.3, accept partial improvements with the intention of achieving the full solution later, but

ensure that initial improvements will not make later full development of solutions more difficult or costly.

#### **GP 5.7 Define success**

Communities need to establish both baselines and goals, and then make their plans work toward achieving those goals. This will allow communities to evaluate progress as per Guiding Principle 5.8 in a meaningful way.

#### **GP 5.8 Evaluate regularly**

Review investments made in active transportation infrastructure and programs to determine what is working, what is failing, and the reasons for their success or failure. Determine how to build on the successes and improve on less-successful activities.



# The Case for Active Transportation

## The Canadian Context

Active Transportation activities provide significant health and fitness, transportation, environmental, economic and tourism benefits. Municipalities in Nova Scotia, Canada, and throughout North America are implementing initiatives to promote and encourage active transportation activities as a preferred option to the private automobile for short-distance trips and as a method of promoting a more active and healthy lifestyle.

Over the last 10 years, the concept of Active Transportation has been gaining popularity because the health, social, environmental, economic and tourism benefits are so substantial. There is clear evidence of the benefits associated with designing cycling and pedestrian friendly communities and encouraging people to be more active by walking and biking more often, for both recreation and utilitarian purposes.

Promoting active transportation, especially through the development of an integrated on and off-road system that provides transportation and recreation options, is a simple and obvious strategy that can encourage people to reduce their use of the personal automobile and create sustainable, more liveable, safe and active communities.

These benefits include improved health, fitness, quality of life, and social interaction for citizens, a cleaner environment resulting from more sustainable means of transportation, and economic benefits related to new tourism opportunities and diversified transportation options to shops and services for workers and patrons.

Health, the environment, safety, the built environment, barriers to active transportation, and economic benefits are the key areas to be addressed in a sound active transportation plan. Creating an active transportation network requires government leadership to establish a range of policies and programs that support opportunities for people of all ages and abilities to engage in routine daily physical activity. These policies might address:

- Bicycle and pedestrian oriented design;
- Mixed-use development;
- Ample recreational facilities;
- Locating schools in walkable neighborhoods; and
- Funding and promoting active living programs.<sup>4</sup>

## Health and Fitness

Walking and cycling, as well as skateboarding and inline skating, provide enjoyable, convenient and affordable means of exercise and recreation. Research suggests that the most effective fitness routines are moderate in intensity, individualized, and incorporated into our daily activities. In addition, studies have shown that people who use active transportation are, on average, more physically fit, less obese and have a reduced risk of cardiovascular disease.

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<sup>4</sup> <http://www.activelivingleadership.org/aboutal.htm>, reviewed on 1 February 2005

Current estimates place the cost of physical inactivity in Canada at \$5.3 billion (\$1.6 billion of direct costs and \$3.7 billion in indirect costs) and the cost of obesity in Canada at \$4.3 billion (\$1.6 billion of direct costs and \$2.7 billion of indirect costs) in health care expenditures<sup>5</sup>. Our health system is attempting to shift from simply protecting people from hazards in the environment to developing healthy environments in which people can live.

Increased physical activity such as walking, cycling and other active transportation related activities can help reduce the risk of coronary heart disease, premature death, high blood pressure, obesity, adult-onset diabetes, depression and various types of cancer. A more active population can in turn reduce the cost of medical care, decrease workplace absenteeism, and maintain the independence of older adults and younger children exploring potential new active transportation options. If Canadians were to become more active, there would be:

- 26% fewer deaths from type II diabetes;
- 20% fewer deaths from colon cancer; and
- 22% fewer deaths from cardiovascular disease<sup>6</sup>.

Sedentary lifestyles have serious consequences for public health. The most visible is the sharp rise in obesity across Canada in recent years. Almost half of Canadians ages 12 and over report being physically inactive and 26% of youth between the ages of two and 17 years old are overweight or obese (Statistics Canada, 2006). In Canada, the prevalence of obesity has more than doubled in the last 20 years (Katzmarzyk & Mason, 2006). Comparatively, the proportion of overweight and obese adolescents aged 12-17 doubled from 14% to 29% between 1979 and 2004, and today only 12% of children and youth get adequate levels of physical activity.

There is strong evidence that people who commute to work using Active Transportation are more likely to be fit and less likely to be overweight or obese than those who use exclusively motorized modes. In addition, there are other health benefits to the physical fitness gains. Active Transportation can enhance one's mental outlook and well-being, improve self-image, social relationships and increase self-reliance by instilling a sense of independence and freedom. These can contribute to healthier and happier personal relationships, and improve work and school productivity.

Improving active transportation methods such as walking and cycling can help make communities more liveable by creating an environment that is pleasant and safe with reduced noise and pollution. This can encourage more social interaction within a neighbourhood and create a stronger sense of community.

## Transportation

Walking and cycling are means of transportation that are efficient, affordable and accessible. They are the most energy efficient, and generate no pollution. The transportation benefits of walking, cycling and other Active Transportation modes include reduced road congestion and maintenance costs, less costly infrastructure, increased road safety and decreased user costs.

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<sup>5</sup> Canadian Fitness and Lifestyle Research Institute. 2010. *Cost of Physical Inactivity*. [http://www.cflri.ca/eng/provincial\\_data/information/cost\\_inactivity.php](http://www.cflri.ca/eng/provincial_data/information/cost_inactivity.php), accessed on 31 March 2011.

<sup>6</sup> Ibid.

In general, active transportation modes provide no emissions during use and have low lifecycle greenhouse gas emissions. In many cases, for distances up to 8 km in urban areas, cycling can be the fastest of all modes from door to door.

Canadians make an average of 2,000 trips per year of distances less than 3 km, using their automobile more than 90% of the time. Surveys show that 66% of Canadians would like to cycle more than they presently do. Seven in 10 Canadians say they would cycle to work if there “were a dedicated lane which would take me to my workplace in less than 30 minutes at a comfortable pace” (National Active Transportation Survey, *Go for Green*, 2005). These facts clearly demonstrate the potential for increasing the number of trips by bicycle, especially in the more developed areas of the Municipality.

It has been estimated that due to rising gasoline prices, more than 10 million cars – mostly belonging to low income families – will disappear in the US in the next five years, and a similar trend is expected in Canada (CIBC World Markets, 2008). This issue will be even more relevant in rural communities, where income levels are typically lower. Providing safe options for bicycle and pedestrian travel is going to become increasingly important.

Road improvements to increase the safety of pedestrians and cyclists can and will also enhance the safety of other road users. The U.S. Federal Highway Administration reports that paved shoulders on two-lane, rural roads have been shown to reduce run-off-the-road, head-on and sideswipe collisions by 30% to 40%. In addition, many municipalities have found that paved shoulders reduce maintenance costs related to shoulder deterioration, grading and snow removal.

## **Environment**

Active Transportation activities are energy-efficient, non-polluting modes of travel, whereas short-distance automobile trips are the least fuel efficient and generate the most pollution per kilometre. Reducing the number of motor vehicles on the road decreases the number of pollutants released into the atmosphere by motor vehicles. Short-distance trips have the greatest potential of being undertaken by Active Transportation.

The effects of climate change can be reduced by encouraging drivers to use other modes of transportation, especially for travel outside rush hours. Motor vehicles, roads and parking facilities are major sources of water pollution and hydrologic disruptions due to such factors as road de-icing, air pollution settlement, and roadside herbicides.

Motor vehicles generate various types of unwanted noise that cause disturbance and discomfort to residents: engine acceleration, tire/road contact, braking, horns and vehicle theft alarms. Cyclists and walkers are not disruptive to communities from a noise perspective.

Making communities less auto-dependant by providing infrastructure for Active Transportation modes, such as walking and cycling, can reduce the amount of land required to construct new communities, thus creating more compact subdivisions that make more efficient use of available land.

## Economic

The average cost of driving 1 km in a Dodge Grand Caravan costs the owner between \$0.449 and \$0.882<sup>7</sup>. Walking or biking 1 km costs nothing.

In 2004, *Go for Green* published what remains the principle Canadian document examining the economic benefits of Active Transportation: “The Business Case for Active Transportation: The Economic Benefits of Walking and Cycling<sup>8</sup>”.

This report specified that savings could be obtained by shifting mode share from driving to walking and cycling. These savings include a reduction in the following costs:

- Road construction, repair and maintenance costs, which will be reduced because of lower demand as mode share shifts to walking and cycling;
- Health costs of treatment for those affected by air pollutants and greenhouse gas emissions;
- Health care costs due to increased physical activity and reduced respiratory and cardiac disease;
- Fuel, repair and maintenance costs of personal vehicles for individuals who substitute some of their driving for walking and cycling;
- External costs due to traffic congestion; and
- Parking subsidies.

Positive benefits to the community, in economic terms, will also include:

- The economic impact of bicycle tourism;
- The economic impact of bicycle sales and manufacturing;
- Increased property values along greenways and trails and in pedestrian and cycling friendly neighbourhoods; and
- Increased productivity and a reduction of sick days and injuries in the workplace.

Considerable examples exist that show on and off-road trails provide significant economic benefits for both local businesses and even adjacent landowners. Benefits are provided to the local economy during both construction and operation.

Trail construction results in direct benefits such as jobs, including the supply and installation of materials.

Following construction, benefits emerge in the form of expenditures by trail users. A few examples include<sup>9</sup>:

- 70% of Bruce Trail (Ontario) users cite the trail as the main reason for visiting the area in which they are walking. They spend an average of nearly \$20/person per visit within a 10 km corridor on either side of the trail;
- Quebec’s La Route Verte produced annual



Figure 2.1: Potential Benefits to Land Owners

<sup>7</sup> Canadian Automobile Association. 2011. *Driving Costs: Beyond the Price Tag – Understanding Your Vehicles Operating Costs*.

<sup>8</sup> Richard Campbell and Margaret Wittgens. 2004. *Business Case for Active Transportation: The Economic Benefits of Walking and Cycling*.

<sup>9</sup> Jennifer Dill. 2009. *Bicycling for Transportation and Health: The Role of Infrastructure*.

expenditures of \$95.4 million in 2000, representing 2,000 jobs, or \$15.1 million in tax revenue for the government of Quebec and \$11.9 million for the government of Canada;

- In 2002, Quebec hosted no fewer than 190,000 bicycle tourists. These spent an average of \$112 per day and an average of 6.5 nights during their visit. This compared to \$52 per day and an average of 3.1 nights spent by other tourists;
- The Eastern Ontario Trails Alliance estimated that at the end of a ten year build-out period, 320 km of their system, constructed at a cost of \$5.4 million, will generate approximately \$36 million in annual economic benefits in the communities through which it passes, and create/sustain over 1,100 jobs. Their trails system is shared-use, including motorized; and
- A 2009 study of Bloor Street, a commercial street in Toronto, Ontario showed that encouraging bicycling is good for business: people who had biked and walked to the area reported that they spent more money in the area per month than those who drove there. The study concluded that the addition of bike lanes would be unlikely to harm local business and predicted that commercial activity on the street would likely increase. Three-quarters of merchants surveyed on the street believed that business activity would improve or stay the same if a bike lane replaced half of the on-street parking<sup>10</sup>.

On and off-road trails systems can have varied levels of attraction for tourists. They can be travel destinations in themselves, encouraging visitors to extend their stay in the area or enhancing business and pleasure visits. By increasing the level of tourist draw, travelers can be expected to stay longer, resulting in an additional night's lodging and meals, a major direct new benefit to local businesses. A local hotel is already taking steps to connect to the neighbouring rail-trail along the La Have River.

- A 2007 survey of Canadian tourists active in the outdoors showed that more than 30% cycled on at least one occasion while on vacation;
- The Ontario Ministry of Transportation reported that touring cyclists spend an average of \$130 per day in Ontario, and bicycle retail and tourist industry contributes to a minimum of \$150 million a year to the Ontario economy; and
- Bed and breakfast operators between Ottawa and Kingston report that the majority of their business is from touring cyclists.

Although not a Canadian example, the following statistic from the United States is worth quoting:

- Cyclists in Vermont spend an average of \$180 U.S. per day, the same amount as someone traveling by car.

## **Tourism**

There is a growing demand for cycling and ecotourism throughout North America, stemming from an increasing desire to explore new areas through an active mode of transportation and experience one's natural surroundings. In all cases the increase in cycling and active tourism has a direct impact on the economic standing of the City, Town, County or Region in which it is implemented.

A study done by the Victoria Transport Policy Institute shows that walking and cycling facility improvements and promotion programs have a direct impact on economic development by increasing shopping opportunities and tourism activities. More specifically, "one study estimates

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<sup>10</sup> Nancy Smith Lea. 2010. *Converting On-Street Parking to Active Transportation in Toronto: Two Studies of Merchant and Patron Preferences*.

that rail trails in Australia provide an average of \$51 to the regional economy per cycle tourist per day (Beeton, 2003)”. A number of studies show a direct correlation between the implementation of well-planned, non-motorized transportation improvements and an increase in local tourism economies.

In the United States, studies have shown that trails and greenways have been able to stimulate tourism and recreation-related spending and that trail and greenway systems have become the central focus of tourist activities in some communities. In these communities, this push in active tourism can be a key means of “kick-starting” the economy.

Though tourism benefits from AT and Trail facilities prove to provide an injection into the local economy there are also a wide range of social, environmental and health benefits associated with AT and trail tourism. As people become increasingly more aware of the benefits to trail use and pedestrian and cycling activities there tends to be a continuous increase in the number of cycling tourists who will provide further benefits to their communities and the communities to which they visit.



# Notes from Public Meeting 1

Monday, 23 September 2013

## Attendance List

SIGN-IN • Public Mtg 23/9/13 28 people

Name Anne Curtin  
Joseph Carnevale

Lori Nickerson

Melissa Risser

KERRY RILEY

Helen Dalton

Christine LeBlanc  
Mary Seale

Dave Heffler

Theresa Heffler

Peter Mosler

Pat Zander

DANNY CROFF

MARQUISE SOPHER

STEFAN SOPHER

Braham Pearson

Tim Pearson

Christa Hynes (At com)

CSB

Eleanor Casparik



## Notes

### Group 1

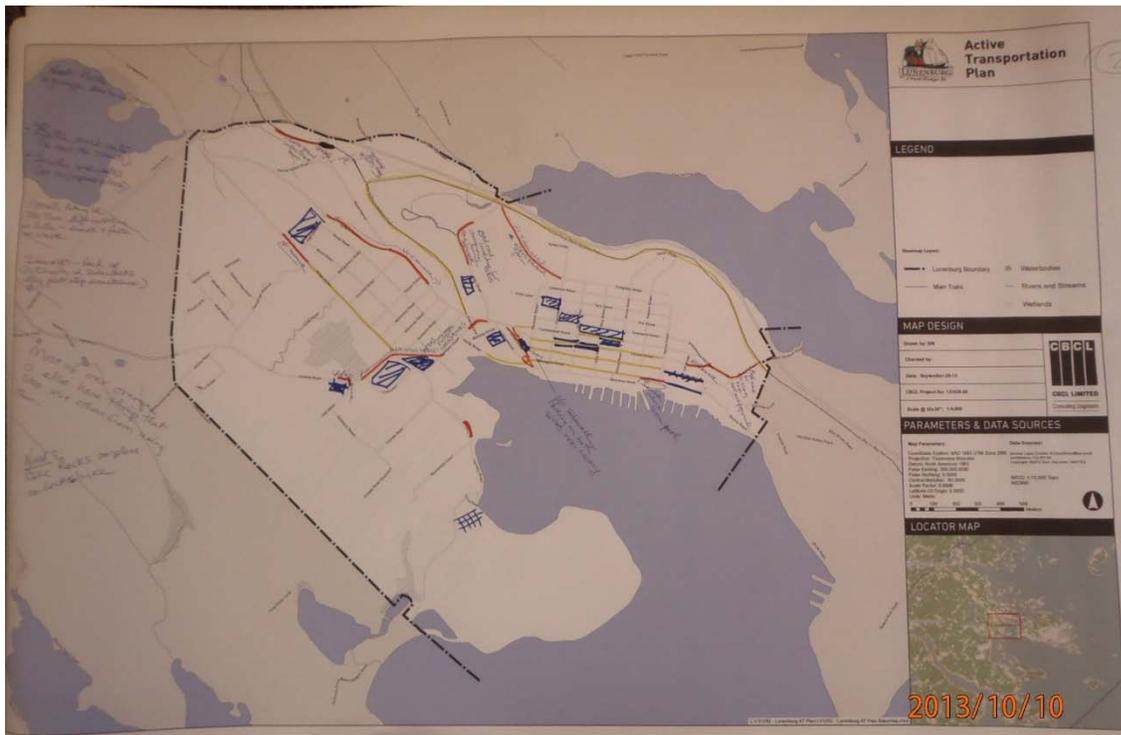
- Fulton parking lot not large enough so people can park and walk around town.
- Lincoln – no parking between King and Kaulbach.
- Walking for school to New and Old Town in front of Old Foundry needs to be improved.
- Walking around Tim Hortons.
- Parking at bridge at head of Back Bay - lot too small.
- Bay to Bay trail lonely/nothing to Snairs Corner.
- No good sidewalk in New Town – width.



Group 1 Diagram

## Group 2

- Back Harbour Trail = great
- Lots of good routes, but there are black spots like bad curb cuts
- At library, lots of parking but no sidewalks.
- Asphalt sidewalk uneven and difficult to walk on.
- Old town too hilly to cycle, is small enough to walk.
- No bike racks in town, put in single lock ups.
- Stairs on Bay to Bay Trail at Maple – bike ramp gutter too close to edge.
- Curve on Tannery Road, house very close to road, no shoulder.
- Better signage about Back Harbour Trail.
- Starr Street has blind corner, also dog park will increase traffic.

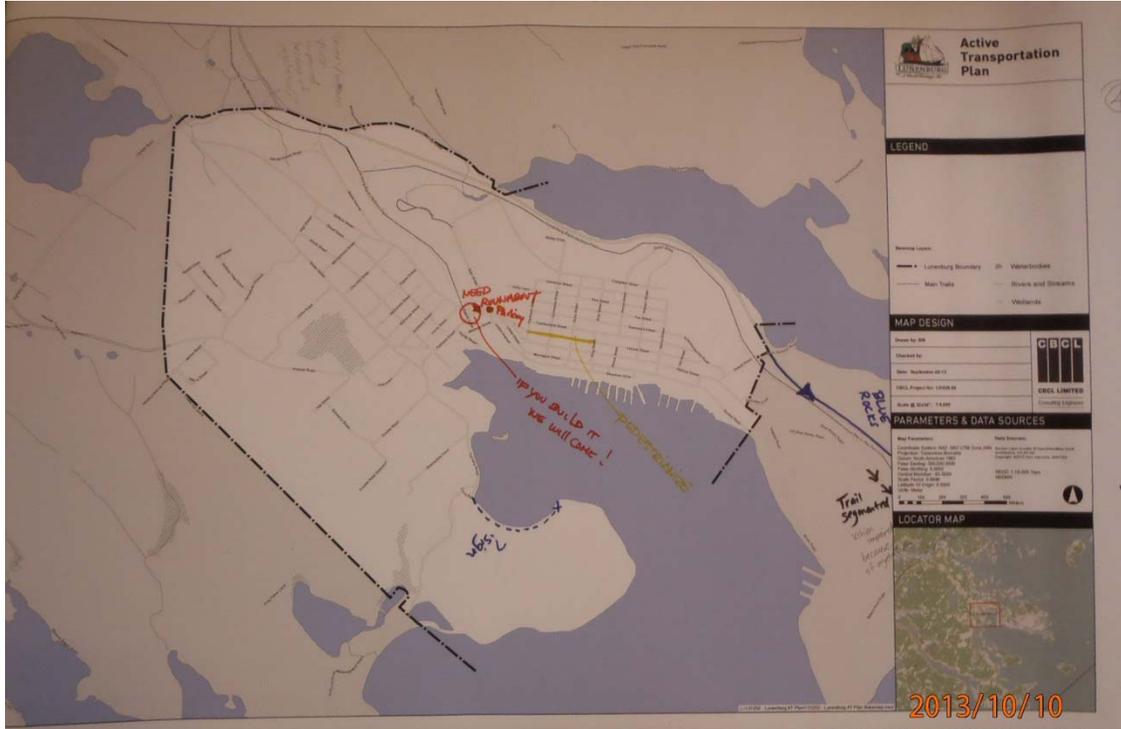


Group 2 Diagram



**Group 4**

- More parking downtown.
- Pedestrian Lincoln to King needs improvement.
- Improve the trails signage; provide distance to destinations.
- Improved road maintenance out to Blue Rocks, people want to bike but don't feel it's safe.



Group 4 Diagram

### Group 5

- Presenter of parents with kids starting with school.
- Kids (5 year olds) have to walk home to after school, care on Centennial Ave, no sidewalks, Victoria Road is scary.
- Tannery Road corner is bad.
- Walking along waterfront is nice.
- Would be good to provide a connection to Highliner plant.
- Trail around golf course.
- Cross walk at Sawpit.
- Parking at kiosk at four way stop needs to be improved.
- Better connections to Back Harbour trail required.



Group 5 Diagram

# Notes from Blue Rocks Residents Presented at First Stakeholder Meeting

**Blue Rocks is advertised and promoted by Lunenburg businesses and Board of Trade VIC as a destination for cycling, kayaking and driving. Folks even walk/jog the stretch to and from Blue Rocks.**

We are concerned about safe recreational access between Lunenburg and Blue Rocks.

- There are no safe walking areas alongside the road. Vegetation is overgrown.
- There is no bike lane/trail for cyclists, pedestrians or joggers.
- Grass is not cut around curves so visibility is limited resulting in motorists not seeing cyclists or walkers.
- Brush also obscures deer entering roadway (Blue Rocks area has abundance of deer)
- The narrow road is in poor repair resulting in vehicles trying to avoid large potholes
- The 80 kilometer speed limit is too high, cars are always speeding and passing, making it hazardous for walkers or cyclists
- Upon entry into Blue Rocks, the curve at Daniel's Pond has poor visibility & road is covered in debris after storms
- The head of Sand Cove is eroding and needs reinforcement
- There is little in the way of signage and mapping
- There are no benches for rest or viewing
- There are no public washroom facilities (The Blue Hog Gallery owners has been admitting people into their home for such needs)
- More vehicular traffic has built up as Blue Rocks is promoted as a tourist destination so we see large RVs and motor coaches on very narrow roads. Some even camp overnight.
- Litter is also a problem as there are no trash or recycling bins

# Notes from Stakeholder Meeting

Tuesday, 24 September 2013

## Attendance List

SIGN IN: STAKEHOLDERS MTG 24/9/13

Name	Organization
ROBEAS HAYLE	LightHouse Media Group
Meghan Walsh	Harbour View Haven
Rachel Bailey	Town
Elisabeth Bailey	Second Story Women's Centre
BRIAN DAVIS	1 <sup>st</sup> PENINSULA
Sandy Marshall	Lunenburg Waterfront Assoc Inc
Al Aebach	Lunenburg Bike Team
Tammy Stauenwhite	GO! Health + Fitness Lifestyle Coaching
Christa Heyne	AT committee
Liz Hamilton	Town citizens
Su Rogers	Lunenburg
Debby Smith	Health & Wellness
Peter Mosler	Town of Lunenburg
Brooke Nockling	Bluenose Coastal Action Foundation
Ashlee Feener	Fisheries Museum
Lisa MacAlpine	South Shore Health
Andre Bouchard	Health & Wellness
ALAN ALTASS	BAY TO BAY TRAIL
Laure Barkhouse	District of Lunenburg
TILER HAYDEN	TYLER HAYDEN INC TOWN OF LUNENBURG



### ***Comments from Stakeholders Attending the Meeting***

- Walking up Dufferin is difficult as it is a gravel surface. Nowhere safe for kids to ride bikes on Dufferin, especially since smokers from hospital block sidewalk.
- Connect onto Starr Street with new dog park.
- Tennis courts-great spot for outdoor physical activity equipment.
- View from the other side of “front harbour”, difficult along Tannery Road. Need a boardwalk to get around through the area.
- On the trail towards Blue Rocks, it is a difficult place to walk near Highliner
  - safety is a big deal, need to look at hot spots;
  - connectivity; and
  - expansion.
- Locals on the most part know how the funky intersections work, but tourist don’t, but even on a bike at Falkland near the Knot it is scary, you are out in the middle of the road.
- Use the WIFI system, connect to TripAdvisor and other biking / walking apps. Put up routes.
- MODL has partnered often with trails groups. Bay to Bay group is a huge resource. Great connection up onto Maple St. But really need to continue that partnership. Make sure you use resources even if they aren’t located in Town.
- What about the provincial building (70 employees) and access to downtown? Needs a good sidewalk.
- Walking to Foodland, need sidewalks on different streets to allow alternative routes.
- Will we provide a GIS layer of routes that could be put into some of the apps we are talking about?
- Waterfront area is in public control – objective is to encourage and maintain a working waterfront both for economics and tourism, so part of activity should be balance of public to the waterfront and public inaccessibility to the waterfront so it can “work”. Group is working on upgrade to staircase near the Yacht Shop. It could be a nice feature.
- Improvements to Spinnaker Wharf have made the area an attraction. Connections from waterfront to other destinations in town.
- Lots of people carrying bicycles in their boats.

Participants were asked if there one issue that was able to be fixed, what would it be?

1. Sidewalks;
2. Education/promotion;
3. Connectivity throughout the town, fill in the gaps to destinations;
4. Walkability to grocery stores;
5. A bike lane / multi-use trail all the way along the back harbour;
6. Accessibility around Kaulbach Head / golf course;
7. Connectivity and better road conditions (in relation to 6 do have trail that parallels road);
8. Nice spots around town to lock up bike, right now they have to lock to meters or signs;
9. Pave the front harbour trail, busy picturesque route that connects to destinations, make sure that plows don’t pile snow in way that blocks trail connections;
10. Inject some fun, if it’s more fun people are more inclined to do it, e.g., paint stairs like piano keys, public art;
11. Have more sidewalks in more areas of town;
12. Sidewalks;
13. Connectivity in town and to areas outside of town;
14. Have a long term capital plan that identifies priorities;

15. Think about the 8 to 80 (years old) rule and use that as a lens. A way to make decisions about AT investments. What should we focus on, guidelines to guide future decisions;
16. Intersection at Dufferin and Falkland;
17. Connectivity into town, especially with school and new developments ... out to Centre;
18. In terms of marketing, good signage and wayfinding that shows how far how long a walk it is;
19. Good connection from community centre and good signage to downtown so it can act as an overflow parking area;
20. Intersections, wayfinding, fitness stations like old style participation;
21. Very lucky in Town – it is already very walkable and beautiful. One of the bigger problems is parking. Go from a small town to a big town in summer. Need to have good road etiquette, where to walk how to drive, how to respect each other;
22. Connectivity and don't forget outside of town;
23. Connecting what's happening on the waterfront – get a waterfront plan for how people get on and off the waterfront using personal mobility;
24. Inter-generational pieces and get groups together and have better health;
25. How to deal with ticks; and
26. Put up signs anywhere you come into town that says “We Stop for Pedestrians”.

# Notes from Public Meeting 2

Thursday, 26 September 2013

## Attendance List

SIGN IN: Public Mtg 2.

NAME

Anne Curtin  
Joseph CARNUALE  
Denise Lyn Baker  
Melissa Ribser  
Peter Mosher  
MARQUISE SOPHER  
STEFAN SOPHER  
DAVID PATRICK  
Rocket Bailey  
Drenda Bachman  
Cheresa Heffler  
Dane Heffler  
KERRY RILEY  
Eleanor GASPARIK



## Notes

Proposals were presented and comments from participants were invited.

Comments received:

- Add signage at Blockhouse Hill Campground directing visitors to Back Harbour Trail;
- Consider streetlighting especially in Old Town area / ensure adequate lighting on walkable routes;
- Provide sidewalks around the library area especially Pelham and Kaulbach;
- Look at providing improvements to the path through the northern edge of the community centre parking lot;
- Concern that the "8 to 80" expression did not go young enough and that it should be "5 to 80";
- Set up a walking crossing guard rather than a static guard. Think about an overall crossing guard program. Add a crossing guard at Lorne and Victoria;
- Help establish a volunteer trail group to deal with trail etiquette, maintenance and other issues; and
- Develop a curb cut and universal access program – review all curb cuts with a representative of the disabled community to make a plan to improve curb cuts that are inadequate and provide ones where required.

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August 23, 2019

Dear Trail Manager;

Stretching for more than 24,000 kilometres and profiling Canada's diverse landscapes and communities, The Great Trail of Canada is now the world's longest network of recreational multi-use trails! Here in Nova Scotia, the Western Loop of this trail is now being planned in collaboration with a number of municipal, provincial and community partners.

You are receiving this letter because you are a trail manager along a proposed section of The Great Trail – Western Loop. It is hoped that you are willing to offer your cooperation, in principle, by providing a letter of support for your section of the route to be part of the Western Loop.

Our volunteer committee, made up of representatives from stakeholder groups in the Western Region, are working to identify the benefits of being part of the Great Trail and how your communities and trails can be supported. For example, it may be useful for you, as trail managers, to be able to maintain your independence, and still:

- ✓ Identify as part of the national brand in addition to your own trail promotion
- ✓ Potentially access funding
- ✓ Take advantage of opportunities with marketing partners and corporate sponsors
- ✓ Have access to support staff for GIS and fundraising

The Great Trail Western Loop Steering Committee would like to gauge interest in having your trail section become part of this trail system, following which we would develop a routing plan to submit to The Great Trail committee. Please indicate your interest in participating by completing the attached template and returning to:

**Glenn McMullen**

**The Great Trail Officer (GTO)**

**Nova Scotia Trails Federation**

**5516 Spring Garden Road, 4th Floor, Halifax, NS B3J 1G6**

**[glenn@novascotiatrials.com](mailto:glenn@novascotiatrials.com)**

If you would like to discuss the opportunity, offer any suggestions or ask questions, please contact either one of us so we can help move this project forward. In addition, you may check out the NS Trails website for more information at <https://nstrails.com/the-great-trail/>

Sincerely,



Laura Barkhouse

Co-chair

[Laura.barkhouse@modl.ca](mailto:Laura.barkhouse@modl.ca)



Rick Jaques

Co-chair

[valleytrailcoordinator@gmail.com](mailto:valleytrailcoordinator@gmail.com)

The Great Trail – Western Loop

Date: \_\_\_\_\_

On behalf of \_\_\_\_\_,

- we are interested in participating in planning for the Great Trail - Western Loop. We understand that by stating our interest through this letter, we are indicating our support for helping to plan the trail route, but it does not release any authority over our trail.
- We are NOT interested in participating in planning for the Great Trail – Western Loop.

Comments:

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**From:** [Kelly Cunningham](#)  
**To:** [Heather McCallum](#)  
**Subject:** Fwd: Western Loop - The Great Trail  
**Date:** November 20, 2019 3:54:32 PM  
**Attachments:** [image002.png](#)  
[ATT00001.htm](#)  
[image004.jpg](#)  
[ATT00002.htm](#)  
[letter and form to trail managers.pdf](#)  
[ATT00003.htm](#)

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Begin forwarded message:

**From:** Kelly Cunningham <[KCunningham@explorelunenburg.ca](mailto:KCunningham@explorelunenburg.ca)>  
**Date:** November 20, 2019 at 3:28:08 PM AST  
**To:** "[Laura.Barkhouse@modl.ca](mailto:Laura.Barkhouse@modl.ca)" <[Laura.Barkhouse@modl.ca](mailto:Laura.Barkhouse@modl.ca)>  
**Subject:** Fwd: Western Loop - The Great Trail

Begin forwarded message:

**From:** Laura Barkhouse <[Laura.Barkhouse@modl.ca](mailto:Laura.Barkhouse@modl.ca)>  
**Date:** September 4, 2019 at 9:44:33 AM ADT  
**To:** Laura Barkhouse <[Laura.Barkhouse@modl.ca](mailto:Laura.Barkhouse@modl.ca)>  
**Subject:** Western Loop - The Great Trail

August 23, 2019

Dear Trail Manager;

Stretching for more than 24,000 kilometres and profiling Canada's diverse landscapes and communities, The Great Trail of Canada is now the world's longest network of recreational multi-use trails! Here in Nova Scotia, the Western Loop of this trail is now being planned in collaboration with a number of municipal, provincial and community partners.

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able to maintain your independence, and still:

- ✓ Identify as part of the national brand in addition to your own trail promotion
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Sincerely,

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**Document No:** 5 (c)  
**Meeting:** Dec 11/19 LWMCC  
**Circulate To:** LWMCC  
**File:**

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## MEMORANDUM

**TO:** LWMCC

**FROM:** KELLY CUNNINGHAM, RECREATION DIRECTOR

**DATE:** DECEMBER 6, 2019

**RE:** RECREATION DIRECTOR'S REPORT

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### ARENA

- Staff have made a wonderful new display stand for our skates and helmets that are available to loan. These can be found in the back room of the Arena office.
- South Shore Lumberjacks Minor Hockey Association held a "holiday skate" on Friday, December 6. Entrance into the skate was a monetary donation to our Ice Resurfacers reserve fund! They said "You folks have been great to work with over the years, and we would like to give back by re-purchasing this ice time, and seeing if we can bring a few dollars back to the facility."
- There was a short-term increase in CO levels at the Arena on the morning of October 13, 2019. Out of an abundance of caution, the Arena was closed on October 13 and 14, 2019 to allow staff time to investigate potential CO sources. The CO source was believed to be the ice resurfacers and/or the edger, both of which are powered by propane combustion engines. Both pieces of equipment were immediately serviced by professional external service providers and passed emissions testing. Since, two new CO detectors were placed in the Arena, the staff handheld CO monitor was recalibrated, and a roof vent and fan was re-opened. Since the morning of October 13, all readings have been well-below the "Air Quality Guidelines for Arenas in Nova Scotia" as developed by the Recreation Facility Association of NS or are reading at zero.
- The office in the Arena is being decorated for the holiday season.
- There are a few free public skates coming up sponsored by different organizations and, as well, additional bookings for Christmas parties by external groups.
- A policy update was passed at the Council Meeting on November 26, 2019. The following motion was passed:
  - Motion: moved by Deputy Mayor McGee, seconded by Councillor Bachman approval of amendments to Policy #79 "Sponsorship and Commemorative Naming of Town Facilities, Property, Programs and Events" regarding regulated substances (Schedule "A"). Motion carried.

- The present sponsorship at the Lunenburg Arena, such as the Knot Pub logo on the ice, are not affected by the changes but, for example, a beer brand logo would not be allowed.
- The Arena will be closed for the season on March 30, 2020 after the Burg Classic Charity Hockey Tournament.
- South Shore Lumberjacks Minor Hockey Association weekend rentals have reduced this year, in comparison to last season, due to their reduced numbers.
- Staff have been doing research on new ice resurfacers in preparation for the potential purchase of a new machine in the capital 2020/21 budget. Please review staff report.
- The warm room was completely re-painted and looked fantastic; however, visitors have begun to pick off the paint. Staff will look at repainting with a different kind of paint.
- “HOME” and “VISITORS” signs are being made for the players’ benches and penalty boxes.

### **COMMUNITY CENTRE**

- The generator has been tested at the Community Centre and is in working condition in the case that the facility is required to be a comfort centre.
- The South Shore Players performed their production “Beauty and the Beast” from November 28-December 1 in the Community Centre.
- The Christmas Craft Show was held in the Community Centre on December 7 and 8 organized by the Darwin Event Group. The Community Centre was one of three buildings for the show, which also included the Lunenburg Curling Club and Bluenose Academy.
- Staff are working on a Request for Proposals for bathroom renovations.

### **PARKS, TRAILS, PLAYGROUNDS, FIELDS**

- Staff have been working hard on the upcoming splash pad in Lunenburg. The Facilities Superintendent has been working on logistics of the splash pad, while the Recreation Director has been working with the group on Provincial grant applications for this purchase.
- Bicycle Nova Scotia presented to Council on December 10, 2019 on their Phase 3 report for the Blue Route Hubs Project as well as some preliminary costing estimates.
- The Active Transportation Sub-Committee is completing a full review of the “Active Transportation Strategic Plan” written in 2013 to update information on what’s been completed, what to remove and to prioritize projects.

### **PROGRAMS**

- The new winter recreation guide is out and will be distributed in post office boxes this week.
- The Town is partnering with Coastal Action to offer a program “Ocean Friendly Nova Scotia: Reducing single-use plastics at restaurants and cafés” on February 6, 2020 at 6:00pm at the Lunenburg and District Fire Hall.

- The Town's PRO Kids program is doing well and is very appreciated by residents within the Town. The Recreation Director did a promotional video of the PRO Kids program with the Darwin Events Group for their craft show, as \$1.00 of each admission ticket goes towards our PRO Kids program funds. Additional donations towards this program are welcomed and encouraged.
- The Town hopes to partner with local municipalities to offer an after school program beginning in January at the Community Centre for grades 4-6; however, there are logistical insurance questions that we are in the midst of trying to figure out.

### **SPECIAL EVENTS**

- Mi'kmaq Flag Raising on October 10, 2019
- Remembrance Day on November 11, 2019
- Newcomers Welcome Event on November 21, 2019
- Staff Christmas Dinner in December 2019

Acknowledged only by:

Bea Renton  
Town Manager/Clerk

# LUNENBURG RECREATION DEPARTMENT



**Town of Lunenburg**  
 15 Green St., Lunenburg, NS B0J 2C0  
 W: [www.explorelunenburg.ca](http://www.explorelunenburg.ca)  
 T: (902) 634-4006 F: (902) 634-4416  
 Facebook: "Town of Lunenburg"



## REGISTRATION

### ABOUT

Register for programs in the Recreation Office located in the Lunenburg Community Centre (cash or cheque only). Town Hall can also take debit. Drop-in programs do not require pre-registration. Fees include HST.

### CANCELLATIONS

The "Town of Lunenburg" Facebook page will indicate if there are any cancellations or call the Recreation Office at 902-634-4006.

\*If school is cancelled for a storm, Fitness Class and Senior Fitness are also cancelled.

### REFUND POLICY

Once a program has started, we will only issue a refund if a participant has to withdraw for medical reasons. In these cases, a 10% administration fee will be charged and the amount of the refund will be prorated.

### QUESTIONS?

Contact: **Kelly Cunningham**  
 Recreation Director  
[kcunningham@explorelunenburg.ca](mailto:kcunningham@explorelunenburg.ca)

## Lunenburg's Volunteer Recognition Nominations

**Do you know someone who lives in the Town of Lunenburg that deserves recognition for their outstanding volunteering?**

Each year the Town of Lunenburg, the Mayor and Council recognize the extraordinary contributions of volunteers who give of their time and skills to provide services and programs in our community.

**The Town invites and encourages nominations of volunteers to be recognized at our annual Civic Volunteer Appreciation Reception. In addition a Representative Volunteer is selected annually to be recognized at the Provincial Volunteer Awards ceremony in Halifax.**

To nominate a volunteer, please contact the Recreation Department for an application form. Deadline for nominations is: **January 31<sup>st</sup>, 2020.**



# LUNENBURG ARENA

The Lunenburg War Memorial Arena is open until March 29, 2020!  
 19 Green Street, Lunenburg, NS  
 902-634-8744

## SKATING TIMES

**Public Skating:**

Mondays, Wednesdays and Fridays  
 3:00pm–4:30pm

**Adult Skating:**

Mondays, Wednesdays and Fridays  
 11:15am–12:45pm

**Family Skating:**

Sundays, 6:15pm–7:30pm

**Parents & Tots:**

Tuesdays, 1:00pm–2:00pm (FREE!)

## ADMISSION RATES

Children & Youth \$3.00  
 Adults \$4.00

**Season Passes:**

Youth \$82.00  
 Adults \$105.00  
 Family \$142.00

Skate Sharpening: \$5.00



## PICK-UP HOCKEY PROGRAMS

**SENIORS HOCKEY (50+)**

Gear up and play a little shinny in the true spirit of the game! Every Friday afternoon is dedicated for adults to enjoy the game just to have fun.

**Fridays, 1:00 pm – 2:30 pm**  
**\$10/session**

**DROP-IN HOCKEY**

Shinny hockey on Monday evenings! A great opportunity to play Canada’s national pastime. No slap shots or dangerous play. Organized by: John Jenkins.

**Mondays, 8:45 pm – 9:45 pm**  
**\$10/session**



**Upcoming Tournaments:**

Gary L Wentzell March Break  
 Tournament: March 18-22

Burg Classic Charity Hockey  
 Tournament: March 26-29

## ICE RENTALS

Looking for some winter fun with friends or work colleagues? Wanting to play hockey or host a skating birthday party? Rent the Lunenburg Arena for recreational fun for all ages!

\*All prices include HST\*

**Youth and schools:** \$149/hr

**Primetime:** \$176/hr

**Non-Primetime:** \$149/hr

**Mornings:** \$114/hr (not including March break)

Check availability or changes to any skating schedules at:

<https://www.explorelunenburg.ca/town-arena.html>

## DON'T FORGET YOUR HELMET!

The Town of Lunenburg adopted a Mandatory Helmet Policy which requires ALL arena users (adults and youth) to wear a CSA approved helmet while skating.

If you don't have one, no problem! Borrow a helmet from the Arena during your skate.



**Ocean Friendly Nova Scotia: Reducing single-use plastics at restaurants and cafés**  
**Led by Coastal Action**

Ocean Friendly Nova Scotia (OFNS) is an environmental recognition program developed by Coastal Action that aims to eliminate single-use plastics at cafés and restaurants, addressing the expansive problem of single-use plastic pollution on our coastlines and in our ocean. The program is currently in its pilot year in Lunenburg (2019-2020). Coastal Action has been working closely with businesses and other environmental non-profits to reduce our communities' plastic consumption, in turn preventing negative impacts to wildlife, our oceans, human health, and the economy.

This workshop will include a brief overview of OFNS program, sustainable alternatives for businesses and customers, how to transition away from single-use items and qualify for the program, and success stories from OFNS Lunenburg!

Contact [oceanfriendlyns@coastalaction.org](mailto:oceanfriendlyns@coastalaction.org) or call **902-634-9977** with questions.

**Thursday, February 6 at 6:00 pm**  
 Lunenburg & District Fire Hall  
**FREE!** No pre-registration required.



**WEIGHT ROOM MEMBERSHIP**

There are tremendous benefits to weight room training for good health, improve strength and can enhance quality of life. The room is open during the weekday from 8:00am until the building closes, or you can pay a key deposit of \$40 which permits access any day of the week from 6:00am-11:00pm. Ages 13+.

**\$42/month or \$148/4 months for adults**  
**\$10/month for students**



**DROP-IN PROGRAMS**

**PICKLEBALL**

Pickleball is a racquet sport that combines elements of badminton, tennis, and table tennis. It is played on three courts. All ages and abilities welcome. Balls and racquets provided.

**Sundays, 12 pm-2 pm;**  
**Tuesdays, 9am -11:30am & 7pm-9pm;**  
**Fridays, 1:30pm-4pm**  
**\$3/drop-in**



**BADMINTON**

We offer drop-in badminton each week. This is open to everyone 16 years and older. All skill levels welcome.

**Wednesdays, 7:00pm-9:00pm**  
**\$5/drop-in**

**WALKIN' IN THE MORNIN'**

Get your day off to a great start with an indoor walk. Walk at your own pace, socialize with friends, and experience the benefits of a regular walking program. This is an unsupervised activity.

**Mon, Tues, Wed & Fri, 8:00 am – 9:00 am**  
**Free**

**IN THE COMMUNITY CENTRE**

**FITNESS STUDIO**

**KARATE**

**Mondays & Wednesdays: 6:45pm-7:45pm**  
 Terry Lantz  
[terrylantz58@gmail.com](mailto:terrylantz58@gmail.com)

**BALLET, TAP, JAZZ & LYRICAL DANCE**

**Sundays (Ages 3-10) & Tuesdays (Ages 5-8)**  
 En Pointe Performing Arts Studio Inc.  
[enpointe@eastlink.ca](mailto:enpointe@eastlink.ca)

**MUSICAL THEATRE**

**Sundays (Ages 3-10)**  
 En Pointe Performing Arts Studio Inc.  
 Ballet, Tap, Jazz & Lyrical  
[enpointe@eastlink.ca](mailto:enpointe@eastlink.ca)

**AUDITORIUM**

**ZUMBA**

**Tuesdays: 5:15pm-6:15pm**  
 Christina Palao  
[palaofitness@gmail.com](mailto:palaofitness@gmail.com)  
 Find us on Facebook at "Palao Fitness"  
 "A fitness class for everybody & everybody."

**TUMBLING**

**Mondays & Wednesdays: Afterschool**  
 En Pointe Performing Arts Studio Inc.  
 Beginner to Advanced Classes  
 (Ages 5-9)  
[enpointe@eastlink.ca](mailto:enpointe@eastlink.ca)

# FITNESS PROGRAMS

## FITNESS CLASS

This fitness program offers 3 moderate intensity classes per week in our fitness studio with experienced instructor Paula Masson. Classes provide a combination of cardio workouts with strength and toning exercises.

*\*New session begins Monday, January 6*

**Mondays, Wednesdays & Fridays**

**8:30am-9:30am**

**\$42/month or \$5/drop in**

## SENIORS FITNESS

This program is designed primarily for seniors and those who prefer to exercise with ease. Our instructor, Madeline Oxner, leads the class with emphasis on improving muscle tone, flexibility and strength in an atmosphere of fun and friendship.

*\*New session begins Monday, January 6*

**Mondays, Wednesdays & Fridays**

**9:30am-10:15am**

**\$60/12 weeks or \$3/drop in**

# UPCOMING EVENTS IN LUNENBURG!

New Years' Levee	January 1	Lunenburg Fire Dept. & Legion
Rotary Club Flea Market	February 1 (9am – 12pm)	Community Centre
Rotary Club Flea Market	March 7 (9am – 12pm)	Community Centre
Gary L Wentzell March Break Tournament	March 18-22	Arena
Burg Classic Charity Hockey Tournament	March 26 – 29	Arena & Community Centre
Volunteer Civic Reception	Mid April	Lunenburg Fire Dept.

# RENTALS IN THE COMMUNITY CENTRE



## AUDITORIUM

Large gymnasium with stage, access to a newly renovated kitchen and sports equipment. Perfect for birthday parties, weddings, fundraisers, dances, and more!

**\$35/hour**



## FITNESS STUDIO/MEETING ROOM

Large open space with natural light and mirrored walls. Adjoined to additional meeting room. Weights, aerobic steps, stability balls available for use. Perfect for fitness, dance, or small group classes.

**\$29/hour**



## Town of Lunenburg PRO Kids



**The Town of Lunenburg is accepting applications for our PRO Kids Program!**

PRO Kids provides financial assistance to children and youth aged 18 and under living within the Town of Lunenburg who, due to lack of funds, are not able to participate in sport, recreation and cultural activities. The Town's PRO Kids can fund up to 50% of program registration cost, to a maximum of \$500.

**PRO Kids would not be possible without donations!**

If you or someone you know would like to contribute, please contact Kelly Cunningham, Recreation Director, at [kcunningham@explorelunenburg.ca](mailto:kcunningham@explorelunenburg.ca) or **902-634-4006**.

For an application, visit the Town's website at <https://www.explorelunenburg.ca/pro-kids-program.html> or Lunenburg Town office at 119 Cumberland Street, Lunenburg.

**Document No:** 5 (e)  
**Meeting:** Dec 11/19 LWMCC  
**Circulate To:** LWMCC, KC,  
 LD, KR  
**File:**

## MEMORANDUM

**TO:** LWMCC RECREATION COMMITTEE

**FROM:** KELLY CUNNINGHAM, RECREATION DIRECTOR

**DATE:** DECEMBER 6, 2019

**RE:** LUNENBURG WAR MEMORIAL ARENA: ICE RESURFACER  
 CAPITAL PURCHASE 2020/21

### 1. FACTS

In the Town of Lunenburg 10 year Capital Budget for the Recreation Department, the Lunenburg War Memorial Arena Ice Resurfacer is anticipated to be replaced in the 2020/21 budget for \$125,000. The following information is referenced in the 2019/20 budget:

#### Ice Resurfacer (89) (2020/21)

*The existing ice resurfacer is a 1989 Olympia. It has given us good service over the past twenty nine years but we have had issues over that time with the transmission, the hydraulic system, the starter motor (replaced four times), and the fuel carburetion system. The conditioner, the blade and auger system mounted at the rear of the machine, have also been replaced. We are fortunate that our staff are well versed in mechanical repairs plus we have had the benefit of hydraulic/automotive technicians in the local area to call upon when the problem is beyond the scope of our own staff. We are reaching the point where nursing the machine along from year to year is becoming more challenging.*

In the Ice Resurfacer reserve fund, there is currently \$50,000, plus interest of \$1,100, for a total of \$51,100. In the 2019/20 fee schedule, a "resurfacer surcharge" has been added onto the hourly rental rate of \$4.00/hour, which was anticipated to gain approximately \$4,200 in the 2019/20 fiscal year. The Arena closes for the season on Monday, March 30, 2020.

### 2. ISSUES AND OPTIONS

#### MONETARY

As noted in the Capital Expenditures Description, the current ice resurfacer has provided us good service but we have had recent mechanical issues. We are fortunate

that our staff are well versed in mechanical repairs; however, the machine is near the end of its lifespan. Staff are concerned that a major parts failure could put the ice resurfacers out of service for an extended period of time during the next ice season.

There is currently \$51,100 in the ice resurfacers reserve fund plus an anticipated \$4,200 from the Arena rental surcharge. This approximates a total of **\$55,300** reserved for this capital purchase. Based on the predicted \$125,000 capital amount, we are in need of approximately **\$70,000**.

Options:

Staff were anticipating on applying for the province's "Recreation Facility Development Capital Grant", which could support up to one-third of the total capital project up to a maximum of \$150,000. Since, Council included the installation of a Splash Pad in the 2020/21 budget at \$200,000 under Recreation Infrastructure. The Lunenburg Community Development Group, on behalf of the Town, is currently in the process of applying for the same grant in the 2020/21. Only one application is accepted per municipal unit and it is highly anticipated that the Splash Pad would receive the funding over an Ice Resurfacers Replacement.

A funding request was sent to the Municipality of the District of Lunenburg (MODL) in March 2019 to provide funding for the replacement of the Ice Resurfacers in the amount of \$40,000. MODL decided to wait until next fiscal year to make a decision as the purchase was to be made in 2020. It should also be noted that MODL provides the Town with an operating grant to assist with operational funding; however, this amount was reduced in 2019/20 when MODL supported the Community Centre structural roof repairs with a \$40,000 grant payable over 4 years (\$10,000 per year). The operating grant offsets is important annual funding.

An option is to inquire for corporate sponsorship(s) from businesses.

There is a potential resale value of \$3,000 to \$5,000 for the current 1989 Olympia at an auction. However, it was recommended by Monarch Enterprise (the local Olympia dealer) that the Town keeps the older machine as a backup.

The Sportsnet "Kraft Hockeyville" contest begins in January 2020 with applications due February 10, 2020. The Canadian winner receives \$250,000 in arena upgrades and the second place winner receives \$25,000 in arena upgrades. An application form could be considered for this.

#### TYPE OF MACHINE

Ice resurfacers are powered by either propane or electric, with the top two brands being Olympia and Zamboni. The cost of a propane machine is significantly cheaper in the initial purchase in comparison to an electric machine; however, it is anticipated that over a 12 year duration, the cost could be comparable. The Zamboni life cycle for both electric vs. propane are relatively the same and, for a rink similar in size to Lunenburg, is approximately 15-20 years. The Olympia life cycle is said to be approximately 20-30

years. There are also natural gas powered machines; however, professionals have said this would not be an option in Lunenburg. Please see APENDIX A for an “Electric vs. Propane” financial review compiled by Saunders Equipment Ltd (Zamboni suppliers).

The decision between a propane and electric machine is a significant choice. Staff compiled an internal propane vs. electric pros and cons list for reference:

<b><u>PROPANE MACHINE</u></b>	
<b>PROS</b>	<b>CONS</b>
Cheaper in initial purchase.	Potential for emissions/odor.
Town Staff are highly experienced with a propane machine.	Propane fuels are on site at Arena which could be a potential hazard.
If there is an issue with a machine, there is a local (Bridgewater) professional that is dependable to look at our issue the day of. There are more experienced professionals that work with propane, and many do not like to work on the electric machines as they are new.	Increase staff safety when handling propane.
Propane has been dependable on hand to run the machine and does not require charging (i.e. if the cord is not plugged in correctly or is forgotten overnight, the machine might not operate properly).	Possibility of propane shortage.
Would not need to install a charging station in the Ice Resurfacer room, which could require electrical upgrades and room renovations.	
Consistent and predictable annual cost for propane.	
New machine should have minimal to zero smell or odor.	

<b><u>ELECTRIC MACHINE</u></b>	
<b>PROS</b>	<b>CONS</b>
Considered to be eco-friendly and no emissions.	New batteries (3-4) required every 8-10 years, approximately \$27,000.
Claims to have less maintenance due to not having to do service on engine or fuels.	Ice resurfacer room will likely require electrical upgrades to withhold charging station and installation of new exhaust fan from gases produced by recharging.
Potential to be safer due to not requiring propane on site.	Room renovations would be required to install the charging station. Requirements include: mount charger off the floor (4ft in height), a safety zone of 4 ft where all equipment or other matter cannot be

	kept, and charger must be close to the breaker.
Technology for electric machines has come a long way in recent years.	Uncertain how the old batteries are recycled.
The machine itself is quieter when running.	Maintenance professionals are currently trained in Halifax. No local service provider.
Olympia Supplier has said per flood the electric costs \$0.50 and the propane is \$3.00/flood.	Town Staff would not be as familiar and fixing/repairs could take longer to complete.
	Charging is critical and machine would not run if plugged in incorrectly or forgotten.
	Lower re-sale value in compared to propane.
	A single ice cleaning takes longer (approximately 3-5 minutes longer) compared to propane.

I have consulted with many other Arena Managers in Nova Scotia who have recently purchased new ice resurfacers. Please see the chart below:

<b><u>MUNICIPALITY</u></b>	<b><u>NEW MACHINE PURCHASED</u></b>
Town of Trenton	Zamboni propane (~2018)
Municipality of Barrington	Olympia propane (2018)
Town of Kentville	Zamboni propane ( <i>currently being shipped</i> )
Acadia University	Zamboni propane (2019)
Halifax: BMO and RBC Centres	6x Zamboni propane ( <i>purchased 4 new in 2017</i> )
Town of Berwick	Olympia electric ( <i>purchased when new facility was built</i> )
Lunenburg County Lifestyle Centre	Olympia electric ( <i>purchased when new facility was built</i> )

The Recreation Staff have agreed that a propane ice resurfacer is the preferred purchase for a new machine.

**OTHER IMPORTATION INFORMATION**

A few important notes from the Ontario Recreation Facilities Association Inc. document titled “Safe Ice Resurfacer Room Battery Charging Unit Installation and Use Guidelines” (June 2014):

“Often, the primary shift toward battery powered equipment is based on indoor air quality issues caused by fossil fuels. Shifting to battery technology may in fact significantly reduce the potential for poor indoor air, however, it is important to

understand that hazardous gases can be generated during the charging process, and as such, must be properly controlled” (page 1).

“Facilities that are considering switching from fossil fuels to battery powered equipment must consider a variety of construction and operational issues beyond equipment selection” (page 4). These requirements for the ice resurfacer room includes the ceilings, lightings, fixtures, and other equipment close in proximity. As well as electrical upgrades to withhold the charging station.

It should also be noted that a new ice resurfacer typically takes approximately 5 to 6 months, or in some cases up to a year, for a new machine to be delivered.

3. **FINANCIAL IMPACT (prepared by the Finance Director)**

Based on a capital purchase of \$125,000, approximately \$70,000 is required to fund a new ice resurfacer in fiscal 2020/21. If an electric ice resurfacer is selected to be purchased, additional funds will be required for renovations and electrical upgrades to the ice resurfacer room to meet regulations. If external funding is not received, Council will need to consider a capital borrowing for this important piece of equipment.

4. **STRATEGIC PLAN RELEVANCE**

Goal 5B: Continually and strategically maintaining and upgrading community infrastructure.

Goal 3B: Facilitating and encouraging healthy lifestyles.

Goal 5A: Making best use of Town-owned buildings and land.

5. **RECOMMENDATION**

It is recommended the LWMCC Recreation Committee discuss ways to raise additional funds for the capital ice resurfacer.

***Draft motion:*** Motion: moved and seconded to recommend to the Lunenburg Town Council to pre-approve a propane ice resurfacer purchase in fiscal 2020/21 estimated to be approximately \$125,000, and to be funded through a fundraising campaign and the ice resurfacer reserve fund. Motion carried.

Acknowledged only by:

Bea Renton  
Town Manager/Clerk

## APPENDIX A:

Electric vs. Propane Financial Review by Saunders Equipment Ltd (Zamboni suppliers)

### Electric vs Propane Lithium Battery

Propane Zamboni 446 - \$110,000.00

Cost of interest over a 7 year term at an interest rate of 6.00% is \$23,850.00

Total cost of the Zamboni plus interest - \$133,850.00

Propane cost over a 12 year period – 5 tanks per week – 7 months/yr. @

\$50.00/tank.  $\$50.00 \times 5 = \$250.00/\text{week} \times 4 = \$1,000.00/\text{month} \times 7 \text{ months} =$   
 $\$7000.00 \times 12 \text{ years} = \underline{\$84,000.00}$

Tune up on propane portion only -  $\$1,000.00/\text{year} \times 12 \text{ years} = \underline{\$12,000.00}$

**Total Cost over 12 years = \$229,850.00**

**Electric Zamboni 450 - \$165,000.00**

Cost of interest over 7 yr. term at an interest rate of 6.00% is \$38,610.00

Total cost of the Electric Zamboni plus interest - \$203,610.00

New battery after 8 - 10 years is \$27,000.00. (Can municipal arenas budget or save in an account \$2,700.00 - \$2,800.00 per year for a new battery? Operating budget vs capital budget)

Fuel cost - \$0.00

Extra electricity cost to charge the battery/month for 12 years - ?

Extra cost for 3 phase wiring for the charger - ?

Extra cost for explosion proof ventilation in Zamboni room - ?

**Total cost over 12 years - \$230,610.00**

**Difference in cost over 12 years - \$760.00 more for the electric Zamboni**

**Cost difference would be higher if the above 3 (?) costs were known.**

**The resale value, today, of a propane Zamboni is higher than the resale value of an electric Zamboni.**

**Lunenburg Harbour Health Advisory Group (LHHAG)**  
**Meeting Minutes**  
**November 6, 2019 @ 9:00 AM**  
**Lunenburg & District Fire Hall**

## **Attendees**

### Members

- Brooke Nodding, Executive Director, Coastal Action (Chair)
- Graham Pearson, Citizen Representative, Town of Lunenburg
- Dr. David Maxwell, Citizen Representative, Municipality of the District of Lunenburg
- Doug Langley, Lunenburg Waterfront Association Inc.
- Ida Scott, Economic Spectrum Unlimited

### Resources

- Heather McCallum, Assistant Municipal Clerk (Communications), Town of Lunenburg
- Steven Pace, Director of Engineering & Public Works, Municipality of the District of Lunenburg
- Shanna Fredericks, Assistant Director, Coastal Action
- Sarah MacLeod, Water Quality Technician, Coastal Action

## **Absent**

- Councillor Matt Risser, Town of Lunenburg (Vice Chair)
- David Friendly, Citizen Representative, Town of Lunenburg
- Councillor Errol Knickle, Municipality of the District of Lunenburg
- Ed Snook, High Liner Foods
- John Kinley, Lunenburg Foundry
- Ryan Tanner, Marine Biologist, Fisheries Museum of the Atlantic
- Ioan Ciente, Ashlea House B&B
- Donna Knickle, Lunenburg Harbour Authority
- Sheila Woodcock, Lunenburg Board of Trade
- Adam Langley, Develop NS
- Mike MacDonald, Environmental Inspector, NS Dept. of Environment
- Rick Welsford, Chair, Coastal Action Board of Directors
- Mayor Rachel Bailey, Town of Lunenburg
- TBD, Town Engineer, Town of Lunenburg

## **1. Welcome – Approval of Agenda**

It was noted that there was not a quorum of members present, therefore no decisions can be made but discussion could proceed.

Two agenda items were added by consensus to #6.

## **2. Review of Minutes/Business Arising from Minutes**

Next steps items from the July 10, 2019 Minutes included:

- Heather to circulate a PDF of the Mayor's slides from the LWAI Waterfront Symposium – *Completed*

- Mike MacDonald to arrange a presentation on NS Environment regulations/enforcement – *A new inspector has recently been hired for our area, but he will not be prepared to give a presentation. Brooke to follow up on alternatives like perhaps Barry Gillis.*
- Ask Develop NS about restoring the marine pump-out station – *Ida reports that a consortium was awarded the lease for the Lunenburg Shipyard as of November 1, 2019. The consortium is made up of: Paul Baskett, Old Town Boatworks and Shane Pittman, Ocean Gear. As part of their lease, infrastructure including a pump out station for boaters will be installed. She also notes that Paul Baskett has indicated his willingness to attend a future LHHAG meeting to talk about their plans. Ida or Brooke to follow up with a date.*
- The idea of a polymer test in a large container of harbour water came up again, where it was noted that salinity affects flocculation, so the effect can be variable.

### **3. Update on Recommendations Letter sent to Lunenburg Town Council**

At their meeting of July 23, 2019, Council requested the preparation of a staff report on the LHHAG recommendations letter and accompanying Coastal Action proposals. A draft report was prepared with the assistance of the then-Town Engineer. Mr. Fougere was offered a partnership in his previous company to return there, putting all in-progress reports on hold.

We are all aware that the Wastewater Treatment Plant was damaged by Hurricane Dorian. The repairs have come with a large bill attached: in excess of \$130,000, with the extent of relief funding and insurance unknown at this time. Any non-urgent expenditures are therefore deferred.

### **4. Updates from Town of Lunenburg**

#### **a. Status of WWTP**

At the September 24<sup>th</sup> Council meeting, Council approved an independent peer review of CBCL Engineering's WWTP retrofit proposal as part of the Town's due diligence before making a decision which plan to pursue. The review is being conducted by Dillon Consulting.

At the October 8<sup>th</sup> Council meeting, Council heard from the Lunenburg Harbour Authority and passed a motion that the pre-engineering design include an effluent pipe extension.

#### **b. Funding Applications**

On September 30, 2019 the Town was notified that our application to the Provincial Capital Assistance Plan funding application for pre-engineering design of a WWTP upgrade was approved.

On October 22, Council was informed that the Town's funding application for a UV disinfection system upgrade (required in all three options for the WWTP upgrade) was unsuccessful.

### **c. Education and Outreach Initiatives**

The "NOT Wanted in our Wastewater System" educational campaign ran through the summer as an eight-part series. The intention is to repeat it in the winter.

As a follow up, the Town ran a contest in partnership with Lunenburg BMR Hardware the first week of November, asking residents what they have done or plan to do for more ocean-friendly habits at home. A second contest will be run in partnership with the Independent the first week of December.

Lunenburg Recreation ran a three-part eco-workshop series as part of their fall Recreation programming, and will be running a Coastal Action workshop on Ocean Friendly Nova Scotia initiatives during the winter.

### **d. Monitoring Proposal**

See item #3 for the status of any further monitoring.

Project Lunenburg: Doug noted that in the view of the Lunenburg Waterfront Association, the Harbour is THE asset, and that they intend to request that this be acknowledged by Project Lunenburg and the Heritage Conservation District Plan and Bylaw review.

Brooke informed the group that Coastal Action has been approached by the consultants of Project Lunenburg to talk about what they think are the environmental priorities. The various organizations within the LHHAG can meet with the PL consultants themselves.

## **5. Future of LHHAG**

Brooke recapped that Coastal Action had been contracted by the Town to set up the LHHAG group. Once the first meeting was completed and the terms of reference had been accepted by the group, their paid role was over, and they remained as a stakeholder in the harbour's health.

The members in attendance reviewed the Terms of Reference and agreed most of the objectives of the group had been met:

- i. Provide a forum for discussion on issues affecting the health of Lunenburg Harbour. ✓ *Excellent cross-section of stakeholders came to the table.*
- ii. Consult with, advise, and make recommendations pertaining to existing and potential threats to the health of Lunenburg Harbour. Resulting advice and

recommendations could be directed at one or all levels of government, as well as industry, depending on the issue and jurisdiction. ✓ *Letter to Town, living reef suggestion to Develop NS. Outstanding: List of threats.*

- iii. Consult with, advise, and develop potential solutions for harbor health improvements. This will include recommendations based on the results of the proposed harbor monitoring program. ✓ *Monitoring provided data to assist WWTP upgrade decision. Outstanding: Enforcement – Environment NS presentation on regulations and enforcement would be informative, as well as any Town plans for business compliance regarding dumping into the wastewater system (correct use of grease traps, for example). Should LHHAG make further recommendations on testing, education, awareness, etc.?*
- iv. Promote communication and collaboration between various stakeholders. ✓
- v. Assist with developing and delivering relevant communication and outreach tools and materials for public engagement. ✓
- vi. Pursue funding opportunities for monitoring program and other potential solutions that result from the group.

It was agreed by consensus that a Final Report to address future direction should be generated by the LHHAG.

## 6. **Unscheduled Items**

### a. “Aqua Hacking” Challenge

Coastal Action was approached by SMU Atlantic Water Network, who provide a free Maritime-wide online database for groups to upload water quality data, as well as provide an equipment bank. The Challenge is made up of teams of both undergrad and graduate students, provided with access to experts in the field. See attachments.

One of the suggested challenges is to do Lunenburg Harbour – an idea that came from Dr. Gagnon at Dalhousie. The project is funded by the Federal Innovation Fund among others, so there is no cost.

The challenge is phrased as figuring out what technology they could create to make the harbour a “recreational playground”. The terms were questioned by some of the members at the table, as Lunenburg is a working, commercial harbour.

The Challenge will be invited to present to the group. **UPDATE:** This meeting has been scheduled for Monday, December 2, 2019 at 10:00am, at the Fire Hall.

### b. Regulatory Enforcement

See item 5.iii. above. The Town publishes Water and Wastewater test results every month, certain standards are required by the operating permit. LWAI asked what happens when the WWTP doesn't meet Provincial or Federal permit standards? How are the regulations enforced? What do the Provincial and Federal regulators do?

Coastal Action noted that Barry Gillis is the Provincial expert in this area, and presented to MODL.

MODL gave an overview of their challenges in their LaHave River straight pipe replacements – it is a six-year program, going into year three. They currently have 600 inspections they have to do on people's properties and are running into a great deal of resistance from people who do not want to replace their straight pipes. The program is excellent, offering \$.30 dollars and support for low income people, and the end of the program will see the costs get much more expensive. The toll on staff has been high.

### **8. Next Steps/Meeting Date**

- a. Presentation from Aqua Hacking Group: **UPDATE** December 2, 2019 at 10:00am
- b. Presentation from NS Environment on regulations: Brooke to approach Barry Gillis: Next regular meeting in January (15 or 22), 2010?
- c. Presentation from Paul Baskett on Lunenburg Shipyard: Next regular meeting in January?

Next regular meeting to be confirmed, pending availability of presenters.

Thank you!

**MEMORANDUM**

**TO: TOWN COUNCIL**

**FROM: HEATHER MCCALLUM, ASSISTANT MUNICIPAL CLERK**

**DATE: JANUARY 3, 2020**

**RE: WASTE REDUCTION STRATEGY WORKING GROUP – CHAIR AND GUIDELINES**

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**1. FACTS**

At the November 12, 2019 Council Meeting the following motion was passed:

*Motion: moved by Deputy Mayor McGee, seconded by Councillor Croft to approve “Option 1” contained in the staff report (Schedule “E”) by establishing a working group of elected, staff and stakeholder members to develop a Town Waste Reduction Strategy and/or action plan. Motion carried. Councillor Risser voted in the negative.*

Note: “Schedule E” refers to the October 11, 2019 staff report “Waste and Plastics Reduction Strategy” from the Assistant Municipal Clerk to the General Government Committee.

**2. ISSUES AND OPTIONS ANALYSIS**

There are two items that require input from Council for the group to begin their work:

- a) Appointment of a Council representative to chair the group, per the working group membership outlined in the staff report; and
- b) Approval of Draft Guidelines for the Waste Reduction Strategy Working Group to keep the work on task and on time.

**Membership**

The following members/stakeholders have agreed to join the Waste Reduction Strategy Working Group:

- Town elected official(s); chaired by a member of Council:
  - **To be appointed**
- Staff as assigned by CAO:

- Assistant Municipal Clerk
- Public Works Superintendent)
- Invited community stakeholders:
  - Region 6/Divert NS (Kirk Symonds)
  - LBOT (representative TBD)
  - Coastal Action (Ariel Smith)
  - Plastic Free Lunenburg (Sue Kelly)

Once a chair has been appointed, an inaugural meeting will be scheduled for this month.

### **Guidelines**

Attached are Draft Guidelines for the Working Group (Attachment “A”). The Guidelines include membership, preliminary objectives, consultation methodology and tasks per the October 11, 2019 staff report, as well as a suggested deadline target of March 31, 2020 for the group’s recommendations to Council.

### **3. FINANCIAL IMPACT**

No additions to impact outlined in the October 11, 2019 staff report (Attachment “B”).

### **4. STRATEGIC PLAN RELEVANCE**

This project is in keeping with:

- Strategic Plan Goal #1: Promote a high quality of life for residents.
  - A. Beautifying the community.
  - D. Engaging our citizens.
- Strategic Plan Goal #3: Champion opportunities for our community’s health and well-being.
  - A. Protecting our natural environment.
- Strategic Plan Goal #5: Operate the Town efficiently and effectively.
  - C. Developing and updating Town bylaws, policies, procedures and plans.
  - D. Developing partnerships and strengthening inter-municipal, provincial and federal relations.

### **5. RECOMMENDATION AND DRAFT MOTION**

It is recommended that Council adopt the following draft motions:

Draft motion: moved and seconded that Council appoints \_\_\_\_\_ as the Council representative and chair of the Waste Reduction Strategy Working Group.

Draft motion: moved and seconded that Council approves the Draft Guidelines for the Waste Reduction Strategy Working Group (**Attachment "A"**).

Attach.

- A. Waste Reduction Strategy Working Group - Draft Guidelines, Jan 3 2020
- B. GG Oct 30 19 Waste and Plastics Reduction Strategy, Oct 11 2019 (for reference only)

Acknowledged only by:

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Bea Renton  
CAO

**TOWN OF LUNENBURG**  
**WASTE AND PLASTICS REDUCTION WORKING GROUP**  
**DRAFT GUIDELINES**

**1.0 DEFINITIONS**

“Town” means the Town of Lunenburg.

“Council” means the Council of the Town of Lunenburg.

“Working Group” means the Waste and Plastics Reduction Working Group, an advisory body reporting to Council.

**2.0 PURPOSE**

The purpose of the Working Group is to coordinate stakeholder consultation, review consultation data, and develop a Waste Reduction Strategy with recommendations for action to Council. This may or may not include Town legislative or policy changes.

**3.0 RESPONSIBILITIES**

3.1 The responsibilities of the Working Group will be to:

- a. Confirm or revise the draft Objectives of the Strategy, as below:
  - Increase resident and business participation in waste prevention and diversion, including single-use materials like plastics, styrofoam, etc.
  - Improve education programs
  - Use financial incentives and disincentives to keep waste out of landfills
  - Encourage the Province to enforce producer responsibility for end-of-life management of products and materials, lifting the burden from municipal taxpayers
  - Ensure the Town of Lunenburg leads by example by reducing waste in all municipal government work
  - Support collaborative efforts for waste reduction with other organizations
- b. Coordinate consultation via workshops, meetings, surveys or other means with stakeholders, to be defined as:
  - Residents – permanent and seasonal

- Businesses – including tourism, grocery, restaurant, retail, and other affected businesses directly and via the Lunenburg Board of Trade
  - Advocacy groups – including Coastal Action’s Ocean Friendly Nova Scotia and Plastic Free Lunenburg
  - Intra-municipal – Region 6 Solid Waste Management, the Federation of Nova Scotia Municipalities (re: extended producer responsibility in NS)
  - Provincial – Environment NS, Divert NS, Develop NS – NS Bill #152 Plastic Bags Reduction Act (received royal assent on Oct. 30, 2019 and commences Oct. 30, 2020)
  - Federal – Environment Canada – July 2019 national plastics reduction strategy announcement, confirmed by Prime Minister’s Twitter December 30, 2019 (details to come)
- c. Review materials to include:
- The Town’s current bylaw and policies on waste management or reduction for potential amendment (Bylaw #38, Procedural Policy #90);
  - Existing public consultation data from Project Lunenburg and Plastic Free Lunenburg;
  - Conduct a survey of businesses’ waste reduction challenges and opportunities
  - Consultation meetings with stakeholders as required
  - Consider issuing an invitation for further comment via email
  - Region 6 audit of public waste units November 2019
- d. Provide a recommendation to Council for a Town-specific Waste Reduction Strategy and/or Action Plan, including estimated costs.
- 3.2 The Working Group may consult with Town staff, Council and stakeholders as necessary.
- 3.3 The Working Group may seek outside expertise as necessary.

#### **4.0 MEMBERSHIP**

- 4.1 The members of the Working Group shall consist of
- Town elected official(s): chaired by a member of Council;
  - Staff assigned by the CAO: Assistant Municipal Clerk and Public Works Superintendent;
  - An invited representative from stakeholder organizations: Region 6 Solid Waste Management, Divert NS, the Lunenburg Board of Trade, Coastal Action and Plastic Free Lunenburg.

- 4.2 Members of the Working Group are appointed until such time as the Working Group has fulfilled its mandate or has been terminated by motion of Council.

## **5.0 MEETINGS**

- 5.1 The time and schedule of Working Group meetings shall be determined by the Chair in consultation with the Working Group members.
- 5.2 A quorum of the Working Group shall consist of a majority of its members.
- 5.3 All meetings of the Working Group shall be held in public.
- 5.4 The Working Group shall operate in accordance with the procedures provided in the Municipal Government Act and Roberts Rules of Order.

## **6.0 FINAL REPORT**

- 6.1 The Working Group shall submit a written report to Council outlining its findings and recommendations by March 31, 2020.
- 6.2 The Working Group's report shall be a public document and will contain reasons and justification for all recommendations.

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Document No:

Meeting:

Circulate To: GENERAL

GOVERNMENT COMMITTEE

File: GENERAL GOVERNMENT  
COMMITTEE

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**MEMORANDUM**

**TO: GENERAL GOVERNMENT COMMITTEE**

**FROM: HEATHER MCCALLUM, ASSISTANT MUNICIPAL CLERK**

**DATE: OCTOBER 11, 2019**

**RE: WASTE AND PLASTICS REDUCTION STRATEGY**

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**1. FACTS**

At the July 18, 2019 General Government Committee meeting the following motion was approved:

*Motion: moved and seconded that a staff report be prepared advising what form of public consultation should take place with various stakeholders including Plastic Free Lunenburg, Region 6 Waste Management, Divert Nova Scotia and Lunenburg Board of Trade to develop a waste reduction and plastic reduction strategy for the Town. Motion carried.*

As requested, this report will address the objectives for a waste and plastic reduction strategy for the Town, and outline proposed public consultation with stakeholders with a suggested timeline.

On September 26, 2019 the Province introduced legislation that: “once passed would prohibit the use of single-use plastic bags, which would take effect in a year.” (CKBW News)

N.S. Bill #152 “Plastic Bags Reduction Act” is significant in that one of the original premises for considering municipal action was that the Province was not pursuing a plastic ban at that time.

## 2. **ISSUES AND OPTIONS**

### **CURRENT STRATEGY, REGULATION, AND PRACTICE**

#### **Provincial Waste Management Strategy**

Waste and Plastic Reduction in Nova Scotia is addressed in:

- Nova Scotia's Solid Waste Resource Management Strategy (1995);
- Renewal of Nova Scotia's Solid Waste Resource Management Strategy (2009); and
- Our Path Forward: Building on the Success of Nova Scotia's Solid Waste Resource Management Strategy (2011).

Nova Scotia leads the country in reducing the amount of waste that goes to landfills.

#### **Town of Lunenburg Regulation & Practice**

- Bylaw #38 Solid Waste Management (2015) deals with garbage, recyclables, and organic materials collection, container regulations, restrictions, rejection and prohibitions, special collections, responsibilities of owners and occupants including commercial, haulers, household hazardous waste and construction or demolition materials, and illegal disposal including fines.
- Policy #90 Compostable Material Use and Waste Reduction Initiatives (2018) deals with reducing the use of non-recyclable containers and other materials for meetings, special events, and other municipal activities. This is applicable to Town properties only.
- Inter-municipal: The Town of Lunenburg, along with 12 other south-west Nova Scotia municipalities, is served by Region 6 Solid Waste Management.

Region 6's services include education, regional cooperation and encouragement of common standards, diversion credits, and implementation of provincial-approved programs (Divert NS and NS Environment).

Apps are also available – *R6RECYCLES* and *My ENVIRO-DEPOT* – to assist residents and businesses.

## **OPTIONS**

Staff was asked to advise on what form of public consultation should take place to develop a waste and plastic reduction strategy.

### **Option 1: Working Group-Led**

- Strike an invited working group to develop a recommended Town of Lunenburg-specific Waste Reduction Strategy and/or Action Plan:
  - Town elected official(s); chaired by a member of Council;
  - Staff (Assistant Municipal Clerk, Public Works representative); and
  - Stakeholders (Region 6, Divert NS, LBOT, Coastal Action, PFL).

### **Option 2: Staff-Led**

- Task staff (Assistant Municipal Clerk) to project manage the consultation and timeline, including one-on-one meetings with stakeholders with assistance from other staff or elected officials as required to develop a recommended Waste Reduction Strategy and/or Action Plan.

Note: The next topic for the Project Lunenburg comprehensive community plan is “Environment and Sustainability”. The public workshop is on October 24, 2019.

## **PROCESS**

### **Preliminary Objectives**

The following preliminary Objectives for discussion were adapted from goals identified by Nova Scotia’s Solid Waste Resource Management Strategy:

The “Three Rs” are in order: first reduce, second reuse, then recycle.

1. Increase resident and business participation in waste prevention and diversion, including single-use materials like plastics, styrofoam, etc.
2. Improve education programs
3. Use financial incentives and disincentives to keep waste out of landfills
4. Encourage the Province to enforce extended producer responsibility for end-of-life management of products and materials, lifting the burden from municipal taxpayers
5. Ensure the Town of Lunenburg leads by example by reducing waste in all municipal government operations
6. Support collaborative efforts for waste reduction with other organizations

### **Stakeholder Consultation Process**

#### Stakeholders

- Residents – permanent and seasonal
- Businesses – including tourism, grocery, restaurant, retail, and other affected businesses directly and via the Lunenburg Board of Trade

- Advocacy groups – including Coastal Action’s Ocean Friendly Nova Scotia and Plastic Free Lunenburg
- Intra-municipal – Region 6 Solid Waste Management; the Federation of Nova Scotia Municipalities (re: extended producer responsibility in NS);
- Provincial – Environment NS, Divert NS, Develop NS – Bill #152 tabled on September 26, 2019
- Federal – Environment Canada – July 2019 national plastics reduction strategy announcement (pending the outcome of the Federal Election)

Methodology

- Review existing public consultation data from Project Lunenburg and Plastic Free Lunenburg
- Conduct a detailed survey of businesses’ waste reduction challenges
- Consultation meetings with stakeholders, as required
- Issue an invitation for further comment via email
- Region 6 is currently conducting an audit of public waste units (streamed and un-streamed) available in Town public areas and public buildings to assist in prioritized planning.

Preliminary Timeline

<b>Month</b>	<b>Option 1</b>	<b>Option 2</b>
Oct 2019	<ul style="list-style-type: none"> <li>- Invitations to pre-identified stakeholders (see above) to form Waste Reduction Strategy working group</li> <li>- Research and background material assembly – share with group</li> <li>- Kick-off Waste Reduction Strategy working group</li> <li>- Terms of Reference</li> <li>- Business survey: Identify recipients and draft survey questions</li> <li>- Schedule consultation meetings</li> <li>- October 21-27 is Waste Reduction Week in Canada</li> </ul>	<ul style="list-style-type: none"> <li>- Schedule stakeholder consultation meetings</li> <li>- Research and background material assembly</li> <li>- Business survey: Identify recipients and draft survey questions</li> <li>- October 21-27 is Waste Reduction Week in Canada – tie into education programming coming from Region 6</li> </ul>
Nov 2019	<ul style="list-style-type: none"> <li>- Town public waste receptacle audit completed by Region 6; Public Works to review and determine priorities</li> <li>- Business survey – distribution</li> <li>- Consultation meetings</li> </ul>	
Winter 2019/20	<ul style="list-style-type: none"> <li>- Consultation meetings, as needed</li> <li>- Strategy and Action Plan development, including costs</li> <li>- Strategy and Action Plan submitted to Council for review – Council decision</li> <li>- Education and outreach (ongoing)</li> </ul>	

## Education

According to Region 6 Solid Waste Management, the issues of recycling and single-use materials comes down to a consumer behaviour issue. Customers continue to demand convenience items. There has been some attitude change, but not enough actual change in behaviour.

One only has to look at the ongoing illegal dumping problem, work to encourage people and businesses to comply with legislated bans on recyclables and organics going to landfills, as well as what can and cannot be dumped into the sewer system to see that legislation is not a silver bullet – education is key.

### Current Education Tactics

- “NOT Wanted in our Wastewater System” campaign has some overlap with waste reduction in terms of illegal dumping and garbage going into wastewater;
- Boosting of Region 6 and Divert NS campaigns and information on Town of Lunenburg website and social media;
- Lunenburg Recreation hosted a public education series of eco-workshops for the first time on September 25, October 3, and October 10, 2019;
- Lunenburg Recreation is coordinating a public art project with Bluenose Academy students to paint a concrete streambed waste unit slated for the Skate Park; and
- Staff education through another lunch and learn with Region 6.

### 3. FINANCIAL IMPACT

Research and stakeholder consultation would require an estimated 60-100 hours of staff time.

It would have minimal out-of-pocket expenses associated for consultation and advertising/promotion of same. The exact cost would depend on the number of meetings and whether or not public workshop(s) is needed, with or without a third-party facilitator.

The outcomes of the public consultation may result in other costs that are TBA at this time.

### 4. STRATEGIC PLAN RELEVANCE

This project is in keeping with:

- Strategic Plan Goal #1: Promote a high quality of life for residents.
  - A. Beautifying the community.

- D. Engaging our citizens.
- Strategic Plan Goal #3: Champion opportunities for our community's health and well-being.
  - A. Protecting our natural environment.
- Strategic Plan Goal #5: Operate the Town efficiently and effectively.
  - C. Developing and updating Town bylaws, policies, procedures and plans.
  - D. Developing partnerships and strengthening inter-municipal, provincial and federal relations.

**5. RECOMMENDATION**

It is recommended that Council on review of this report determine if it wishes to proceed with a stakeholder consultation process for development of a Town of Lunenburg-specific Waste Reduction Strategy and/or Action Plan at this time.

Encl.

- A. Nova Scotia Legislature – Bill 152 – Plastic Bags Reduction Act
- B. Our Path Forward: Building on the Success of Nova Scotia's Solid Waste Resource Management Strategy

Acknowledged only by:

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Bea Renton  
CAO

## MEMORANDUM

**TO: TOWN COUNCIL**

**FROM: PAUL BRACKEN, FACILITIES SUPERINTENDENT**

**DATE: JANUARY 14<sup>TH</sup> 2020**

**RE: SOLAR SUMMIT DECEMBER 4<sup>TH</sup> 2019**

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### 1. FACTS

November 26<sup>th</sup> 2019 Council Meeting:

- Request of Councillor Carnevale to attend the 2019 Nova Scotia Solar Summit
- Council was advised that staff members will be attending the conference on behalf of the Town.
- Councillor Carnevale withdrew his request to attend.
- Motion: moved by Councillor Croft, seconded by Councillor Risser that staff prepare a report following the 2019 NS Solar Summit conference on what was learned and how the Town can use that information in future. Motion carried.

Cali Beck and Paul Bracken attended the 2019 Solar Summit in Halifax on December 4<sup>th</sup> 2019.

### 2. ISSUES AND OPTIONS ANALYSIS

Notes on the conference provided for information and reference to the Council.

#### **Solar Summit overview Notes - Dec 4<sup>th</sup> 2019**

**Host:** Canadian Solar Industries Association (CanSIA), held at the Halifax Harbour front Marriott Hotel. The Canadian Solar Industries Association (CanSIA) is a national trade association that represents the solar energy industry throughout Canada. Since 1992, CanSIA has worked to develop a strong, efficient, ethical and professional Canadian solar energy industry with capacity to provide innovative solar energy solutions and to play a major role in the global transition to a sustainable, clean-energy future. Main Sponsors: Province of Nova Scotia, Efficiency Nova Scotia, Polaron Solartech.

**Conference details:** The Solar Summit conference was comprised of two main components: presentation sessions, and tradeshow networking. The body of this report contains a review of these sessions and links to the affiliated organizations are provided for further information.

**Session 1:** Nova Scotia Solar market update

➤ **Halifax Solar City – City of Halifax**

- <https://www.halifax.ca/home-property/solar-projects/about-solar-city-halifax>

- The Solar City program offers property owners in the municipality access to innovative solar energy options, which can be financed through a solar collector account with the Halifax Regional Municipality. After the completion of the pilot program, Halifax Regional Council approved the continuation of the program which aims to:
  - offer an innovative financing option to avoid the large, upfront cost of solar energy installations
  - offer the option to install three unique solar energy systems
  - provide support and guidance to ensure the selected technology is best suited for their energy consumption needs
  - meet the municipal Community Energy Plan objectives
  - meet the municipal [Economic Strategy](#) objectives
  - meet the municipal [Regional Plan](#) objectives by supporting healthy, sustainable and vibrant communities
- Who can access the solar city program?
  - Residential property owners
  - non-profit organizations
  - places of worship
  - co-operatives
  - charities
- Property owners can choose to install one, or all, of following solar technologies:
  - Solar photo-voltaic
  - Solar hot air
  - Solar hot water
- **Solar electricity for Community Buildings – Department of Energy and Mines**
  - <https://novascotia.ca/solar/solar-electricity-community-buildings.asp>
  - The Solar Electricity for Community Buildings Pilot Program. The Solar for Community Buildings Program enables eligible community groups and organizations to generate up to 75kW of solar **photovoltaic** (PV) electricity on their roofs or properties and sell it to their utility under a 20-year contract.
- **SolarHomes – Efficiency Nova Scotia**
  - <https://www.energyncs.ca/residential/services-rebates/solarhomes/>
  - Efficiency Nova Scotia offers incentives to make solar power more affordable than ever. The SolarHomes program helps Nova Scotia's harness the sun's energy by offering a rebate on an approved solar photovoltaic (PV) systems. Homeowners have more choices and more control over their energy future, while reducing carbon emissions, and improving air quality. Solar PV systems can help you reduce your energy bills on average \$1,500 per year.
  - This solar program is funded by the Government of Canada's \$56 million-dollar commitment to Nova Scotia from the Low Carbon Economy Leadership Fund. Efficiency Nova Scotia is administering the program for the province.
  - Average cost of solar array for residential install was reported as \$24,000. Customer who can take part in PACE financing tend to finance between \$10,000 - \$15,000. This is roughly the balance of the project after the SolarHomes Rebate
  - SolarHomes Rebate structure changed as of November 1, 2019. Structure changed from \$0.85/Watt up to \$8,500 or 35% of project cost to \$0.60/Watt up to \$6,000 or 25% of project cost.
  - SolarHomes Program update – Province wide
    - Applications Received:1,900
    - Average system size: 9.8 kilo Watt

- Total value of projects: \$47.5 Mil
- Total rebates committed: \$11.8 Mil
- Total completed project: 700
- Total capacity installed: 6.5 Mega Watt
- Total rebates Paid: \$5.6 Mil

**Session 2:** Financing and the business case for mid-scale solar projects

- CoPower – Green bonds
  - <https://copower.me/en/>
  - When you invest in Green Bonds you're investing in a diversified portfolio of loans to clean energy and energy efficiency projects. The projects generate steady revenues from the sale of clean energy or energy savings, allowing you to earn competitive fixed returns while reducing carbon emissions.
- Siemens – Energy Performance contracts
  - <https://support.industry.siemens.com/cs/sc/4358/energy-performance-contracting?lc=en-WW>
  - A truly comprehensive Energy Services Company, or ESCO, can help you take a holistic view of your energy and infrastructure needs and create a strategic plan that helps you address these challenges. In both public and private sectors, ESCOs offer an innovative option through guaranteed performance-based solutions. These energy savings performance contracts (ESPCs) allow you to use the savings that will be generated by the project to fund infrastructure improvement programs
- East port properties
  - [https://eastportproperties.ca/?gclid=CjwKCAiA8qLvBRABEiwAE\\_ZzPYDGddn6U6QsJ7o6SQ1XJG44BmxW43t2Ga\\_XxbbK6usoO\\_TJbJT4JRoCm5sQAvD\\_BwE](https://eastportproperties.ca/?gclid=CjwKCAiA8qLvBRABEiwAE_ZzPYDGddn6U6QsJ7o6SQ1XJG44BmxW43t2Ga_XxbbK6usoO_TJbJT4JRoCm5sQAvD_BwE)
  - Doing what is right for the environment is a fundamental part of our business. But what's more important is that its good business. By developing sustainable buildings we save you money in reduced energy costs and increased wellness. And we like that.

**Session 3:** Utilizing Solar Roadmap to Unlock Nova Scotia's solar potential

- Canadian Solar Industries Association (CanSIA)
  - <https://www.cansia.ca/>
- **The plan focuses on five key areas that require action:**
  - Develop a supportive and stable policy and regulatory environment that recognize the total value of solar electricity, including externalities;
  - Simplify and streamline permitting and processes for grid interconnection and metering of solar electricity systems;
  - Reduce soft costs to levels consistent with global best practices;
  - Educate the Canadian population on the true benefits and costs of solar electricity, and empower them to take action to support and adopt solar; and
  - Develop new and enhance existing relationships with technologies, applications and stakeholders to create synergies that enables greater solar electricity use in Canada.
  - Very aggressive approach to renewable energy
  - 100% renewable by 2030
  - PACE Programs – property assessed clean energy programs

- Solar Nova Scotia
  - <http://www.solarns.ca/>
  - Discover Solar PV
    - Learning workshops hosted throughout Nova Scotia
  - Atlantic solar Study 2018
    - [https://www.cansia.ca/uploads/7/2/5/1/72513707/cansia\\_nova\\_scotia\\_residential\\_solar\\_market\\_outlook\\_and\\_labor\\_force\\_study\\_-\\_final\\_report\\_2019-04-09\\_.pdf](https://www.cansia.ca/uploads/7/2/5/1/72513707/cansia_nova_scotia_residential_solar_market_outlook_and_labor_force_study_-_final_report_2019-04-09_.pdf)

#### **Session 4:** Nova Scotia Solar Research and Data Mapping Update

Dr. Wayne Groszko, Research scientist (NSCC) and Bryan Ellis, Dalhousie University Renewable Energy Storage Laboratory presented information on the impact of a rapid increase in the number of residential solar PV systems installed in Nova Scotia due to falling prices and incentive programs. Increasing numbers of intermittent energy sources, such as PV solar can impact grid performance due to misalignment of loads. NSCC and Dalhousie are using data collected from the systems that come online to study the effect of inverter clipping, snow coverage, shading, etc.

- NSCC and Dalhousie are devolving a Community Solar Data website to allow the public to view solar energy production (in near-real-time) and forecast data.
- IKEA's solar array was reviewed and the curtailment of the system was discussed. Curtailment occurs when the system is able to produce more energy than is allowed to be fed back into the grid.
- [https://www.cansia.ca/uploads/7/2/5/1/72513707/wayne\\_groszko\\_nssc\\_ss19pptx.pdf](https://www.cansia.ca/uploads/7/2/5/1/72513707/wayne_groszko_nssc_ss19pptx.pdf)

#### **Keynote:**

Cooperative Energy Futures, Minneapolis Minnesota

<https://www.cooperativeenergyfutures.com/>

- Community solar projects – solar gardens
  - Different approach to making clean energy accessible to everyone without upfront cost.
  - Subscription based service for solar gardens that provides subscribers with credit on electric bill.

#### **Session 5:** Nova Scotia Municipalities

Town of Bridgewater

- PACE Program, energy poverty (one stop shop, helps outline confusing programs)
- Smart Cities Challenge
- <https://www.bridgewater.ca/town-services/planning/strategic-initiatives/bridgewater-smart-cities>
- Recycle \$ back to the community through investment

Alternative Resource Energy Authority

- <https://www.areans.ca/>
- 23.5 Mega Watts to Mahone Bay, Berwick, Antigonish

Municipality of Digby

- Economic development platform for thinking about and designing these projects
  - Tidal power service hub for the Bay of Fundy
  - Significant cost savings achieved by switching from High Pressure Sodium to LED street lighting

- PACE Program – RFP for contractor to build and facilitate a solar program
  - Single installer
  - 18 loans per year up to 20,000 10 year fixed rate for solar PV
  - Started with community group
  - <https://www.colchester.ca/solar>
  - \$ from reserve to invest in Solar projects, better return on investment
    - Interest rate = prime + .75% = 4.7% fixed

#### Natural Forces

- Natural Forces is a private independent power producer that delivers renewable energy projects in partnership with local communities across Canada. We develop, construct, own, and operate wind, solar, and hydro projects with First Nation communities, universities, municipalities, and local community funds.

### 3. **FINANCIAL IMPACT**

The financial impact of any particular program implemented by the Town will have to be evaluated on its merits which would also include the impact on the Town's Electric Utility.

### 4. **STRATEGIC PLAN RELEVANCE**

5B continually and strategically maintaining and upgrading community infrastructure.

### 5. **RECOMMENDATION AND DRAFT MOTION**

"This report is provided for Council information only."

Acknowledged only by:

Bea Renton  
Town Manager/Clerk

December 11, 2019



Town of Lunenburg  
177 Cumberland Street  
Lunenburg, Nova Scotia  
B0J 2C0

ATTENTION: Bea Renton  
Chief Administrative Officer

Lunenburg Wastewater Treatment Plant Report – Peer Review

Dillon Consulting Limited (Dillon) is pleased to submit this report summarizing the findings of our peer technical review of the Town of Lunenburg Wastewater Treatment Plant – Evaluation and Options Identification, Final Report, March 27, 2019 prepared by CBCL Limited.

## Background & Introduction

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The Town operates a WWTP that was built in 2003 and utilizes the moving bed biofilm reactor (MMBR) and dissolved air flotation (DAF) process. The plant has been experiencing issues with meeting Provincial regulatory effluent requirements, generally as follows:

- 2017 BOD: average of quarterly samples met the federal criterion (25 mg/L), but failed the provincial criterion because one sample exceeded the Federal limit by a factor greater than 2.0;
- 2017 Fecal Coliforms: only 74% of samples met the 1000 MPN/100 mL criterion, versus a provincial minimum of 80%;
- 2017 Fecal Coliforms: Multiple samples exceeded the provincial limit of 2000 MPN/100 mL;
- 2018 BOD: One sample exceeded the federal limit by a factor greater than 2.0, which failed the provincial criterion;
- 2018 TSS: One sample exceeded the federal limit by a factor greater than 2.0, which failed the provincial criterion;
- 2018 Fecal Coliforms: Multiple samples exceeded the provincial limit of 2000 MPN/100 mL;
- 2019 Results (January – August Data): With the exception of some of the BOD and TSS results in January 2019, the plant was generally in compliance until June where there was one exceedance of fecal coliforms, which Town staff believed was due

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to an illegal substance entering the sewer system. Over half of the July and August sampling showed exceedances above provincial/federal guidelines, however a “milky-greyish” substance was observed throughout the plant and is suspected of causing process upsets. Town staff believed they have identified the source of the unknown sewer discharge, and it has not occurred since.

Sampling of the plant effluent for reporting purposes is performed by weekly grab samples analyzed at the plant’s lab and independently verified by accredited external laboratories. In addition to the above permit compliance exceedances, the Town is also challenged with respect to periodic visible wastewater characteristics at the effluent discharge point in the Town harbor, which is easily observed from the commercial wharf by residents and tourists. The cause of the visible plume is discussed by CBCL as resulting from excess polymer and TSS carryover from the DAF unit. This visible plume causes public outcry and poses a reputational risk to the Town.

CBCL Limited was retained in 2018 to complete an assessment report and identified three potential options for the Town to consider to improve their WWTP performance:

1. Replace the existing MBBR media with fixed-in-place media;
2. Upgrade the existing MBBR process and replace the DAF units; and
3. Replace the MBBR and DAF process with a new membrane bioreactor (MBR) process.

Dillon was retained to provide commentary on CBCL’s assessment of the existing treatment system, review assumptions, general assessment, cost estimates and recommendations.

## Peer Review Methodology

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Process engineers from Dillon met with Town staff in October 2019. Following a meeting with the Town’s Interim Engineer, CAO and Director of Public works, Dillon met with one of the plant operators and was given a detailed walkthrough of the plant’s main processes, and discussed the operational challenges that the plant has been experiencing. These generally focused on:

- Inert solids (i.e. rocks) depositing in front of the influent screen with some passing the screen and plugging downstream processes;
- Severe corrosion of the aeration system piping inside the MBBR building;
- Work MBBR media;



- Solids carry over through the DAF to the treated effluent;
- Low treated effluent ultraviolet light transmittance (UVT) below the UV disinfection system design value, resulting in inefficient disinfection
- Odours throughout plant process areas (largely improved through the addition of a biofilter in 2019);
- Residual polymer levels in the plant effluent discharged to the harbour; and
- Aeration issues and low dissolved oxygen levels in the MBBR tanks.

At the time of the Dillon facility visit, the plant was restarting full operations after completing repairs associated with flooding damage caused by Hurricane Dorian in September 2019.

The following sections provide Dillon's peer review comments on the CBCL report. For organizational purposes, the chapter headings in this report reference the corresponding chapter numbers in the CBCL report.

## Report Discussion & Peer Technical Review

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### Chapter 1: Introduction

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No Dillon comments.

### Chapter 2: Wastewater Treatment Plant

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#### 2.4.2: Bioreactor Tanks

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The report comments that wear of the MBBR media in the bioreactor indicates that the media may not be suitable for this application. However, the bioreactor appears to be meeting the BOD reduction targets after 15 years of operation, and MBBR treatment performance is typically associated with a minimum media surface area in the treatment tank. In Dillon's opinion, media attrition over a 15 year period is acceptable based on life cycle cost, and annual replacement of a portion of the media as an operation expense to maintain treatment performance is a reasonable investment. Condition of the media and replacement media costs should be explored with the media supplier.

Dillon has assumed that the existing MBBR has adequate remaining media surface area to support biological treatment. Periodic microscopic examination of the MBBR reactor should be performed to determine if suspended filamentous bacteria are present in the MBBR tanks. Regular sludge volume index (SVI) testing of the DAF feed using an Imhoff Cone is a recommended approach to monitor biological solids; increasing SVI may suggest filamentous bacteria are present. If filamentous bacteria



are observed in the system, they may have an adverse effect on downstream DAF performance. Chlorine dosing of the MBBR would be required to control filamentous bacteria.

#### **2.4.4: Dissolved Air Flotation Units**

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It is stated that the DAF recirculation pumps are causing turbulent conditions in the DAF, and potentially discharging poor quality micro bubbles. However, the DAF is currently operating using an on/off operation, where batches of wastewater are periodically released by gravity from the equalization tank (similar to the analogy of flushing a toilet). While Dillon observed similar turbulent DAF conditions, it cannot be concluded that this is caused by DAF recirculation pumping and/or periodic batch operation. Dillon observed ongoing release of micro bubbles at the channel surface (UV channel) downstream of the DAF unit, suggesting that micro bubbles are being successfully generated by the DAF system, but turbulent conditions in the DAF are affecting their ability to properly separate with attached suspended solids within the DAF tank.

The report comments that foam observed downstream of the DAF is caused by excess polymer and the weir drop inside the effluent box. While this may be a contribution to the foam, carryover of micro bubbles from the DAF to the effluent channel is likely also contributing to the observed foam.

### **Chapter 3: Wastewater Treatment Options**

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#### **3.1: Design Criteria**

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In general, the design average and peak daily flow presented by CBCL are appropriate for the level of study completed. However, as the project proceeds through preliminary and detailed design, the average and peak daily flows should be based on a more rigorous statistical analysis of flow data, and compared to per capita loadings recommended by the Atlantic Canada Guidelines. Based on our analysis of CBCL's graphical data, this may result in a minor reduction in design flow, but is considered conservative for this stage.

The data in Table 3.1 represents a snapshot of the August – September 2018 operational period, and the title should be modified to reflect this limitation. Design flows and loads should be established at the following stages of engineering based on multiple years' worth of data.

The design basis for the original 2003 construction have been referenced by CBCL, but not included in the report. These 2003 design values should be included in Table 3.1 for comparative purposes.



Earlier in the report it is stated that carbonaceous biochemical oxygen demand (cBOD) was measured during the 2018 sampling events; however Table 3.1 reports the organic loading in terms of BOD. cBOD excludes oxygen consumption attributed to nitrification activity, while BOD considers all biochemical oxygen requirements; BOD is a five-day test, where a portion of the ammonia is typically nitrified. Using BOD and Ammonia (NH<sub>3</sub>) loading for biological treatment design, versus cBOD and ammonia, is potentially double accounting for a portion of the oxygen consumption associated with nitrification. It is recommended that when biological treatment upgrades are being designed, a consistent approach to organics is used.

In the discussion regarding salinity effects on bacteria, a distinction should be made regarding the type of treatment and negative effects (inactivation) on bacteria due to salinity changes. The inactivation versus salinity change data presented is related to observations from activated sludge (suspended bacteria) systems, including MBR; however, biofilm based treatment systems (MBBR and fixed film processes) may have a much higher tolerance to salinity changes, based on observations made with oxidizing chemicals (disinfectants). This should be investigated, because it may suggest that biofilms have an advantage over activated sludge systems (Option 3) in this instance. This can be validated by observing any step changes in effluent cBOD following peak salinity events, and the durations of subsequent recovery periods. It should be noted that routine WWTP performance does not appear to be impacted at the average 3,000 mg/L salinity level. We agree that the Town should investigate areas of the collection system where significant inflow of seawater may be occurring at high tide events.

We are in agreement that salinity will have an effect on polymer performance; however, it is not quantitatively established what the performance impacts are relative to the salinity peaks observed at the WWTP. As part of the DAF assessment process, polymer trials should be conducted to identify salinity threshold levels for DAF performance, and/or alternative polymers that perform better in higher salinity wastewaters.

Low ultraviolet transmittance (UVT) is discussed briefly and the impact of potential industrial discharges. While the data suggests that the typical effluent UVT is well below the existing UV system design value, there appears to be only a limited number (five) of data points taken over a relatively short time span. The Town should monitor UVT on a regular basis to trend how it fluctuates seasonally. It is our understanding that the Town is planning to install additional UV equipment under a separate project; this seasonal data would be beneficial in identifying times where the second bank could be turned off to reduce operational (power) costs. A UVT analyzer can be considered with the procurement of additional UV equipment.



The driver for expansion of the UV disinfection system may be premature, pending potential performance improvements in the operation of the DAF process. Dillon recommends that UV expansion not occur until a new baseline for DAF operation is established following optimization efforts.

In addition to the potential plant upgrades, conformance to applicable Town wastewater bylaws should be strictly enforced going forward. This could include WWTP influent composite (24 hours) or grab samples. During Dillon's site visit surface residue from an unknown substance that was released to the sewer in the summer of 2019 was still visible in some areas of the plant, along with a high level of oil and grease deposits. This further supports the need for a rigorous bylaw enforcement and public awareness.

### **3.2: Upgrade Options**

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Elevated corrosion is apparent through a review of the plant's visual physical condition that may be the result of elevated salinity in the wastewater based on the community's proximity to the ocean and salinity data. The corrosion may also be related to historic sulfide levels in the headworks and MBBR buildings that may now be mitigated with enhanced ventilation rates. As instantaneous salinity is difficult/impractical to measure directly, the plant could consider installing a conductivity meter. Conductivity levels can be correlated to salinity concentrations, and if an analyzer is installed it could trend data on how salinity is related to tidal and storm events, and impacting the treatment process. High grade steel, such as 316L, or fiberglass reinforced plastic (FRP) where appropriate could extend equipment lifespans and reduce the impacts of salinity. Materials selection for the Headworks and MBBR areas should be carefully considered for upgrade projects.

Elevated salinity in wastewater is not feasible to treat at the municipal level, and involves either membrane treatment (e.g. reverse osmosis) or evaporation; both of these technologies generate high salinity waste streams, and are not recommended for small communities such as Lunenburg. Unfortunately, salinity can also inhibit biological activity and aeration efficiency, and therefore biological treatment performance, so unless significant improvements in the collection system are planned in the near term (e.g. 5 years), the design basis for treatment plant modifications should reflect this parameter. Based on anticipated climate change patterns, the risk of seawater inflow to the collection system will not go away without sewer upgrades to identify and repair leaks.

It is not known if the materials selected for the original aeration system in 2003 were based on a value engineering approach, with less costly but less corrosion resistant materials selected. If this was the case, then the aeration system piping materials have now reached the end of their normal life expectancy and require replacement.



This situation would have been the same regardless of the treatment process. Typical material selection for the aeration system piping is stainless steel; it appears that a galvanized steel was used for original construction.

CBCL recommends that the plant upgrades/replacement be completed under one project, rather than piecemealing together or completing in phases. While generally accurate and preferred from an overall engineering/life cycle cost approach, this execution is not always feasible for a small municipal entity to undertake without significant provincial/federal funding, which can be intermittent and hard to predict based on elections and political focuses. Furthermore, it is not recommended in situations where one or more components in a system are not performing to expectations and requires a systematic evaluation to determine the prioritization of upgrades; replacement of multiple system components at the same time can result in unnecessary spending.

#### Option 1: Capital Maintenance of Existing Process

This option includes replacing the floating MBBR media with a Fixed Activated Sludge (FAS) process, and retaining the existing DAF process. Dillon assumes this technology option is IFAS (Integrated fixed film activated sludge process). Additional components of option 1 include:

- Replace the existing influent screen;
- Instrumentation upgrades (air flows, influent salinity, effluent TSS);
- New DAF recirculation pumps;
- DAF optimization by the manufacturer;
- Replace polymer system;
- Add additional UV capacity; and
- New emergency generator.

Based on the ability of the existing MBBR system to meet regulatory limits even with deteriorated media (except for occasional exceedances of cBOD that may be related to operational upsets and/or poor DAF performance), Dillon does not support changing to a new IFAS process, which includes new media modules, aeration piping, valves and diffusers. The IFAS process is a relatively new process that combines aspects of activated sludge and biofilm (fixed film) treatment. The IFAS process can use either fixed-in-place media, or dispersed media (same as MBBR process). The important aspect of the media is to provide adequate surface area for growth of bacteria biofilm; this is the same principle as the existing MBBR process. The IFAS process has been used to increase treatment capacity at existing conventional activated sludge (CAS) plants, but less commonly used for new-build facilities. IFAS conversions also allow increased nitrification/denitrification performance when existing plants have effluent ammonia or total nitrogen limitations.



The existing MBBR floating media is still achieving performance targets, and supports the same biofilm as a new IFAS process would. Although worn media may be a concern aesthetically, treatment performance should be the primary performance indicator. We feel it is much less costly to replace a portion of the MBBR media annually in order to maintain a target biofilm surface area. Essentially, media attrition becomes an operational cost. If the existing 15 year old media still provides adequate biofilm surface area for treatment purposes in its 'worn' state, we disagree that the MBBR process should be replaced with the IFAS process, which is operationally more complex compared to the MBBR process.

A new IFAS process will have similar operational issues as the existing MBBR process, particularly with respect to the DAF process. If the DAF process is not upgraded as a component of this FAS option, then it is not considered feasible. Therefore, improving DAF performance should be the priority activity related to this option. If DAF operation cannot be improved, then this option should not be considered further.

An alternative to this option is to consider upgrading the existing MBBR media to one that is more commonly used in the wastewater industry currently. At the time when the Lunenburg WWTP was designed, the original Kaldnes MBBR system, including their media, was likely still under patent protection. Variants of the Kaldnes media, which is much smaller and has a higher surface area to volume ratio compared to the media used at Lunenburg, is now widely available in the marketplace. Conversion to the smaller Kaldnes-type media would require replacement of the media retention screens with smaller openings; however, it may be possible to achieve MMBR treatment in only one of the two MBBR trains at Lunenburg due to the increased media surface area. This cost for this option may be offset by reduced operational costs. The Kaldnes media is also more robust than the media currently used in Lunenburg; original MBBR plants are still operational after 30 years using the original media. This topic will be discussed further under 'Option 2'.

Replacement of the existing influent screen at this time should be considered on its own merits, and not included in any of the upgrade options. Capital versus operational costs should be considered relative to screen improvements. We also recommend that the screen manufacturer be brought to site to inspect the unit, and provide recommendations for maintenance repairs or upgrades that may extend life expectancy. The screen has a life expectancy of 20+ years depending on maintenance, so planned replacement around 2023 is not unrealistic based on an asset management planning approach. If government funding is available on a cost-sharing basis, then screen replacement or upgrade may be justified based on remaining life expectancy.

Dillon agrees with the recommended instrumentation upgrades. However, consideration should be made to exclude the air flow measurements, and instead use daily dissolved oxygen readings for process control.



We recommend that the replacement of the DAF recirculation pumps and polymer system be considered as part of the overall DAF performance assessment by the manufacturer.

Installation of additional UV disinfection capacity should be deferred until DAF performance is optimized. If effluent UVT improves, then the need for additional UV capacity may go away.

Addition of a new emergency generator should first be discussed with the Province, to determine if this will be a regulatory requirement. This decision should be based on the reliability of the electrical grid feeding the WWTP, frequency and duration of outages, regulatory drivers, and cost-benefit.

#### Option 2: Improve the Existing (MBBR/DAF) System

This option includes upgrading the existing MBBR system with new compact Kaldnes-type media, and replacement of the DAF units. Additional components of option 2 include:

- Replace the existing influent screen;
- Instrumentation upgrades (air flows, influent salinity, effluent TSS);
- Add additional UV capacity; and
- New emergency generator.

This option will require a similar upgrade of the deteriorating aeration system piping, valves, and diffusers as compared to Option 1. An additional required modification will be the replacement of media retaining screens in the MBBR tanks with smaller screen openings to retain the new smaller MBBR media. This option also includes an outright replacement of the DAF units, without additional investigation into the costs to improve the performance similar to Option 1.

Dillon does not support replacing the existing MBBR media with the smaller Kaldnes-type media. The existing MBBR system and media appears to be routinely meeting effluent performance with respect to organics removal, and does not justify a wholesale media change. However, as discussed in the last section, there may be a cost-benefit to media change if one of the two existing MBBR treatment trains can be eliminated. This would mean the aeration system in only one train requires replacement, which represents a potential cost savings. This could also provide operating cost savings.

Dillon does not recommend the replacement of the existing DAF units without first determining whether or not it is feasible for modifications to improve their performance. Investigating the performance issues with the DAF process and



potential solutions should be the number one priority to realize maximum benefit of this existing asset.

In Dillon's opinion and experience with the MBBR process, the DAF performance in Lunenburg is questionable and should be further investigated. Successful operation of the DAF unit is critical to overall MBBR system operations. Batch operation and associated high flows to the DAF may be creating disruptive flow patterns that cause turbulence and short-circuiting, which impact DAF separation performance. This issue potentially correlates to the observation of micro bubble, suspended solids and polymer carryover in the DAF effluent. We understand that batch operation and the associated high flow rate was established to maintain a target operating level in the DAF for operational reasons; however, DAF modifications to allow continuous operation under variable flow conditions should be investigated with the manufacturer. It is likely that modifications to the existing units will increase their performance, and overall reliability of the WWTP effluent quality.

On the day of the Dillon site visit, we observed that only one DAF units was operating, with significant turbulence. It is not known if there is a reason for running the DAFs as alternating duty/standby service, but these units should be operating in parallel if possible to reduce the hydraulic loading rate to any one unit. We also noted that there is a 'Continuous – Operation' selector in the plant PLC for the DAF; however, this mode is likely not used based on the above discussion regarding maintaining an optimal high flow in the DAF for operational purposes. Ideal operating conditions for the DAF units include continuous flow, with both units operating in parallel to maximize residence time for separation efficiency.

Inadequate mixing of the polymer prior to entering the DAF could also be contributing to performance issues. An inline mixer, pipe flocculator or mixing tank immediately upstream of the DAF could improve performance at relatively minimal capital cost. Options for integrated upstream polymer mixing can be discussed with the DAF manufacturer.

During our site visit the plant's operator indicated that polymer jar testing for the DAF had recently been completed by a third party. As the polymer dosage is primarily based on flow to the DAF, the impacts of solids loading should also be considered. At a plant this size, jar testing should be completed by operators at a minimum of once per month, ideally weekly. Some industrial plants perform jar tests multiple times a week to optimize polymer dose and reduce operational costs. Dillon recommends that additional polymer trials be conducted, that include salinity as a variable. Seawater can be added to the secondary effluent samples to simulate varying degrees of seawater intrusion that is being observed in the collection system. This testing will allow the operating team to make informed decisions regarding polymer selection and dose versus salinity level. This testing may also identify alternate polymer products that offer improved performance over a broader salinity range. This work is



strongly recommended to improve DAF performance, particularly with the increased risk that climate change will increase the frequency of seawater intrusion events in the collection system.

Replacement of the existing influent screen at this time should be considered on its own merits, and not necessarily included in any of the upgrade options. Capital versus operational costs should be considered relative to screen improvements. We also recommend that the screen manufacturer be brought to site to inspect the unit, and provide recommendations for maintenance repairs or upgrades that may extend life expectancy. The screen has a life expectancy of 20+ years depending on maintenance, so planned replacement around 2023 is not unrealistic based on an asset management planning approach. If government funding is available on a cost-sharing basis, then screen replacement or upgrade may be justified based on remaining life expectancy, which will be discussed in a later section of this report.

As stated above, Dillon agrees with the recommended instrumentation upgrades. However, consideration should be made to exclude the air flow measurements, and instead use daily dissolved oxygen readings for process control.

Installation of additional UV disinfection capacity should be deferred until DAF performance is optimized. If effluent UVT improves, then the need for additional UV capacity may go away. However, if government funding is available on a cost-sharing basis, then this upgrade may be justified from an economic perspective. The presence of residual bubbles from the poorly-functioning DAF may also be contributing to UVT issues; the presence of these bubbles can scatter light, reducing disinfection efficacy.

Similar to option 1, the addition of a new emergency generator should first be discussed with the Province, to determine if this will be a regulatory requirement. This decision should be based on the reliability of the electrical grid feeding the WWTP, frequency and duration of outages, regulatory drivers, and cost-benefit.

### Option 3: Replace with MBR Process

This option includes replacing the existing MBBR system with a new membrane bioreactor (MBR) treatment system. This process would reuse the existing MBBR tankage in addition to new tankage to house the MBR equipment. We agree that this option will provide a high quality effluent that will reliably meet all regulatory limits, and reduce the risk of outfall episodes. With the MBR system, the existing DAF system would no longer be required. Additional components of option 3 include:

- Replace the existing influent screen;
- Instrumentation upgrades (air flows, influent salinity, effluent TSS);
- New drum screen for the MBR system;
- Add additional UV capacity; and
- New emergency generator.



MBR is a proven process with high quality effluent results, and is typically used for water re-use applications (e.g. irrigation water). The membranes provide very fine filtration of the effluent, effectively removing most suspended solids. However, MBRs have a high lifecycle cost relative to other options and requires a higher level of operator attention compared to the existing plant process. In addition, the membranes can be susceptible to foulants in the wastewater that can damage the membrane material. The operations staff noted an event in 2019 where an unknown paint-like substance passed through the WWTP, coating surfaces. An event like this could severely upset an MBR system, with potential costly replacement of the membranes required.

In addition, Dillon observed significant oil and grease through the WWTP, which can result in increased operational costs associated with chemical cleaning frequency of the membranes. If this option is selected, the Town will need to evaluate sewer bylaw enforcement and community outreach so risks of illegal dumping and oil and grease trap maintenance are well understood.

The MBR building will require dedicated air handling systems and odour control; it may be possible to connect this to the existing biofilter, but it is unclear if it has capacity.

Dillon does not recommend proceeding with this option at this time, until effort has been made to optimize the existing MBBR and DAF systems, as discussed in the previous sections. This option represents a high capital and operating cost scenario, which may be difficult for the Town to accommodate.

Replacement of the existing influent screen at this time should be considered on its own merits, and not necessarily included in any of the upgrade options. Capital versus operational costs should be considered relative to screen improvements. We also recommend that the screen manufacturer be brought to site to inspect the unit, and provide recommendations for maintenance repairs or upgrades that may extend life expectancy. The screen has a life expectancy of 20+ years depending on maintenance, so planned replacement around 2023 is not unrealistic based on an asset management planning approach. If government funding is available on a cost-sharing basis, then screen replacement or upgrade may be justified based on remaining life expectancy, which will be discussed in a later section of this report.

Dillon agrees with the recommended instrumentation upgrades. However, consideration should be made to exclude the air flow measurements, and instead use daily dissolved oxygen readings for process control.

Installation of additional UV disinfection capacity should be deferred until DAF performance is optimized. If effluent UVT improves, then the need for additional UV capacity may go away. However, if government funding is available on a cost-sharing basis, then this upgrade may be justified from an economic perspective. Additional



UV disinfection capacity should be deferred until new DAF unit performance is validated, or existing DAF system performance is optimized. If effluent UVT improves, then the need for additional UV capacity may go away. The presence of residual bubbles from the poorly-functioning DAF may also be contributing to UVT issues; the presence of these bubbles can scatter light, reducing disinfection efficacy.

Addition of a new emergency generator should first be discussed with the Province, to determine if this will be a regulatory requirement. This decision should be based on the reliability of the electrical grid feeding the WWTP, frequency and duration of outages, regulatory drivers, and cost-benefit.

#### Supplemental Option A: Extend Existing Outfall

The existing outfall location under Fisherman's Wharf is a non-ideal location given the plant's history with process upsets, poor apparent mixing, proximity to public use and media coverage. Extending the outfall beyond public view will also improve mixing and reduce the public health risk associated with effluent contact.

Dillon views this option as one of the highest priorities for the Town. All WWTPs have upsets from time-to-time, and having the effluent discharge in clear view of the public with minimal mixing is not ideal. The current situation with polymer carryover is an example where the public can observe visual clues and assume a worst case scenario. The media is typically very quick to report on issues and perceptions, which generates mistrust of the Town's operations, which is not desirable. Even if the Town can successfully optimize the existing MBBR process and reliability to improve effluent quality, we still recommend relocating the outfall to a more suitable location in the harbor.

### Chapter 4: Cost Estimates

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In making capital decisions, the Town should be fully aware of the level of estimate completed. CBCL refers to their estimate as "Class D", which appears appropriate given the level of engineering described in their report. However, this level of estimate is, by definition, at best accurate to  $\pm 30\%$  for complex engineering projects such as retrofits like this, depending on the level of engineering design completed. When evaluating and making decisions at the conceptual stage, the upper range of the estimate accuracy should be used for whichever option is selected to avoid project funding issues during implementation.

Background information/details related to the development of CBCL's cost estimates were not provided, so our commentary focuses around our professional judgement, capital work on previous plants and the cost presented in 4.1, 4.2 and 4.33.

The three contingencies (design development, construction and engineering) presented are appropriate for this stage of engineering. In some cases for more



complex projects the construction contingency may be increased to 15%; likewise for the engineering allowance, especially if in-depth background studies or full-time construction inspection are required.

Installation costs appear to be based as a percentage of equipment costs, which is standard practice for this level of project. The general mechanical & electrical allowances appear suitable for new construction, however retrofits are typically more expensive. The percentage factors for these items should be reviewed and possibly increased by 5-15%.

### CAPITAL COST ESTIMATES

#### **Option 1: Capital Maintenance of Existing Process**

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It is unclear from the report what the \$69,000 Site Works cost is for. All of the work, with the exception of the new generator, appear to be inside the existing plant.

As discussed in this report, we do not feel that replacing the MBBR media with a fixed in place media is warranted, and the associated cost should be utilized towards MBBR media top-up instead.

#### **Option 2: Improve the Existing System**

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It is unclear from the report what the \$177,000 Site Works cost is for, since the work will be contained within the existing plant building and tanks. The equipment costs and associated M&E allowances appear suitable for a full MBBR media and DAF replacement. However as discussed previously, a full DAF replacement may not be required.

#### **Option 3: Replace with MBR Process**

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Due to the high quality effluent produced by an MBR, the additional UV bank may not be required under this option. However, it is understood that the UV upgrade may proceed ahead of any major plant project, and hence why it was considered under this option as well.

MBR equipment costs can vary dramatically based on the supplier, quality and type (flat plate versus hollow fibre). Acknowledging the legacy issues surrounding the topic of wastewater treatment in the Town, we would recommend that if Option 3 is pursued, a high quality product be purchased. Based on our historical work, the equipment costs for such an MBR product this scale may be as much as double the \$2M allowance currently budgeted. This will have a trickledown effect and increase the subsequent construction and design related costs. However, if the Town is willing



to procure a system from a smaller manufacturer, and CBCL has based their estimates on vendor quotations, the estimated process equipment costs are reasonable.

### **Supplemental Option A: Extend Existing Outfall**

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No drawing was provided by CBCL as part of this option, however ABL Environmental completed a study in 2014 that considered outfall extension options. This section of the CBCL report seems to build on the ABL work, and notes that it is based on 920 m of 400 mm  $\varnothing$  HDPE pipe placed along the bottom of the harbor. This equates to approximately \$1,200/m for installed outfall piping. CBCL acknowledges that this option was only evaluated at a high level, so it is recommended that this estimate not be considered a "Class D" level of estimate and carry an even higher cost safety factor. For outfall installation, especially in populated waters such as Lunenburg's, it can often be as high as \$2,500 – \$5,000/m.

As noted in the CBCL report, the outfall cost estimate does not include pumping upgrades that may be required to manage the additional headloss associated with the outfall extension, or what onshore outfall piping modifications may be required.

Regulatory assistance requirements with in-water work are often extensive, and may require an updated Environmental Risk Assessment.

Under the assumption of ABL's Option 3 (longest extension) and our previous experience, Dillon recommends that a minimum of \$3,000,000 plus HST should be budgeted for design, permitting and construction of an outfall extension at this stage until detailed engineering and more accurate cost estimates can be completed.

### **OPERATIONAL COST ESTIMATES**

Background information from current operations (e.g. chemicals, labour, parts and equipment, and power) was not presented in the CBCL report, so each option in Table 4.2 was reviewed for general accuracy based on the breakdown provided. The total current annual operational costs is understood to be \$438,000. Options 1 and 2 appear adequately costed at this preliminary stage.

The operational cost for Option 3 appears low in our opinion. Additional chemicals to clean and maintain the MBR will be required, and the \$3,000 current allowance is too low. We assume that the power consumption was based on a calculation of motor sizes and run times, however we would expect for an MBR plant of this size with new air scour blowers and membrane feed/vacuum pumps that costs will exceed the \$241,000 allowance for power (increase of \$42K over current operations). It is not clear how the operating costs cover membrane replacement, which is expected approximately once every 7 years.



Dillon recommends an annual allowance be included under each item for routine capital investment. This is typically 1% of the major equipment capital cost. It is not clear if this has been included under the category 'Supplies/Equipment/Parts'.

#### LIFECYCLE COST ESTIMATES

The approach used by CBCL for lifecycle costs is consistent with industry standards. The dollar values that input into the calculation could be modified as discussed previously, which would impact the LCC per option. This has the possibility of increasing the overall Net Present Value (NPV) of Option 3 above the \$16M presented.

The report suggests that the capital costs be inflated 3% per annum for each year the project is delayed beyond 2019. This is representative of typical increases in construction costs year-year, but does not account for the larger price increase in construction projects associated with government funding cycles. Due to the amount of capital projects during these years, contractor resources become limited and tendered bids can increase significantly as a result. If the majority of this project is to be federally funded, the capital estimates should be increased, or a contingency added, to reflect this potential market risks.

An allowance should also be included for major capital overhaul under each option. This depends on the type of equipment, but typically occurs around years 10-15. Typically this value is 20% of the major equipment capital cost. The MBR option (#3) will require complete replacement of membranes, typically every 7 years, depending on how they are maintained. The CBCL report does not specifically identify this cost in Table 4.2. However, over a 25-year life cycle analysis, 3 membrane replacement events should be considered at years 7, 14 and 21.

### **Chapter 5: Scoring of Options**

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The method utilized by CBCL is a common way of evaluating non-financial factors. It can be somewhat subjective, and as such is best used to eliminate options to create a shortlist rather than identify the preferred path, unless the rating discrepancy is significant. Dillon normally recommends that clients participate directly in the development of scoring methodology, including topics and their weighting.

#### **Table 5-1 Scoring of Options**

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When using this method of scoring, it is also typical to have a "Very Poor" (1) and "Excellent" (5) rating for each factor, unless it is qualitative. "Operation's Cost" factor is a quantitative attribute, of which Option 3 should be a 1. Option 3 also received a very high rating for ease of operations, however MBRs can be quite complex to operate and require increased maintenance associated with chemical cleaning.



Option 3 also scored higher than Option 2 on Ease of Implementation, presumably because of the ability to operate the existing process while the new MBR building is built. However, if Option 2 is selected it could also be completed in a similar fashion as each of the main processes have two trains. There would be a risk to effluent quality should this main train experience issues during construction, but if Option 2 is selected it would be a relatively short duration upset.

Process performance is critical to wastewater operations; however, this table does not directly take into account risk to the public. Under an outfall extension scenario, any process performance upsets with visible aesthetic changes will be largely mitigated by distance from the outfall to public receptors, and improved mixing/dilution. There would still be a need to maintain effluent quality with respect to Provincial requirements, but this would be regulatory driven rather than publically perception.

#### **Table 5-2 Weighted Scoring of Options**

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The weighting related to Operations Cost and Capital Cost should be reviewed against the funding method for the project. Under federal programs where the municipality pays a relatively small (e.g. 30%) portion of the capital cost, it may be in the Town's interest to select an option that has a lower operational cost but carries a higher capital cost. These scenarios could be explored further by incorporating a capital discount value to each option.

#### **General Discussion**

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The CBCL report provides three potential options for the Town of Lunenburg related to improving operations at the WWTP. These options include a mix of comprehensive upgrades, with associated capital expenditures, that may not be prioritized to meet the Town's economic situation. The approach of comparing three options is commonly applied by engineering consultants to compare technology alternatives; however, it is not always the best approach where an existing process has operational challenges, which could be resolved/improved by more aggressive operational troubleshooting and relatively low cost modifications.

Options 1 and 2 in the CBCL both include variants on improving the existing MBBR system, including replacement of the current MBBR media with either fixed media or new smaller MBBR media, and either optimizing or replacing the existing DAF process. Rather than have only two options to assess, Dillon recommends that the Town implement a decision-making tool that can be used to guide the Town through the process of upgrades to improve plant operations.



Dillon has identified the DAF process as the key priority for improving performance of the existing MBBR plant, and recommends that troubleshooting efforts initially focus on DAF improvements through operational changes and/or modification coordinated with the DAF manufacturer. In this case, a progressive approach to WWTP evaluation and modifications may provide best value for the Town, and maximize reuse of existing assets.

Dillon has prepared an example of a decision-making flow chart in Figure 1 to show how engineering activities can be prioritized in a plan to realize improved treatment performance. We feel that the current MBBR/DAF process, which is approximately 15 years old, still has significant residual asset value for the Town; replacing the MBBR with a new and expensive process (Option 3) should be deferred until improvements to the DAF system are fully explored. If upgrades to the existing DAF units is not feasible, then Option 3 should be compared to DAF replacement with new units capable of operation under continuous flow conditions, which should still be a lower-cost alternative. Since the MBBR process still appears to achieve performance objectives, we do not feel that changing to a different media type (IFAS or smaller MBBR media) should be considered unless there are clear financial drivers. An annual addition of MBBR media to account for media wear and attrition should be considered.

Dillon also recommends that the Town prioritize the extension of the existing outfall from the current location, as previously explored by the Town. The WWTP plant will at risk of occasional performance upsets regardless of the treatment process, and the residents and media now have a heightened awareness of the outfall location.

The Town should also monitor any potential regulatory changes (such as more stringent nutrient limits). MBBR technology can be adjusted through the addition of more air, media and (if necessary) reactor tanks to reduce TKN, and TP through the addition of chemical precipitation. Dillon noted that the amount of media in the existing MBBR reactor appears to be relatively low; additional treatment capacity, including nitrification, could be achieved with increased media content.

If there is concern at the political level that the MBBR process has an associated high risk to the Town in the future, then we suggest that Town representatives visit one or more municipalities where MBBR is used successfully, to evaluate if an upgraded and well-run MBBR process will meet Town expectations.

Additional upgrades have been included in all CBCL Options, which Dillon has separated in Figure 1 under the title: 'Maintenance' and 'Optional'. Maintenance-related activities are considered to be required if the WWTP system was operating as expected and had a long remaining life. This includes safety related upgrades, aeration system piping upgrades, MBBR media top-up, and influent screen maintenance. These maintenance items should be planned as an operational cost.



However, depending on funding opportunities, it may be worthwhile for the Town to perform these upgrades with a capital project.

If the Town wishes to develop costs that reflect Dillon commentary in this report, it would be a modification of Option 1; This Option will be referred to as Option 4. This option would involve the following key components related to plant operation:

- Retaining and topping up the existing MBBR media;
- Replacing the aeration system piping;
- DAF operational assessment, including polymer salinity trials;
- DAF upgrades, or new DAF units;
- UV upgrade if required following DAF upgrades; and
- Outfall extension.

Under Option 4, the influent screen replacement is a decision that the Town must make based on economics, including an assessment of operational costs, existing condition and remaining life expectancy. Similarly, including the emergency generator and enhanced instrumentation should be decided on a cost benefit approach. If funding is available to the Town, procurement of additional spare MBBR media can be considered for future years.

The costs presented are generally appropriate for this conceptual stage of engineering; however, Dillon recommends increasing several of the operational and capital costs. We have also provided estimating qualifications so that the Town fully understands the level of accuracy and upper ranges of the current estimates. Full project endorsement should not be given to a large capital investment until a more refined estimate and associated design is completed, in order to help the Town best execute a project. In our opinion, there is still significant asset value in the existing plant systems and the Town's objectives can be met following a more phased approach to system evaluation and decision making rather than complete plant overhaul as a single project scope.

### Dillon Recommendations and Next Steps

The following course of action is recommended for consideration by the Town:

1. Identify WWTP upgrades that are associated with worker safety (e.g. grating, handrails, air quality). Consider a H<sub>2</sub>S sensor/alarm in the headworks building;
2. Proceed with next engineering steps and initiate regulatory discussion for outfall extension;
3. Perform microscopic examination of MBBR reactors to determine if filamentous bacteria are present;
4. Replace MBBR aeration system. Consideration should be given to material selection, life expectancy, and life cycle cost. Estimate media volume when tanks are drained;
5. Top up MBBR media;



6. Engage Suez (DAF manufacturer) to explore options to improve DAF performance. This will include costing of modifications as well as the cost of new DAF units;
7. Perform regular polymer trials as part of DAF optimization. Testing should include an evaluation of salinity effects and limitations for different chemical products;
8. Based on DAF study, proceed with DAF modifications, or consider new DAF units;
9. Evaluate adding capacity of UV disinfection following DAF optimization, when a new baseline for plant UVT is established;
10. Assess optional instrumentation upgrades using a cost-benefit approach. Consider the likelihood of whether the operations' team will use the additional data for operational optimization, operational cost savings, or risk reduction;
11. Rigorous testing and enforcement of sewer bylaw, coupled with a public awareness program;
12. Continue to collect influent, effluent and flow data to better support future operations and design effort; and
13. Implement or increase annual capital maintenance budgeting to account for more routine "wear and tear" upkeep.

The Town can add an additional option (Option 4) for cost estimating. Option 4, as discussed in this report, represents the low cost alternative to improving WWTP performance with maximum reuse of existing plant assets. Option 4 includes extension of the outfall, which is not included in the CBCL options; however, Dillon recommends outfall extension for all upgrade options.

## Closing

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We trust this information meets your requirements. If you have any questions regarding this report, please contact the undersigned at your convenience.

Yours truly,

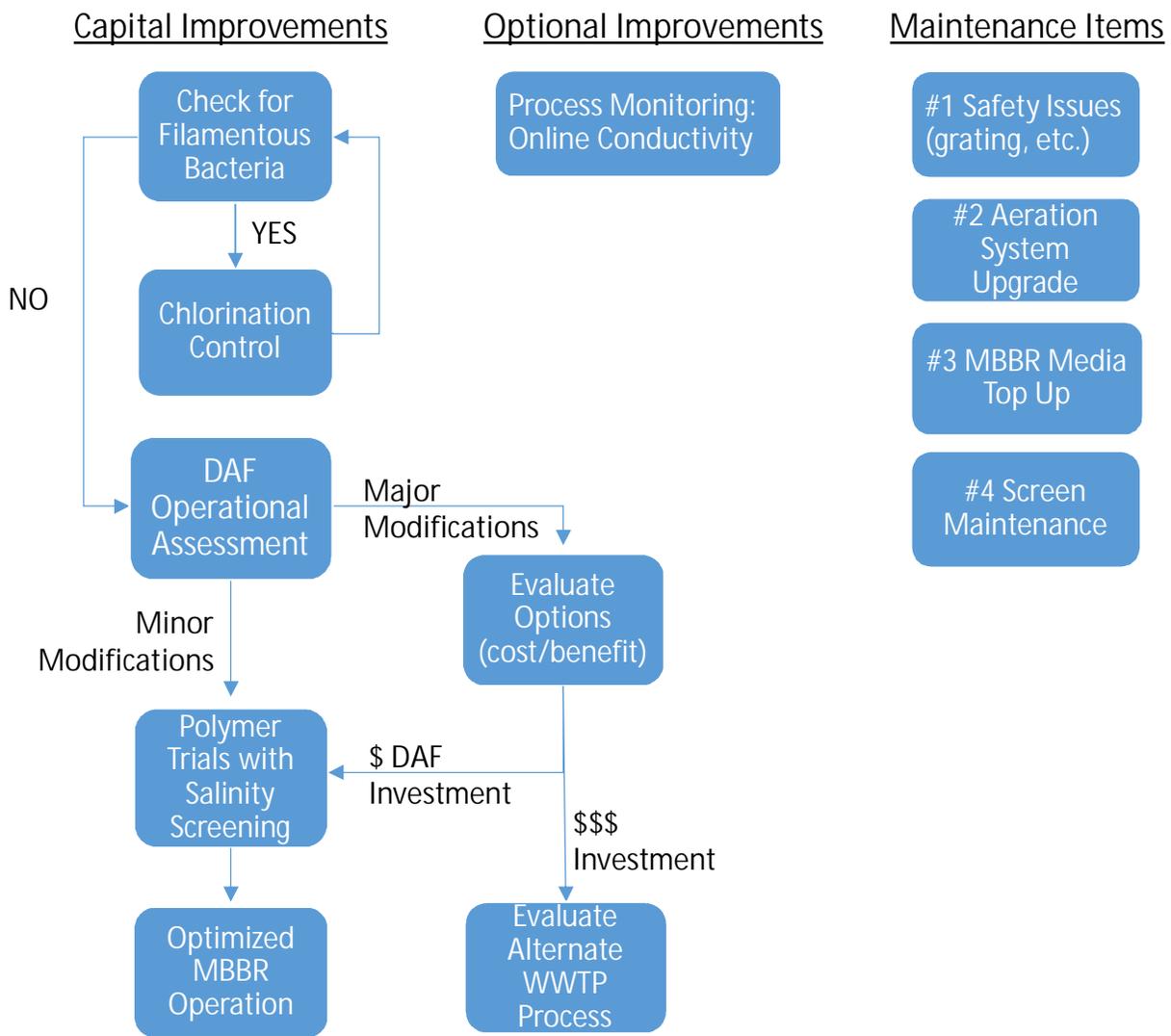
DILLON CONSULTING LIMITED

Dave McKenna, M.Eng., P.Eng.  
Wastewater Engineering Technical Lead

Kyle MacIntyre, P.Eng.  
Water/Wastewater Engineer

KRM:jes  
Our File: 19-1650-1000

**Figure 1: Decision Flow Chart**



## Splash Pad Project Information Summary

January 10, 2020

### **Presentations/Reports to Council:**

- January 8, 2019 – Lunenburg Community Development Group “Splash Pad Project” presentation
- January 22, 2019 – Splash Pad Proposal: Staff Report
- March 12, 2019 – Splash Pad Proposal: Staff’s Feasibility Report
- December 10, 2019 – Splash Pad Project Staff Report and Splash Pad Feasibility Study (Request for Proposals alternative process recommendation)

### **Draft Milestones/Construction Timeline:**

- January 14, 2020 – Council discussion of Splash Pad alternative process for the issuance of a Request for Proposals for design and construction at a pre-selected location
- February 3, 2020 – Provincial grant application deadline to fund up to one-third of the total cost of the project
- January to February 2020 – Staff write Request for Proposal (RFP)
- February to March 2020 – RFP be reviewed by an engineering firm
- March to May 2020 – RFP open for proponents, with a company selected by the end of May; successful proponent could be presented at the May 12 Council meeting
- May to April 2020 – Finalized drawings and plans approved by the Town
- June to July 2020 – Construction
- Grand Opening – Pending above schedule, potential to be ready for July 1, 2020

### **Review of Operating Costs:**

The preliminary estimates that the splash pad would have as an annual operating cost is noted below (from March 7, 2019 Staff Feasibility Report). The Town’s Recreation Department would be responsible for the weekly maintenance, operations, start up and shut down of the splash pad. The Public Works Department would be required with the construction of the project to provide water and sewer hookups.

• Water (seasonally 1,086,912 gallon/year)	\$4,900
• Power (approximately \$100/month for four months)	\$400
• Weekly checks (June, July, August and September)	\$470*
○ Estimated one hour each at \$31.00/hour	
• Start up: Spring (half day by two staff)	\$250*
• Shut down: Fall (half day by two staff)	\$250*
• Insurance	<u>TBT</u>
	<b>\$6,270 + Insurance</b>

\*Based on Public Work’s charge out rates schedule.

Paul Bracken, Facilities Superintendent  
Kelly Cunningham, Recreation Director

**MEMORANDUM**

**TO: TOWN COUNCIL**  
**FROM: PAUL BRACKEN, FACILITIES SUPERINTENDENT**  
**DATE: DECEMBER 5, 2019**  
**RE: SPLASH PAD PROJECT**

1. **FACTS**

ON March 12<sup>th</sup> 2019 – SPLASH PAD PROPOSAL: STAFF’S FEASIBILITY REPORT WAS PRESENTED TO COUNCIL.

*Motion: moved by Councillor Mosher, seconded by Deputy Mayor McGee that the splash pad project commence, contingent on community funding. A Consultant Engineer would be hired through the tender process to further look at the specifics required for a splash pad within the Town. The splash pad is anticipated to be constructed in 2020/21. Motion carried.*

Currently in the 2019/20 capital budget, there is \$20,000 approved for “Splash Pad (Detailed Design-Tender)”.

After further review and research the utilities and construction are straight forward and do not require an in-depth engineering site review. This would be a simple way to save money on the Towns portion of the project.

**Basic Utility Requirements:**

**Water:**

- Standard 1 1/2” to 2” water line with a static water pressure of 35psi to the features. Most areas in Town have at least 50psi of water pressure which is more than enough.

**Electrical requirements:**

- The Splash pad will require low voltage power to run a control box that provides 24V power to control the valves, turning the features on and off.
- This would only require 120V electrical power.

**Sewer requirement:**

- Using a flow through system a 6” drain line would be required to drain the water from the splash pad.
- With a flow through system water can be discharged to a pumping station or into the harbor.

- With the right approval and permit discharging the water in the harbor would be the simplest and cheapest method.

In collaboration with the community group Town staff are proposing to write a site specific RFP, rather than tender a multi-site review to an engineering firm as moved at the March 12<sup>th</sup> Council meeting.

## 2. **ISSUES AND OPTIONS**

The TOL will put together the RFP with the functional specification for the facility and have a preferred site selected, 250<sup>th</sup> park is recommended by Staff and LCDG (Lunenburg Community Development Group).

We would require a consulting engineer to:

- Review the RFP document re: overall engineering inputs to the functional spec, to ensure that the specified utility connections are in alignment with any long term goals and the general terms and conditions. The utility connections are power, water and sewer.
- Review the RFP responses and provide feedback for each response.

Staff have reviewed numerous RFP's from other municipalities across Canada for design specifications, layout, site planning, and construction details. The RFP has become the preferred method of procurement for many municipalities across Canada.

### Splash pad locations:

- Staff prepared a feasibility report March 12<sup>th</sup> for council to review and outlined the different locations.
- After additional review by staff, 250<sup>th</sup> anniversary park remains as the number one choice location
- Recommended by the Town staff, consulting Town engineer, Fire Chief and LCDG.

### Input from Fire Chief

- Likes the center location of the 250<sup>th</sup> park, agrees this is the best proposed location in Lunenburg.
- Does not see parking as an issue, most of their rentals fall outside of splash pad operation hours.
- Would be happy to allow 2-3 spots as designated accessibility parking.
- Expressed concerns with the foot traffic around the Fire Hall and thought this could be dealt with using good signage and directions.

### **Option 1:**

"Request for Proposal" procurement, using the 250<sup>th</sup> anniversary park as the location of the splash pad, exact location to be part of the RFP. Town staff to write a RFP including all functional aspects that will be additionally reviewed by a consulting engineer for technical aspects of the project.

### **Option 2:**

Not to move forward with a RFP procurement and hire an engineering firm to write a complete tender package.

3. **FINANCIAL IMPACT (prepared by Finance Director)**

In the approved 2019/20 Capital Budget \$20,000 was included for the Splash Pad Detailed Design & Tender to be funded by Deed Transfer Taxes. Should Council wish to proceed as recommended by staff with Option 1 the engineering review costs should be significantly less than the approved 2019/20 Capital Budget.

The construction of the Splash Pad would then be included in the 2020/21 Capital Budget for Council's approval. As previously discussed the LCDG, with support from Town staff, will apply for grants to fund this project and fundraise from local business and individuals for the balance of the project's capital costs. The Town will assume the operating costs once the capital construction is completed.

3. **STRATEGIC PLAN RELEVANCE**

- 1D Engaging our citizens
- 2B Cultivating a positive visitor experience
- 3B Facilitating and encouraging healthy lifestyle
- 5A Making best use of Town-Owned buildings and land
- 5B Continually and strategically maintaining and upgrading community infrastructure

5. **RECOMMENDATION**

Option 1 is recommended by staff:

Prepared motion:

Council move proceed with Option 1 – Use a RFP for the procurement of a splash pad with the 250<sup>th</sup> park as the choice location, splash pad to be built during the 2020/2021 fiscal year pending funding from Lunenburg Community Development Group.

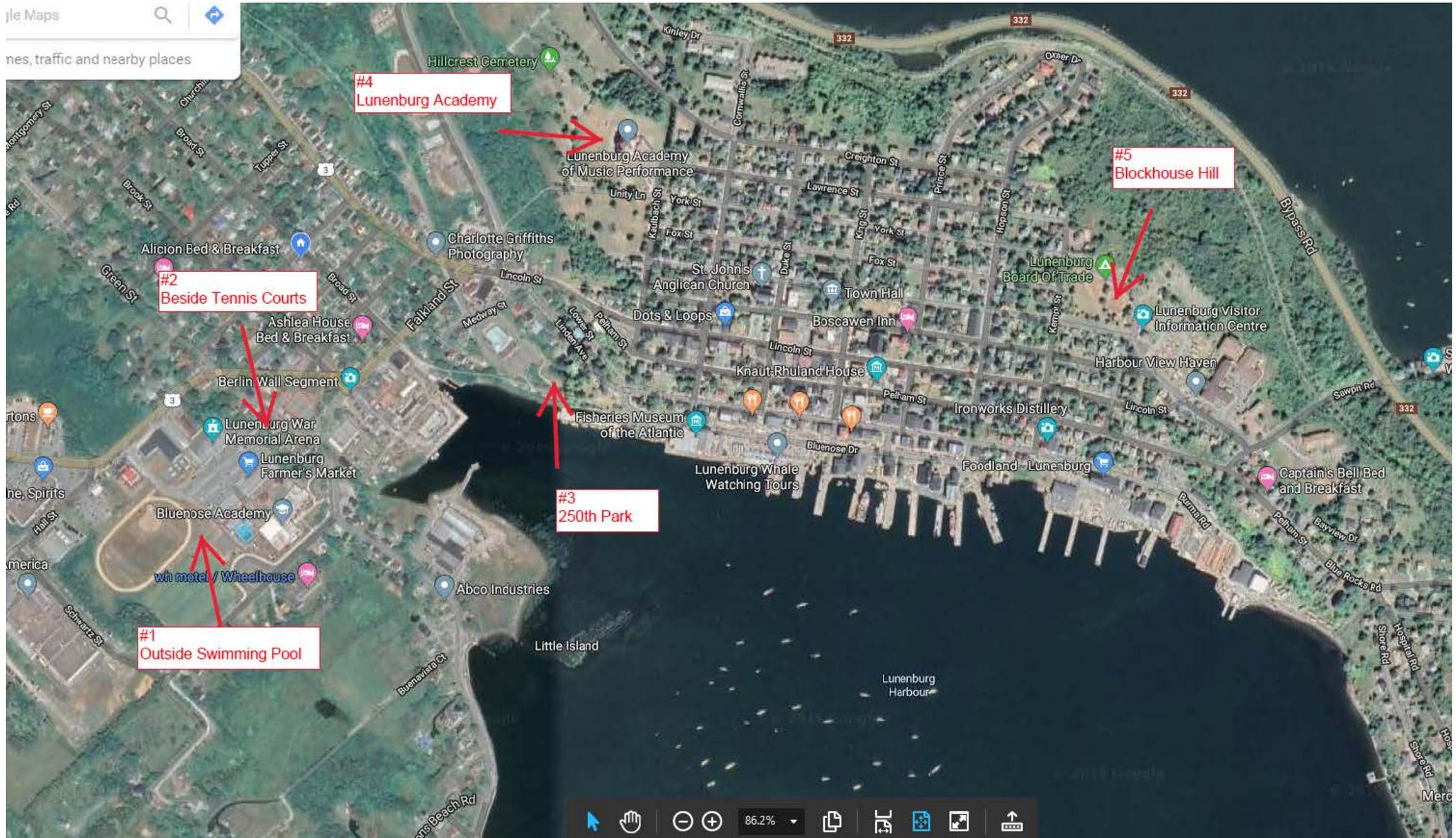
Encl.

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Bea Renton  
Town Manager/Clerk

# Splash Pad Feasibility Study

Town Of Lunenburg



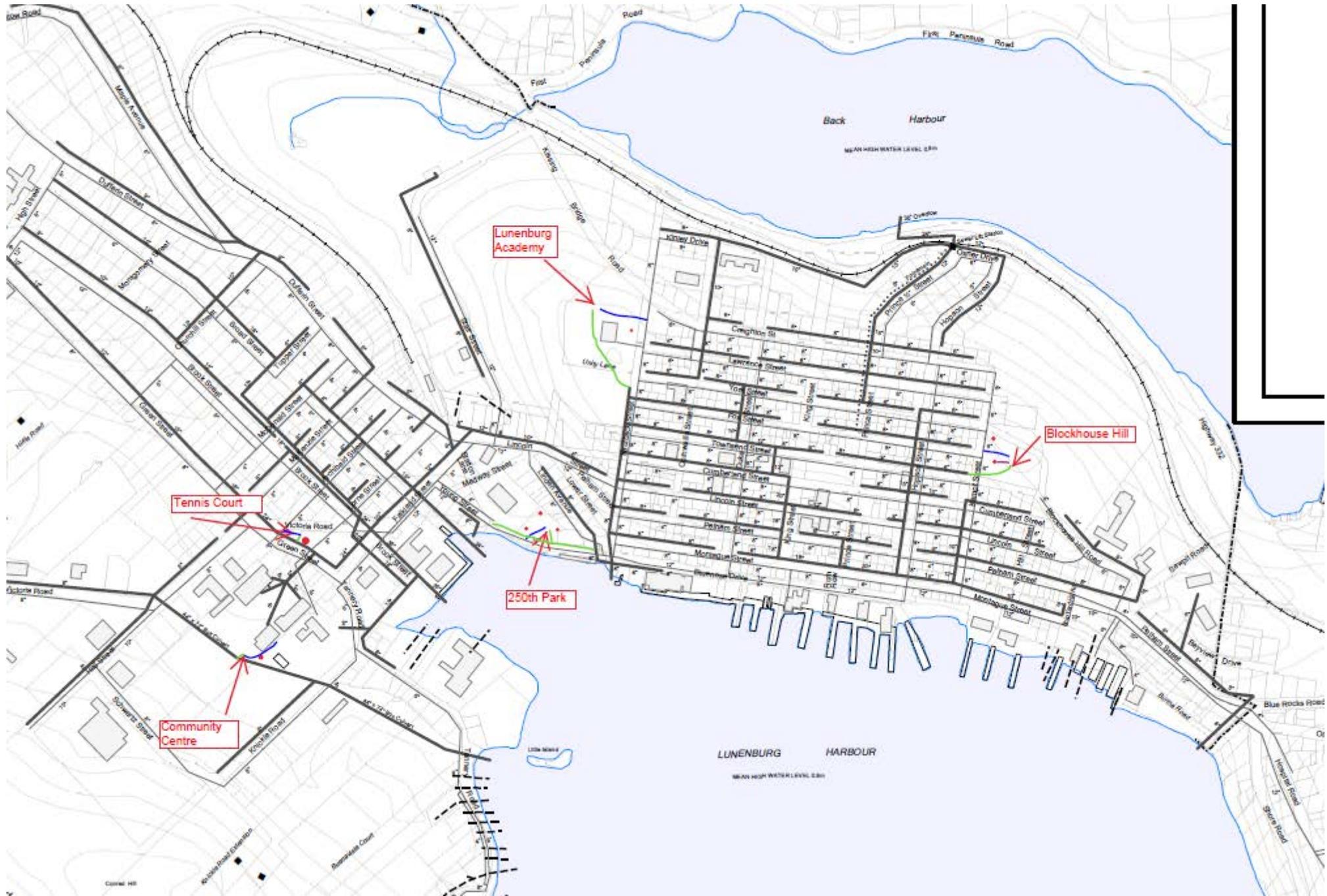
#4  
Lunenburg Academy

#5  
Blockhouse Hill

#2  
Beside Tennis Courts

#3  
250th Park

#1  
Outside Swimming Pool



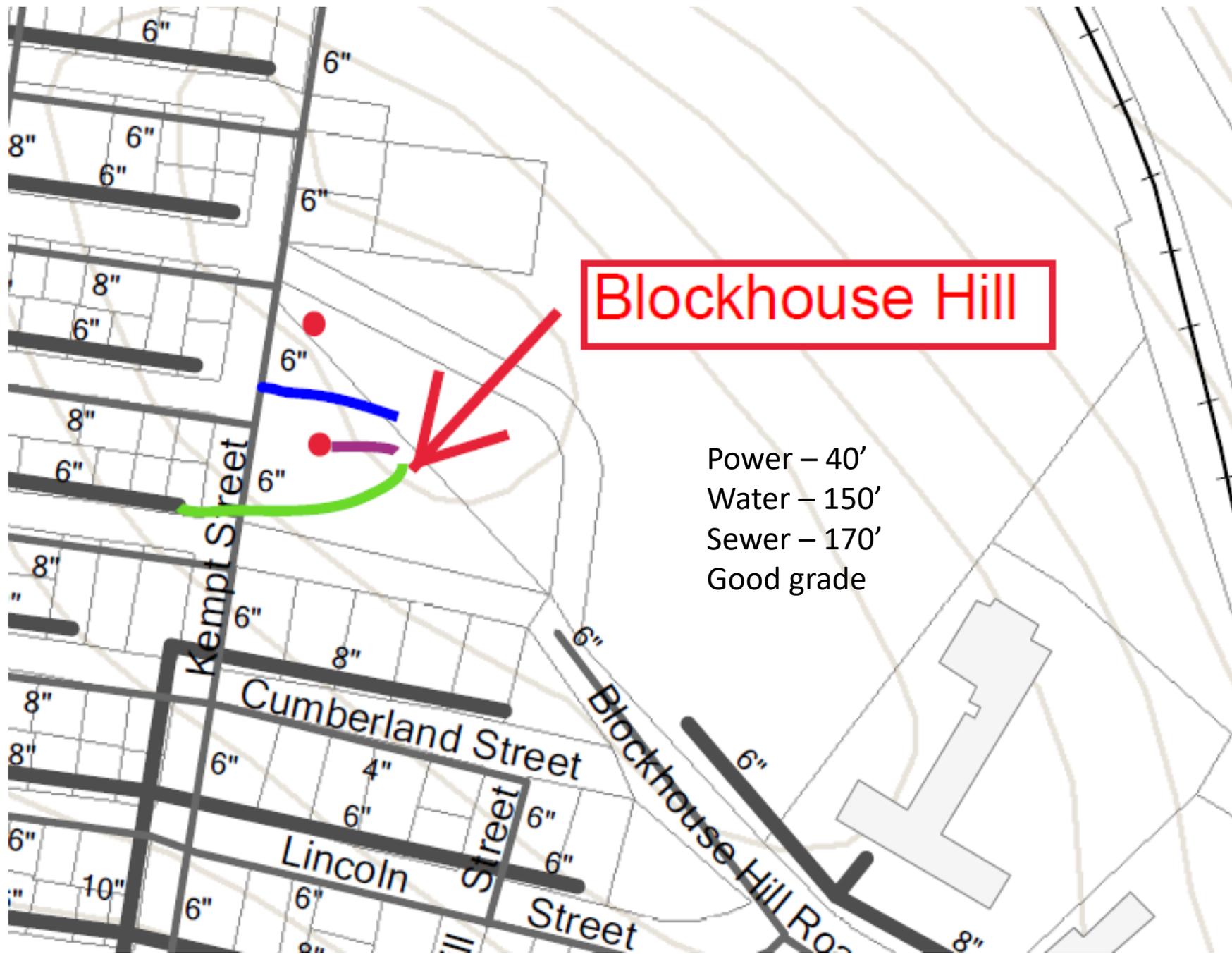
Location	250 <sup>th</sup> Park	Tennis Court Location	Lunenburg Academy Grounds	Community Centre site	Blockhouse Hill
Sewer and Water Access					
Geotechnical Factors					
Parking					
Accessibility					
Shade					
Parental viewing/seating					
LCDG Input (1-5)					
Other Factors					
<b>Total (35 Max)</b>					

Scale	Rating	Definitions
5 points	Excellent. Exceptional Much more than acceptable.	Significantly above criteria for successful Surpassed expectations. Meets all major / essential / core criteria or acceptable equivalents and met three or more additional criteria.
4 points	Very Good. Above average.	More than adequate Generally exceeds criteria Meets all of the major / essential / core criteria or acceptable equivalents and several of the minor / additional criteria. No major deficiencies exist in the areas assessed.
3 points	Good. Acceptable. Satisfactory Average	Should be adequate for effective performance. Meets several of the major / essential / core criteria one or two of the minor / additional criteria or acceptable equivalents. Some of the major and minor criteria were met; some deficiencies exist in the areas assessed but none of major concern.
2 points	Weak. Less than Acceptable	Insufficient for performance requirements. Generally does not meet criteria Does not describe / demonstrate a sufficient range criteria appropriate
0 – 1 point	Unacceptable. Poor. Much less than acceptable	Significantly below criteria required Few or no criteria met. Many deficiencies. A major problem exists.

# Blockhouse Hill Location







**Blockhouse Hill**

- Power – 40'
- Water – 150'
- Sewer – 170'
- Good grade

# Pros, Cons, and Considerations

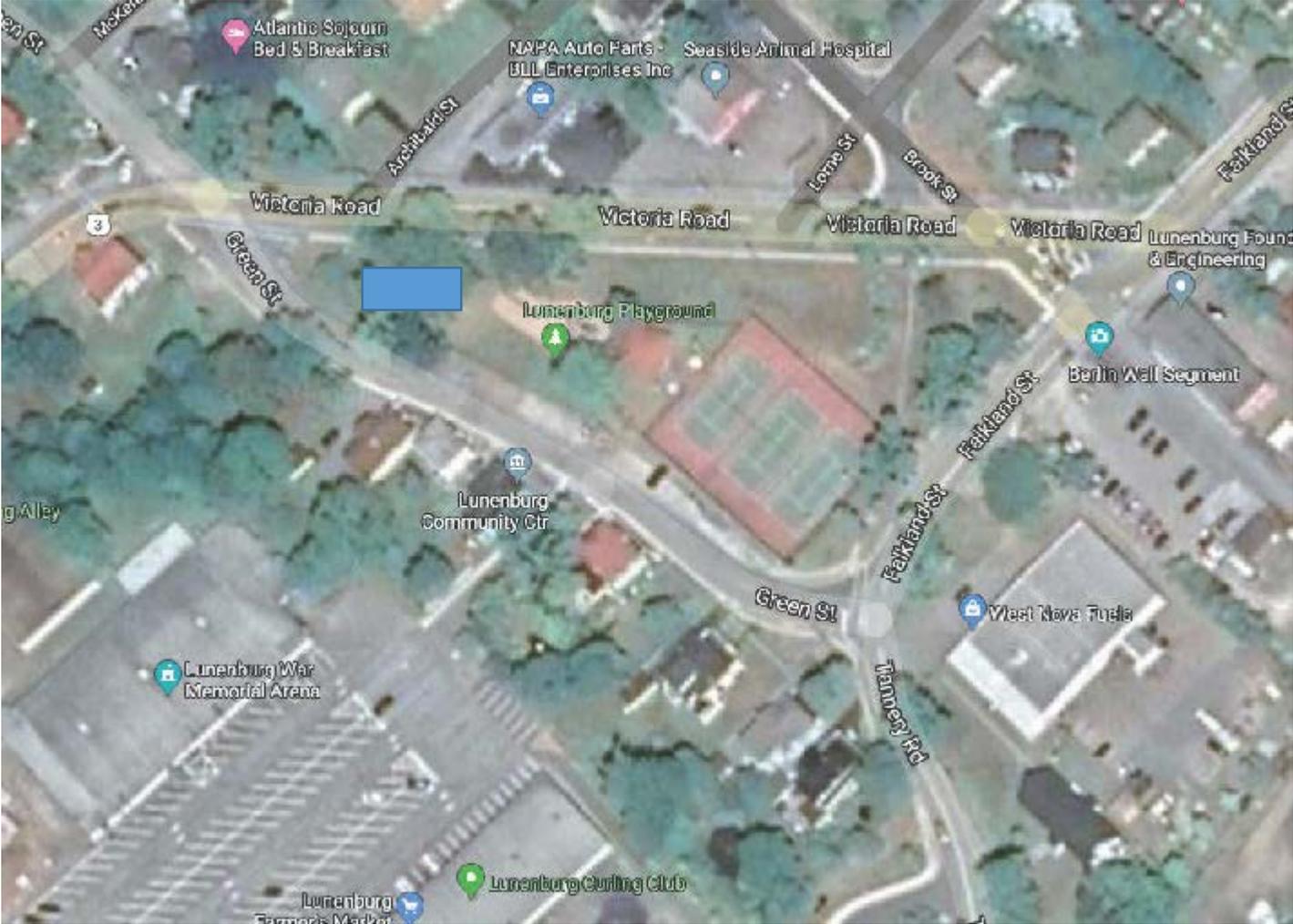
## **Pros**

- Services are close by
- Nice views from the top of the hill
- Park currently underutilized

## **Cons**

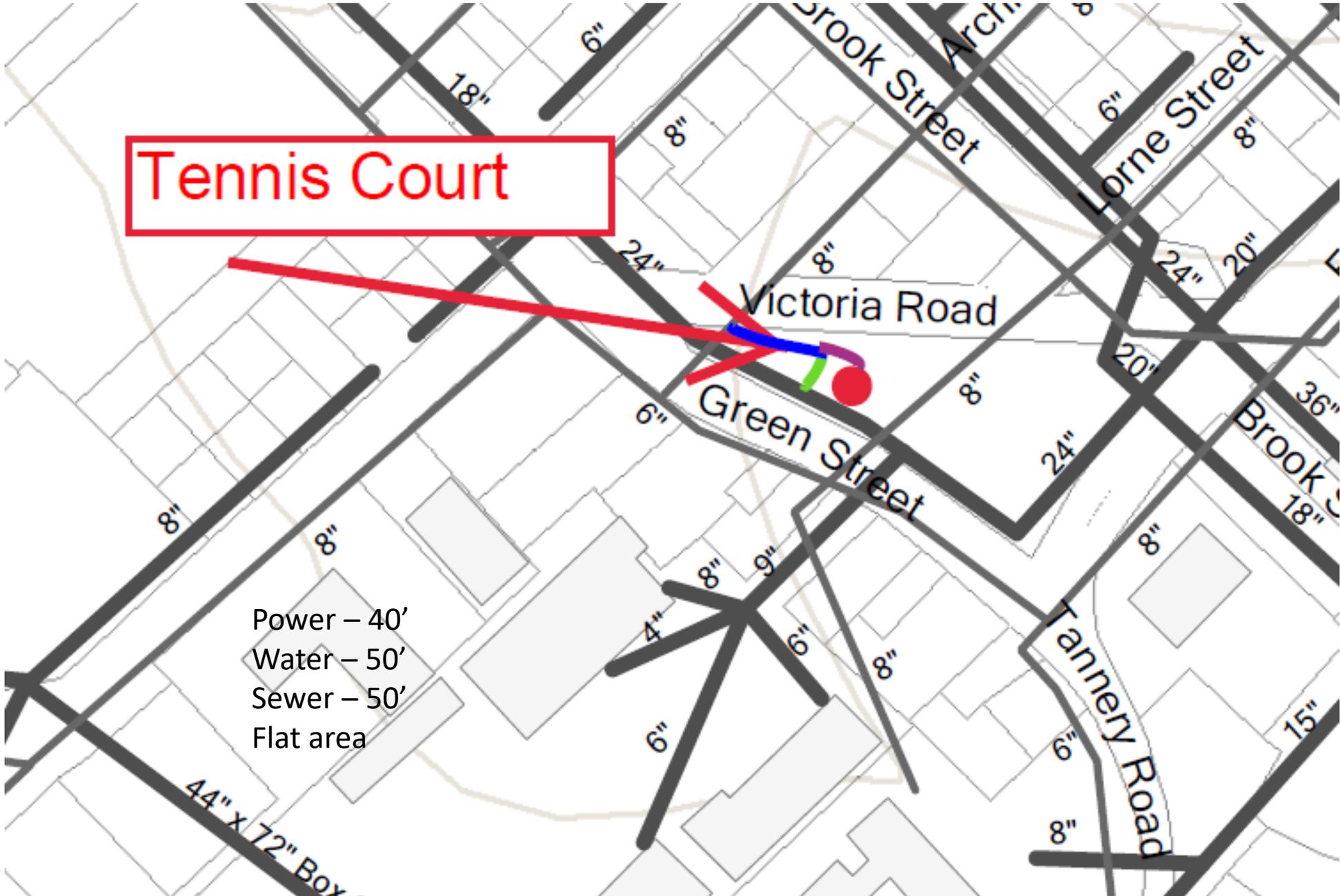
- Lower water pressure
- Non central Location
- Park used for festivals
- Limited shade
- No Town owned washrooms

# Tennis Court Location





# Tennis Court



- Power – 40'
- Water – 50'
- Sewer – 50'
- Flat area

44" x 72" Box

# Pros, Cons, and Considerations

## **Pros**

- Services are close by
- Shaded area
- Parking Close by

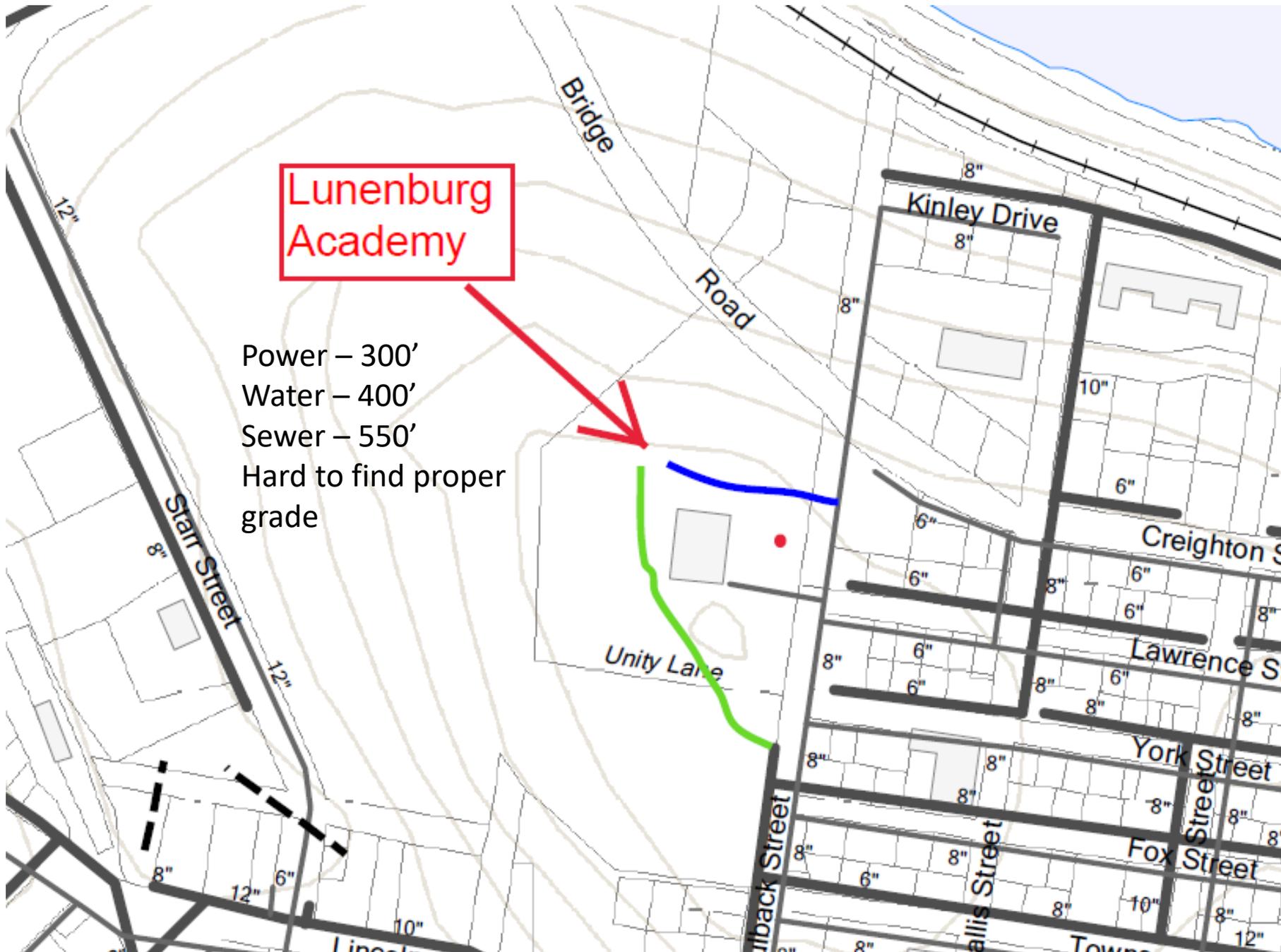
## **Cons**

- High traffic zone
- Lots of Trees
- Low lying area
- No Town washrooms

# Lunenburg Academy Location







**Lunenburg Academy**

- Power – 300'
- Water – 400'
- Sewer – 550'
- Hard to find proper grade

# LUNENBURG ACADEMY LOT DEVELOPMENT PLAN



## New Features Key

- ① Parking for 60 cars
- ② Bus drop off
- ③ Welcome plaza
- ④ Accessible ramp
- ⑤ Cafe terrace
- ⑥ Bespoke Lunenburg Academy interpretive signs
- ⑦ Pocket park / reading space
- ⑧ Garbage enclosure
- ⑨ Walking trail
- ⑩ Native pollinator planting beds
- ⑪ Rain gardens / sustainable urban drainage
- ⑫ 20' x 25' basketball court

## Materials Key

- New trees 
- Planting bed + seating wall 
- Permeable pavers 
- Concrete sidewalk 
- Asphalt 
- Bike racks 
- Light standards 
- Perspective View 

PLAN VIEW

# Pros, Cons, and Considerations

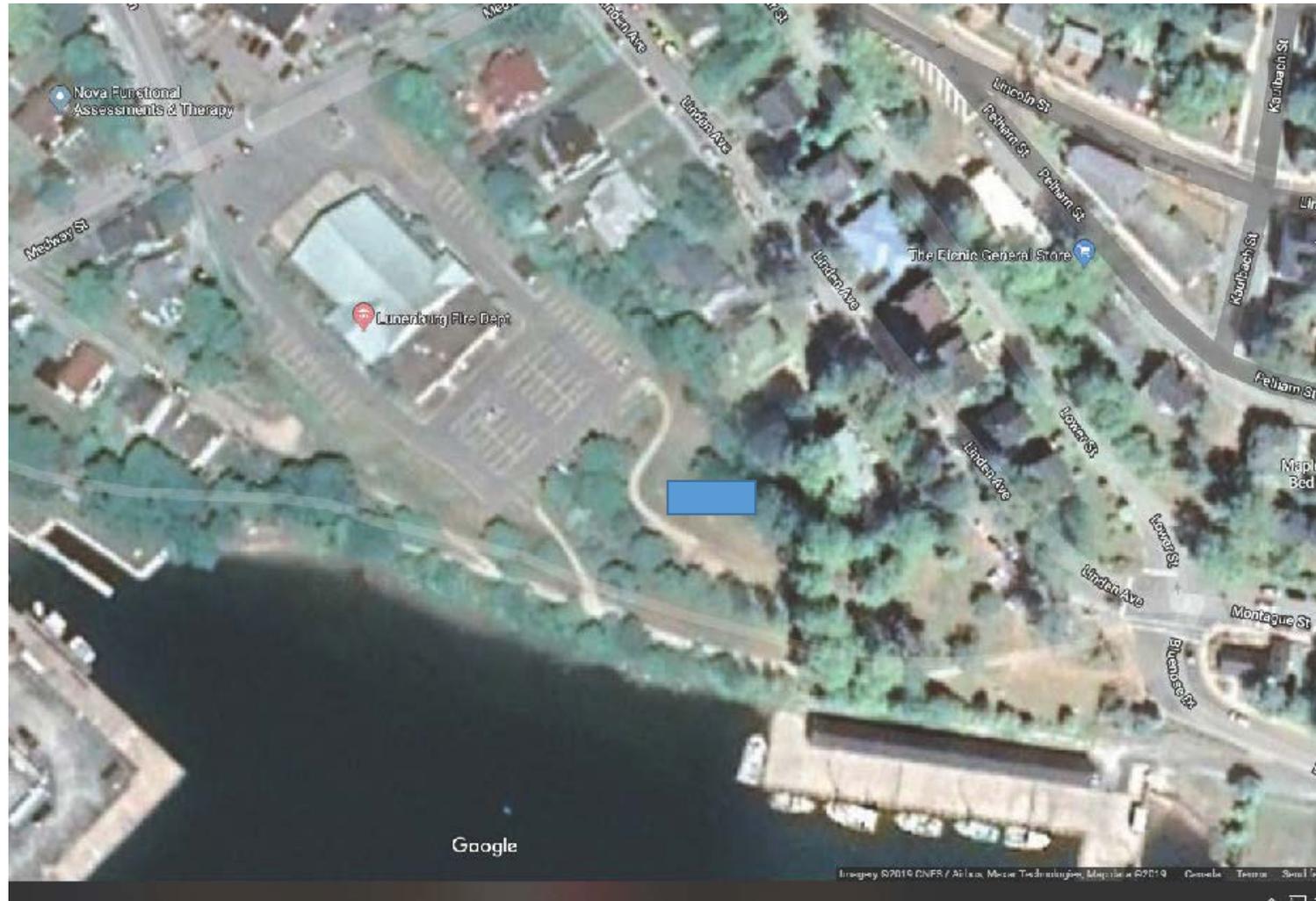
## **Pros**

- Open space
- Expanding the Academy's uses

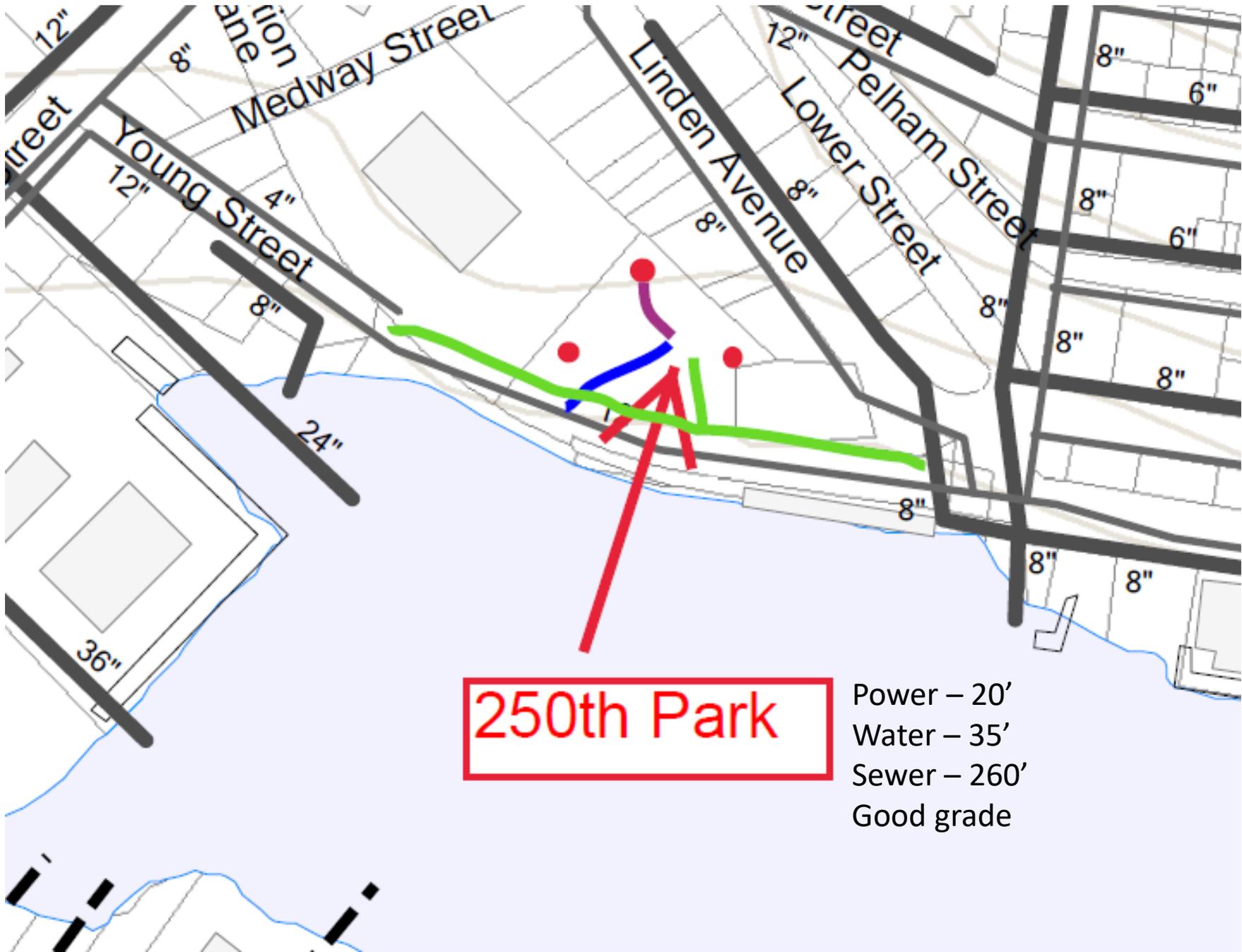
## **Cons**

- Lower water pressure
- Services are far away
- Lot development plan not complete
- Limited parking in summer months
- No shade
- Washrooms?
- Sloped away from sewer
- Fire ants in fields

# 250<sup>th</sup> Park









61 total spaces  
3 handicap marked spaces

5 spaces  
1 handicap  
Firefighter Only

11 spaces

22 spaces  
2 handicap

9 spaces

11 spaces



# Pros, Cons, and Considerations

## Pros

- Services are close with strong water pressure
- Complements existing playground which can be updated with playground reserve funds
- Elevated parental viewing
- Landscaping in place
- Central location between New Town and Old Town
- Public Washrooms close by
- Very accessible
- Good parking
- Potential for easy drainage to harbour or lift station
- Minimal vehicle traffic
- Encourages walking

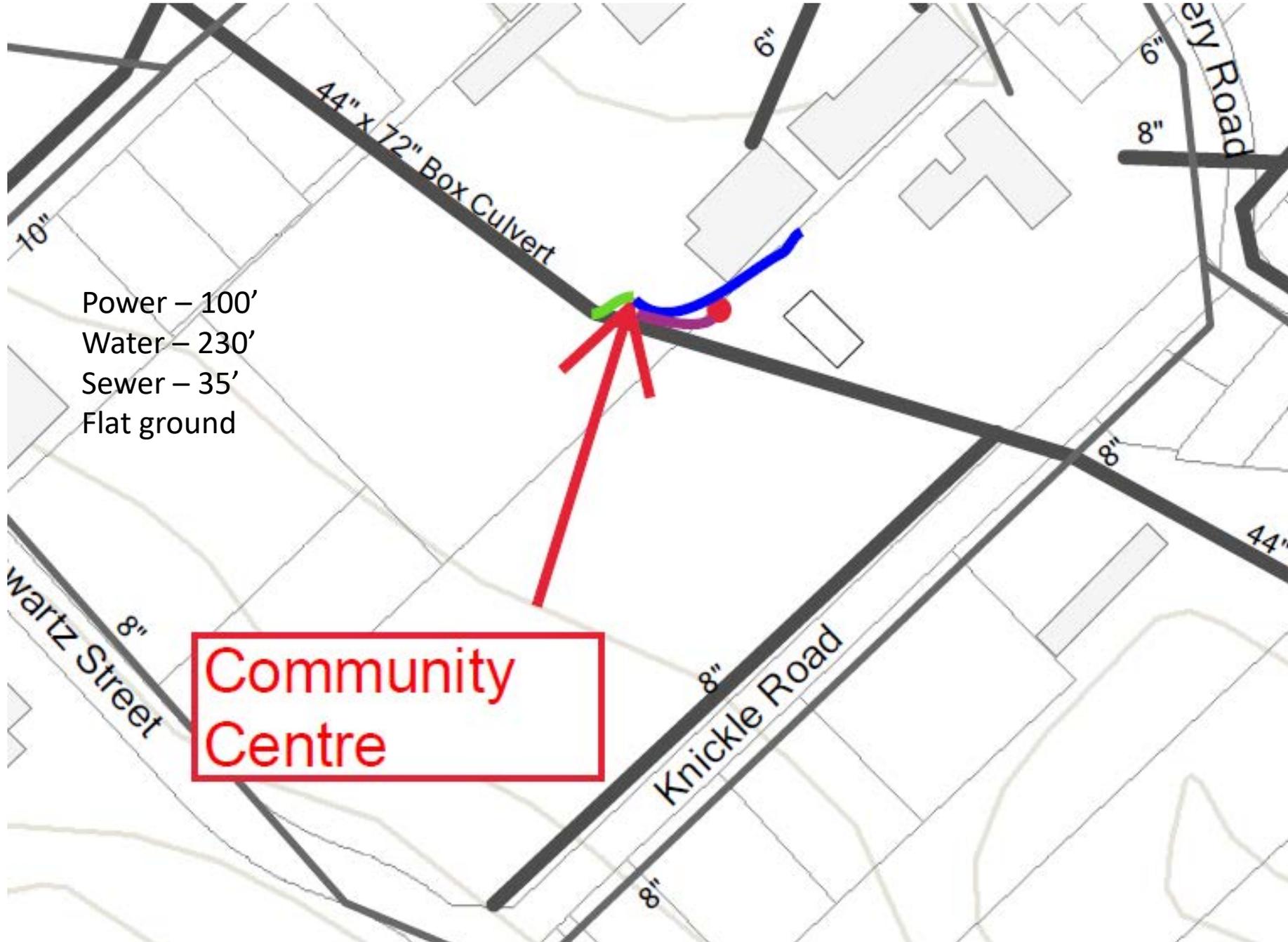
## Cons

- Potential for risk during fire call
- Potential for full parking lot
- Potential overuse of public washrooms
- Requires good signage

# Community Centre







Power – 100'  
Water – 230'  
Sewer – 35'  
Flat ground

**Community  
Centre**

# Pros, Cons, and Considerations

## **Pros**

- Close to other recreation services
- large parking lot
- Potential use of Community Centre washroom (only during working hours 8-4 M-F)

## **Cons**

- Take away from swimming pool clients
- Potential flood zone / swampy
- Water service under pavement

	250 <sup>th</sup> Park	Tennis court	Lunenburg Academy	Community Centre	Blockhouse hill
Power	20'	40'	300'	100'	40'
Water	35'	50'	400'	35'	150'
Sewer	260'	50'	550'	100'	170'
Total underground service	280'	90'	850' or 1,250'	235'	210'
Under Pavement	No	No just normal road cut	Yes, large portion in parking lot and road	Yes large portion in parking lot	Normal road cut

Location	250 <sup>th</sup> Park	Tennis Court Location	Lunenburg Academy Grounds	Community Centre site	Blockhouse Hill
Sewer and Water Access	4	4	2	3	4
Geotechnical Factors	4	3	4	3	4
Parking	3	4	2	5	3
Accessibility	4	4	3	5	3
Shade	5	5	0	0	2
Parental viewing/seating	5	4	4	4	4
LCDG Input (1-5)	5	4	2	3	1
Other Factors		Traffic Zone Washrooms ?	Future Use Water Pressure Washrooms?		Water Pressure Washroom?
<b>Total (35 Max)</b>	<b>30</b>	<b>28</b>	<b>17</b>	<b>23</b>	<b>17</b>

Scale	Rating	Definitions
5 points	Excellent. Exceptional Much more than acceptable.	Significantly above criteria for successful Surpassed expectations. Meets all major / essential / core criteria or acceptable equivalents and met three or more additional criteria.
4 points	Very Good. Above average.	More than adequate Generally exceeds criteria Meets all of the major / essential / core criteria or acceptable equivalents and several of the minor / additional criteria. No major deficiencies exist in the areas assessed.
3 points	Good. Acceptable. Satisfactory Average	Should be adequate for effective performance. Meets several of the major / essential / core criteria one or two of the minor / additional criteria or acceptable equivalents. Some of the major and minor criteria were met; some deficiencies exist in the areas assessed but none of major concern.
2 points	Weak. Less than Acceptable	Insufficient for performance requirements. Generally does not meet criteria Does not describe / demonstrate a sufficient range criteria appropriate
0 – 1 point	Unacceptable. Poor. Much less than acceptable	Significantly below criteria required Few or no criteria met. Many deficiencies. A major problem exists.

Recirculated for reference of operating costs as requested at the January 7, 2020 Council meeting - please see highlighted area on page 7

**Document No:**  
**Meeting:** Mar 12/19 Coun  
**Circulate To:** Coun, BR, LD, HM  
**File:** Recreation - Parks

**MEMORANDUM**

**TO: TOWN COUNCIL**  
**FROM: KELLY CUNNINGHAM, RECREATION DIRECTOR**  
**PAUL BRACKEN, FACILITIES SUPERINTENDENT**  
**DATE: MARCH 7, 2019**  
**RE: SPLASH PAD PROPOSAL: STAFF’S FEASIBILITY REPORT**

1. **FACTS**

A community organized group called the “Lunenburg Community Development Group” (LCDG) is proposing a Community Splash Pad Park to be built in the Town of Lunenburg (Town). The group is proposing that the Splash Pad be built at the Town’s 250<sup>th</sup> Anniversary Park where a playground structure currently exists. The proposal would remove the existing playground equipment prior to construction.

The LCDG is seeking funding from a variety of sources, including federal, provincial, and municipal governments, corporate sponsors, and grant applications.

A splash pad is a dynamic, zero-depth aquatic play area that combines flowing, misting, spraying and jetting. The jets and sprays offer choreographed movements and intensity of water spraying.

At the January 8, 2019 Council Meeting, the following motion of Council was approved:

*Motion: moved by Deputy Mayor McGee, seconded by Councillor Carnevale that staff prepare a report regarding the splash pad proposal. Motion carried.*

At the January 22, 2019 Council Meeting, a preliminary staff report was provided to Council. The staff team was to obtain more information and report further to Council.

Kelly Cunningham (Recreation Director), Paul Bracken (Facilities Superintendent) and Peter Baker (Public Works Superintendent) have met with members of the LCDG to gather further information. Staff have since done further research to assist in a preliminary feasibility study of the proposed elements for consideration.

Currently in the 2019/20 draft capital budget, there is \$20,000 proposed for “Splash Pad (Detailed Design-Tender)”. The description for this work is as followed:

“A splash pad is a dynamic, zero-depth aquatic play area (no accumulation of water) that combines flowing, misting, spraying and jetting. Splash pads have, in recent years, become an increasingly popular family recreation destination in towns and cities of all sizes. While not meant to be a replacement to outdoor pools, they offer a fun water experience, with little to no standing water and non-slip surfaces, they make for a safe environment to play in. They are scalable, allowing them to meet wide-ranging levels of service and budget. The jets and sprays offer an endless combination of choreographed movements and intensity of water spray.

In collaboration with the community group, who has spear headed this project to date, staff are proposing a contractor be engaged to provide the technical assistance of detailed design work and preparation of a tender package. This will allow the group/Town to move forward with funding applications for the 2020/21 construction of this project.”

This first phase of the project would result in staff to work in partnership with a Consulting Engineer and Landscape Architect, which would be hired through tender. It is important to emphasize that much of the information provided in this report through the feasibility study was done preliminary by staff and would be further reviewed through the hiring of the Consultant. We have budgeted \$20,000 for this process, which is based on 10% of the total project budget, this could be reduced through staff planning.

## 2. **FEASIBILITY STUDY CONDUCTED BY STAFF**

Staff is very supportive of the splash pad proposal. The LCDG members have done extensive research in preparation of their January 8, 2019 presentation to Town Council (Schedule “A”).

The LCDG asked Council for:

- *Permission to move forward on a mutually agreeable tentative plan to build a splash pad park on Town of Lunenburg land.*
- *Ability for the Town of Lunenburg to accept the financial support this project will require.*
- *Ability for the Town to be able to facilitate the project with continued engagement from staff (i.e., Corporate Services, Recreation, Public Works, Water Utility, etc.).*

The LCDG stated their willingness to:

- *Obtain a designed and costed plan for a Splash Pad and Park.*
- *Obtain a significant portion of the funding.*

- *Continued facilitation of the splash pad development for the community.*

## Location

### i) Site selection – Staff’s Evaluation

- 250<sup>th</sup> Anniversary Park: This location was determined as the best placement for the proposed splash pad based on staff’s assessments. There is currently an existing playground and pad in the area; however, it was previously anticipated by staff to further look into options for updating the play structure. By replacing the existing structure, it is thought that there would be minimal additional investment to the pad itself.

The 250<sup>th</sup> Anniversary Park is a beautiful location that overlooks the waterfront. It is accessible by the Front Harbour Trail, which would be the main entrance to the pad. There is minimal public motor vehicle traffic near this location, which reduces safety concern of children and youth near the road. Parents would be welcomed to watch children, either on the level of the splash pad or above on the hill to look down, to get a clear view of their children playing. The splash pad would also make a nice waterfront recreation tie in to the Broad Street boat launch.

The “Public Washrooms” on 29 Bluenose Drive, Lunenburg, is approximately a 180m walk from the entry of the 250<sup>th</sup> Anniversary Park from the Front Harbour Trail. This can be used for washroom access and/or a change facility. There is, however, also the option to build a changing room facility on site, at an additional cost. The Lunenburg Community Centre/Arena parking lot would be encouraged as a location for free parking. It is approximately a 600m walk to the Front Harbour Trail entrance of the park from this parking lot. Additional parking could be found on Bluenose Drive, Linden Avenue, and Montague Street.

The Lunenburg and District Fire Department’s Fire Chief, Darren Romkey, was consulted by staff. Chief Romkey thought that the 250<sup>th</sup> Anniversary Park was a great location for a splash pad. He offered 2 or 3 parking spots near the park that would be used for handicapped parking, allowing the Splash pad to be accessible. The main concern for the Fire Department is that there is no sidewalk by the Fire Hall for public access to walk to the splash pad. Mr. Romkey would want it to be communicated that access to the pad is from the path on the Front Harbour Trail. Saturday night is known to be the busiest night for the Fire Hall; however, the splash pad would have restricted hours and should not conflict.

An advantage of the 250<sup>th</sup> Anniversary Park is the opportunity to develop the space into a multi-purpose park. It has been proposed to put the splash pad in the existing playground structure pad; however, other options can be explored. This could be to either put the splash pad on the above hill where the staging is currently sitting and refurbish the current playground, or put the splash pad on the current pad and add additional playground equipment in replace of the staging.

- Beside the Tennis Court (Victoria Road): There are a couple reasons why this location is not ideal. The area is very close to a busy road and would cause concern that children and youth would be running around, as it is a main area in the Town. In addition, the green space that is currently has been measured by staff and was determined to not be the right size for a splash pad.
- Inside the Lunenburg and District Swimming Pool: One of the main benefits of a splash pad is that it is a free and accessible recreation activity for residents and neighboring communities. Unfortunately, poverty rates and low-income families is a reality in all communities. A splash pad would provide equitable access to all families to stay cool on hot, humid summer days.

The Lunenburg and District Swimming Pool is a wonderful organization that provides families the opportunity to go swimming throughout the summer. As with like facilities, the pool requires an entrance fee to go swimming. By putting the splash pad in the facility of the swimming pool, the Town would be reducing the accessibility for all families and restricting those who may not be able to afford the admission costs.

- Replacement of the old Lunenburg Academy Basketball courts (97 Kaulbach Street): There are a couple known challenges associated with this location. There is no main pipe line access causing challenges for the water and sewer hookup, and there could potentially be grading issues due to the sloped ground. Adding a splash pad at this location could be contingent to the Lot Development Plan for the Town.

### Design/Engineering

#### i) Facility design

- Funds approved in the 2019/20 capital budget would be used for design specifications and tender package procurement.

#### ii) Water access

- A preliminary estimate has been made based on the information gathered from ABC Recreation. This company has a Peak Water Flow Rate of 76.5 gallons per minute (GPM). This assumes that all pad features are running

at once. To encourage more active play on the splash pad and reduce water consumption, the features will be sequenced such that only 50% of the features will run at once. This will reduce the operating flow rate to 38.3 GPM.

The splash pad is suggested by the LCDG to operate from 10:00am to 6:00pm daily. To estimate the daily flow rate, it is assumed that the park will not be 100% operational for 8 hours a day. The rates listed are based on an 80% daily usage factor for estimation purposes. The total daily water volume is projected to be 14,688 gallons.

The seasonal water quantity is calculated based on the splash pad being open and operational for 12 weeks (from the last week in June until the second week in September). With acknowledging that there may be poor weather days, we reduced the park to be open/used for 74 days. The seasonal water volume is estimated to be 1,086,912 gallon/year.

### iii) Sewer access

- After speaking with a local installer of splash pads, it was recommended to route water from the splash pad out the storm drain. This is standard practice with other municipalities, such as Kentville, Berwick, and Shelburne. It is anticipated that the water coming from the splash pad would be similar to clean water runoff and would be much cleaner than what would typically flow through most storm drains. This water would go into the harbour. Other municipalities who have used this practice have not had any issues.

If the storm drain is determined to be the best practice, staff would look further into receiving approval from the federal government to put this water into the harbour. Staff have spoken to the Small Craft Harbours who have said if the water is released into their area, a permit would be required but did not see it being an issue.

### iv) Electrical access and requirements

- A preliminary estimate was looked at regarding the power supply needed. With the Town's current gravity fed water supply, it is predicted that the 250<sup>th</sup> Anniversary Park would only need low voltage power. This would power the actuators that operates the equipment, which is turning the water valves on and off. Additional power needed would be for new lights that could be added to the 250<sup>th</sup> Anniversary Park. It is estimated that overall, the power needed per year would be less than a one family house.

### v) Pump house

- This would be done with a non-intrusive above ground box embedded in the landscape.

### Project Management

The current project leads include the Town's Recreation Director, Facilities Superintendent, and Public Works Superintendent. Staff have met with members of the LCDG regarding the project and to share information.

The project timeline estimated by staff is for a Consultant Engineer to be hired through tender process in the 2019/20 budget year, and for the construction of the splash pad to be conducted in the 2020/21 budget year.

### 3. **FINANCIAL IMPACT**

#### Capital

Currently in the 2019/20 draft capital budget, there is \$20,000 proposed for "Splash Pad (Detailed Design-Tender)". As well, it is proposed for the 2020/21 capital budget to have \$200,000 towards the splash pad implementation. LCDG is seeking Town approval to assume responsibility for the project by receiving donations and issuing charitable donation receipts, funding the balance of the project cost and assuming the project lead role.

If the splash pad proposal is approved by Council, this municipal project would be required to go to tender for competitive bids. An estimated quote originally provided by the LCDG was listed as \$195,370.05. There are also additional aspects of the project construction that have yet to be fully determined such as geo-technical, tender specification preparation, sewer, water etc. services installation costs, etc. to arrive at a fuller budget estimate. The Consultant Engineer would assist with this process.

#### LCDG Projected Funding Receivable

The LCDG provided staff with the financial funding that they are hopeful to receive. The group has been mindful to not name specific sponsors to respect privacy and ensure commitment prior to listing the names. If the proposal is approved by Council to move forward with the splash pad project, the LCDG will be able to confirm sponsors and the amount they are willing to donate to the project.

Listed below is the group's anticipated funding receivables.

- Federal grant: Atlantic Canada Opportunities Agency (ACOA)
  - Up to 50% of the project
- Provincial grant: Recreation Facility Development through Communities, Culture and Heritage\*
  - Projects are eligible to apply for up to one-third (1/3) of the total capital cost of the project to a maximum of \$150,000.00
- Accessibility grants
- Recreation development grants (Jumpstart and United Way of Lunenburg County)

- Private citizens group
  - Up to \$50,000
- Community Health Board grants
  - \$3,000-\$6,000 (applying for two separate ones)
- 6+ Local corporate sponsors, as of now

\*This is the same funding source that Town staff has been planning to apply for the Ice Resurfacer replacement at the Lunenburg War Memorial Arena, which is currently in the ten-year capital budget for 2020/21.

**Operating Costs**

The preliminary estimates that the splash pad would have as an annual operating cost is noted below. The Town’s Recreation Department would be responsible for the weekly maintenance, operations, start up and shut down of the splash pad. The Public Works Department would be required with the construction of the project to provide water and sewer hookups

• Water (seasonally 1,086,912 gallon/year)	\$4,900
• Power (approximately \$100/month for four months)	\$400
• Weekly checks (June, July, August and September)	\$470*
◦ Estimated one hour each at \$31.00/hour	
• Start up: Spring (half day by two staff)	\$250*
• Shut down: Fall (half day by two staff)	\$250*
• Insurance	TBT
	<b>\$6,270 + Insurance</b>

\*Based on Public Work’s charge out rates schedule.

4. **OPTIONS**

Option 1: Approval for the splash pad project to commence. A Consultant Engineer would be hired through the tender process to further look at the specifics required for a splash pad within the Town. The splash pad would be anticipated to be constructed in 2020/21. This could mean the deferral of the replacement of the Ice Resurfacer (89) if we wanted to utilize the same funding source for this purchase; however, staff will continue to actively seek other funding sources for the Ice Resurfacer.

Option 2: Post-pone the splash pad project to be included in the Town’s ten-year Capital plan.

5. **STRATEGIC PLAN RELEVANCE**

Goal 3B: To facilitate and encourage healthy lifestyles.  
 Goal 5A: Making best use of Town-owned buildings and land.

Goal 5B: Continually and strategically maintaining and upgrading community infrastructure

6. **RECOMMENDATION**

It is recommended for Council's consideration of project options and further direction.

Acknowledged only by:

Bea Renton  
Town Manager/Clerk

**Excerpt from March 12, 2019 Minutes**

**LUNENBURG TOWN COUNCIL MEETING MINUTES**

**TUESDAY, MARCH 12, 2019 AT 5:15 P.M.**

**(LUNENBURG TOWN HALL)**

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**PRESENT:** Mayor Rachel Bailey  
Deputy Mayor John McGee  
Councillor Ronnie Bachman  
Councillor Joseph Carnevale  
Councillor Danny Croft  
Councillor Peter Mosher  
Councillor Matt Risser

**ALSO PRESENT:** Paul Bracken, Facilities Superintendent  
Kelly Cunningham, Recreation Director  
Lisa Dagley, Finance Director  
Arthur MacDonald, Heritage Manager  
Heather McCallum, Assistant Municipal Clerk  
Kathleen Rafuse, Accountant  
Bea Renton, CAO

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a. Public Works

i. Splash Pad project update

This item was moved up in the agenda due to the presence of members of the Lunenburg Development Community Group championing the Splash Pad in the audience.

The Recreation Director and Facilities Supervisor reviewed the report (**Schedule "J"**).

The Finance Director noted that the \$20,000 line item for engineering and design work in the 2019/20 budget will be approved when the full Capital budget is approved.

**Motion:** moved by Councillor Mosher, seconded by Deputy Mayor McGee that the splash pad project commence, contingent on community funding. A Consultant Engineer would be hired through the tender process to further look at the specifics required for a splash pad within the Town. The splash pad is anticipated to be constructed in 2020/21. **Motion carried.**

## MEMORANDUM

**TO: TOWN COUNCIL**

**FROM: BEA RENTON, CAO**

**DATE: JANUARY 2, 2020**

**RE: DRAFT MUNICIPAL COMPLAINTS PROCESS POLICY**

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**1. FACTS**

A draft Complaints Process Policy has been prepared as requested.

**2. ISSUES AND OPTIONS ANALYSIS**

Municipal Complaints Process Policy samples from Canada and the United States and legislative authority were researched in preparation of a draft Town Policy for Council consideration. The most relevant sample was found in the Nova Scotia Association of Municipal Administrators' Model Policy Manual (see: copy attached). It provides an overview of the Policy's legislative authority in the Municipal Government Act and general guidelines for adopting a formalized process for addressing public and internal complaints.

Staff adapted the AMA Model Policy for Council consideration. It reflects Council's adoption of a Code of Conduct and current privacy legislation provisions balanced with disclosure of public information interests as recommended by municipal solicitor, Peter Rogers, Q.C.

The Policy is intended to provide a process by which public complaints can be promptly and fairly addressed through (in)formal procedures with the objective of continuous municipal improvement.

If the draft Policy is acceptable, a Councillor could give notice of motion of its proposed adoption at this Council meeting and a motion to approve same made at the January 28, 2020 Council meeting. Alternatively, if Council wished to further review the draft Policy, it could remain on the Council agenda or be referred to the January 16, 2020 General Government Committee meeting agenda for report back to Council.

### **3. FINANCIAL IMPACT**

If adopted, the Policy does not have any financial impact. Only if a complaint was received requiring external resources to investigate, e.g., legal counsel, mediation, costs could be incurred. Commonly though such Policies emphasize the importance of seeking “front line” or more informal resolution of complaints so that issues can efficiently addressed at the outset as opposed to a more prolonged and potentially costly informal process with the same outcome to achieve service and/or program improvements.

### **4. STRATEGIC PLAN RELEVANCE**

The adoption of a Complaints Process Policy would achieve several core Town Strategic Plan Directions including:

1. “Promote a high quality of life for residents by:...C. Becoming a more welcoming community; and D. Engaging our citizens”; and
5. “Operate the Town efficiently and effectively by:...C. Developing and updating Town bylaws, policies, procedures and plans.”

### **5. RECOMMENDATION AND DRAFT MOTION**

It is recommended that Council approve the attached draft Complaints Process Policy by adopting the following motions.

(January 14, 2020) Deputy Mayor or Councillor \_\_\_\_\_ - Notice of motion is given of the proposed adoption of a Complaints Process Policy (Schedule “\_\_”).

(January 28, 2020) Motion: moved by Deputy Mayor or Councillor \_\_\_\_\_, seconded by Deputy Mayor or Councillor \_\_\_\_\_ that the Municipal Complaints Process Policy (Schedule “\_\_”) be adopted.

Attachments (2)     - N.S. Association of Municipal Administrators model Complaints Handling Policy  
                          - Draft Town of Lunenburg Complaints Process Policy

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# Chapter [26]

## Complaints Handling Policy

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### Title

1. This policy may be referred to as the “Complaint Handling Policy”

### Purpose

2. The purpose of this policy is to enable the **[Municipality]** to promptly and effectively address program and service delivery concerns raised by members of the public. The policy will assist the **[Municipality]** in providing excellent service to the public, and contribute to continuous improvement of operations. The **[Municipality]** strives to reduce customer dissatisfaction by:
  - providing a timely and accurate response to complaints; and
  - using complaints as an opportunity to improve program and service delivery issues.
3. This policy is not meant to address:
  - (1) Complaints about non-municipal services;
  - (2) Issues already addressed by legislation, or an existing **[Municipal]** bylaw, policy or procedure;
  - (3) A decision of Council or a decision of a committee of Council.
  - (4) A grievance covered by the **[Municipality]**'s collective agreement(s); or
  - (5) internal employee complaints.

### Interpretation

4. In this policy:
- (1) “Complainant” means the individual filing the complaint with the **[Municipality]**;
  - (2) “Complaint” means an issue or concern raised with a municipal program, service, or operation which is not resolved at the time of the incident and for which the complainant submits their concerns to the **[Municipality]** in accordance with this policy;
  - (3) “CAO” means Chief Administrative Officer of the **[Municipality]**.
  - (4) “Council” means council of the **[Municipality]**;
  - (5) “Designated Officer” means the **[position title of employee designated to address complaints]**;
  - (6) “Employee” means an employee of the **[Municipality]**;
  - (7) “**[Mayor/Warden]**” means the **[Mayor/Warden]** of the **[Municipality]**;
  - (8) “Ombudsman” means the Nova Scotia Office of the Ombudsman.

### Designated Officer

5. A Designated Officer may delegate the authority to investigate a complaint to another employee, where s/he deems appropriate.
6. A Designated Officer may not delegate the authority to investigate a complaint to an employee who is or may be named in the complaint.
7. If a complaint is made against the Designated Officer, the **[Mayor/Warden]** shall review the matter and may:
- (1) **[consult with the executive council]**;
  - (2) **[Refer the matter to the CAO]**<sup>1</sup>
  - (3) consult with council;
  - (4) consult with legal counsel; or

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<sup>1</sup> This option is only available where the municipality does not designate the CAO as the employee responsible for handling complaints.

(5) Refer the matter to the Ombudsman.

### **Frontline Resolution**

8. It is the responsibility of the complainant to attempt to resolve concerns by dealing with the employee(s) directly involved with the issue where appropriate.
9. It is the responsibility of all employees to attempt to resolve issues or concerns before they become complaints, and identify opportunities to improve municipal services.

### **Filing a Complaint**

10. Where frontline resolution cannot be achieved, complaints should be submitted to the Designated Officer and include:
  - (1) The name, phone number, e-mail address, and mailing address of the individual submitting the complaint.
  - (2) The nature of the complaint including the:
    - (a) background leading to the issue(s);
    - (b) date(s), time(s) and location(s) of the incident(s); and
    - (c) name(s) of any employee(s) previously contacted regarding the issues(s); and
  - (3) Any action(s) being requested of the [**Municipality**].
11. Complaints may be submitted on the form provided in Schedule A.

### **Receipt and Acknowledgement**

12. The Designated Officer shall acknowledge in writing that the complaint has been received within [**5 business days**] of receipt of the complaint.

### **Investigation**

13. The Designated Officer shall review the issues identified by the complainant and in doing so may:
  - (1) Review relevant municipal and provincial legislation;

- (2) Review the **[municipality]**'s relevant policies and procedures;
- (3) Review any existing file documents;
- (4) Interview employees or members of the public involved in the issue;
- (5) Identify actions that may be taken to address the complaint or improve municipal operations; or
- (6) Take other actions the Designated Officer deems expedient to resolving the matter.

14. The Designated Officer shall maintain a file of the complaint in compliance with the **[Municipality]**'s records management policy.

### **Decision**

15. Within **[30 calendar days]** of receipt of a complaint the Designated Officer shall provide a response in writing to the complainant. The response shall include:

- (1) Whether the complaint was substantiated,
- (2) If the complaint is not substantiated, the Designated Officer shall provide reason(s) for their decision.
- (3) Any actions the **[Municipality]** has or will take as a result of the complaint.

16. If the Designated Officer is unable to provide a response within **[30 calendar days]**,s/he shall notify the complainant of the delay and provide an estimate of when a response will be provided.





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# Model Complaints Handling Policy

## Editor's Annotations

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### Relevant Legislation

*Municipal Government Act*, R.S.N.S. 1998, c. 18:

- 29     Where the council does not appoint a chief administrative officer, the council
- (a)     shall fulfil the responsibilities, and may exercise the powers, given to the chief administrative officer by this Act; and
  - (b)     may delegate any of the responsibilities and powers of the chief administrative officer to an employee of the municipality.
- 31     (1)     The chief administrative officer shall ... (e) carry out such additional duties and exercise such additional responsibilities as the council may, from time to time, direct.
- 22     (2)     The council or any committee appointed by the council may meet in closed session to discuss matters relating to ... (c) personnel matters;

### Important Notice

The reader is cautioned that editorial and drafting choices involve interpretation of the law. Municipal units should consult with their own legal advisors before relying upon, and applying to their own circumstances, the comments or drafts contained in this Manual.

### Comments

- This model Policy is intended to be a guideline for drafting a formalized process for addressing complaints received from members of the public. There are distinct advantages for a municipality to set up a written process for dealing with complaints from the public. The municipality as well as the public will have a clear idea of who is responsible for dealing with complaints and how complaints are reviewed and resolved. In the event that the situation cannot be resolved, and the complaint is forwarded to the Office of the Ombudsman for consideration, or legal action is attempted, a clearly documented review can demonstrate the municipality carefully reviewed the issues and took reasonable steps to resolve the situation. The process also encourages careful review of a municipality's operations where problems have been identified and allows for the continuous improvement of municipal services. The adoption of complaint handling policies and

procedures in Nova Scotia Municipalities has resulted in a decrease in total volume of complaints received.

- The model policy does not supersede other legislation, policies, or procedures such as Part XX of the Municipal Government Act – Freedom of Information and Protection of Privacy, your municipality’s records management policy, code of conduct, collective agreements, or situation specific policy and procedures involving complaints (e.g. policies and procedures for dangerous and unsightly premises complaints).
- The use of a Designated Officer assists in ensuring the consistent application of the policy and ensuring that the employee investigating the complaint is not directly involved with the issue. Assigning the complaints function to a single employee will also allow staff to provide council with regular information on the volume of complaints, the amount of complaints resolved, and the amount of outstanding complaints.
- If a complaint is received that requires attention from council, council may wish to meet in camera to discuss the item pursuant to section 22(2)(c) of the MGA to protect the confidentiality of the employee(s).
- See the User’s Guide found at the beginning of this Manual regarding the appropriate insert to make where "[Municipality]" appears.
- The chapter # in the policy title bar should be replaced by each municipal unit with the chapter # it assigns to this Policy.
- Below are some common references which may be useful for municipal staff to provide where a member of the public has a concern with a non-municipal service:
  - The Better Business Bureau: <http://atlanticprovinces.bbb.org/>
  - The Nova Scotia Human Rights Commission: <http://humanrights.gov.ns.ca/>
  - The Nova Scotia Office of the Ombudsman: <http://gov.ns.ca/ombu/>
  - Nova Scotia Government – General Enquiries: <https://www.gov.ns.ca/agri/secure/response.shtml>
  - Nova Scotia Power Incorporated: [www.nspower.ca](http://www.nspower.ca)
  - The Nova Scotia Utility and Review Board: <http://www.nsuarb.ca/>
  - Office of the Police Complaints Commissioner (OPCC): <http://www.gov.ns.ca/opcc/filingAComplaint.htm>
  - Commission for Public Complaints against the RCMP: <http://www.cpc-cpp.gc.ca/index-eng.aspx>

- The reference material used in the drafting of this model policy includes:
  - The Scottish Public Services Ombudsman's *Guidance on a Model Complaint Handling Procedure* (<http://www.spsso.org.uk/files/webfm/Publications/CSA/nce-on-a-Model-Complaints-Handling-Procedure.pdf>)
  - The Manitoba Office of the Ombudsman's *Handbook on Fairness for Manitoba Municipal Leaders* (<http://www.ombudsman.mb.ca/pdf/Understanding%20Fairness%20Web%20Report.pdf>)
  - The Town of Trenton's Enquiry/Complaint Report
  - Section 5.9 of the local government resource handbook – Dangerous and unsightly premises ([http://www.gov.ns.ca/snsmr/muns/manuals/PDF/LGRH/LocalGovernmentResourceHandbook\\_5.9.pdf](http://www.gov.ns.ca/snsmr/muns/manuals/PDF/LGRH/LocalGovernmentResourceHandbook_5.9.pdf)).

**TOWN OF LUNENBURG PROCEDURAL POLICY # -  
COMPLAINT PROCESS POLICY**

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**PURPOSE**

1. The purpose of this Policy is to enable the Town of Lunenburg (“Town”) to promptly and effectively address complaints by members of the public about Town program and service delivery and other operational concerns raised by members of the public. The Policy will assist the Town in providing service to the public and contribute to continuous improvement of Town operations. The Town strives to address public concerns by:
  - providing a timely and accurate response to complaints; and
  - using complaints as an opportunity to improve program and service delivery issues.
2. This Policy is not meant to address:
  - (1) Issues already covered by legislation, or an existing Town bylaw, Policy or procedure;
  - (2) A decision of Council or a decision of a Committee of Council;
  - (3) Complaints brought by Council members or staff against Council members or staff; or
  - (4) A grievance covered by a Town collective agreement and/or Personnel Policy, except that complaints about staff or Council Members brought by members of the public which would also constitute a Code of Conduct complaint under applicable Policies or Personnel Policy of the Town should be acknowledged and the Complainant advised that the matter is being referred to Council in camera or to the Designated Officer as the case may be to be addressed under the applicable Code of Conduct policy in a manner respectful of any privacy interests of the Complainee and Complainant.

**INTERPRETATION**

3. In this Policy:
  - (1) “Complainant” means the individual filing a complaint with the Town;
  - (2) “Complainee” means any individual Council member or Employee identifiable by name, title or context whose conduct or whose act or omission is complained about in a complaint;
  - (3) “Complaint” means an issue or concern raised with a municipal program, service, or operation which is not resolved at the time of the incident and for

which the complainant submits their concerns to the Town in accordance with this Policy;

- (4) "CAO" means the Chief Administrative Officer of the Town;
- (5) "Council" means the elected municipal Council of the Town;
- (6) "Council Member" includes the Mayor and Councillors;
- (7) "Councillor" means an elected Town Council member other than the Mayor;
- (8) "Designated Officer" means the CAO, except when a complaint is filed against the CAO, in which case it means the Mayor; and except when the complaint is against a Council Member, in which case the matter shall be referred to Council in camera as set out herein;
- (9) "Employee" means an employee of the Town, but includes for purposes of this Policy a volunteer Firefighter; and
- (10) "Mayor" means the Mayor of the Town, or the Deputy Mayor in the event of absence or unavailability of the Mayor.

#### DESIGNATED OFFICER

4. The Designated Officer may delegate the authority to investigate a complaint to another Town employee or to a qualified external person, such as a lawyer or mediator.
5. If the Complainee is a Council Member, Council in camera may determine how it wishes to investigate or delegate the investigation of a complaint to a qualified external person, such as a lawyer or mediator.
6. A Designated Officer may not delegate the authority to investigate a complaint to a Complainant or Complainee, and neither the Complainant nor the Complainee shall participate as a voting Council member in any determination of a complaint before Council or Council in camera.
7. Complainees shall be promptly provided with a copy of a complaint, including a copy of a Complaint Form, made against them and given a reasonable opportunity to explain or respond to the complaint in writing and/or verbally. Where the Complainee is employed by the Town, the applicable collective agreement and/or personnel policy shall be followed before any discipline or sanction is considered if the complaint is substantiated.
8. All Complainees shall have their privacy interests respected and no public statement of disciplinary or other action shall be made, except after due consideration of those privacy interests, including, at the option of the Designated Officer or Council in camera, the obtaining of legal advice regarding such privacy interests. Normally disciplinary sanctions against employees will not be made public.

### FRONT LINE RESOLUTION

9. It is the responsibility of the Complainant and Designated Officer to make reasonable front line efforts to resolve complaints informally, including, where appropriate, by preliminary dismissal of complaints not eligible to be pursued under this Policy or otherwise not warranting the process of a formal complaint.
10. The Designated Officer shall record efforts to reach front line resolution and may choose to write to the Complainant confirming that the matter is considered to be resolved or that a formal complaint will be accepted for handling under this Policy.

### FILING A FORMAL COMPLAINT

11. Where front line resolution cannot be achieved, complaints should be submitted to the Designated Officer, on the Complaint Form attached in Schedule A, providing particulars of the Complaint. The Designated Officer may waive the use of a Complaint Form by the Complainant where the complaint was already presented in writing with sufficient particularity.

### RECEIPT AND ACKNOWLEDGEMENT

12. The Designated Officer shall acknowledge in writing that the complaint has been received within seven business days of receipt of the complaint. The Designated Officer shall maintain a file of written complaints and documents relating to the complaint, in accordance with the Town's Record Management Policy.

### INVESTIGATION

13. The Designated Officer shall review the issues identified by the Complainant and in doing so shall, as necessary having regard to the circumstances:
  - (1) Attempt front line resolution where it has not already been attempted;
  - (2) Review relevant Municipal and Provincial legislation;
  - (3) Review the Town's relevant Policies, procedures and practices;
  - (4) Review existing file documents relating to the matter;
  - (5) Interview the Complainant, Complainee and other persons identified as relevant to the complaint;
  - (6) Provide a copy of the written complaint to any person(s) complained against and ensure they have a reasonable opportunity to be heard regarding the complaint as described in section 7 herein;
  - (7) If the complaint does not identify a particular Complainee and is of a general nature regarding the Town, elected officials and/or employees, the Designated Officer may conduct a general review of the complaint to determine what, if any, action needs to be taken to address the complaint;

- (8) Identify and take actions that in the opinion of the Designated Officer should be taken to resolve or handle the complaint and improve municipal services as a result of matters raised by the complaint.

### DECISION

14. Within thirty business days of receipt of a complaint the Designated Officer shall provide a response in writing to the Complainant and to the Complainee where a Complainee has been able to be identified. Subject to the due consideration of applicable privacy interests, the response may include:
  - (1) Whether further time is needed to resolve or handle the complaint, and if so, why;
  - (2) Whether the complaint was substantiated;
  - (3) If the complaint is not substantiated, the reason(s) why it is not considered substantiated; and
  - (4) Any processes or actions the Town has or will take as a result of the complaint including that the matter has been referred for disciplinary consideration to the CAO or to Council in camera, as the case may be.
15. For complaints which are substantiated, the Designated Officer shall attempt to identify and implement opportunities to improve municipal services.
16. Subject to the due consideration of privacy interests, a summary of the complaint and its disposition may be circulated to the relevant staff and Council where appropriate to effect general municipal service improvements.
17. No disciplinary or other retaliatory action shall be taken against Complainants for complaints made in good faith under this Policy.





December 11, 2019

TO ALL MUNICIPAL UNITS IN NOVA SCOTIA:

The Municipality of Barrington has made an application to the Department of Education and Early Childhood Development to be able to provide a personal development credit to students who join a volunteer fire department and complete the required training.

Joining a volunteer fire department helps students with interpersonal and communication skills as well as problem solving while serving their community.

Along with the personal development of students this program also has the potential to increase fire department memberships. The age of firefighters is increasing and departments are finding it difficult to attract younger members. It is key to attract people into the fire department while they are young so they can form a lifelong connection with the service.

The Barrington Municipal Council would like to request your support for this application, in the form of a letter or otherwise, to allow schools in Nova Scotia to offer a Personal Development Credit for students that join a fire department and undergo the required training.

Yours truly,



Chris Frotten,  
Chief Administrative Officer



## Ann Covey

---

**Subject:** 8 Coun Jan 20 20 Region 6 Solid Waste Resource Management Committee Draft Budget 2020/21 - motion to approve;  
**Attachments:** Budget letter 20-21 Lun.pdf

**From:** Valda Walsh [<mailto:Valda.Walsh@Region6swm.ca>]  
**Sent:** December-16-19 12:19 PM  
**To:** Bea Renton <[brenton@explorelunenburg.ca](mailto:brenton@explorelunenburg.ca)>  
**Cc:** Rachel Bailey <[RBailey@explorelunenburg.ca](mailto:RBailey@explorelunenburg.ca)>; 'Diana Gibson' <[dgibson@westhants.ca](mailto:dgibson@westhants.ca)>  
**Subject:** Region 6 Budget 2020-21

Good afternoon Bea,

Attached please find our official correspondence requesting your council to review and support the Region 6 Solid Waste Management Budget.

If you have any questions – please feel free to email or call me.

To assist with any of your questions, I am also copying Region 6s accountant, Diana Gibson, in this correspondence.



**Valda Walsh** BSc TME EP  
Regional Coordinator  
**Region 6 Solid Waste Management**  
PO Box 639 | 45 School Street Rm 304  
Mahone Bay, NS B0J 2E0  
P: 902-624-1339 M:902-350-0333  
Download R6RECYCLES and *never miss a collection again!*  
[Get it on Google Play](#) or  
[Download in the App store](#)



PO Box 639 / 45 School St , Suite 304

Region 6 Solid Waste-Resource Management

Phone: 902-624-1339

Mahone Bay, NS B0J 2E0

E-mail: Valda.Walsh@Region6SWM.ca

Beatrice Renton  
*Town of Lunenburg*  
PO Box 129  
119 Cumberland St  
Lunenburg, NS B0J 2C0

December 16, 2019

**RE: Budget Approval 2020-21**

Dear Ms. Renton,

On Friday, November 29, 2019, the Region 6 Inter-Municipal Committee met regarding the budget for the upcoming fiscal April 1, 2020 – March 31, 2021.

The following motion was passed:

**MOTION:** to recommend approval of the 2020-21 Region 6 Inter-Municipal Committee Budget in the amount of \$833,272 to member councils as presented. **M/C**

Pursuant to FINANCES of the Region 6 Inter-Municipal Agreement; items 34 – 39

- “34. The proposed Committee budget shall be submitted to the Councils of each of the Parties prior to 4:30 p.m. on December 31<sup>st</sup> of each year.
35. The Councils of each of the Parties shall approve said budget, or refuse to do so, by 4:30 p.m. on March 14<sup>th</sup> of the year to which said budget applies.
36. Should the Council of any of the Parties fail to approve or refuse to approve the proposed Committee budget and so notify in writing the Committee by the stated deadline, then the said budget is deemed to have been approved by that Council.
37. The proposed Committee budget shall be binding on all of the Parties if approved by the Councils of 75% or more of the Parties, so long as the Parties whose Councils have approved represent a minimum of 50% of the total population represented by the Parties to this agreement – said figures to be taken from the most recent available Census of Canada statistics.
38. In the event that motions of refusal to approve result in a proposed Committee budget not receiving approval of the necessary majority of Councils, the Committee shall revise the proposed budget taking into account any comments that may have been provided and submit a revised budget to the Councils of the Parties.
39. Should the Council of any of the Parties fail to approve or refuse to approve a revised proposed Committee budget within 45 days after receipt of same then the said budget is deemed to have been approved by that Council.”

Respecting the enclosed budget, please review with your council and respond to Region 6 before 4:30 pm, March 14, 2020 on your approval or refusal.

Should you have any questions on either document please feel free to contact myself at 902-624-1339 or Chair, Michael Ernst at 902-624-8864.

If you require my attendance at the council meeting when the budget is up for discussion, feel free to contact me by phone or email.

Regards,

A handwritten signature in blue ink that reads "Valda Walsh". The signature is written in a cursive, flowing style.

Valda Walsh BSc TME EP  
Regional Coordinator

*Encl.*

## Region 6 Solid Waste Management

<b>INCOME</b>	2019-20 Projection		2019-20 Budget		2020-21 Estimates	
<b>Contracts/Service Agreements</b>						
Education Contract	70,163		64,261		70,163	
Coordinator Agreement	43,286		42,028		43,286	
Enforcement Contract	89,425		89,519		89,425	
Services	3,000		3,000		3,000	
Sub-total	\$ 205,873		\$ 198,808		\$ 205,873	
<b>Stewardship/Incentives</b>						
Dairy Stewardship	94,060		87,000		87,000	
Diversion <sup>1</sup>	365,200		365,200		365,200	
Municipal Approved Programs	80,500		80,500		80,500	
Interest			0			
Sub-total	\$ 539,760		\$ 532,700		\$ 532,700	
<b>Municipal Contribution</b>						
Municipal Billing <sup>2</sup>	88,510		88,510		94,699	
Inter-Municipal Program ( <i>transfer</i> ) <sup>3</sup>	9,000		9,000			
Sub-total	\$97,510		\$97,510		\$94,699	
<b>TOTAL</b>	<b>\$ 843,143</b>		<b>\$ 829,018</b>		<b>\$ 833,272</b>	



## Region 6 Solid Waste Management

EXPENSES	2019-20 Projection		2019-20 Budget		2020-21 Estimates	
<b>OPERATING EXPENSE</b>						
Coordinator Salary	66,130		65,996		67,448	
Coordinator Benefits	10,255		11,648		10,334	
Travel (Coordinator)	5,500		6,500		5,500	
Training and conference	1,600		2,040		2,040	
Office Rental	8,885		8,400		8,760	
Cleaning	780		780		780	
Cell phones	1,100		1,100		1,100	
Phone/fax	1,400		2,200		1,500	
Office supplies and services	3,500		3,000		3,500	
Computer/materials	1,500		1,500		1,500	
Insurance	3,100		3,100		3,100	
Administration	9,390		9,390		9,390	
Legal	1,000		1,000		1,000	
Auditor	7,822		7,822		8,240	
Sub-total	\$ 121,962	\$	124,476	\$	124,192	
<b>EDUCATION</b>						
Education salary	51,158		51,158		52,284	
Educator Benefits	7,897		8,464		7,971	
Travel (education)	10,500		9,500		10,500	
Signs/web/advertising	1,000		1,000			
Environment Week	-	-				
Compost Awareness Week	1,200		1,200			
Waste Reduction Week	-	-				
Public bins maintenance	1,200		1,200			
Program materials <sup>4</sup>	800		800		4,200	
Inter-Municipal program <sup>3</sup>	10,100		9,000		12,000	
Sub-total	\$ 83,855	\$	82,322	\$	86,955	
<b>PAYMENTS TO UNITS</b>						
Enforcement Contract	89,425		89,519		89,425	
Dairy Stewardship	94,060		87,000		87,000	
Diversion <sup>1</sup>	365,200		365,200		365,200	
Municipal Approved Programs	80,500		80,500		80,500	
Sub-total	\$ 629,185	\$	622,220	\$	622,125	
<b>TOTAL</b>	<b>\$ 835,002</b>	<b>\$</b>	<b>829,018</b>	<b>\$</b>	<b>833,272</b>	
Revenue/Expenditure	\$ 8,141	\$	0	\$	0	



# Region 6 Solid Waste Management

Notes to **BUDGET**:

1. Diversion Credits - In June 2018, Divert NS reported a three year 'Diversion Credit Smoothing' formula. This means \$4.4 M will be the total amount used over the next 3 years. Region 6 averages 8.3% of diversion credit pot so \$365,200 is used for budget.

2. Municipal Billing (details below) - this line pays for the operations that are not covered through grant and contracted services. \$94,699 estimate will be offset by \$14,859 surplus made up from the \$3,507 as reported in the 2018-19 audited financial statements plus the cost of the R6RECYCLES yet to be transferred from our future projects fund for 11,352.

Actual to be billed to municipal members will be **\$79,840**

3. Inter-Municipal Program (transfer) – April 1, 2018 Region 6 engaged ReCollect to build an electronic sorting app. The cost for this app was \$9,000. Region 6 passed a motion on September 14, 2018 to pay for the app at \$9,000 in 2019-20. There was also a cost of promo (pens). This amount is slated here in Inter-Municipal program but will have to have an operations account created going forward.

4. Program materials - it is no longer a requirement to track individual event costs. All event line items (Environment Week, Waste Reduction Week, etc) are now collapsed into one line 'Program Materials'.

<i>Municipal area serviced:</i>	<i>Pop'n</i>	<i>% of Region</i>	<i>2020-21 Estimate</i>
Shelburne Shared Services	6,562	7.25%	\$ 5,791.69
Town of Bridgewater	8,532	9.43%	\$ 7,530.43
Town of Mahone Bay	1,036	1.15%	\$ 914.38
Municipality of Lunenburg	24,863	27.49%	\$ 21,944.33
Municipality of Barrington	6,646	7.35%	\$ 5,865.82
Town of Clark's Harbour	758	0.84%	\$ 669.02
Municipality of Chester	10,432	11.53%	\$ 9,207.39
Town of Lunenburg	2,263	2.50%	\$ 1,997.35
Municipality of West Hants	15,368	16.99%	\$ 13,563.95
Region of Queens Municipality	10,351	11.44%	\$ 9,135.89
Town of Windsor	3,648	4.03%	\$ 3,219.76
<b>Total</b>	<b>90,459</b>	<b>100.00%</b>	<b>\$ 79,840.00</b>



**MEMORANDUM**

**TO: TOWN COUNCIL**

**FROM: IAN TILLARD, ENGINEERING CONSULTANT  
AND LISA DAGLEY, FINANCE DIRECTOR**

**DATE: JANUARY 8, 2020**

**RE: ADDITIONAL PUMP STATION CAPITAL UPGRADE REQUIREMENT  
FOR FISCAL 2019/20**

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**1. FACTS**

At the December 10, 2019 Council meeting the following motion was approved:

*Motion: moved and seconded the approval of the following wastewater pump stations expenditures:*

*a. \$34,000 including net HST in the 2019/20 budget year for repairs to pumps in 6 lift stations, to be funded from Sewer Reserves.*

*b. Pre-approve in the 2020/21 budget year the following amounts:*

*i. \$34,000 including net HST for pump repairs not addressed in 6 lift stations, to be funded from Gas Tax;*

*ii. \$21,000 including net HST for repairs to the pumps in the 4 un-assessed lift stations, to be funded from Gas Tax; and*

*iii. \$4,200 including net HST for routine assessment and maintenance by the pump manufacturer's representative as an annual allowance. This operating expense will be funded from Sewer Rates beginning in 2020/21.*

*c. Pre-approve in the 2021/22 budget year the following amount:*

*i. \$45,000 including net HST for the purchase of 5 rotating assembly spares, one for each pump type, to be funded from Gas Tax. (Schedule "I"). Motion carried.*

Since then the Back Harbour Pump station, Pump #2, experienced a failure on or about the 20<sup>th</sup> of December. Pump #1 was due to be repaired/upgraded as per the December 10<sup>th</sup> Council motion and the parts had been ordered. There were attempts by PW staff to get Pump #2 operational, which were temporarily successful, but ultimately Pump #2 did fail. In the meantime the supplier was contacted to expedite the parts for Pump #1, which they did do. Pump #1 was repaired with the new parts and restarted on January 6<sup>th</sup>, after the lift station was vacuum truck cleaned of a blockage.

As a result of the failure, Pump #2 was opened up and it was determined that the repairs that are required are more extensive than originally anticipated.

As an FYI, each station has two pumps. Under normal flow, one pump is needed and the two pumps are duty cycled. Under heavy load (ie rain storm conditions) the two pumps are needed.

There are a number of recommendations from the December 10<sup>th</sup> motion that are still valid. This work reflects the more severe deterioration found as well as the acceleration of some of the work from next year to this year.

## **2. ISSUES AND OPTIONS ANALYSIS**

- a. It is apparent that the lift station pumps may be in a worse condition than originally thought during the inspections earlier in the fall. As the consequence of a complete lift station pump failure is quite severe, this situation cannot be tolerated so the repair program needs to be accelerated. As a result the 2019/20 Lift Station Pump repairs budget needs to be increased by \$21,000 including net HST.
- b. As there is more work required than originally estimated and as some of the repair work needs to be accelerated from 2020/21 into 2019/20, additional funding will be required for fiscal 2019/20.
- c. Given the uncertain nature of the work estimates, which can only be confirmed once the pumps are opened up, the budget for repair work for 2020/21 remain the same as previously approved, even though some of this work will be brought forward to this year.
- d. The additional work scope for this year to ensure that the major pump stations are up to standard:
  - a. Brook Street. Re-build the pump assembly for the second pump
  - b. Back Harbour. New volute and re-build the pump assembly for the second pump
  - c. Bluenose Drive. New volute and new motor for the second pump.
  - d. Tannery Road. Replace malfunctioning sensor.
- e. As a part of the approved expenditures for next year, once the pump stations are updated to acceptable conditions, there will be a preventive maintenance program put in place that will be a combination of PW inspections and maintenance as well as manufacturer' rep inspections and maintenance.

## **3. FINANCIAL IMPACT**

As the Town was unsuccessful in our ICIP Funding application for the Additional UV Bank at the WWTP we are able to redirect the Sewer Reserves (\$67,500) that were to fund the Town's portion of the UV Bank project to the Pump Station Capital Repairs. As \$34,000 was redirected as per the December 10<sup>th</sup> motion, there remains a balance of \$33,500.

It is recommended that the additional \$21,000 including net HST of Lift Station pump repairs be funded from sewer reserves.

**4. STRATEGIC PLAN RELEVANCE**

5) Operate the Town efficiently and effectively by:

A. Making best use of Town-owned buildings and land.

B. Continually and strategically maintaining and upgrading community infrastructure

**5. RECOMMENDATION AND DRAFT MOTION**

It is recommended that Council adopt the following draft motion:

Draft Motion

Approval of an increase of \$21,000 including net HST, to the 2019/20 repairs to pumps in lift stations capital budget, for a total budget of \$55,000 including net HST in fiscal 2019/20 and that the funding for the entire capital project will be from Sewer Reserves.

Acknowledged only by:

Bea Renton  
CAO

Circulated: \_\_\_\_\_

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Document No: 7  
Meeting: Council Jan 14, 2020  
Circulate To: Council, BR, JL, JM, PB  
File: Water/Wastewater - General

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## MEMORANDUM

**TO: TOWN COUNCIL**

**FROM: PETER BAKER, PUBLIC WORKS SUPERINTENDENT, JOHN LOHNES, TAYLOR ROMBAUT AND JOHN MADER, WATER RESOURCE OPERATORS**

**DATE: DECEMBER 26, 2019**

**RE: NOVEMBER 2019 WATER AND WASTEWATER QUALITY TEST RESULTS**

---

### 1. FACTS

The Nova Scotia Environment “Approval” documents to operate both for the Water Treatment Plant (Class II water treatment facility) and the Wastewater Treatment Plant (Class II wastewater treatment facility) require that certain tests be carried out to verify the quality of treated water and wastewater at the respective plants. There are also Federal testing standards. Routine testing is conducted both in Town labs at each plant and independently certified labs to determine compliance levels with both the Provincial and Federal standards. If any test result exceeds the standards then explanations are provided. This report provides a monthly summary of these results.

At the end of each year an annual report is also prepared for both treatment plants and filed with the Provincial and Federal governments.

### 2. ISSUES AND OPTIONS

#### **Wastewater Treatment Plant**

The Provincial Approval to operate requires that treated wastewater be tested a minimum of five times per month (once per week) for:

- biochemical oxygen demand (BOD maximum 20 mg/L);
- suspended solids (SS maximum 20 mg/L); and
- fecal coliform (maximum 1000 counts/100 mls).

pH (maximum 6.5 – 9) is tested daily (five times per week).  
Disinfection is required to be continuous with the use of UV lights.

The Approval document further states that the facility is considered to be “in compliance with effluent limitations if 80% of the sample test results, at the frequency and number specified...meet the specified limit(s)...No single test result can be greater than two times the limits”.

The Town is also required to comply with the Federal Environment Canada Wastewater Systems Effluent Regulations. We test treated water from the Wastewater Treatment Plant for Carbonaceous Biochemical Oxygen Demand (CBOD maximum 25 mg/L), Total Suspended Solids (TSS maximum 25 mg/L), un-ionized ammonia (maximum 1.25 mg/L) and pH (maximum 5.9-9.5) every two weeks. Acute lethality tests are conducted quarterly and in this test rainbow trout are used to determine if they can survive in wastewater effluent over a 96 hour period.

## Results

All November test results met Provincial standards with the exception of those noted in the following table.

Parameter Tested (# of test)	Maximum Limit	Exceeded Maximum Limit
BOD (5)	20 mg/L	None
SS (5)	20 mg/L	None
Fecal Coliform (4)	1,000 counts/100 mls	2,500 and 3,100 counts/100 mls
pH (21)	6.5 – 9.0	None

All November test results met Federal standards. No rainbow trout died in the acute lethality test performed on September 30, 2019. Acute lethality tests are performed quarterly and this is the most current test result.

The reason for one of the high Fecal Coliform test results noted in the table above is believed to be poor influent quality including high salinity, possibly due to road salt and/or higher than normal tides. The other high Fecal Coliform test result was because the testing lab experienced a power outage after receiving our sample and the sample could not be kept cool as required in the testing procedure.

We have attached a table which provides a summary of the average monthly daily flow (US gallons per day) of wastewater which has been treated from 2009 to date.

## Water Treatment Plant

The Provincial Approval document requires weekly total coliform and E. coli bacteria tests for water entering the distribution system and various water distribution system sample points. In addition, aluminum is tested monthly. Quarterly we test for: parameters for corrosion control; lead; trihalomethanes; bromodichloromethane; and haloacetic acids. Annually, we test raw water and treated water for compliance with the

Federal Guidelines for Monitoring Public Drinking Water Supplies and a fuller assessment every five years. The Province can also request viruses, Giardia and Cryptosporidium testing at any time.

## **Results**

All November and quarterly test results were in compliance with the Provincial Approval requirements.

Additional information is attached with the line loss since January 2014 up to date and the location and cause of water leaks within the distribution system since January 2015 up to date. The water line loss was higher than normal during the July to September period for which an explanation was provided in the October report.

### **3. FINANCIAL IMPACT**

Funds are included in the Water Treatment Plant and Wastewater Treatment Plant operating budgets to pay for these water quality tests.

### **4. STRATEGIC PLAN RELEVANCE**

Strategic Planning Goal #3. A. (a.) of the Town's Strategic Plan is to "Champion opportunities for our community's health and well-being by ... Protecting our natural environment ... Continue to provide solid waste management, sewage treatment and high quality water to all of our residents".

### **5. RECOMMENDATION**

This report is provided for Town Council's information.

Acknowledged only by:

Bea Renton, CAO

Encls. 3

**Waste Water Treatment Plant**

<u>Average Monthly Daily Flows (USGPD)</u>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
January	767,857	840,324	990,669	798,500	821,333	1,228,376	797,289	963,316	906,324	636,808	681,049
February	592,263	978,915	822,827	902,320	632,291	1,171,563	804,590	969,710	974,459	693,503	689,140
March	726,059	915,953	916,966	1,083,288	949,220	965,278	1,043,356	965,597	998,449	802,902	914,341
April	1,107,593	1,113,196	736,749	933,020	1,602,759	965,278	764,799	632,395	985,934	569,976	1,070,959
May	974,489	792,349	855,584	728,810	485,225	573,635	887,125	654,174	1,157,628	477,666	702,156
June	914,011	678,713	884,103	626,112	991,863	639,974	989,508	656,993	840,575	559,765	678,842
July	601,530	643,826	580,779	615,238	628,417	526,474	834,703	605,139	629,526	686,258	547,631
August	577,504	504,183	617,797	508,015	627,702	509,224	601,246	559,871	834,769	582,341	577,263
September	273,878	520,990	601,488	524,950	462,222	550,710	662,096	996,792	588,082	571,014	502,385
October	649,833	884,682	491,703	773,368	728,372	851,612	716,092	714,657	1,188,019	578,492	944,224
November	942,787	1,067,517	554,340	735,231	625,240	1,053,808	889,923	774,717	1,028,785	948,721	636,926
December		770, 823	939,003	930,390	831,210	1,207,248	1,128,674	1,117,587	1,050,063	1,109,152	1,006,181
<b>Average Daily Volume/Year USG</b>		745,054	749,334	763,270	782,155	853,598	843,283	800,912	931,884	684,717	745,925
<b>Days per year</b>		365	365	366	365	365	365	366	365	365	365
<b>Total Yearly Volume USG</b>		271,944,679	273,506,897	279,356,880	285,486,407	311,563,392	307,798,420	293,133,914	340,137,812	249,921,529	272,262,573
<b>Year to Year Increase (Decrease) USG</b>		-1,562,218	-5,849,983	-6,129,528	-26,076,984	3,764,972	14,664,506	-47,003,898	90,216,284	-22,341,045	

\* Due to power outages these volumes may not be completely accurate

**Town of Lunenburg Water Use**

<b>2014</b>				
	<b>Pumped</b>	<b>Sold *</b>	<b>Unaccounted Water Use/Loss</b>	<b>Percent</b>
January to March	41,343,988	33,477,361	7,866,627	19.03%
April to June	41,683,941	34,045,724	7,638,217	18.32%
July to September	46,966,995	35,008,429	11,958,566	25.46%
October to December	38,523,608	33,039,285	5,484,323	14.24%
<b>2015</b>				
January to March	38,685,055	31,474,195	7,210,860	18.64%
April to June	41,053,551	33,846,179	7,207,372	17.56%
July to September	44,926,119	33,983,269	10,942,850	24.36%
October to December	38,532,914	35,139,044	3,393,871	8.81%
<b>2016</b>				
January to March	39,065,596	32,368,168	6,697,428	17.14%
April to June	38,905,020	34,990,883	3,914,137	10.06%
July to September	50,366,140	39,678,233	10,687,907	21.22%
October to December	40,464,380	37,443,578	3,020,802	7.47%
<b>2017</b>				
January to March	37,574,680	33,531,323	4,043,357	10.76%
April to June	39,237,440	36,096,612	3,140,828	8.00%
July to September	48,072,704	42,657,360	5,415,344	11.26%
October to December	40,528,840	35,983,255	4,545,585	11.22%
<b>2018</b>				
January to March	38,260,460	33,880,209	4,380,251	11.45%
April to June	39,117,100	33,951,871	5,165,229	13.20%
July to September	45,083,423	38,246,005	6,837,418	15.17%
October to December	37,931,817	33,208,199	4,723,618	12.45%
<b>2019</b>				
January to March	38,188,700	32,842,069	5,346,631	14.00%
April to June	41,667,340	34,992,919	6,674,421	16.02%
July to September	55,870,980	38,731,499	17,139,481	30.68%
October to December				

\*Based on an average of 150/gallons/day residential use. This typically increases during warm month periods.

**Water Leaks in Distribution System**

<b>2015</b>				
<b>Month</b>	<b>Date</b>	<b>Street</b>	<b>Address or Block</b>	<b>Problem or Cause</b>
January	12	Victoria Road	Civic 80	3/4" water service with pin holes
January	22	Kempton Street	Between Townsend and Cumberland	6" valve bonnet broke
January	26	Lincoln Street	Civic 187	3/4" water service brass connection
January	26	Falkland Street	Civic 71	6" valve bonnet broke
February	11	Blockhouse Hill Road	Between Civic 11 and Civic 24	6" watermain cracked
February	18	High Street	Civic 24 (Hospital)	6" sprinkler service leaking
February	20	McDonald Street	Between Brook and Green	4" watermain cracked
April	15	Victoria Road	Civic 167	8" watermain long split
May	1	Lorne Street	Civic 20	3/4" water service swedge curb stop
June	8	Pelham Street	Civic 178	3/4" water service brass connection
November	24	McDonald Street	Between Brook and Green	4" watermain cracked
December	3	Kaulback Street	Between Kissing Bridge Road and Kinley Drive	8" watermain cracked
<b>2016</b>				
<b>Month</b>	<b>Date</b>	<b>Street</b>	<b>Address or Block</b>	<b>Problem or Cause</b>
January	19	Falkland Street	Civic 71	6" sprinkler service cracked
February	18	Archibald Street	Intersection of Green Street	8" X 6" reducer loose fitting
February	25	Centennial	Intersection of Victoria Road	8" X 8" loose fitting (elbow)
March	11	Kaulback Street	Between Kissing Bridge Road and Kinley Drive	8" watermain cracked
March	29	McDonald Street	Between Brook and Green	4" watermain cracked
April	15	Falkland Street	Civic 32	3/4" water service brass connection
July	6	Mason's Beach Road	Between Civic 101 and 142	2" leak watermain
July	25	Bayview Drive	Behind 311 Pelham Street	1 1/2" leak water service
October	21	Dufferin Street	157 Dufferin Street	3/4 " leak water service
October	31	Pelham Street	106 Pelham Street	3/4 " leak water service
December	1	Blue Rocks Road	Civic 359	1" leak water service
<b>2017</b>				
<b>Month</b>	<b>Date</b>	<b>Street</b>	<b>Address or Block</b>	<b>Problem or Cause</b>
February	4	Montague	Civic 208	6" watermain cracked
September	7	MacDonald	Civic 59	3/4" Brass service leaking
September	21	Motague	Civic 257	3/4 Brass service leaking
<b>2018</b>				
<b>Month</b>	<b>Date</b>	<b>Street</b>	<b>Address or Block</b>	<b>Problem or Cause</b>
February	6	Brook	Civic 108	6" watermain cracked
February	15	Green	Civic 23	6" watermain cracked
March	19	Victoria Road	Civic 79	8" watermain cracked
May	15	Bayview Drive	Behind 305 Pelham	2" plastic line fitting
July	2	Victoria Road	Between 80 and 58	1" service holes in pipe
October	4	Dufferin Street	Civic 121	3/4 " leak water service
November	4	Young Street	End of Young Street in Park	12" AC water line coupling failed
<b>2019</b>				
<b>Month</b>	<b>Date</b>	<b>Street</b>	<b>Address or Block</b>	<b>Problem or Cause</b>
May	2	Kempton Street & Lincoln	Civic 24 Kempton Street	6" watermain cracked
June	10	Harbour View Drive	Civic 232	3/4 " leak water service
June	18	Bluenose Drive	Civic 179	12" watermain coupling failed
October	2	Blue Rocks Road	Civic 359	3/4" service hole in pipe
October	21	MacDonald Street	Civic 59	4" cast iron watermain cracked

## Kelly Jardine

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**From:** dromkey [<mailto:dromkey@eastlink.ca>]  
**Sent:** December 23, 2019 10:18 AM  
**To:** Bea Renton <[brenton@explorelunenburg.ca](mailto:brenton@explorelunenburg.ca)>  
**Cc:** Lisa Dagley <[LDagley@explorelunenburg.ca](mailto:LDagley@explorelunenburg.ca)>; Katie MacMillan <[KMacMillan@explorelunenburg.ca](mailto:KMacMillan@explorelunenburg.ca)>  
**Subject:** Re: FW: LDFD - Re: Surplus PPE Turn Out Gear

With the replacement of our fire fighter turn out gear for our front line interior attack fire fighters, as well as some other fire fighters requiring gear, we now have a surplus of gear.

Our plan is to keep the sets that are still a couple years within the NFPA expiry date of 10 years as spares to use if the fire fighters gear is out being cleaned.

We are also keeping a few sets of gear that is still in good condition but has passed the expiry date. This we will use to outfit new members until they are trained for interior attack, then get them new gear.

There are fire departments in our county, as well as the province and beyond that cannot afford new gear.

Since our gear does not meet the NFPA expiry date, I feel it isn't worth much.

I would like to donate this gear to these departments as an act of good faith and cooperation.

If approved, I think it should be offered to any Lunenburg County department first, departments within Nova Scotia second, and out of province third.

I feel it would be the responsibility of the department receiving the gear to either come to our station to pick it up, or cover any costs to ship it to them.

I am willing to work with the Station Superintendent on this project.

If you have any questions please feel free to contact me.

(Additional information - breakdown of Turn Out Gear that we have that is now surplus:

**Pre 2011 Turnout Gear** (Out in the Storage Building)

30 Jackets  
31 Pants  
11 Pairs of Boots  
5 Captain Helmets  
14 Firefighter Helmets

**2011 Turnout Gear** (In Water Rescue Room)

9 Jackets  
6 Pants  
10 Pairs of Boots

The average price for one set of surplus Morning Pride turnout gear is \$74.11 CAD.

This list does not include the sets of 2011 Turnout Gear, Boots and Helmets that are allocated as spare sets for new members and replacement Turnout Gear when a member's current set of Turnout Gear is out for cleaning and/or repair.)

Darren