WEST HANTS REGIONAL MUNICIPALITY
Committee of the Whole Meeting Agenda
September 14, 2021 - 6:00 p.m.
Sanford Council Chambers, 76 Morison Dr, Windsor, NS
Virtual via Zoom
(also FB Livestream)

Agenda is subject to change due to additions that may not be able to be reflected until after the meeting.

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1. Call to Order

2. Attendance

3. Announcements

4. Approval of the Agenda, including additions or deletions
   a) Dashboard – Action Items

5. Declaration of Conflict of Interest

6. Approval of Previous Meeting Minutes
   2021-07-13 Committee of the Whole Meeting minutes

7. Presentations
   a) Branding Leadership Presentation – Information – Tim Carr, Co-chair Branding Leadership Team

   b) Traffic Calming Report/Presentation (Identify potential solutions for problematic Municipally-owned roads) – Information – Courtney McCarthy, P,Eng, Traffic and Transport Engineer

   c) WHRM Emergency Management Plan Presentation – Recommendation Report – Rick Sherrard

8. Unfinished Business/Postponed Motions
   a) Former Textile Mill Dangerous or Unsightly Update - CAO
   b) NSFM Caucus Membership - Information – Councillor Murley
   c) Temporary Opening of Edward Drive & Underwood Drive - Information Report (Public Works)
   d) Outdoor Fire By-Law - Recommendation Report
   e) WHRM Strategic Plan – Update – Information

9. Reports
   a) CAO Activity Update – Information Report

10. Correspondence
    a) Information

i) Avon River Causeway/Hwy 101 Twinning Project Correspondence Log
   1. Current Avon Causeway correspondence received as of August 13, 2021
ii) Letter of Concern - Tregothic Trail (Councillor Murley)

b) Requests – None

c) Sent – Letter to the Honourable Lloyd Hines, Minister Transportation and Active Transportation

11. New Business
a) Advocacy for Active Transport – Bog Road – Decision Request (Comm. Dev)
b) Brooklyn Civic Centre Expense Write-off – Decision Request (Councillor McLean)
c) Windsor Drainage Issues - Decision Request (Mayor Zebian)
d) Mobile Canteen Vending By-Law – Recommendation Request- Amendment (Mayor Zebian)
e) Parkland Divestment – Recommendation Report (Comm. Dev)
f) PCP Milestone 3: Local Action Plan (Planning)
g) MFC 2021 Fall Debenture - Decision Request (Finance)

12. In-Camera

a) Land Matter (as per MGA S. 22, 2a)

b) Land Matter (as per MGA S. 22, 2a)

c) Land Matter (as per MGA S. 22, 2a)

d) Land Matter (as per MGA S. 22, 2a)

e) Land Matter (as per MGA S. 22, 2a)

13. Next Meeting Date / Adjournment

M - Motion
D - Direction/Discussion

West Hants Regional Municipality
Dashboard (Action List)
September 14, 2021

Green - Complete
Yellow - In-progress
Red - Not started

Matter	Meeting	M/D	Start Date	Deadline / Update	Status	Resp.
Sewer Billing Review - Staff explore what the sewer rates would be if sewer util. fees were put back on the taxes. **(Tabled until after budget) (Also at 2020-04-14 COTW mtg)**	COTW	M	2020-05-12			CAO/Fin
Asset Mgmt (Strategic Sustainability) - Strategic Sustainability Plan is needed	COTW	D	2020-05-12	On-going until approx. Oct. 2022		PW
Avon River Causeway (Aboiteau/Hwy. 101 Twinning) - CAO to initiate process for financial evaluation which may include feasibility study on potential economic opportunities that exist with each of the causeway/aboiteau options being considered with Hwy. 101 twinning proj. (Table motion until after Community Liaison Committee (CLC) meets)	COTW	M	2020-05-12			CAO
Branding for Region - proceed with Branding project	Council	M	2020-05-26	2021-07		CAO
PID 45245578 and portions of 45182797, 45245560, 45245552, 45184025, and 45182904 (Cogmagun Lands) - purchase as per Letter of Offer presented at 2020-06-09 COTW in-camera	Council	M	2020-06-23			CAO
James Salter (Funding Req) - Resurrection of wooden statue. Staff to meet with Mr. Salter re proposed project cost(s) and meet with Hantsport Fire Dept. to discuss potential preservation options & report back.	Council	M	2020-09-22	2021-05 (Mr. Salter has advised this isn't immediate)		CAO

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Pedestrian Signage and Barriers - Have consistent and align with Branding outcomes. Staff prepare report for 2021/22 Capital & Operating budgets. (These items should be incorporated into our growth centres). Staff report back.	Council	M	2020-09-22	Align with Branding outcomes 2021-07		PW/Comm. Dev
Diversity & Inclusion Committee (from Meeting & Committee Procedural Policy Amendments) - Advertise for Committee members and mobilize the committee	COTW	M	2020-10-13	2021-05 (also with Rad Consulting Engagement Sessions)		Comm Dev
Burning Permit/Outdoor Fires - Staff review existing Fire-related by-laws	COTW	D	2020-11-10	2021-09 Council		CAO/Fire Chiefs
In-Camera (b) - MGA 22(2)(a) - Acquisition, sale, lease and security of Mun property - Land Sale - proceed with next steps/presentation	COTW	D	2021-11-10	2021-01		CAO
Panuke Rd Event - Event to be arranged by Mayor	COTW	D	2021-03-09	2021-06		Mayor
Noise By-law - Staff revise by-law (Peace and Good Order)	Council	M	2021-03-23	2021-07		Planning/ CAO
Cheverie Land Exchange - Agree	Council	M	2021-03-23	2021-05		CAO/Com D
Sewer Billing - Staff prepare education material for utility users	Council	D	2021-03-23	2021-06		CAO/Fin
Newport Station Food Hub Paving Driveway & Lease - Staff review if existing lease pertains to Newport Station Food Hub or previous owners. Establish new lease if need be.	COTW	D	2021-05-11	2021-07		CAO
65 Fort Edward St Properties - Deem surplus and list for sale	Council	M	2021-05-05	2021-06		CAO
Dog Park - Staff review historical information related to dog park feasibility	COTW	D	2021-06-08	2021-08		Comm. Dev

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Regional Caucus - Clr Murley to present information on possibilities	COTW	D	2021-06-08	2021-06-22		Murley
Glooscap First Nation & WHRM Council Meeting - Send formal invite for a meeting to discuss many topics including reconciliation	Council	M	2021-06-22			Mayor
Request to Meet with Avon Causeway Gate Stakeholders - Send letter to Kwilmu'kw Maw-Klusuaqn (KMK) requesting immediate in-person meeting to discuss Avon River Causeway/Aboiteau Gate System and Ministerial Order	Council	M	2021-06-22	2021-08		CAO/Mayor
Request to Meet with Avon Causeway Gate Stakeholders - Send letter to Glooscap First Nation requesting immediate joint council mtg. to discuss Avon River Causeway/Aboiteau Gate System and Ministerial Order	Council	M	2021-06-22			Mayor/CAO
Contracts & Agreements Listing - circulate list with financial figures via email to council (and also provide hard-copy)	COTW	D	2021-07-13	2021-08		CAO
Traffic Calming Measures - Staff identify and report back on potential solutions for problematic Municipally-owned roads	COTW	M	2021-07-13	2021-09		PW
Temporary opening of Edward & Underwood - Staff review possiblity of temporarily opening as well as reqeust timeline from developer.	COTW	M	2021-07-13	2021-09		CAO/PW
Highway Twinning over the Avon River - Send letter to Lloyd Hines, Minister of NSTAT, proj. should not be delayed due to uncertainty relating to causeway aboiteau design.	COTW	M	2021-07-13			CAO
Contract Negotiations (Item 13(a))- CAO proceed pending review by legal counsel. (Intermun with Kings re. Hantsport Fire)	COTW	M	2021-07-13	2021-08		CAO

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Former Textile Mill - Dang/ Unsightly Report - Awaiting Geo-thermal report & draft drawings. Requst for official report and will present report to members of Council.	Council	D	2021-07-27	2021-09-14		CAO
Correspondence - Any" sent" correspondence regarding motions be included in future agendas.	Council	M	2021-07027	2021-09-14		CAO
WHRM Strategic Plan - Update for Council members	Council	D				CAO
WHRM Emergency Measures Plan- Information Update	COTW	D	2021-09-14	2021-10		REMO
Active Transport - Bog Road - Request for Decision - Letter	COTW	D	2021-09-14	2021-10		Comm. Dev.
Brooklyn Civic Centre Expense Write - off - Request for Decision	COTW	D	2021-09-14	2021-10		McLean
7043 Highway 215, Bramber Dang/Unsightly Report	COTW	D	2021-09-14	2021-10		Planning
Windsor Drainage Issues - Request for Decision	COTW	D	2021-09-14	2021-10		Mayor/PW
Mobile Canteens/Sidewalk Café Vending By-Law - Request for Decision	COTW	D	2021-09-14	2021-11		Mayor
Parkland Divestment - Information Report	COTW	D	2021-09-14	2021-10		Fin/CAO/CD
PCP Milestone 3 - Request for Decision	COTW	D	2021-09-14	2021-10		Planning
MFC Fall 2021 Debenture - Request for Decision	COTW	D	2021-09-14	2021-11		Finance

WEST HANTS REGIONAL MUNICIPALITY

Presenter/Presentation Overview

Date: September 14, 2021 Committee of the Whole Meeting

Name of Presenters & Organization: Tim Carr, Co-chair Branding Leadership Team

Presentation Outline/Summary (Matter): Presentation of the new brand, logo and brand story.

Introductions/thanks

What is a good brand?

What is our promise?

Questions/comments

(Approximately 6-8 minutes)

Request of WHRM Council:

*Thank you for providing this information & a full copy of your presentation one full week **BEFORE** the date you are scheduled to present to West Hants Regional Council to sthornton@westhants.ca !*

Good evening,

I want to begin by acknowledging our presence on the traditional and ancestral land of the Mi'kmaq People. I also want to recognize the work of this municipality, who encourage fairness, equality and prosperity - with no tolerance for racism, sexism, homophobia, or any other forms of discrimination. I was reminded of these words by Kathy Johnston, and I echo their importance every chance I get.

Heartfelt thanks to our Mayor, CAO and Council, not only for this evening's opportunity, but also for encouraging and supporting a group of community volunteers to steer this branding process. Our committee and our values represent your communities well. Your decision to include the public in this process has undoubtedly contributed to our growing sense of regionalism.

Most of my thanks go to the volunteer committee itself - fourteen proud, engaged citizens who met numerous times these past few months. They came together (most often virtually) during an unprecedented and challenging year for everyone, to discuss in depth the attributes that make our region tremendous. Our process was guided by Prime Creative, led by Paul Card (born and raised in Hants County) who weighed our contributions equally and encouraged a true team process, valuing all input. Prime Creative's goal was to work with us to consolidate years of community consultation and to ensure and consider the diverse wants and needs of our people, in their communities. The positivity of the process was a refreshing antidote to the uncertainties of Covid 19. It was a true pleasure to work with the entire team. Their contributions and enthusiasm are clearly reflected in our new brand.

Special thanks to Shelleena Thornton and Crystal Remme, for their creative input, as well as their technical and moral support.

What is a brand? A brand is a lot of things, intended for a lot of people. A good brand reinforces our sense of pride. It strengthens the emotional connection between us and our home. One aim of this process was to create more cohesion for our Region, with considerations for our vibrant and varied communities, to create a more common identity.

A good brand also increases awareness among non-residents. It assures them there are things to discover here, we're a destination capable of surprises, and that we're open for business.

Above all else a brand is a promise, and it needs to be true.

Our promise is, in West Hants, something inspiring awaits. Our small towns and villages offer life with varied and rich experiences. The secret is out. We live in an incredible place, a place more and more people want to call home. They, like us, feel our region's growing vibrancy.

They, like us, recognize the passion and innovation of our people. They, like us, understand that West Hants is a place to live a full life.

The challenges of Covid 19 have highlighted the resilience, determination and overwhelming generosity of West Hants residents. Many of us explored and experienced our Region with fresh eyes. It has given us an opportunity to reflect upon and appreciate the true wealth we share in this place, each other.

Inspiration seems like a big word to some. It's really not. Inspiration is tangible and easily measurable. I feel inspired every day. I only need to think of the dedication of our volunteer fire departments, or putting a canoe in Falls Lake, learning to snowboard in my middle age, driving the 215, seeing a neighbour helping another, or knowing that a rainy drive from Halifax always seems to end with the sun breaking through by the time you get to Ellershouse.

Something inspiring awaits. It's true. I think and feel this when I wake up each morning, and I know I'm not alone. Maybe it's time for us to be a little less modest.

This brand is symbolic of our vibrancy and cooperation, but allows for interpretation, ensuring everyone feels included and valued. That was the intent.

This brand came from a place of pure positivity. It's a positive thing we can all easily embrace and promote. By acknowledging the strength and beauty of our collective communities and by committing to our Region, we all come together to shine brighter.

Go be inspired, or create that inspiration yourself!

September 14, 2021

Traffic Calming Memo

Committee of the Whole Presentation



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What is Traffic Calming?

Traffic Calming Advantages

Traffic Calming Disadvantages

Traffic Calming Objectives

Traffic Calming Process

Traffic Calming Toolbox

Recommendation

Q & A

What is Traffic Calming?

- Defined as “the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users”. [1]
- Traffic calming measures can be effective in addressing issues related to:
  - Vehicle speed
  - Excessive traffic volume
  - Noise pollution
  - Overall neighbourhood safety and comfort
- Traffic calming measures can be a combination of vertical and horizontal deflections, road narrowing and access restriction. Commonly utilized traffic calming measures may include:
  - Speed humps
  - Traffic circles
  - Curb extensions
  - Curb radius reduction
  - Raised median islands

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[1] Institute of Traffic Engineers (ITE) Subcommittee on Traffic Calming, 1997

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Traffic Calming Advantages

Traffic calming measures can have a number of positive and negative impacts.

Some advantages include:

- Reduced motor vehicle speeds & traffic volume
- Discouraged through vehicular traffic
- Improved roadside aesthetic by using attractive materials
- Reduced noise & air pollution
- Improved neighbourhood livability
- Reduced conflict between roadway users

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Traffic Calming Disadvantages

Traffic calming measures can have a number of positive and negative impacts.

Some disadvantages include:

- Increased travel speed between traffic calming features
- Reduced ease of vehicular access in and out of neighbourhoods
- Increased vehicular travel time and trip length
- Increased emergency vehicle response time
- Diverted vehicular traffic onto neighbouring roadways
- Decreased roadside aesthetic by using unattractive materials
- Increased noise pollution
- Cost considerations

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Traffic Calming Objectives

To address undesirable traffic conditions on local and collector roadways, the specific objectives of traffic calming are to:

- Increase the Safety of Neighbourhoods
- Improve the Liveability of Neighbourhoods
- Restore Streets to their Intended Function
- Preserve Access and Minimize Impact to Emergency & Maintenance Services
- Promote Public Participation and Community Support

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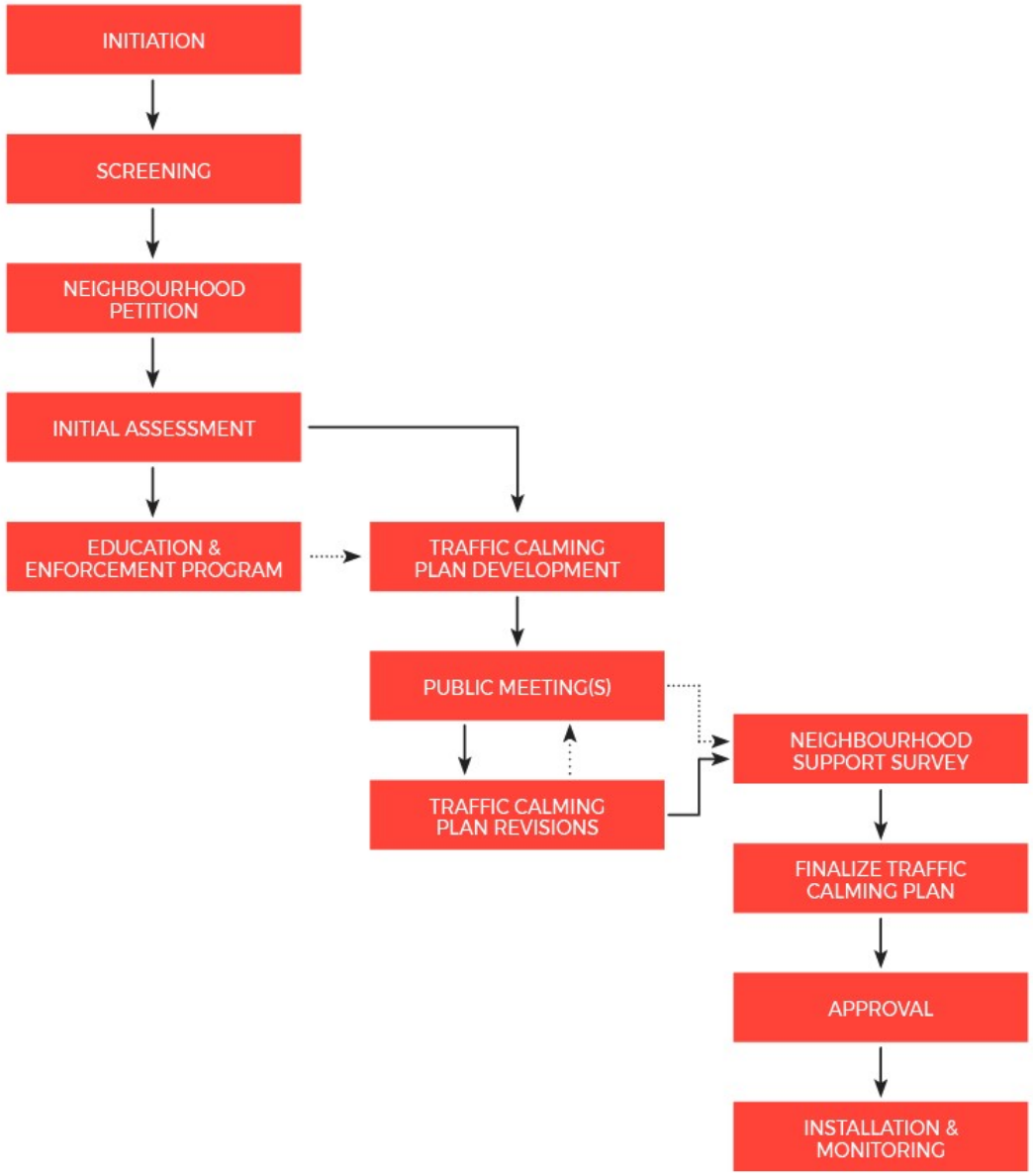
Traffic Calming Toolbox

Recommendation

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Traffic Calming Process

A key component of the process is community engagement and effective communication with residents.



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Traffic Calming Process

1) Initiation

- Resident(s) or a councillor with traffic related concerns are instructed to submit a written request to investigate traffic calming within their neighbourhood to WHRM.

2) Screening

- WHRM staff will then conduct a brief preliminary assessment to determine if the requested roadway meets initial screening criteria. Screening criteria may include that the street:
  - Be owned and maintained by the Municipality
  - Be classified as either a local or collector roadway
  - Not be a multi-lane roadway
  - Not have a posted speed limit greater than 50km/hr
  - Not be shorter in length than 150m
  - Not provide direct access to an emergency services building
  - Be in an area where the zoning is primarily residential
- If the initial screening criteria is met, then the next step in the process is initiated; otherwise, the street is not considered for traffic calming.

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3) Neighbourhood Petition

- A neighbourhood petition is conducted to determine the level of support to initiate an investigation into the need for traffic calming on the requested roadway.
- Without public support, the traffic calming measures intended to alleviate traffic concerns could be met with negative public opinion and, as a result, jeopardize the outcome and potential positive impacts of the affected neighbourhood.
- A certain percentage of households (67% requirement from the Town of Riverview policy)[2] with direct frontage onto the section of roadway being considered for traffic calming, must indicate support in order to proceed with an investigation.

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[2] Town of Riverview. 2015. Traffic Calming Policy. p.7

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4) Initial Assessment

- WHRM staff conduct the traffic review to quantify/qualify traffic concerns within a neighbourhood.

		HALIFAX REGIONAL MUNICIPALITY [1,2]	TOWN OF RIVERVIEW [3]
CRITERIA	85TH PERCENTILE SPEED	85th percentile speed must exceed 40 km/hr to consider traffic calming. Where in a school zone, 85th percentile speed must exceed 40 km/hr and/or exceed 30 km/hr during school arrival and dismissal times to consider traffic calming. Where designated a local street bikeway, 85th percentile speed must exceed 30 km/hr (or meet the traffic volume criteria below) to consider traffic calming. 85th percentile speed exceeding 45 km/hr will necessitate traffic calming.	In addition to the traffic volume criteria presented below, 85th percentile speed must be a minimum of 10 km/hr over the posted speed limit to consider traffic calming. Where 85th percentile speed equals or exceeds 15 km/hr over the posted speed limit, there is no minimum traffic volume requirement.
	TRAFFIC VOLUME	For streets that are not designated local street bikeways, traffic volumes are only assessed for project ranking purposes. Where designated a local street bikeway, traffic volumes must exceed 1,000 vpd (or meet the traffic speed criteria above) to consider traffic calming.	For residential local streets, annual average daily traffic must exceed 500 vpd. For urban collector minor roadways, annual average daily traffic must exceed 5,000 vpd.

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5) Education and Enforcement Program

- Municipal staff conduct an education and/or enforcement program over a period of one to six months and monitor the effectiveness of the techniques used in the program in addressing the identified issue. [6]
- Some education and enforcement techniques identified within the Canadian Guide to Traffic Calming include:
  - Active and Safe Routes to School Program
  - Pace Car Program
  - Vehicle Activated Signs
  - Targeted Education Campaigns
  - Mobile Speed Enforcement
- If data collection results indicate that the issue was not resolved through education and/or enforcement techniques, then the traffic calming process continues to the Traffic Calming Plan Development stage.

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[6] Solomon, H., Malone, B., Garcia, J. et al. 2017. Canadian Guide to Traffic Calming, Second Edition. Ottawa, ON: Transportation Association of Canada. p.25

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6) Traffic Calming Plan Development

- Based on location context, appropriate traffic calming measures are selected based on a toolbox of traffic calming measures.
- A plan could include one or more different types of traffic calming techniques. Once municipal staff have prepared concept drawings of the traffic calming measures, consultation with emergency and maintenance services is conducted.
- Modifications to the plan are made to address concerns. If the concerns cannot be remedied, the traffic calming process will be discontinued.

7) Public Meeting(s)

- Municipal staff host a public information meeting or open house to present the traffic calming plan and explain the rationale behind the specific preferred traffic calming treatment(s).
- The public meeting provides residents with an opportunity to become involved in the process, learn more about the proposed traffic calming treatment(s) and to provide their feedback.

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8) Traffic Calming Plan Revisions

- Modifications to the plan may be made to address feedback received from the public. If major changes are made to the plan, additional consultation with emergency and maintenance services and another public meeting may be required.

9) Neighbourhood Support Survey

- A neighbourhood support survey is completed to determine the level of support for the traffic calming plan and to provide an opportunity for the most directly affected residents to support or oppose any modifications to the road.
- A certain percentage (typically 50-70%) of total surveys submitted must be in favour of the traffic calming plan to proceed with installation.
- If the support rate is not met, the traffic calming process will be discontinued.

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10) Finalize Traffic Calming Plan

- Staff finalize the traffic calming plan by developing detailed engineering drawings that consider aspects such as geometric roadway design, surface drainage, utility locations, signage placement, cost and adherence to municipal specifications.
- Alterations to the traffic calming plan may be necessary if limitations are identified that make the original plan not feasible. Additional consultation with emergency and maintenance services and the public may be required if significant modifications have been made to the plan.

11) Approval

- Upon completion of the detailed engineering drawings and the calculation of a construction cost estimate, approval by the municipal council is requested.
- If approved, installation of the traffic calming measures is completed; otherwise, the traffic calming process is discontinued.

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12) Installation & Monitoring

- Traffic calming measures are installed. Municipal staff may decide to utilize interim and/or temporary treatments based on budget constraints and/or to provide time to examine the impacts of the measures prior to permanent installation.
- Monitoring of traffic calming treatments is conducted to determine the effectiveness and impact to the subject road and surrounding road network. Monitoring programs may include, but are not limited to, assessments of:
  - Before and after 85th percentile speed and traffic volumes on the subject road
  - Traffic diversion to other local and/or collector roadways
  - Before and after traffic noise levels
  - Before and after collision frequency and severity
  - Before and after active transportation user activity
  - Impacts to emergency and maintenance services
  - Resident feedback

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12) Installation & Monitoring

- If data collection results indicate that traffic calming objectives (e.g. reduction in traffic speed) were not met, municipal staff may consider implementing additional measures and/or discuss potential enforcement alternatives with police services, if deemed appropriate.
- If traffic calming objectives are met and there were no associated operational and/or safety impacts, no further action is required if permanent installations were already implemented. If temporary treatments were installed, permanent installations can be pursued.
- Removal of the measures may be warranted if the installation of traffic calming measures resulted in unforeseen operational and/or safety impacts and/or there is support for removal from residents in the associated neighbourhood.

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Horizontal Deflection

- Horizontal deflection traffic calming measures create a lateral shift in the vehicular travel path of a roadway corridor.
- Depending on the selected measure, it can discourage speeding and/or shortcutting.
- Examples of horizontal deflection traffic calming measures include:
  - Chicanes
  - Curb radius reductions
  - Lateral roadway shifts
  - Traffic circles



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Vertical Deflection

- Vertical deflection traffic calming measures create a vertical upward movement for vehicles to encourage drivers to slow down on the approach in order to avoid damaging the vehicle and/or experiencing an unpleasant sensation.
- Examples of vertical deflection traffic calming measures include:
  - Raised active transportation crossings
  - Raised intersections
  - Speed cushions
  - Speed humps



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Road Narrowing

- Narrowing a road (both physically and perceived) can help to calm traffic by increasing a driver's feeling of confinement to encourage them to slow down and be more aware of their surroundings.
- Examples of road narrowing measures include:
  - Curb extensions
  - Painted lane narrowing
  - On-street parking
  - Tree planting
  - Raised median island



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Access Restriction

- Access restrictions help to calm traffic by reducing the number of vehicles traveling along a street by prohibiting all or a few vehicular turning movements into and/or out of a street.
- This can be done through signage and/or physical obstruction.
- Examples of access restrictions include:
  - Directional closures
  - Diverters
  - Full closures
  - Raised median through intersection
  - Right-in / right-out island



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What is Traffic Calming?

Traffic Calming Advantages

Traffic Calming Disadvantages

Traffic Calming Objectives

Traffic Calming Process

Traffic Calming Toolbox

Recommendation

Q & A

Recommendation

It is recommended that West Hants Regional Municipality develop a traffic calming policy and program that includes public participation to address traffic concerns relating to traffic speeds and noise on residential streets.

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What is Traffic Calming?

Traffic Calming Advantages

Traffic Calming Disadvantages

Traffic Calming Objectives

Traffic Calming Process

Traffic Calming Toolbox

Recommendation

Q & A

Q & A

Thank you

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WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation X	Decision Request ☐	Councilor Activity ☐

To: Committee of the Whole

Submitted by: _____
Rick Sherrard, Emergency Management Coordinator

Date: September 14, 2021

Subject: West Hants Regional Municipality - Emergency Management Plan (EMP)

LEGISLATIVE AUTHORITY

Emergency Management Act R.S.N.S. 1990 c.8 s.10

WHRM Emergency Management By-law RE-002 s.6b

West Hants Regional Municipality Meeting and Committee Procedural Policy RCOGE-003.00

RECOMMENDATION or DECISION REQUEST

…that it be recommended to Council that Council approve the West Hants Regional Municipality's Emergency Management Plan 2021.

BACKGROUND

Property☐	Public Opinion☐	Environment☐	Social☐	Economic☐	Councilor Activity ☐

The Meeting and Committees Procedural Policy RCOGE-003.00 outlines one of the COTW purposes is:

"to carry out the duties of the Regional Emergency Management Advisory Committee as set forth the Regional Emergency Management By-law of the Municipality; "

The West Hants Emergency Management Organization (EMO) Advisory Committee has the mandate to advise Council on the development and maintenance of emergency management plans and present such plans to Council.

The most current Emergency Management Plan was approved by Council in 2014.

DISCUSSION

With the creation of the West Hants Regional Municipality (WHRM), its Emergency Management By-law RE-002 and creation of the Municipal Emergency Management Organization, it was determined that the existing EMP required a refresh.

There have not been any fundamental changes made to the 2014 EMP. It has been updated where applicable, with narrative added to clarify Emergency Operations Centre (EOC) General Operating Guidelines and activation protocol. We have also added evacuation guidelines.

It is important to understand that any EMP is a fluid document and requires continuous review and updating.

NEXT STEPS

Should the recommendation be supported, it will go before Council at the September 28,2021 Council meeting for approval.

FINANCIAL IMPLICATIONS

This Emergency Management Plan has no financial implications on current budgets of the Municipality.

Any future resources identified to prevent, respond to, and recover from a disaster will be presented annually to Council for consideration.

ALTERNATIVES

The Committee of the Whole could choose to not support the recommendation.

ATTACHMENTS

West Hants Regional Municipality's Emergency Management Plan 2021

CHIEF ADMINISTRATIVE OFFICER REVIEW

Report Prepared by: _____
Rick Sherrard, Emergency Management Coordinator

Report Reviewed by: _____
Shelleena Thornton, Municipal Operations Supervisor

Report Approved by: _____
Mark Phillips, CAO

WWH

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TOGETHER

2021

Emergency Management Plan

West Hants Regional Municipality

EMO

WEST HANTS REGIONAL MUNICIPALITY
MUNICIPAL EMERGENCY MANAGEMENT ORGANIZATION









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West Hants Regional Municipality (WHRM)

Emergency Management Plan

Executive Summary

Introduction

This plan results from the recognition on the part of local government and provincial officials that a comprehensive plan is needed to enhance the Province's ability to manage emergency/disaster situations. It was prepared by Emergency Management officials working as a team in a planning process. This plan constitutes an integral part of a province wide emergency management program and contributes to its effectiveness. Authority to undertake this effort is provided by both the province's Emergency Management Act and the West Hants Regional Municipality (WHRM) Emergency Management By-law. The development of this plan included an analysis of potential hazards that could affect our region and an assessment of our capabilities to deal with these potential hazards.

Comprehensive Approach

Dealing with disasters is an ongoing and complex undertaking. Through implementation of risk reduction measures before a disaster or emergency occurs, timely and effective response during an actual occurrence, and provision of both short- and long-term recovery assistance after the occurrence of a disaster, lives can be saved, and property damage minimized.

This process is called comprehensive emergency management to emphasize the interrelationship of activities, functions, and expertise necessary to deal with emergencies. This plan contains five sections to deal separately with each part of this ongoing process.

Management Responsibilities

The emergency management responsibilities of departments and organizations are outlined in this plan. Assignments are made within the framework of the present WHRM capability and existing organizational responsibilities. The Municipal Emergency Management Organization (EMO) is designated to coordinate all emergency management activities within the region. In this process EMO intends to use the Incident Command System (ICS) to respond to emergencies. ICS is a management tool for the command, control, and coordination of resources and personnel in an emergency.

Provincial responsibilities are closely related to the responsibility of the local levels of government within the Province (cities, towns and municipalities) to manage all phases of an emergency. The Province has the responsibility to assist the local governments in the event that they have fully committed their resources and are still unable to cope with any disaster.

Similarly, the Canadian Government is obligated to provide assistance to the Province after resources have been fully committed and the Province is unable to cope with the disaster.

This plan describes in detail the centralized direction of requests for assistance and the understanding that the governmental jurisdiction most affected by an emergency is required to fully involve itself in the emergency prior to requesting assistance.
Specific emergency management guidance for situations requiring special knowledge, technical expertise, and resources may be addressed in separate annexes attached to this plan. Examples of this type of situation are emergencies resulting from hazardous chemical releases, dam failures, or power outages.

Conclusion

This plan provides general all-hazards management guidance, using existing organizations, to allow the WHRM to meet the responsibilities before, during and after an emergency. Therefore, it is recommended that this Emergency Plan (EP) be reviewed and approved by Municipal Council annually.

Section I: GENERAL CONSIDERATIONS AND PLANNING GUIDELINES

Legal Authority

This Plan, in whole or in part, may rely upon the following laws for the power necessary for its development and implementation.

- Emergency Management Act of the Province of Nova Scotia
- West Hants Regional Municipality – Emergency Management By-law RE-002

Guidance Regarding Comprehensive Emergency Management

1. A wide variety of emergencies, caused by nature or technology, result in loss of life, property and income, disrupt the normal functions of government, communities and families, and cause human suffering.

2. Government must provide leadership and direction to prevent, mitigate, respond to, and recover from dangers and problems arising from emergencies within its municipal jurisdiction.

3. Under authority of the Emergency Management Act of the Province of Nova Scotia, a municipality is authorized to develop a Comprehensive Emergency Management Plan to prevent, mitigate, respond to and recover from emergencies and disasters. To meet this responsibility, the WHRM has developed this Comprehensive Emergency Management Plan.

4. This concept of Comprehensive Emergency Management includes three phases:
    - Risk Reduction (Prevention and Mitigation)
    - Response
    - Recovery

5. Risk Reduction (Prevention and Mitigation):
    - Prevention refers to those short- or long-term activities which eliminate or reduce the number of occurrences of disasters.
    - Mitigation refers to all activities which reduce the effects of disasters when they do occur.
    - Section II of this Plan, Risk Reduction, describes activities to prevent or minimize the impact of hazards within the WHRM.

6. Response:

- Response operations may start before the emergency materializes, for example, on receipt of advisories that a flood, blizzard, or ice storm is approaching. This increased readiness response phase may include such pre-impact operations as:
    - Detecting, monitoring, and assessment of the hazard
    - Alerting and warning of endangered populations
    - Protective actions for the public
    - Allocating/distributing of equipment/resources

- Most response activities follow the immediate impact of an emergency. Generally, they are designed to minimize casualties and protect property to the extent possible through emergency assistance. They seek to reduce the probability of secondary damage and speed recovery operations.

- Emergency response operations are the responsibility of and controlled by the WHRM, supported by the Municipal Emergency Management Organization as appropriate.

- If the WHRM is unable to adequately respond, the Nova Scotia Emergency Management Office (NS-EMO) shall be asked to assist.

7. Recovery:

Recovery activities are those following a disaster to restore the community to its pre-emergency state, to correct adverse conditions that may have led to the damage, and to protect and improve the quality of life in the community. It includes risk reduction actions to prevent or mitigate a recurrence of the emergency.

Purpose and Objectives of the Plan

1. This Plan sets forth the basic requirements for managing emergencies within the WHRM.

2. The objectives of the Plan are:

    - To identify, assess and prioritize local and regional vulnerabilities to emergencies or disasters and the resources available to prevent or mitigate, respond to, and recover from them.
    - To outline short, medium and long-range measures to improve the emergency management capability to manage hazards.
    - To provide that the Province and local government will take appropriate actions to prevent or mitigate effects of hazards and be prepared to respond to and recover from them when an emergency or disaster occurs.
    - To provide for the efficient utilization of all available resources during an emergency.

- To provide for the utilization and coordination of municipal, provincial, and federal programs to assist disaster victims, and to prioritize the response to the needs of the elderly, disabled, low income, and other groups which may be inordinately affected.
- Provide for the utilization and coordination of provincial and federal programs for recovery from a disaster with attention to the development of mitigation programs.

Concept of Operations

1. The primary responsibility for responding to emergencies rests with WHRM.
2. WHRM and its emergency service organizations play an essential role as the first line of defense.
3. Responding to a disaster, WHRM is required to utilize its own facilities, equipment, supplies, personnel and resources first.
4. When local resources are inadequate, the Chief Administrative Officer (CAO) may obtain assistance from other municipal governments.
5. The Province may coordinate responses for requests for assistance for the local governments.
6. The Province has the authority to direct and coordinate Provincial disaster operations.
7. The Provincial Executive may obtain assistance from other municipalities or the Province when the emergency/disaster is beyond the resources of the WHRM.
8. The Provincial Legislature has assigned to NS-EMO the responsibility to coordinate provincial emergency management activities.
9. The WHRM will utilize the Incident Command System (ICS) to manage all emergencies requiring multi-agency response. EMO recommends and encourages all organizations in the WHRM involved with emergency response to utilize the ICS.
10. A request to the Province for assistance will be submitted through NS-EMO located in Dartmouth, Nova Scotia and presupposes the utilization and expenditure of personnel and resources at the local level.
11. Provincial assistance is supplemental to local emergency efforts.
12. Direction and control of Provincial risk reduction, response and recovery actions is exercised by NS-EMO.
13. Upon the occurrence of an emergency or disaster clearly beyond the management capability and emergency resources of Provincial and municipal government, the Premier may find that federal assistance is required and may request assistance from the Prime Minister by requesting a declaration of a major disaster or emergency.

Designation of Emergency Management Coordinator (EMC)

1. The WHRM Emergency Management By-law RE-002 allows for the appointment of a co-coordinator of the municipal emergency management organization and prescribes the duties of the co-coordinator which shall include the preparation and co-ordination of emergency management plans for the municipality.

2. The EMC shall:
   - Chair the Municipal Emergency Management Planning Committee.
   - Coordinate and prepare municipal emergency management plans.
   - Perform such other duties as may be required by the municipality.

Plan Maintenance and Updating

- The EMO is responsible for maintaining and updating this Plan.
- All departments and organizations are responsible for annual review of their emergency response role and procedures, and to provide any changes to the EMC by March 1 of each year.
- This Plan should be reviewed and updated annually with revised pages distributed by April 1 of each year.

Section II: RISK REDUCTION

BACKGROUND

WHRM is a primarily rural municipality located about halfway between Halifax and Kentville. Development is concentrated in communities near Highway 101 including Windsor, Three Mile Plains, Falmouth, Hantsport and the hamlets of Brooklyn and Summerville. The proximity to Halifax and the relatively lower cost of housing have contributed to the attractiveness of the area as a bedroom community for commuters who work in the Halifax Metro area.

(a) Geography

WHRM occupies the western half of Hants County, running from the Minas Basin to the boundary with Halifax County, sharing this boundary with the East Hants municipal district. There are many points of land, inlets and islands. The mainland is made up of flat and undulating land to the West and more hills and slopes to the southwest. Much of the development is concentrated near the Minas Basin coastline and the Avon River estuary. The municipality's geography and historical settlement pattern contribute to its vulnerability to the impacts of climate change. In all, WHRM has more than 160 km of coastline, over 2,400 ha of dykeland and 30.5 km of running dike at risk from sea level rise or storm surge.

(b) Climate

This area has a very mixed climate in terms of weather systems and variations. There can be heavy snowfalls, heavy rain falls, which often are accompanied by high winds. Temperatures range from periods of moderately cold weather in the winter to hot humid stretches in the summer.

(c) Population

The West Hants Regional Municipality population totals approximately (Windsor 3,648) 19,016.

Land area is 1,253.2 square kilometers with a population density of 15.1 persons per square kilometer in the WHRM (2016). This compares to the provincial land area of 52,939.44 square kilometers with a population density of 17.4 persons per square kilometer. The population density of the community of Hantsport is 544 persons per square kilometer and the community of Windsor is 400.6 persons per square kilometer.

In 2016, WHRM (West Hants, Windsor, Hantsport) had 8,012 private dwellings occupied by usual residents.

WHRM has continued to see new residential development and modest growth in population, unlike many other areas of Nova Scotia that have experienced population decline over the past 15 to 20 years.

(d) Governments

WHRM includes the former Municipality of the District of West Hants, the former Town of Hantsport and the former Town of Windsor. Hants West is a seat of the provincial government in Nova Scotia. The WHRM is governed by a Mayor and Council. The Municipal Court House is located at 100 King Street, Windsor.

(e) Services

1. Health:

Hants Community Hospital (HCH) serves the communities of WHRM and portions of the Municipality of East Hants. Services offered include acute care, transitional care, ambulatory care, 24-hour emergency care, day surgery, physiotherapy, laboratory services, diagnostic imaging services, respiratory therapy, palliative care, geriatrics clinic, Hants Health and Wellness Team, cardiac investigation, pain clinic and Haliburton Place long-term care.

External agencies based at the HCH include Home Care Nova Scotia (Continuing Care), VON, Nova Scotia Hearing & Speech Clinic, West Hants Community Mental Health, Northwood Homecare and Internal Medicine Specialists. There are several long-term care facilities located in the region including the Windsor Elms Village and Dykeland Lodge.

2. Department of Community Services:

The office is located at 50 Empire Lane in Windsor and is responsible for the provision of emergency social services.

3. Fire:

Fire Departments located throughout WHRM have a mutual aid agreement in effect. The region has four volunteer fire departments and two substations (Brooklyn Station 2 and Southwest Hants Fire Society), Walton Fire Department also serves sections of the municipality.

4. Police:

Police services are provided by the RCMP through a Municipal Police Services Agreement (MPSA) directly with the Federal Government of Canada. In Addition, some RCMP resources include but are not limited to: Western Traffic Services, Police Dog Service, Street Crime Enforcement Unit, Forensic Identification Services, Integrated Border/Drug Enforcement Team, and RCMP Federal Operations.

5. Public Information:

Radio Station coverage is relatively good throughout the WHRM with coverage by both Annapolis Valley Radio Stations (Rewind 89.3 and Annapolis Valley Radio 1450) and Halifax radio stations including CBC Nova Scotia.
Local newspaper coverage is provided by the Valley Journal Advertiser and provincial papers include the Chronicle Herald.
Television Stations include Global, CTV, and CBC with locations in the Halifax Region. Local television is provided by Eastlink television. Actual television channels vary amongst providers and geography so using one's television guide as reference is key.
Website & Social Media – The following WHRM online accounts are other communication tools used to relay a variety of information:

- Website www.westhants.ca
- Municipal Facebook @RMWindsorWestHants
- Municipal Emergency Management Organization Facebook @WestHantsRemo
- Municipal Twitter @RegMunWWH
- Municipal EMO Twitter @WWH_REMO
- Municipal YouTube https://www.youtube.com/channel/UCPhCgbwju1JSG-V2P1uKPHw

6. Communications:

The telephone is the basic means of communication. All fire departments use VHF and TMR and utilize the Nova Scotia Communications System (NSIMRS). Other government departments such as RCMP, Emergency Health Services, Natural Resources, and Transportation, use TMR and in turn may be contacted using appropriate equipment and procedures. There is an active amateur radio club located in Kings County.

7. Transportation:

Transportation is primarily by highway traffic. Highways Numbers 101 and 1 traverse the municipality. Highway 14 provides links to the South Shore and Central Nova Scotia. Although some train tracks exist within the county, they have not been maintained or used for many years. Most marine traffic has ceased since the closing of Fundy Gypsum and recreational use is generally the only water use.

8. Government Departments & Organizations:

(a) Federal: Human Resources and Social Development
RCMP
Canada Border Services Agency
Transport Canada
Fisheries and Oceans Canada
Agriculture and Agri-Food Canada

Canada Post

(b) Provincial: Department of Community Services
Department of Transportation and Active Transit
Department of Health and Wellness
Department of Justice
Department of Education
Department of Environment and Climate Change
Department of Labour and Advanced Education
Department of Lands and Forestry
Department of Communities, Culture and Heritage
Tourism Nova Scotia (now an agency and not a department)

A. HAZARD ANALYSIS

Designation of Hazard Mitigation

- The EMO Advisory Committee has been designated as having the responsibility of hazard mitigation.
- They will be responsible for coordinating efforts in reducing hazards in WHRM.
- The EMC will participate as a member of the Advisory Committee

General:

The spread of population and dwellings throughout the municipality, present emergency planners with communication challenges associated with the control of operations and the utilization of available resources.
The volume of road traffic is increasing, and the transportation of dangerous commodities constitutes a major hazard. The Municipality is likely to experience the effects of natural hazards or incidents associated with high winds and winter storms.

Fire
The majority of dwellings are of wood construction and fire constitutes a major hazard, particularly in areas of relatively high density.
Road
The continual increase in the volume of traffic will increase the danger of road accidents and planners should be aware of access routes and population location and growth.
High Winds
The disruption of power and telephone services by high winds must be considered.
Heavy Snowfall
Heavy snowfall has been experienced and adds to an ever-present transportation danger.
Explosion – Natural Gas

The changeover to Natural Gas by industries in the region such as CKF must be considered along with the increased transportation of this hazard through the region to other areas of Nova Scotia.

Hazardous Materials

There are some industries located in the region that work with hazardous materials in process management. These responses are managed by the local fire service in coordination with other hazmat teams by mutual aid agreement.

Forest Fires

An ever-increasing number of residential areas are being developed where they are surrounded by forest. Hence the potential exists for a forest fire to threaten an area of human habitat.

Floods

The risk of increased flooding and erosion as a result of sea level rise or storm surge is a real concern. The potential for more frequent and severe freshwater flooding during high precipitation events is a threat that is intensified by the operations of the Avon River Causeway tide gates and the upstream hydroelectric system dams.

Identification and Analysis of Potential Hazards

NS-EMO working with Regional and Municipal EMC's have adopted a standard model of assessing risks and hazards. This Hazard Risk Vulnerability Assessment (HRVA) Model is found in Appendix 3 and is used in identification and analysis of potential hazards in the WHRM.

This HRVA Model examines potential hazards by considering:

- Probability -the frequency or likelihood of occurrence,
- Impact – the consequences likely to be experienced should an event occur and
- Risk Tolerance

B. PLANNING COMMITTEE

1. The EMO Planning Committee will consist of the following members:

    - Emergency Management Coordinator or alternate
    - Chief Administrative Officer or designate
    - Directors or representatives of every Municipal department or agency which has been assigned emergency related functions under the Municipality's emergency management plan, including those responsible for providing the following services:
        i. Law Enforcement (RCMP)
        ii. Search and rescue (GSAR)
        iii. Fire Control

iv. Hazardous material control
v. Transportation
vi. Health Care
vii. Communication
viii. Public Information
ix. Utilities

- Directors or representatives of such of the following provincial departments or agencies as are willing to participate:
  i. Nova Scotia Emergency Management Office
  ii. Lands and Forestry
  iii. Education
  iv. Community Services
  v. Health and wellness
  vi. Transportation and Active Transit
  vii. Agriculture
  viii. EHS
- Information Technology Specialist
- Geographic Information System Technician
- Amateur Radio Representative

2. The EMO Planning Committee will:

- identify potential hazards in the Municipality.
- determine the probable impact each of those hazards could have on people and
- delineate the geographic areas affected by potential hazards, plot them on maps, and designate them as hazard areas.

3. Significant potential hazards to be identified and analyzed include natural, technological, and human caused hazards.

4. To comply with (2) and (3) above, hazards that pose a potential threat have been and will continue to be identified and analyzed by the Planning Committee using the provincial guideline outlined in the Emergency Management Act.

5. The hazard analysis:
   - provides a basic method for analyzing and ranking the identified hazards, including identification of geographic areas and populations at risk to specific hazards.
   - establishes priorities for planning for those hazards receiving a high ranking of significance.
   - is to be reviewed and updated every year.

6. The Hazards Rating and Ranking Results of the hazard analysis are found in Appendix 4.

7. The complete Hazard Analysis results, including computerized maps identifying the location of hazard areas, are located at the Emergency Operations Centre (EOC).

C. Risk Reduction Guidance, Programs and Reports

1. Municipal departments are authorized to:

- promote policies, programs and activities to reduce hazard risks in their area of responsibility

Examples of the above are:

- subdivision regulations and building codes that are cognizant of and take into account significant hazards in the Municipality.
- promote compliance with and enforcement of existing laws, regulations, and codes that are related to hazard risks, e. g., building and fire codes, flood plain regulations.
- encourage and assist water and wastewater treatment plants to replace chlorine use with a safer disinfectant in accordance with the regulations of the provincial Department of the Environment.
- encourage and participate in the protection of waterways and other sensitive environment areas.
- encourage provincial Department of Transportation and Active Transit to address dangerous conditions on roads used by hazardous materials carriers.

2. The Municipal Planning and Development Department is responsible for land use regulation within the Region, including advising and assisting Council regarding the creation and amendment of planning and heritage documents and policies and building regulations.

3. In all of the above activities, the EMO Planning Committee will take into account the significant hazards in the region.

4. The Planning Committee will meet annually to identify specific hazard reduction actions that could be taken for those hazards determined by the hazard analysis to be most significant.

5. For each hazard reduction action identified, the following information is to be included by the Planning Team:

    - a description of the action
    - a statement on the technical feasibility of the action
    - the expected benefits of the action
    - an estimate of the level of community support for the action

6. This information will be consolidated into a Risk Reduction Report.

7. The Risk Reduction Report will prioritize and make recommendations concerning the identified actions.

8. The Risk Reduction report will be presented to the EMO Advisory committee for review, revision, and approval or disapproval, in April of each year.

9. The Risk Reduction Report will be presented to council for consideration and funding.

D. Emergency Response Capability Assessment

1. Periodic assessment of the Municipality's capability to manage emergencies that could be caused by the hazards identified is a critical part of Risk Reduction.

2. The EMO Planning Committee will, on an annual basis.
   Assess the current capability for dealing with those significant hazards that have been identified and analyzed, including but not limited to:

    - the likely time of onset of the hazard
    - the impacted communities' preparedness levels
    - the existence of effective warning systems
    - the communities' means to respond to anticipated casualties and damage

3. To assist the Planning Committee in its assessment, the EMC will conduct table-top exercises based upon specific hazards and hazard areas identified by the Committee.

4. The Committee will identify emergency response shortfalls and make recommendations for implementing corrective actions to the EMO Advisory committee.

E. Training of Emergency Personnel

1. EMO has the responsibility to:

- arrange and provide, with the assistance of the NS-EMO, training programs for emergency response personnel, as designated by the EMC.
- encourage and support training for emergency personnel, such training programs will:
    - include information on the characteristics of hazards and their consequences and the implementation of emergency response actions including protective measures, notification procedures, and available resources.
    - include Incident Command System (ICS) training, focusing on individual roles.
    - provide emergency personnel with the variety of skills necessary to help reduce or eliminate hazards and increase their effectiveness to respond to and recover from emergencies of all types.
    - be provided in crisis situations, that requires additional specialized training and refresher training.

- conduct periodic exercises and drills to evaluate local capabilities and preparedness, including a full-scale operational exercise that tests a major portion of the elements and responsibilities in the EMO Emergency Plan, and regular drills to test readiness of warning and communication equipment.
- consult in developing training courses and exercises.
- work with the local response community to identify, or develop and implement, training programs specific to mitigation, response, and recovery from the identified hazards.
- receive technical guidance on latest techniques from provincial and federal sources, as appropriate, and request assistance as needed.

F. Public Education and Awareness

1. The EMO is responsible for:
   - providing education on hazards to the public.
   - making the public aware of existing hazards in their communities.
   - familiarizing the public with the kind of protective measures developed to respond to any emergency arising from the hazard.

2. This education will:
   - cover all significant hazards
   - be available free of charge

3. Public Safety and Emergency Preparedness pamphlets, books and kits dealing with all aspects of emergency management and materials developed by NS-EMO and other provincial departments, as appropriate, will be made available for use in the program.

G. Monitoring of Identified Hazard Areas

- The Public Works Department will develop, with the necessary assistance of other departments, the capability to monitor identified hazard areas, in order to detect hazardous situations in their earliest stages.

- As a hazard's emergence is detected, this information is to be immediately provided to the EMO.

- Monitoring tasks include detecting the hazard potential and taking measurements or observations of the hazard. Examples of such are rising water levels, toxic exposure levels, mass gatherings, the formation and break-up of ice jams, shore erosion, dam conditions.

- All hazard monitoring activity will be coordinated with, and make use of where available, private industry, utility companies, and volunteer organizations and individuals, as appropriate.

H. Special Event Bylaw

The former Town of Windsor and District of West Hants each had a Special Event Bylaw (see appendix 5) whereby any promoter of an event where a large number of people (500 or more) are brought together to watch or participate in any type of recreational, commercial, dance or sporting event must make application for approval to the WHRM. The WHRM utilizes the same format under the provisions found in the Emergency Management Act.

These by-laws allow emergency planners to discuss, prepare and approve emergency plans for an event in coordination with the event organizers. This greatly reduces the potential of hazards associated with these events.

The Province of Nova Scotia has also issued a guideline for managing On-Highway Special Events which has been adopted by EMO (see appendices 6).

Section III RESPONSE

Response Organization and Assignment of Responsibilities

A. Municipal Executive Responsibilities, Powers, and Succession

1. The WHRM is ultimately responsible for emergency response activities and:
   - may declare a State of Local Emergency in consultation with the CAO or alternate.
   - may request assistance from other municipal governments and the Province when it appears that the incident will escalate beyond the capability of local municipal resources,
   - may provide assistance to others at the request of other municipal governments.

2. The CAO
   - assumes personal oversight of the EMO if the scope and magnitude of the emergency indicates the necessity of personal management and direction of the response and recovery operations.
   - controls the use of all municipal owned resources and facilities for disaster response.

3. In the event of the unavailability of Municipal Council, the following line of command and succession has been established to ensure continuity of government and the direction of emergency operations:
   - The Mayor or designate will assume the responsibilities of council until they are available.
   - The CAO or designate will assume the management of the Emergency Operations Center (EOC).
   - The EMC will be assigned and assume responsibility until the CAO is available.

B. The Role of the Emergency Management Coordinator (EMC)

1. The EMC coordinates initial emergency response activities and may recommend to the CAO, that he advise Council to declare a state of local emergency based on the severity of the situation and the necessity to use additional executive power to respond effectively to the emergency.

2. The EMC:
   - activates one of the Emergency Operations Centre's.

- notifies and briefs all members of the Emergency Operations Center (EOC) involved in an emergency response.
- maintains and manages an EOC on a day-to-day basis.
- facilitates coordination between the EOC and:
  - the Incident Commander.
  - local governments outside the municipal unit.
  - the Province of Nova Scotia.
  - private emergency support organizations.

C. The EMO Emergency Response System

1. The Incident Command System (ICS) will be used in EOC operations. Command resides at the scene. The EOC coordinates support to field operations.

a) WHRM endorses the use of the ICS. This allows flexibility in its implementation so that its structure can be tailored to the specific situation at hand.

The ICS should be initiated by the emergency forces first responding to an incident. (see Appendix 7 - ICS Position Descriptions)

b) ICS is organized by functions. There are five:

· Command
· Operations
· Planning
· Logistics
· Finance

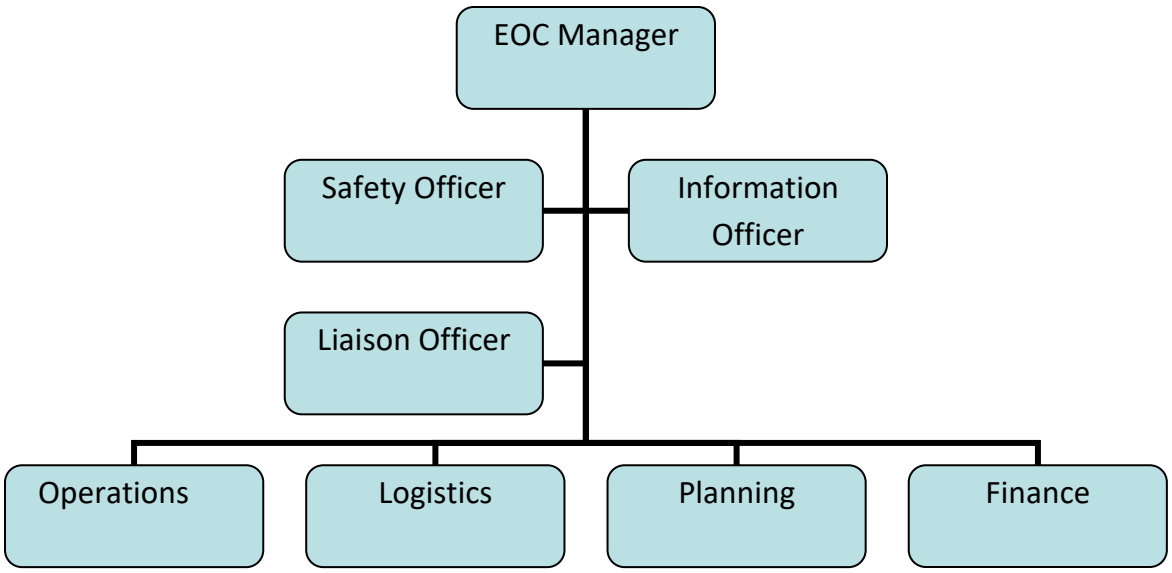
c) Under ICS, an Incident Commander (IC) has the overall responsibility for the effective on-scene management of the incident and must ensure that an adequate organization is in place to carry out all emergency functions. The IC directs emergency operations from an Incident Command Post, the only command post at the emergency scene.

d) Although a single IC normally handles the command function, an ICS organization may be expanded into a Unified Command (UC). The UC is a structure that brings together the ICs of all major organizations involved in the incident in order to coordinate an effective response while at the same time carrying out their own jurisdictional responsibilities. The UC links the organizations responding to the incident and provides a forum for these entities to make consensus decisions. Under the UC, the various jurisdictions and/or agencies and non-government responders may blend together throughout the operation to create an integrated response team.

The UC is responsible for overall management of the incident. The UC directs incident activities, including development and implementation of overall objectives and strategies, and approves ordering and releasing of resources. Members of the UC work together to develop a common set of incident objectives and strategies, share information, maximize the use of available resources, and enhance the efficiency of the individual response organizations.

The UC is not "decision by committee." The principals are there to command the response to an incident. Time is of the essence. The UC should develop synergy based on the significant capabilities that are brought by the various representatives. There should be personal acknowledgement of each representative's unique capabilities, a shared understanding of the situation, and agreement on the common objectives. With the different perspectives on the UC comes the risk of disagreements, most of which can be resolved through an understanding of the underlying issues. Contentious issues may arise, but the UC framework provides a forum and a process to resolve problems and find solutions. If situations arise where members of the UC cannot reach consensus, the UC member representing the agency with primary jurisdiction over the issue would normally be deferred to for the final decision. If this approach does not work, the Regional Response Team (RRT) may be called on to serve as a forum where differences can be thoroughly discussed and to assist in resolving the disagreement.

e) In minor incidents, the five ICS functions may all be managed directly by the IC. Larger incidents usually require that one or more of the functions be set up as separate sections under the IC.
f) Within the Command function, the IC has additional responsibilities for Safety, Public Information, and Liaison. These activities can be assigned to staff under the IC.
g) During an emergency, response personnel must be cognizant of the ICS in place and their role in it. Some Municipal personnel may be responders to the scene and part of the on-scene ICS structure in a functional or staff role. Other Municipal personnel may be assigned to the EOC or other locations where they will provide support to the responders at the scene. All Municipal response personnel not assigned to the on-scene ICS will be coordinated by or through the EMO.
h) The IC is usually selected due to his or her position as the highest-ranking responding officer at the scene. The IC must be fully qualified to manage the incident. As an incident grows in size or becomes more complex, a more highly qualified IC may be assigned by the responsible jurisdiction.
i) A major emergency encompassing a large geographic area may have more than one emergency scene. In this situation, separate IC’s may set up command at multiple locations. They report to the EOC Manager for the coordination of all activities.
j) Response personnel operating at the EOC will be organized by ICS function, as depicted below and interface with their on-scene counterparts as appropriate.



k) Whenever the ICS is established, Municipal staff should be assigned to specific ICS functions wherever they are needed, including at the scene, at the EOC in a support role, or at an Area Command, if established. See Table 1 for sample ICS functional assignments by agency. Assignments may change as situation dictates or as directed by the EOC Manager.

Table 1 – ICS Function and Response Activities

ICS Function Response Activities

ICS Function	Response Activity
EOC Manager	CAO – Ultimate Situation Responsibility; EOC Management
EMC	Activation and Maintaining of the EOC
Solicitor	Ensure Legal requirements are met
PIO	Emergency Public Information
Safety	Health and Welfare requirements are met
Liaison	Liaison and coordination with governments and organizations
Operations	Law enforcement, Search and rescue, Identification and disposal of deceased, Fire Suppression and Control, Hazmat Exposure Control, Debris Removal and disposal, Damage Assessment, Sewage Control, Temporary Housing and Shelter, Emergency Feeding and Clothing, to include assessment, treatment and or transport of the sick and injured
Planning	Situation Assessment and Documentation Advance Planning
Logistics	Communications, Supply and Procurement
Finance	Purchasing, Accounting, Record keeping

2. Organizational Responsibilities

- The CAO or designate shall exercise ultimate responsibility and oversight for emergency response and shall delegate ICS responsibilities as described in Table1; or as special circumstance warrants, response personnel operating at the EOC will be organized by ICS function, as depicted below and interface with their on-scene counterparts, as appropriate.

Managing Emergency Response

A. Incident Command Post and Emergency Operations Center (EOC)

1. On-scene emergency response operations will be directed and controlled by the Incident Commander (IC) or Unified Command (UC) from an Incident Command Post located at or near the emergency site. This will be the only command post at the emergency scene. All other facilities at the scene used by organizations for decision-making should not be identified as a command post.
2. The EOC will be used to support Incident Command Post activities and to coordinate resources and assistance.
3. A Command Post will be selected by the IC or UC based upon the logistical needs of the situation and located at a safe distance from the emergency site.
4. There is one primary EOC located in the basement of the Municipal Building at #76 Morison Drive and a secondary EOC located at the municipal offices at #100 King Street.
5. The EOC provides for the centralized coordination of all response activities from a secure and functional location.
6. All response personnel represented at the EOC will be organized according to ICS function under the direction of the EOC Manager.
7. Though organized by ICS function, each organization's senior representative at the EOC will be responsible for directing or coordinating his or her agency's personnel and resources. Where the agency is also represented at the scene in an ICS structure, the EOC representative will coordinate the application of resources with the agency's representative at the scene.
8. The EMC is responsible for maintaining the EOC's during emergencies.
9. If required, the EOC will be staffed to operate continuously on a twenty-four hour a day basis. In the event of a 24-hour operation, two 12 ½ hour shifts will be utilized. (The additional ½ hour is for shift change briefings.) Designation of shifts will be established as conditions warrant by the EMC in consultation with the EOC Manager.
12. Each agency will routinely identify its personnel assigned to the EOC. This identification is to be provided to the EMC and updated as changes occur, no less than annually.
13. Work areas will be assigned to each agency represented at the EOC.
14. Internal Security at the EOC during an emergency will be provided.
    a) All persons entering the EOC will be required to check in at the security desk located at the main entrance.

b) All emergency personnel will be issued a pass (permanent or temporary) to be worn at all times while in the EOC.
c) Temporary passes will be returned to the security desk when departing from the premises.

15. EOC space must be maintained in an emergency operating mode by the EMC at all times. During non-emergency periods, the EOC can be used for meetings, training and conferences.

16. The ICS planning function is responsible for emergency situation reporting at the EOC and has established procedures and forms to be used.

17. The EMC maintains a General Operating Guide (GOG) for activating, staffing, and managing the EOC. This GOG can be found as appendix 8 to this plan.

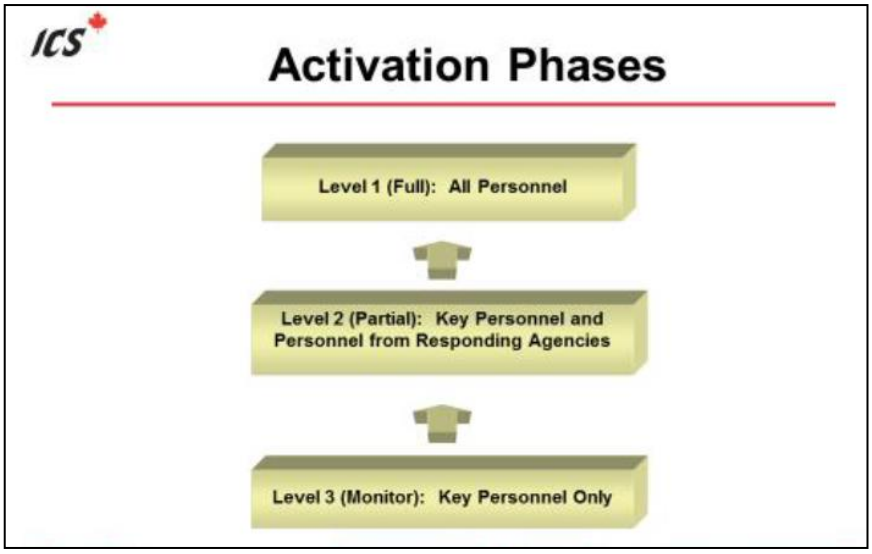
B. Notification and Activation (Alert)

1. In the WHRM day to day accidents and incidents are usually dealt with by police, fire and health services.
2. On notification of an emergency to the 9-1-1 Communications Center (CC), the CC will immediately alert the appropriate response organizations. This initial notification sets into motion the activation of emergency response personnel. Each emergency agency will respond according to their SOP's.
3. Should an event occur however, which, in the opinion of the Senior Official involved, presents a risk to all or part of the community, and as the situation is starting to intensify, the senior official present, shall contact the EMC to assess the situation, along with the senior official involved.
4. As the EMC receives the warning of a real or potential emergency and or disaster, he will brief the CAO on the situation and departs for the scene to assess the situation. The CAO will contact and brief the Mayer as necessary.
5. In the event of an emergency and/or disaster, and should the EMC, CAO or Mayor not be reached then, their designated alternates are to be contacted.
6. On receipt of this warning, the Mayor, assembles Council, and at that time if a state of local emergency is declared, then the Members of the Advisory Committee, with the CAO will initiate the Alert. The CAO also has the authority to activate the EOC.
7. Once the Alert has been activated, then the members of EMO Team report to the EOC. On arrival, EMO members establish communication with each of their departments, and open up a log and wait for the EOC Manager to give a briefing on the situation, after this briefing, it is very important for the public information officer, with the assistance of the RCMP, EHS, or Fire Department, to inform the public. By this time the remaining members of the EOC will be busy coordinating their duties with the EOC Manager.
8. The EMC in consultation with the CAO will determine level of EOC activation. Required personnel will be contacted via the "I Am Responding" system from the contact list on file.

EOC Activation Levels

The level of EOC activation is determined by the magnitude and scope of the event. Only those EOC functions and positions that are required to meet current response objectives are activated. If staff are not assigned to a function or role, the next available staff position in the EOC organization will assume responsibility for the tasks assigned. If an individual is unsure of which level to activate, the EOC is activated to the higher level since it is easier to scale back staffing than it is to ramp up.

Appendix 9 outlines the 'Activation Flowchart' for the EOC.



Deactivation

The EOC Manager (CAO) is responsible for EOC deactivation. The Manager considers the requirements of termination from the outset of the incident. Criteria for terminating EOC operations may include:

- Individual EOC functions are no longer required.
- State of Local Emergency is lifted.
- Coordination of response activities and/or resources is no longer required; and
- Incident has been contained and emergency personnel have returned to regular duties.

The Planning Sections' Demobilization Unit Coordinator in the EOC supervises and coordinates the demobilization process, under the direction of the EOC Manager.

C. Assessment and Evaluation

As a result of information provided by the EMC to the CAO, the EOC staff will, as appropriate, in coordination with the on-scene IC:

- develop guidelines by evaluating the safety, health, economic, environmental, social, humanitarian, legal, and political implications of a disaster or threat.
- analyze the best available data and information on the emergency.
- explore alternative actions and consequences.
- select and direct specific response actions.

D. Declaration of State of Local Emergency and Proclamation of Emergency Orders

1. In response to an emergency, or its likelihood, upon a finding that public safety is imperiled, the Council may proclaim a state of local emergency pursuant to Chapter 8 of the Provincial Emergency Management Act.
2. Such a proclamation authorizes the Council to deal with the emergency with full ministerial powers.
3. Municipal council may, when satisfied that an emergency exists or may exist in all or any area of the region declare a state of local emergency in all the municipality or area thereof.
4. If municipal council is unable to act promptly, the mayor may exercise that authority of municipal council contained in a section (2) after consulting, if it is practical to do so, with a majority of the members of council to advise on the development of emergency management plans.
5. A declaration pursuant to this section shall identify the nature of the emergency and the area in which it exists.
6. When a state of local emergency has been declared or terminated pursuant to the Act, the municipality shall immediately cause the details of the declaration or termination to be communicated or published by such means as the municipality considers the most likely to make the contents of the declaration or termination known to the people of the area affected.
7. Upon a state of local emergency being declared the mayor may, during the state of local emergency, do everything necessary for the protection of property and the health or safety of persons therein and, without restricting the generality of the foregoing, may:
   a. cause an emergency management plan or any part thereof to be implemented.
   b. acquire or utilize or cause the acquisition or utilization of personal property by confiscation or any means considered necessary.
   c. authorize or require a qualified person to render aid of such type as that person may be qualified to provide.
   d. control or prohibit travel to or from an area or on a road, street or highway.
   e. provide for the maintenance and restoration of essential facilities, the distribution of

essential supplies and the maintenance and co-ordination of emergency medical, social and other essential services.

f. cause or order the evacuation of persons and the removal of livestock and personal property threatened by an emergency and make arrangements for the adequate care and protection thereof.

g. authorize the entry by a person into any building or land without warrant.

h. cause or order the demolition or removal of anything where the demolition or removal is necessary or advisable for the purpose of reaching the scene of an emergency, or attempting to forestall its occurrence or of combating its progress.

i. order the assistance of persons needed to carry out the provisions mentioned in this section.

j. regulate the distribution and availability of essential goods, services and resources.

k. authorize and make emergency payments.

l. assess damage to any works, property or undertaking and the costs to repair, replace or restore the same.

m. assess damage to the environment and the costs and methods to eliminate or alleviate the damage.

8. Upon declaring a state of local emergency, the mayor,
   a. shall immediately forward a copy of the declaration to the Minister; and
   b. may authorize any person or committee to exercise any power vested in the mayor.
9. A municipality may terminate a state of local emergency with respect to an area identified by it in its declaration when, in its opinion, an emergency no longer exists in such area.
10. A state of local emergency terminates:
    (a) when the area identified by the municipality in its' declaration is identified by the Minister in a declaration of a Provincial state of emergency,
    (b) when it is terminated by the Minister or by the municipality.
    (c) seven days after the day on which it was declared unless it is renewed in accordance with this Act.
11. A state of local emergency may be renewed by the municipality with the approval of the Minister.
12. A mayor, a municipality, a committee established pursuant to this Act or a member thereof, or any other person
    a) is not liable for any damage arising out of any action taken pursuant to this Act or the regulations, and
    b) is not subject to any proceedings by prohibition, certiorari mandamus or injunction with respect to any action taken pursuant to this Act or the regulations.
13. Any person in the course of implementing an emergency management plan pursuant to this Act or the regulations may, at any time, enter upon any property.
14. Any person who obstructs a municipality, the EMO, a committee established pursuant to this Act or any person in the performance of any action, matter or thing authorized by this Act or who contravenes or fails to comply
    a. with any provision of this Act or any regulation, or
    b. with any direction, order or requirement made pursuant to this Act or the regulations,

is guilty of an offence and liable on summary conviction to a fine not exceeding one thousand dollars or to imprisonment of not more than six months or both.

15. Every person who with proper authority is absent from that persons accustomed employment and is on duty authorized by a municipality for the purpose of this Act shall while so absent, for all purposes relative to retention of employment, of seniority rights and of superannuation benefits, be deemed to have been in that person's accustomed employment during the period of absence.

E. Emergency Medical and Public Health

1. A high impact disaster can cause injury and death to large numbers of people. In addition, damage to and destruction of homes, special facilities, and vital utilities may place the public at substantial risk of food and water contamination, communicable diseases, and exposure to extreme temperatures.
2. There may be established within the Operations section an Emergency Medical/Public Health Group to ensure that health and medical problems are being addressed.

F. Meeting Human Needs

1. The Planning and Operations functions are responsible for ascertaining what human needs have been particularly affected by an emergency and responding to those unmet needs with the available resources of the Community Services/Red Cross and with the assistance of volunteer organizations and the private sector.
2. There may be established within the Operations section a Community Services/Red Cross to perform the tasks associated with (1) above.

G. Restoring Public Services

1. The Operations and Planning sections are responsible for ascertaining the emergency's effect on the infrastructure and the resultant impact on public services including transportation, electric, power, fuel distribution, public water, telephone, and sewage treatment and ensuring that restoration of services is accomplished without undue delay.
2. In the event of a major power outage, the EOC will liaise with a representative of Nova Scotia Power to facilitate communications and information flow between the utility and the Operations Section.
3. During response operations relating to debris clearance and disposal, the EOC should act in cooperation with the Nova Scotia Department of Transportation and Active Transit.

H. Resource Management

1. The Planning function is responsible for the identification and allocation of additional resources needed to respond to the emergency.
2. Resources owned by municipality should be used first in responding to the emergency.
3. Resources owned by other municipalities outside of WHRM can be utilized upon agreement between the requesting and offering government.
4. Resources owned by private business can be used under the terms of the local state of emergency.

I. General Operating Guidelines and other supporting plans.

1. Each department of the WHRM and assigned responsibility under the "Response" portion of this plan should have its own General Operating Guidelines (GOG). These GOGs address activation of personnel, shift assignments at the EOC, assignment to the field including the Incident Command Post (if applicable), coordination with other organizations, drills, exercises, and ICS training.
2. Each agency's GOG is to be updated at least annually and reviewed at a joint agency planning meeting. Copies of each GOG are retained by the EMO.
3. The following is a list of functional and hazard specific appendices that support this plan, and are on file with the EMO:

West Hants Fire Mutual Aid Plan
Red Cross Sheltering Plan

4. The following documents support this portion of the plan and are appended to it:

Appendix 6 - Special Events Guidelines EMO-NS 2014
Appendix 8 - Emergency Operations Center (EOC) General Operating Guide (GOG)
Appendix 10 - Instructions for Declaring a State of Emergency and Issuing Emergency Orders
Appendix 11 – I am Responding Contact list
Appendix 12 – Evacuation Considerations

J. Evacuation

Reference: WHRM Evacuation Operational Guidelines, May 2021 (Rsh)

The evacuation function describes how the public would be evacuated out of areas affected by an emergency situation that are deemed to be too hazardous for people to stay in place. Evacuation methods will be dependent on the incident and is the responsibility of the Incident Commander on site. A key component of the evacuation process is to look after the evacuees once they are evacuated and this is the responsibility of the municipality. This function shall be performed by the EMC unless the EOC is activated, at which time it will be organized and managed by the Logistics section Chief within the EOC. Evacuation considerations are outlined in appendix 12.

During an emergency the EOC operational support functions may include:

- Damage Assessment
- Debris Management
- Livestock and Pet Coordination

Evacuee Alerting & Sheltering

The decision to evacuate any specific area has two levels:

Immediate Evacuation: An immediate and sudden leak, spill, or fire at a fixed facility or mobile transport vehicle that requires identification of impacted areas to be evacuated followed by an immediate evacuation. This is the responsibility of the IC with support from the EMC to coordinate the moving of people and the opening of shelters to receive and house evacuees.

Alerting: Evacuees shall be notified to evacuate within the areas identified by the IC. Alerting shall be a door-to-door campaign by police with assistance from other agencies as required and available.

Time Critical Evacuation: An event that unfolds over a number of days, such as hurricanes that require an evacuation. In these cases, the evacuation will be managed by the EOC prior to the arrival of the severe weather event. The EOC will provide notifications and alerting, transport, and sheltering.

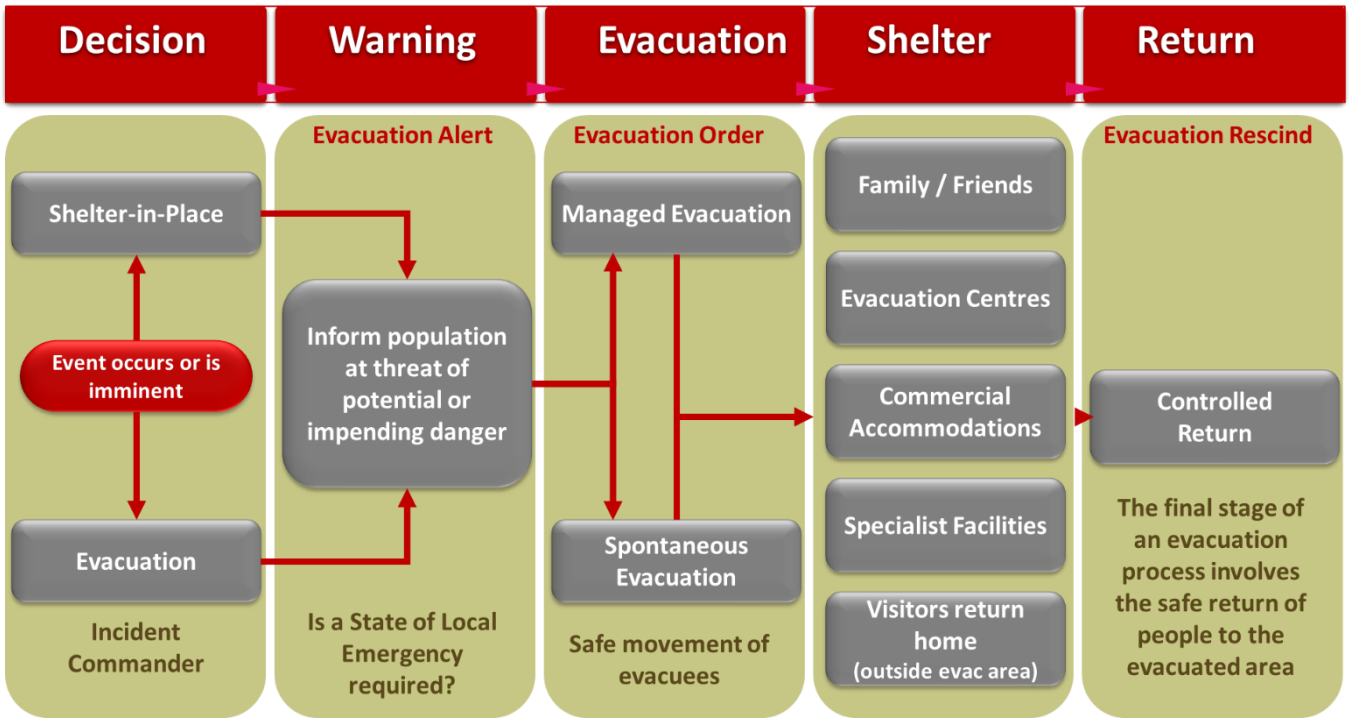
Alerting: Evacuees shall be notified to evacuate within the areas identified by the EOC Manager. Alerting shall be a police door to door campaign notifying citizens to evacuate as well as providing each family so advised of the location of their nearest shelter either within WHRM

or neighboring Counties. Police may accept assistance from other agencies as required and available. Additional alerting shall be through local media (radio) and social media. Evacuations will be supported by the EOC opening shelters to house displaced people and provide them with the necessities of life.

Evacuation Process

Evacuation takes place within a process that begins with preparing for the possible need to evacuate populations at high risk from imminent or actual disaster. It involves ongoing risk monitoring and management as the situation and needs of evacuees evolve over time, and only ends with their safe, voluntary and sustainable reintegration back home or in alternative locations.

Figure 2. – Evacuation Process



Section IV: RECOVERY

A. Damage Assessment

1. The Supervisors for Public Works are responsible for:
a) Developing a damage assessment program.
b) Coordinating damage assessment activities during and following an emergency.
c) Designating a Damage Assessment Officer for each emergency.
d) The Supervisors of Public Works will advise the CAO to maintain similar detailed records of emergency expenditures and supply them with standard documentation forms.
2. All departments will cooperate fully with the EMC in damage assessment activities including:

a) Pre-emergency:
1) identifying Municipal personnel, and resources to assist and support damage assessment activities.
2) identifying non-government groups such as non-profit organizations, trade organizations and professional people that could provide damage assessment assistance.
3) fostering agreements between Municipal governments and the private sector for technical support.
4) utilizing geographic information systems (GIS) in damage assessment
5) arranging for training of selected personnel in damage assessment survey techniques as required.

(b) Emergency:
1) obtaining and maintaining documents, maps, photos and video tapes of damage
2) reviewing procedures and forms for reporting damage to higher levels of government
3) determining if Provincial assistance is required in the damage assessment process

(c) Post-emergency:
1) selecting personnel to participate in damage assessment survey teams
2) identifying and prioritizing areas to survey damage
3) assigning survey teams to selected areas
4) completing damage assessment survey reports and maintaining records of the reports
5) It is essential that, from the outset of emergency response actions, that detailed records of expenditures for:
a) labour used
b) use of owned equipment
c) use of borrowed or rented equipment
d) use of materials from existing stock
e) contracted services for emergency response
f) submitting damage assessment reports to the Provincial Emergency Management Office

3. Damage assessment will be conducted by Public Works personnel, building inspectors, and members of non-profit organizations, such as the Red Cross and the Salvation Army. When necessary, non-government personnel from the fields of engineering, construction, insurance, property evaluation and related fields may supplement the effort.
4. There will be two types of damage assessment: Infrastructure (damage to public property and the infrastructure); Individual assistance (IA) teams (impact on individuals and families, agriculture, private sector).
5. Municipal damage assessment information will be reported to the Damage Assessment Officer at the EOC.
6. Personnel from Municipal departments, assigned damage assessment responsibilities, will remain under the control of their own departments, but will function under the technical supervision of the Damage Assessment Officer during emergency conditions.
7. All assessment activities in the disaster area will be coordinated with the on-site Incident Commander (when appropriate) and the EOC Manager.
8. The Emergency Management Coordinator, in conjunction with the Damage Assessment Officer, will prepare a Damage Assessment Report which will contain information on:
    1) destroyed property
    2) property sustaining major damage
    3) property sustaining minor damage, for the following categories:
    4) damage to private property in dollar loss to the extent not covered by insurance:
    5) homes, businesses, industries, utilities, hospital, institutions, and schools
    6) damage to public property in dollar loss to the extent not covered by insurance:
    7) road systems, bridges, water utilities, sanitation facilities, public buildings, equipment, vehicles, parks and recreational facilities.
    8) damage to agriculture in dollar loss to the extent not covered by insurance:
    9) farm buildings, machinery and equipment, crop losses, and livestock
    10) cost in dollar value will be calculated for individual assistance in the areas of mass care, and housing.
    11) municipal services provided beyond normal needs such as:
        - debris clearance and protective measures taken such as pumping, sandbagging, construction of warning signs and barricades, etc.
        - overtime and labour required for emergency services.

9. The municipality will submit the Damage Assessment Report to the Provincial Emergency Management Office. It is required for establishing the eligibility for any Provincial and/or Federal assistance.

B. Planning for Recovery

1. Recovery includes community development and redevelopment.
2. Community development is based on a comprehensive community development plan prepared under direction of the Planning and Development Department.
3. WHRM will decide whether the recovery will be managed through existing departments with planning and coordinative skills or by a recovery task force created exclusively for this purpose.
4. A recovery task force will:
    a) Direct the recovery with the assistance of municipal departments.
    b) Prepare a local recovery and redevelopment plan, unless deemed unnecessary,
5. The recovery and redevelopment plan shall include:
    a) Replacement, reconstruction, removal, relocation of damaged/destroyed
    b) Establishment of priorities for emergency repairs to facilities, buildings
    c) Economic recovery and community development.
    d) New or amended bylaws, subdivision regulations, and building codes.
6. Prevention and mitigation measures should be incorporated into all recovery planning if possible.

C. Reconstruction

1. Reconstruction consists of two phases:
a) Phase 1-short term reconstruction to return vital life support systems to minimum operating standards.
b) Phase 2-long term reconstruction and development which may continue for years after a disaster and will implement officially adopted plans and policies, including risk reduction projects, to avoid conditions and circumstances that led to the disaster.

2. Long term reconstruction and recovery includes activities such as:
    a) Scheduling planning for redevelopment
    b) Analyzing existing Provincial and Federal programs to determine how they may be used
    c) Providing temporary housing and facilities
    d) Public assistance
    g) Monitoring of reconstruction progress
3. Reconstruction operations must conform to existing Provincial/Federal laws and regulations concerning environmental impact.

D. Public Information on Recovery Assistance

1. Public Information Officers are responsible for arranging with the broadcast media and press to obtain their cooperation in adequately reporting to the public on:
    a) What kind of emergency assistance is available to the public.
    b) Who provides the assistance.
    c) Who is eligible for assistance.
    d) What kinds of records are needed to document items which are damaged or destroyed by the disaster.
    e) What actions to take to apply for assistance.
    f) Where to apply for assistance.

Section V: APPENDICES

1. Emergency Management Act
2. WHRM Emergency Management By-law RE-002
3. NS-EMO Hazard Risk Vulnerability Assessment (HRVA) Model
4. WHRM (HRVA) Hazards Rating and Ranking Results 2019
5. Former TOW Special Events By-law/Former WH Special Events By-law
6. Special Events Guidelines EMO-NS 2014
7. ICS Position Descriptions
8. EOC General Operating Guide (GOG)
9. EOC Activation Flow Chart
10. Instructions for Declaring a State of local Emergency (SOLE)
11. Contact List – I am Responding
12. Evacuation Considerations

Emergency Management Act

CHAPTER 8

OF THE

ACTS OF 1990

amended 2005, c. 48, ss. 1-6; 2007, c. 10, s. 2; 2009, c. 12
2011, c. 9, ss. 4-15

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An Act to Provide for a Prompt and Co-ordinated Response to a State of Emergency

Short title

1 This Act may be cited as the Emergency Management Act. *1990, c. 8, s. 1; 2005, c. 48, s. 1.*

Interpretation

2 In this Act,

(a) repealed 2005, c. 48, s. 2.

(aa) "Department" means the Department of Justice;

(b) "emergency" means a present or imminent event in respect of which the Minister or a municipality, as the case may be, believes prompt co-ordination of action or regulation of persons or property must be undertaken to protect property or the health, safety or welfare of people in the Province;

(c) repealed 2011, c. 9, s. 4.

(d) "emergency management plan" means any plan, program or procedure prepared by the Province or a municipality, as the case may be, that is intended to mitigate the effects of an emergency or disaster and to provide for the safety, health or welfare of the civil population and the protection of property in the event of such an occurrence;

(e) "Fire Marshal" means the Fire Marshal appointed pursuant to the Fire Prevention Act;

(f) "mayor or warden" includes an alderman or councillor acting in the stead of the mayor or warden, as the case may be;

(g) "Minister" means the Minister of Justice;

(h) "municipality" means a city, an incorporated town or a municipality of a county or district;

(i) "police officer" means a member of the Royal Canadian Mounted Police and a police officer of a municipality;

(j) "state of emergency" means a state of emergency declared by the Minister or renewed by the Minister pursuant to this Act;

(k) "state of local emergency" means a state of local emergency declared by a municipality or renewed by it pursuant to this Act. *1990, c. 8, s. 2; 2005, c. 48, ss. 2, 6; 2011, c. 9, s. 4.*

Act prevails and Minister's authority

3 (1) Where there is a conflict or inconsistency between this Act or the regulations and any other enactment respecting emergencies, this Act and the regulations prevail.

(2) The Minister has authority over all matters respecting emergency planning, preparedness, response, mitigation, recovery and emergencies in the Province.

(3) The Minister's authority under subsection (2) includes

(a) the general supervision and management of this Act;

(b) the co-ordination of emergency management plans within the Province; and

(c) authority to delegate powers vested in the Minister by or pursuant to this Act. *2009, c. 12, s. 1.*

Department of Justice

4 The Department has and shall exercise and perform such powers and duties as are vested in it by or under this Act and those assigned to it by the Minister. *2005, c. 48, s. 3; 2011, c. 9, s. 5.*

Advisory committee appointed by Governor in Council

5 The Governor in Council may appoint, from among the members of the Executive Council, a committee to advise the Governor in Council on matters relating to emergencies. *1990, c. 8, s. 5.*

Executive Emergency Management Committee

5A (1) There shall be an Executive Emergency Management Committee consisting of

(a) the Minister, who is the Chair;

(b) the Deputy Minister of Treasury Board;

(c) the Deputy Minister of the Office of the Premier;

(d) the Deputy Minister of Justice;

(e) repealed 2011, c. 9, s. 6.

(f) such experts as appointed by the Minister.

(2) The Executive Emergency Management Committee shall provide oversight and direction to the Minister regarding emergency preparedness, response, mitigation and recovery. *2009, c. 12, s. 2; 2011, c. 9, s. 6.*

Advisory committees appointed by Department

6 (1) The Department may appoint such committees as it considers necessary or desirable to advise or assist the Department, the Minister or the Governor in Council.

(2) A member of a committee appointed pursuant to subsection (1) may, if the member is not an employee of Her Majesty or an agency thereof, be paid such remuneration and expenses as the Governor in Council determines. *1990, c. 8, s. 6; 2005, c. 48, s. 6; 2011, c. 9, s. 7.*

Agreements and acquisition of property

7 (1) Subject to the approval of the Governor in Council, the Minister may, on behalf of the Province,

(a) enter into agreements with the Government of Canada, a province or a municipality, a state of the United States of America, or an agent of any of them, in respect of emergency management plans or provision of emergency services;

(b) enter into agreements with a board, commission, agency or Crown corporation of the Government of Canada, of a province or of a municipality, or an agent of any of them, in respect of emergency management plans;

(c) enter into agreements with the Government of Canada and the Workers' Compensation Board for the administration and payment of compensation benefits to persons engaged in training or carrying out duties related to a state of emergency or a state of local emergency;

(d) acquire, by purchase or lease, real and personal property for the purpose of emergency management.

(1A) Subject to the regulations, a person sent to the Province under an agreement entered into under clause (a) of subsection (1), who holds a licence, certificate or permit respecting the person's profession, trade or other qualifications from a jurisdiction that is a party to the agreement is deemed to be similarly qualified in the Province when providing assistance during a state of emergency or a state of local emergency.

(2) The Workers' Compensation Board may execute and administer an agreement referred to in this Section. *1990, c. 8, s. 7; 2005, c. 48, ss. 4, 6; 2011, c. 9, s. 8.*

Powers of Department

8 The Department may, subject to the approval of the Minister,

(a) review and approve, or require modification to Provincial and municipal emergency management plans;

(b) make surveys and studies to identify and record actual and potential hazards that may cause an emergency;

(c) make surveys and studies of resources and facilities to provide information for the effective preparation of emergency management plans;

(d) conduct public information programs related to the prevention and mitigation of damage during an emergency;

(e) conduct training and training exercises for the effective implementation of emergency management plans;

(f) procure food, clothing, medicines, equipment and goods of any nature or kind for the purposes of emergencies;

(g) authorize or require the implementation of any emergency management plan;

(h) enter into agreements with any persons, organizations or associations in respect of emergency management plans. *1990, c. 8, s. 8; 2005, c. 48, s. 6; 2011, c. 9, s. 9.*

Powers of Minister

9 The Minister may

(a) divide the Province into districts and subdistricts for the purpose of this Act;

(b) after consultation with the municipalities concerned, designate a combination of municipalities or parts thereof as a municipality for the purpose of this Act and determine the respective responsibilities of municipalities in the designated area;

(c) require municipalities to prepare emergency management plans, including mutual aid programs, and to submit such plans to the Department for review for adequacy and integration with the Provincial emergency management plans;

(d) establish procedures for the prompt and efficient implementation of emergency management plans;

(e) require any person to develop emergency management plans in conjunction with the Department or the municipalities to remedy or alleviate any hazard to persons or property that is or may be created by

(i) a condition that exists or may exist on that person's property,

(ii) that person's use of property,

(iii) an operation in which that person is or may be engaged, or

(iv) a process that that person is or may be utilizing,

except where an enactment of the Province or a municipal by-law provides a procedure for dealing with the hazard. *1990, c. 8, s. 9; 2005, c. 48, s. 6; 2011, c. 9, s. 10.*

Medal for long service

9A (1) In recognition of a significant contribution to the protection of persons and property by a member of a ground search and rescue crew or other person involved in the provision of emergency services, the Minister or a person designated by the Minister, on the recommendation of the Department, may issue a medal for long service.

(2) Where the Minister or the Minister's designate has issued a medal for long service, the Minister or the designate, on the recommendation of the Department, may issue a bar for further service to accompany the medal. *2007, c. 10, s. 2; 2011, c. 9, s. 11.*

Powers and duties of municipalities

10 (1) Within one year after the coming into force of this Act, each municipality shall

(a) subject to the approval of the Minister, establish and maintain a municipal emergency by-law;

(b) establish and maintain a municipal emergency management organization;

(c) appoint a co-ordinator of the municipal emergency management organization and prescribe the duties of the co-ordinator which shall include the preparation and co-ordination of emergency management plans for the municipality;

(d) appoint a committee consisting of members of the municipal council to advise it on the development of emergency management plans; and

(e) prepare and approve emergency management plans.

(2) The municipality may

(a) pay the reasonable expenses of members of the organization or members of the committee appointed pursuant to clause (b) or (d) of subsection (1);

(b) enter into agreements with and make payments to persons and organizations for the provision of services in the development and implementation of emergency management plans;

(c) enter into an arrangement or agreement with any other municipality respecting a common organization, plan or program;

(d) appropriate and expend sums approved by it for the purpose of this Section. *1990, c. 8, s. 10; 2005, c. 48, s. 6.*

Municipality to report emergency

10A Every municipality shall, immediately upon becoming aware of it, inform the Department of any real or anticipated event or emergency that could impact the health, safety or welfare of Nova Scotians, their property or the environment. *2009, c. 12, s. 3; 2011, c. 9, s. 12.*

Police

11 (1) The Minister may appoint persons trained for police duties as auxiliary police officers for the purpose of this Act.

(2) Police officers and auxiliary police officers have such powers, duties and responsibilities as the regulations prescribe and shall be organized and operate in accordance with the regulations.

(3) A police officer or auxiliary police officer, in carrying out duties pursuant to this Act and the regulations, has and may exercise in any part of the Province all the powers, authorities and immunities of a peace officer as defined in the Criminal Code (Canada).

(4) The protection afforded by this Act and any other enactment to a police officer or auxiliary police officer extends to any other person while and to the extent that that person is in the course of assisting a police officer or auxiliary police officer under the police officer's or auxiliary police officer's direction. *1990, c. 8, s. 11.*

State of emergency or state of local emergency

12 (1) The Minister, after consulting, if it is practical to do so, with a majority of the members of a committee established pursuant to Section 5 or a quorum of the Executive Council and, if the Minister is satisfied that an

emergency exists or may exist, may declare a state of emergency in respect of all or any district, subdistrict or area of the Province.

(2) A municipal council may, when satisfied that an emergency exists or may exist in all or any area of that municipality, declare a state of local emergency in respect of that municipality or area thereof.

(3) If a municipal council is unable to act promptly, the mayor or warden may exercise the authority of the municipal council contained in subsection (2) after consulting, if it is practical to do so, with a majority of the members of the council's committee to advise on the development of emergency management plans.

(4) A declaration pursuant to this Section shall identify the nature of the emergency and the area in which it exists.

(5) Nothing in this Section prevents the Minister from declaring a state of emergency whether a state of local emergency has been declared or not. *1990, c. 8, s. 12; 2005, c. 48, s. 6.*

Publication of declaration or termination

13 When a state of emergency or a state of local emergency has been declared or terminated pursuant to this Act, the Minister or the municipality, as the case may be, shall immediately cause the details of the declaration or termination to be communicated or published by such means as the Minister or the municipality, respectively, considers the most likely to make the contents of the declaration or termination known to the people of the area affected. *1990, c. 8, s. 13.*

Protection of property and health or safety

14 Upon a state of emergency being declared in respect to the Province or an area thereof, or upon a state of local emergency being declared in respect to a municipality or an area thereof, the Minister may, during the state of emergency, in respect of the Province or an area thereof, or the mayor or warden, as the case may be, may, during the state of local emergency, in respect of such municipality or an area thereof, as the case may be, do everything necessary for the protection of property and the health or safety of persons therein and, without restricting the generality of the foregoing, may

(a) cause an emergency management plan or any part thereof to be implemented;

(b) acquire or utilize or cause the acquisition or utilization of personal property by confiscation or any means considered necessary;

(c) authorize or require a qualified person to render aid of such type as that person may be qualified to provide;

(d) control or prohibit travel to or from an area or on a road, street or highway;

(e) provide for the maintenance and restoration of essential facilities, the distribution of essential supplies and the maintenance and co-ordination of emergency medical, social and other essential services;

(f) cause or order the evacuation of persons and the removal of livestock and personal property threatened by an emergency and make arrangements for the adequate care and protection thereof;

(g) authorize the entry by a person into any building or upon land without warrant;

(h) cause or order the demolition or removal of any thing where the demolition or removal is necessary or advisable for the purpose of reaching the scene of an emergency, of attempting to forestall its occurrence or of combating its progress;

(i) order the assistance of persons needed to carry out the provisions mentioned in this Section;

(j) regulate the distribution and availability of essential goods, services and resources;

(k) authorize and make emergency payments;

(l) assess damage to any works, property or undertaking and the costs to repair, replace or restore the same;

(m) assess damage to the environment and the costs and methods to eliminate or alleviate the damage. *1990, c. 8, s. 14; 2005, c. 48, s. 6.*

Duty of mayor or warden and delegation of Section 14 powers

15 (1) Upon declaring a state of local emergency, a mayor or warden, as the case may be,

(a) shall immediately forward a copy of the declaration to the Minister; and

(b) may authorize any person or committee to exercise any power vested in the mayor or warden, respectively, by Section 14.

(2) Upon declaring a state of emergency, the Minister may authorize any person or committee to exercise any power vested in the Minister by Section 14. *1990, c. 8, s. 15.*

Prices

16 (1) During a state of emergency or a state of local emergency, no person in the Province may charge higher prices for food, clothing, fuel, equipment, medical or other essential supplies or for the use of property, services, resources or equipment than the fair market value of the same thing immediately before the emergency.

(2) A contract that is contrary to subsection (1) is voidable at the option of the purchaser if the purchaser repudiates the contract within one month after the termination of the state of emergency or state of local emergency. *1990, c. 8, s. 16.*

Fires and law enforcement

17 During a state of emergency,

(a) the Fire Marshal is the co-ordinator of all efforts in relation to the suppression and prevention of fires, and every fire brigade, fire department and firefighter in the area in which the state of emergency exists is subject to the direction and control of the Fire Marshal; and

(b) a peace officer designated for this purpose by the Solicitor General is the co-ordinator of all efforts in relation to law enforcement and every police officer and auxiliary police officer in the area in which the state of emergency exists is subject to the direction and control of that officer. *1990, c. 8, s. 17.*

Termination of state of emergency or state of local emergency

18 (1) The Minister may

(a) terminate a state of emergency with respect to an area identified by the Minister in a declaration of a state of emergency when, in the Minister's opinion, an emergency no longer exists in such area; and

(b) terminate a state of local emergency with respect to an area identified by a municipality in its declaration of a state of local emergency when, in the Minister's opinion, an emergency no longer exists in such area.

(2) A municipality may terminate a state of local emergency with respect to an area identified by it in its declaration of a state of local emergency when, in its opinion, an emergency no longer exists in such area. *1990, c. 8, s. 18.*

Termination within fourteen days and renewal

19 (1) A state of emergency terminates fourteen days after the day on which it was declared unless it is renewed or terminated by the Minister.

(2) A state of emergency may be renewed by the Minister with the approval of the Governor in Council.

(3) The provisions of this Act respecting a state of emergency and the declaration thereof apply, with the necessary changes, to a renewal of a state of emergency. *1990, c. 8, s. 19.*

Termination of state of local emergency and renewal

20 (1) A state of local emergency terminates

(a) when the area identified by the municipality in its declaration of a state of local emergency is included in an area identified by the Minister in a declaration of a state of emergency;

(b) when it is terminated by the Minister or by the municipality;

(c) seven days after the day on which it was declared unless it is renewed in accordance with this Act.

(2) A state of local emergency may be renewed by the municipality with the approval of the Minister.

(3) The provisions of this Act respecting a state of local emergency or the declaration thereof apply, with the necessary changes, to a renewal of a state of local emergency. *1990, c. 8, s. 20.*

No liability

21 The Minister, a mayor or warden, a municipality, the Department, a committee established pursuant to this Act or a member thereof, or any other person

(a) is not liable for any damage arising out of any action taken pursuant to this Act or the regulations; and

(b) is not subject to any proceedings by prohibition, certiorari, mandamus or injunction with respect to any action taken pursuant to this Act or the regulations. *1990, c. 8, s. 21; 2005, c. 48, s. 6; 2011, c. 9, s. 13.*

Entry upon property

22 Any person in the course of implementing an emergency management plan pursuant to this Act or the regulations may, at any time, enter upon any property. *1990, c. 8, s. 22; 2005, c. 48, s. 6.*

Offence of obstruction

23 Any person who obstructs the Minister, a municipality, the Department, a committee established pursuant to this Act or any person in the performance of any action, matter or thing authorized by this Act or who contravenes or fails to comply

(a) with any provision of this Act or any regulation; or

(b) with any direction, order or requirement made pursuant to this Act or the regulations,

is guilty of an offence and liable on summary conviction

(c) in the case of an individual, to a fine not exceeding ten thousand dollars; or

(d) in the case of a corporation, to a fine not exceeding one hundred thousand dollars,

or to imprisonment of not more than six months or both. *1990, c. 8, s. 23; 2005, c. 48, s. 6; 2009, c. 12, s. 4; 2011, c. 9, s. 14.*

Additional penalty

23A In addition to any penalty imposed under Section 23, a court may increase the fine imposed on a person by an amount equal to the financial benefit that was acquired by or that accrued to the person as a result of the commission of the offence. *2009, c. 12, s. 5.*

Absence from employment

24 Every person who with proper authority is absent from that person's accustomed employment and is on duty authorized by the Minister or by the council of a municipality for the purpose of this Act shall, while so absent, for all purposes relative to retention of employment, of seniority rights and of superannuation benefits, be deemed to have been in that person's accustomed employment during the period of absence. *1990, c. 8, s. 24.*

Regulations

25 (1) The Governor in Council may make regulations

(a) respecting emergency planning for the continuity of functions of departments, boards, commissions, corporations and other agencies of the Province;

(b) respecting the vesting of special powers and duties in various departments and agencies of the Province for the purposes of emergency planning and the implementation of emergency management plans;

(ba) respecting the recognition of the professional, trade or other qualifications of persons sent to the Province by another jurisdiction under an agreement entered into under clause (a) of subsection (1) of Section 7 during a state of emergency or state of local emergency;

(bb) requiring municipalities to assess their level of preparedness and report their findings to the Department;

(bc) respecting the emergency planning, evaluation, and level of preparedness required of municipalities;

(bd) respecting emergency plans to be submitted by municipalities to the Emergency Management Office;

(c) respecting the organization, responsibilities, powers, duties and operation of police officers and auxiliary police officers throughout the Province or any part thereof for the purpose of this Act;

(ca) respecting emergency planning, evaluation and reporting for non-governmental entities;

(d) respecting authority to be delegated pursuant to this Act;

(e) prescribing the forms to be used for a declaration of a state of emergency and renewals and ~~temination~~ [termination] of the same;

(f) respecting the establishment, operation, liability and responsibilities of ground search and rescue organizations;

(g) prescribing renewal periods for states of emergency;

(h) defining any word or expression used in this Act but not defined herein;

(i) respecting any matter or thing that the Governor in Council deems necessary for the administration of this Act.

(2) The exercise by the Governor in Council of the authority contained in subsection (1) shall be regulations within the meaning of the Regulations Act.

(3) An order or regulation made under this Act may be made retroactive to the date in the order or regulation.

(4) Notwithstanding the Regulations Act, an order or regulation made under this Act during a state of emergency or a state of local emergency comes into force immediately on the signing by the Governor in Council or by the person who makes it, unless some other time is stated as being the time when it comes into force. *1990, c. 8, s. 25; 2005, c. 48, ss. 5, 6; 2009, c. 12, s. 6; 2011, c. 9, s. 15.*

Repeal

26 Chapter 145 of the Revised Statutes, 1989, the Emergency Measures Act, is repealed. *1990, c. 8, s. 26.*

Proclamation

27 This Act comes into force on and not before such day as the Governor in Council orders and declares by proclamation. *1990, c. 8, s. 27.*

Proclaimed - July 31, 1990
In force - November 1, 1990

homepage statutes statutes by title

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In accordance with the Emergency Management Act R.S.N.S. 1990 c.8 s.10, the Council of the West Hants Regional Municipality enacts the following:

Short Title

1. This By-law shall be known as the "Emergency Management By-law."

Interpretation

2. In this By-law,
   a) "Act" means Emergency Management Act, R.S.N.S. 1990, c.8 or successor legislation and references to the Act or to regulations made under the Act are to be interpreted as meaning the Act or regulations as they may be amended from time to time;
   b) "agent" means a person, persons, company or any other organization employed or contracted to act on behalf of the Municipality;
   c) "Chief Administrative Officer" means the Chief Administrative Officer of the Municipality;
   d) "Committee of the Whole" means the committee of Council consisting of all Councillors;
   e) "Council" means the Council of the Municipality;
   f) "Councillor" means a member of Council;
   g) "Emergency" has the meaning prescribed by the Act;
   h) "Emergency Management Coordinator" means the person appointed by the Municipality to fulfill the functions prescribed by the Act, regulations made under the Act, or by this By-law;
   i) "Emergency Management Advisory Committee" means the advisory committee appointed by the Municipality to fulfill the functions prescribed by the Act, regulations made under the Act, or by this By-law;
   j) "Emergency Management Planning Committee" means the planning committee established pursuant to this By-law;
   k) "emergency management plan(s)" has the meaning prescribed by the Act;
   l) "employee" means a person employed either part or full time by the Municipality;
   m) "Mayor" means the Mayor of the Municipality or a Councillor lawfully acting in the stead of the Mayor;
   n) "Municipal Emergency Management Organization" means the organization established pursuant to this By-law;

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o) "Municipality" means the West Hants Regional Municipality;

p) "State of Local Emergency" means a state of local emergency declared by Council or Mayor pursuant to the Act or renewed by the Municipality pursuant to the Act and regulations made under the Act.

Municipal Emergency Management Organization

3. The Council hereby establishes a Municipal Emergency Management Organization.

4. The Municipal Emergency Management Organization shall consist of the following persons and committees:

   a) The Emergency Management Advisory Committee;

   b) The Emergency Management Coordinator; and

   c) The Emergency Management Planning Committee.

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Emergency Management Advisory Committee

5. The Committee of the Whole shall act as the Emergency Management Advisory Committee.

6. The Emergency Management Advisory Committee shall:

   a) Advise Council on the development and maintenance of emergency management plans;

   b) Present emergency management plans to Council;

   c) Prepare and recommend the annual operating budget to Council for approval;

   d) Brief Council on developments during a Local State of Emergency; and

   e) Perform such other duties as may be required by the Council or by the Act or regulations made under the Act or by this by-law.

Emergency Management Coordinator

7. The Emergency Management Coordinator reports to the Chief Administrative Officer and shall be responsible, through the Emergency Management Advisory Committee for:

   a) Act as chair of the Emergency Management Planning Committee;

   b) Coordinate and prepare emergency management plans, training and exercises;

   c) Be responsible for on-going public self-help education programs related to emergency preparedness;

d) Following activation of the Municipality's emergency management plan or declaration of a State of Local Emergency, prescribe as necessary the duties to be fulfilled by municipal departments or agencies, employees and agents of the Municipality;

e) Perform such duties in accordance with the emergency management plan, and carry out any lawful directives of the Mayor, a Councillor lawfully acting in the stead of the Mayor, the Chief Administrative Officer, the Emergency Management Advisory Committee or Council.

Emergency Management Planning Committee

8. Emergency Management Planning Committee members shall include:

a) Emergency Management Coordinator

b) Chief Administrative Officer

c) Directors or representatives of every Municipal department or agency which has been assigned emergency related functions under the Municipality's emergency management plan, including those responsible for providing the following services during an emergency:

i. Law enforcement

ii. Search and rescue

iii. Fire control

iv. Hazardous material control

v. Transportation

vi. Health Care

vii. Communication

viii. Public Information

ix. Utilities

d) Directors or representatives of such of the following provincial departments or agencies as are willing to participate:

i. Nova Scotia Emergency Management Office

ii. Lands and Forestry

iii. Education

iv. Community Services

v. Health and Wellness

vi. Transportation and Active Transit

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9. The Emergency Management Coordinator shall chair the Emergency Management Planning Committee.

10. The Emergency Management Planning Committee shall:

    a) Assist the Emergency Management Coordinator in the preparation and coordination of emergency management plans;

    b) Advise the Emergency Management Advisory Committee on the development of emergency management plans;

    c) Upon request, assist the Emergency Management Advisory Committee in the annual presentation of emergency management plans to Council;

    d) Following activation of the Municipality's emergency management plan or a declaration of State of Local Emergency, fulfill the duties as prescribed in the emergency management plans;

    e) Perform such other duties as may be required by the Mayor, a Councillor lawfully acting in the stead of the Mayor, Emergency Management Advisory Committee or Council.

Agreements

11. The Municipality may enter into agreements with the Government of Canada, the Province of Nova Scotia, another municipal unit, or any other person or organization, for the provision of services in the development and implementation of emergency management plans.

12. Except as otherwise limited by Council or by the Chief Administrative Officer, following activation of the Municipality's emergency management plan or a declaration of a State of Local Emergency, the Emergency Management Coordinator has authority to bind the Municipality to contracts made for the purpose of responding to emergency conditions.

Duties of Council

13. Review and approve emergency management plans presented to it by the Emergency Management Advisory Committee.

14. Specify additional duties to be fulfilled by the Emergency Management Advisory Committee, Emergency Management Coordinator and the Emergency Management Planning Committee.

15. Request assistance from the Province of Nova Scotia and/or Government of Canada in accordance with established guidelines.

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16. Declare a State of Local Emergency, in accordance with the Act, and communicate it to the public.

17. Extend or terminate a State of Local Emergency in accordance with the Act.

18. The Council may appropriate and expend monies:

    a) To pay reasonable expenses of members of the Emergency Management Advisory Committee, Emergency Management Coordinator and the Emergency Management Planning Committee;

    b) To fulfill the terms and conditions of an agreement made pursuant to this by-law; and

    c) To respond to emergency conditions following activation of the Municipality's emergency management plan or a declaration of a State of Local Emergency.

Duties During an Emergency

19. Following activation of the Municipality's emergency management plan or a declaration of a State of Local Emergency, and for the duration of the emergency:

    a) Every Councillor shall advise the Mayor as to their whereabouts and how they may be contacted;

    b) Every employee and agent of the Municipality who has a designated role in an emergency as identified in emergency management plans staff list shall:

        i. Advise the Emergency Management Coordinator of their whereabouts and how they may be contacted; and

        ii. Fulfill such duties as may be prescribed by the Emergency Management Plan or as may be lawfully directed by the Council, the Chief Administrative Officer or the Emergency Management Coordinator.

Repeal

20. The Regional Emergency Management By-law of the former Municipality of the District of West Hants dated March 13, 2007; the Regional Emergency Management By-law of the former Town of Windsor dated January 28, 2003; and all other Emergency Management By-laws of the Municipality of the District of West Hants and Town of Windsor are hereby repealed.

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I, Rhonda Brown, Municipal Clerk of the West Hants Regional Municipality, the Province of Nova Scotia, do hereby certify that this is a true copy of the By-law as adopted by the Council of the West Hants Regional Municipality at a meeting duly called and held on the _____day of _____(month), _____(year).

_____

R.N. Brown
Municipal Clerk

By-law Adoption	
First Reading:	*date*
Notice Published:	*date*
Second Reading & Approval	*date*
Final Publication	*date*
Notice to Municipal Affairs	*date*
Description: Initial approval of the Emergency Management By-law, RE-002.	

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Nova Scotia EMO

Hazard Risk Vulnerability Assessment (HRVA) Model

Guidelines for Use

October, 2010

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1. Background

Nova Scotia EMO works with Regional and Municipal Emergency Management Coordinators to promote best practices in all areas of emergency management. At a working session in February 2010, EMC's / REMC's and DEPO's indicated they would like to see hazard, risk and vulnerability assessment as a focus for future development.

To capitalize on the work already done and continue with the emergency management program goals including e-team development, the province has adopted a standard model for assessing risks and hazards. Standardized information will be collected from municipalities and responders to provide provincial assessments. Warnings and alerts will also adopt the standardized format to provide municipal leaders impact information in a consistent manner for preparation and planning purposes.

This Hazard Risk Vulnerability Assessment (HRVA) Model has been adopted as a draft format. The model will be presented at the "Partners in Preparedness" Conference in October 2010 for input and suggestions for improvements before being accepted in final format.

Once accepted as a provincial standard, the model will provide the basis for Hazard Analysis throughout the province and will form the foundation for future preparedness and planning purposes.

2. Definitions

Critical Infrastructure- as one of the priorities for emergency management, critical infrastructure refers to organizations, persons, buildings and technology considered vital to the health, well-being, and economics of the population.

Hazard- a source of potential harm, or a situation with a potential for causing harm, in terms of human injury; damage to health; property, the environment, and other things or value or a combination of these.

Impact- the results or ultimate outcomes of an event or a series of events. When an event occurs, the impact can be measured by examining the event consequences. By continuously asking the questions "so what", event consequences can be determined.

Probability-the frequency or likelihood that an event will happen. This can be measured by historical data and predicted models.

Risk Analysis- the process of identifying the known and potential impacts a hazard may create. As a result of risk analysis, decisions are made as to whether or not a response or further analysis is required.

Risk Tolerance- the degree to which the population or segments of the population are able to tolerate the chance of a hazard or threat occurring. It is a subjective measure of perception often influenced by past experience, media exposure and political agendas.

Susceptible Populations/Persons- groups of individuals that because of the nature of the particular hazard, time of day of occurrence, or seasonal factors, may be more adversely affected than the rest of the general population.

Vulnerability- a degree of susceptibility or increased likelihood of being adversely impacted due to the nature of the particular hazard, time of day of occurrence, or seasonal factors association with the event.

3. Principals of Hazard Analysis

In emergency planning, hazard analysis is the first step in identifying the known and potential impacts a hazard may create. Once the impacts have been assessed, priorities for planning are identified. Effective emergency plans offer mitigation and response solutions to the impacts identified during hazard assessment.

The hazard analysis process examines events by considering two factors:

1. Probability- the frequency or likelihood of occurrence, and

2. Impact- the consequences likely to be experiences should such an event occur

The NS-EMO HRVA Model considers a third factor in the assessment:

3. Risk Tolerance

This parameter is included because of the reality of the importance of public perception. The general public, particularly when influenced by a variety of media sources, may not assess hazards according to the same models of probability and impact that emergency planners do. In some cases, a low tolerance to the impacts of a hazard may increase the priority for planning even when probability and impact are low.

Both quantitative and qualitative measures are used in assessing risk. Quantitative measures are objective data, such as number of occurrences in the past or insurance costs tabulated as a result of an event. Quantitative measures can be applied to events that have occurred either to the community being assessed or in similar areas. Qualitative measures are more subjective in nature. Because no two events or communities are ever exactly the same, much of hazard analysis becomes based on broad categories, judgement, and assumptions.

Because of the qualitative nature of risk assessment, it is important to be consistent in analysis in order to set priorities for planning that have reviewed all hazards using the same tool and judgement parameters.

Effective Hazard Analysis can be used in emergency response mode as well as in planning sessions. During the early warning or immediate impact of an event, a review of the hazard assessment can clearly identify the response objectives, including special considerations for vulnerable populations and allocation of resources.

4. Best Practices Review

A review of Hazard Analysis practices reveals that most agencies, provinces and countries measure risks according to probability, likelihood, or frequency that an event will occur and the severity of impact such an event might have.

There appears to be no consistent model or method among the assessments reviewed to determine the probability or impact levels. Most methods combine quantitative measures such as property loss values and historical information and very qualitative information based on broad subjective measure and judgement dependent on the person or organization performing the analysis. None of the documents reviewed consider the element of Risk Tolerance although many documents talked about the important of this component. Most documentation provided the end results of a hazard review but did not define how the conclusions were made.

Provincial bodies in both Manitoba and British Columbia have published Hazard Analysis and Risk Assessment documentation for their areas. The Manitoba assessment, "Hazard Analysis and Risk Assessment" is published by the Office of the Fire Commissioner and can be found on-line at www.firecomm.gov.mb.ca The British Columbia document, "British Columbia Hazard Risk and Vulnerability Tool Kit, 2004. Can be found on-line at www.pep.bc.ca/hrva/tookit.html

Concepts from both these documents were modified for use in the Nova Scotia EMO HRVA model.

5. Provincial Hazards List

In order to provide direction on the Hazards to review through the model, NS-EMO has identified the most likely hazards to affect communities in Nova Scotia. This list is provided as Table 1 of the HRVA Model.

On the left column of the Table, the Hazards are identified within the categories of Natural Events; Technological Events; Industrial Events; and Human-Induced Events. On the right column, the typical impacts associated with each of the hazards are outlined.

The hazards identified and typical impacts are meant to provide guidance to communities. Due to the unique nature of communities throughout the province, some hazards may cause differing impacts or provide challenges not listed. Those living and working within the community may be aware of hazards and impacts outside the scope of the table that should be considered when completing the hazard analysis model. Due to locations, mitigation efforts, and preparedness strategies, some communities may consider only some of the impacts listed realistic for their situation.

Table 1 is meant as a guide to provide a basis for understanding impacts and completing the model in a consistent manner. Communities should add and delete hazards and impacts according to their situation.

A complete Municipal Hazard Analysis would include the HRVA Model results for each of the 18 hazards identified in the list.

6. Components of the NS-EMO HRVA Model

Probability (Historical and Predicted)- This section examines historical frequency of the hazard occurring as well as predictions of occurrence. Historical data can be collected from municipal records, first responders, and insurance data. The Canadian Disaster Database, http://www.publicsafety.gc.ca/prg/em/cdd/srch-eng.aspx maintained by Public Safety Canada is another source for historical data. Predicted data should be collected from reputable sources only such as Environment Canada, Nova Scotia EMO, or local agency sources. For each hazard, a final number (1-5 scale) is assigned to the probability rating.

Impacts (Susceptibilities both Human and Infrastructure)- This section examines the consequences of the event regardless of the probability rating. The most likely impact area is identified. In some cases this might be the entire municipality. For some hazards a more localized area may be more likely to be affected. Once the area is identified, susceptible populations within the area are identified. Appendix A is a supporting document to help define such populations according to the hazard impacts. Critical Infrastructure in the impact area is also listed. Once the area, populations and infrastructure within have been identified, the potential impacts are assessed. Typical impacts for each hazard are identified in Table 1. From this list of typical impacts, the chart can then be filled out identifying potential death or injury, displaced or isolated persons, environment and property damage and resources required for each potential impact. This assessment is largely qualitative in nature and should be completed in the group format with qualified individuals. Once the chart has been completed, an overall impact score is assigned based on the raking levels. The group must consider all the parameters identified in the chart prior to assigning an impact score. Groups may vary on the level they assign; hence the same group should assess all hazards in order to maintain consistency.

Risk Tolerance- Once an Overall Impact Score has been assigned to the hazard, the group should consider the Risk Tolerance of the community. Consider how the general public and media are likely to react to such an event. Identify other groups such as political groups, activists or agencies that may react. If groups are likely to accept the impacts of the hazard, work towards restoring the community, and are generally prepared for the event, the risk tolerance is considered high. If groups are likely to become disorderly, raise concerns, be demanding of officials, and unable to accept the impacts, risk tolerance is considered low. As a general rule, natural hazards are tolerated better by the public than technological or human-induced events but local factors and past experience will drive the tolerance rating. Risk tolerance will change over time and according to situational influences.

Hazard Risk Vulnerability Rating- this rating is achieved by multiplying the Probability Score by the Overall Impact Score. This rating does not consider the Risk Tolerance assessment. A final score from 1-25 is assigned to the hazard. Considering Risk Tolerance is a very dynamic factor, the overall Hazard Risk Vulnerability Rating is assigned without the Risk Tolerance factor.

Final Hazard Assignment- The final hazard assignment is used to identify priorities for planning and considers the risk tolerance level. Generally, a final Hazard Risk Vulnerability Rating of 11-25 would

identify a need to set the hazard as a high priority for planning. A rating of 6-10 indicates moderate priority for planning and 1-5 indicates a low priority for planning. However, if risk tolerance is low to medium, this hazard may require further analysis and earlier attention to planning than it might normally rank. This Final Hazard Assignment can be presented to groups instrumental in supporting the planning process.

7. HRVA Model

8. Taking the Model to the Community Level

The HRVA Model is designed to be completed in a collaborative process with individuals who are familiar with emergency management at the municipal level.

Once the REMC/EMC has a working knowledge of the model, it is suggested the model be taken to the committee that is typically involved in emergency planning. Most likely this committee is comprised of first and second responders. In some cases, elected officials may also be part of this group. In a working session, this group should then complete the model for each of the hazards identified. In order to ease the process, it may be helpful to start with those hazards most familiar to the group.

Once completed, the hazard analysis model provides documentation to support planning and allocation of resources. It recommended completed models be shared with Mayors and Councils to advance the emergency management program.

Once NS-EMO has collected the municipal HRVA models, an overall provincial assessment can be made providing documentation and support for preparedness, planning and resource allocation from the province to individual communities.

9. Appendix A

Nova Scotia Emergency Management Organization
Hazard Risk Vulnerability Model

Background Information

Analysis Completed For: _____

Analysis Completed By: _____

Category of Hazard

- ☐ Natural
- ☐ Technological
- ☐ Industrial
- ☐ Human-Induced

Identify Specific Hazard: _____

PROBABILITY

If this type of event has occurred in the area in the past, complete the table below.

Historical Events

Date (most recent first)	Changes made since	Comments

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Predicted Events without Historical Evidence

Predicting Authority	Evidence to support prediction with timeframe (5, 7, 20, 100, or 500 years)	Mitigation Strategies in Place	Comments

Probability Score

(Considering historical and predicted probability rate the likelihood of occurrence in years)

- 5 Highly Probable within 5 years or less
- 4 Likely to occur every 5-7 years
- 3 Might occur once every 20 years
- 2 Not expected; could occur once every 100 years
- 1 Rare chance of occurrence every 500 or more years

DRAFT

Impacts

Identify most likely Impact Area (geographical; map reference)

_____

Identify Population number in Impact Area

_____

Identify numbers of Susceptible Persons in Impact Area (Identify groups)

Appendix A supporting document

_____

_____

_____

_____

Identify critical Infrastructure in Impact Area

_____

_____

_____

_____

DRAFT

Using Table 1, list the potential impacts of the hazard you are assessing in the left hand column of the table below. Considering your impact area, susceptible groups and infrastructure within the area, identify the degree of impact for each.

Typical Impacts	# of potential Deaths or Injuries	# of persons displaced or isolated & timeframe	Environment & Property Damage Cost estimate	Resources required to respond	Comments

DRAFT

Overall Impact Score

(Considering each of the impacts identified and the guidelines below, select an overall impact score for the hazard event)

- ☐ 5 Catastrophic, over 100 people affected; multiple fatalities; injuries, long term health effects; prolonged displacement; extensive environment & property damage; long term effects to environment; serious infrastructure disruption; community unable to function without significant support
- ☐ 4 Significant; 51-100 people affected; multiple serious injuries; long-term hospitalization required; displacement for 6-24 hours; significant impact to environment- medium to long term effects; external resources required; community only partially functioning, some services unavailable
- ☐ 3 Moderate; 11-50 people affected; no fatalities, some hospitalization and treatment required; localized small numbers displaced for 6-24 hours; no long term environmental or property damage; localized damage rectified by routine arrangements; normal community functioning with some inconvenience, no resources required outside of mutual aid agreements
- ☐ 2 Minor; less than 10 people affected; no fatalities, small number of injuries requiring first aid only; small numbers displaced for less than 6 hours; no external resources required; minor localized disruption to community services for less than 6 hours;
- ☐ 1 Insignificant; no fatalities, injuries or impact on health; no persons displaced; no damage to properties or environment; no disruption to community services or infrastructure; no mutual aid resources required

RISK TOLERANCE

Considering the area of impact, community events, and past experience, identify the level of tolerance to the hazard identified.

Group	High Tolerance	Medium Tolerance	Low Tolerance
Public			
Media			
Other (Identify			

DRAFT

HAZARD RISK VULNERABILITY RATING

Probability score _____ x Overall Impact Score _____ = Number assigned to this hazard _____(1-25)

Final Hazard Assignment in consideration of Risk Tolerance for Priority Planning

- ☐ Low (1-5)
- ☐ Moderate (6-10)
- ☐ High (11-25)
- ☐ Requires further analysis due to Risk tolerance rating

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Appendix A
Susceptible Populations Analysis

Once the impacts of the event have been identified, consider which populations will be susceptible. The following provides a guide.

	Chemical Exposure	Evacuation	Disease Transmission	Food Supply Disruption	Media Focused on Area	Medical Supply Disruption	Poor Air Quality	Public Health Disruption	Separation from family	Shelter-In-Place Quarantine	Structural Collapse	Transportation Disruption	Utility Disruption	Water Supply Disruption
Aboriginal/Indigenous People		X								X				
Airport Populations			X							X		X		
Airport Workers			X											
Alcohol dependent		X		X						X				
Asthmatic/respiratory patients	X		X				X							
Breastfeeding women	X		X	X			X		X					X
Children	X	X	X	X			X		X					X
Community leaders/ Decision makers					X									
Critical Infrastructure Employees		X	X		X								X	
Custom/border patrol workers	X		X											
Day home/ day care populations	X	X	X	X			X		X	X				X
Drug-dependent individuals		X	X	X		X		X		X				
Diabetics		X	X	X		X		X		X				X
Direct contact groups individuals			X											
Electricity dependent for life support								X					X	
Elderly		X	X	X			X	X		X				X
Families of first responders	X		X		X				X					
Families of health care workers	X		X		X				X					
Farm owners	X	X	X				X							X
First responders	X		X		X									

	Chemical Exposure	Evacuation	Disease Transmission	Food Supply Disruption	Media Focused on Area	Medical Supply Disruption	Poor Air Quality	Public Health Disruption	Separation from family	Shelter-In-Place Quarantine	Structural Collapse	Transportation Disruption	Utility Disruption	Water Supply Disruption
Food Suppliers/handlers			X											
Funeral home workers			X					X						
Health care workers	X		X		X			X						
Homeless		X	X							X	X			
Home owners		X									X			
Hospice residents		X	X	X		X	X	X					X	X
Hospice workers			X											
Hospital patients	X	X	X	X		X		X					X	X
Hotel/Motel populations		X	X							X		X		
Hotel/Motel staff			X											
Immunosuppressed individuals	X	X	X	X		X	X	X		X			X	X
Incarcerated individuals		X	X								X		X	
Isolated or confined individuals		X		X						X			X	X
Justice workers			X		X								X	
Kennel workers		X	X							X	X			X
Language limited individuals		X	X											
Livestock owners	X	X	X				X			X			X	X
Long-term care facility populations		X	X				X	X					X	X

	Chemical Exposure	Evacuation	Disease Transmission	Food Supply Disruption	Media Focused on Area	Medical Supply Disruption	Poor Air Quality	Public Health Disruption	Separation from family	Shelter-In-Place Quarantine	Structural Collapse	Transportation Disruption	Utility Disruption	Water Supply Disruption
Low-educational level individuals		X								X				
Media-focused groups					X									
Medical equipment dependent individuals		X				X		X					X	
Medication dependent individuals		X	X			X		X					X	
Mental Health Institution residents		X	X					X		X			X	
Mental Health workers		X	X		X					X			X	
Mobility challenged individuals		X												
Newborns	X	X	X	X			X						X	X
Parents			X						X					
People dependent on public transport		X	X									X		
People with disabilities		X					X							
Pet owners		X	X											
Poverty level or below income individuals		X		X						X				X
Pregnant women	X	X	X	X			X	X						X
Renters											X			
Restaurant workers			X											
Schools	X	X	X		X		X		X	X	X		X	X
Single-income families		X	X											
Single parents		X							X					

	Chemical Exposure	Evacuation	Disease Transmission	Food Supply Disruption	Media Focused on Area	Medical Supply Disruption	Poor Air Quality	Public Health Disruption	Separation from family	Shelter-In-Place Quarantine	Structural Collapse	Transportation Disruption	Utility Disruption	Water Supply Disruption
Social assistance recipients		X		X				X						
Socially isolated individuals		X								X				
Social workers			X		X					X	X			
Transients		X	X											
Transportation routes, terminals	X		X							X		X		
Transportation workers			X							X		X		
Tourists		X								X		X		
Unemployed		X						X		X				
University Populations		X	X						X	X				
University residences populations		X	X						X	X				
Veterinary workers			X											
Wildlife workers			X											
Youth groups		X	X						X					
Zoo workers		X	X								X		X	X

Appendix B. Susceptible Populations
Explanation of Susceptibility

It should never be assumed that just because individuals or groups of individuals fall within a particular category they become vulnerable. The following description is meant as a guide only in helping determine the degree of susceptibility some individuals may experience given the impacts of the hazard.

A

- Aboriginal or indigenous people – may be living in sub-standard housing, on flood plains or areas of vulnerability. May have less contact/resources outside living area. May have day to day living arrangements with little resources for long term sustenance. May not be integrated well with larger community resources and emergency management strategies. May have cultural concerns different from larger community.

- Airport populations- In situations such as natural storms, or terrorist activity where air travel is restricted there may be a large number of people stranded within the airport structure. These people may not be familiar with the community, and lack basic resources such as food and shelter (sleeping accommodations) outside of the airport structure. Many travelers may not have financial resources to support long-term layovers within the airport. The supplies (including medications) travelers may have left their homes with may be unavailable to them (suitcases still in other airports, on planes etc.) Travelers may be cut off from contact with family, friends and support systems. In instances of disease contamination, airport populations may be exposed to travelers with airborne contaminants and quarantine of those within airport or who traveled through the airport may be necessary.

- Airport workers – Over a 24 hour period or longer, those working within an airport may be exposed to thousands of persons and may run the risk of exposure to contamination in biological emergencies. In situations of terrorist threat, airport workers may be at greater risk if air travel is a potential target or method of escape.

- Alcohol dependent- Alcohol dependent individuals may have difficulty coping with an emergency situation when supplies of alcohol are depleted. Some alcohol dependent individuals may lack the resources (basics of food, shelter) available to many other community members.

- Asthmatics/respiratory patients- Any time a hazard causes air quality concerns, asthmatics and those with respiratory conditions may experience increased health difficulties. In cases of forest fires or hazardous material incidents, these patients may require evacuation or shelter-in-place procedures in advance of other members of the community.

B

- Breastfeeding women- many contaminants a breastfeeding woman is exposed to may be passed through breast milk to the infant and can cause both acute and long-term effects on the child. In situations where basic supplies of food and water are limited, breastfeeding woman may require special consideration to nutritional needs to maintain the health status of both the mother and child. In situations where parents are separated from their children, breastfeed infants will be at particular health risk from maternal separation.

C

- Children – children may be particularly vulnerable during times of disaster, particularly if separated from parents and caregivers. In certain biological emergencies children may be more vulnerable as their immune system may be less able to cope with the invasion. Children may also be less able to compensate for poor nutrition and inadequate fluid intake.

- Community Leaders/Decision Makers –because of their roles during an emergency, mayors, elected officials, and other key decision makers may be vulnerable to or exposed to a threat that may not impact other population groups to the same degree. It might be seen as a criminal or terrorist advantage to take out a group that traditional has the ability to lead and direct the community, leaving the entire community less organized and in control.

- Custom/border patrol workers- custom or border patrol workers may be in the "front lines" of threats or hazards occurring in one or more country. They could be more likely to be exposed to chemical or biological contaminants or explosives.

D

- Day home/daycare populations- particularly during daytime, workweek hours, day home and daycare populations may be particularly vulnerable. With a high child to adult ratio, it might be difficult to evacuate, shelter-in-place, or otherwise protect and manage this population. Certain bacterial outbreaks often are easily spread through this population as well, particularly if the mode of transmission is a fecal-oral one.

- Drug- dependent individuals – In emergencies situations, when drug-dependent individuals are unable to access the supplies they require, they may present with particular vulnerabilities and be unable to function in crisis appropriate ways. Prolonged drug dependency, especially in injection dependent cases or in combination with improper nutrition, may cause weakened immune systems leaving such individuals more vulnerable to disease.

- Diabetics- The reliance on medication and need to rigidly control nutritional intake may make diabetics particularly vulnerable during an emergency. The stress of emergency procedures may cause fluctuating blood sugar levels in such individuals as well. During disease outbreaks, diabetics may be at particular risk due to weakened immune systems.

- Direct Contact Groups/Individuals (disease transmission)- During biological emergencies, those individuals who have been in direct contact with affected individuals will present as a vulnerable group depending on the mode of disease transmission.

E

- Electricity dependent for life support individuals- during events that cause fluctuations to or loss of electricity, individuals dependent on electricity for life support functions will be at high risk.

- Elderly- Certain diseases appear to affect both the very young and the elderly more severely and may leave this group at greater risk. As well, elderly individuals with some degree of impairment such as hearing loss, mobility loss, medication dependency or others may experience increased vulnerability. Elderly populations may find themselves with less disposable income, more resistant to change in structure and routine and therefore more vulnerable or disadvantaged during an emergency.

F

- Families of first responders- during emergency situations, first responders may be required to work the scene, often without any time off, for hours or days. They may be unable to attend to their own families causing increased difficulty. In situations of chemical exposure or disease transmission, families of first responders may be of increased risk due to their contact with the first responder.

- Families of health care workers- during emergency situations, health care workers such as hospital staff, lab technicians and community health workers, may be called to work for extended periods, often without any time off, for hours or days. They may be unable to attend to their own families causing increased difficulty. In situations of chemical exposure or disease transmission, families of health care workers may be of increased risk due to their contact with the health care worker.

- Farm owners- during some hazard situations such as floods or fire, farm owners may be particularly vulnerable as such a hazard may threaten not only individuals or family members but animals, crops, and their livelihood as well. Evacuations may be more complicated for such groups who feel unable or unwilling to leave animals or property unattended.

- First responders – by virtue of being first on the scene or site of an emergency, first responders may be exposed to contaminants (chemical, biological, radiological, nuclear) before the situation is fully realized and known to be dangerous, leaving them as a particularly vulnerable group.

- Food suppliers/handlers- groups or individuals that have contact with food supplies may be a vulnerable group during particular types of hazards such as biological contamination depending on the mode of transmission.

- Funeral home workers- depending on the mode of transmission of certain biological diseases, funeral home workers may become a vulnerable group due to their contact during the embalming/body preparation process particularly in the early stages of an outbreak before appropriate precautions are known to be required. Their contact with family members and friends of the recently deceased (may be carriers of the disease) may also expose them to contaminants.

G

H

- Health care workers- health care workers are often among the first to be exposed to newly emerging hazards such as biological contaminants and chemical exposure from patients who arrive at the treatment facility for treatment. This is particularly true in the early stages of a hazardous event before the situation is fully understood and before precautions and protocols are instituted.

- Homeless- Homeless persons with few resources may be particularly vulnerable during some hazardous situations if their survival methods and routines are disrupted. It may be difficult to track such individuals or direct them during an incident.

- Home owners- may be vulnerable during emergencies such as flooding and forced evacuations as they may attempt to protect their assets and may loose more financially during the event depending on insurance coverage.

- Hospice residents- by virtue of their illness are likely to have lowered immune systems leaving them vulnerable to death due to disease transmission. They may not be easily mobile and dependent on medications and life support machines therefore presenting as a vulnerable group during disease outbreaks, forced evacuations and other hazardous events.

- Hospice workers- may be a vulnerable group if the situation involves disease transmission as such disease could easily be spread through close contact with residents in air borne or direct contact modes of transmission.

- Hospital patients- may be a vulnerable group during hazardous events due to their immobility, reliance on machines, medications, and treatment regimes. As well they may be inadvertently exposed to new disease organisms or chemical contamination if patients from an event enter the hospital environment before proper protection or decontamination is realized.

- Hotel/motel populations- during hazardous conditions may be particularly vulnerable. They may not hear warnings and bulletins on expected action; they may not be familiar with the area, and unsure how to proceed even if they do hear the warnings. During biological incidents disease agents may rapidly spread through hotel and motel ventilation systems. It may be difficult to track visitors through the system to identify potentially exposed persons, or in search situations.

- Hotel/motel staff- due to the transient nature of guests, hotel and motel staff may be exposed to a number of people during any 24-hour period, making them vulnerable depending on the mode of transmission of certain diseases. Staff often has close contact with guests through airborne particles and direct contact as they clean sheets, bathrooms and objects the guest may have had contact with.

I

- Immunosuppressed individuals- have a more difficult time fighting any new disease and therefore are more vulnerable during an outbreak. They also require proper nutrition, sanitary conditions and safe water supplies to an even greater degree than persons with intact immune systems in order to prevent illness.

- Incarcerated individuals- may be at a particular risk due to their inability to respond quickly and move due to the security threat. These individuals may be reliant on others to release locks and provide transportation during forced evacuations. Disease can also be spread rapidly through the incarcerated population during outbreak situations.

- Isolated or confined individuals- may be more vulnerable if they are unable to hear the warnings or unable to move to safer areas. These individuals may have difficulty acquiring necessary supplies and resources in some hazardous situations. It may be difficult to assess their status during community events.

J

- Justice workers- may face unique concerns during certain situations. Power and utility failures or interruptions may put them in vulnerable situations, as those they are guarding may no longer be confined. In many situations they may face hazards as first responders to situations, or last to leave, unsafe areas. Depending on the nature of their job, their facility may be particularly vulnerable to attack as well.

K

- Kennel workers- may have increased risk of transmission of disease from agents that cross over from animal to human populations. During other types of hazards such as those that require evacuation, kennel workers may have increased needs, as it may be difficult to move large numbers of animals safely and efficiently.

L

- Language limited individuals- may be unable to accurately interpret warnings and announcements during crisis situations if the information is not supplied in their "first language" leaving them vulnerable. In situations where information may be quite complicated or involve emergency or medical terms, the language barrier may be even more pronounced. These individuals may have difficulty communicating their concerns and issues to emergency workers during times of crisis.

- Livestock owners – may face increased vulnerability in situations where disease is transmitted from animal to human. In situations requiring evacuation they may be reluctant to leave their livestock for both economic and emotional reasons and may have difficulty moving large herds to safer areas. During shelter-in-place situations where air quality is a concern they may be unable to adequately protect their livestock.

- Long-term care facility populations- are particularly vulnerable during disease outbreaks due to the risk of airborne or direct contact transmission in a group that may already be immunosuppressed to some degree. Individuals may have special mobility and medication needs that increase their vulnerability during other hazardous situations as well. Utility and power outages as well as forced evacuations may all pose difficulties for this population.

- Long term care facility workers- may have increased vulnerability during disease outbreaks if proper protection is not utilized in the initial phases. Fecal/oral transmission modes as well as airborne and direct contact may put workers at increased risk during biological outbreaks.

- Low-educational level individuals- may have difficulty understanding warnings and emergency direction. This may be particularly true in situations that involve medical terminology or complex directions and procedures. Written instructions may have little value and may pose increased frustration to these individuals.

M

- Media- focused groups- any time media attention is focused on a segment of the population, they may become particularly vulnerable during emergencies as they try to make decisions, follow directions and act appropriately under the spotlight of media attention. The decisions they make and action they take, may also impact the rest of the community and the emergency response effort.

- Medical equipment dependent individuals- will be particularly vulnerable in any hazardous situation that involves the threat of utility disruption. Open medical equipment is not easily portable and may cause dependent individuals to be more vulnerable during rapid evacuation scenarios. Evacuation centers may not be adequately prepared to adapt to medical equipment needs and supplies for the equipment usage may also be in short supply taxing these individuals.

- Medication dependent individuals- will be particularly vulnerable during a hazardous situation if medication supplies are limited or unavailable. Existing medication regimes may also have an impact during biological events that require prophylactic medication administration due to drug interaction concerns.

- Mental Health Institution residents- may be vulnerable in any hazardous situation that challenges or threatens their basic needs and general routine. Some institutions may have special areas of "lock-down" or forced confinement that may be vulnerable to utility disruptions. Transportation of residents may also be difficult, particularly in a crisis situation. Disease, particularly if transmitted through airborne, fecal/oral, or direct contact will increase the vulnerability of any large group of residents housed within shared ventilation facilities or in daily close contact situations.

- Mental Health Workers- may be particularly vulnerable during situations that threaten their clients or cause increase anxiety or violence in their clients. Biological outbreaks may easily spread among clients and workers as well when disease transmission routes are direct contact or airborne.

- Mobility challenged individuals- will be particularly vulnerable in situations that require rapid evacuation or response.

N

- Newborns- are at high risk during any type of disease transmission if they are in a position to come in contact with the disease agent because their body systems and resistance to disease may not be fully developed. Any situation that threatens food, shelter (body temperature control), or water supplies puts newborns at an increased level of vulnerability, as their compensatory mechanisms are not highly developed.

O

- Other (identify) _____

P

- Parents- may be vulnerable in situations that separate them from their children. In biological emergencies parents may be particularly concerned they will pass disease on to their children, or may be vulnerable to contracting disease from their children.

- People dependent on public transport- will be vulnerable in situations requiring them to get to a safe area, if no public transportation is available. Evacuation from a downtown core for example will leave those dependent on the public system vulnerable to the hazard until transportation can be supplied. In cases of disease outbreak through airborne transmission in particular, those who depend on public transport may be more vulnerable as they will be exposed to large numbers of persons in confined areas until precautions can be established. If public transport is unavailable or considered unsafe, many workers may not be able to commute to work and this may have a collateral sector impact effect.

- People with disabilities- any time a hazardous situation is present or threatened, people with disabilities should be assessed for their degree of particular vulnerability given the nature of the threat and their disability
    - Mobility specific- may have difficulty in evacuations
    - Hearing related- may not hear warning, instructions, directions,
    - Visual- may not see warning signs, have difficulty seeing safe areas or hazards, may have difficulty in evacuations
    - Communication- may not understand warnings and directions and may not be able to communicate their concerns or situation to emergency workers. Might not be able to communicate area they were trapped in during building collapse situation.
    - Physical- may have difficulty during evacuation, when routine is disrupted, or environment significantly changed.
    - Mental or cognitive- may not fully understand warnings, instructions, or the gravity of the situation.
    - Multiple chemical sensitivities- may have increased vulnerability during hazards involving air quality, may be particular vulnerable in reception center areas or places where large numbers of crowds have gathered.

- Pet owners- may be vulnerable in situations where owners are required to leave their pets behind. May not be as quickly portable or willing to evacuate. May require special supplies (cages, food, sanitation needs for pets) during alternative housing arrangements. Pet owners may be particularly vulnerable in disease situations where the vector can be transmitted from animal to human.

- Poverty level or below income individuals/families- may be vulnerable in situations such as evacuations that require some degree of disposable income readily available (ex. to put gas in vehicle, stay at hotel, or buy food and water if initial supplies unsafe). In shelter-in-place situations such groups may have less resources and supplies on hand to sustain them throughout the emergency.

- Pregnant women- may be vulnerable in disease outbreak where the risk of disease transmission to the fetus is a concern. In cases where prophylactic medications or vaccines are required there may be concern the treatment may affect the unborn child. During chemical or radiological exposure there is a risk of exposure not only to the mother but to the fetus as well. The stress of emergency procedure requirements may place the mother at risk of premature labor.

Q

R

- Renters- in situations that involve structural damage may be particularly vulnerable if they loose all assets and don't have adequate insurance coverage or disposable income to provide housing/shelter and basic needs.

- Restaurant workers- may be vulnerable in biological emergencies where disease is transmitted via food borne contamination. In community emergencies where disease transmission occurs through direct droplet contact, people who clear tables and wash dishes may be at particular risk if appropriate precautions (gloves) are not taken.

S

- Schools – are particularly vulnerable if the emergency occurs during 'in-class" hours due to the high children to adult ratio. Loss of contact between children and parents or caregivers may cause anxiety and unpredictable or inappropriate action.

- Single income families- may be vulnerable in situations where the sole income earner is unable to go to work or continue to supply the income due to emergency closures, illness or community disruption.

- Single parents- may be more vulnerable in emergencies that require them to be separated from their children, unable to provide adequate childcare. This may include sub-groups such as health care workers that are required to put in longer shifts at their work place but have responsibilities to provide childcare with no alternative support system. Situations that require school or day care closures may particularly strain these individuals if they are responsible for providing income and being at work, and supplying childcare. There may also be increased vulnerability in court order custody situations that make movement of children difficult.

- Social assistance recipients- may be particularly vulnerable in situations where disposable income is required for alternative housing, food, or basic need provisions. Such individuals may have less resources and supplies on hand if confinement is required for a period of time. In situations where cheque generation, mail delivery, or government office shut down occurs, this group may suffer the collateral damage if their income is not delivered on time.

- Socially isolated individuals- may have less resources and support systems to aid them during emergency situations. There may be less ability to notify authorities of their situation and need for aid.

- Social workers- may be vulnerable during prolonged emergency situations if their clients become over stressed, and act in inappropriate or violent ways. Social workers may be required to work prolonged hours in reception centers and during debriefing situations that put them at risk for disease transmission, illness, or stress reactions.

T

- Transients- may be vulnerable during emergencies as their resources, disposable income, and supplies may be unable to sustain them through the crisis. With no support systems or definitive places of shelter they may be lacking in basic needs. Depending on the length of time they have been in the area, they may be unsure of evacuation routes, emergency procedures and warning systems. If others are unaware of their location they may not be searched for appropriately in situations of structural collapse.

- Transportation routes, terminals (populations within)- because of the high impact and large concentration of people within transportation systems and terminals they may become targets of attack leaving the population within at increased risk of death, injury or disease. During community disease outbreak, the high concentration of individuals may allow airborne transmission of biological agents within the terminal or transport system until proper precautions are activated. Persons in transit during a hazardous situation such as a chemical release may be vulnerable to exposure due to a lack of ability to quickly shelter-in-place appropriately. Persons in transit during emergencies may also be suddenly cut off from family, resources and supplies.

- Transportation workers- because of the high impact and large concentration of people within transportation systems and terminals they may become targets of attack leaving transportation workers at increased risk of death, injury or disease. During community disease outbreak, the high concentration of individuals may allow airborne transmission of biological agents within the terminal or transport system until proper precautions are activated. Transport workers during a hazardous situation such as a chemical release may be vulnerable to exposure due to a lack of ability to quickly shelter-in-place appropriately.

- Tourists- may be vulnerable due to their lack of knowledge of the community, of emergency procedures and warning and notification systems. They may have language barriers or cultural differences that place them in more vulnerable situations with limited resources and supplies.

U

- Unemployed- may be vulnerable during emergencies as their disposable income and resources may be limited leaving them unable to be self-sufficient for extended periods of time. In situations where mail delivery and government agencies are not functioning, their sole source of income (government support) may quickly be depleted.

- University populations- may be vulnerable as they include a large population of young adults who are suddenly faced with decisions they may not be used to making. Many university populations contain a diverse demographic group with a variety of cultural needs that may be difficult to assess and supply during an emergency. Disease agents can be spread quickly through such a concentrated population within the confines of the university leaving this population vulnerable until precautions can quickly be instituted. In certain terrorist threats, university may be vulnerable to attack depending on the types of resources on site such as biology labs, cultural organizations, and organized groups.

- University residences populations- with large numbers of young adults not used to being completely self-reliant may be particularly vulnerable. Students living in the residence may be quite limited in their knowledge of the community outside the university and may be unfamiliar with exit routes, and emergency procedures. During biological emergencies residences may be particular vulnerable to the transmission of disease due to close contact, shared ventilation, sanitation, and food areas.

V

- Veterinary workers- may be vulnerable during disease outbreaks when transmission occurs from animal to human.

W

- Wildlife workers- may be vulnerable during disease outbreaks when transmission occurs from animal to human populations.

- Wildlife populations- may be vulnerable during emergencies such as fires, floods or earthquakes that destroy or alter their natural habitats. This may have a collateral impact in that wildlife may suddenly be in closer proximity to human populations and may display unpredictable behaviors.

X

Y

- Youth groups-may be vulnerable during emergencies as they may be require to cope with little background experience or decision-making skills. In groups where the ratio of youth to adults is high or no adults are present, this lack of experience may increase their vulnerability. They may not understand the urgency of the situation or the emergency, notification or procedural instructions.

Z

- Zoo workers- may be vulnerable during outbreaks where disease can be transmitted from animal to human populations. During other emergencies such as fires, floods, earthquakes, or terrorist attacks zoo workers may also be vulnerable if animals within their care become panicked, unpredictable, trapped, or loose.

(a) Structure Fires
The majority of dwellings are of wood construction and fire constitutes a major hazard, particularly in areas of relatively high density.

(b) Road
The continual increase in the volume of traffic will increase the danger of road accidents and planners should be aware of access routes and population location and growth.

(c) High Winds
The disruption of power and telephone services by high winds must be considered by emergency planners.

(d) Heavy Snowfall
Heavy snowfall has been experienced in the past and adds to an ever present transportation danger.

(e) Explosion – Natural Gas
The changeover to natural gas by industries in the Municipality such as CKF should be considered along with the increased transportation of this hazard through the county to other areas of Nova Scotia.

(f) Hazardous Materials
There is some industries located in the Municipality that work with hazardous materials in process management. These responses are managed by the local fire service in coordination with other hazmat teams by mutual aid agreement.

(g) Forest Fires
An ever increasing number of residential areas are being developed where they are surrounded by forest. Hence the potential exists for a forest fire to threaten an area of human habitat. The majority of dwellings are of wood construction and fire constitutes a major hazard, particularly in areas of relatively high density. Forest fires present a very real hazard.

(h) Overland Flooding
The risk of increased flooding and erosion as a result of sea level rise or storm surge is a real concern. The potential for more frequent and severe freshwater flooding during high precipitation events is a threat that is intensified by the operations of the Avon River Causeway tide gates and the upstream hydroelectric system dams.

(i) Inland Flooding

The risk of drought as a result of changes in weather patterns will increase the risk of wildland fires and possible water shortages for citizens on well water. A prolonged drought could severely affect the water table of the Municipality.

(j) Drought

The risks with changes to climate is there will be changes to weather patterns that will potentially effect our lakes, rivers and ground water systems levels. This could lead to dry wells and reduced water supplies for the municipal water systems. A drought will also effect the Farming and forestry industries and uses.

Hazard List from NS-EMO HRVA Model Influenced by Changing Climate

For each of the identified Natural Hazards, the Climate Change influence and typical impacts are identified. The list should not be considered exhaustive in nature. Your local situation may indicate a need to exclude some impacts or add others not listed. This list is meant as a guide only.

Table 1

Hazard/Event	Climate Change Impacts/Influence	Typical Impacts
Natural Events		
Animal Disease Outbreak	Pest infestation affecting animal disease; wetter winters & dryer summers will increase disease (hoof infections/mud fever); decreased water & food supplies	Food shortage; transmission to humans; increased need for health care treatment; transportation disruption; media surge; public disorder; carcass disposal; economic disruption
Coastal Flooding/Sea Level Rise/Storm Surge	Increased frequency & intensity due to ice melt, increased temperatures; rising sea level	Fatalities, injuries; displacement; Erosion of headlands, shoreline areas, roads, damage to infrastructure; Drinking water contamination (increased salinity); runoff & drainage issues; power disruption; increased flooding events; economic/environmental impacts fishing industry
Drought	Increased frequency & intensity due to dryer summers, increased temperatures	Increased demands on Health Care System; Decreased water supply (watershed supplies & wells); Crop damage; pest infestation; animal disease/death; increased Wildland fires
Epidemic/pandemic (Human)	Pest infestations carrying disease; new infectious disease agents	Fatalities; prolonged hospitalization/treatment; business disruptions; utility/infrastructure disruption;

	spreading from south to north;	essential services disruption; public disorder
Forest fire/wildfire	Increased frequency; drought causing increased fuel & decrease in water suppression supplies; warmer winters/less snow pack increasing season for fires	Displacement; property damage; transportation disruption; long-term environmental impacts; air pollution; animal displacement/death;
Hot Days /Heat Wave	Increased frequency & temperatures predicted; likely to be experienced in areas not used to increased temperatures	Fatalities; increased need for health care/hospitalization; displacement; crop damage; increase electricity use; work slow down/stoppage; crop damage; pest infestation; animal distress/death
Hurricane	Increased frequency & intensity due to rising sea temperatures and water levels	Fatalities, injuries; displacement; isolation; property damage; power disruption; telecommunications disruption; flash flooding; infrastructure disruption; transportation disruption, community lifeline damage; food & fuel shortages
Inland Flooding	Increased frequency, greater areas of involvement due to sea water rise, storm surge & coastal erosion, salt water intrusion in ground water; increased frequency of heavy rainfall events	Fatalities; injuries; displacement; isolation; water contamination; community lifeline (bridge) damage; landslides/erosion; transportation disruption; food & fuel shortages; property damage

Severe Thunderstorm/Tornado/Hailstorm	Increase in extreme weather events and storm activity predicted	Fatalities, injuries; displacement; property damage, power disruption, telecommunications disruption; flash flooding; crop damage; animal deaths/injuries;
Winter Storm (blizzard/ice storm)	Increase in extreme weather events suggesting that storm activity will worsen; with rise in winter temperatures may be increase in freezing rain/ice storms	Fatalities, injuries; displacement; isolation; property damage, crop damage, livestock fatalities/disease; power disruption; telecommunications disruption; transportation disruption; community lifeline damage, food & fuel shortages, storm surge flooding
Others (Identify)		

Nova Scotia Community Scale Hazards List with Typical Impacts

For each of the identified Community Scale Hazards, the typical impacts are identified. The list should not be considered exhaustive in nature. Your local situation may indicate a need to exclude some impacts or add others not listed. This list is meant as a guide only.

Table 1

Hazard/Event	Typical Impacts
Natural Events	
Animal Disease Outbreak	Food shortage; transmission to humans; increased need for health care treatment; transportation disruption; media surge; public disorder; carcass disposal; economic disruption
Epidemic/pandemic (Human)	Fatalities; prolonged hospitalization/treatment; business disruptions; utility/infrastructure disruption; essential services disruption; public disorder
Flood	Fatalities; injuries; displacement; isolation; water contamination; community lifeline (bridge) damage; landslides/erosion; transportation disruption; food & fuel shortages; property damage
Forest fire/wildfire	Displacement; property damage; transportation disruption; long-term environmental impacts; air pollution; animal displacement/death;
Hail Storm	Property damage; transportation disruptions; crop damage; flash flooding; power disruptions; telecommunications disruptions
Heat Wave	Fatalities; increased need for health care/hospitalization; displacement; crop damage
Hurricane	Fatalities, injuries; displacement; isolation; property damage; power disruption; telecommunications disruption; flash flooding; infrastructure disruption; transportation disruption, community lifeline damage; food & fuel shortages
Magnetic Storm	Telecommunication disruptions; infrastructure disruption; power disruption, transportation

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	accidents/disruption;
Winter Storm (blizzard/ice storm)	Fatalities, injuries; displacement; isolation; property damage, crop damage, livestock fatalities/disease; power disruption; telecommunications disruption; transportation disruption; community lifeline damage, food & fuel shortages, storm surge flooding
Tornado	Fatalities, injuries; displacement; property damage, power disruption, telecommunications disruption; flash flooding; crop damage; animal deaths/injuries;
Tsunami	Fatalities, injuries; displacement; property damage, long-term environmental damage; power disruption; telecommunications disruption, transportation disruption; flash flooding, community lifeline damage, food & fuel shortages
Volcanic eruption	Crop damage; injury/increased need for health services; animal fatality/disease; food & fuel disruption; transportation disruption; telecommunications disruption
Others (Identify)	
Technological Events	
Telecommunications Disruption	Banking disruption; Infrastructure loss (911, dispatching, traffic control, water treatment, security systems); Food & fuel shortage; transportation disruption; public disorder
Others (Identify)	
Industrial	
Hazardous Material Spill/Release	Fatalities, injury/increased need for specialized medical treatment /hospitalization; long term health issues; displacement; isolation; decontamination with specialized equipment; long term environmental contamination; animal death/disease; crop failure; property damage; food & fuel shortage; water contamination; air contamination; fire; explosion; public disorder
Transportation Disruption (Air, Rail, Road,	Fatalities, injury; displacement; isolation; long

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Ship)	term environmental contamination; decontamination with specialized equipment; property damage; food & fuel shortages
Others (Identify)	
Human-Induced	
Bomb/explosive device	Fatalities, injury/increased need for specialized medical treatment/hospitalization; long-term health effects; decontamination with specialized equipment; displacement; property damage; public disorder
Civil Disorder/Disturbance/Riot	Fatalities, injury; property damage; increased need for security measures/legislation
Urban Fire	Fatalities, injuries; displacement; property damage; power disruption; telecommunications disruption
Others (Identify)	

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Blizzards/Massive Snowstorms		Bomb Threat		Bombing (Actual, not threats)		Chemical Contamination/Spill	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
5	2	3	2	1	5	3	4
5	4	2	4	1	5	4	3
5	4	2	2	1	5	3	4
3	2	2	3	1	5	4	3
5	2	2	1	1	5	4	4
3	3	2	3	2	4	2	3
5	5	2	2	1	1	3	3
4	3	2	2	2	2	3	3
4	4	4	3	2	4	5	5
5	3	2	2	1	5	2	3
5	5	4	3	4	5	5	4
4	4	1	1	1	1	3	3
4	3	3	2	1	4	3	4
4	3	3	3	3	3	4	3
4	3	1	1	1	2	4	3
4.3	**3.3**	**2.3**	**2.3**	**1.5**	**3.7**	**3.5**	**3.5**

Civil Disobedience or Rioting		Dam/Dyke Rupture		Drought		Earthquake	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
1	2	2	5	5	3	1	3
1	4	3	5	4	3	2	4
1	3	2	5	3	3	2	5
2	1	3	4	3	2	1	3
2	4	3	5	3	4	1	2
1	4	4	3	4	4	1	4
1	1	3	3	2	2	1	1
2	2	4	3	2	2	3	3
2	1	3	4	4	1	0	0
1	2	2	2	3	2	2	4
3	3	3	5	3	5	3	5
2	3	3	4	3	3	1	1
1	3	1	4	3	4	1	4
2	2	0	0	1	1	1	1
2	1	3	2	2	1	0	0
1.6	**2.4**	**2.6**	**3.6**	**3.0**	**2.7**	**1.3**	**2.7**

Electric Power Blackout		Epidemic		Explosions		Major Structure Fire	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
5	1	2	3	2	2	5	3
5	4	4	2	3	3	5	4
3	3	2	5	2	5	4	4
5	1	3	3	3	4	5	4
3	2	2	4	2	3	5	3
2	2	3	3	3	3	4	3
3	3	2	2	2	2	4	4
3	3	3	3	3	3	4	3
0	0	0	0	2	4	4	4
3	2	2	4	2	5	4	4
5	5	4	5	4	4	5	4
3	4	2	3	3	4	3	3
3	3	1	4	1	4	3	4
4	3	4	4	2	4	4	4
3	2	1	1	3	3	5	3
3.3	**2.5**	**2.3**	**3.1**	**2.5**	**3.5**	**4.3**	**3.6**

Flash Flood		Forest Fire		Freezing Rain/Ice Storm		Heatwave	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
3	3	5	3	5	2	5	2
4	4	4	4	5	4	5	3
4	4	1	4	4	4	3	4
4	3	5	2	5	1	4	2
4	3	5	2	5	3	4	2
4	3	4	4	4	3	3	2
3	3	3	3	5	5	3	3
3	3	4	3	4	3	4	3
0	0	3	4	4	4	1	1
4	3	4	3	5	3	4	2
5	4	5	5	5	5	5	3
3	4	3	4	4	4	4	4
1	3	2	4	4	2	3	3
3	3	4	3	4	4	3	2
2	2	4	4	4	3	3	2
3.1	**3.0**	**3.7**	**3.5**	**4.5**	**3.3**	**3.6**	**2.5**

Hostage Incident		Hurricane		Long-term Power Outage		Major Frost/Freeze	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
1	4	4	4	2	3	5	2
1	2	4	4	4	4	4	4
1	3	5	4	3	4	5	2
2	3	4	3	3	3	5	1
2	4	5	2	3	4	4	3
3	2	4	3	2	4	3	2
2	2	3	3	3	3	4	4
2	3	3	3	4	3	4	3
3	1	3	1	0	0	1	1
2	3	4	4	3	3	3	3
3	3	4	5	5	5	5	3
2	2	4	4	3	4	3	3
1	3	3	4	2	3	4	2
2	3	4	3	2	2	3	1
1	1	0	0	3	2	3	2
1.9	**2.6**	**3.6**	**3.1**	**2.8**	**3.1**	**3.7**	**2.4**

Major Gas Main Break		Major Hailstorm		Major Industrial Accident		Major Motor Vehicle Accident	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
1	4	2	2	3	4	5	2
3	4	4	3	3	2	5	3
0	0	3	3	2	4	5	3
2	3	3	1	4	3	5	2
1	2	2	2	4	3	5	4
1	1	3	3	1	1	3	3
0	0	3	3	3	3	3	3
4	3	4	3	4	3	4	3
1	1	1	1	1	1	5	4
2	4	4	2	2	3	4	5
1	1	5	4	4	4	5	4
2	2	4	4	3	3	3	3
1	3	3	3	1	3	4	3
3	3	2	1	2	3	5	4
0	0	2	1	3	3	5	3
1.5	**2.1**	**3.0**	**2.4**	**2.7**	**2.9**	**4.4**	**3.3**

Major Water Main Break		Magnetic Storm		Mudslide/Landslide		Pipeline/CNG Explosion	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
5	1	1	2	2	2	0	0
3	3	1	2	1	2	1	3
4	3	1	3	1	4	0	0
5	2	3	1	3	2	2	3
3	2	1	1	2	1	1	1
2	2	2	2	1	1	2	3
3	3	2	2	2	1	1	1
4	3	2	2	2	2	2	2
0	0	0	0	1	1	0	0
3	2	0	1	1	2	0	4
3	3	4	5	3	3	2	4
3	3	2	2	2	2	2	2
3	3	1	2	1	2	0	3
3	4	0	0	0	0	0	0
3	2	1	1	2	0	0	0
3.1	**2.4**	**1.4**	**1.7**	**1.6**	**1.7**	**0.9**	**1.7**

Plane Crash (in Community)		Radiological Accident		River Flood		Severe Fog	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
1	4	0	0	5	3	5	1
1	3	1	4	5	3	5	1
1	5	1	4	3	4	4	2
1	4	2	4	4	1	4	1
2	5	1	3	4	2	2	2
3	3	3	3	4	3	1	1
1	1	1	1	2	2	3	3
4	3	4	3	3	2	3	3
2	2	0	0	0	0	0	0
1	5	1	3	3	3	3	1
3	5	3	3	4	4	5	1
2	2	2	2	4	4	4	4
2	4	1	2	3	3	2	2
1	2	1	1	3	3	1	1
1	4	0	0	1	2	4	2
1.7	**3.2**	**1.4**	**2.2**	**2.9**	**2.4**	**2.7**	**1.6**

Small Boat Lost or Accident		Sudden Waste Disposal Problem		Train Derailment		Tornado	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
5	1	2	3	1	3	1	4
5	1	2	1	1	1	2	5
5	2	1	2	0	0	2	5
5	2	2	1	1	2	2	4
4	3	1	1	0	0	1	2
3	2	4	4	3	1	2	1
3	3	2	2	1	1	1	1
4	3	4	3	2	1	3	2
4	3	0	0	1	1	1	1
4	4	2	1	0	4	1	5
5	3	3	2	0	0	4	5
3	3	3	4	1	1	3	3
2	2	4	2	0	3	1	3
3	1	1	0	0	0	2	3
5	3	5	2	0	0	0	0
3.7	**2.3**	**2.3**	**1.7**	**0.7**	**1.0**	**1.7**	**2.7**

Tsunami		Water Pollution		Water Shortage		Volcanic Eruption	
Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences	Likelihood/Probability	Severity/Consequences
1	2	2	4	5	2	0	0
1	5	3	3	4	3	0	0
1	5	2	5	2	4	1	5
1	4	3	2	5	1	1	4
1	3	3	3	3	3	0	0
1	1	3	3	4	4	0	0
1	1	2	2	2	2	0	0
2	2	4	2	2	3	1	1
1	1	0	0	0	0	0	0
1	5	2	2	1	3	0	5
4	5	3	3	4	5	1	1
2	2	3	4	3	3	1	1
1	4	3	3	1	3	0	4
0	0	3	4	3	3	0	0
0	0	2	0	2	0	0	0
1.1	**2.5**	**2.4**	**2.4**	**2.4**	**2.5**	**0.3**	**1.4**

TOWN OF WINDSOR
BYLAW # 41
SPECIAL EVENT BYLAW

AUTHORITY

Section 172 (1) (a-c), and (d) (iii-vi) of the *Nova Scotia Municipal Government Act (MGA)* provides municipalities with the power to make bylaws, for municipal purposes, respecting the health, well-being, safety and protection of persons; the safety and protection of property; persons, activities and things in, on or near a public place or place that is open to the public, and respecting nuisances, activities and things that, in the opinion of council, may be or may cause nuisances, including noise, as well as prescribing the hours during which certain noises, or all noise above a certain level, specified in the by-law is prohibited, authorizing the granting of exemptions in such cases as the bylaw provides, and providing that it is an offence to engage in any activity that unreasonably disturbs or tends to disturb the peace and tranquility of a neighbourhood.

Section 10A of the *Emergency Management Act* - Chapter 8 of the Acts of 1990, amended 2005, c. 48, ss. 1-6; 2007, c. 10, s. 2; 2009, c. 12 – An Act to Provide for a Prompt and Co-ordinated Response to a State of Emergency, states that *"Every municipality shall, immediately upon becoming aware of it, inform the Emergency Management Office of any real or anticipated event or emergency that could impact the health, safety or welfare of Nova Scotians, their property or the environment.* 2009, c. 12, s. 3.

INTERPRETATION

41.01 In this Bylaw, unless the context otherwise requires:

a) "Coordinator" means the REMO Coordinator for the Town of Windsor;

b) "Large" means five hundred (500) or more;

c) "Special Event" means any event where a large number of people (five hundred or more) are brought together to watch or participate in a commercial dance or other entertainment performance or other event where:

(i) the, performance or event is held for the purpose of providing entertainment, whether such entertainment is free or for profit or gain;

(ii) tickets may be provided or sold and / or an entrance or attendance fee is charged for persons to attend; and

(iii) music, noise or sound of any kind or source, including but not limited to amplified, recorded or computer generated music, amplified recorded or computer generated sounds, live music, sound or band music is performed or played.

d) "Promoter" means the person/group/organization who has the financial responsibility for the **special event** including contracting with entertainers, security firm, overtime policing costs, renting the facility, advertising the **special event**, and collecting gate receipts;

e) "REMO" means Regional Emergency Management Organization;

f) "Town" means the Town of Windsor.

GENERAL PROHIBITION

41.02 A person must not promote, organize or hold a **special event** without first obtaining an event permit issued in accordance with the provisions of Section 41.03 of this by-law.

EVENT PERMIT(S)

41.03 (1) Event Permit Application Procedure

(a) A **promoter** wishing to organize or hold a **special event** must complete an event application provided by the **Town** for that purpose.

(b) The event application specified in subsection (a), must:

(i) be signed by the **promoter**;

(ii) be presented to the **Coordinator** at least forty-five (45) days prior to the event; and,

(iii) be accompanied by an application fee of $100.

(2) Event Permit Requirements

(a) The **Town** will only issue a **special event** permit for events where:

(i) premises continue to meet all relevant fire, safety, and health regulations/codes;

(ii) a payment is made to the Town prior to the issuance of the event permit for additional policing services on the basis of such presented by the RCMP (based up to the maximum capacity of the facility, and as established in the event application);

(iii) there is adequate traffic control and security plan in place for the **special event** which includes provisions for:

(a) first aid;

(b) entrance control to deter alcohol or illicit drugs being brought to the premises during a **special event**;

(c) outside inspection and clean up in the vicinity of the premises during and after the event;

(d) the employment of a security firm licensed by the Government of Nova Scotia;

(e) traffic control for safe traffic and pedestrian flow.

(iv) There is provision for an adequate supply of potable water to those in attendance.

(3) A permit for a **special event** will not be issued to any **promoter:**

(a) who does not have a valid business license to hold such **special event,** or

(b) who does not agree to comply with existing town by-laws, or Provincial statutes or regulations, or

(c) whose application indicates the employment or hiring of any person or company connected with a previous **special event**, was operated in contravention of any town by-laws or Provincial statutes or regulations.

SEVERABILITY AND CITATION

41.04 (1) Any person who fails to comply with the provisions of this Bylaw for which no penalty is expressly provided shall be liable on conviction to a penalty of not less than Two Thousand Dollars ($2,000.00) and not more than Ten Thousand Dollars ($10,000.00), and in default of payment, to imprisonment for a term not exceeding two (2) months.

(2) If any part, section, subsection, clause, or sub clause of this bylaw is, for any reason, held to be invalid by the decision of a court of competent jurisdiction, such decision does not affect the validity of the remaining portions of this bylaw.

(3) This bylaw is cited as the **"Special Event Bylaw # 41"**

This Bylaw is effective upon publication.

Clerk's Annotation (Office Use Only)

Date of first reading:	Tuesday, December 20, 2011
Dates of advertisement of Notice of Intent to Consider:	January 05 & February 02, 2012
Date of second reading:	February 28, 2012
*Date of advertisement of Passage of Bylaw:	March 08, 2012
Date of mailing to Minister a certified copy of Bylaw:	March 12, 2012

I certify that this **Special Event Bylaw #41** was adopted by Council and published as indicated above

Louis Coutinho, CAO
Town of Windsor

*Effective Date of the Bylaw unless otherwise specified in the text of the Bylaw

MUNICIPALITY OF THE DISTRICT OF WEST HANTS
Special Events By-law

1. Citation

1.1 This by-law may be cited as the "Special Events By-law".

2. Authority

2.1 Section 172 (1) (a-c), and (d) (iii-vi) of the *Nova Scotia Municipal Government Act (MGA)* provides municipalities with the power to make by-laws, for municipal purposes, respecting the health, well-being, safety and protection of persons; the safety and protection of property; persons, activities and things in, on or near a public place or place that is open to the public, and respecting nuisances, activities and things that, in the opinion of Council, may be or may cause nuisances, including noise.

As well, Council has the authority to prescribe the hours during which certain noises, or all noise above a certain level, specified in this by-law is prohibited, authorizing the granting of exemptions in such cases as the by-law provides, and providing that it is an offence to engage in any activity that unreasonably disturbs or tends to disturb the peace and tranquility of a neighbourhood.

2.2 Section 10A of the *Emergency Management Act* – Chapter 8 of the Acts of 1990, amended 205, c. 48, ss. 1-6, c. 1 s. 2; 29, c. 12 – An Act to Provide for a Prompt and Coordinated Response to a State of Emergency, states that "Every municipality shall, immediately upon becoming aware of it, inform the Emergency Management Office of any real or anticipated event or emergency that could impact the health, safety or welfare of Nova Scotians, their property or the environment" 2009, c. 12, s. 3.

2.3 Division B, Section 2.9 of the National Fire Code of Canada 2010 and DivisionB, Secion 3.1.6 of the National Building Code of Canada 2010, outlines the requirements for the erection and use of Tents and Air Supported Structures and othertypes of membrane structures. The authority to inspect and approve the use of these apparatus is granted to the Municipality of West Hants' Fire Inspector, as appointed by Council. Additional standards that must be adhered to include the National Fire Protection Association Standard #7095 or CAN/ULC-S109.

2.4 The *Nova Scotia Fire Safety Act* also provides guidance to Special Events structures and operations. This Act is administered by the Fire Inspector who will grant approval based on meeting the requirements of the Act.

3. Interpretation

3.1 In this By-law, unless the context otherwise requires:

a. "Coordinator" means the REMO Coordinator for the Municipality of West Hants, or other qualified person appointed by the Chief Administrative Officer;
b. "Large" means five hundred (500) or more;
c. "Special Event" means any event where a large number of people (five hundred or more) are brought together to watch or participate in entertainment, performance or gathering or other event where:
   i. the performance or event is held for the purpose of providing entertainment or information, whether such entertainment or information is free or for profit or gain;
   ii. tickets may be provided or sold and/or an entrance or attendance fee is charged for persons to attend; and
   iii. music, noise or sound of any kind or source, including but not limited to amplified, recorded or computer generated music, amplified recorded or computer generated sounds, live music, sound or band music is performed or played.
d. "Promoter" means the person/group/organization who has the financial responsibility for the special event including contracting with entertainers, security firm, overtime policing costs, renting the facility, advertising the special event, and collecting gate receipts;
e. "REMO" means Regional Emergency Management Organization;
f. "Municipality" means the Municipality of the District of West Hants.
g. "Unacceptable noise or noise level" means in any activity that unreasonably disturbs or tends to disturb the peace and tranquillity of a neighbourhood beyond the parameters set out in a Special Events Permit.
h. "Operational plan" means the details of the proposed event which are included with an event application, as prescribed by the Municipality, and includes:
   i. Description of the proposed event,
   ii. Location where the event is to be held,
   iii. Security plan which outlines the entrance (line control), during and exiting the location, which meet industry standards,
   iv. Fire and evacuation plan,
   v. Medical safety plan,
   vi. Operational set up and take down plan.

4. General Prohibition

4.1 A person must not promote, organize or hold a special event without first obtaining a Special Event Permit issued in accordance with the provisions of Section 5.1 of this By-law.

5. Special Event Permit(s)

5.1 Permit Application Procedure

a. A promoter wishing to organize or hold a special event must complete an application provided by the Municipality for that purpose.
b. The application specified in subsection (a), must:
   i. be signed by the promoter;
   ii. be presented to the Coordinator at least forty-five (45) days prior to the event; and
   iii. be accompanied by an application fee of $100.

5.2 Event Permit Requirements

a. The Municipality will only issue a special event permit for events where:
   i. premises continue to meet all relevant fire, safety, and health regulations/codes;
   ii. a payment is made to the Municipality prior to the issuance of the event permit for additional services, which may include policing services on the basis of such presented by the RCMP (based up to the maximum capacity of the facility, and as established in the application); other services contracted with the Municipality
   iii. there is an adequate traffic control and security plan in place for the special event which includes provisions for which form part of the operational plan:
      a) first aid;
      b) entrance control to deter alcohol or illicit drugs being brought to the premises during a special event;
      c) outside inspection and clean up in the vicinity of the premises during and after the event;
      d) the employment of a security firm licensed by the Government of Nova Scotia;
      e) traffic control for safe traffic and pedestrian flow.
   iv. there is provision for an adequate supply of potable water to those in attendance.
   v. the promoter sets the start and end time of the event
   vi. proof has been provided of adequate insurance coverage naming the Municipality as a third party for the term of the special event
   vii. there is provision for take down and clean up of the site to the condition it was received, if the site used is owned by the Municipality

5.3 A Special Events Permit will not be issued to any promoter:

a. who does not have a valid business license to hold such special event, or
b. who does not agree to comply with existing municipal by-laws, or Provincial statutes or regulations, or,

c. whose application indicates the employment or hiring of any person or company connected with a previous special event, was operated in contravention of any municipal by-laws or Provincial statutes or regulations.

6. Penalty and Severability

6.1 Any person who fails to comply with the provisions of this By-law for which no penalty is expressly provided shall be liable on conviction to a penalty of not less than two thousand dollars ($2000) and not more than ten thousand dollars ($10,000), and in default of payment, to imprisonment for a term not exceeding two (2) months.

6.2 If any part, section, subsection, clause, or sub clause of this By-law is, for any reason, held to be invalid by the decision of a court of competent jurisdiction, such decision does not affect the validity of the remaining portions of this by-law.

I, Rhonda Brown, Municipal Clerk of the Municipality of the District of West Hants, the Province of Nova Scotia, do hereby certify that this is a true copy of the By-law as adopted by the Council of the Municipality of the District of West Hants at a meeting duly called and held on the **9th** day of **August, 2016**.

_____
R.N. Brown
Municipal Clerk

By-Law Adoption	
First Reading:	July 12, 2016
Notice Published:	July 25, 2016
Second Reading & Approval	August 9, 2016
Final Publication	August 29, 2016
Notice to Municipal Affairs	August 10, 2016
Description: Initial approval of the Special Events By-law.	

Community Event Emergency Response Planning

A guide to help event and municipal emergency planners prepare for gathering events in Nova Scotian communities.

EMO
EMERGENCY MANAGEMENT OFFICE
NOVA SCOTIA

January 2014

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INTRODUCTION

Purpose of This Guide

The Nova Scotia Emergency Management Office worked with Nova Scotia's Association of Municipal Administrators to develop Community Event Emergency Response Planning. The guide is to assist emergency managers and event planners in communities across Nova Scotia. It incorporates tools and strategies to help municipalities with every stage – from concept through to completion of the event.

Recent events in Nova Scotia, throughout Canada, and around the world have heightened the need to provide event and emergency response planners with the tools and processes to plan and respond to potential risks during an event. The guide is not intended to replace existing municipal plans but rather to complement community event emergency response planning by

- identifying the need for a joint municipal/provincial/event planning group
- assessing risk prior to the event and linking mitigation efforts to plans to respond to emergencies or establishing hazard specific plans as identified
- establishing the linkages between the event and local community emergency managers

Best practices information was gathered from municipalities alongside Canadian federal and provincial government departments. The intent was to build a relevant guide that can be used and understood regardless of the event size, time, or place – by any municipality, event organizer, or venue operator.

What Is Due Diligence?

It is the level of judgment, care, prudence, determination, and activity that a person would reasonably be expected to do under particular circumstances. As applied to an emergency program, due diligence means that all reasonable precautions are taken to address public safety risks, including during response to an emergency. This duty also applies to situations that are not addressed elsewhere in the occupational health and safety legislation.

Due diligence is important as a legal defence. If charged, a defendant – who could be YOU! –may be found not guilty if he or she can prove that due diligence was exercised. In other words, a defendant needs to prove that all precautions, reasonable under the circumstances, were taken to provide the necessary services and procedures in emergency response and recovery.

DEFINITIONS

Consequence Management
Actions taken for mitigation, preparedness, response and recovery with regard to emergencies, except human-induced intentional threats, and for response and recovery in respect of human- induced intentional acts

Disaster
An event that results in serious harm to the safety, health, or welfare of people, or in widespread damage to property.

Emergency Response Action Plan (Emergency Response Plan / ERP, or Emergency Action Plan / EAP)
A formal planning document that outlines roles, responsibilities, contacts, planned actions, and procedures to be followed in the event of a major emergency or disaster at an event (planned or unplanned).

Event Incident Response Team
Consists of incident command, including, as required, command post staff of fire, police, medical agency representatives, event staff (ICS: Incident Commander, who may also act as Planning Section Chief; Operations Section Chief, responsible for ops and agency communications, Logistics Section Chief, responsible for resource requests and allocation), and command staff of information officer, safety officer, and liaison officer.

Hazard
A potentially damaging physical event, phenomenon, or human activity that may result in loss of life, injury, property damage, social and economic disruption, or environmental degradation.

Incident Command System (ICS)
A standardized on-site management system designed to enable effective and efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure.

Incident Commander (IC)
A person who, once the position is activated, has authority for all emergency response operations within the venue. Could be the producer, event organizer, appointed First Responder, or other. This position can change as the incident expands or contracts.

Mass Gathering
A congregation of people at an event or activity where there is potential to place exceptional demands on, or have impact on, the community and its services and resources. Such events can be pre-planned or spontaneous, attracting a relatively large number of people in a confined area (either indoor or outdoor).

Mitigation Strategy
The Canadian Standards Association defines mitigation as “actions taken to reduce the risks and impacts posed by hazards.” The document provides examples of mitigation strategies, including adopting current building codes in development proposals; recognizing, removing, or reducing the potential consequences of the hazard; and reallocating resources to deal with these strategies. It is recommended that the event emergency planning group incorporate strategies such as up-to-date site plans, defined access and egress routes, mutual aid agreements, and multi-agency response coordination plans. Details are available in the CSA’s Z1600-08 document.

Municipal Emergency Plan (MEP)
The formal emergency response plan required by legislation of all local governments, which includes activation, notification, and roles and responsibilities.

Risk
A measure of the probability and severity of adverse effects that result from exposure to a hazard or hazards.

Threat
The presence of a hazard and an exposure pathway. Threats may be natural or human-induced, either accidental or intentional.

OVERVIEW SUMMARY OF BEST PRACTICES

Policy and Governance

- Every municipality should have guiding principles for the planning, implementation, management, and emergency response for all mass gatherings, including festivals and events.
- Accountability for the outcomes of the event should be clearly identified.
- An approval process for emergency response plans should be determined.
- Legal ramifications of risks and threats should be understood.

Pre-planning Considerations

- Approval process for obtaining required permits and licences.
- Review of by-laws impacting the event.
- Know the audience demographics and plan for expected behaviour (e.g.; alcohol availability).
- Based on type of event, identify hazards, risks and threats and develop a mitigation plan for protection of life, property and the environment.
- Identification of roles and responsibilities of event organizers.
- To establish the organization, coordination procedures and response patterns in the provision of security services in support of responses to events. The plan focuses on the provision of security during the consequence management phase of managing events. It is not applicable to the provision of protective security during Major Events. Security is a major concern in planning responses to events. Experience has demonstrated that response and recovery efforts will be hindered and first responders, victims, property and, evidence put at risk if the event site is not secured.

Emergency Response Plan

- Build a site map identifying areas of access and evacuation routes.
- Identify roles and responsibilities of event organizers and response personnel before, during and after an emergency or disaster.
- Determine an evacuation and sheltering plan including muster points in consideration of weather, risk and type of emergency.
- Determine incident Command and Control and how emergency responders will communicate.
- Have a medical and mass-casualty plan.
- Have a safety and security plan.
- Ensure monitoring of weather, news, social media and other factors.
- List emergency equipment available on site, and provide resource lists from mutual aid or supporting agencies.

Communication Plan

- Ensure contact lists and numbers are readily available for all event organizers, as well as emergency coordination and first response personnel.
- Determine what public communication systems will be used and how emergency communications will be delivered to event attendees (including pre-scripted messaging to be delivered in the event of an emergency).
- Determine how and who will manage the media.
- The event plan should clearly identify the roles and responsibilities of event and municipal public information (media) staff, including: strategies on media releases, triggers to engage a media center and opportunities for event and municipal communications staff to work together to insure accurate and timely information flows.

Exercising

- Practical discussion of event coordinators and coordination response personnel prior to the event will familiarize people with emergency response plans and identify operational gaps.

GOVERNANCE

Legislative Standards

The Province of Nova Scotia has an Emergency Management Act, which includes the following under section 10:

Powers and duties of municipalities

10 (1) Within one year after the coming into force of this Act, each municipality shall

(a) subject to the approval of the Minister, establish and maintain a municipal emergency by-law;

(b) establish and maintain a municipal emergency management organization;

(c) appoint a coordinator of the municipal emergency management organization and prescribe the duties of the coordinator which shall include the preparation and coordination of emergency management plans for the municipality;

(d) appoint a committee consisting of members of the municipal council to advise it on the development of emergency management plans; and

(e) prepare and approve emergency management plans.

(2) The municipality may

(a) pay the reasonable expenses of members of the organization or members of the committee appointed pursuant to clause (b) or (d) of subsection (1);

(b) enter into agreements with and make payments to persons and organizations for the provision of services in the development and implementation of emergency management plans;

(c) enter into an arrangement or agreement with any other municipality respecting a common organization, plan or program;

(d) appropriate and expend sums approved by it for the purpose of this Section. 1990, c. 8, s. 10; 2005, c. 48, s. 6.

Local By-laws and Standards

All pre-planned mass gatherings or special events must adhere to municipal by-laws and standards and ensure that all permits, licences and other approvals are obtained.

Policy

Municipalities should consider developing a policy that officially supports special events in the community and which endorses the value and benefit in supporting community events. It should also demonstrate alignment to other significant municipal policies. The policy provides the framework for supporting mass gatherings in the community.

A policy provides a clear understanding of accountability, which will help identify roles and responsibilities for the municipality and community event organizers. It is also a guide for employees who are responsible for community events and who work with community organizations. It is recommended that policy include sections on:

- the purpose of hosting and supporting special events
- definitions designed for the particular municipality and that also align with industry standards

- definitions for municipal hosted events, community events, co-sponsored events, and subsidy requests
- guiding principles
- outcomes and benefits that support the value of community special events
- roles and responsibilities
- a management framework/process for approvals

Standards Agreement

Based on policy, the municipality will want to have a legal agreement with event organizers that outlines indemnification, insurance obligations, agreement to comply with all by-laws, and requirements for ongoing communication of changes to scope and risk of the event. This is usually done by way of an application process.

PLANNING PROCESS

Depending on the complexity of the event, planning may begin several weeks or months in advance. It is important that emergency response plans are considered and built concurrently with all other event planning. As decisions are being made related to the what, where, when, why, and how of the event, an on-going dialogue should include the hazards, risks, threats, mitigations, and contingencies that affect the safety and security of people, property, and the environment. A timeline should be added to the application process if one is in place for the municipality.

Event Planning Team

It is critical that all pre-planned events have some sort of event planning team with some degree of experience, expertise, and training, the degree to which depends on the complexity of the event. Small community events may consist of a few people with some experience organizing community-based events. Larger events that may draw people from outside the municipality may have numerous levels of organizational structure and may require people with specific expertise. All plans should include local emergency response personnel from emergency management, police services, fire services, EHS, EMONS, and municipal staff.

Approval Process

Every municipality should have an event application form that all event organizers complete and an approval process to ensure that all services that may be called upon to assist or respond are aware of the event details. The application form requires the event organizers to develop and document more detailed information about their event including how they will manage security and what they will do in the event of an emergency. The following are examples of what could be included:

- site and route maps, including access and egress
- command and control structure and activation
- communications procedures during the event and for emergencies, including media management
- contingency plans for weather
- evacuation and shelter-in-place plans
- transportation and parking plans
- medical and lost person procedures

Roles and Responsibilities

Event team members, municipal staff, and emergency management and response personnel need a clear understanding of their roles and responsibilities both during the normal course of an event and in response to an on-site incident.

Planning Considerations and Contingencies

Listed below are some of the key planning considerations for mass gatherings that will support an emergency response plan.

Infectious Disease Planning

During periods of infectious disease outbreaks or pandemic concerns, serious consideration must be given to health risks. Organizers should work in close collaboration with local public health officials and emergency management personnel to assist with risk assessment and mitigation for large events.

Medical Services

On the site of an event it will be important to consider the many options you have to provide medical and first aid services. Consultation with Emergency Health Service (EHS) providers will help organizers determine the appropriate on-site medical service delivery options. Organizers should consult their local EHS support staff to ensure that routes for ambulances will meet everyone's needs if there is a medical emergency.

Volunteer organizations such as the Red Cross and St. John Ambulance may be willing to attend and provide first aid care to people who become injured or ill at an event. However, EHS should be involved with any medical plans.

Transportation

In many cases, traffic flow and parking entrances and exits are clearly established and have adequate and proper signage. However, traffic and parking control may be a factor at any event where flow patterns are not established, causing congestion and negative impacts on the surrounding community. In the event of a mass evacuation, transportation corridors must be kept clear, traffic patterns must flow quickly from an event venue, and evacuations from parking lots must be kept orderly and non-aggressive. Speak to the venue owners/operators to find out if they have contingency plans for large numbers of people leaving a site, and ensure there is adequate parking and traffic signage so people are clear about exit routes. Public transportation must also provide quick and easy access to and from the venue. It would also be beneficial to have a contact in public transit or contracted transportation services to ensure availability of additional transportation resources if required. The Nova Scotia Department of Transportation, Infrastructure and Renewal, and the local public works or traffic authority should be consulted to approve transportation plans.

Lost Persons Services

Identify a lost persons station and ensure that participants are aware of the location. The loss of a child can cause panic, which can be dispelled quickly if loved ones know where to go to retrieve a child or get help locating a child. This service should also be able to communicate to key personnel throughout the venue to be on the look-out for a lost child, further reducing panic for parents and improving the chances that the child will be found quickly and without incident.

EMERGENCY RESPONSE PLANNING

Hazard Identification and Risk Assessment

Potential hazards must be taken into consideration when developing an event emergency response plan. When completing the Hazard Vulnerability and Risk Assessment, it is important to remember that mass gatherings are by definition a congregation of people at an event or activity, generally a high concentration of the local and visiting population in a limited area of the community. Therefore, consideration should be given to the capacity of response agencies to respond to events affecting the population at the site and the concurrent events in the rest of the community. To ensure capacity to respond, planners should look at resource availability and event requirements, maintaining that capacity through mutual aid or contract services as required.

When determining the Hazard Vulnerability and Risk Assessment (HVRA) for the event, the planning team needs to analyze both the municipal HVRA and the event to identify potential hazards to both the event and community, and their probability of occurrence.

Event Complexity

Events can be classified into different complexities, which helps identify the level of risk expected. Community-based family events are unlikely to create disturbances leading to an emergency or crisis situation, whereas some music events could cause a different situation. To evaluate the level of risk for event type, several factors must be considered including:

- age and type of groupings (families, youth, seniors, etc.)
- potential criminal activity
- alcohol either sold at, or at risk of being brought into, the event

Location/Venue

Events can be held indoors or outdoors, each of which can present challenges. An evaluation of the venue must consider how to best protect the health and safety of participants and staff in the event of emergency.

Crowds

Crowds are defined by the physical structure and common purpose by which people come together. They bring a set of emotions to an event and are therefore complex social structures that can be analyzed and categorized.

Crowds that gather on behalf of a grievance or conflict, including sports events, can involve herding behaviour that turns violent. When a crisis occurs, the individuals and small family or friendship units that make up a crowd can become panicked or crazed, possibly causing them to want to “escape” or “fight.” A mass of individual people may now have the following characteristics:

- Individuals attempt to move faster than normal.
- Interactions between individuals become physical.
- Exits become arched and clogged.
- Escape is slowed by fallen individuals serving as obstacles.

- Individuals display a tendency toward mass or copied behaviour.
- Alternative or less-used exits are overlooked.

Safety Code Considerations

Organizers need to consider what performance facilities and special structures are needed and consider the provincial safety-codes system when the infrastructure (temporary or permanent) is being put in place at the site of a mass-gathering event. Since the usage of many of the structures and places may be temporary it may not be obvious that the safety codes, acts, and related regulations contain requirements to protect our safety. In some cases permits for the construction of these structures are required. The requirement for permits is largely in place to insure the involvement of a building inspector. The building inspector will determine if things like load bearing capacities, occupant loads, evacuation or egress routes, fire and emergency plans, barrier free access, sanitation facilities and access for emergency vehicles have been addressed. Permits may be obtained through a municipal building inspector, The Provincial Office of The Fire Marshal or NS Department of Labour and Advanced Education

Examples of temporary structures that may be regulated by the Safety Codes Act include:

- stages or overhead structures that are used in conjunction with the stage
- pools / hot tubs
- temporary gas and electrical systems
- mobile concessions (including fuel, electrical, and fire-protection systems)
- amusement rides
- enclosures, including fences around events where access is restricted for various reasons, such as the requirement for admission to be paid, sale of liquor, or safety of event participants and staff.

Existing permanent structures may require a permit if the use or occupancy of the building is going to change as a result of the event. An example of this could be the use of an arena for an event where the ice surface is used for seating for a performance, social event (licensed or otherwise), ceremony, or meeting. Even if a permit is not required, changing the location of most of the occupants, or increasing the number of occupants in non-planned locations, likely requires additional planning for proper and safe exiting, additional washrooms, etc., and potentially having to remove or modify arena glass, boards, etc.

Other activities likely to require a permit and/or the involvement of a safety-codes professional would include displays of pyrotechnics, or fireworks. These usually require the approval of the fire department or a fire-safety-codes professional.

In all instances, it is suggested that, unless a facility is purpose-built for the mass-gathering events anticipated (such as an amusement park), some change in the type, scope, or volume of usage will result in a need to evaluate any building, structure, or place used temporarily for such purposes. Evaluation should focus on the following:

Activities

- What activities are expected to take place?
- Do those activities involve any specific or general risks to the participants or spectators (e.g., flame effects, animals, motorized equipment, extreme noise, light or heat, hot work)?
- Does the setup, maintenance, or take-down of equipment for the event pose any specific or general risks (e.g., use of forklifts, cranes; installation of temporary electrical power; refuelling of generators, engines, propane tanks)?
- Is there liquor service, food service, dancing, etc.?
- Is there preparation of food (or other products) on site?
- Does the event bring into an indoor space equipment normally designed for and found outdoors?

Audience/Participants

- What ages (or range of ages) are likely to attend?
- Is there any process to limit numbers of attendees/participants (ticket purchase, etc.)?
- Are there different locations/facilities/equipment at the event location that will be used by different age groups?
- Are there identifiable portions of the attendees who could have trouble taking actions for self-preservation, with or without directions? This could include children, those with physical or cognitive challenges, and persons with service animals.
- Will any parts of the event involve participation of, or attendance by, people who might be considered VIPs?

Facilities/Buildings/Equipment

- Is the event taking place in a facility normally used for assembly-type purposes?
- Is the event similar to the activities that normally take place within the venue?
- Does the event involve placement or erection of temporary equipment or structures?
- Have occupant loads been determined in terms of the Building Code, Fire Code, and possibly the Liquor Control Act by the appropriate authorities?
- If any of the event takes place outdoors, are there provisions, in case of inclement weather or emergency, for the potential movement of people into buildings, which may already be occupied?
- Are the facilities, buildings, structures, places, or equipment complaint with the applicable codes, standards, regulations, and permits under provincial Legislation?

By answering these questions and taking appropriate measures, the owners, operators, and regulators will have conducted much of the risk analysis that should be expected at mass-gathering events.

Organizers should contact the local municipality, including the fire department and those who deal with building, electrical, and gas permits, well in advance of the event to ensure that all regulatory matters have been identified and addressed. Participation of these groups in the planning of events has repeatedly proved to be of value, reduces potential for conflict at the last moment, and improves any required emergency response.

Safety and Security

Organizers must ensure that a safe and secure environment is provided for everyone, from the general public to performers and workers. Potential problems and concerns must be anticipated and mitigated. Where a potential problem cannot be fully mitigated, emergency plans must be developed and communicated so that response to an incident is efficient and effective. Organizers should inform the local police service about potential problems and consult with them about the best ways to handle safety and security. For larger and higher-risk events, the best option is to hire an approved security company that has personnel already trained and knowledgeable in providing safe and secure environments.

Controversial Events and Criminal Activity

Any potential for criminal activity at an event or protesters should be anticipated. To ensure adequate security, police or other security personnel need to be involved in the planning process. Any emergency response actions must be undertaken separately from response to criminal activity. The security team should know how to work with police and how to protect evidence at a crime scene. It is advantageous to meet with protest group leaders in advance and to include them in developing plans to minimize injury and conflict.

Command and Control

The Canadian Incident Command System (ICS) is being adapted by most organizations across the province and country. This system works well for large and small responses whenever multiple agencies are involved in response, such as police, fire, EHS, municipal staff, utility companies, transportation, and social services.

In advance of the mass gathering, the type of command and control structure to be used in the event of a serious incident or disaster should be the Canadian Incident Command System (ICS Canada). Even for small community events, there must be someone “in charge,” making the critical decisions during an incident response. Key personnel and their roles must be identified for all sizes of events.

In large-scale events, people can become confused about who is in charge and what roles and responsibilities all of the various agencies play during normal operations and during different phases of an emergency. Unless there is some structure for the key agencies to work together to coordinate an effective response, there can also be confusion in communications. Disorganization can become compounded if multiple incidents occur at the same time.

Emergency Communications

Notifications/Activation/Contact Lists

Develop an event notification chart. A notification chart is a diagram of the hierarchy for notification in an emergency, including who is to be notified, by whom, and in what priority. How and when to use the contact lists also needs to be clarified.

Notification procedures should be developed to ensure the timely notification of persons responsible for taking emergency actions. The procedures for this group of people should be brief, simple, and easy to implement. How notification will be given also must be determined. Phone calls, emails, or radio

notification can be used, depending on the size of the event and the number of people that need to be contacted in a given period of time.

Interoperable Communication Systems

Communications systems between event organizers, security, and emergency response personnel should be interoperable so that during an incident or disaster all parties are able to communicate efficiently and effectively.

A central communications area for large gatherings, adjacent to or part of the command post area, should be considered for higher-risk events. Communications systems can include portable radios, telephones, cellular telephones, and public address systems. Because a single system can fail, communication facilities should be multi-modal, and each system should have its own backup power source.

Public Communications

A means of communicating with the public at a mass gathering is essential. For small events, in small or confined indoor spaces, a public address system (megaphone or microphone) may be all that is needed. For larger events spread over a wide area, there may be a need to establish multiple communications systems so that messages can be delivered to different sections of a crowd or to different indoor or outdoor facilities. Some consideration should also be given to extending the ability to communicate just beyond the controlled venue boundaries and into the surrounding area.

Event Emergency Warning System

Some means to inform people of an emergency or dangerous weather condition should be in place for every size of event. This emergency warning system must be able to operate without benefit of the main power source and must be operational at all times. All emergency communications must be authorized through one person – typically the Incident Commander – to avoid mixed messages and rumours that could move a crowd to panic. Part of the planning process should be to draft pre-scripted messages that can be revised quickly.

WEATHER MONITORING FOR MASS GATHERINGS

Weather can have a significant impact on any mass-gathering event. Weather planning and weather safety preparedness can go a long way to minimize or mitigate the impacts of weather-related events. Some weather threats can be avoided or greatly minimized by carefully considering and choosing times and locations for events.

Weather conditions and forecasts must be attentively monitored from pre-event facility setup right through to post-event take-down. Event organizers may also have to consider potential off-site responsibilities. A sudden change in the weather such as a severe storm could present a direct danger to people or damage to facilities and equipment.

Well before the mass-gathering event, potential weather elements should be fully analyzed for probability, potential impact, and event-specific critical thresholds. Mitigation plans must be developed and the emergency plans must be well known by event staff. Even weather events that do not meet the criteria for an Environment Canada Weather Warning may require emergency or other event mitigation plans.

Weather forecasting and weather monitoring services involve a number of choices. Multiple means of weather monitoring are strongly encouraged. Whether you choose Environment Canada as a reference source for weather information or services from other providers, weather forecasts and observations must be properly interpreted. Event organizers should consider specialized weather information, location-specific weather forecasts, and on-site weather observations.

As with any emergency plan, effective communication is extremely important. Be sure to consider the needs of people with language, health, or mobility issues that might affect their ability to access, understand, or follow safety guidelines or emergency procedures.

Shelter-in-place and Evacuation Planning

The event planning team should consider both evacuation and shelter-in-place strategies when developing an event emergency response plan. The planning team can work toward a strategy that will ensure the health and safety of event responders, participants, attendees, and employees. Any strategies developed should complement and support the municipal emergency plan. Considerations include the following:

- Who will make the decision to evacuate or shelter in place?
- How will that decision be communicated and to whom?
- Who will lead the evacuation / shelter-in-place efforts (i.e., event security)?
- Have the evacuation / shelter-in-place requirements of persons with special needs been addressed?
- Have clear, concise public messages been prepared based on the probably of occurrence identified in the local hazard vulnerability and risk analysis?
- Will all paid and volunteer staff be trained and aware of their roles and responsibilities during an evacuation / shelter-in-place?

Shelter in Place

Considerations include the following:

- Can the venue facilities accommodate a shelter-in-place strategy? A building may be adequate shelter during a severe weather event but not during a hazardous materials event, or vice versa.
- Have building staff been trained in their duties (e.g., managing building ventilation systems) during a shelter-in-place event?
- Are suitable shelter-in-place structures identified on the site plan?

Evacuation

Considerations include the following:

- Can site infrastructure accommodate a timely evacuation of all attendees?
- What are the event traffic-control and management strategies?
- Will additional transportation resources (buses, etc.) be required? Who will be the lead on additional transportation equipment? Have resource lists been developed?
- Will patrons and staff be evacuated from the site or evacuated to a structure on site?
- Will the local authority's emergency social services staff be involved?
- Are evacuation routes clearly identified and marked on the site plan?

Site Map/Plan

As part of the planning and permitting process there should be a site map or plan provided for each event/venue. Site plans, route maps, and supporting diagrams and drawings should be submitted in both electronic and paper formats. Plans and maps should include but not be limited to:

- north direction
- direction of travel – if event is a parade, race, walk, etc.
- names of adjacent avenues, streets, and roads
- emergency access routes
- access and egress routes clearly labelled with numbers/letters consistent with those on the gates
- location of temporary and permanent fencing, barriers, or barricades set up for the event
- parking facilities
- generators and other electrical sources
- fuel storage (if required for the event)
- temporary and fixed event facilities, including stages, seating (bleachers and grandstand), bridges, platforms, trailers, tents, amusement rides, and vendor sites
- staging and holding areas
- location of vendor sites with cooking activities that may involve flammable gases or open flames
- location of first aid facilities
- layout of permanent or temporary camping facilities if provided as part of the event

Mass-Casualty Event

A mass-casualty event may by its very nature involve multiple response agencies to support treatment and transport of persons from the scene. It is essential that the planning team include Emergency Health Services in the planning process to ensure:

- that health-care facilities and EHS staff are aware of the event for logistical purposes, including dates/times of the event
- seamless transfer of patients from event medical staff (if not provided by EHS) to EHS
- that communications and command structures are defined prior to an incident
- that access/egress and staging/triage areas are established prior to an incident
- the development of a Medical Site Management Plan

DEBRIEFING AND CORRECTIVE ACTION PLANS

All emergencies, particularly those requiring municipal coordination procedures, offer operational and resource challenges. Some of these challenges may not have been considered or known before the event. Debriefing after the event provides an opportunity to capture those experiences and learn from them. This review can provide insight to assessing and continuously improving procedures, resources, and functions.

Risk

Those involved in municipal emergency management operations during a real event can provide very valuable information for improving existing procedures or functions. In reality, very few of these valuable insights are captured and applied, as good intentions to debrief with all agencies are often not included in procedures. To capture lessons learned after every emergency requiring the activation of the Event Emergency Response Plan or exercise, it is recommended that "Lessons Learned" procedures be included in the Event Emergency Response Plan. This debriefing procedure should outline when the general (all agencies present) debriefing is done, who participates, and how to follow up on recommendations resulting from the debriefing. The procedure should also require or encourage every participating agency to do an additional internal agency review of the event response and to document the debriefing, recommendations, and follow-up.

Recommended Policy

To ensure that all participating agencies review the overall event response whenever the plan is activated, a debriefing procedure shall be included in the emergency plan, requiring a debriefing meeting of all agencies involved, soon after the emergency is concluded. The meeting shall be recorded, lessons learned documented, and follow-up recommendations reported to the planning committee. The procedure shall also require municipal agencies involved in the event response to do a formal internal agency debriefing and to document agency recommendations and follow-up.

SAMPLE WORKSHEETS

Event Information

Event Type:

- Special Event
- Festival
- Run/Walk
- Sports Rally

Date/Time/Duration:

_____

Event Venue:

- Park _____
- Roadway (attach route)
- Plaza _____
- Building _____

Event Activities:

ACTIVITY	TEMPORARY STRUCTURES	SPECIFICS

SAMPLE WORKSHEETS

Risk Analysis

RISK FACTOR	1 LOW	2 MEDIUM	3 HIGH	4 EXTREME	SCORE
EVENT and ACTIVITY INFORMATION					
Type	Planned Events • Community and family based	Planned Events • Sporting Events • Runs/Walks • Concerts	Planned Events • Rallies • Demonstrations • Protests	Unplanned Events Any spontaneous event	
Duration	Up to 3 hours	Up to 10 hours	Up to 24 hours	Over 24 hrs. Unknown	
Infrastructure and Equipment	No structures low to the ground such as tables, chairs	Soft structures such as small or moderate-sized tents	Hard structures such as stages Tall structures Heavy structures Power cables and electrical equipment	Uncontrolled or non-permitted structures and equipment	
Alcohol	None	Confined Controlled Limited access	Uncontrolled Unconfined Moderate to high use	Excessive use Uncontrolled Unconfined Movement through public areas	
Criminal Activity	None expected	Potential by-law infractions	Criminal acts Minor property damage Potential assaults	Life/safety issues Excessive property damage	
ORGANIZATION AND PLANNING					
Organizers	Well-organized Compliant Experienced	New group May be in-experienced	History of unco-operative behaviour Non-payment	Defiant Violent	
Event History	No problems No police interventions	Minor incidents Minimal police interventions	Major incidents Arrests, charges Some impact on city systems	Critical upset to city systems History of violence	
Event Planning	Maximum preparation time	Limited preparation plans	Minimal preparation time	No preparation time	
Security	None needed Trained Paid Sufficient	Needed but limited training Volunteers Insufficient	Needed but no training Insufficient numbers	No security	

SAMPLE WORKSHEETS

Risk Analysis

RISK FACTOR	1 LOW	2 MEDIUM	3 HIGH	4 EXTREME	SCORE
	numbers	numbers			
Emergency response planning	Have emergency response plans including medical, security, evacuation, communications	Adequate emergency response plans	Inadequate emergency response plans	No emergency response plans	
VENUE					
Type	Parks and public spaces that are non-confined	Buildings or parks with controlled or confined access (plazas, theatres)	Buildings with uncontrolled access	Streets	
Route Safety	Paths and sidewalks No police assistance needed	Planned street route with some traffic control and signage	Un-escorted Un-marked with no police or safety controls	Varied route Unplanned Uncontrolled Interacts with other users	
CROWD ASSESSMENT					
Crowd Type	Family Corporate Business	Young adults Persons of interest			
Crowd Size and capacity	Small size High capacity venue for size of crowd	Moderate numbers Up to maximum capacity of venue	Large numbers Exceeds capacity	Critical density Uncontrolled venue	
Crowd Dynamics	Calm Co-operative Peaceful	Celebratory	Anxious Aggressive	Violent	

SAMPLE WORKSHEETS

Event Contact List

AGENCY	CONTACT PERSON	TITLE	CELLULAR	RADIO
EVENT ORGANIZER				
EMERGENCY CONTACT				
DIRECTOR				
DIRECTOR				
DIRECTOR				
EVENT STAFF				
SECURITY				
ADMISSIONS				
FIRST AID				
COMMUNICATIONS				
FOOD SERVICES				
VENUE MANAGER				
GATES				
MUNICIPAL RESPONDERS				
POLICE				
FIRE				
EHS				
EMERGENCY MANAGEMENT				
PUBLIC WORKS				
PUBLIC INFORMATION				

SAMPLE WORKSHEETS

Typical Events Requiring an Emergency Response Plan

EVENT	NUMBER OF PEOPLE	DATE(S)	CONTACT

APPENDIX: MEDICAL AND HEALTH-RELATED CONSIDERATIONS

The Nova Scotia health system, through local district health authorities (DHAs), the IWK, Emergency Health Services (EHS) and the Department of Health and Wellness (DHW) works with communities, event organizers and stakeholders to ensure safe and successful events. Planning factors to be considered include:

- Numbers and demographics of anticipated spectators, participants and volunteers
- Nature and type of event
- Location and size of the venue
- Duration of the event; hours or days
- Seasonal/weather and other environmental factors
- Available health resources in the surrounding community
- isaster and evacuation requirements for the site

The process of medical planning ensures both that the event site is safe and that the event does not compromise the health system capacity for the greater community.

9-1-1

Municipalities and event organizers are reminded that 9-1-1 remains the only method for accessing emergency medical services, even if EHS and/or primary health care facilities staffed with physicians and/or other health care providers are on site.

8-1-1

The Nova Scotia Healthlink 8-1-1 system provides access to non-emergency health information and services. If you are hearing-impaired and would like to access this service, call 7-1-1 (TTY).

When telephoning 8-1-1, a registered nurse will provide advice and information concerning all kinds of general health issues and questions. Advice and information may include a recommendation to see your doctor or a visit to a local emergency department. You can also obtain information about health issues and services available in the community.

The 8-1-1 program can provide services in French and many other languages. Services in other languages are offered through a third party interpretation service and include, but are not limited to, Arabic, Farsi, and Cantonese.

The 8-1-1 service is provided at no cost to the caller. Municipalities and event organizers are encouraged to include the 8-1-1 service information in the event materials. It is also recommended 8-1-1 be informed by telephoning 902-237-6912 when events are occurring in communities.

Public Health

Public Health is responsible to control the transmission of communicable diseases, promote health and identify and mitigate risks to health by physical, chemical or biological hazards. Public Health professionals can provide expertise that ensures participants enjoy a successful event by preventing

disease and injury and protecting the health of participants and the community.

Public Health may wish to work with community and event organizers to assess the risks posed by the events, participants, venues, supportive infrastructure and other community factors that may influence the health of participants such as influenza activity or other communicable diseases. This may include disease surveillance before, during and after the event, establishment of preventive measures, educational materials, air and water quality assessments and general sanitation guidance.

Municipalities and organizers are encouraged to contact their local public health office listed at www.gov.ns.ca/dhw/about/phs-offices.asp .

Emergency Health Services

EHS paramedics, collaborating with police, fire and other stakeholders provide a valuable service to support a successful event. Paramedics will work with your event planning committee to review the size and complexity of your event to help determine the type of pre-hospital medical coverage that should be in place.

Depending on the identified risks, simply having first aid on site may not be in the best interest of the event planners or participants. EHS paramedics will help you define the right combination of paramedics, ambulances and other on-site medical resources. There is no charge for EHS paramedics to work with you in the planning for medical coverage for your event. If on-site resources are required for the event, e.g. paramedics, equipment and vehicles, the cost is the responsibility of the event organizers. Event organizers will only be billed on a cost recovery basis for EHS services.

Please contact the EHS special events team early in your planning to ensure availability of medical resources for your event.

Emergency Health Services
Phone: (902) 407-4894
Fax: (902) 832-8333
e-mail: specialevents@emci.ca

Hospitals

The DHAs and IWK will collaborate with municipalities and event organizers to ensure the appropriate level of resources are available at hospitals to support your event. In some cases, it may be appropriate to have on-site emergency and/or primary health care facilities staffed with physicians and/or other health care providers.

The DHA / IWK Emergency Planner, in collaboration with Public Health and EHS, will work with the event planning committee to develop the medical plan. The DHA/IWK Emergency Planner can be contacted through the local DHA / IWK switchboard. www.gov.ns.ca/dhw/about/DHA.asp . Contact information for individual hospitals can be found at www.gov.ns.ca/dhw/about/hospitals.asp

Food Safety

Anyone in Nova Scotia who wants to operate a foodservice facility such as: restaurant, food take-out, mobile canteen, temporary food establishment, or a grocery store or push carts or any facility

from which foods are sold, whether on a permanent basis or only occasionally must apply for a Food Establishment Permit.

A Temporary Event Permit is required for the sale of foods at temporary events, fairs and festivals as defined in the Nova Scotia Food Safety Regulations. It is required for a booth or other structure operated for fourteen consecutive days or less per year and also includes food booths set up by community organizations to raise funds.

Note: Not for profit (recognized charity) does not require a fee.

For additional information regarding these and more permits or policies, visit the department's web site at **www.gov.ns.ca/snsmr/paal/agric/paal006.asp**

It also falls under the mandate of the Food and Safety Division to ensure that an adequate number of washrooms are on site at an outdoor event. The chart below can serve as a guideline in determining the number of portable toilets the event should have on site. If the event is serving food and/or beverages (especially alcohol), ordering additional restrooms should be considered. The Food and Safety Division can also assist in determining the number of toilets necessary for the event.

For further assistance, contact the Food Safety Division at

Nova Scotia Department of Agriculture
Agriculture and Food Protection Division
PO Box 550
Truro, NS
B2N 2P3

Phone: (902) 424-1173 Food Safety Section
Fax: (902) 424-3948

APPLICATION FOR SPECIAL EVENT (S)

PLEASE PRINT

(1) DATE OF EVENT: _____

(2) APPLICANT INFORMATION

(a) Applicant(s) (promoter) Name _____

(b) Drivers License No. and Birthdate _____

(c) Address: _____

City: _____ Postal Code: _____

(d) Telephone No. Business: _____ Residence: _____

(e) Applicant (promoter) Business License No. _____

(f) If incorporated: Date of Incorporation: _____

Incorporation No. _____

Directors Names: _____

(g) Names & contact numbers (cellular, direct lines and/or pagers) of persons who will be on site at the event and who will have direct authority and responsibility: _____

_____

_____

_____

(h) Please list below the names and Business License Numbers of any companies or individuals that will be selling merchandise at the event (i.e. water, food, jewelry, etc) _____

_____

_____

_____

_____

(3) EVENT INFORMATION

(a) Address of Proposed Event: _____

(b) Will alcohol be served at the event? Yes ☐ No ☐

(c) Will minors be admitted (18 and under) Yes ☐ No ☐

(d) Age group of expected attendees _____

(e) Proposed hours of operation _____

(f) Proposed patron capacity: _____ Fire Capacity: _____

(g) Type of entertainment: _____

(h) Describe the transportation options to and from the event (i.e. public transit, taxi-cab, etc)

(i) Describe automobile parking arrangements for your event patrons (i.e. number & location)

(j) Security Company Name & Business License No: _____

(k) Is the Security Company insured for late night events? Yes ☐ No ☐

(l) Have you budgeted for the cost of the additional policing presence during the event?

Yes ☐ No ☐ If YES, how many officers have you budgeted for? _____

(m) Type of food and beverages available at event: _____

(4) REQUIRED ATTACHMENTS

(a) Have you attached two copies of the complete proposal? Yes ☐ No ☐
(b) Have you organized a Special Event before? Yes ☐ No ☐
If YES, when & where? _____
(c) At these events, were there incidents that required police or emergency services to attend?
Yes ☐ No ☐
(d) A non-refundable processing application fee of _____ is attached to this application. *(This fee is waived for non-profit and charitable organizations)*
(e) A letter from the facility owner indicating their approval of the event is attached to this application.
(f) Two copies of the complete security/operational plan that meets industry standards are attached to this application form which include:

- Provisions and details on first aid, security, entrance and line control and post neighbourhood clean-up measures

(5) PROMOTER COMMITMENTS

I / We agree to the following:

☐ Ensuring that potable water will be available to all participants.

☐ To cover the costs of additional policing, as proposed, presented and recommended by the Police Agency. (Payment for additional police officers will NOT be accepted in-lieu of security personnel). Payment for the additional police officers is due prior to issuance of the Permit.

☐ To provide space at the event for community based drug and health awareness displays.

☐ To accept full responsibility for dealing with ticket holders in the event that a permit is not approved by the Town XXXX.

NOTE: The application must be received by the EMO Coordinator for the Town of XXXXX and application info immediately relayed to the Police Department, XXXXX Fire Department and CAO.

_____ _____

Applicant's Signature & Print Date

OFFICE USE ONLY

PLANNING DEPARTMENT

Is the proposed location suitable? Yes ☐ No ☐
Are residential uses in close proximity? Yes ☐ No ☐
Do you approve of the event? Yes ☐ No ☐
Comments/Conditions: _____

Dir. of Planning _____

FIRE DEPARTMENT

Maximum Fire Capacity:
Plans Submitted/Approved? Yes ☐ No ☐
Do you approve of the event? Yes ☐ No ☐
Comments/Conditions: _____

Fire Chief _____

EMO DEPARTMENT

Operational Plan Submitted/Approved? Yes ☐ No ☐
Do you approve the event? Yes ☐ No ☐
Comments/Conditions:

EMO Coordinator _____

POLICE DEPARTMENT

Security Plan Submitted/Approved? Yes ☐ No ☐
Do you approve of the event? Yes ☐ No ☐
Comments/Conditions:

S/Sgt _____

PUBLIC WORKS DEPARTMENT

Operational Plan Submitted/Approved? Yes ☐ No ☐
Do you approve the event? Yes ☐ No ☐
Comments/Conditions:

Dir. of Public Works _____

ADDITIONAL COMMENTS

PERMITS & LICENSES

Fees Paid: Yes ☐ No ☐ If no, Reason _____
Approved: Yes ☐ No ☐ **(Must also be approved & signed off by EMO prior to final approval)**

If YES, Permit/License No. _____

If NO, Reason(s): _____

Approving Authority Signature ( )

Special Event Bylaw
(Sample)

AUTHORITY

Section 172 (1) (a-c) and (d) (iii-vi) of the *Nova Scotia Municipal Government Act (MGA)* provides municipalities with the power to make bylaws, for municipal purposes, respecting the health, well-being, safety and protection of persons; the safety and protection of property; and respecting nuisances, activities and things that, in the opinion of council, may be or may cause nuisances, including noise, as well as prescribing the hours during which certain noises, or all noise above a certain level, specified in the by-law is prohibited, authorizing the granting of exemptions in such cases as the bylaw provides, and providing that it is an offence to engage in any activity that unreasonably disturb the peace and tranquility of a neighborhood.

Section 10A of the *Emergency Management Act*- Chapter 8 of the Acts of 1990, amended 2005, c. 48, ss. 1-6; 2007, c. 10, s. 2; 2009, c. 12- An Act to provide for a Prompt and co-ordinated response to a state of Emergency, states that "*Every municipality shall, immediately upon becoming aware of it, inform the Emergency Management Office of any real or anticipated event or emergency that could impact the health, safety or welfare of Nova Scotians, their property or the environment.* 2009, c. 12, s. 3.

INTERPRETATION

41.01 In this Bylaw, unless the context otherwise requires:

a) "Coordinator" means the REMO Coordinator for the Town of ___

b) "Large" means five hundred (500) or more;

c) "Special Event" means any event where a large number of people (five hundred or more) are brought together to watch or participate in a commercial dance of other entertainment performance or other event where;

(i) the, performance or event is held for the purpose of providing entertainment, whether such entertainment is free or for profit or gain;

(ii) tickets maybe be provided or sold and / or an entrance or attendance fee is charged for persons to attend; and

(iii) music, noise or sound of any kind or source, including but not limited to amplified, recorded or computer generated music, amplified recorded or computer generated sounds, live music, sound or band music is performed of played.

d) "Promoter" means the person/organization who has the financial responsibility for the special event including contracting with

entertainers, security firm, overtime policing costs, renting the facility, advertising the special event, and colleting gate receipts;

e) "REMO" means Regional Emergency Management Organization;

f) "Town" means the town of _____.

GENERAL PROHIBITION

41.03 (1) Event Permit Application Procedure

(a) A **promoter** wishing to organize or hold a **special event** must complete an event application provided by the **Town** for that purpose.

(b) The event application specified in subsection (a), must;

(i) be signed by the **promoter**;

(ii) be presented to the **Coordinator** at least forty-five (45) days prior to the event; and,

(iii) be accompanied by an application fee of $100.

(2) Event Permit Requirements

(a) The Town will only issue a special event permit for events where:

(i) Premises continue to meet all relevant fire, safety, and health regulations/codes;

(ii) a payment is made to the **Town** prior to the issuance of the event permit for additional policing services on the basis of such a presented by the RCMP (based up to the maximum capacity of the facility, and as established in the event application);

(iii) there is adequate traffic control and security plan in place for the **special event** which includes provisions for:

(a) first aid;

(b) Entrance control to deter alcohol or illicit drugs being brought to the premises during the special event;

(c) Outside inspection and clean up in the vicinity of the premises during and after the event;

(d) The employment of a security firm licensed by the Government of Nova Scotia;

(e) Traffic control for safe traffic and pedestrian flow.

(iv) There is provision for an adequate supply of potable water to those in attendance.

SEVERABILITY AND CITATION

41.04 (1) Any person who fails to comply with the provisions of this Bylaw for which no penalty is expressly provided shall be liable on conviction to a penalty of not less than Two Thousand Dollars ($2,000.00) and not more than Ten Thousand Dollars ($10,000.00), and in default of payment, to imprisonment for a term not exceeding two (2) months.

(2) If any part, section, subsection, clause, or sub clause of this bylaw is, for any reason, held to be invalid by the decision of a court of competent jurisdiction, such decision does not affect the validity of the remaining portions of this bylaw.

(3) This bylaw is cited as the "Special Event Bylaw # ____"

This Bylaw is effective upon publication.

Clerks Annotation (Office Use Only)

Date of first reading:
Dates of advertisement of Notice of Intent to Consider:
Date of second reading:
*Date of advertisement of passage of Bylaw:
Date of mailing to Minister a certified copy of Bylaw:

I certify that this Special Event Bylaw # ____was adopted

_____
CAO
Town of

***Effective Date of the Bylaw unless otherwise specified in the text of the Bylaw**

A special thanks to the Town of Windsor for sharing their Special Event Bylaw and Special Event Application.

Community Event Emergency Response Planning

January 2014

INCIDENT COMMAND SYSTEM (ICS)
POSITION DESCRIPTIONS

Emergency Operations Center (EOC) MANAGER

DESCRIPTION: The EOC Manager's responsibility is the overall management of the EOC. On most incidents the command activity is carried out by a single EOC Manager. The EOC Manager will be the CAO or designate.

Reports to: Mayor and Council
The EOC Manager should have a deputy. Deputies must be ready to take over that position at any time.

RESPONSIBILITIES:

- Assess the situation and/or obtain a briefing from the EMC or the prior EOC Manager.
- Determine Incident Objectives and strategy for the operational period.
- Determine level of staffing needed to begin dealing with the emergency. This may be increased or decreased later.
- Establish the immediate priorities.
- Ensure planning meetings are scheduled as required.
- Approve and authorize the implementation of an Incident Action Plan (IAP).
- Ensure that adequate safety measures are in place.
- Coordinate activity for all Command and General Staff.
- Coordinate with the Advisory Committee.
- Approve requests for additional resources or for the release of resources.
- Keep the Mayor informed of incident status.
- Keep the chairperson of the EMO Advisory Committee informed of incident status.
- Approve the use of trainees, volunteers, and auxiliary personnel.
- Determine the operational period.
- Authorize release of information to the news media.
- Order the demobilization of the incident when appropriate.
- Use SOP's for briefing incoming EOC Manager.

SAFETY OFFICER

DESCRIPTION: To ensure good risk management practices are applied throughout the event. Identifies liability and loss exposures to personnel and property. Provides advice on health and safety issues.

Reports to: EOC Manager

RESPONSIBILITIES:

The responsibilities of the Safety Officer or alternate during an emergency or disaster are:

- Report to the EOC.
- Prepare a site-specific Safety and Health Plan and publish Site Safety Plan summary (ICS Form 208), as required.
- Identify and cause correction of occupational safety and health hazards.
- Continuously monitor workers for exposure to safety or health hazardous conditions.
- Alter, suspend, evacuate or terminate activities that may pose immanent safety or health danger to the workers.
- Take appropriate action to mitigate or eliminate unsafe condition, operation, or hazard.
- Provide training and safety and health information.
- Perform assessment of engineering controls and PPE.
- Comply with NS OHS standards/guidelines.
- Document both safe and unsafe acts, corrective actions taken on the scene, accidents or injuries, and ways to improve safety on future incidents.
- Participate in planning meetings.
- Identify hazardous situations associated with the incident.
- Review the Incident Action Plan (IAP) for safety implications.
- Exercise emergency authority to stop and prevent unsafe acts.
- Investigate accidents that have occurred within the incident area.
- Assign assistants, as needed.
- Review and approve the medical plan.
- Maintain Unit/Activity Log (ICS Form 214)
- ensure safety plan is commenced and activated for all areas of the emergency operations plan.
- Work with EMO and other operational divisions to ensure safety components are built into working activities and plans.

LIAISON OFFICER

DESCRIPTION: Invites required Support Agencies and stakeholders to the EOC. Provides input to strategic direction and advice and liaises with neighboring municipal EMC.

Reports to: EOC Manager

RESPONSIBILITIES:

The responsibilities of the Liaison Officer or alternate during an emergency or disaster are:

- Be a contact point for Agency Representatives.
- Maintain a list of assisting and cooperating agencies and Agency Representatives.
- Monitor check-in sheets daily to ensure that all Agency Representatives are identified.
- Assist in establishing and coordinating interagency contacts.
- Keep agencies supporting the incident aware of incident status.
- Monitor incident operations to identify current or potential inter-organizational problems.
- Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
- Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- Have debriefing session with the EOC Manager prior to departure.
- Work with EMO and other operational divisions to ensure interagency communication and reporting are built into working activities and plans.

PUBLIC INFORMATION OFFICER (PIO)

DESCRIPTION: Establishes and maintains media contacts. Prepares social media releases, coordinates interviews and news briefings and monitors media and information sources and ensures public safety information is provided in accessible formats.

Reports to: EOC Manager

RESPONSIBILITIES:

The responsibilities of the Public Information Officer or alternate during an emergency or disaster are:

- Report to the EOC.
- Have an area away from EOC.
- Brief Mayor and Council on situation.
- Maintain a log of all action taken.
- Coordinate a Press Release on information received from the IC.

- Coordinate with local and other media as required.
- Coordinate social media forums such as Facebook, Twitter, websites etc.
- Ensure emergency messages are activated on main telephone lines as required.

ADMINISTRATION / FINANCE SECTION CHIEF

DESCRIPTION: The Finance Section Chief is responsible for managing all financial aspects of the incident. He / she are responsible for tracking all incident costs and providing guidance to the EOC Manager on financial issues that may have an impact on incident operations.

Reports to: EOC Manager

RESPONSIBILITIES:

- Check-In upon arrival at the EOC.
- Report to the EOC Manager.
- Obtain a briefing on the situation
- Review your position responsibilities.
- Ensure that the section is set up properly and that appropriate personnel, equipment and supplies are in place. Set-up your workstation.
- Review organization in place at the EOC. Know where to go for information or support.
- Clarify any issues you may have regarding your authority and assignment, and what others in the organization do.
- Open and maintain section logs.
- Organize and staff section as appropriate.
- Identify collateral response organization(s) and positions.
- Manage all financial aspects of an incident.
- Confer with EOC Manager on delegation of purchasing authority to section. Determine appropriate purchasing limits to delegate to Logistics Section.
- Meet with Operations and Logistics Chiefs. Determine financial and administrative support needs. Review procedures for on-going support from section. Establish purchasing limits for Logistics Section.
- Based on the situation as known or forecast, determine likely future Finance/Administration section personnel and support needs.
- Review responsibilities of units in section. Develop plan for carrying out all responsibilities.
- Activate organizational units within section as needed and designate leaders for each unit.
- Request additional personnel for the section as necessary to maintain appropriate level of EOC operations.
- Adopt a proactive attitude. Think ahead and anticipate situations and problems before they occur.
- Ensure that section logs and files are maintained.

- Carry out responsibilities of Finance/Administrative Section units that are not currently activated.
- Make sure that all contacts with the media are fully coordinated first with the Public Information Officer.
- Participate in EOC Manager's strategy meetings and planning meetings.
- Conduct periodic briefings for section. Ensure that all organizational elements are aware of priorities.
- Monitor section activities and adjust section organization as appropriate.
- Resolve problems that arise in conduct of section responsibilities.
- Brief EOC Manager on major problem areas that now need or will require solutions.
- Share status information with other sections as appropriate.
- Keep agency administrators apprised of overall financial situation.
- Brief your relief at shift change time.

Demobilization

- Provide financial input to demobilization planning.
- Demobilize the Section and close out logs when authorized by the EOC Manager.
- Ensure that any open actions are assigned to the appropriate agency or element for follow-on support.
- Ensure that any required forms or reports are completed prior to your release and departure.
- Be prepared to provide input to the Post Incident Report.

LOGISTICS SECTION CHIEF

DESCRIPTION: The Logistics Section Chief is responsible for providing all support needs to the incident. Support needs include facilities, services, personnel, equipment and supplies. The Logistics Section Chief activates and supervises the units within the Logistics Section.

Reports to: EOC Manager

RESPONSIBILITIES:

- Check-In upon arrival at the EOC.
- Report to the EOC Manager.
- Obtain a briefing on the situation
- Review your position responsibilities.
- Determine if other section staff is at the EOC.
- Ensure that the section is set up properly and that appropriate personnel, equipment and supplies are in place. Set-up your workstation.
- Review organization in place at the EOC. Know where to go for information or support.
- Clarify any issues you may have regarding your authority and assignment, and what others in the organization do.
- Open and maintain Section logs.
- Manage all incident logistics.
- Provide logistical input to the EOC Manager in preparing the Incident Action Plan.
- Identify anticipated and known incident service and support requirements.
- Request additional resources as needed.
- Supervise requests for additional resources.
- Oversee demobilization of the Logistics Section.

COMMUNICATIONS UNIT LEADER

Reports to: Logistics Chief

RESPONSIBILITIES:

The responsibilities of the Communications Unit Leader or alternate during an emergency or disaster are:

- activates the communications Alert System.
- provides communications in support of emergency or disaster operations.
- establishes static and mobile communications posts as required.
- provide liaison with Annapolis Valley Amateur Radio Club.
- ensure that logs are maintained of all actions taken, including all IN and OUT messages.
- ensure that all personnel likely to operate on the emergency command channel be trained to at least the Restricted Radio Operator (RRO) standard.

ANNAPOLIS VALLEY AMATEUR RADIO CLUB
Amateur Radio Emergency Coordinator

Reports to: Communications Unit Leader

RESPONSIBILITIES:

The responsibilities of the Amateur Radio Emergency Coordinator or alternate during an emergency or disaster are:

- to act as liaison with local emergency planning officials to determine their communications needs.
- to organize local amateur radio operators in an effective emergency communications medium.
- plan to respond to emergencies or disasters or to provide mutual aid.
- to liaise with regional and provincial amateur emergency communications coordinators to effectively integrate the Annapolis Valley amateur communications plan with regional and provincial plans.
- to establish effective call-up procedures to alert operators during an emergency.
- to accurately inventory amateur radio operators and their communications resources.
- to coordinate the deployment of amateur radio operators and resources during an emergency according to the needs of local emergency response officials.
- to ensure that Net Control operators are selected and trained.
- to ensure that amateur radio operators are trained in conducting emergency communications and in message handling.
- activate the Club's Amateur Emergency Communications Plan.
- coordinate the amateur radio response in cooperation with the Communications Unit Leader; and
- alert regional and provincial amateur communications coordinators to possible requirements for assistance.

OPERATIONS SECTION CHIEF

DESCRIPTION: The Operations Section Chief is responsible for the support of all tactical operations for the incident. The Operations Section Chief helps formulate and interprets strategy established by the EOC Manager implements it tactically as per EOC procedures. The Operations Section Chief activates and supervises organizational elements in accordance with the Incident Action Plan (IAP) and directs its execution. The Operations Section Chief also directs the preparation of unit operational plans, requests or releases resources, makes expedient changes to the Incident Action Plan as necessary, and reports such changes to the EOC Manager. The Operations Section Chief ensures that the operations function is carried out including the coordination of response for all operational functions assigned to the EOC and ensures that operational objectives and assignments / missions identified in the IAP are carried out effectively. The Operations Section Chief establishes the appropriate level of organization within the section, continuously monitors the effectiveness of that organization and makes changes as required. The Operations Section Chief reports to the EOC Manager on all matters pertaining to section activities.

Report to: EOC Manager

RESPONSIBILITIES:

- Check-In upon arrival at the EOC.
- Report to the EOC Manager.
- Obtain a briefing on the situation
- Review your position responsibilities.
- Determine if other section staff is at the EOC.
- Ensure that the Operations Section is set up properly and that appropriate personnel, equipment and supplies are in place. Set-up your workstation.
- Review organization in place at the EOC. Know where to go for information or support.
- Clarify any issues you may have regarding your authority and assignment, and what others in the organization do.
- Open and maintain section logs.
- Meet with Communications Unit Leader.
    - Obtain briefing on on-site and external communications capabilities and restrictions.
- Attempt to determine estimated times of arrival of requested staff that are not yet on site.
- Establish operating procedure with Communications Unit for use of telephone and radio systems.
- Make any priorities or special requests known.
- Meet with the Planning Section Chief. Obtain and review any major incident reports.
- Obtain from the Planning Section additional field operational information that may pertain to or affect Section operation.
- Based on the situation as known or forecast, determine likely future Operations Section needs.
- Review responsibilities of the Section. Develop plan for carrying out all responsibilities.

- Activate organizational elements within Section as needed and designate supervisors for each element.
- Determine need for representation or participation of other organization representatives.
- Request additional personnel for the Section as necessary for maintaining appropriate level of EOC operation.
- Advise EOC Manager of Section status.
- Adopt a proactive attitude. Think ahead and anticipate situations and problems before they occur.
- Provide situation and resources information to the Planning Section on a periodic basis or as the situation requires.
- Conduct periodic briefings and work to reach consensus among staff on objectives for forthcoming operational periods.
- Attend and participate in strategy and planning meetings.
- Work closely with the Planning Section Chief in the development of EOC Incident Action Plans.
- Ensure that information for your sections and Organization representatives is made available to the Planning Section.
- Ensure that all fiscal and administrative requirements are coordinated through the
- Finance/Administration Section.
    - Notification of any emergency expenditures
    - Time sheets
- Brief EOC Manager on major problem areas that now need or will require solutions.
- Brief supervisors periodically on any updated information you may have received.
- Share status information with other sections as appropriate.
- Brief your relief at shift change time.
- Deactivate subordinate units when no longer required. Ensure that all paperwork is complete, logs are submitted to the Documentation Unit (or Planning Section).

Demobilization

- Authorize demobilization of organizational elements with the Section when they are no longer needed. Ensure that any open sections are handled by section or transferred to other EOC elements as appropriate.
- Demobilize the Section and close out logs when authorized by the EOC Manager.
- Ensure that any open actions are assigned to the appropriate agency or element for follow-up support.
- Ensure that any required forms or reports are completed prior to your release and departure.
- Be prepared to provide input to the Post Incident Report.
- Request additional resources to support tactical operations.
- Approve release of resources from assigned status (not release from the incident).
- Make or approve expedient changes to the Incident Action plan during the Operational Period as necessary.
- Maintain close communication with the Incident Commander.
- Maintain Unit Log.

Fire Services (Fire Chief or alternate)

Reports to: Operations Section Chief

RESPONSIBILITIES:

The responsibilities of the Fire Services Chief or alternate during an emergency or disaster are:

- activate the department's Emergency Alert System.
- coordinate firefighting operations.
- provide assistance in rescue operations.
- coordinate water rescue operations in coordination with RCMP and GSAR
- coordinate hazardous material responses.
- activate the Mutual Fire Aid System if required.
- ensure that dangerous goods support agencies are contacted if necessary; and
- maintain a log of all actions taken.

Royal Canadian Mounted Police (RCMP)

Reports to: Operations Section Chief

RESPONSIBILITIES:

The responsibilities of the R.C.M.P. during an emergency or disaster are:

- activate the department's Emergency Alert System.
- control, and if necessary, disperse crowds within the emergency or disaster area.
- seal off the emergency or disaster area.
- control traffic to facilitate the movement of emergency vehicles.
- oversees the evacuation of buildings or residential areas authorized by the Operations Group.
- ensure the protection of lives, public and private property.
- provide security and prevent looting of evacuated areas.
- provide assistance to the Coroner.
- direct search and rescue operations (e.g., work with GSAR. / Fire Departments).
- provide or request assistance when required.
- maintain a log of all actions taken.

Ground Search and Rescue (GSAR)

Reports to: Operations Section Chief

RESPONSIBILITIES:

The responsibilities of the Chief or alternate of the GSAR Organization during an emergency or disaster are:

- activate the organization's Emergency Alert System.
- support emergency or disaster operations.
- search for missing persons, ground and air.
- provide or request mutual aid when required; and
- maintain a log of all actions taken.

Emergency Health Services (EHS)

Reports to: Operations Section Chief

RESPONSIBILITIES

The responsibilities of the EHS Operations supervisor or EPSO Paramedic or alternate during an emergency or disasters are:

- Establish priorities for distribution of resources among multiple sites.
- Ensure available equipment and resources required at the scene are mobilized.
- Coordinate incident related, off site concerns, i.e., staffing, etc.
- Liaise with all other agencies including hospital staff and facilities.
- Liaise with Fire Representative to mobilize Medical First Responders (MFRs) as needed.
- Ensure the System Status Plan is maintained outside of the incident site.
- Prepare to return to normalcy.

Health Representatives

Reports to: Operations Section Chief

Health Liaison Officer

Responsibilities

On receipt of the warning of a real or potential emergency or disaster, the Health Representative shall:

- Activate the health services alert system
- Report to the Emergency Operations Centre
- Activate the health services emergency plan
- Act as a liaison for the coordination of the response of health services including:
  - Annapolis Valley Health Authority
  - Capital District Health Authority
  - VON
  - Continuing Care
- Maintain a log of all actions taken

Health Services Responsibilities

All Services

- Activate internal emergency alert system
- Activate internal emergency response plan when notified of a disaster situation.

- Establish a communications link with the Health Liaison Officer within the Emergency Operations Centre

Capital District Health Authority and Annapolis Valley Health Authority hospitals:

- Provide hospitalization for the seriously injured
- Provide appropriate medical care to victims of the disaster
- Coordinate the provision of emergency medical treatment for those not requiring hospitalization
- Coordinate the transfer of victims to other hospital facilities as required
- Provide a medical on-site team in an extreme emergency when advance medical treatment is required, at the scene, because of an inability to transport victims to a health facility
- Provide a list of wholesale distributors of pharmaceuticals or surgical supplies, hospitals, clinics, clinical laboratories, special care facilities, and health personnel associated with the Health Facility

Public Health Services:

- Provide information on health hazards
- Assist with the prevention and control of communicable diseases and provide mass immunization if required
- Provide human resources to assist with provision of medically related and support care as appropriate
- Provide advice regarding the safe handling and storage of human remains
- Provide information/education, on health issues, to the public as required

VICTORIAN ORDER OF NURSES (VON)

- Provide human resources to assist with the provision of medically related and support care as appropriate

Continuing Care

- Provide human resources to assist with the provision of medically related and support care as appropriate

Public Works

Reports to: Operations Section Chief

RESPONSIBILITIES

The responsibilities of Public Works or alternate during an emergency or disaster are:

- activates the department's Emergency Alert System.
- provides Municipal equipment and personnel as required.
- provides a list of equipment, supplies, construction companies, private contractors and engineer resources.
- provide assistance in cleanup operations and repair of damages where there is a municipal responsibility.
- advises the Operations Control Group when sustained damages to buildings exceed safe limits.
- provides alternate supplies of water when required.
- provides barricades and flashers.
- provides assistance in search and rescue of trapped and injured people.
- restores essential services.
- provides or request mutual aid when required.
- act as liaison with NSPC
- maintains a log of all actions taken.

Public Transportation

Reports to: EOC OPERATIONAL SECTION CHIEF

RESPONSIBILITIES:

The responsibilities of the Public Transportation Officer or alternate during an emergency or disaster is:

- activate the department's Emergency Alert System.
- establish effective control over all public transportation.
- provide road transportation as required.
- provide qualified personnel to operate transportation vehicles.
- re-routing of transportation.
- provide transportation for casualties, evacuees, special care persons.
- provide lists of vehicle and fuel resources.
- provide or request mutual aid when required.
- act as liaison with local transport companies, taxi firms, airlines, school bus driver; and
- maintain a log of all actions taken.

Emergency Social Services

Reports to: Operations Section Chief

RESPONSIBILITIES:

Under the Emergency Management Act of Nova Scotia, the Department of Community Services (DCS) is responsible for the coordination and provision of Emergency Social Services, in co-operation with EMO NS and each Municipality, to individuals affected by an emergency, and has the ultimate authority and responsibility for decisions regarding these services.

Contract between DCS and the Canadian Red Cross

Since 2000, the DCS has contracted the Canadian Red Cross, to provide services on behalf of DCS regarding Emergency Social Services preparedness, planning, training and response throughout the province.

Under the terms of this agreement, an emergency is defined as one which results in the evacuation of more than 25 people or 10 units/. (Units can be 10 apartments in a building or 10 houses).

The Canadian Red Cross partners with other community groups, such as the Salvation Army, St. John Ambulance, Feed Nova Scotia, DART NS (Disaster Animal Rescue Team), the SPCA, and other agencies that can provide assistance with various areas of emergency response.

ESS Activation/Notification Process

The local authorities/first responders (police, fire services and/or municipal emc) can activate the Department of Community Services ESS team via the Red Cross's emergency number (1-800 222-9597). The Red Cross or the Regional ESS Coordinator or Alternate will then notify the Director of Emergency Social Services of the emergency.

The responsibilities of the Emergency Social Services Coordinator or alternate during an emergency or disaster are:

- activates the Services Emergency Alert System.
- provide the following:
    - temporary emergency food services.
    - temporary emergency lodging in hotels, and/or in reception center/shelters.
    - Provision of essential clothing.
    - Reception and Information Services includes reception centre/shelter management and is intended for the care of people affected by emergencies who are evacuated from their homes and require a temporary meeting place and possibly temporary accommodation until they can return to their homes, or more permanent accommodations are found.
    - Personal services including assistance in obtaining medications, arrangements for the care of pets for displaced individuals residing at an emergency shelter, psychosocial assistance, recreational services, childcare for children separated

from their care givers, and special needs of the elderly and persons with disabilities
    - Family Reunification- a formal system of recording information and answering inquiries regarding the safety and location of people in an emergency. The whereabouts and condition (non-medical) of those affected are tracked through a Registration and Inquiry process, so that families may be reunited and/or reassured as quickly as possible.
- establishes communications requirements.
- provides or request mutual aid assistance when required.
- coordinate the response of volunteer organizations directly involved with Social Services; and
- maintains a log of all actions taken.

The Canadian Red Cross Society

RESPONSIBILITIES:

The responsibilities of the Area Manager or alternate of the Canadian Red Cross Society during an emergency or disaster are:

- activates the Society's Emergency Alert System.
- support emergency or disaster operations.
- operate an inquiry bureau to deal with national and international requests as directed by the Society's National Office.
- setup Reception Centers and provide for food, clothing, lodging, registration/inquiry, and associated personal services.
- provide or request mutual aid when required; and
- maintains a log of all actions taken.

Saint John Ambulance

RESPONSIBILITIES:

The responsibilities of the Superintendant or alternate of St. John Ambulance during an emergency or disaster are:

- activates the brigade's Emergency Alert System.
- support emergency or disaster operations.
- provides emergency first aid services in coordination with Health Services Representative and/or EHS Representative through the Medical First Response program.
- provide or request mutual aid when required; and
- maintains a log of all actions taken.

The Salvation Army

RESPONSIBILITIES:

The responsibilities of the Divisional Commander or alternate of the Salvation Army during an emergency or disaster are:

- activates the Division's Emergency Alert System.
- support emergency or disaster operations.
- provide, in cooperation with Red Cross/Community Services:
    - shelter and bedding.
    - mobile kitchens.
    - Clothing.
    - provides a list of clergy assistance.

PLANNING SECTION CHIEF

DESCRIPTION: The Planning Section Chief is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and the status of resources. Information is needed to understand the current situation, predict the probable course of incident events, and prepare alternative strategies and control operations for the incident. The Planning Section Chief conducts the Planning Meeting and is responsible for producing a written Incident Action Plan (if so, directed by the EOC Manager). The Planning Section Chief activates and supervises units within the Planning Section, Situation Unit, Resource Unit, Documentation Unit, Demobilization Unit and Technical Specialists.

RESPONSIBILITIES:

- Check-In upon arrival at the EOC.
- Report to the EOC Manager.
- Obtain a briefing on the situation.
- Review your position responsibilities.
- Determine if other section staff are at the EOC.
- Ensure that the section is set up properly and that appropriate personnel, equipment and supplies are in place. Set-up your workstation.
- Review organization in place at the EOC. Know where to go for information or support.
- Clarify any issues you may have regarding your authority and assignment, and what others in the organization do.
- Open and maintain Section logs.
- Organize and staff section as appropriate.
- Collect from all available sources, information about the incident.
- Provide input to preparation of the Incident Action Plan (IAP).
- Provide input to modification of the IAP to meet changing needs as necessary.
- Prior to the completion of the IAP, prepare and distribute the EOC Manager's objectives.
- Conduct the Planning Meeting.
- Establish reporting requirements and reporting schedules for all ICS organizational elements.
- Gather, post, and maintain current incident resource status.
- Determine need for any specialized resources in support of the incident.
- If requested, assemble and disassemble resources not assigned to operations.
- Identify coincidental information needs and gather as necessary.
- Ensure information concerning special environmental needs is included in the IAP.
- Assemble information on alternative strategies based on projections.
- Provide periodic predictions on incident potential and develop contingency plans (e.g., worst case scenario).
- Advise EOC staff of any significant changes in incident status.
- Anticipate changes in resource needs.
- Compile and display incident status information.
- Oversee preparation of Incident demobilization plan.
- Incorporate plans developed by other units (Incident Communications Plan etc.) into the Incident Action Plan.

- Maintain Unit Log.
- Perform operational planning for the Planning Section.
- Insure coordination between the Planning Section and other Command and General staff.

Duty Officer

Reports to: Planning Section Chief

The responsibility of the Duty Officer is to manage and disseminate information.

Responsibilities include:

- assisting with setting up the EOC,
- assisting with notifying EOC participants,
- opening, maintaining, and displaying a main event log.
- maintaining situational awareness.
- drafting and disseminating situational reports to EOC participants, other Emergency Management Organizations, and pertinent stakeholders.
- maintaining a map of the incident indicating the location of incidents and resources.
- providing a briefing of the current situation for the initial planning meeting.
- other duties as assigned by the Planning Section Chief.

TECHNICAL SPECIALISTS

Technical Specialists are advisors with special skills which are needed to support incident operation.

Report to: Planning Chief

- May form a separate branch if required or be reassigned to other sections of the organization, e.g., a chemist who could provide technical information on the probable health hazards or extent of an evacuation for a hazard materials incident.

- Participating in the development of an incident action plan and review the general control objectives, including alternative strategies as requested.
- Responding to requests for information about the limitations and capabilities of resources.
- Collecting and transmitting records and logs to the documentation unit at the end of each operational period.

Technical Specialists

Nova Scotia Department of Environment

Report to: Planning Chief

RESPONSIBILITIES

The responsibilities of the Manager or alternate of the NS Department of Environment during an emergency or disaster are:

- Ensure compliance with drinking water safety requirements. Act in support of MOH and
- Communicable Disease Control Committee in the prevention and investigation of waterborne contaminants and/or illnesses.
- Ensure compliance with proper waste disposal practices, including disposal of solid waste, hazardous materials, wastewater, sewage, and other organic wastes (i.e., foods and animal remains).
- Ensure adequate containment, cleanup and disposal of spills and releases of substances causing adverse environmental effects
- Provide public information on drinking water safety, solid and hazardous waste management and clean-up of contaminated areas.
- Provide post-emergency assessment on the above issues through surveillance and monitoring until conditions return to normal.

Nova Scotia Department of Agriculture
Aboiteau Superintendant

Report to: Planning Chief

RESPONSIBILITIES:

The responsibilities of the Aboiteau Superintendant or alternate of the NS Department of Agriculture during an emergency or disaster are:

- Provide information with respect to tidal and fresh-water flow from the Avon River system.
- Liaise with NS Power with respect to water flow from infrastructure and impacts on water levels.
- Liaise with the EOC Manager/ Public Works/ Transportation and Active Transport with respect to water flow and potential flooding.

Nova Scotia Department of Agriculture
Food Safety Division

Report to: Planning Chief

The responsibilities of the Food Safety Representative or alternate of the NS Department of Agriculture during an emergency or disaster are:

- Provide inspection services to ensure food safety at temporary and permanent food service facilities during the emergency.
- Ensure food safety by proper food storage and handling procedures, and provide advice regarding determination of contaminated food.
- Act in support of MOH and Communicable Disease Control Committee in the prevention and investigation of food borne contaminants.
- Provide public information regarding food safety during emergencies, and advice regarding food safety issues for high-risk populations (elderly, infants, immune-compromised individuals).
- Provide post-emergency assessment through surveillance and monitoring until conditions return to normal.
- Liaise with the EOC Manager/ group responsible for food service.
- Provide water supply sampling services at food service facilities in conjunction with NS Department of Environment.
- Provide advice and assistance on other agricultural and fisheries matters (i.e., animal disease issues).

HUMAN RESOURCES COORDINATOR RESPONSIBILITIES:

1. The responsibilities of the Human Resources Coordinator during an emergency or disaster are:
    - coordinate supply and demand of human resources at the site with assistance of the Transportation Officer,
    - maintains records of human resources; and turn in log records daily to the EOC.
    - arrange for transportation of human resources to and from the emergency or disaster site,
    - advises the EOC Manager on all matters concerning human resources planning.
    - maintains a log of all actions taken.

Organization Representatives

POSITION DESCRIPTION: In many multi-jurisdictional incidents, an agency or jurisdiction will send a representative to assist in coordination efforts. An Organization Representative is an individual assigned to an incident from an assisting or cooperating agency who has been delegated authority to make decisions on matters affecting that agency's participation at the incident. Organization Representatives report to the Liaison Officer or to the EOC Director.

Responsibilities:

- Check in properly at the EOC.
- Obtain briefing from the Liaison Officer or EOC Director.
- Inform assisting or cooperating agency personnel on the incident that the Organization representative position for that agency has been filled.
- Clarify any issues regarding your authority and assignment and what others in the organization are responsible to look after.
- Establish communication link with home agency. If unable to do so, notify Communications Unit in the Logistics Section.
- Facilitate requests for support or information that your agency can provide.
- Keep up to date on the general status of resources and activity associated with your agency.
- Provide appropriate situation information to the Planning Section.
- Keep your agency informed of the situation.
- Attend briefings and planning meetings as required.
- Provide input on the use of agency resources unless resource technical specialists are assigned from the agency. Cooperate fully with the EOC Manager.
- Ensure the well-being of agency personnel assigned to the incident.
- Advise the Liaison Officer of any special agency needs or requirements.
- Report to home agency dispatch or headquarters on a prearranged schedule.
- Ensure that all agency personnel and equipment are properly accounted for and released prior to departure.
- Ensure that all required agency forms, reports and documents are complete prior to departure.
- Have a debriefing session with the Liaison Officer or Incident Commander prior to departure.
- Check out of EOC when demobilization is authorized.
- Leave a forwarding phone number if necessary.

Emergency Operations Centre (EOC)
General Operating Guide (GOG)
For activating, staffing and managing

Notification and Activation (Alert)

1. In the WHRM day to day accidents and incidents are usually dealt with by police, fire and health services.
2. On notification of an emergency to the 9-1-1 Communications Center (CC), the CC will immediately alert the appropriate response organizations. This initial notification sets into motion the activation of emergency response personnel. Each emergency agency will respond according to their SOP's.
3. Should an event occur however, which, in the opinion of the Senior Official involved, presents a risk to all or part of the community, and as the situation is starting to intensify, the senior official present, shall contact the EMC to assess the situation, along with the senior official involved.
4. As the EMC receives the warning of a real or potential emergency and or disaster, he will brief the CAO on the situation and departs for the scene to assess the situation. The CAO will contact and brief the Mayer as necessary.
5. The EMC in consultation with the CAO will determine level of EOC activation. See appendix 10 for EOC Activation Flow Chart. Required personnel will be contacted via the "I Am Responding" system from the contact list on file.
6. In the event of an emergency and/or disaster, and should the EMC, CAO or Mayor not be reached then, their designated alternates are to be contacted.
7. On receipt of this warning, the Mayor, assembles Council, and at that time if a state of local emergency is declared, then the Members of the Advisory Committee, with the CAO will initiate the Alert. The CAO also has the authority to activate the EOC.
8. Once the Alert has been activated, then the members of EMO Team report to the EOC. On arrival, EMO members establish communication with each of their departments, and open up a log and wait for the EOC Manager to give a briefing on the situation, after this briefing, it is very important for the public information officer, with the assistance of the RCMP, EHS, or Fire Department, to inform the public. By this time the remaining members of the EOC will be busy coordinating their duties with the EOC Manager.

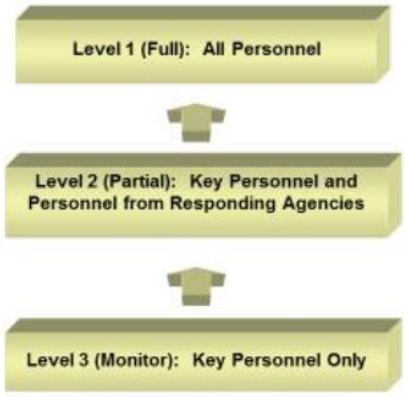
ECC Activation Levels

The level of EOC activation is determined by the magnitude and scope of the event. Only those EOC functions and positions that are required to meet current response objectives are activated. If staff are not assigned to a function or role, the next available staff position in the EOC organization will assume responsibility for the tasks assigned. If an individual is unsure of which level to activate, the EOC is activated to the higher level since it is easier to scale back staffing than it is to ramp up.

Appendix 10 outlines the 'Activation Flowchart' for the EOC.

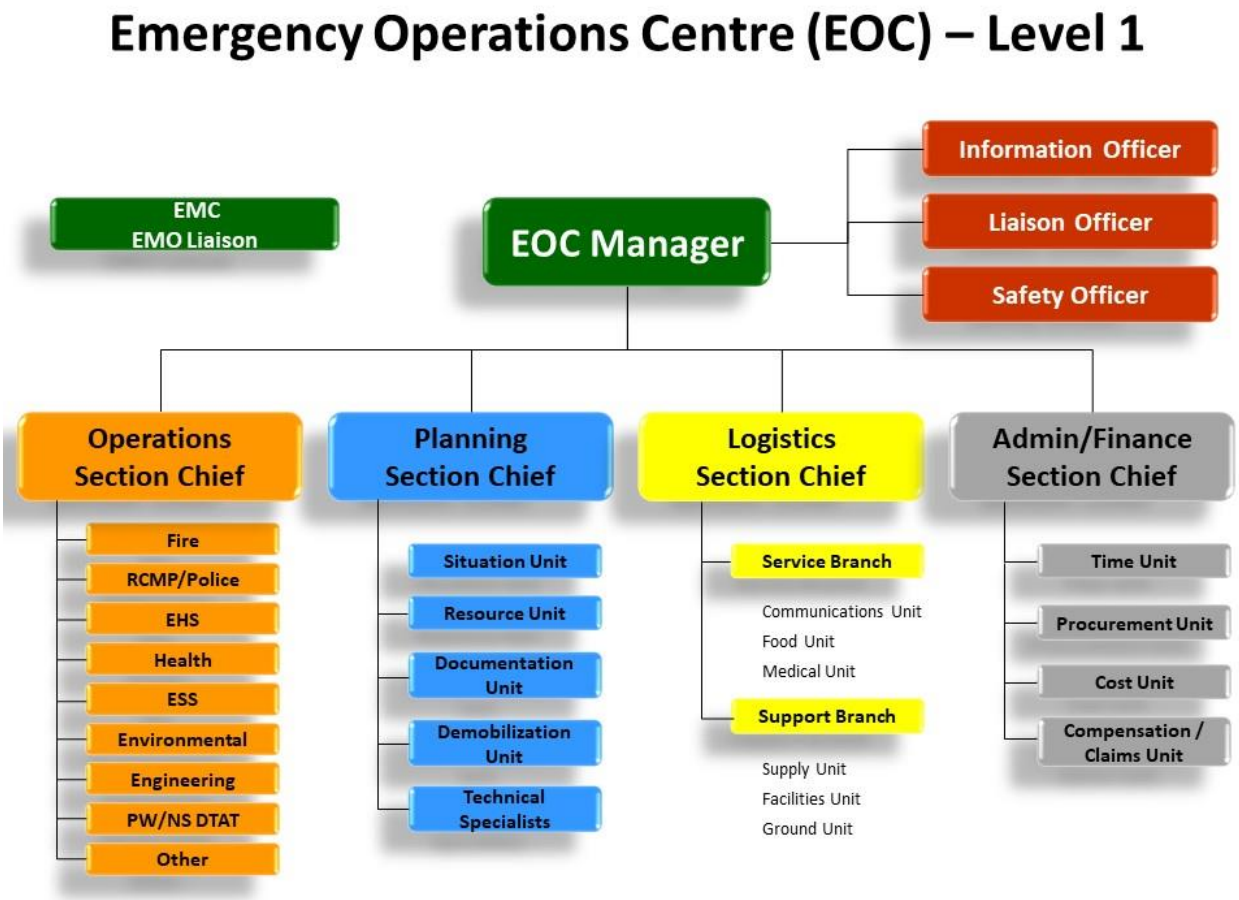
ICS

Activation Phases



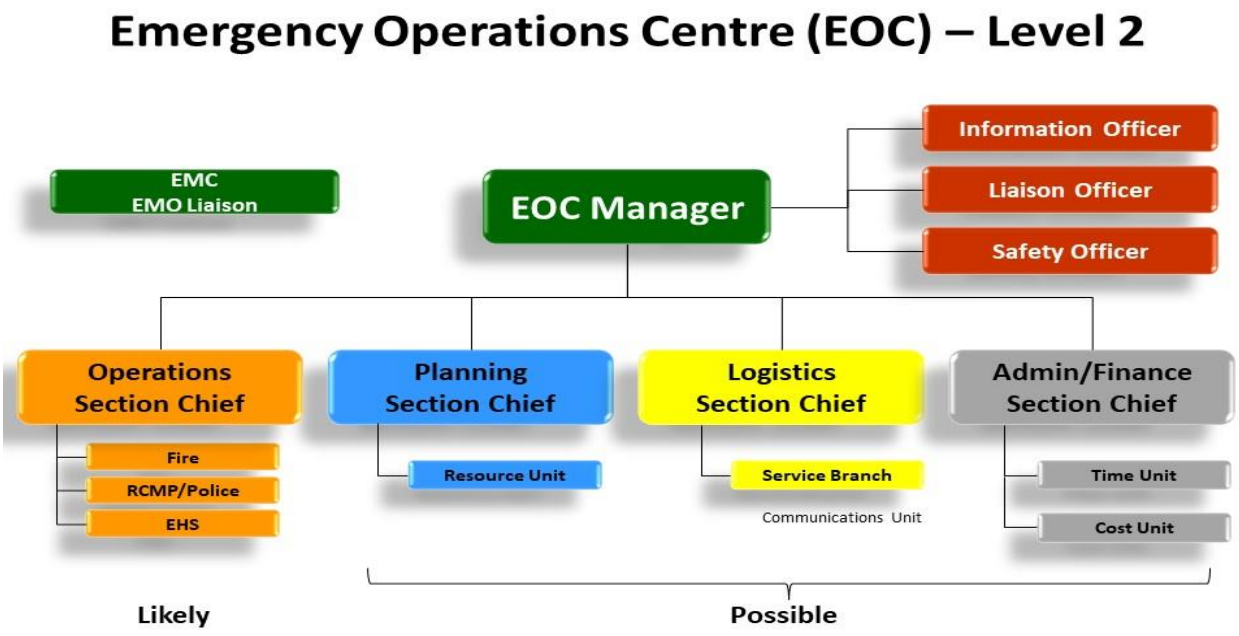
Level 1 – Full Activation (All Personnel)

- Major incident
- Multiple sites
- Regional disaster
- Multiple agencies involved
- Extensive evacuations
- Resources/support required
- EOC set-up
- Emergency Management Advisory Committee notified
- EMO NS notified by Emergency Management Coordinator (EMC)



Level 2 – Partial Activation (Key Personnel and Personnel from Responding Agencies)

- Moderate incident
- Two or more sites
- Several agencies involved
- Major scheduled event (e.g. conference or sporting event)
- Limited evacuations
- Some Resources/support required
- EOC set-up
- EMO NS notified by Emergency Management Coordinator (EMC)

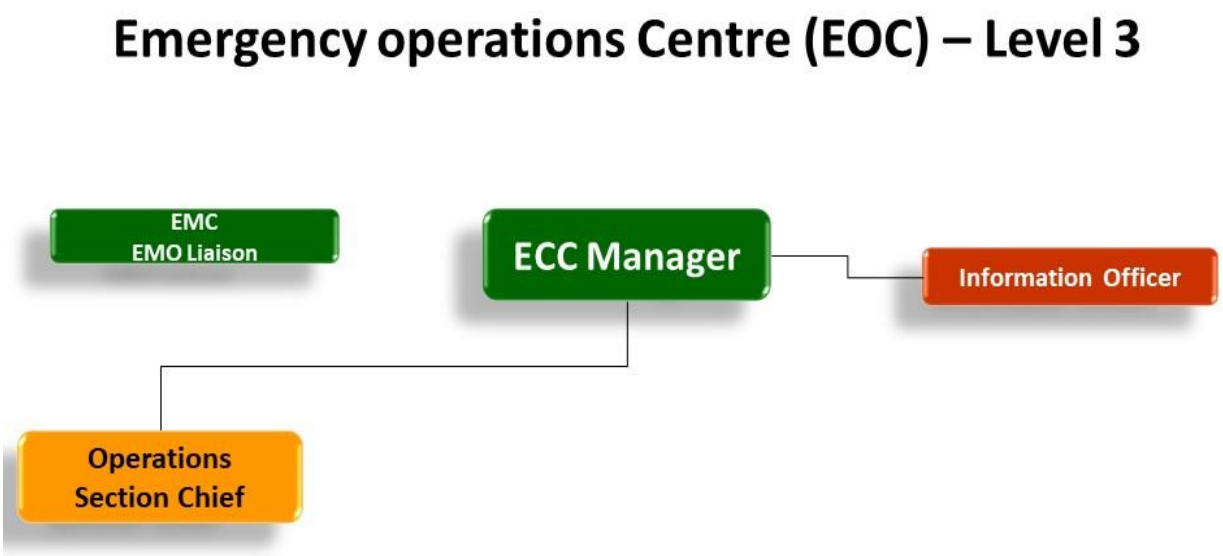


EOC Level 2 – Partial Activation

(An escalating or worsening incident that requires a Declaration of a State of Local Emergency or is of sufficient size to warrant EOC support. Section Chiefs may be called to the EOC to support on-scene Incident Commanders with acquiring and distributing resources, preparing action logs, and support of on-scene operations of emergency responders to suit the size and complexity of the emergency)

Level 3 – Monitoring (Key Personnel only)

- Small incident
- One site
- Several agencies involved
- Potential threat (e.g., flood or severe storm impending)
- Some agency or coordination and/or support required
- EOC set-up optional
- EMO NS notified by Emergency Management Coordinator (EMC)



– EOC Level 3 – Monitoring

(Pre-emergency activity to receive and analyze early data for a weather incident to determine the probability of an escalation or worsening of conditions. During a man-made emergency the EMC visits the site to receive information from the Incident Commander on stand-by to assist)

Deactivation

The EOC Manager (CAO) is responsible for EOC deactivation. The Manager considers the requirements of termination from the outset of the incident. Criteria for terminating EOC operations may include:

- Individual EOC functions are no longer required.
- State of Local Emergency is lifted.
- Coordination of response activities and/or resources is no longer required; and
- Incident has been contained and emergency personnel have returned to regular duties.

The Planning Sections' Demobilization Unit Coordinator in the EOC supervises and coordinates the demobilization process, under the direction of the EOC Manager.

Emergency Operations Centre (EOC) Activation Flowchart



Event Occurs or is imminent and may require activation of ECC

EOC Activation Authority receives briefing from Incident Commander (IC)

Inadequate Response Resources?

Site Support or Coordination Required?

Declaration of State of Local Emergency Required?

Evacuation Alert/ Order Necessary?

Significant Information Management / Media Issues Present?

Yes To Any

Determine appropriate level of EOC Activation

Small Event, One Site, Few Agencies

Yes

Level 3 EOC Activation

Limited Functions activated

EOC may be operated from existing office

No

Moderate event, 2 or more sites, Multiple Agencies?

Yes

Level 2 EOC Activation

Partial Functions Activated

No

Major event, Multiple sites & Agencies, Regional Event

Yes

Level 1 EOC Activation

All Functions Activated

Activate EOC Facility

Notify EOC Personnel

Notify Provincial Emergency Coordination Centre

No

Emergency Event Resolved?

Yes

No

Remain on Standby and Monitor the Situation

EOC Activation Not Required

Declaration of State of Local Emergency (SOLE) and Proclamation of Local Emergency

Orders

1. In response to an emergency, or its likelihood, upon a finding that public safety is imperiled, the Council(s) may proclaim a state of emergency pursuant to the Emergency Management Act (Act) of the Province.

2. Such a proclamation authorizes the Council(s) to deal with the emergency situation with full ministerial powers.

3. A municipal council may, when satisfied that an emergency exists or may exist in all or any area of that municipality, declare a state of local emergency in respect of that municipality or area thereof. (Click here for Declaration of State of Emergency Council)

4. If a municipal council is unable to act promptly, the mayor or warden may exercise that authority of the municipal council contained in a subsection (2) after consulting, if it is practical to do so, with a majority of the members of council to advise on the development of emergency measures plans. (Click here for Declaration of State of Emergency Mayor or Warden)

5. A declaration pursuant to the Act shall identify the nature of the emergency and the area in which it exists.

6. When a state of local emergency has been declared or terminated pursuant to the Act, the municipality shall immediately cause the details of the declaration or termination to be communicated or published by such means as the municipality considers the most likely to make the contents of the declaration or termination known to the people of the area affected.

7. Upon a state of local emergency being declared the mayor or warden may, during the state of local emergency, do everything necessary for the protection of property and the health or safety of persons therein and, without restricting the generality of the foregoing, may:
• Cause an emergency measures plan or any part thereof to be implemented;
• Acquire or utilize or cause the acquisition or utilization of personal property by confiscation or any means considered necessary;
• Authorize or require a qualified person to render aid or such type as that person may be qualified to provide;
• Control or prohibit travel to or from an area or on a road, street or highway;
• Provide for the maintenance and restoration of essential facilities, the distribution of essential supplies and the maintenance and co-ordination of emergency medical, social and other essential services;
• Cause or order the evacuation of persons and the removal of livestock and personal property threatened by an emergency and make arrangements for the adequate care and protection thereof;
• Authorize the entry by a person into any building or land without warrant;
• Cause or order the demolition or removal of anything where the demolition or removal is necessary or advisable for the purpose of reaching the scene of an emergency, of attempting to forestall its occurrence or of combating its progress;
• Order the assistance of persons needed to carry out the provisions mentioned in the Act;
• Regulate the distribution and availability of essential goods, services and resources;
• Authorize and make emergency payments;
• Assess damage to any works, property or undertaking and the costs to repair, replace or restore the same;
• Assess damage to the environment and the costs and methods to eliminate or alleviate the damage.

8. Upon declaring a local state of emergency, a mayor or warden, as the case may be,
• Shall immediately forward a copy of the declaration to the Minister of Municipal Affairs

(Minister); and
• May authorize any person or committee to exercise any power vested in the mayor or Warden.

9. A municipality may terminate a state of local emergency with respect to an area identified by it in its declaration of a state of local emergency when, in its opinion, an emergency no longer exists in such area.

10. A state of local emergency terminates:
• When the area identified by the municipality in its declaration of a state of local emergency is including in an area identified by the Minister in a declaration of a state of emergency;
• When it is terminated by the Minister or by the municipality;
• Seven days after the day on which it was declared unless it is renewed in accordance with the Act. (Click here for Termination of State of Emergency)

11. A state of local emergency may be renewed by the municipality with the approval of the Minister. (Click here for Renewal of State of Emergency)

12. A mayor or warden, a municipality, a committee established pursuant to this Act or a member thereof, or any other person
• is not liable for any damage arising out of any action taken pursuant to this Act or the regulations; and
• is not subject to any proceedings by prohibition, certiorari mandamus or injunction with respect to any action taken pursuant to this Act or the regulations.

13. Any person in the course of implementing an emergency measures plan pursuant to the Act or the regulations may, at any time, enter upon any property.

14. In accordance with the Act any person who obstructs a municipality, the Emergency Management Organization, a committee established pursuant to the Act or any person in the performance of any action, matter or thing authorized by the Act or who contravenes or fails to comply
• with any provision of the Act or any regulation; or
• with any direction, order or requirement made pursuant to the Act or the regulations, is guilty of an offence and liable on summary conviction to a fine not exceeding one thousand dollars or to imprisonment of not more than six months or both.

15. Every person who with proper authority is absent from that persons accustomed employment and is on duty authorized by a municipality for the purpose of the Act shall while so absent, for all purposes relative to retention of employment, of seniority rights and of superannuation benefits, be deemed to have been in that person’s accustomed employment during the period of absence.

FORM 4

DECLARATION OF A STATE OF LOCAL EMERGENCY

West Hants Regional Municipality

Section 12(2) of the *Emergency Management Act*, S.N.S. 1990, c.8

WHEREAS the area herein described is or may soon be encountering an emergency that requires promptaction to protect property or the health, safety or welfare of persons therein;

Emergency Area:

The area generally described as

_____

_____

_____

Province of Nova Scotia (hereafter referred to as the "Designated Area(s)") Yes ( ) No ( )

Nature of the Emergency:

_____

_____

_____

AND WHEREAS the undersigned is satisfied that an emergency as defined in Section 2(b) of Chapter 8 ofthe Statutes of Nova Scotia, 1990, the *Emergency Management Act*, exists or may exist in the Designated Area(s) noted above;

THE UNDERSIGNED HEREBY DECLARES pursuant to Section 12(2) of the *Emergency ManagementAct*, a State of Local Emergency in the Municipality noted above as of and from_____o'clock in theforenoon ( ) or afternoon ( ) of the _____day of_____, 20_.

THIS DECLARATION OF STATE OF LOCAL EMERGENCY shall exist until_____o'clock in theforenoon ( ) or afternoon ( ) of the____day of_____, 20_, or for a maximum of 7 days from the date and time specified above unless the Declaration is renewed or terminated as provided in Section 20 of the *Emergency Management Act*.

DATED at_____, in the West Hants Regional Municipality, Province of Nova Scotia, this_____day of_____, 20___.

_____

_____
Council, West Hants Regional Municipality

_____
Name

_____
Position

[Authorized by Resolution No. _____
dated the_____day of_____,20_]

FORM 5

DECLARATION OF A STATE OF LOCAL EMERGENCY

(Mayor/Warden)

Section 12(3) of the *Emergency Management Act*, S.N.S. 1990, c.8

WHEREAS the area herein described is or may soon be encountering an emergency that requires promptaction to protect property or the health, safety or welfare of persons therein;

Emergency Area:
The area generally described as

_____

_____

_____

Province of Nova Scotia (hereafter referred to as the "Designated Area(s)") Yes ( ) No ( )

Nature of the Emergency:

_____

_____

_____

AND WHEREAS the undersigned is satisfied that an emergency as defined in Section 2(b) of Chapter 8 of the Statutes of Nova Scotia, 1990, the *Emergency Management Act*, exists or may exist in the Designated Area(s) noted above;

AND WHEREAS the Council of the Municipality is unable to act;

AND WHEREAS the undersigned has (check appropriate box)

(a) Consulted with a majority of the members of the Municipal Emergency Management Committee Yes ( ) No ( )

(b) Found it impractical to consult with the majority of the Municipal Emergency Management Committee Yes ( ) No ( )

THE UNDERSIGNED HEREBY DECLARES pursuant to Section 12(3) of the *Emergency ManagementAct*, a State of Local Emergency in the Municipality noted above as of and from_____o'clock in theforenoon ( ) or afternoon ( ) of the _____day of_____, 20_.

THIS DECLARATION OF STATE OF LOCAL EMERGENCY shall exist until o'clock in the forenoon ( ) or afternoon ( ) of the_____day of_____, 20_, or for a maximum of 7 days from the date and time specified above unless the Declaration is renewed or terminated as provided in Section 20 of the *Emergency Management Act*.

DATED at_____, in the West Hants Regional Municipality, Province of Nova Scotia, this_____day of_____, 20___.

_____

_____
Mayor/Warden's signature
West Hants Regional Municipality

FORM 6

RENEWAL OF A STATE OF LOCAL EMERGENCY

(Council of Municipality/Mayor/Warden)

Section 20(2) of the *Emergency Management Act*, S.N.S. 1990, c.8

WHEREAS the area herein described is or may soon be encountering an emergency that requires prompt action to protect property or the health, safety or welfare of persons therein;

Emergency Area:
The area generally described as

_____

_____

_____

Province of Nova Scotia (hereafter referred to as the "Designated Area(s)") Yes ( ) No ( )

Nature of the Emergency:

_____

_____

_____

AND WHEREAS the Declaration of a State of Local Emergency was signed on the ___ day of _____,20_;

AND WHEREAS the undersigned is satisfied that an emergency as defined in Section 2(b) of Chapter 8 of the Statutes of Nova Scotia, 1990, the *Emergency Management Act*, continues to exist or may exist in the Designated Area(s) noted above;

THE UNDERSIGNED HEREBY DECLARES pursuant to Section 20(2) of the *Emergency Management Act*, a State of Local Emergency in the Municipality noted above is renewed as of and from _____o'clock in the forenoon ( ) or afternoon ( ) of the _____day of_____, 20_.

THE RENEWAL OF A DECLARATION OF STATE OF LOCAL EMERGENCY shall exist until _____o'clock in the forenoon ( ) or afternoon ( ) of the_____day of_____, 20__, or for a maximum of 7 days from the date and time specified above unless the Declaration is renewed or terminated as provided in Section 20 of the *Emergency Management Act*;

THIS RENEWAL was authorized by the Minister responsible for the *Emergency Management Act*, pursuant to Section 20(2) of the Act by approval dated the_____day of_____, 20_.

DATED at_____, in the West Hants Regional Municipality, Province of Nova Scotia, this_____day of_____, 20_____.

In the event the Council is unable to act:

_____
Council of Municipality

_____
Name

_____
Mayor/Warden

_____
Position

[Authorized by Resolution No. _____ dated the____day of_____,20____]

FORM 7

TERMINATION OF A STATE OF LOCAL EMERGENCY

(Council of West Hants Regional Municipality)

Section 18(2) of the *Emergency Management Act*, S.N.S. 1990, c.8

WHEREAS by a Declaration of a State of Local Emergency dated the_____day of _____, 20___, as renewed on the_____day of_____, 20____, a State of LocalEmergency was declared for the following area:

Emergency Area:
The area generally described as

_____

_____

_____

Province of Nova Scotia (hereafter referred to as the "Designated Area(s)") Yes ( ) No ( )

Nature of the Emergency:

_____

_____

_____

AND WHEREAS the undersigned is of the opinion that an emergency no longer exists in the Designated Area(s).

THE UNDERSIGNED pursuant to Section 18(2) of Chapter 8 of the Statutes of Nova Scotia, 1990,the *Emergency Management Act*, hereby terminates the State of Local Emergency effective as of andfrom _____o'clock in the forenoon ( ) or afternoon ( ) of the_____day of_____, 20 .

DATED at_____, in the West Hants Regional Municipality, Provinceof Nova Scotia, this_____day of, 20_____.

_____
Council of West Hants Regional Municipality

_____
Name

_____
Position

[Authorized by Resolution No. _____ dated the_____day of_____, 20___.]

Name	Email address	Text message address	
Atwell Hartley	hatwell@westhants.ca	9026987250@txt.bell.ca	GIS & Planning Alternate
Bauchman Craig	craig.bauchman@novascotia.ca	9027928330@txt.bell.ca	Agriculture
Brown Jeffrey	jeffery.brown@novascotia.ca	9027904323@txt.bell.ca	NS Lands & Forestry
Brown Rhonda	rbrown@westhants.ca	9026982931@txt.bell.ca	WHRM Comms
Burgess Troy	tburgess@westhants.ca	9027903212@txt.bell.ca	PW - Alternate
Cochrane Jason	jcochrane51@hotmail.com	9027910518@txt.eastlink.ca	Fire
Crosby Marion	mauve_b@yahoo.com	9024717371@txt.koodo.ca	GSAR
Desveaux Heather	hdesveaux@gmail.com	9023069467@text.bell.ca	Red Cross Alternate
Duchesne Roberta	roberta.duchesne@nshealth.ca	9022229296@txt.bell.ca	NS Health (HCH) - Contact #1
Ferguson David	david.ferguson@rcmp-grc.gc.ca	9024510983@txt.bell.ca	RCMP
Ferguson Delwin	delwin.ferguson@nshealth.ca	9024733836@txt.bell.ca	NS Health (HCH) - #2 EP Manager Central
Hanshaw Jeff	jhanshaw@westhants.ca	9026707936@txt.bell.ca	IT- Alternate
Harvey Jamie	jrjh@gmail.com	9026980382@txt.bell.ca	Fire - Windsor DC
Ivany Alishia	alishia.ivany@ns.health.ca	9022218096@txt.bell.ca	NS Health (HCH)- Contact #4
Johnston Peter	pjohnston@westhants.ca	9027904887@txt.bell.ca	Fire - Hantsport
Juteau Jamie	jamiejuteau@hotmail.com	9027987643@txt.bell.ca	Fire - Windsor
Kehoe Kathy	kkehoe@westhants.ca	9027904526@txt.bell.ca	Community Development
Lavers Hal	Harold.Lavers@novascotia.ca	9027986362@txt.bell.ca	NS TAT
LeMay Madelyn	mmlemay@westhants.ca	9027980672@txt.bell.ca	Planning & Development
Lunn Jasper	Jasper.Lunn@novascotia.ca	9027987033@txt.bell.ca	Ns TAT Alternate
MacLeod Jason	jmacleod@glooscapfirstnation.com	9026905157@txt.koodo.ca	Glooscap First Nation
Maynard Paul	paul.maynard@novascotia.ca	9022233194@txt.bell.ca	Fire - Hantsport Alternate
McNamara Laura	laura.mcnamara@redcross.ca	9026708497@txt.bell.ca	Cdn Red Cross
Mitton Andrew	andrew.mitton@novascotia.ca	9026700481@txt.bell.ca	NS - EMO
Nemer Maria	maria.nemer@nshealth.ca	9024975743@txt.bell.ca	NS Health (HCH) - Contact #3
Patterson Danny	saddleriver@hotmail.com	9027904958@txt.Bell.ca	Fire - Walton
Penney Al	alphonsepenney@gmail.com	9023499315@txt.eastlink.ca	Amateur Radio
Phillips Mark	mphillips@westhants.ca	9026704255@txt.bell.ca	C.A.O.
Povah Matt	mpovah@westhants.ca	9027904760@txt.bell.ca	IT
Remme Chrystal	cremme@westhants.ca	9026921798@txt.bell.ca	WHRM Comms
Richard Todd	trichard@westhants.ca	9027987214@txt.bell.ca	PW
Roberts VanEssa	vanessa@westhants.ca	9027981708@text.rogers.ca	WHRM Comms
Rochon Carlee	crochon@westhants.ca	9027987964@txt.bell.ca	Finance
Sherrard Rick	rsherrard@westhants.ca	9027902474@txt.bell.ca	EMC
Spencer Chris	c.l@eastlink.ca	9027987878@txt.bell.ca	Fire - Summerville
Thomson George	George.Thomson@avrce.ca	9026808523@txt.bell.ca	AVRCE
Thornton Shelleena	sthorton@westhants.ca	9027904985@txt.bell.ca	WHRM Comms
Tucker Matthew	matthew.tucker@rcmp-grc.gc.ca	9027094524@txt.bell.ca	RCMP
Upshaw Jennifer	jennifer.upshaw@novascotia.ca	9027910064@txt.eastlink.ca	NS Community Services
Walker Jay	John.Walker@emci.ca	9024787672@txt.bell.ca	NS - EHS
White Barry	barrywsar@eastlink.ca	9027910836@txt.bell.ca	GSAR



Hazards & Damage

- Presence or possible return of Hazard
- New/Secondary Hazards
- Impact Assessment
- Structural Integrity & Major Infrastructure



Health

- Public Health Risks
- Safety of returning evacuees and responders
- Provision of Mental & Physical Health Services



Business & Other Services

- Essential Services (Power, Water, Sewage, Telecomms)
- Commercial Services (food supply, fuel)
- Local Government services
- Transportation infrastructure



Human Resources

- Escorting Personnel
- Traffic Management Points / Exclusion areas
- Outreach teams and other support services
- Recovery Centre Personnel



Physical Resources

- Transportation
- Signage/Barriers
- Crime Scene Preservation
- Recovery Centre



Governance

- Emergency Management Plan
- Impact Assessment
- Demobilization of resources/services
- Recovery Plan
- SOPs & Guidelines



Vulnerable Groups & Facilities

- Level of readiness to return
- Hospitals and Aged Care facilities
- Education facilities ability to function



Timings

- Commencement of re-entry
- Estimated time to undertake re-entry
- Removal of services/personnel providing re-entry assistance
- Exit Strategy



Consultation

- Support agencies
- Affected community
- Functional areas
- Local Government
- Police Services



Public Information

- Return Arrangements
- Recovery & Support services
- Safety Advice
- Timings



Options

- Restricted Re-entry
- Unrestricted Re-entry
- Staged Re-Entry

WINDSOR / WEST HANTS TOGETHER

EMO Advisory Committee

September 14, 2021

72 HOURS

IS YOUR FAMILY PREPARED?

EMO

WEST HANTS REGIONAL MUNICIPALITY

UNICIPAL EMERGENCY MANAGEMENT ORGANIZATION

Preparing for Emergencies

Rick Sherrard
Emergency Measures Coordinator

Items to touch on:

- WHRM Emergency Management Program Assessment
- Public Awareness Campaign
- Rural EMO Response Pilot
- Small Scale Exercise
- WHRM Emergency Plan Refresh



WHRM Emergency Management Program Assessment

- Essential Plan
  - Meet or in process of meeting all requirements.

- Enhanced Plan
  - 32 additional criteria identified.
    - 10 complete.
    - 13 in process.

- Comprehensive Plan
  - 12 more criteria identified.
    - 3 complete.
    - 4 in process.



Public Awareness Campaign



The idea here is three-fold.

1. Raise public awareness of our presence & role in emergency planning.

2. Help manage public expectations and encourage self/community resiliency.

3. Engage with our residents, helping them to understand the hazards, risks and vulnerabilities in their local community and neighborhoods.

It is our goal to:
Give residents as much information as we can, so that they can plan as best they can.

WHRM has a number of online Social Media accounts and communication tools to relay a variety of information:

- Website www.westhants.ca
- Municipal Facebook @RMWindsorWestHants
- Municipal Emergency Management Organization Facebook @WestHantsRemo
- Municipal Twitter @RegMunWWH
- Municipal EMO Twitter @WWH_REMO
- Municipal YouTube https://www.youtube.com/channel/UCPhCgbwju1JSG-V2P1uKPHw

Please sign up and promote these accounts to our residents.



Rural EMO Response Pilot

It is intended that we develop a “road show” so to speak that we can roll out to various communities within our municipality giving them as much information as we can enabling them to prepare as best, they can:

- Who we are and what residents can expect.
- Communicate local risks in their community.
- Promote need for self resiliency.
- Reiterate their need for a family emergency plan.
- Provide information and helps on how to develop a plan.
- Provide information on getting or building an emergency kit.





Small Scale Exercise

Cottage Country – Private Developments in Vaughan Area.

Tabletop Exercise – “Great Falls of Fire” – June 17,2021.

Falls Lake, Chateau Village – August 28, 2021

- Door to door contact with local residents
- Afternoon presentations at SWH Fire Station
  - EMO
  - Fire Service
  - Lands & Forestry
  - Red Cross
- Meet & Greet
- FireSmart Display and information on receiving a house assessment and mitigation demo.



WHRM Emergency Plan Refresh

- Our Emergency Plan ideally would be reviewed and approved annually.
- Last approval we can verify was in 2014.
- A Hazard, Risk, Vulnerability Assessment (HRVA) was completed in 2019.
- No major changes to operations have been made in the plan before you.
- We have updated where possible, adding guidance around HRVA and reporting.

Key Elements of an Emergency Plan

- How the EMO is organized.
- How it functions.
- Triggers for Activation and
- Who is expected to show and where?



QUESTIONS



WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☐	Decision Request ☐	Councillor Activity ☐

To: Council

Submitted by: Mark Phillips, Chief Administrative Officer

Date: September 14, 2021

Subject: 368 Nesbitt Street, Windsor (Old Textile Mill Property)

LEGISLATIVE AUTHORITY

Dangerous & Unsightly Act

INFORMATION / ACTION

During the month of August the property owner applied and was issued a demolition permit from the municipality. The issuance of the permit authorizes the property owner to demolish the current building located at 368 Nesbitt Street, Windsor. The issuance of the permit does not guarantee that the property owner will demolish the building, but it is an indication of their intent. When the demolition commences this fall it will be carried out under the authorization of Senior Building Official, Tim Leslie.

This intended action comes as a conclusion to a thorough and lengthy process carried out by the property owner which explored and investigated if the building could be salvaged and renovated for a future purpose. Several engineering firms and geotechnical assessments were carried out on the site by the owner. It has been relayed to the municipality that regretfully the cost and size and scope of work associated with revitalizing the building was out of reach and could not be supported by any viable business plan.

BACKGROUND

The following information was reported to Council in July of 2021 by Time Leaslie.

Background Information:

- *There have been several building permits over the years from 1996 – renovations ($10,000), 2006 – new use ($25,000), 2006 – new roof*

($158,000), 2007 – Windows ($300,000) to most recently 2008 – renovations to the first floor ($1,754,000, which was cancelled).

- *There have been 4 different demolition permits from 1998 to 2007 for various parts of the building.*
- *In 2021 there was a Dangerous & Unsightly complaint made with regard to the building. This was addressed by way of sign off from a Structural Engineer stating the building (where the roof collapsed) was structurally sound at this point, as well as a construction fence installed around the building and posted 'do not enter'. The fence was extended past the fall zone where the roof collapsed as a precaution. The building and property are monitored by the owner on a weekly basis. Tim has been in contact with the developers monthly and any time there is a concern (portion of fence knocked down for example) it has been fixed that day.*

Property X	Public Opinion☐	Environment☐	Social☐	Economic☐	Councillor Activity ☐

DISCUSSION

It is regrettable that such a significant landmark has come to this conclusive action. However, the property owner reserves the right to take the action he has indicated and based on the evidence and assessment this appears to be the best and possibly only action left to address the safety concerns associated with the failing structure.

NEXT STEPS

This course of action satisfies the Municipality's request for an action plan which was required by September 28, 2021. Further, if the demolition is not carried out before winter or December 21, 2021, then Senior Building Official, Tim Leslie will require a written report from a structural engineer determining how the building is to be supported from further collapsing or deterioration over the winter months. The current and growing safety concerns must be satisfied by the owner.

FINANCIAL IMPLICATIONS

N/A

ALTERNATIVES

N/A

ATTACHMENTS

None

Report Reviewed by: _____
Tim Leslie, Manager of Building & Fire Inspection Services

Report Prepared by: _____
Mark Phillips, Chief Administrative Officer

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation X	Decision Request X	Councillor Activity ☐

To: West Hants Regional Municipality Committee of the Whole

Summitted by: Laurie Murley, Councillor

Date: September 14, 2021

Subject: NSFM Caucus Membership

LEGISLATIVE AUTHORITY

Bill 55 – Region of Windsor and West Hants Municipality Act

RECOMMENDATION or DECISION REQUEST

COTW recommends West Hants Regional Municipality continue its membership in the NSFM Regional Caucus to ensure that the Region's diversity is fully recognized, and further; so that West Hants may gain insight into the unique opportunities and challenges faced by its regional caucus colleagues in Halifax and Cape Breton that also represent both rural and growth centers.

BACKGROUND

Mayor Zebian was approached by NSFM to confirm West Hants Regional Municipality's place in the caucus structure. As a former president of NSFM, I was asked to present a report and recommendation request to aid in Council's decision.

In order to understand the benefits of the NSFM caucus structure and West Hants Regional Municipality's membership within it - some background is required about both the NSFM and Bill 55, Region of Windsor and West Hants Municipality Act.

The Nova Scotia Federation of Municipalities, formerly the Union of Nova Scotia Municipalities, was incorporated in 1981 under the Act to Incorporate the Union of Nova Scotia Municipalities. The Act was amended on May 22, 2003. The objectives of the Federation can be found in Article 2 of the By-laws. Among the nine objectives are the following which pertain more closely to this recommendation.

Article 2a - represent the interests of municipal governments in the Province, and to act as the advocate for member units on all such matters as are properly within the jurisdiction of the government of the Province.

Article 2d – hold Annual Conferences for information, discussion, and resolutions, and to hold a general workshop and discussion sessions at each Annual Conference to give delegates an opportunity to present problems or concern.

Article 2g – further municipal interests by encouraging cooperation between municipal units.

The definition of each of the three legal structures units enjoy are:

> "Regional Municipality" means a regional municipality established by, or continued pursuant to, the Municipal Government Act.
>
> "Rural Municipality" means a county or district municipality.
>
> "Town" means an incorporated town.

West Hants Regional Municipality, as an NSFM member in good standing, has certain rights (Article 3.6) that include: membership in a Caucus, without additional fees; receiving notice of members' meetings; sending voting delegates to members' meetings where they may speak and vote on behalf of the Member Unit; etc.

Article 3.10 Caucuses – Role and Governance

a) There are caucuses of Member Units constituted as follows:
    i. The regional municipalities, excluding the Region of Queens Municipality,
    ii. The towns,
    iii. The rural municipalities, including the Region of Queens Municipality

b) No Caucus has the authority to speak on behalf of the Federation or to bind the Federation.
c) Caucuses operate within the framework of the Federation and as part of the Federation structure and have no independent legal existence separate from the Federation.
d) Procedures on election of a Caucus member to be a caucus chair are outlined in the "Federation Elections Policy".
e) Each Caucus
    . must elect an Elected Municipal Official to serve as Caucus Chair, who then is appointed to serve as a member of the Board;
    . may make recommendations to the Federation on matters of interest and concern to members of the Caucus;

Article 4 – Officers

4.1 Officers

a) The Officers of the Federation are the President, Vice President and Past President.

c) The President and Vice President of the Federation are elected by Elected Municipal Officials at the Annual General Meeting and serve a one-year term or until their successors are elected at the next Annual General Meeting.

d) The Officer positions rotate on an annual election cycle so that the positions of President, Vice President and Past President are filled by Elected Municipal Officials from towns, rural municipalities and regional municipalities in sequence.

e) For greater clarity, in 2019-20, the President is from a town; the Vice President is from a rural municipality and the Past President is from a regional municipality. In 2020-2021, the President shall be from a rural municipality, the Vice President from a regional municipality and the Past President from a town. In 2021-2022, the President shall be from a regional municipality, the Vice President from a town and the Past President from a rural municipality. This cycle will continue in the previously described order.

Bill 55 – Region of Windsor and West Hants Municipality Act

18 (1) Clause 3 of Chapter 18 of the Acts of 1998, the Municipal Government Act, is repealed and the following clause substituted:

"regional municipality" mean a regional municipality established by or continued by an enactment and includes

i) The Cape Breton Regional Municipality,
ii) The Halifax Regional Municipality,
iii) The Region of Queens Municipality, and
iv) The Region of Windsor and West Hants Municipality,

DISCUSSION

West Hants Regional Municipality, as per Bill 55, is a regional municipality. Bill 55 bought our rural areas and one of our growth centres, Windsor, together to allow us to build a municipality that is financially and administratively stronger. We now strive to deliver better services to residents and have ended regional competition for investment, that once would have resulted in outcomes, that would often result in winners and losers.

As a regional municipality we enjoy the best of both worlds. We celebrate the diversity of both our rural and growth centres and see the value of every community across our Region.

Our governance, finances and taxation, economics, provision of services, infrastructure, demographics, and sociocultural identity are more closely aligned with our NSFM Regional Caucus colleagues than any other caucus. There are both opportunities and challenges that we face under a regional governance structure that Halifax and Cape

Breton Regional Municipalities have been dealing with for years. They too have built infrastructure, inadequate provincial roads and transportation challenges and they have the opportunity to discuss these topics within the Regional Caucus. As a member of the NSFM Regional Caucus we can leverage their knowledge to benefit our own rural and growth centres. Now, is not the time to play small. We came together to grow our Region and we deserve to sit at the table with the Regional Caucus so that we can more effectively represent all of our residents, and what's more – our residents deserve it.

NEXT STEPS

Recommendation to Council

FINANCIAL IMPLICATIONS

There are no additional financial implications.

ALTERNATIVES

None recommended.

ATTACHMENTS

CHIEF ADMINISTRATIVE OFFICER REVIEW

I concur with the remarks made by Councillor Murley in her thorough report. Particularly, her remarks surrounding the commonalities and community of interest that our new region has with other regional municipalities.

It is important to note that as a member of NSFM we will receive the same benefits that all members do whether members are representing a Town, Rural or Region Municipality. Being a member of the Regional Caucus provides the opportunity to discuss and network with others facing the same issues at noted in this report.

I support the recommendation.

Report Prepared by: _____
Laurie Murley, Councillor District 10

Report Reviewed by: _____
(Name and Title)

Report Approved by: _____
Mark Phillips, Chief Administrative Officer

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information X	Recommendation ☐	Decision Request ☐	Councillor Activity ☐

To: Committee of the Whole

Submitted by: _____
Troy Burgess, Traffic Authority

Date: September 14, 2021

Subject: Temporary Opening of Edward Dr and Underwood Dr

LEGISLATIVE AUTHORITY

Municipal Government Act

RECOMMENDATION or DECISION REQUEST

Information to Council

BACKGROUND

Property X	Public Opinion☐	Environment☐	Social X	Economic☐	Councillor Activity ☐

During the July 13, 2021, Committee of the Whole, direction was given to Staff to bring a report to the Sept 14, 2021, Committee of the Whole regarding the temporary opening of the emergency gate between Edward Dr and Underwood drive until a permanent road is constructed and opened between the area of The Crossing and Tregothic Heights, Payzant Dr area.

DISCUSSION

After Staff reviewed the process, solicitor advice was sought with the following opinion being provided. "Because a portion of Underwood Drive was formally closed under section 315 of the MGA that section would need to be re-opened to allow public passage over the lands as a "street". This can be accomplished under S. 315(6) of the MGA which states:

(6) Upon filing the policy in the registry, all rights of public user in the land described in the policy are forever extinguished and the municipality may sell and convey the land or may subsequently reopen the land as a street in the manner required by this Act. 1998, c. 18, s. 315; 2004, c. 44, s. 4; O.I.C. 2007-553; O.I.C. 2021- 56.

The currently closed portion of Underwood Drive would need to be re-opened by Council under s. 312 of the MGA. The MGA is silent on the process for opening a street but given that the street was closed by Policy of the former Town a Policy to re-open the street would be appropriate. We could essentially reverse the closure policy and use it and the same plan of survey (required under s. 312(2)) to facilitate the re-opening.

A draft policy is attached for Council's consideration. While s. 315 mandates a public hearing for the closing of a street there are no such requirements established for re-opening a street. Instead, the act merely states that the street can be re-opened in a manner required under the Act. The only requirements are a designation of the area as a street by council and the filing of a plan of survey in the Land Registration Office under s. 312(2).

If Council decides to re-open this portion of Underwood Drive, they can also determine whether it will have free passage of traffic or remained gated. Section 322 does allow the Engineer to temporarily close a street "for any purpose beneficial to the public interest." If a new connector road was completed and the Municipality decided to close the Underwood/Edward connection (but not to formally close the street as the Town previously did) this section of the MGA could be used in support of closing the gate between these streets."

NEXT STEPS

Council could decide to formally re-open by policy the portion of Underwood Drive that is now closed by following the procedure recommended by Legal.

Consideration should be given to the following:

On September 9, PAC/HAC considered a report regarding required amendments to the Civic Addressing By-law (Attachment). It is anticipated that PAC/HAC will make a recommendation regarding the amendments to the Civic Addressing By-law which will be considered by Council September 28, 2021. Should Council remove the gate between underwood and Edward, Council will be requested to provide a common name for the entire length of the street.

The Development Agreement for 'The Crossing" would need to be reviewed to determine whether revisions are needed.

The area near the emergency gate would need to be widened a minimum of four feet in order to allow two-way traffic and align the two streets. This would include removing trees and the fence.

The street and sidewalk infrastructure would be recommended to be updated / improved on Underwood Drive.

The 2021 WSP Windsor Intersection Infrastructure Needs Assessment should be taken into consideration as the traffic warrants indicates a traffic circle is recommended at

Payzant Dr and Wentworth Rd along with other recommendations. Currently as part of the approved 2021/22 budget an RFP has been sent out for detailed design for intersection improvements (traffic circle) at this location.

FINANCIAL IMPLICATIONS

- $7500 split 50/50 from the West Hants Road and Windsor Roads budgets, before opening to traffic.
- Asphalt approximately $5000 widening street at the connection point.
- Removal of tree, fence and minor civil work approximately $2500.
- Recommended capital work in the future. Amount undetermined to date.

ALTERNATIVES

Council could decide to do nothing, leave status quo. Background info is as follows;

- 2019 the complete RCMP fleet were given gate keys,
- 2019 Brooklyn Fire, Windsor Fire and Hantsport Fire were given the appropriate number of keys as requested by each. WRHM Public Works Staff all have keys.
- Fall of 2020 the gate was opened during the re-paving project on Underwood Road for the duration of the project.
- During the winter of 2020/21 the gate was opened for snow removal and ice control several times. Note: if the gate wasn't closed immediately many complains were received from The Crossing.

ATTACHMENTS

- Draft Policy to Re-open a Portion of Underwood Drive
- WHRM Civic Addressing By-Law Amendment (PAC Sept 9, 2021)
- Windsor Intersection Infrastructure Needs Assessment (WSP 2021)

CHIEF ADMINISTRATIVE OFFICER REVIEW

Due to the historic effort that was dedicated to the street closure in this section a permanent change does warrant appropriate policy reflection and change if Council wishes. Generally, I support the connectivity of the two residential areas through the public streets for safety reasons, ease of traffic flow and to connect residential areas that now fall under the Regional Municipality versus separate municipalities.

I recommend Council carryout the action items listed in the "Next Steps" section of the report. Further, I recommend the approval of the draft policy attached to the report as provided by the Traffic Authority recognizing a gate can remain in place if so desired or until the noted action items are carried out.

Report Prepared by: _____

Troy Burgess, Manager, Public Works Operations, & Traffic Authority

Report Approved by: 

Mark Phillips, Chief Administrative Officer

West Hants Regional Municipality

A Policy to Re-open a Portion of Underwood Drive

Policy #:
Approval Date:
Revision Date:

Authority

This policy is made by Council under the authority of sections 312 and 315 of the *Municipal Government Act*, SNS 1998, c-18.

Purpose

The purpose of this policy is to re-open as a public street that portion of Underwood Drive identified in the plan of survey prepared by Blake Beaton, NSLS 626 and dated August 31, 2015, a copy of which is attached to this policy.

Definitions

"Act" means the *Municipal Government Act*, SNS, 1998, c-18,

"Council" means the Municipal Council for the West Hants Regional Municipality,

Policy Statement

1. Council hereby re-opens as a public street all that portion of Underwood Drive as depicted in a plan of survey prepared by Blake Beaton, NSLS 626 and dated August 31, 2015. That portion of Underwood Drive that is being re-opened is more particularly described and identified as follows:

    ALL AND SINGULAR that certain area of land intended for street closure situated, lying and being at Underwood Drive in the County of West Hants, Province of Nova Scotia, said lands being shown on Plan 15-2464-15B, prepared by Strum Consulting Ltd., dated the 31st of August 2015, being more particularly described as follows:

    PREMISING that directions are quadrant bearings, derived from GPS observations referenced to the Nova Scotia Coordinate Survey System and are referred to Central Meridian, 64 degrees 30 minutes West (Zone 5).

    BEGINNING at a survey marker being North 42 degrees 39 minutes 45 seconds East a distance of 1013.998 metres from Nova Scotia Coordinate Monument No. 208629. The same point being the northeastern corner of Lot 27A, said Survey Marker being the **POINT OF BEGINNING**.

    THENCE South 82 degrees 03 minutes 11 seconds West a distance of 2.339 metres along the north boundary of Lot 27A to a point;

THENCE North 23 degrees 18 minutes 22 seconds East a distance of 23.532 to a point on the southern boundary of Lot 21A-3;

THENCE North 82 degrees 03 minutes 11 seconds East a distance of 2.339 metres along the Southern boundary of Lot 21A-3 to a Survey Marker at the southeast corner of Lot 21A-3 and the western boundary of Lot A-A;

THENCE South 23 degrees 18 minutes 22 seconds West a distance of 23.532 metres along the western boundary of Lot A-A to a Survey Marker. Said survey marker being the **POINT OF BEGINNING**.

SAID LANDS CONTAINING and area of 47.05 Square Metres.

BEING AND INTENDED a portion of Parcel UD-1 to be lands conveyed to the Town of Windsor, Book 559 Page 631.

2. Pursuant to sections 312 and 315 of the Act, this Policy was passed at a duly called meeting of Council and following the delivery of this Policy to the Minister of Transportation and Infrastructure Renewal.

Approved by Council on this ___ day of September, 2021

_____ _____

Abraham Zebian, Mayor Mark Phillips, CAO

Certificate

I, Mark Phillips, CAO hereby certify that the preceding Policy was passed at a duly called meeting of the Council of the Town of Windsor held on September ____, 2021.

_____

Mark Phillips, CAO

Dated _____, 2021

WEST HANTS REGIONAL MUNICIPALITY
RECOMMENDATION REPORT

To:	Members of Planning Advisory Committee/Heritage Advisory Committee (PAC/HAC)
Submitted by:	_____ Madelyn LeMay, Director, Planning and Development
Date:	September 9, 2021
Subject:	Civic Addressing By-law Amendment File # 21-16

1.0 LEGISLATIVE AUTHORITY

Municipal Government Act (MGA) s.313

2.0 RECOMMENDATION

If PAC/HAC wishes to forward a positive recommendation the following motion would be in order:

PAC/HAC recommends that Council give First Reading and proceed to a Public Hearing to amend the Civic Addressing By-law, RC-001, by adding a new clause to allow Council to change a road name without support of those owning lots on the street, in a manner substantively the same as that included as Attachment A to the report entitled *Civic Addressing By-law Amendment* dated September 9, 2021.

3.0 BACKGROUND

West Hants Regional Municipality approved a Civic Addressing By-law on November 24, 2020. Since then it has come to the attention of staff that the only way to rename a road is by the Civic Addressing Coordinator receiving a

petition signed by the owners of seventy-five percent (75%) of the lots with frontage on the road.

4.0 DISCUSSION

The 2020 By-law works well when a road is named or when a name change is wanted by those who own property on the street. However, within the 2020 By-law there is no opportunity for Council itself to change a road name should it become necessary for reasons of safety and/or to meet the requirements of the Nova Scotia Civic Address File (NSCAF) system.

As a result, staff are recommending that Council amend the Civic Addressing By-law (Attachment A) by adding the following clause:

6.2.1 *When a road owned by West Hants Regional Municipality should be named or a name changed in order to comply with or reflect the criteria used by the Nova Scotia Civic Address File (NSCAF) to ensure safety of residents, WHRM Council may direct the Civic Addressing Coordinator to change the road name to a specific road name determined by Council and reviewed by the Civic Addressing Coordinator to ensure it complies with the requirements of Section 6.3, Road Naming Evaluation Criteria, without public consultation. Notice to those affected must be provided a minimum of sixty (60) days prior to the name being changed in the Civic Address File.*

When a road is being named or the name changed because of safety concerns, no opportunity for those who own property on the road to object to Council should be provided. NSCAF requirements need to prevail to ensure emergency services can reach and find residents.

5.0 NEXT STEPS

The following process is required for amendment of the By-law:

Staff Review

▼

Planning Advisory Committee Review and Recommendation
(September 9, 2021)

▼

Regional Council First Reading
(September 28, 2021)

▼

Notice of Public Hearing

▼

Regional Council Public Hearing and Second Reading (October 26)

▼

Notice of Approval in Local Paper

▼

Notice of Approval to Municipal Affairs and Housing

6.0 FINANCIAL IMPLICATIONS

There are no financial implications for the Region associated with amending the existing By-law.

7.0 ALTERNATIVES

Should PAC/HAC not wish to recommend this amendment to Council, PAC/HAC may:

- recommend specific amendments to the proposed draft;
- provide alternative direction, such as requesting further information on a specific topic.

8.0 ATTACHMENTS

Attachment A — Region of West Hants Civic Addressing By-law, RC-001, with proposed amendments

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Report Prepared by: _____

Madelyn LeMay, Director, Planning and Development

and

_____

Tracy Babineau, Civic Addressing Coordinator

Proposed Changes Shown in RED

1.0 This By-law is made pursuant to the Municipal Government Act, RSNS 1998, as amended from time-to-time and hereinafter referred to as the "Act" and shall be known and may be cited as the Civic Addressing By-law.

2.0 DEFINITIONS

In this By-law:

(a) "building" means any structure used, or intended to be used, to support or shelter any use or occupancy, and includes an incomplete building once the footings have been constructed, but does not include a structure accessory to another structure on the same lot or a structure which, if it were now being built for the first time, would not require a Building Permit to authorize its construction;

(b) "civic address" means the combination of an assigned civic number, the road name and the community;

(c) "Civic Address File" means the database maintained by the Region containing geographically referenced civic address information including civic points, street network files, and community boundaries;

(d) "Civic Addressing Coordinator" means the person who administers this By-law;

(e) "civic number" means the number assigned to a lot or building by the Civic Addressing Coordinator in accordance with this By-law;

(f) "community" means a geographic area contained within the Region of Windsor and West Hants;

(g) "owner" has the same meaning as the owner of property in the Municipal Government Act or successor legislation from time to time;

(h) "private road" means any street, road, lane, bridge or other thoroughfare accessible to motor vehicles which is not a public road defined in clause 2.0 (k) and which serves as a principal vehicular access to three or more dwelling units;

(i) "property" means a lot of land;

(j) "public road" means a road or highway owned and maintained by the Region or the Province of Nova Scotia;

(k) "Region" or "West Hants Regional Municipality" means the Municipality incorporated by the Region of Windsor and West Hants Act, SNS 2018, c.26 irrespective of whether it has had its name changed by virtue of Section 11 of that *Act* or otherwise;

(l) "road name" means the official name of a street, road, or highway as it appears in the Civic Address File.

3.0 DUTIES of CIVIC ADDRESSING COORDINATOR

The Civic Addressing Coordinator shall be responsible for:

(a) assigning or re-assigning civic numbers to lots or buildings and the keeping of the Civic Address File;

(b) reviewing and approving all proposed road names for new public and private roads created through the subdivision approval process;

(c) reviewing and approving all proposed road names for existing unnamed roads; and

(d) reviewing and recommending to Regional Council the acceptance or rejection of proposed road names submitted through the application process for changing an existing Provincial or Regional road name.

4.0 CIVIC NUMBERS

4.1 Existing Civic Numbers

A civic number that is recorded in the Civic Address File for a lot or building on the date of the first reading of this By-law is hereby assigned to that lot or building until such time as the Civic Addressing Coordinator, by written notice to an owner, directs otherwise.

4.2 Assignment of Civic Numbers

4.2.1 The Civic Addressing Coordinator may assign civic numbers to:

(a) buildings that have permanent or temporary occupancy or use; and

(b) vacant lots or developed sites and in the assignment of a number shall take into consideration the public use thereof which may require emergency services, such as parks, playgrounds and trails where public activity will occur.

4.2.2 The Civic Addressing Coordinator may assign more than one civic number to a lot or building.

4.2.3 The Civic Addressing Coordinator shall assign new civic numbers using a spatial formatting system which has all roads divided into intervals and numbers are assigned depending upon where the driveway intersects the road.

4.2.4 The Civic Addressing Coordinator may assign a new civic number with a spatial formatting system based on the surrounding civic numbers where an existing civic number prevents the use of the usual spatial formatting system.

4.2.5 The Civic Addressing Coordinator shall assign a new civic number where:

(a) a building permit has been issued; or

(b) there is no building permit issued, once a site inspection has been done by the Building Inspector or Civic Addressing Coordinator to confirm whether a civic number is required.

4.3 Deletion of Civic Numbers

Deletion of civic numbers shall be at the discretion of the Civic Addressing Coordinator.

4.4 Refusal of Civic Number

The Civic Addressing Coordinator shall not issue a civic number if they are made aware of an outstanding order against the property under the National Building Code, Fire Safety Act, or the Municipal Government Act.

4.5 Change and Reassignment of Existing Civic Numbers

(a) The Civic Addressing Coordinator may, by sixty (60) days written notice to an owner, change or reassign civic numbers where necessary to avoid potentially confusing numbering irregularities and to assure an adequate supply of civic numbers for existing and future development.

(b) The Region shall not be liable for any costs or damages whatsoever that may be incurred by an owner related to the reassignment of a civic number.

5.0 POSTING of CIVIC NUMBERS

5.1 Civic Number Specifications

The owner of a property for which a civic number is issued shall keep the assigned civic number posted on the lot or building in the following manner:

(a) civic numbers shall be in Arabic numerals;

(b) the numerals shall be right side up;

(c) the colour of the numerals shall clearly contrast with the background upon which the numbers are displayed;

(d) civic numbers shall either be composed of highly reflective material or be effectively illuminated during the hours of darkness;

(e) the bottom of the numbers shall be a minimum of 90 centimeters (36 inches) above grade;

(f) the height of the numerals shall not be less than 65 millimeters (2.5 inches);

(g) civic numbers shall be posted within 6 meters (20 feet) of the closest edge of the traveled portion of the public road or private road which forms part of the civic address for the lot or building;

(h) the civic number shall be posted on the building or on a gatepost, signpost, or other structure on the lot on which the building is situated, excluding a utility pole for electrical, telephone, or other utility service;

(i) civic numbers shall face towards the public road or private road upon which the lot or building is situated and which forms part of the civic address for the lot or building, except that double-sided signage may be used, in which event the civic number shall be on both sides of the sign and perpendicular to the public road or private road;

(j) civic numbers shall be posted in a location which is not obstructed from view when viewed from the closest place on the traveled portion of the public or private road upon which the lot or building is situated or from which it has access and from all points at least 10 meters (33 feet) in either direction from that place, except that an intervening tree trunk or a vertical pole or post shall not alone be considered an obstruction for purposes of this subsection; and

(k) no person shall post or permit to be posted a number that could be reasonably confused with a civic number as determined by the Civic Addressing Coordinator.

5.2 Occupancy Permit

An occupancy permit shall not be issued for a property unless a civic number is posted on that property.

6.0 ROAD NAMING

6.1 Application Process for Naming New Roads Created Through Subdivision Approval

(a) The applicant shall complete the "Application to Name a Road" form and submit it to the Civic Addressing Coordinator;

(b) The Civic Addressing Coordinator shall review the application;

(c) If the road name does not meet the evaluation criteria, the Civic Addressing Coordinator shall advise the applicant and provide an explanation for the rejection;

(d) If the road name meets the evaluation criteria, the Civic Addressing Coordinator shall approve the name;

(e) Within one week of notification of final approval of the plan of subdivision, the Civic Addressing Coordinator shall notify the appropriate agencies. Once the road is constructed the Civic Addressing Coordinator shall record the location of the road in the Civic Address File;

(f) If a subdivision plan creating a new road is repealed, all agencies notified of the new road name(s) shall be notified of the repeal; and

(g) The Civic Addressing Coordinator shall contact all property owners on the road(s) to inform them of the name of the new road(s).

6.2 ~~Application~~ Process for Naming an Existing Unnamed Road or Changing an Existing Road Name

6.2.1 When a road owned by West Hants Regional Municipality should be named or a name changed in order to comply with or reflect the criteria used by the Nova Scotia Civic Address File (NSCAF) to ensure safety of residents, WHRM Council may direct the Civic Addressing Coordinator to change the road name to a specific road name determined by Council and reviewed by the Civic Addressing Coordinator to ensure it complies with the requirements of Section 6.3, *Road Naming Evaluation Criteria,* without public consultation. Notice to those affected must be provided a minimum of sixty (60) days prior to the name being changed in the Civic Address File.

6.2.2 When individuals wish to have an unnamed road named, or a name changed, the following process must be followed:

(a) Application shall be made by completing the "Application to Name a Road" form and submitting it to the Civic Addressing Coordinator. The application shall be accompanied by a petition signed by the owners of seventy-five percent (75%) of the lots with frontage on the road;

(b) The Civic Addressing Coordinator shall review the application;

(c) If the road name does not meet the evaluation criteria, the Civic Addressing Coordinator shall advise the applicant and provide an explanation for the rejection;

(d) If the application meets the evaluation criteria, the Civic Addressing Coordinator shall:

(i) seek approval from the authority having jurisdiction over the road, if applicable, and approve the name; or

(ii) seek approval from Council when an existing Provincial or Regional Road name is to be changed.

(e) Within one week of the approval of the new road name, the Civic Addressing Coordinator shall record the new name in the Civic Address File and notify the appropriate agencies; and

(f) The Civic Addressing Coordinator shall contact all owners of property on the road to inform of the new road name. If a subdivision plan creating a new road is repealed, all agencies notified of the new road name(s) shall be notified of the repeal.

6.3 Road Naming Evaluation Criteria

(a) The name must be easy to pronounce and spell and have recognizable words or an acceptable combination of words;

(b) Consideration must be given to the long-standing local usage of the name by the local public;

(c) Road names must be in good taste;

(d) Qualifying words (such as Upper, Lower, New, Old, etc.) should be avoided, but may be accepted in cases where the qualifier has been applied in an official context (e.g., as found in the Nova Scotia Gazetteer);

(e) All names must have an associated road type and the road type must be checked against a standard list before the submitted name can be accepted;

(f) Road names must be alphanumeric (e.g. First Street); name submissions using a numeral (e.g. 1st Street) shall be rejected;

(g) Where a new road is a continuation of an existing road, wherever possible the new road shall be given the same name as the existing road;

(h) There must be no duplication of road names within the Region and, if possible, duplication of road names used in immediately adjoining municipal units shall be avoided;

(i) All road name submissions must be checked against the alias field in the road names database both for the community in question and its adjacent communities. If the suggested name appears as an alias, it must be rejected;

(j) There should be no like-sounding names within the Region;

(k) Official road names, including road type, must have no more than 35 characters (including special characters and spaces);

(l) If the road is named after a topographic feature, the name must reflect the official name found in the Nova Scotia Gazetteer;

(m) A personal name (given name and surname) should not be applied to a road unless such application is in the public interest. The person commemorated should have contributed significantly to the area where the road is located. The adoption of a personal name during the lifetime of the person concerned should only be made in exceptional circumstances and with the person's written consent;

(n) No formal titles of distinction may be associated with the personal name (e.g., Captain, Major);

(o) Company or commercial product names, as well as names associated with copyright or trademarks, shall be avoided;

(p) The spelling and accenting of names must agree with the rules of the language in which they are written; and

(q) Changes to established existing road names shall be discouraged unless there are recognized difficulties with the existing name.

7.0 POSTING ROAD SIGNS

7.1 Public Road Signs

Identification of provincially or municipally owned public roads is the responsibility of the respective jurisdiction.

7.2 Private Road Signs

The owners of a private road shall ensure that a road sign is erected and maintained according to specifications outlined in this Civic Addressing By-law.

7.3 Posting Private Road Signs through the Nova Scotia Department of Transportation (DTIR)

7.3.1 Private roads which intersect with public roads shall be identified only by an approved road name sign.

7.3.2 Private roads which intersect with public roads and are not already identified by an approved road name sign shall be provided with a road name sign upon the written request of one or more residents of the road subject to the following criteria:

(a) prior to approval of a sign by the Civic Addressing Coordinator the applicant(s) has paid to the Region one hundred percent (100%) of the fees charged by DTIR for such purchase; and

(b) the name of the road is to be that designated by the Civic Addressing Coordinator; and

(c) the administrative process developed by the Region from time-to-time shall be followed for the erection of private road signs.

7.3.3 When a private road sign requires repair, removal or replacement, costs shall be determined by DTIR and borne by the applicant.

7.4 Posting Private Road Signs by Applicant

7.4.1 The applicant shall erect, maintain in good condition and replace as necessary, a sign and signpost at the intersection of the private road and the public street in a manner consistent with any conditions attached to such permission and other lawful requirements; and

7.4.2 The residents of a private road shall apply for and obtain permission to erect an identifying sign and a signpost from any person or regulatory authority whose permission is required by law to erect an identifying sign and a signpost, subject to the following requirements:

(a) the cost of fabrication and installation of such sign shall be the responsibility of the residents;

(b) it will be the residents' responsibility to install, maintain in good condition and replace as necessary the sign and signpost;

(c) the name of the road is to be that designated by the Civic Addressing Coordinator;

(d) to the extent possible, the signpost is to be located in an unobstructed line of sight for vehicles approaching the private road from either direction along the intersecting public street, and is to be set back a minimum of 1.5 meters (5 feet) from the outside edge of the travel lane of the intersecting public road;

(e) double-sided signage placed perpendicular to the intersecting road shall be used so that the name of the road is visible for vehicles approaching the private road from either direction;

(f) lettering of the private road name shall be 100 millimeters (4 inches) in height and in uppercase letters;

(g) the sign shall be painted with reflective paint with lettering in black against a white background;

(h) the bottom of the sign shall be between 1.5 meters (5 feet) and 2.5 meters (8 feet) above the road grade of the intersecting public road; and

(i) the signpost shall be made of pressure-treated lumber with cross-sectional dimensions not less than 85 millimeters (3.3 inches) by 85 millimeters (3.3 inches), or rigid non-ferrous metal, and sufficiently fastened to the ground to hold the sign rigidly in place and to prevent turning of the sign.

8.0 COMPLIANCE

8.1 Special Conditions

8.1.1 Upon application by an owner, the Civic Addressing Coordinator may provide written authorization for signage for civic numbers or road names to vary from the standards contained in this By-law, with or without conditions, when:

(a) compliance with the standards is not reasonably possible, due to the physical features of the site or other matters; or

(b) compliance with this By-law would not effectively meet the objectives of this By-law as an alternative approach.

8.1.2 The Civic Addressing Coordinator may revoke or vary an authorization under this section. Owners shall comply with any conditions contained within authorizations granted under this section.

9.0 VIOLATIONS

9.1 It shall be an offence for a person to refuse or fail to comply with a written notice issued by the Civic Addressing Coordinator to an owner which assigns, reassigns, or deletes a civic number of a lot or building.

9.2 Any person who violates any provision of this By-law shall be liable on summary conviction to a penalty of not less than $200.00 and not more than $5,000.00, and in default of payment to imprisonment for a period of not more than 90 days.

9.3 In the event of contravention of this By-law, the Region may:

(a) prepare and serve a notice in writing to an owner to undertake work including, but not limited to, the posting or re-posting of a civic number on a building or lot, the erection or re-erection of signage for a private road, or the removal of a civic number or signage for a private road;

(b) in the event that:

(i) required remedial work regarding a road sign has not been completed within thirty (30) days; or

(ii) required remedial work regarding a civic number has not been completed within fourteen (14) days,

of the date of service of the notice, enter upon the property of the owner and undertake the work, and the cost of the work with interest at the same rate as taxes from the date of completion until the date of payment, shall be a first lien on the property upon which, or for the benefit of which, the work was done.

9.4 The notice required to be served pursuant to this By-law may be served:

(a) in person;

(b) by regular mail to the address shown on the Assessment Roll;

(c) by electronic mail; or

(d) by facsimile.

A notice is deemed to have been served on the seventh (7th) day after it was sent.

10.0 REPEAL

10.1 The Town of Windsor Civic Addressing By-law dated November 19, 2019 and the Municipality of the District of West Hants Civic Addressing By-law , C-003, dated November 27, 2018 are hereby repealed.

I, Rhonda Brown, Municipal Clerk, of the West Hants Regional Municipality, the Province of Nova Scotia, do hereby certify that this is a true copy of the By-law as adopted by the Council of the West Hants Regional Municipality at a meeting duly called and held on the **24th** day of **November, 2020**.

R. N. Brown
Municipal Clerk

By-law Adoption	
First Reading:	September 22, 2020
Notice Published:	November 3, 2020
Second Reading & Approval	November 24, 2020
Final Publication	December 1, 2020
Notice to Municipal Affairs	December 1, 2020
Description: Initial approval of the Civic Addressing By-law, RC-001, which includes the repeal of previous Civic Addressing By-laws of the former Town of Hantsport and Municipality of the District of West Hants.	

WINDSOR INTERSECTION INFRASTRUCTURE NEEDS ASSESSMENT



PREPARED FOR:
WEST HANTS REGIONAL MUNICIPALITY

Project No. 201-11983

SEPTEMBER 2021

wsp

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1 INTRODUCTION

Background

Plans are currently being prepared for modifications to the regional transportation network in Windsor, Nova Scotia. The Nova Scotia Department of Transportation and Active Transit (NSTAT) is considering re-aligning the Highway 101 Eastbound Exit 5A Ramp at Industrial Drive. With the realignment of the Exit 5A Ramp, the Hants County Exhibition entrance will be required to be relocated along Wentworth Road. Since the main access to the Hants County Exhibition will be relocated, the Windsor Agricultural Society is planning to expand the site to accommodate additional commercial development and a new access location on Wentworth Road. Among the future changes to the road network, the West Hants Regional Municipality (WHRM) is also considering extending Payzant Drive to the west to connect with Centennial Drive. WSP Canada Inc. was retained to complete a Traffic Impact Study (TIS) for the proposed Exhibition Expansion with respect to several future road network scenarios, which followed the March 31st, 2021 Scoping Document reviewed by NSTAT.

In addition to the changes resulting from the realignment if the Highway 101 Eastbound Exit 5A Ramp and the Hants County Exhibition Expansion, the WHRM is considering an extension of Payzant Drive to the east to connect with King Street.

The potential changes to the road network will have an impact on traffic volumes on Wentworth Road and King Street. WSP Canada Inc. has been retained to assess the impact of these changes at a series of key intersections and provide recommendations to mitigate the infrastructure impacts of the changes to the regional transportation system. A summary of the potential changes to the transportation network is provided in Figure 1.

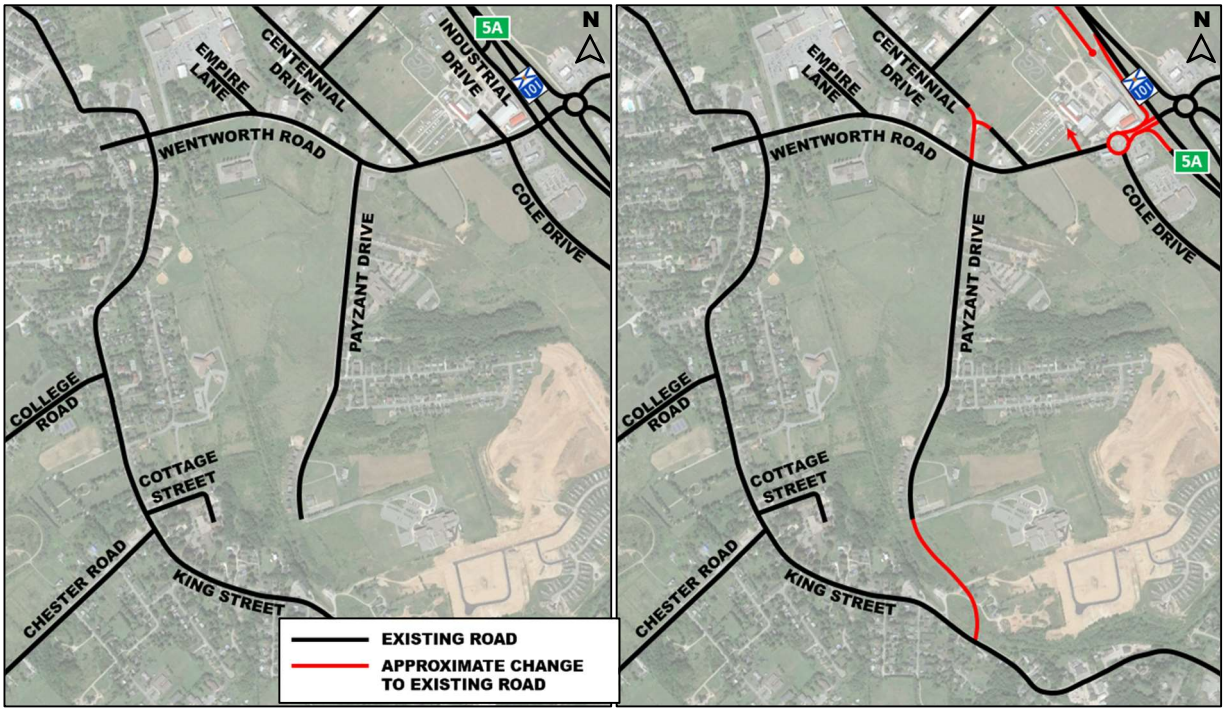


Figure 1 – Summary of Potential Changes to the Road Network

Study Objectives

1. Establishing existing traffic conditions in the Study Area with input from the studied traffic volume changes at the Hants County Exhibition;
2. Determining the future growth based on municipality approach and future developments;
3. Preparing the Design Hourly Volumes for analysis;
4. Completing warrant analyses and operational analyses at the Study Intersections for existing and future growth scenarios;
5. Determining improvements to the Study Intersections to mitigate future growth and traffic volume redistribution; and,
6. Preparing intersection concept drawings with planning level cost estimates for implementation.

Descriptions of Major Study Area Roads

Wentworth Road is an arterial roadway, generally aligned north-south for the purposes of this study. Wentworth Road provides a key link between the Town of Windsor and Highway 101. Wentworth Road generally consists of one lane in each direction with an alternating left-turning lane and concrete sidewalk on both sides. The posted speed limit is 50 km/h.

King Street is an arterial roadway, generally aligned north-south for the purposes of this study. King Street provides a major link between the Avon River in Downtown Windsor and the Curry's Corner / Garlands Crossing neighbourhoods. In the Study Area, King Street generally consists of one lane in each direction and has an asphalt sidewalk on the north side of the street. The posted speed limit is 50 km/h.

Payzant Drive is a collector roadway, generally aligned east-west for the purposes of this study, that runs approximately 1.4 kms between Wentworth Road and the Avon View High School. Payzant Drive is the only road access the Avon View High School and the Hants Community Hospital. Payzant Drive generally consists of one lane in each direction and the posted speed limit is 50 km/h.

Study Intersections

This study will focus on four (4) existing intersections and one (1) future intersection, as shown in Figure 2. The existing conditions and future changes anticipated at each Study Intersection are described in detail in Section 4.

#1 – Wentworth Road at Payzant Drive
#2 – Wentworth Road at Empire Lane
#3 – King Street at College Road
#4 – King Street at Chester Road
#5 – King Street at Payzant Drive

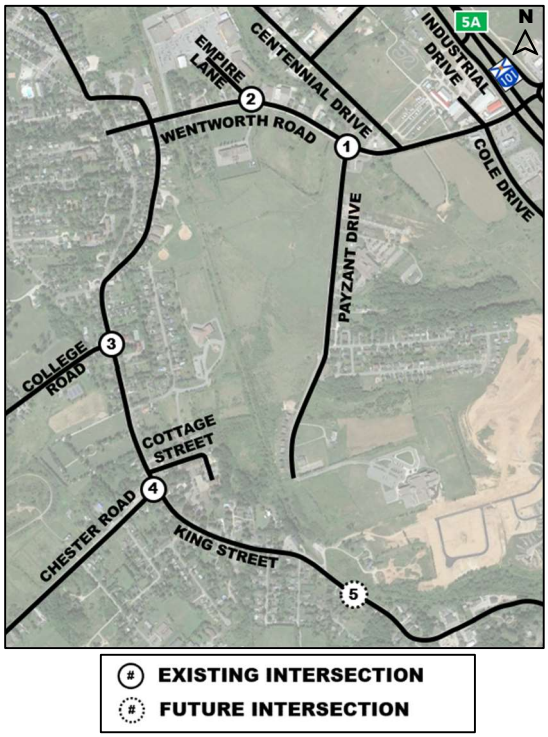


Figure 2 – Study Intersections

2 BACKGROUND TRAFFIC

Turning Movement Counts

Turning movement volumes were collected by WSP between Tuesday, January 19th and Thursday, January 21st, 2021 at the existing Study Intersections. Traffic volumes were collected during the morning (7:00-9:00AM), midday (11:30AM-1:30PM) and afternoon (3:30-5:30PM) peak periods. Intersection counts have been tabulated in 15-minute intervals with peak hours indicated by shaded areas. Turning movement volumes are provided in Tables A-1 to A-4, Appendix A.

Seasonal Adjustment Factor

NSTAT completes traffic counts on various roads and highways throughout the year. In order to normalize the collected traffic counts completed for different types of roads and to account for seasonal variation in traffic volumes, NSTAT develops average traffic count group factors. There is a factor determined for each week of the year for each road class.

Road classes consider the type of traffic use carried on a particular road section. A road section that primarily carries commuter traffic in an urban area does not see as much variation in volumes as a rural road in a tourist area would experience.

With respect to traffic volumes collected in the third week of January, the associated NSTAT seasonal adjustment factor for a 'A' class roadway (Wentworth Road and King Street) is 1.17 factor, as shown in Table A-5, Appendix A.

Covid-19 Adjustment Factor

It should be noted that the traffic volume data was collected amidst the Covid-19 pandemic. Since traffic volumes in the WHRM appear to be similar to pre-pandemic conditions, volumes will be increased by 5% to account for potentially reduced travel patterns to be conservative.

Background Traffic from the Existing West Hants Sports Complex and Exhibition

Since traffic volume data was collected amidst the Covid-19 pandemic, typical weekday traffic generated by the existing West Hants Sports Complex and Hants County Exhibition would not have been captured in the turning movement volumes collected at the Study Intersections.

The distribution of trips at Study Intersection #1 from the existing West Hants Sports Complex and Hants County Exhibition were extracted from the *Hants County Exhibition Expansion Traffic Impact Study (WSP, May 2021)*. Based on trips at the Wentworth / Payzant Drive intersection, trips were then distributed through the study area network.

Traffic from the existing West Hants Sports Complex and Hants County Exhibition is considered in 2021 volume projections, which is carried through to the 2030 volume projections.

Future Background Traffic from developments within WHRM

There are ongoing developments in WHRM that are being constructed or plan to be constructed between the years 2021 and 2030 and will be considered in the 2030 volume projections. These developments include:

- Payzant Drive Area: 258 single family units, 250 apartment units with a community centre (10,000 sq. ft.).
- College Road Area: 88 units of Senior housing, 128 beds Long-term care, 42 units of assisted living, 10 units with disability requirements, 44 units of independent living with a commercial (medical centre/pharmacy)/café (8,000 sq.ft.) development and community centre (11,000 sq.ft.).
- Empire Lane Area: 27 apartment units
- The Crossing Area: 60 single family dwelling units

The above developments have been added to the 2030 volume projections and distributed onto the study network using the existing travel patterns.

Traffic Growth Rate

Historical data was unavailable for Wentworth Road or King Street within the Study Area, therefore, historical traffic volume data on Highway 101, near Exit 5, 5A and 6, was utilized for background growth.

The available traffic data for Highway 101 Section 60 (between Exit 5 and 5A) was reviewed and found a 1.76% growth rate, as shown in Figure 3. Similarly, the available data for Highway 101 Section 65 (between Exit 5A and 6) was reviewed and found a 1.74% growth rate, as shown in Figure 4.

To account for future annual growth of the unknown developments, an annual growth rate of 1.5% will be applied to the background volumes between 2021 and 2030 for this study.

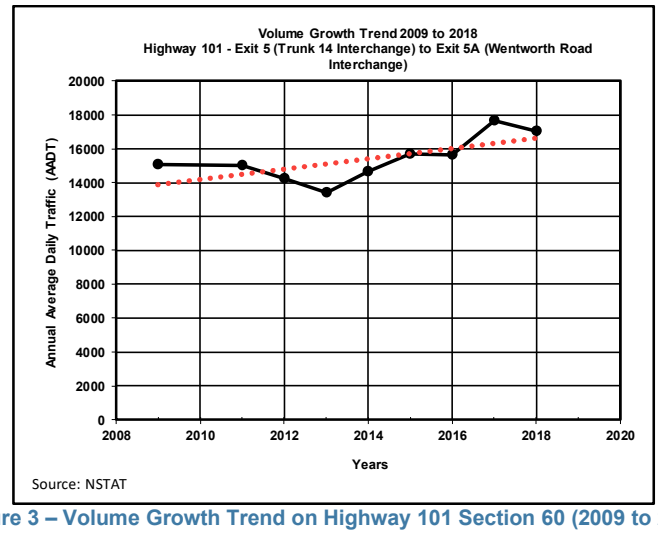


Figure 3 – Volume Growth Trend on Highway 101 Section 60 (2009 to 2018)

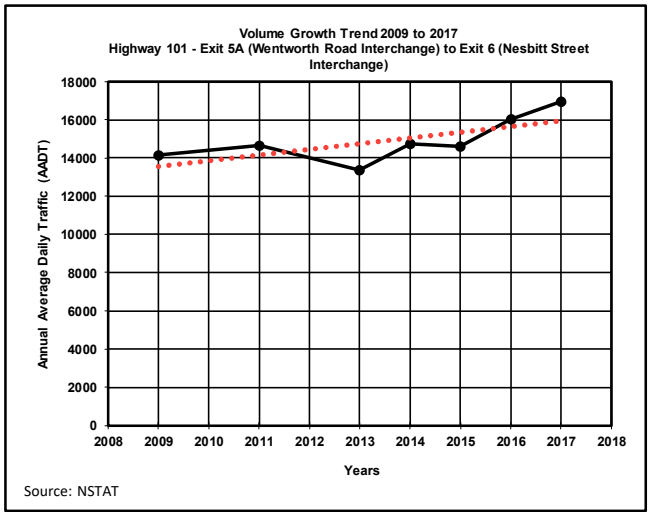


Figure 4 – Volume Growth Trend on Highway 101 Section 65 (2009 to 2017)

Future Traffic from the Hants County Exhibition Expansion

The expansion of the Hants County Exhibition is expected to include approximately 35,000 ft^2 of commercial development, consisting of office space, retail establishments and restaurants. The distribution of trips at Study Intersection #1 from the Hants County Exhibition Expansion were extracted from the *Hants County Exhibition Expansion Traffic Impact Study (WSP, May 2021)*.

Traffic from the Hants County Exhibition Expansion is only considered in 2030 volume projections.

3 ANALYSIS SCENARIOS

Analysis Scenarios Considered

WSP considered the following analysis scenarios at the Study Intersections:

1. 2021 Existing Conditions;
2. 2030 ***without*** Payzant Drive connection; and,
3. 2030 ***with*** Payzant Drive connection.

The scenarios are described in more detail in the following subsections. It should be noted that the scenarios do not apply to all Study Intersections. Study Intersections will be evaluated based on appropriate scenarios. Similarly, there may be additional scenarios considered that reflect slightly modified scenarios, depending on the intersection being considered.

It should be noted that the 2030 scenarios assume the following:

- Highway 101 Exit 5A Eastbound Ramp is re-aligned with Wentworth Road;
- Full build-out of the expansion to the Hants County Exhibition; and,
- Payzant Drive is extended west and connects with Centennial Drive.

3.1 SCENARIO 1: 2021 EXISTING CONDITIONS

Projected 2021 Volumes

Projected 2021 AM and PM peak hour volumes consider:

- 1.17 Seasonal Adjustment Factor
- 1.05 Covid-19 Adjustment Factor
- Trips generated by the West Hants Sports Complex on a typical weekday
- Trips generated by the existing Hants County Exhibition on a typical weekday

Study Intersections reviewed based on traffic volumes in Scenario 1 will be evaluated with respect to the existing traffic control and lane configurations.

3.2 SCENARIO 2: 2030 WITHOUT PAYZANT DRIVE CONNECTION

Projected 2030 Volumes without Payzant Drive connection

Projected 2030 AM and PM peak hour background volumes ***without*** the Payzant Drive connection consider:

- 2021 Volumes
- Future Background Developments
- 1.5% Annual Growth between 2021-2030
- Trips generated by the Hants County Exhibition Expansion on a typical weekday

3.3 SCENARIO 3: 2030 WITH PAYZANT DRIVE CONNECTION

Projected 2030 Volumes with Payzant Drive connection

Projected 2030 AM and PM peak hour background volumes ***with*** the Payzant Drive connection consider:

- 2021 Volumes
- Future Background Developments
- 1.5% Annual Growth between 2021-2030
- Trips generated by the Hants County Exhibition Expansion on a typical weekday
- Estimation of Redistributed Trips with the Payzant Drive connection open

4 INTERSECTION OPERATIONAL ANALYSIS

Intersection Level of Service (LOS) Analysis was completed to estimate how intersections may be expected to operate into the future without and with site generated trips. This section of the report addresses how left-turn lane warrants and traffic signal warrants were conducted and how each intersection was evaluated. The following subsections identify each study intersection and summarize the results of the operational analysis.

Left-Turn Lane Warrant Analysis

Left-turn movements on a two-lane street may cause both operational and safety problems. Operational problems result as a vehicle stopped waiting for an opportunity to turn across 'heavy' opposing traffic causes a queue of stopped vehicles to form. Safety problems result from rear end collisions when a stopped left-turning vehicle is struck by an advancing vehicle, or from head-on or right-angle collisions when a left-turning vehicle is struck by an opposing vehicle.

The *Geometric Design Standards for Ontario Highways Manual* contains nomographs for left-turn lane analysis for two lane streets at unsignalized intersections. The analysis method, which is normally used by WSP Atlantic to evaluate the need for left-turn lanes, uses a series of nomographs that consider speed, advancing volumes, left-turns as a percentage of advancing volumes, and opposing volumes. A point, based on 'opposing' and 'advancing' volumes, plotted to the right of the 'warrant line' of the appropriate '% left-turns' and 'approach speed' nomograph, indicates that a left-turn lane is warranted for the conditions used in the analysis. Similarly, a point that is plotted to the left of the warrant line indicates that a left-turn lane is not warranted.

Left-turn lane warrant analyses are included in Appendix B.

Traffic Signal Warrant Analysis

A signal warrant analysis is completed to determine if the installation of traffic signals at an intersection will provide a positive impact on total intersection operation. That is, the benefits in time saved and improved safety that will accrue to vehicles entering from a side street will exceed the impact that signals will have in time lost and potential additional collisions for vehicles approaching the intersection on the main street.

The *Canadian Traffic Signal Warrant Matrix Analysis (Transportation Association of Canada (TAC), 2005)* considers 100 warrant points as an indication that traffic signals will provide a positive impact. Signal warrant analysis uses vehicular and pedestrian volumes, and intersection, roadway and study area characteristics to calculate a warrant point value.

Traffic signal warrant analyses are included in Appendix B.

Intersection Capacity Analysis Results

Synchro 11.0 / *Arcady 9* software have been used for performance evaluation of the Study Intersections Summaries of the results are provided in the following sub-sections and detailed results of the analyses are included in Appendix C.

Intersection Level of Service Analysis

The level or quality of performance of an intersection in terms of traffic movement is determined by a level of service (LOS) analysis. LOS for intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and increased travel time.

LOS criteria, as shown in Table 1 are stated in terms of average control delay per vehicle which includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Table 1 – Level of Service Criteria for Intersections

LOS	Signalized Intersections Control Delay (Seconds per Vehicle)	LOS Description	Roundabouts *and* Two Way Stop Controlled (TWSC) Intersections Control Delay (Seconds per Vehicle)
A	Less than 10.0	Very low delay; most vehicles do not stop **(Excellent)**	Less than 10.0
B	Between 10.0 and 20.0	Higher delay; most vehicles stop **(Very Good)**	Between 10.0 and 15.0
C	Between 20.0 and 35.0	Higher level of congestion; number of vehicles stopping is significant, although many still pass through intersection without stopping **(Good)**	Between 15.0 and 25.0
D	Between 35.0 and 55.0	Congestion becomes noticeable; vehicles must sometimes wait through more than one red light; many vehicles stop **(Satisfactory)**	Between 25.0 and 35.0
E	Between 55.0 and 80.0	Vehicles must often wait through more than one red light; considered by many agencies to be the limit of **acceptable** delay	Between 35.0 and 50.0
F	Greater than 80.0	This level is considered to be unacceptable to most drivers; occurs when arrival flow rates exceed the capacity of the intersection **(Unacceptable)**	Greater than 50.0

4.1 INTERSECTION #1: WENTWORTH ROAD AT PAYZANT DRIVE

Existing / Future Intersection Description

The existing intersection of ***Wentworth Road at Payzant Drive / Commercial Driveway*** is a 4-leg intersection with stop-control on the Payzant Drive and Commercial Driveway approaches, as shown in Photo 1. The Wentworth Road and Payzant Drive approaches are supplemented with a left-turn lane. There are painted crosswalks on the east and west legs and there is an enhanced crosswalk on the north leg.

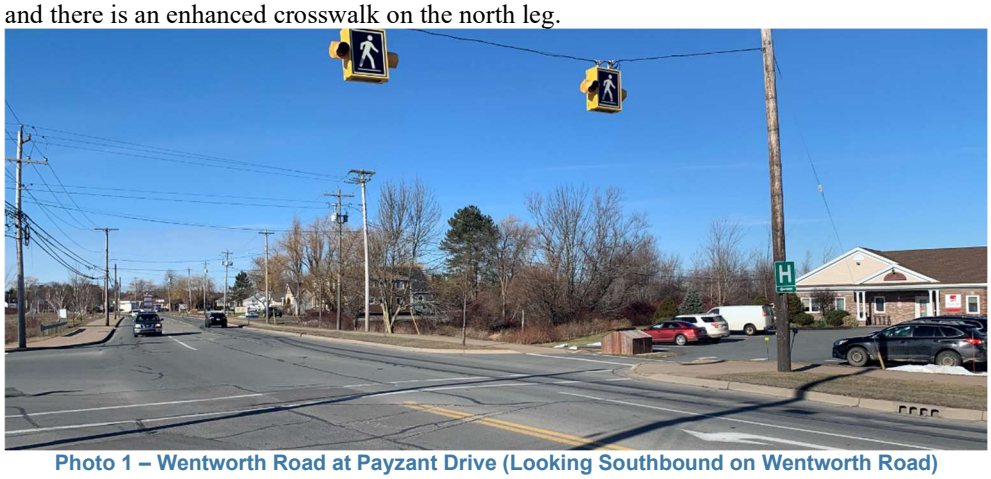


Photo 1 – Wentworth Road at Payzant Drive (Looking Southbound on Wentworth Road)

With full build-out of the Hants County Exhibition Expansion, there are future plans to reconfigure this intersection. In Scenario 1, the west leg of this intersection is considered to be the existing commercial driveway. In Scenarios 2 and 3, the west leg of the intersection is considered an extension to Payzant Drive, as illustrated in Figure 5. It should be noted that this particular intersection is being considered for traffic signals or a roundabout as a result of the expansion to the Hants County Exhibition. Since there is some uncertainty of the future traffic control at this time, an operational analysis of a signalized and roundabout intersection was completed in Scenarios 2 and 3.

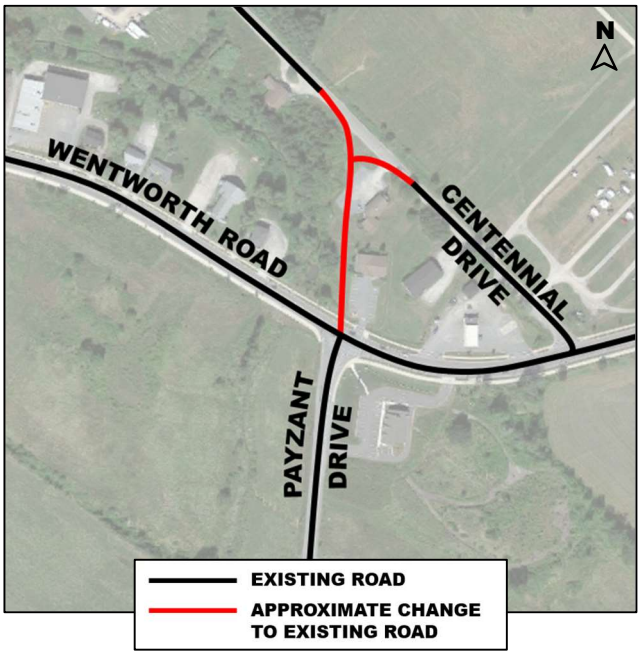


Figure 5 – Future Intersection Configuration

Another option for the intersection of Wentworth Road at Payzant Drive is to remain as a three-legged intersection with turning restrictions at the Centennial Drive/Wentworth Road intersection. This option may be reviewed during the detailed design of the project, however, was not considered in the analysis.

Projected Traffic Volumes

Traffic volume figures were prepared for existing conditions and future traffic volumes without and with the Payzant Drive connection. Table 2 provides a summary of the volume figures prepared and the location of the figure in Appendix A.

Table 2 – Summary of Traffic Volume Figures: Wentworth Road at Payzant Drive

	Description	Volume Figure
Scenario 1	Stop-control	Figure A-1 (Boxes A & B)
Scenario 2	Traffic Signals	Figure A-1 (Boxes C & D)
	Roundabout	Figure A-1 (Boxes E & F)
Scenario 3	Traffic Signals	Figure A-2 (Boxes A & B)
	Roundabout	Figure A-2 (Boxes C & D)

Warrant Summary

Based on the existing traffic control and lane configurations, traffic signal warrants were completed, and no turning lane warrants were completed. It was determined that:

- Traffic signals are not warranted with respect to Scenario 1 (**82 Warrant Points, ~~Table B-1, Appendix B).~~**
- ~~Traffic signals are warranted with respect to Scenario 2[1] (**229 Warrant Points**, Table~~ B-2, Appendix B).
- Traffic signals are warranted with respect to Scenario 3[2] (**145 Warrant Points**, Table B-3, Appendix B).

Intersection Operational Analysis Results

Operational performance results for this intersection are provided in Table 4 (AM peak hour) and Table 5 (PM peak hour).

The signalized alternative in Scenarios 2 and 3 was evaluated with a northbound channelized right-turn from Wentworth Road to Payzant Drive and the eastbound approach consists of a lane for right-turn movements and a lane for shared left-turn and through movements. It should be noted that no changes were made to the traffic signal timing plan or lane configurations between Scenario 2 and 3 for comparison purposes. Without the Payzant Drive connection, all movements are expected to operate at a LOS 'E' or better and a v/c ratio of 0.99 or better.

The roundabout configuration evaluated in Scenarios 2 and 3 is provided on Page C-5 and C-8, Appendix C. No changes were made to the intersection geometry or lane configurations between Scenario 2 and 3 for comparison purposes.

Key Takeaways:

- The existing intersection is operating at a poor LOS.
- **Traffic signals are warranted** based on existing traffic volumes and are expected to **remain warranted** for future scenarios.
- The intersection performs better as a roundabout compared to traffic signals.
- Traffic signals are expected to provide an acceptable level of service at this intersection.
- Some **traffic is diverted from the intersection with the Payzant Drive connection open**, which slightly improves the operational performance of the intersection.
- **Minimal changes in the operational performance of this intersection are expected with the Payzant Drive connection.**

[1] Traffic signal warrant was completed based on traffic volumes in Figure A-1 (Boxes C & D)
[2] Traffic signal warrant was completed based on traffic volumes in Figure A-2 (Boxes A & B)

Without the Payzant Drive connection and with the roundabout option, all movements are expected to operate at a LOS 'B' and a v/c ratio of 0.65 or better.

In general, the operational performance of the intersection is expected to improve slightly with the Payzant Drive connection, regardless of the selected traffic control.

Intersection Recommendations & Planning Cost Estimate

Based on findings from this study, in conjunction with the *Hants County Exhibition Expansion Traffic Impact Study (WSP, May 2021)*, it is recommended that plans be prepared to upgrade this intersection to a roundabout. The general configuration of roundabout is provided in Figure 6[3] and schematic image to show lane configuration. It is recommended that the roundabout include:

- Right-turn lane on the northbound approach;
- Left-turn lane on the southbound approach;
- Single lane on the eastbound and westbound approaches;
- Pedestrian crosswalks consisting of zebra markings and side-mounted signage (RA-4) as appropriate;
- Yield signage on all approaches; and,
- Sidewalk connections to crosswalks.

A planning cost estimate for these items is provided in Table 3. It is estimated that these intersection modifications would be in the range of approximately $2,400,000 plus HST.

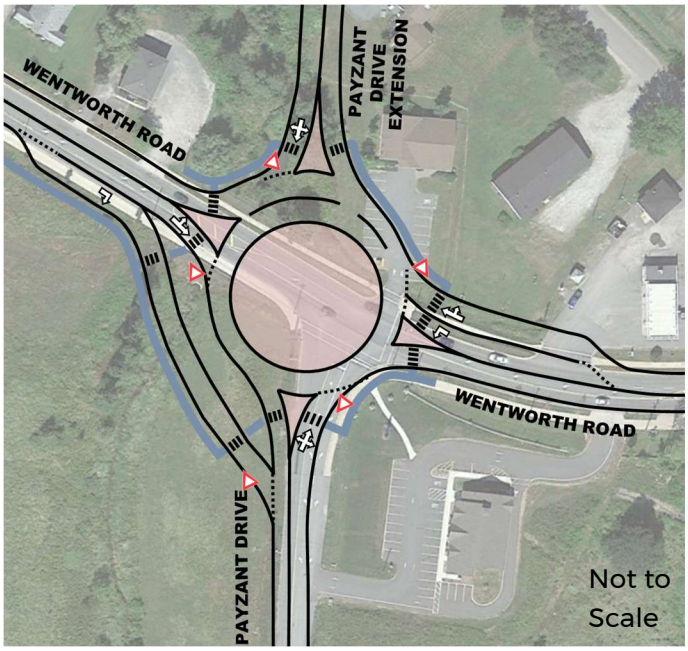


Figure 6 – Recommended Intersection Configuration: Wentworth Road at Payzant Drive[3]

Table 3 – Planning Cost Estimate: Wentworth Road at Payzant Drive

Item	Cost (HST Excluded)
Roundabout	$1,600,000
50% Contingency	$800,000
Total	**$2,400,000**

[3] The rendering is not to scale and is intended for conceptual purposes only.

Table 4 – Intersection Capacity Analysis: Wentworth Road at Payzant Drive (AM Peak)

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement								Overall Intersection	
	Driveway		Payzant Drive		Wentworth Road					
	EB-LTR		WB-L	WB-TR	NB-L	NB-TR	SB-L	SB-TR	Delay	LOS
Scenario 1 - 2021 AM Peak Hour **with Existing** Conditions - ***Stop Control*** (Page C-1)										
Delay	71.7		345.9	16.4	8.3	0.0	11.1	0.0	18.2	C
LOS	F		F	C	A	A	B	A		
v/c	0.05		1.30	0.37	0.00	0.40	0.35	0.27		
Queue	1.3		50.3	13.6	0.0	0.0	12.9	0.0		
LOS Criteria	**Payzant Drive**				**Wentworth Road**				**Overall Intersection**	
	EB-L	**EB-TR**	**WB-L**	**WB-TR**	**NB-L**	**NB-TR**	**SB-L**	**SB-TR**	**Delay**	**LOS**
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Traffic Signals*** (Page C-3)										
Delay	48.6	17.1	52.6	7.5	20.3	57.6	73.3	10.1	40.9	D
LOS	D	B	D	A	C	E	E	B		
v/c	0.3	0.22	0.78	0.53	0.17	0.99	0.99	0.43		
Queue	48.6	17.1	52.6	7.5	20.3	57.6	73.3	10.1		
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Roundabout*** (Page C-5)										
Delay	7.8		9.9		10.1		3.9		7.4	A
LOS	A		A		B		A			
v/c	0.15		0.55		0.59		0.51			
Queue	3.5		19.6		17.5		10.5			
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Traffic Signals*** (Page C-6)										
Delay	42.8	18.6	33.6	7.9	17.8	36.3	27.6	9.7	23.5	C
LOS	D	B	C	A	B	D	C	A		
v/c	0.22	0.20	0.40	0.48	0.16	0.88	0.76	0.44		
Queue	16.5	13.4	37.7	20.9	17.2	190.7	74.8	75.4		
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Roundabout*** (Page C-8)										
Delay	6.4		7.0		8.7		3.3		6.0	A
LOS	A		A		A		A			
v/c	0.13		0.38		0.54		0.44			
Queue	3.5		19.6		15.4		14.0			

Table 5 – Intersection Capacity Analysis: Wentworth Road at Payzant Drive (PM Peak)

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement								Overall Intersection	
	Driveway		Payzant Drive		Wentworth Road					
	EB-LTR		WB-L	WB-TR	NB-L	NB-TR	SB-L	SB-TR	Delay	LOS
Scenario 1 - 2021 PM Peak Hour **with Existing** Conditions - ***Stop Control*** (Page C-2)										
Delay	39.6		134.2	17.2	8.5	0.0	9.1	0.0	13.3	B
LOS	E		F	C	A	A	A	A		
v/c	0.10		0.95	0.38	0.00	0.35	0.09	0.32		
Queue	2.5		50.8	14.3	0.1	0.0	2.4	0.0		
LOS Criteria	**Payzant Drive**				**Wentworth Road**				**Overall Intersection**	
	EB-L	**EB-TR**	**WB-L**	**WB-TR**	**NB-L**	**NB-TR**	**SB-L**	**SB-TR**	**Delay**	**LOS**
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Traffic Signals*** (Page C-4)										
Delay	60.5	13.6	46.3	7.0	16.3	45.0	33.4	12.5	30.5	C
LOS	E	B	D	A	B	D	C	B		
v/c	0.61	0.30	0.72	0.45	0.14	0.94	0.70	0.51		
Queue	36.5	14.7	70.2	20.8	14.9	255.1	53.1	97.6		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Roundabout*** (Page C-5)										
Delay	8.6		18.0		12.8		3.5		10.3	B
LOS	A		C		B		A			
v/c	0.29		0.72		0.70		0.45			
Queue	11.2		79.8		56.0		13.3			
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Traffic Signals*** (Page C-7)										
Delay	49.6	15.3	30.4	7.8	15.6	33.8	9.7	11.4	22	C
LOS	D	B	C	A	B	C	A	B		
v/c	0.51	0.28	0.32	0.43	0.14	0.87	0.35	0.50		
Queue	35.3	16.6	32.4	20.9	13.3	172.6	16.3	87.5		
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Roundabout*** (Page C-8)										
Delay	6.8		9.3		10.9		2.9		7.3	A
LOS	A		A		B		A			
v/c	0.25		0.47		0.65		0.39			
Queue	9.8		22.4		31.5		18.9			

4.2 INTERSECTION #2: WENTWORTH ROAD AT EMPIRE LANE

Existing Intersection Description

The existing intersection of ***Wentworth Road at Empire Lane*** is a 3-leg intersection with stop-control on the Empire Lane approach, as shown in Photo 2. The existing intersection was constructed with underground conduit in preparation for future potential signalization of the intersection. Empire Lane provides the primary vehicle access to the Fort Edward Mall, a shopping plaza consisting of major retail destinations in the area. The Empire Lane approach consists of a right-turn and left-turn lane separated by a splitter island. In addition, two-way vehicle movements on Empire Lane are separated by a median. The northbound approach on Wentworth Road is supplemented with a left-turn lane to the shopping plaza. There are painted crosswalks on the west leg and there is an enhanced crosswalk on the north leg.



Photo 2 – Wentworth Road at Empire Lane (Looking Southbound on Wentworth Road)

Projected Traffic Volumes

Traffic volume figures were prepared for existing conditions and future traffic volumes without and with Payzant Drive connection open. Table 6 provides a summary of the volume figures prepared and the location of the figure in Appendix A.

Table 6 – Summary of Traffic Volume Figures: Wentworth Road at Empire Lane

	Volume Figure
Scenario 1	Figure A-3 (Boxes A & B)
Scenario 2	Figure A-3 (Boxes C & D)
Scenario 3	Figure A-3 (Boxes E & F)

Warrant Summary

Based on the existing traffic control and lane configurations, traffic signal warrants were completed, and no turning lane warrants were completed. It was determined that:

- Traffic signals are not warranted with respect to Scenario 1 (**37 Warrant Points**, Table B-4, Appendix B).
- Traffic signals are not warranted with respect to Scenario 2 (**62 Warrant Points**, Table B-5, Appendix B).
- Traffic signals are not warranted with respect to Scenario 3 (**50 Warrant Points**, Table B-6, Appendix B).

Intersection Operational Analysis Results

Operational performance results for this intersection are provided in Table 7.

The existing intersection is operating well during the morning and afternoon peak hours. This intersection was evaluated in Scenarios 2 and 3 with the existing intersection geometry and lane configurations.

In 2030 without the Payzant Drive connection, movements on the Wentworth Road approaches are expected to operate at LOS 'B' or better. Left turning traffic from the Fort Edward Mall is expected to experience the largest delay at LOS 'D' during the PM peak.

In 2030 with the Payzant Drive connection, all movements are expected to operate at a LOS 'C' or better and a v/c ratio of 0.45 or better. In general, with the Payzant Drive connection, the operational performance of the intersection is expected to improve slightly.

Key Takeaways:

- The existing intersection is operating well.
- **Traffic signals are not warranted** based on existing traffic volumes and are expected to **remain unwarranted** for all future scenarios.
- Implementing traffic signals at this intersection is expected to introduce an unnecessary delay to the Wentworth Road approaches.
- Some **traffic is diverted from the intersection with the Payzant Drive connection open**, which slightly improves the operational performance of the intersection.
- **Minimal changes in the operational performance of this intersection are expected with the Payzant Drive connection.**

Intersection Recommendations

Since the existing intersection is currently operating well and is expected to continue to operate well in 2030 without and with the Payzant Drive connection, no major changes to the intersection geometry, traffic control or lane configurations are proposed. It is recommended that the intersection be monitored for future signalization.

Table 7 – Intersection Capacity Analysis: Wentworth Road at Empire Lane

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement					Overall Intersection	
	Empire Lane		Wentworth Road				
	EB-L	EB-R	NB-L	NB-T	SB-TR	Delay	LOS
Scenario 1 - 2021 AM Peak Hour **with Existing** Conditions - ***Stop Control*** (Page C-9)							
Delay	15.3	11.4	8.6	0.0	0.0	1.0	A
LOS	C	B	A	A	A		
v/c	0.09	0.05	0.05	0.40	0.30		
Queue	2.3	1.2	1.2	0.0	0.0		
Scenario 1 - 2021 PM Peak Hour **with Existing** Conditions - ***Stop Control*** (Page C-10)							
Delay	23.0	18.4	10.6	0.0	0.0	3.6	A
LOS	C	C	B	A	A		
v/c	0.40	0.23	0.09	0.28	0.42		
Queue	14.7	7.1	2.4	0.0	0.0		
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Stop Control*** (Page C-11)							
Delay	19.2	14.1	9.5	0.0	0.0	1.1	A
LOS	C	B	A	A	A		
v/c	0.14	0.09	0.07	0.49	0.44		
Queue	3.7	2.3	1.7	0.0	0.0		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Stop Control*** (Page C-12)							
Delay	32.7	18.9	10.5	0.0	0.0	3.8	A
LOS	D	C	B	A	A		
v/c	0.54	0.27	0.11	0.43	0.55		
Queue	24	8.7	3.0	0.0	0.0		
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-13)							
Delay	16.8	12.5	9.0	0.0	0.0	1.1	A
LOS	C	B	A	A	A		
v/c	0.12	0.07	0.06	0.42	0.36		
Queue	3.1	1.9	1.5	0.0	0.0		
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-14)							
Delay	24.5	15.4	9.7	0.0	0.0	3.5	A
LOS	C	C	A	A	A		
v/c	0.45	0.22	0.10	0.36	0.45		
Queue	17.9	6.5	2.6	0.0	0.0		

4.3 INTERSECTION #3: KING STREET AT COLLEGE ROAD

Existing Intersection Description

The existing intersection of ***King Street at College Road*** is a 3-leg intersection with stop-control on the College Road approach, as shown in Photo 3. All approaches consist of one lane and there is a pedestrian crosswalk offset from the south leg (approximately 10 m). There is a painted dashed yellow line present indicating the vehicle path for left turning vehicles. Since College Road consists of an uphill grade approaching King Street, and the STOP bar present on College Road is offset from the intersection, available sightlines from the STOP bar on College Road are restricted and are represented in Photo 4.



Photo 3 – King Street at College Road (Looking Southbound on King Street)



Photo 4 - College Road Approach

Projected Traffic Volumes

Traffic volume figures were prepared for existing conditions and future traffic volumes without and with Payzant Drive connection open. Table 8 provides a summary of the volume figures prepared and the location of the figure in Appendix A.

Table 8 – Summary of Traffic Volume Figures: King Street at College Road

	Volume Figure
Scenario 1	Figure A-4 (Boxes A & B)
Scenario 2	Figure A-4 (Boxes C & D)
Scenario 3	Figure A-4 (Boxes E & F)

Warrant Summary

Based on the existing traffic control and lane configurations, traffic signal and left-turn lane warrants were completed. It was determined that:

- A northbound left-turn lane is currently warranted and is expected to remain warranted in Scenarios 2 and 3 (Figure B-1, Appendix B).
- Traffic signals are not warranted with respect to Scenario 2 (**29 Warrant Points with less than 75 vph average side street volumes**, Table B-8, Appendix B).

The largest traffic volumes expected at this intersection are projected in 2030 without the Payzant Drive connection (Scenario 2). Since traffic signals are not warranted in Scenario 2, traffic signals are not expected to be warranted in Scenario 3.

Intersection Operational Analysis Results

Operational performance results for this intersection are provided in Table 10.

It should be noted that this intersection was initially modelled with a northbound left-turn lane on King Street, however, minimal improvements to the operational performance of this intersection were observed. Since there is little benefit to the operational performance of this intersection and available space is limited, a left-turn lane was not considered in the analysis.

The existing intersection is operating well during the morning and afternoon peak hours.

In 2030 without the Payzant Drive connection (Scenario 2), King Street approaches are expected to operate at LOS 'A'. Left turning traffic from College Road is expected to experience the largest delay at LOS 'E' during the PM peak.

In 2030 with the Payzant Drive connection (Scenario 3), all movements are expected to operate at a LOS 'D' or better and a v/c ratio of 0.35 or better. In general, with the Payzant Drive connection, the operational performance of the intersection is expected to improve minimally.

Key Takeaways:

- The existing intersection is operating well.
- **Traffic signals are not warranted** based on Scenario 2 volumes and are expected to **remain unwarranted** for all future scenarios.
- A northbound left-turn lane is currently warranted and is expected to remain warranted in Scenarios 2 and 3.
- Negligible changes in the operational performance are expected with the introduction of a northbound left-turn.
- A northbound left-turn lane can be incorporated when future road work takes place.
- Some **traffic is diverted from the intersection with the Payzant Drive connection open**, which slightly improves the operational performance of the intersection.
- **Minimal changes in the operational performance of this intersection are expected with the Payzant Drive connection.**

Since the existing intersection is currently operating well and is expected to continue to operate well in 2030 without and with the Payzant Drive connection, minor changes to the intersection geometry are proposed. These are provided in Figure 7[4]. It is recommended that the intersection include the following:

- Complete a sightline review on King Street to determine the location for the crosswalk, as there is a crest on King Street;
- Provide curb extensions to reduce crossing distance for pedestrians, lower vehicle turning speeds and improve sightlines;
- Update pedestrian crosswalk on King Street to include zebra markings, side-mounted signage (RA-4);
- Relocate the stop bar on College Road approximately 5 m east to improve sightlines;
- Provide pedestrian crossing on College Road consisting of parallel bars;
- Update pavement markings;
- Remove existing yellow dashed line; and,
- Cut back vegetation to improve sightlines.

It is recommended that consideration be given to incorporating the construction of a northbound left-turn lane with future planned rehabilitation on King Street and the re-location of the crosswalk.

A planning cost estimate for these changes to the intersection are provided in Table 9. It is estimated that these intersection modifications would be in the range of approximately $15,000 plus HST.

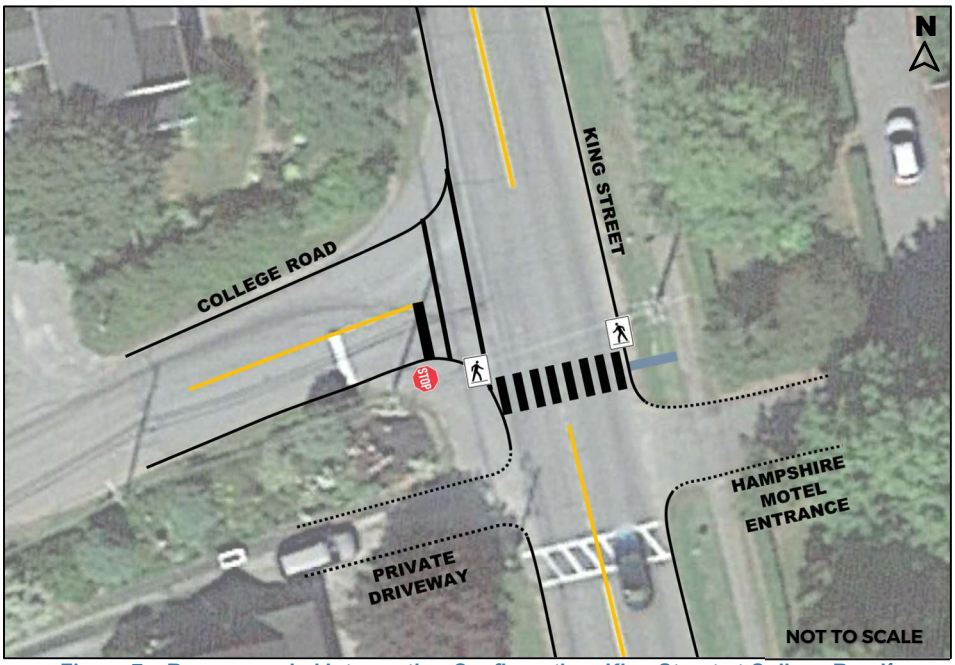


Figure 7 – Recommended Intersection Configuration: King Street at College Road[4]

[4] The rendering is not to scale and is intended for conceptual purposes only.

Table 9 – Planning Cost Estimate: King Street at College Road

Item	Cost (HST Excluded)
Intersection Modifications	$10,000
50% Contingency	$5,000
Total	**$15,000**

Table 10 - Intersection Capacity Analysis: King Street at College Road

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement			Overall Intersection	
	College Road	King Street			
	EB-LR	NB-LT	SB-TR	Delay	LOS
Scenario 1 - 2021 AM Peak Hour **with Existing** Conditions - ***Stop Control*** (Page C-15)					
Delay	13.7	1.3	0.0	1.7	A
LOS	B	A	A		
v/c	0.13	0.04	0.17		
Queue	3.5	1.1	0.0		
Scenario 1 - 2021 PM Peak Hour **with Existing** Conditions - ***Stop Control*** (Page C-16)					
Delay	18.5	1.1	0.0	1.4	A
LOS	C	A	A		
v/c	0.17	0.04	0.34		
Queue	4.8	1.0	0.0		
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Stop Control*** (Page C-17					
Delay	18.8	1.5	0.0	2.3	A
LOS	C	A	A		
v/c	0.24	0.06	0.25		
Queue	7.5	1.5	0.0		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection **- *Stop Control*** (Page C-18					
Delay	35.7	1.5	0.0	2.9	A
LOS	E	A	A		
v/c	0.45	0.06	0.43		
Queue	16.9	1.7	0.0		
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-19)					
Delay	15	1.5	0.0	2.3	A
LOS	C	A	A		
v/c	0.19	0.05	0.18		
Queue	5.5	1.3	0.0		
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-20)					
Delay	25.1	1.3	0.0	2.5	A
LOS	D	A	A		
v/c	0.35	0.05	0.35		
Queue	11.8	1.3	0.0		

4.4 INTERSECTION #4: KING STREET AT CHESTER ROAD

Existing / Future Intersection Description

The existing intersection of ***King Street at Chester Road*** is a 3-leg intersection with stop-control on the Chester Road approach, as shown in Photo 5. All approaches consist of one lane. There are painted crosswalks on the west and north legs. In addition, there is a painted dashed line indicating the vehicle path for northbound left-turning vehicles. It should be noted that the exit driveway for the Clockmaker's Inn is within 5 m of the intersection to the south on King Street.



Photo 5 – King Street at Chester Road (Looking Northbound on King Street)

In addition, there is an unoccupied lot adjacent to the intersection and there is no curb present in this area, resulting in an empty asphalt area with no delineation between the lot and King Street and Chester Road, as shown in Photo 6 and Photo 7. Currently there are no treatments to discourage vehicles from cutting through the site to bypass the intersection.



Photo 6 – Unoccupied Lot Fronting King Street

Existing / Future Intersection Description (Continued)



Photo 7 – Unoccupied Lot Fronting Chester Road

Consideration is currently being given to realigning this intersection to include Cottage Street as a fourth leg. Implications of this realignment are considered in the following subsections of this report (Sections 4.4.1 & 4.4.2). This section of the report specifically focus on King Street and Chester Road as a 3-leg intersection.

Projected Traffic Volumes

Traffic volume figures were prepared for existing conditions and future traffic volumes without and with Payzant Drive connection open. Table 11 provides a summary of the volume figures prepared and the location of the figure in Appendix A.

Table 11 – Summary of Traffic Volume Figures: King Street at Chester Road

	Volume Figure
Scenario 1	Figure A-5 (Boxes A & B)
Scenario 2	Figure A-5 (Boxes C & D)
Scenario 3	Figure A-5 (Boxes E & F)

Warrant Summary

Based on the existing traffic control and lane configurations, traffic signal and left-turn lane warrants were completed. It was determined that:

- A northbound left-turn lane is **currently warranted** and is **expected to remain warranted** in Scenarios 2 and 3 (Figure B-2, Appendix B).
- Volumes are approaching the warrant threshold for traffic signals with respect to Scenario 2 (**83 Warrant Points**, Table B-10, Appendix B).
- Traffic signals are not warranted with respect to Scenario 3 (**67 Warrant Points**, Table B-11, Appendix B).

Since projected traffic volumes are approaching the warrant threshold with respect to Scenarios 2 and 3, traffic signals are expected to be warranted at this location in the future.

Operational performance results for this intersection are provided in Table 12 (AM peak hours) and Table 13 (PM peak hours).

The existing intersection is operating at a poor LOS during the afternoon peak, which is largely due to significantly delays on Chester Road. The Chester Road approach is currently operating near capacity during the afternoon peak (v/c = 0.87).

This intersection was initially evaluated with stop-control on Chester Road, including northbound and eastbound left-turn lanes. Based on Scenario 2 volume projections, left-turning vehicles from Chester Road are expected to operate above capacity and at LOS 'F' during both peak periods. Similarly, left-turning vehicles were operating at LOS 'F' in Scenario 3.

Since this intersection approaches the warrant threshold in future Scenario 2, the intersection was evaluated with traffic signals and as a roundabout for comparison. It should be noted that the signalized alternatives also include a southbound right-turn channel in order to reduce delays introduced to through traffic on King Street. With traffic signals in Scenario 2, all movements are expected to operate at LOS 'C' or better with a v/c ratio of 0.70 or better. Similarly, in Scenario 3, all movements are expected to operate at LOS 'C' or better with a v/c ratio of 0.69 or better. For comparative purposes, no changes were made to the lane configurations or the traffic signal timing plans between Scenarios 2 and 3.

Key Takeaways:

- The existing Chester Road approach is operating at a poor LOS.
- This intersection **approaches the traffic signal warrant threshold** in Scenario 2.
- In 2030, to achieve an acceptable LOS for left-turning vehicles from Chester Road, traffic signals are recommended.
- Traffic signals are expected to provide an acceptable level of service at this intersection without and with the Payzant Drive connection.
- The 3-leg roundabout is expected to operate well with a LOS 'B' or better for both AM and PM peak hours.
- Some **traffic is diverted from the intersection with the Payzant Drive connection open**, which slightly improves the operational performance of the intersection.
- **Minimal changes in the operational performance of this intersection are expected with the Payzant Drive connection.**

The intersection was modelled as a 3-leg roundabout for Scenario 2 and all movements are expected to operate at LOS 'B' or better with a v/c ratio of 0.64 or better. Addition details regarding the roundabout configuration are provided on Page C-46, Appendix C.

Table 12 – Intersection Capacity Analysis: King Street at Chester Road (AM Peak)

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement						Overall Intersection	
	Chester Road		King Street					
	EB-L	EB-R	NB-L	NB-T	SB-T	SB-R	Delay	LOS
Scenario 1 - 2021 AM Peak Hour **with Existing** Conditions - ***Stop Control*** (Page C-21)								
Delay	27.6		2.2		C		8.9	A
LOS	D		A		A			
v/c	0.64		0.07		0.15			
Queue	34.5		1.7		0.0			
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Stop Control*** (Page C-23)								
Delay	67.0	10.7	8.4	0.0	0.0		14.8	B
LOS	F	B	A	A	A			
v/c	0.87	0.09	0.08	0.23	0.22			
Queue	59.6	2.5	2.2	0.0	0.0			
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Traffic Signals*** (Page C-25)								
Delay	22.7	6.3	6.6	9.7	19.4	6.8	14.1	B
LOS	C	A	A	A	B	A		
v/c	0.52	0.14	0.17	0.42	0.49	0.15		
Queue	43.8	7.8	11.2	45.2	51.7	9.8		
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-27)								
Delay	31.6	10.3	8.1	0.0	0.0		7.4	A
LOS	D	B	A	A	A			
v/c	0.57	0.16	0.09	0.22	0.15			
Queue	26.7	4.4	2.4	0.0	0.0			
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Traffic Signals*** (Page C-29)								
Delay	20	5.9	6.0	8.6	18.0	6.1	11.5	B
LOS	C	A	A	A	B	A		
v/c	0.44	0.28	0.18	0.39	0.38	0.13		
Queue	30.4	10.4	11.1	35.7	33.1	7.3		
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Roundabout*** (Page C-46)								
Delay	5.2		7.1		4.7		6.0	A
LOS	A		A		A			
v/c	0.31		0.49		0.25			
Queue	13.3		14.0		9.8			

Table 13 – Intersection Capacity Analysis: King Street at Chester Road (PM Peak)

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement						Overall Intersection	
	Chester Road		King Street					
	EB-L	EB-R	NB-L	NB-T	SB-T	SB-R	Delay	LOS
Scenario 1 - 2021 PM Peak Hour **with Existing** Condition - ***Stop Control*** (Page C-22)								
Delay	67.8		4.5		0.0		13.8	B
LOS	F		A		A			
v/c	0.87		0.16		0.35			
Queue	58.8		4.6		0.0			
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Stop Control*** (Page C-24)								
Delay	268.5	13.9	10.3	0.0	0.0		30.7	C
LOS	F	B	B	A	A			
v/c	1.36	0.19	0.21	0.24	0.44			
Queue	90.4	5.4	6.3	0.0	0.0			
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Traffic Signals*** (Page C-26)								
Delay	27.8	7.8	6.5	7.6	23.2	8.1	14.2	B
LOS	C	A	A	A	C	A		
v/c	0.47	0.23	0.33	0.38	0.70	0.44		
Queue	41.2	11.2	16.7	43.1	81.6	26.4		
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-28)								
Delay	193	13.4	10.1	0.0	0.0		18.8	C
LOS	F	B	B	A	A			
v/c	1.12	0.24	0.26	0.23	0.36			
Queue	61.7	7.6	8.5	0.0	0.0			
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Traffic Signals*** (Page C-30)								
Delay	28	8.4	6.1	6.4	25.0	8.1	13.4	B
LOS	C	A	A	A	C	A		
v/c	0.42	0.36	0.39	0.35	0.69	0.37		
Queue	31.4	13.8	20.2	35.5	72.7	20.6		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Roundabout*** (Page C-46)								
Delay	5.8		9.7		10.4		9.3	A
LOS	A		A		B			
v/c	0.30		0.64		0.64			
Queue	12.6		20.3		24.5			

It is recommended that the King Street / Chester Road intersection be upgraded to a signalized intersection or a single lane roundabout. For the signalized intersection option, the recommendations proposed are provided in Figure 8[5]. It is recommended that the intersection include the following:

- Upgrade traffic control device to traffic signals;
- Provide a southbound channelized right-turn lane;
- Provide a northbound left-turn lane;
- Provide an eastbound left-turn lane;
- Provide corner curb extensions to reduce crossing distance for pedestrians, lower vehicle turning speeds and improve sightlines;
- Provide pedestrian crossings on all approaches consisting of parallel bars;
- Updated pavement markings; and
- Remove existing yellow dashed line.

A planning cost estimate for these items is provided in Table 14. It is estimated that these intersection modifications would be in the range of approximately $450,000 plus HST.

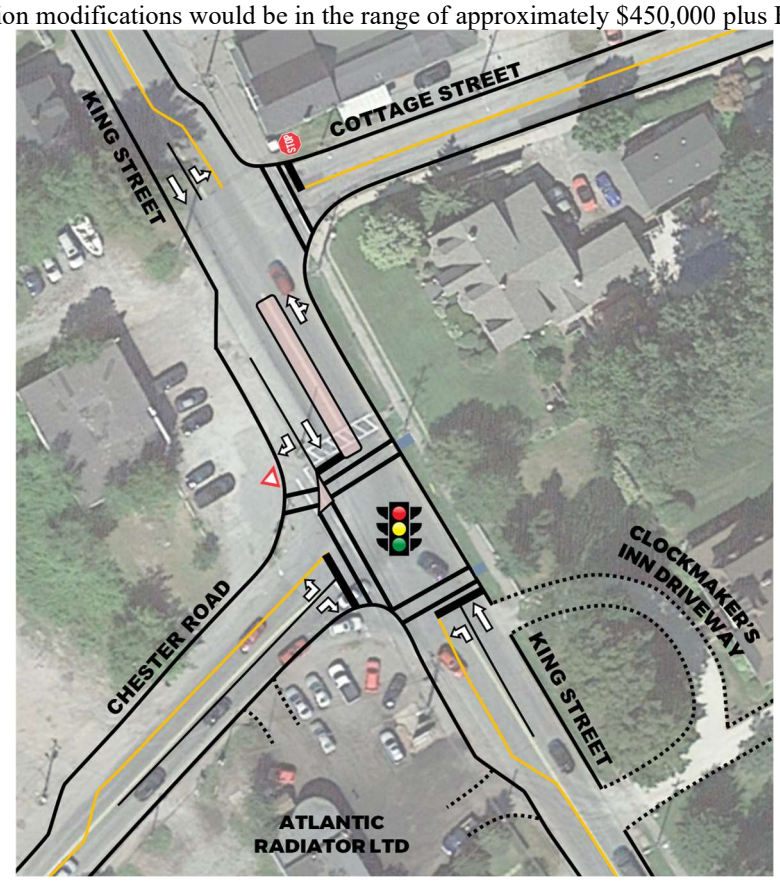


Figure 8 – Recommended Intersection Configuration: King Street at Chester Road[5]

Table 14 – Planning Cost Estimate: King Street at Chester Road

Item	Cost (HST Excluded)
Intersection Modifications with Traffic Signals	$300,000
50% Contingency	$150,000
Total	**$450,000**

[5] The rendering is not to sale and is intended for conceptual purposes only.

For the roundabout option, the recommended layout is shown in Figure 9, which illustrates a single lane roundabout.

A planning cost estimate for these items is provided in Table 15. It is estimated that these intersection modifications would be in the range of approximately $1,875,000 plus HST.

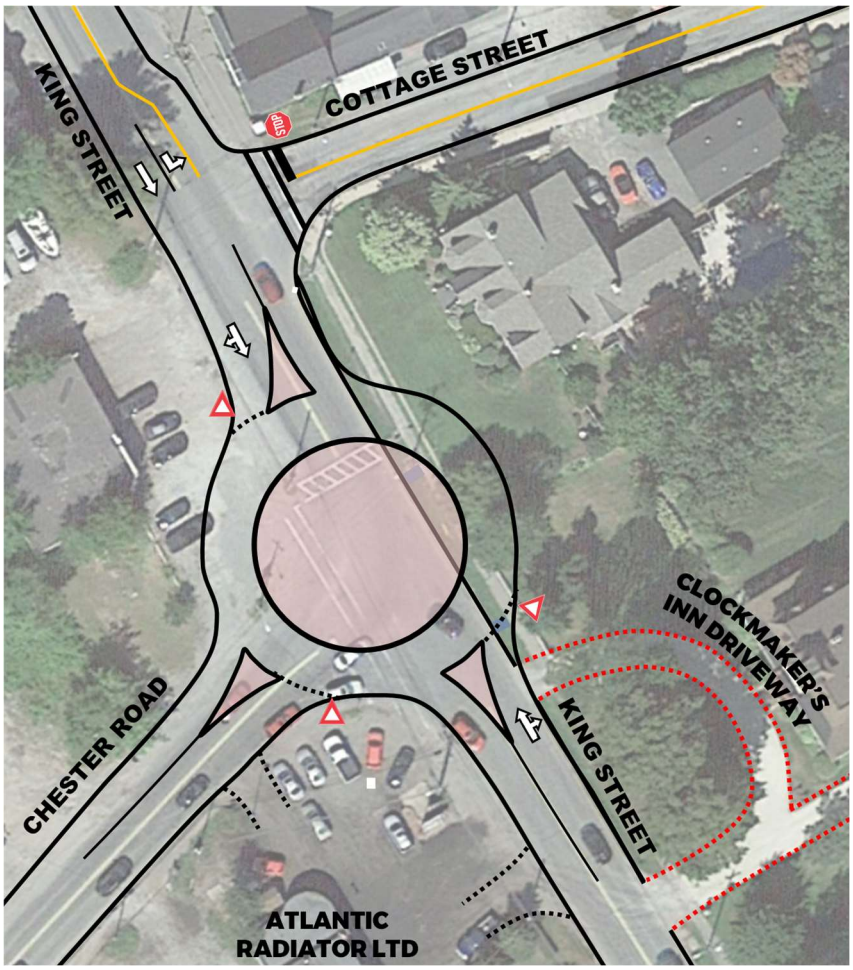


Figure 9 – Recommended Intersection Configuration: King Street at Chester Road[5]

Table 15 – Planning Cost Estimate: King Street at Chester Road

Item	Cost (HST Excluded)
Intersection Modifications with Roundabout	$1,250,000
50% Contingency	$625,000
Total	**$1,875,000**

4.4.1 KING STREET AT COTTAGE STREET

Existing / Future Intersection Description

As previously mentioned, consideration is being given to assessing the implications of realigning Cottage Street with the King Street / Chester Road intersection. The existing intersection of ***King Street at Cottage Street*** is a 3-leg intersection with stop-control on the Cottage Street approach, as shown in Photo 8. All approaches consist of one lane and there is a painted crosswalk on the east leg. This intersection is located approximately 25 m north of the King Street / Chester Road intersection.



Photo 8 – Existing King Street at Cottage Street Intersection

Intersection Operational Analysis Results:
3 Leg Intersection

In order to compare the impacts of realigning Cottage Street with the King Street / Chester Road intersection, analyses were completed to determine the operational performance of King Street / Cottage Street with respect to Scenario 2 volumes (the largest traffic volumes expected at this intersection).

To better understand the implications of introducing traffic signals downstream, this analysis was completed once with stop-control at the King Street / Chester Road intersection and once with traffic signals. In general, slight improvements to the operational performance of this intersection were observed with traffic signals at the King Street / Chester Road intersection. Operational performance results for the 3-leg intersection are provided in Table 16.

In general, the King Street / Cottage Street intersection is expected to perform well in 2030 without the Payzant Drive connection. The King Street approaches are expected to operate at LOS 'A' and the Cottage Street approach is expected to operate at LOS 'C' or better during the morning and afternoon peak hours.

Table 16 – Intersection Capacity Analysis: King Street at Cottage Street (3-Leg Intersection)

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement			Overall Intersection	
	Cottage Street	King Street			
	WB-LR	NB-TR	SB-LT	Delay	LOS
Modelled with Stop Control at King Street / Chester Road					
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - **Stop Control** (Page C-31)					
Delay	14.6	0.0	0.9	0.6	A
LOS	B	A	A		
v/c	0.05	0.37	0.03		
Queue	1.3	0.0	0.7		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection **- Stop Control** (Page C-32)					
Delay	23.4	0.0	0.3	1.3	A
LOS	C	A	A		
v/c	0.25	0.34	0.01		
Queue	7.8	0.0	0.3		
Modelled with Traffic Signals at King Street / Chester Road					
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***SIGNALS at King/Chester*** (Page C-33)					
Delay	14.6	0.0	0.9	0.6	A
LOS	B	A	A		
v/c	0.05	0.37	0.03		
Queue	1.3	0.0	0.7		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***SIGNALS at King/Chester*** (Page C-34)					
Delay	21.8	0.0	0.3	1.0	A
LOS	C	A	A		
v/c	0.20	0.34	0.01		
Queue	6.0	0.0	0.3		

4.4.2 KING STREET AT CHESTER ROAD / COTTAGE STREET

Projected Traffic Volumes:
4-Leg Intersection

Traffic volume projections were prepared to estimate turning movement counts at the potential 4-leg intersection without and with Payzant Drive connection. Table 17 provides a summary of the volume figures prepared and the location of the figure in Appendix A.

Table 17 – Summary of Traffic Volume Figures: King Street at Chester Road / Cottage Street

	Volume Figure
Scenario 2	Figure A-6 (Boxes A & B)
Scenario 3	Figure A-6 (Boxes C & D)

Warrant Summary:
4-Leg Intersection

Based on the existing traffic control and lane configurations, traffic signal and left-turn lane warrants were completed. It was determined that:

- A southbound left-turn lane is **warranted** and in Scenarios 2 and 3 (Figure B-2, Appendix B).
- Volumes are approaching the warrant threshold for traffic signals with respect to Scenario 2 (**91 Warrant Points**, Table B-12, Appendix B).
- Traffic signals are not warranted with respect to Scenario 3 (**75 Warrant Points**, Table B-13, Appendix B).

Intersection Operational Analysis Results:
4-Leg Intersection

Operational performance results for the 4-leg intersection are provided in Table 18.

In addition to the lane configuration recommendations for the future King Street / Chester Road intersection (northbound and eastbound left-turn lanes and a channelized southbound right-turn lane), the intersection was evaluated with the realignment of Chester Street approach to Cottage Street.

In Scenario 2, traffic signals are nearing the warrant threshold (91 warrant points). It should be noted that no changes were made to the lane configurations or the traffic signal timing plans between Scenarios 2 and 3 for comparative purposes.

With traffic signals in Scenario 2, all movements are expected to operate at LOS 'D' or better with a v/c ratio of 0.87 or better. Similarly, in Scenario 3, all movements are expected to operate at LOS 'D' or better with a v/c ratio of 0.84 or better.

A roundabout analysis was completed at the 4-leg intersection with the realigned approach of Chester Street. The roundabout is expected to operate with a LOS 'B' or better with a v/c ratio of 0.64 or better. Addition details regarding the roundabout configuration are provided on Page C-47, Appendix C.

Key Takeaways:

- This intersection approaches the traffic signal warrant threshold in Scenario 2.
- Traffic signals are expected to provide an acceptable level of service at this intersection without and with the Payzant Drive connection.
- The 4-leg roundabout is expected to operate at an acceptable level of service.
- Some **traffic is diverted from the intersection with the Payzant Drive connection open**, which slightly improves the operational performance of the intersection.
- **Minimal changes in the operational performance of this intersection are expected with the Payzant Drive connection.**

Table 18 – Intersection Capacity Analysis: King Street at Chester Road / Cottage Street (4-Leg Alternative)

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement							Overall Intersection	
	Chester Road		Cottage Street	King Street					
	EB-L	EB-TR	WB-LTR	NB-L	NB-TR	SB-L	SB-TR	Delay	LOS
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Traffic Signals*** (Page C-35)									
Delay	26.5	6.6	10.6	8.2	11.1	15.9	21.6	16.9	B
LOS	C	A	B	A	B	B	C		
v/c	0.60	0.14	0.05	0.20	0.42	0.05	0.61		
Queue	50.2	8.9	5.4	13.6	53.5	5.6	69.8		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Traffic Signals*** (Page C-36)									
Delay	43.1	9.2	20.4	10.6	7.5	11.1	29.2	21.6	C
LOS	D	A	C	B	A	B	C		
v/c	0.64	0.24	0.19	0.50	0.35	0.02	0.87		
Queue	54.9	13.1	16.5	19.8	47.3	3.7	149.6		
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Traffic Signals*** (Page C-37)									
Delay	23.6	6.0	10.3	6.6	9.1	15.6	17.6	12.9	B
LOS	C	A	B	A	A	B	B		
v/c	0.50	0.27	0.06	0.19	0.38	0.05	0.44		
Queue	33.2	11.1	5.0	12.9	39.8	5.3	41.9		
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection **-** ***Traffic Signals*** (Page C-38)									
Delay	36.9	8.8	20.0	9.3	6.6	13.5	29.5	18.7	B
LOS	D	A	B	A	A	B	C		
v/c	0.51	0.34	0.21	0.51	0.33	0.03	0.84		
Queue	39.1	15.5	15.8	27.1	40.1	4.1	117.0		
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection - ***Roundabout*** (Page C-47)									
Delay	5.4		4.9	7.1		4.8		6.0	A
LOS	A		A	A		A			
v/c	0.32		0.03	0.49		0.26			
Queue	14.0		3.5	14.7		7.7			
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection - ***Roundabout*** (Page C-47)									
Delay	5.9		5.7	9.8		10.5		9.2	A
LOS	A		A	A		B			
v/c	0.30		0.09	0.64		0.64			
Queue	12.6		3.5	21.7		23.1			

Table 19 – Intersection Capacity Analysis: King Street at Cottage Street with Southbound Left-Turn Lane

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement				Overall Intersection	
	Cottage Street	King Street				
	WB-LR	NB-TR	SB-L	SB-T	Delay	LOS
Traffic Signals at King Street / Chester Road & Southbound Left-Turn Lane on King Street at Cottage Street						
Scenario 2 - 2030 AM Peak Hour **without** Payzant Drive Connection (Page C-39)						
Delay	14.6	0.0	9.0	0.0	0.5	A
LOS	B	A	A	A		
v/c	0.05	0.37	0.03	0.22		
Queue	1.3	0.0	0.7	0.0		
Scenario 2 - 2030 PM Peak Hour **without** Payzant Drive Connection (Page C-40)						
Delay	21.8	0.0	8.8	0.0	0.9	A
LOS	C	A	A	A		
v/c	0.20	0.34	0.01	0.43		
Queue	6.0	0.0	0.3	0.0		

Conclusions & Recommendations for Realigning Cottage Street with King Street / Chester Road Intersection

A review was completed to position a roundabout at Cottage Street with a realigned Chester Road at King Street. This roundabout option would have significant land impacts north and east of the intersection, along with significant construction costs. Due to these challenges the realigned option focused on a signalized intersection and is shown in Figure 10.

A planning cost estimate for re-alignment of Cottage Street and the addition of traffic signals is provided in Table 20. It is estimated that these intersection modifications would be in the range of approximately $900,000 plus HST.

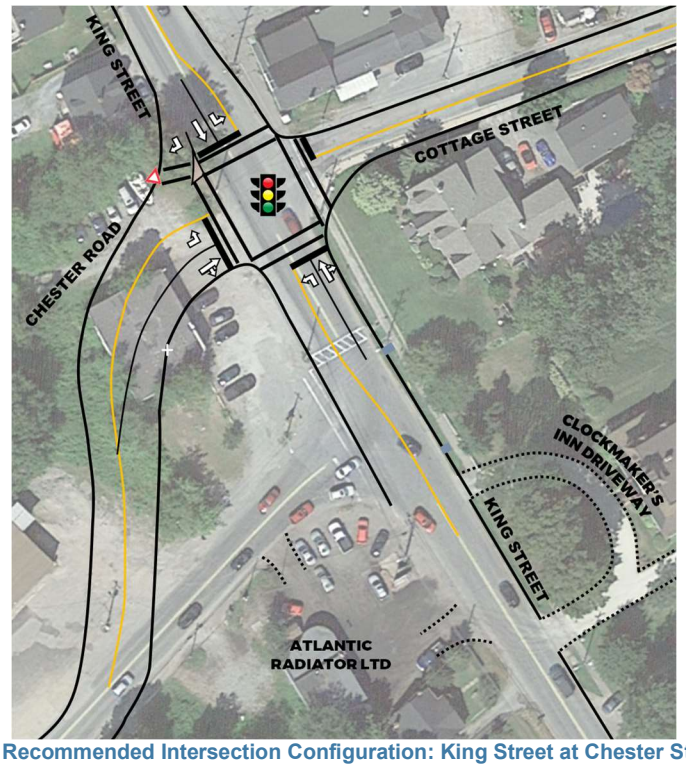


Figure 10 – Recommended Intersection Configuration: King Street at Chester St/Cottage St

Table 20 – Planning Cost Estimate: King Street at Chester St/Cottage St

Item	Cost (HST Excluded)
Traffic Signals and Re-alignment of Chester Street	$600,000
50% Contingency	$300,000
Total	**$900,000**

4.5 INTERSECTION #5: KING STREET AT PAYZANT DRIVE

Existing / Future Intersection Description

Unlike Study Intersections #1-4, this intersection only exists in Scenario 3 when Payzant Drive connections with King Street. King Street, in the approximate area that Payzant Drive is expected to connect to, consists of one lane in each direction with a posted speed limit of 50 km/h.

Projected Traffic Volumes

Traffic volume projections were prepared for Scenario 3 based on an estimated redistribution of future traffic volumes expected. Traffic volume figures for Scenario 3 are provided in Figure A-7, Appendix A.

Warrant Summary

A traffic signal warrant and a left turning lane warrant were completed. It was determined that:

- A southbound left-turn lane is warranted (Figure B-3, Appendix B).
- Traffic signals are not warranted (**60 Warrant Points**, Table B-15, Appendix B).

It was determined that the future intersection of King Street / Payzant Drive would not warrant traffic signals in 2030. Similarly, the resulting 2030 traffic volumes do not necessarily warrant a higher level of traffic beyond stop-control. Despite the warranted traffic control, this intersection was evaluated with stop-control, traffic signals and as a roundabout in order to better understand the potential for a future major intersection.

Intersection Operational Analysis Results

Operational performance results for this intersection are provided in Table 23.

The stop-control alternative was examined with southbound and westbound left-turn lanes. With stop-control on Payzant Drive and free flow on King Street, the intersection is expected to operate at an acceptable level of service. King Street movements are expected to operate at LOS 'A' with a v/c ratio of 0.40 or better. Left-turning traffic from Payzant Drive is expected to operate over capacity at LOS 'E' and 'F' during the morning and afternoon peak periods, respectively.

The signalized intersection alternative was examined with the same lane configuration as the stop-control option. With traffic signals, the performance of the Payzant Drive approach is expected to improve, however, additional delays are introduced to the King Street approaches. With traffic signals, the intersection is expected to operate at LOS 'B' or better during morning and afternoon peak periods.

Key Takeaways:

- Traffic signals are not expected to be warranted in 2030 with the Payzant Drive connection open. **However, with the delay expected for left-turn traffic, a higher level of traffic control is recommended.**

The roundabout alternative was evaluated with single lane approaches. Addition details regarding the roundabout configuration are provided on Page C-45, Appendix C. With the roundabout, all approaches are expected to operate at LOS 'A' with a v/c ratio of 0.67 or better.

With the left-turn from Payzant Drive operating at a LOS 'E' and 'F' during the AM and PM peak hours, respectively, a higher level of traffic control is recommended for this intersection. Since acceptable performance results are achievable with a signalized intersection or a roundabout, it is recommended that the King Street / Payzant Drive intersection be designed with either traffic control.

If WHRM would like to proceed with the installation of traffic signals, it is recommended that intersection include the following (shown in Figure 11[6]):

- Provide stop-control on Payzant Drive approach;
- Provide a westbound left-turn lane on Payzant Drive;
- Provide a southbound left-turn lane on King Street;
- Install underground conduit during construction of this intersection to prepare for future signalization; and,
- Monitor intersection for future signalization.

A planning cost estimate for these items is provided in Table 21. It is estimated that these intersection modifications would be in the range of approximately $90,000 plus HST. It should be noted that the planning cost estimate assumes that the Payzant Drive connection has been constructed and conduit has been run for future signalization. The planning cost estimate reflects the costs associated with providing an eastbound left-turn lane on Payzant Drive and a southbound left-turn lane on King Street. These budgets may vary based on the requirements for the railway crossing.



Figure 11 – Recommended Intersection Configuration: King Street at Payzant Drive[6]

Table 21 – Planning Cost Estimate: King Street at Payzant Drive - Signalization

Item	Cost (HST Excluded)
STOP Controlled Intersection with Left-Turn Lane & underground conduit for future signalization	$60,000
50% Contingency	$30,000
Total	**$90,000**

[6] The rendering is not to scale and is intended for conceptual purposes only.

If WHRM would like to proceed with the installation of a roundabout, it is recommended that the intersection be a single lane roundabout.

A planning cost estimate for these items is provided in Table 22. It is estimated that these intersection modifications would be in the range of approximately $1,875,000 plus HST. It should be noted that the planning cost estimate assumes that the Payzant Drive connection has been constructed. These budgets may vary based on the requirements for the railway crossing.

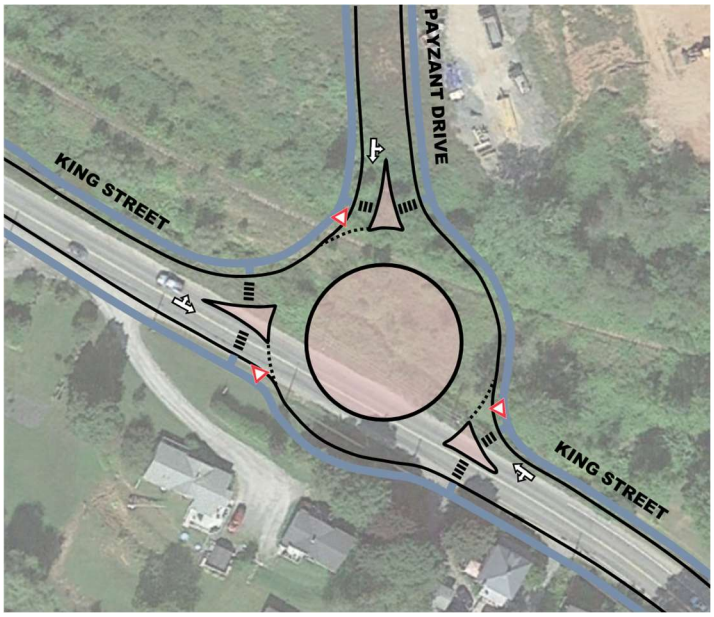


Figure 12 – Recommended Roundabout Configuration: King Street at Payzant Dr[6]

Table 22 – Planning Cost Estimate: King Street at Payzant Drive - Roundabout

Item	Cost (HST Excluded)
Single lane Roundabout	$1,250,000
50% Contingency	$625,000
Total	**$1,875,000**

Table 23 – Intersection Capacity Analysis: King Street at Payzant Drive

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement					Overall Intersection	
	Payzant Drive Connector		King Street				
	WB-L	WB-R	NB-TR	SB-L	SB-T	Delay	LOS
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-41)							
Delay	37.1	12.8	0.0	9.1	0.0	5.2	A
LOS	E	B	A	A	A		
v/c	0.50	0.16	0.34	0.12	0.17		
Queue	20.0	4.4	0.0	3.4	0.0		
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Stop Control*** (Page C-42)							
Delay	62.8	15.4	0.0	9.5	0.0	5.8	A
LOS	F	C	A	A	A		
v/c	0.61	0.28	0.40	0.12	0.29		
Queue	26.0	9.0	0.0	3.4	0.0		
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Traffic Signals*** (Page C-43							
Delay	15.1	5.9	10.2	9.7	7.4	9.5	A
LOS	B	A	B	A	A		
v/c	0.21	0.18	0.56	0.31	0.27		
Queue	16.8	8.5	53.9	14.3	23.2		
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Traffic Signals*** (Page C-44							
Delay	18.1	6.4	13.0	12.4	9.5	11.6	B
LOS	B	A	B	B	A		
v/c	0.25	0.29	0.71	0.42	0.51		
Queue	19.9	11.4	70.4	15.6	44.7		
Scenario 3 - 2030 AM Peak Hour **with** Payzant Drive Connection - ***Roundabout*** (Page C-45)							
Delay	5.4		5.7	8.2		6.9	A
LOS	A		A	A			
v/c	0.21		0.40	0.57			
Queue	8.4		18.9	10.5			
Scenario 3 - 2030 PM Peak Hour **with** Payzant Drive Connection - ***Roundabout*** (Page C-45)							
Delay	6.5		8.5	10.5		9.1	A
LOS	A		A	B			
v/c	0.29		0.59	0.67			
Queue	11.2		11.9	0.0			

5 SUMMARY, RECOMMENDATIONS & CONCLUSIONS

5.1 SUMMARY

Background	1.	WHRM is preparing for potential changes to the road network that will have an impact on traffic volumes on Wentworth Road and King Street. Consideration is being given to re-aligning the Highway 101 Eastbound Exit 5A Ramp at Industrial Drive by NSTAT. With this realignment, the existing entrance to the Hants County Exhibition will be required to be relocated along Wentworth Road. In addition, the WHRM is considering extending Payzant Drive to the east to connect with King Street.
Study Objective	2.	WSP Canada Inc. has been retained to determine the impact of these changes at a series of key intersections and provide recommendations to mitigate the impacts of the changes to the regional transportation system.
Study Intersections	3.	This study focused on four (4) existing intersections and one (1) future intersection: #1 – Wentworth Road at Payzant Drive #2 – Wentworth Road at Empire Lane #3 – King Street at College Road #4 – King Street at Chester Road #5 – King Street at Payzant Drive *(future intersection)*
Turning Movement Counts	4.	Turning movement volumes were collected by WSP between Tuesday, January 19th and Thursday, January 21st, 2021 at the existing Study Intersections.
Analysis Scenarios Considered	5.	WSP considered the following analysis scenarios ***Scenario 1*** – 2021 Existing Conditions ***Scenario 2*** – 2030 ***without*** Payzant Drive connection ***Scenario 3*** – 2030 ***with*** Payzant Drive connection ***Scenario 1:*** Projected 2021 AM and PM peak hour volumes consider: • 1.17 Seasonal Adjustment Factor • 1.05 Covid-19 Adjustment Factor • Trips generated by the West Hants Sports Complex on a typical weekday • Trips generated by the existing Hants County Exhibition on a typical weekday ***Scenario 2:*** Projected 2030 AM and PM peak hour background volumes ***without*** the Payzant Drive connection consider: • Projected 2021 Volumes • 1.5% Annual Growth between 2021-2030 • Trips generated by the Hants County Exhibition Expansion on a typical weekday ***Scenario 3:*** Projected 2030 AM and PM peak hour background volumes ***with*** the Payzant Drive connection consider: • Projected 2021 Volumes • 1.5% Annual Growth between 2021-2030 • Trips generated by the Hants County Exhibition Expansion on a typical weekday Estimation of Redistributed Trips with the Payzant Drive connection open

Upgrade Warrant Analysis	6.	Warrant analyses were completed for left-turn lanes and traffic signals for different scenarios at the different Study Intersections, as required. Warranted intersection upgrades are included in the intersection analysis, as appropriate.
Summary – Intersection Capacity Analysis	7.	Intersection performance analysis was completed using *Synchro 11.0* and/or *Arcady 9* at the Study Intersections.

5.2 RECOMMENDATIONS

Intersection #1	8.	***Wentworth Road at Payzant Drive*** – Based on findings from this study, in conjunction with the *Hants County Exhibition Expansion Traffic Impact Study (WSP, May 2021)*, it is recommended that plans be prepared to enhance this intersection to a roundabout. The planning cost estimate indicates that these modifications will be in the range of approximately $2,400,000 plus HST.
Intersection #2	9.	***Wentworth Road at Empire Lane*** – It is recommended that this intersection be monitored for future signalization.
Intersection #3	10.	***King Street at College Road*** – Minor recommendations for this intersection include curb extensions, relocating/upgrading the pedestrian crosswalk on King Street, relocating the stop bar on College Road, providing a crosswalk on College Road consisting of parallel bars, updating pavement markings, removing the existing yellow dashed line and cutting back vegetation. The planning cost estimate indicates that these modifications will be in the range of approximately $15,000 plus HST.
Intersection #4	11.	***King Street at Chester Road*** – It is recommended that this intersection be signalized with a southbound right-turn channel, a northbound left-turn lane and an eastbound left-turn lane. Pedestrian crosswalks consisting of parallel bars are recommended on all approaches. In addition, a southbound left-turn lane is recommended on King Street at Cottage Street. The planning cost estimate indicates that the modifications to King Street / Chester Road will be in the range of approximately $450,000 plus HST. If WHRM completes the realignment of Chester Road with Cottage Street at King Street, it is recommended that the 4-leg intersection be signalized with a southbound right-turn channel, northbound left-turn lane and eastbound left-turn lane. The planning cost estimate indicates that the modifications to King Street / Chester Road & Cottage Road intersection will be in the range of approximately $900,000 plus HST.
Intersection #5	12.	***King Street at Payzant Drive*** – It is recommended that this future intersection consist of stop-control on the Payzant Drive approach with a southbound left-turn lane and an eastbound left-turn lane and plan for future signalization with underground conduit. The planning cost estimate indicates that this new intersection will be in the range of approximately $90,000 plus HST.

5.3 CONCLUSIONS

Conclusion

13. With the recommended upgrades, the Study Intersections are expected to operate within the outlined performance guidelines.

14. Some traffic is expected to divert from King Street and Wentworth Road when the Payzant Drive connection is open. The operational performance of all Study Intersections is projected to improve slightly with diverted through traffic on King Street and Wentworth Road.

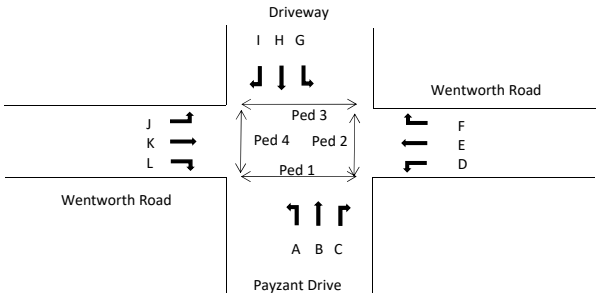
APPENDIX

A TRAFFIC VOLUME DATA

Table A-1

Wentworth Road
@
Payzant Drive / Commercial Driveway

Windsor, Nova Scotia
Tuesday, January 19, 2021



AM Peak Period Volume Data

Time		Payzant Drive Westbound Approach			Wentworth Road Southbound Approach			Commercial Driveway Eastbound Approach			Wentworth Road Northbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
07:00	07:15	4	0	16	13	28	0	0	0	0	0	35	9	105
07:15	07:30	6	0	12	13	38	0	0	0	0	3	49	8	129
07:30	07:45	6	0	9	21	37	1	0	0	0	3	60	10	147
07:45	08:00	4	0	8	36	68	0	0	0	2	2	73	17	210
08:00	08:15	12	0	13	34	84	1	0	0	0	0	87	23	254
08:15	08:30	14	0	24	48	77	0	0	0	0	1	71	36	271
08:30	08:45	15	0	43	68	82	0	0	0	0	0	68	63	339
08:45	09:00	14	0	59	91	94	2	2	0	0	1	87	65	415
AM Peak Hour		**55**	**0**	**139**	**241**	**337**	**3**	**2**	**0**	**0**	**2**	**313**	**187**	**1279**
07:00	**08:00**	**20**	**0**	**45**	**83**	**171**	**1**	**0**	**0**	**2**	**8**	**217**	**44**	**591**
08:00	**09:00**	**55**	**0**	**139**	**241**	**337**	**3**	**2**	**0**	**0**	**2**	**313**	**187**	**1279**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
07:00	**08:00**	**4**			**0**			**1**			**0**			**5**
08:00	**09:00**	**5**			**3**			**5**			**0**			**13**

Midday Peak Period Volume Data

Time		Payzant Drive Westbound Approach			Wentworth Road Southbound Approach			Commercial Driveway Eastbound Approach			Wentworth Road Northbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
11:30	11:45	20	0	38	18	103	0	1	0	1	0	89	26	296
11:45	12:00	21	0	24	29	105	0	1	0	0	0	93	22	295
12:00	12:15	12	0	22	22	109	0	1	0	1	2	114	16	299
12:15	12:30	19	0	20	20	91	0	2	2	1	0	109	14	278
12:30	12:45	17	0	15	13	110	0	0	0	1	1	104	18	279
12:45	13:00	20	0	12	18	85	0	0	0	1	1	101	14	252
13:00	13:15	17	0	16	22	87	0	0	0	1	1	92	21	257
13:15	13:30	35	0	67	23	102	0	0	0	0	1	117	15	360
Midday Peak Hour		**72**	**0**	**104**	**89**	**408**	**0**	**5**	**2**	**3**	**2**	**405**	**78**	**1168**
11:30	**12:30**	**72**	**0**	**104**	**89**	**408**	**0**	**5**	**2**	**3**	**2**	**405**	**78**	**1168**
12:30	**13:30**	**89**	**0**	**110**	**76**	**384**	**0**	**0**	**0**	**3**	**4**	**414**	**68**	**1148**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
11:30	**12:30**	**4**			**1**			**6**			**0**			**11**
12:30	**13:30**	**3**			**1**			**3**			**0**			**7**

PM Peak Period Volume Data

Time		Payzant Drive Westbound Approach			Wentworth Road Southbound Approach			Commercial Driveway Eastbound Approach			Wentworth Road Northbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
15:30	15:45	34	0	51	22	90	1	0	0	1	0	95	9	303
15:45	16:00	21	0	32	16	85	0	0	0	1	0	99	12	266
16:00	16:15	14	0	31	14	123	0	0	0	0	0	107	14	303
16:15	16:30	20	1	22	13	91	0	1	0	2	1	94	10	255
16:30	16:45	6	0	14	15	113	0	1	0	2	0	95	18	264
16:45	17:00	22	0	15	12	105	0	0	0	4	0	94	11	263
17:00	17:15	17	0	19	14	107	0	0	0	0	0	95	6	258
17:15	17:30	9	0	13	12	81	0	0	0	0	0	72	11	198
PM Peak Hour		**89**	**1**	**136**	**65**	**389**	**1**	**1**	**0**	**4**	**1**	**395**	**45**	**1127**
15:30	**16:30**	**89**	**1**	**136**	**65**	**389**	**1**	**1**	**0**	**4**	**1**	**395**	**45**	**1127**
16:30	**17:30**	**54**	**0**	**61**	**53**	**406**	**0**	**1**	**0**	**6**	**0**	**356**	**46**	**983**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
15:30	**16:30**	**2**			**5**			**5**			**0**			**12**
16:30	**17:30**	**1**			**0**			**2**			**0**			**3**

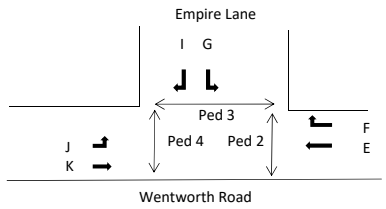
* Count completed by WSP

Table A-2

Wentworth Road @ Empire Lane

Windsor, Nova Scotia

Tuesday, January 19, 2021



AM Peak Period Volume Data

Time		Wentworth Road Southbound Approach		Empire Lane Eastbound Approach		Wentworth Road Northbound Approach		Total Vehicles
		E	F	G	I	J	K	
07:00	07:15	26	4	2	1	1	43	77
07:15	07:30	35	4	0	0	2	60	101
07:30	07:45	31	6	2	1	3	73	116
07:45	08:00	57	21	3	2	5	89	177
08:00	08:15	74	16	5	7	8	104	214
08:15	08:30	78	15	8	5	9	108	223
08:30	08:45	81	10	5	6	6	133	241
08:45	09:00	79	23	7	3	13	154	279
AM Peak Hour		**312**	**64**	**25**	**21**	**36**	**499**	**957**
07:00	**08:00**	**149**	**35**	**7**	**4**	**11**	**265**	**471**
08:00	**09:00**	**312**	**64**	**25**	**21**	**36**	**499**	**957**
		Ped 2		**Ped 3**		**Ped 4**		**Total Peds**
07:00	**08:00**	**0**		**1**		**0**		**1**
08:00	**09:00**	**0**		**4**		**0**		**4**

Midday Peak Period Volume Data

Time		Wentworth Road Southbound Approach		Empire Lane Eastbound Approach		Wentworth Road Northbound Approach		Total Vehicles
		E	F	G	I	J	K	
11:30	11:45	90	39	19	18	8	96	270
11:45	12:00	94	25	26	13	9	95	262
12:00	12:15	97	33	29	11	14	102	286
12:15	12:30	83	33	28	16	10	95	265
12:30	12:45	101	27	28	17	15	90	278
12:45	13:00	85	21	26	11	14	97	254
13:00	13:15	78	25	25	12	16	94	250
13:15	13:30	109	28	31	16	15	103	302
Midday Peak Hour		**375**	**118**	**111**	**57**	**48**	**382**	**1091**
11:30	**12:30**	**364**	**130**	**102**	**58**	**41**	**388**	**1083**
12:30	**13:30**	**373**	**101**	**110**	**56**	**60**	**384**	**1084**
		Ped 2		**Ped 3**		**Ped 4**		**Total Peds**
11:30	**12:30**	**0**		**5**		**0**		**5**
12:30	**13:30**	**0**		**4**		**0**		**4**

PM Peak Period Volume Data

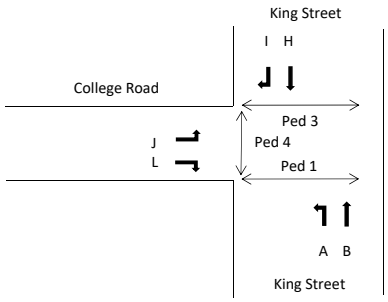
Time		Wentworth Road Southbound Approach		Empire Lane Eastbound Approach		Wentworth Road Northbound Approach		Total Vehicles
		E	F	G	I	J	K	
15:30	15:45	107	31	28	12	12	72	262
15:45	16:00	87	19	17	21	9	97	250
16:00	16:15	115	28	23	16	9	103	294
16:15	16:30	98	21	23	19	15	81	257
16:30	16:45	96	26	31	15	16	78	262
16:45	17:00	115	21	23	13	10	83	265
17:00	17:15	111	15	19	8	6	78	237
17:15	17:30	84	14	16	16	10	62	202
PM Peak Hour		**424**	**96**	**100**	**63**	**50**	**345**	**1078**
15:30	**16:30**	**407**	**99**	**91**	**68**	**45**	**353**	**1063**
16:30	**17:30**	**406**	**76**	**89**	**52**	**42**	**301**	**966**
		Ped 2		**Ped 3**		**Ped 4**		**Total Peds**
15:30	**16:30**	**0**		**6**		**0**		**6**
16:30	**17:30**	**1**		**1**		**0**		**2**

* Count completed by WSP

Table A-3

King Street (Trunk 1)
@
College Road

Windsor, Nova Scotia
Thursday, January 21, 2021



AM Peak Period Volume Data

Time		King Street Northbound Approach		King Street Southbound Approach		College Road Eastbound Approach		Total Vehicles
		A	B	H	I	J	L	
07:00	07:15	1	48	22	2	1	2	76
07:15	07:30	4	46	23	1	5	3	82
07:30	07:45	4	47	45	1	3	0	100
07:45	08:00	15	74	64	5	4	7	169
08:00	08:15	9	80	51	6	6	8	160
08:15	08:30	13	102	43	4	3	9	174
08:30	08:45	4	78	38	3	9	2	134
08:45	09:00	3	96	51	3	5	1	159
AM Peak Hour		**41**	**334**	**196**	**18**	**22**	**26**	**637**
07:00	**08:00**	**24**	**215**	**154**	**9**	**13**	**12**	**427**
08:00	**09:00**	**29**	**356**	**183**	**16**	**23**	**20**	**627**
		Ped 1		**Ped 3**		**Ped 4**		**Total Peds**
07:00	**08:00**	**0**		**0**		**0**		**0**
08:00	**09:00**	**1**		**0**		**0**		**1**

Midday Peak Period Volume Data

Time		King Street Northbound Approach		King Street Southbound Approach		College Road Eastbound Approach		Total Vehicles
		A	B	H	I	J	L	
11:30	11:45	2	65	80	4	4	2	157
11:45	12:00	5	93	76	5	8	3	190
12:00	12:15	1	87	85	9	4	4	190
12:15	12:30	5	57	80	2	6	1	151
12:30	12:45	3	72	64	5	8	4	156
12:45	13:00	2	95	72	4	7	4	184
13:00	13:15	4	74	64	3	8	5	158
13:15	13:30	3	64	74	4	4	4	153
Midday Peak Hour		**13**	**302**	**321**	**20**	**22**	**10**	**688**
11:30	**12:30**	**13**	**302**	**321**	**20**	**22**	**10**	**688**
12:30	**13:30**	**12**	**305**	**274**	**16**	**27**	**17**	**651**
		Ped 1		**Ped 3**		**Ped 4**		**Total Peds**
11:30	**12:30**	**3**		**0**		**0**		**3**
12:30	**13:30**	**1**		**0**		**0**		**1**

PM Peak Period Volume Data

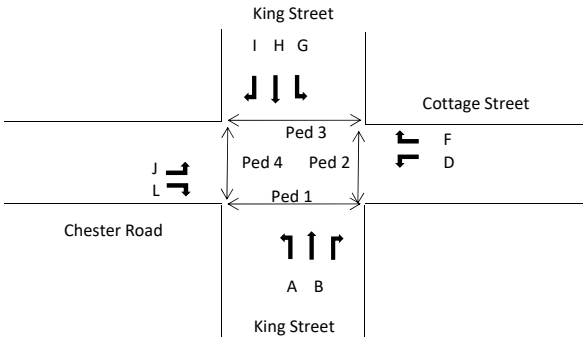
Time		King Street Northbound Approach		King Street Southbound Approach		College Road Eastbound Approach		Total Vehicles
		A	B	H	I	J	L	
15:30	15:45	8	88	104	7	5	6	218
15:45	16:00	5	80	97	12	4	5	203
16:00	16:15	3	100	105	3	4	6	221
16:15	16:30	12	66	98	7	7	3	193
16:30	16:45	3	76	104	4	6	11	204
16:45	17:00	2	71	108	4	2	3	190
17:00	17:15	7	79	98	5	4	5	198
17:15	17:30	4	54	78	9	3	8	156
PM Peak Hour		**28**	**334**	**404**	**29**	**20**	**20**	**835**
15:30	**16:30**	**28**	**334**	**404**	**29**	**20**	**20**	**835**
16:30	**17:30**	**16**	**280**	**388**	**22**	**15**	**27**	**748**
		Ped 1		**Ped 3**		**Ped 4**		**Total Peds**
15:30	**16:30**	**2**		**0**		**0**		**2**
16:30	**17:30**	**1**		**0**		**0**		**1**

* Count completed by WSP

Table A-4

King Street (Trunk 1)
@
Chester Road / Cottage Street

Windsor, Nova Scotia
Thursday, January 21, 2021



AM Peak Period Volume Data

Time		King Street Northbound Approach			Cottage Street Westbound Approach		King Street Southbound Approach			Chester Road Eastbound Approach		Total Vehicles
		A	B	C	D	F	G	H	I	J	L	
07:00	07:15	5	31	1	3	5	2	18	8	19	5	97
07:15	07:30	10	36	0	0	1	1	24	7	21	15	115
07:30	07:45	8	25	2	2	1	4	24	15	31	11	123
07:45	08:00	8	52	5	1	2	9	37	12	34	6	166
08:00	08:15	11	60	5	1	2	2	45	10	32	8	176
08:15	08:30	17	71	1	1	0	2	32	15	44	14	197
08:30	08:45	17	45	1	0	0	8	20	14	37	13	155
08:45	09:00	20	61	8	1	9	2	43	13	42	12	211
AM Peak Hour		**65**	**237**	**15**	**3**	**11**	**14**	**140**	**52**	**155**	**47**	**739**
07:00	**08:00**	**31**	**144**	**8**	**6**	**9**	**16**	**103**	**42**	**105**	**37**	**501**
08:00	**09:00**	**65**	**237**	**15**	**3**	**11**	**14**	**140**	**52**	**155**	**47**	**739**
		Ped 1			**Ped 2**		**Ped 3**			**Ped 4**		**Total Peds**
07:00	**08:00**	**0**			**1**		**0**			**0**		**1**
08:00	**09:00**	**0**			**3**		**0**			**0**		**3**

Midday Peak Period Volume Data

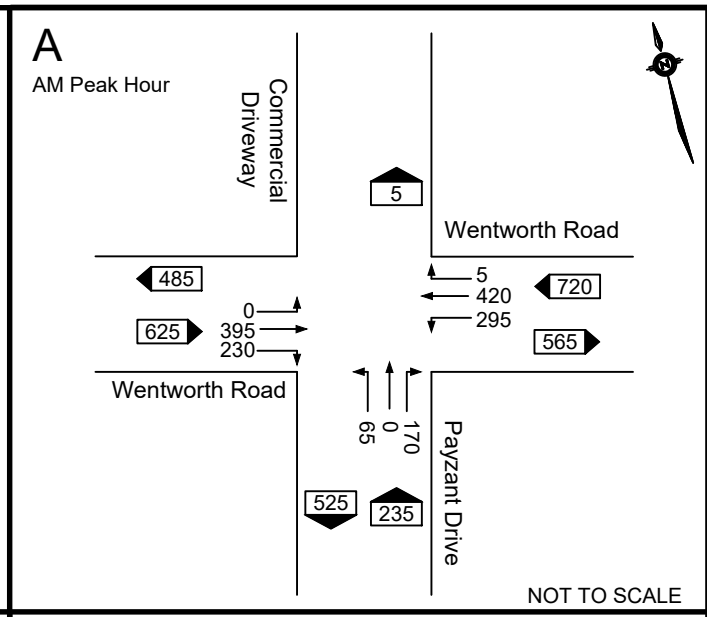
Time		King Street Northbound Approach			Cottage Street Westbound Approach		King Street Southbound Approach			Chester Road Eastbound Approach		Total Vehicles
		A	B	C	D	F	G	H	I	J	L	
11:30	11:45	14	46	0	1	1	5	48	28	22	12	177
11:45	12:00	11	49	5	6	5	1	48	33	37	14	209
12:00	12:15	16	64	1	3	4	1	44	41	25	10	209
12:15	12:30	10	39	0	4	2	1	56	25	20	17	174
12:30	12:45	10	51	0	0	1	5	49	20	26	17	179
12:45	13:00	11	59	1	1	2	1	47	24	34	16	196
13:00	13:15	8	48	2	1	2	0	44	27	26	21	179
13:15	13:30	11	44	1	0	0	1	49	30	28	15	179
Midday Peak Hour		**47**	**203**	**6**	**13**	**12**	**8**	**197**	**119**	**108**	**58**	**771**
11:30	**12:30**	**51**	**198**	**6**	**14**	**12**	**8**	**196**	**127**	**104**	**53**	**769**
12:30	**13:30**	**40**	**202**	**4**	**2**	**5**	**7**	**189**	**101**	**114**	**69**	**733**
		Ped 1			**Ped 2**		**Ped 3**			**Ped 4**		**Total Peds**
11:30	**12:30**	**0**			**4**		**1**			**0**		**5**
12:30	**13:30**	**0**			**0**		**0**			**0**		**0**

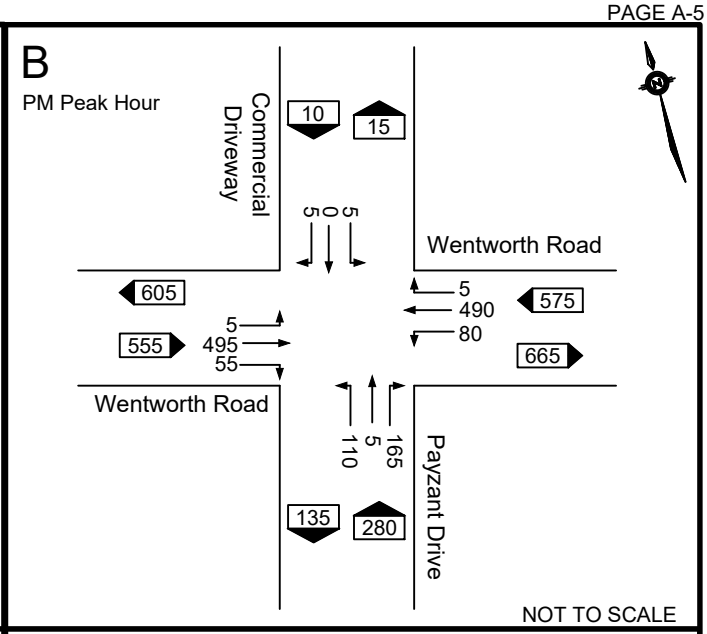
PM Peak Period Volume Data

Time		King Street Northbound Approach			Cottage Street Westbound Approach		King Street Southbound Approach			Chester Road Eastbound Approach		Total Vehicles
		A	B	C	D	F	G	H	I	J	L	
15:30	15:45	24	66	1	2	5	1	74	41	27	17	258
15:45	16:00	28	49	2	2	0	2	57	44	38	11	233
16:00	16:15	23	61	1	8	11	2	63	40	29	19	257
16:15	16:30	32	54	0	3	1	1	57	47	19	9	223
16:30	16:45	31	52	1	1	4	2	66	51	30	14	252
16:45	17:00	33	48	3	6	2	2	68	53	29	18	262
17:00	17:15	28	58	0	1	0	1	56	42	24	17	227
17:15	17:30	24	44	0	0	2	1	51	33	13	9	177
PM Peak Hour		**119**	**215**	**5**	**18**	**18**	**7**	**254**	**191**	**107**	**60**	**994**
15:30	**16:30**	**107**	**230**	**4**	**15**	**17**	**6**	**251**	**172**	**113**	**56**	**971**
16:30	**17:30**	**116**	**202**	**4**	**8**	**8**	**6**	**241**	**179**	**96**	**58**	**918**
		Ped 1			**Ped 2**		**Ped 3**			**Ped 4**		**Total Peds**
15:30	**16:30**	**1**			**5**		**1**			**0**		**7**
16:30	**17:30**	**0**			**5**		**5**			**0**		**10**

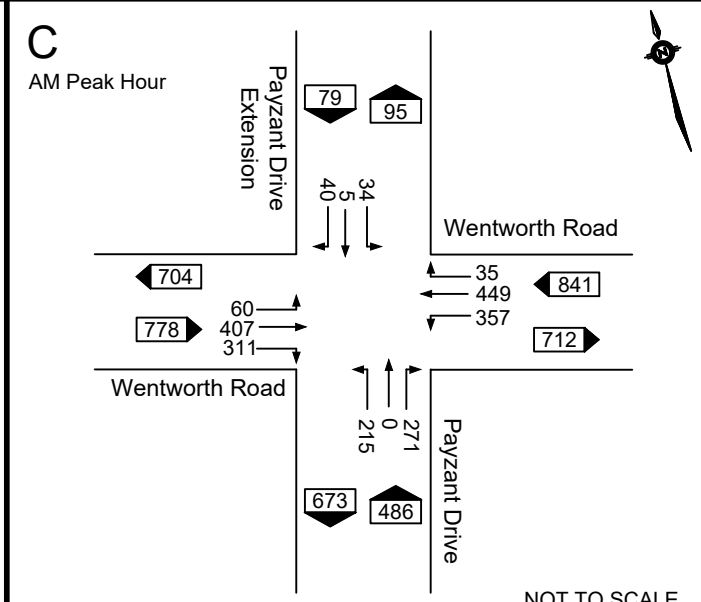
* Count completed by WSP

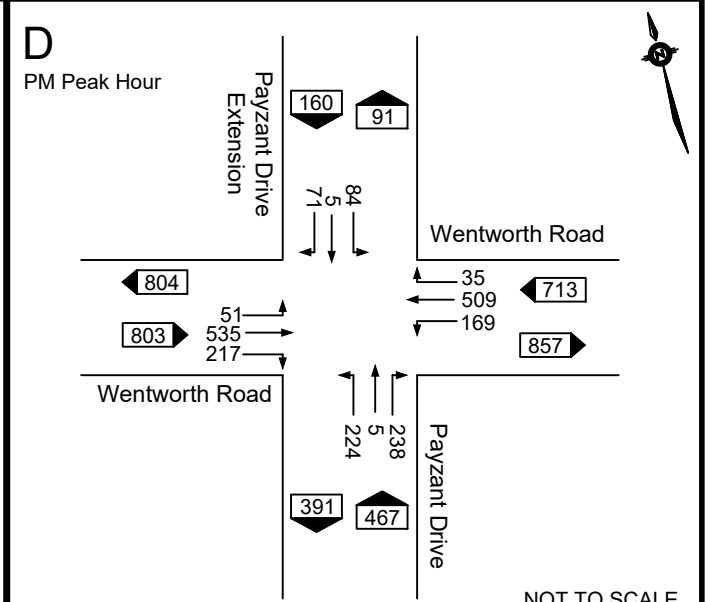
Scenario 1:
Estimated 2021 Design Hourly Volumes



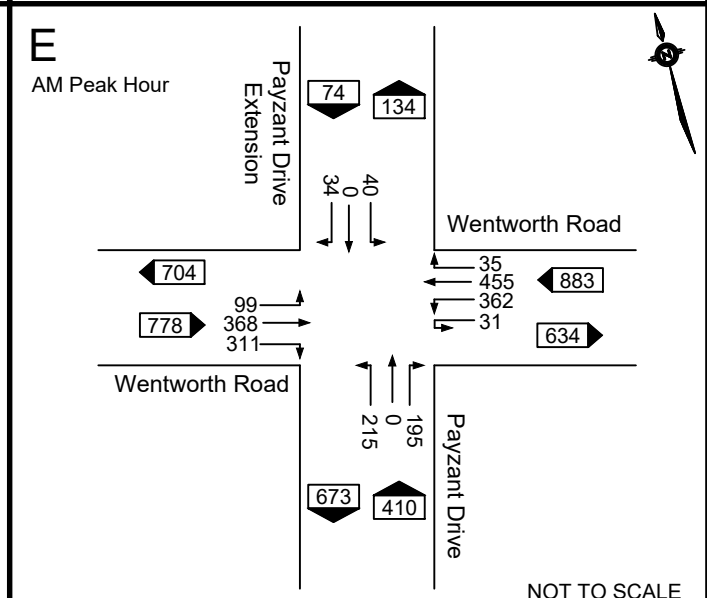


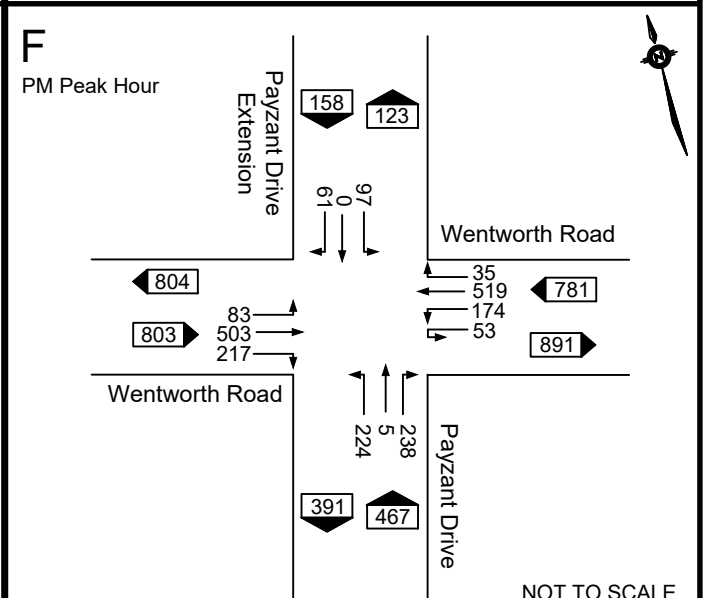
Scenario 2 **(Signals)**:
Projected 2030 Design Hourly Volumes
without Payzant Drive Connector





Scenario 2 **(Roundabout)**:
Projected 2030 Design Hourly Volumes
without Payzant Drive Connector

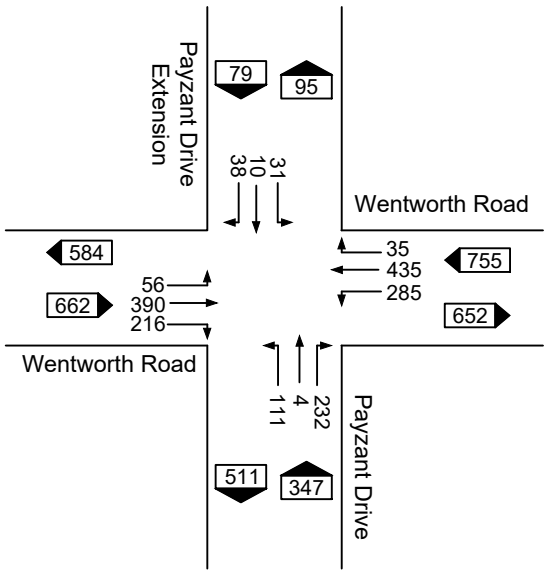




wsp	Intersection Infrastructure Needs Assessment Windsor, Nova Scotia	Figure A-1
	Intersection #1: Wentworth Road at Payzant Drive Scenario 1 & 2 Weekday AM and PM Peak Hours	August 2021

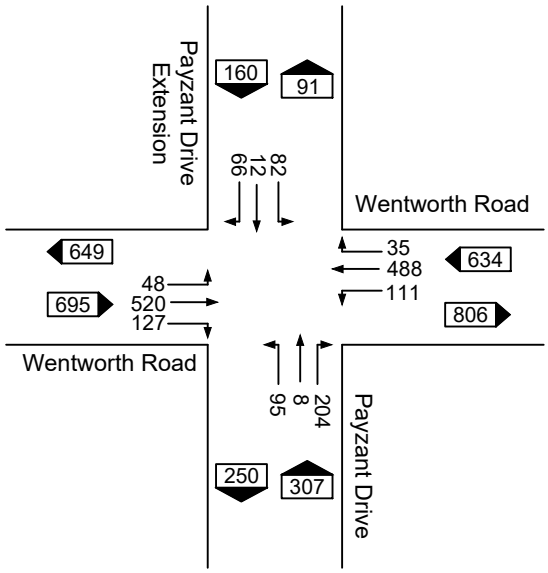
Scenario 3 **(Signals)**:
Projected 2030 Design Hourly Volumes *with* Payzant Drive Connector

A
AM Peak Hour



NOT TO SCALE

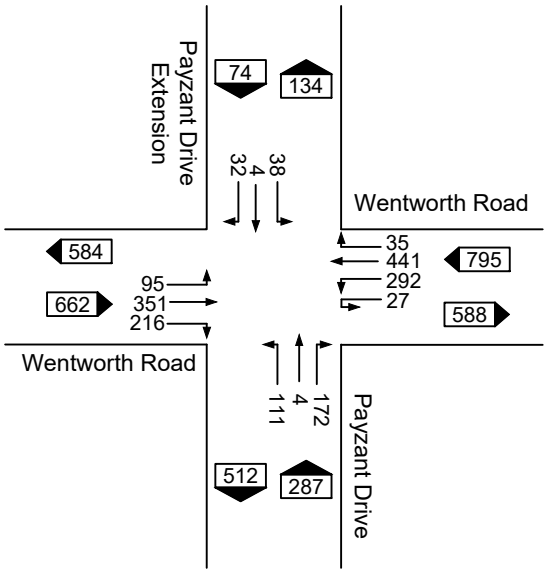
B
PM Peak Hour



NOT TO SCALE

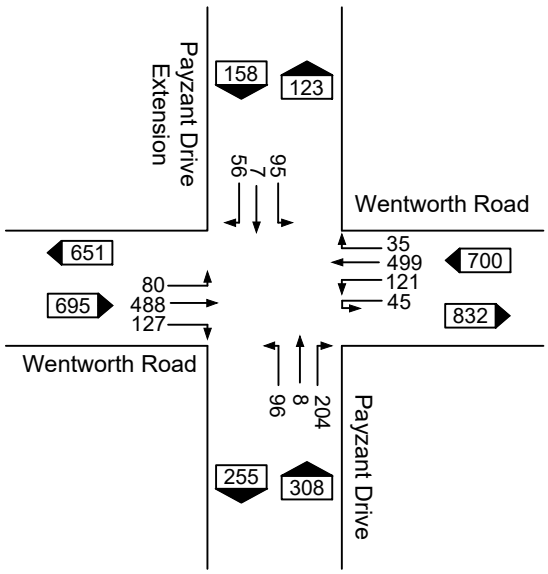
Scenario 3 **(Roundabout)**:
Projected 2030 Design Hourly Volumes *with* Payzant Drive Connector

C
AM Peak Hour



NOT TO SCALE

D
PM Peak Hour

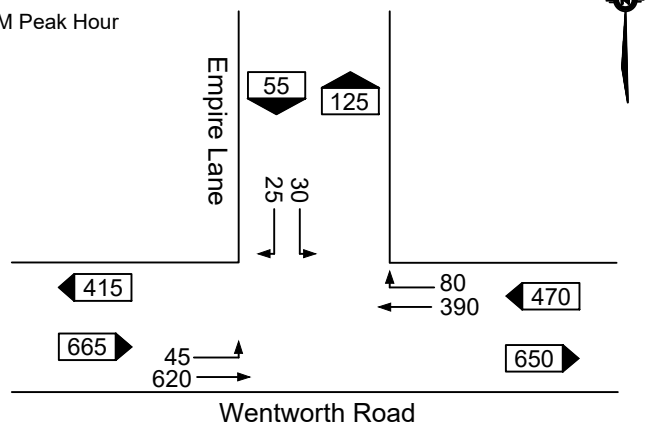


NOT TO SCALE

WSP	Intersection Infrastructure Needs Assessment Windsor, Nova Scotia	Figure A-2
	Intersection #1: Wentworth Road at Payzant Drive Scenario 3 Weekday AM and PM Peak Hours	August 2021

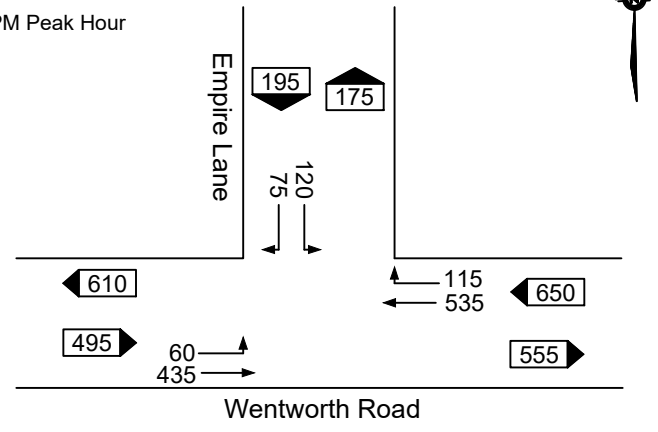
Scenario 1:
Estimated 2021 Design Hourly Volumes

A
AM Peak Hour



NOT TO SCALE

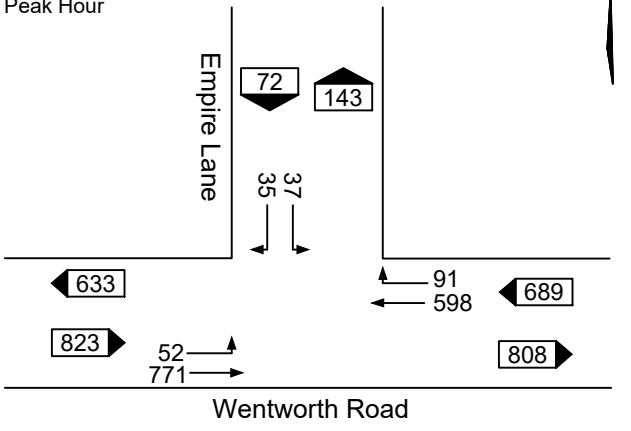
B
PM Peak Hour



NOT TO SCALE

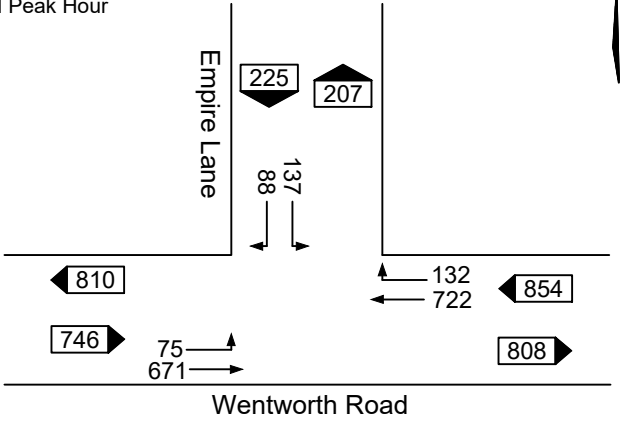
Scenario 2:
Projected 2030 Design Hourly Volumes
without Payzant Drive Connector

C
AM Peak Hour



NOT TO SCALE

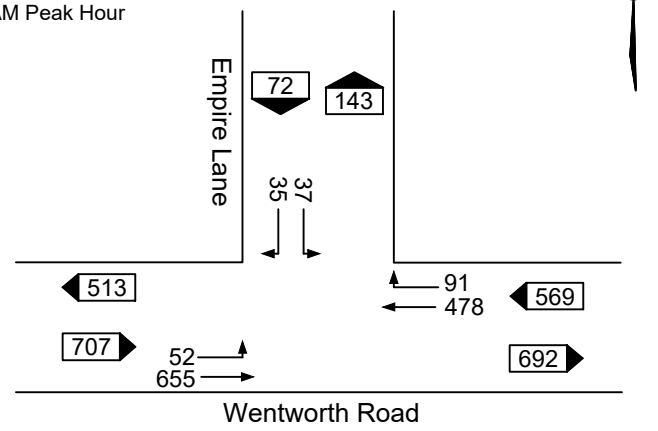
D
PM Peak Hour



NOT TO SCALE

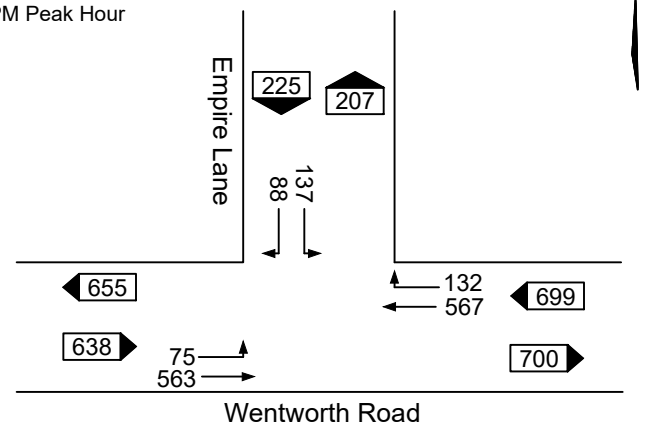
Scenario 3:
Projected 2030 Design Hourly Volumes
with Payzant Drive Connector

E
AM Peak Hour



NOT TO SCALE

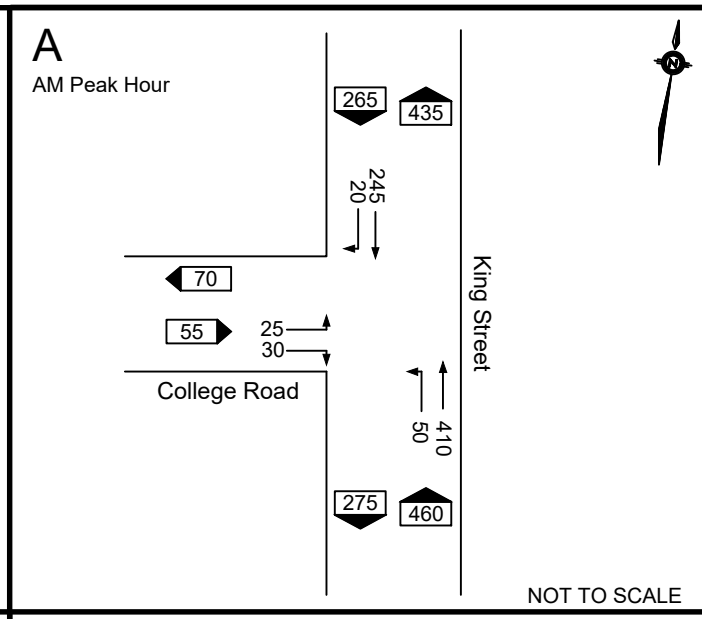
F
PM Peak Hour

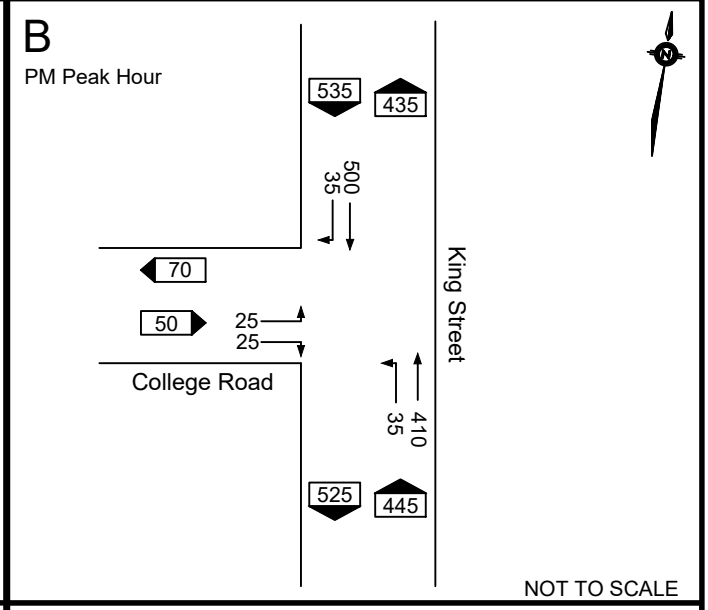


NOT TO SCALE

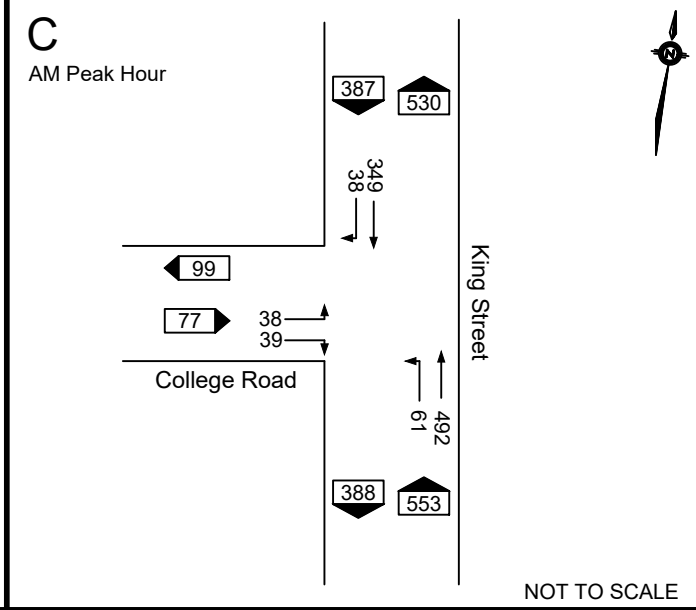
WSP	Intersection Infrastructure Needs Assessment Windsor, Nova Scotia	Figure A-3
	Intersection #2: Wentworth Road at Empire Lane Scenario 1, 2 & 3 Weekday AM and PM Peak Hours	August 2021

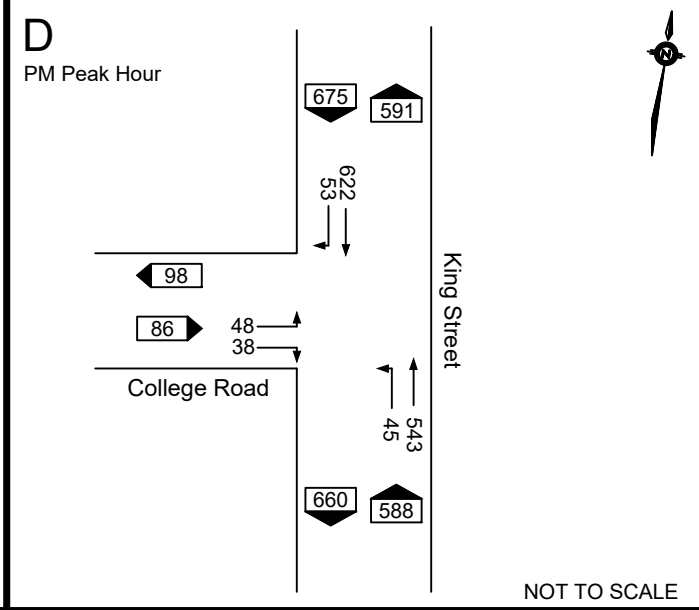
Scenario 1:
Estimated 2021 Design Hourly Volumes



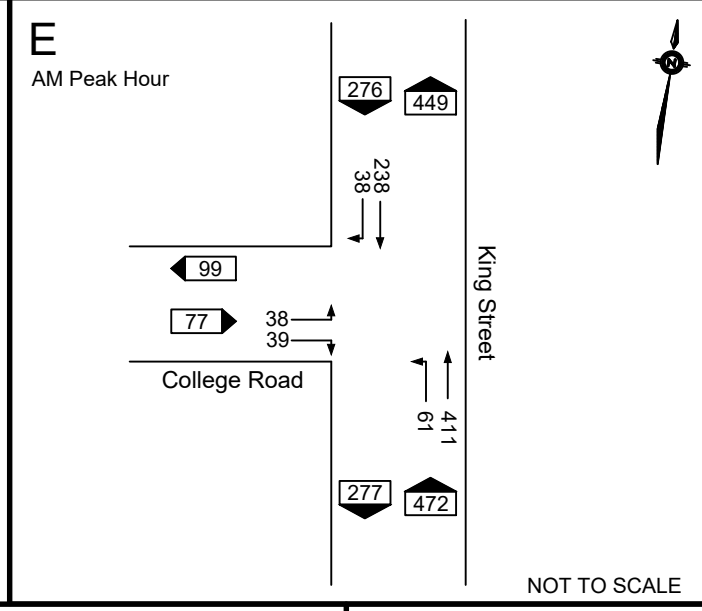


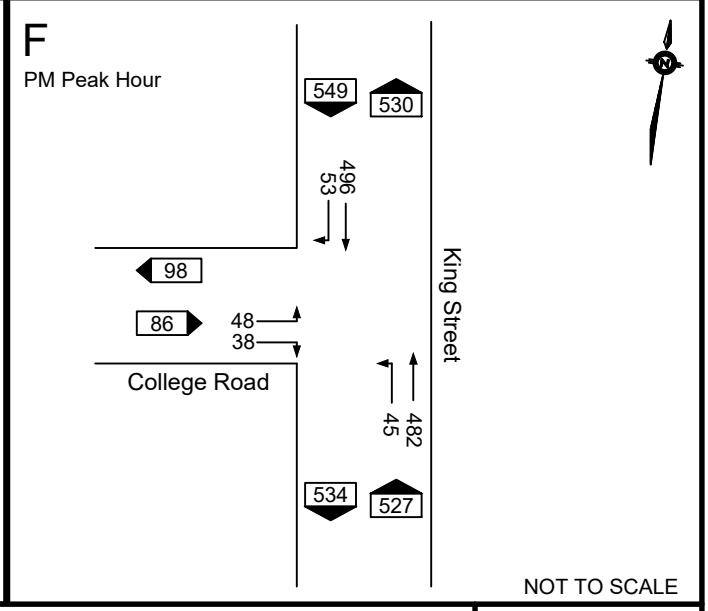
Scenario 2:
Projected 2030 Design Hourly Volumes
without Payzant Drive Connector





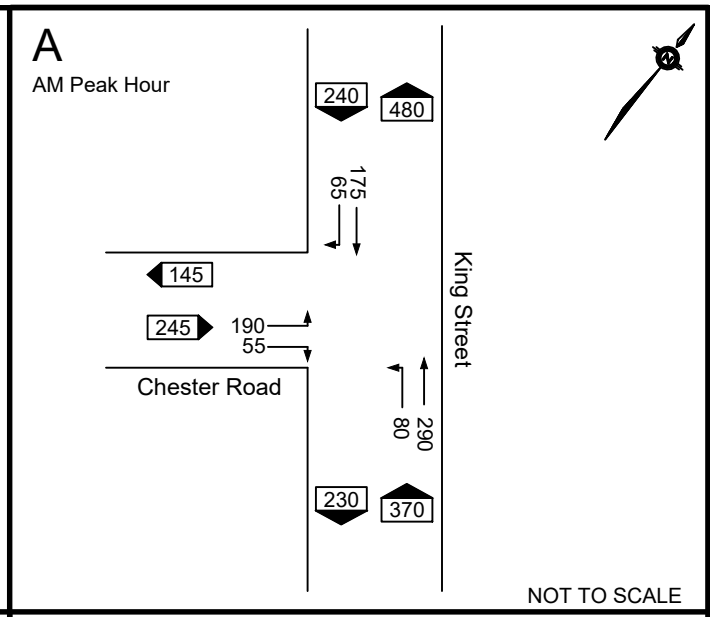
Scenario 3:
Projected 2030 Design Hourly Volumes
with Payzant Drive Connector

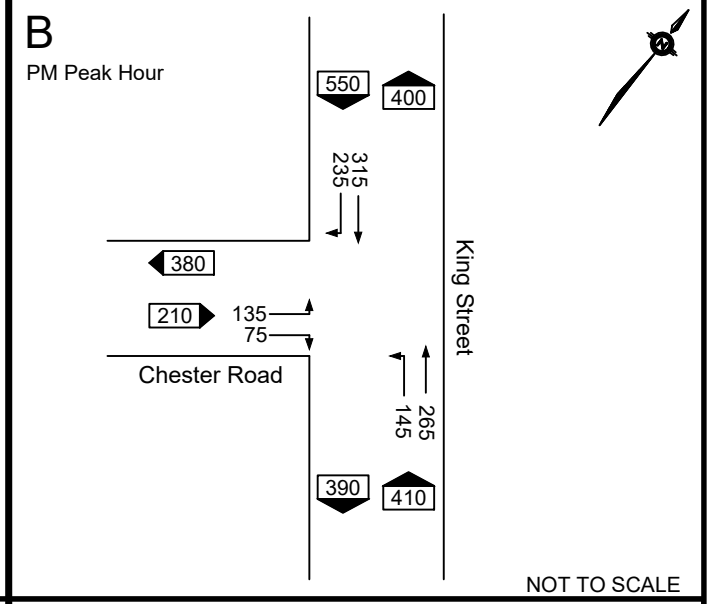




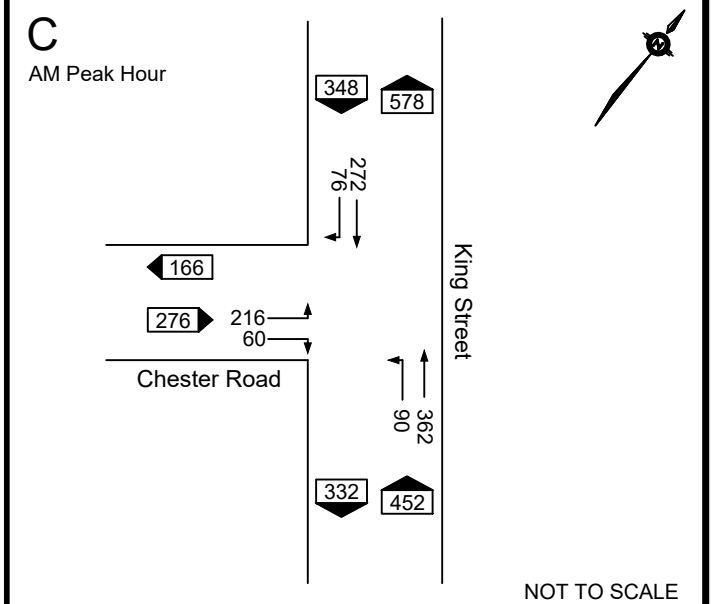
WSP	Intersection Infrastructure Needs Assessment Windsor, Nova Scotia	Figure A-4
	Intersection #3: King Street at College Road Scenario 1, 2 & 3 Weekday AM and PM Peak Hours	August 2021

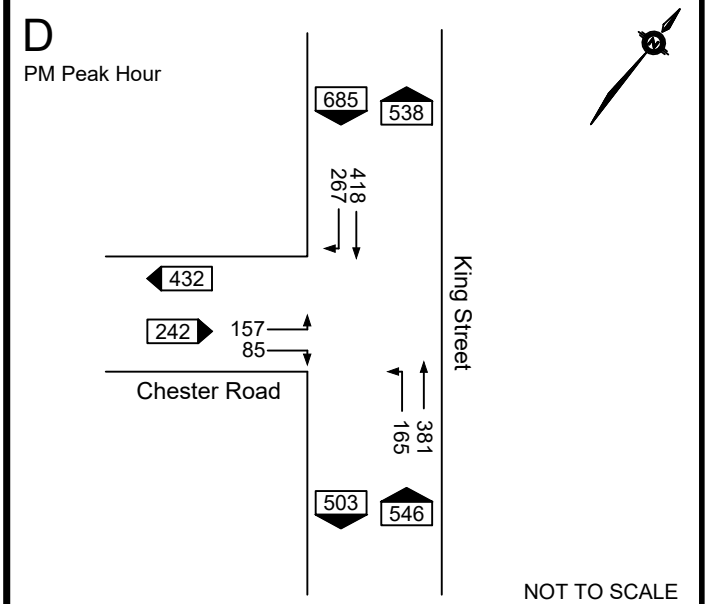
Scenario 1:
Estimated 2021 Design Hourly Volumes



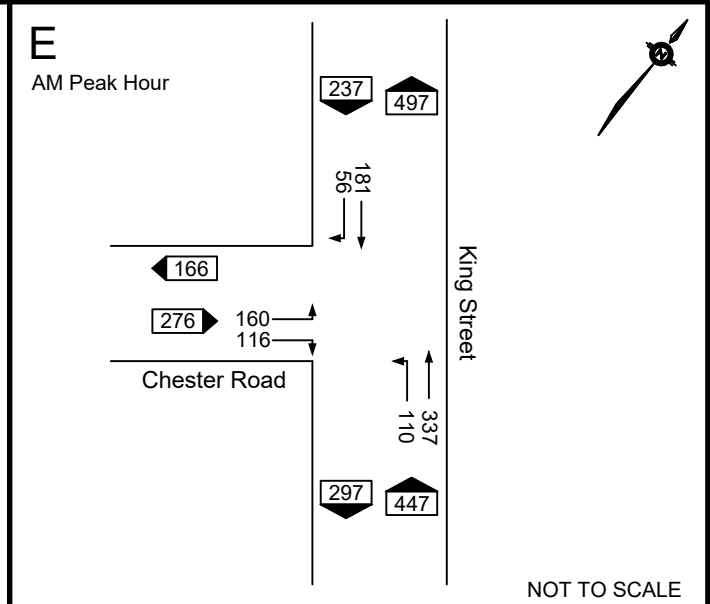


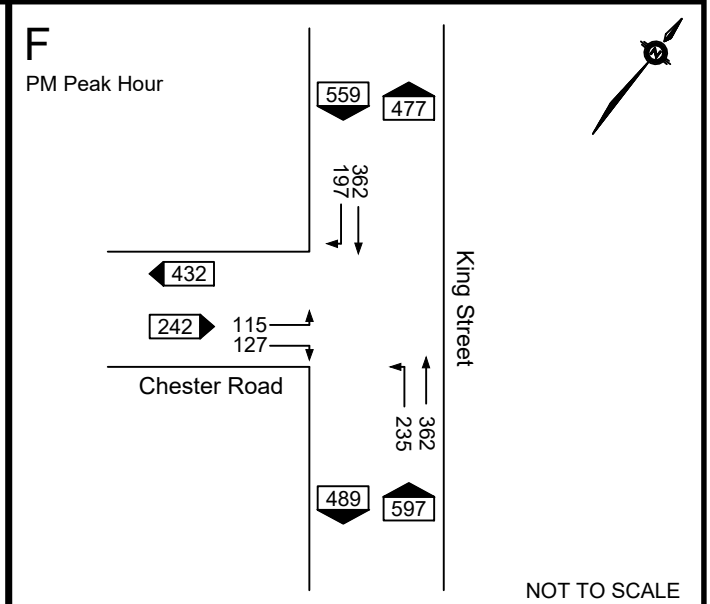
Scenario 2:
Projected 2030 Design Hourly Volumes
without Payzant Drive Connector





Scenario 3:
Projected 2030 Design Hourly Volumes
with Payzant Drive Connector

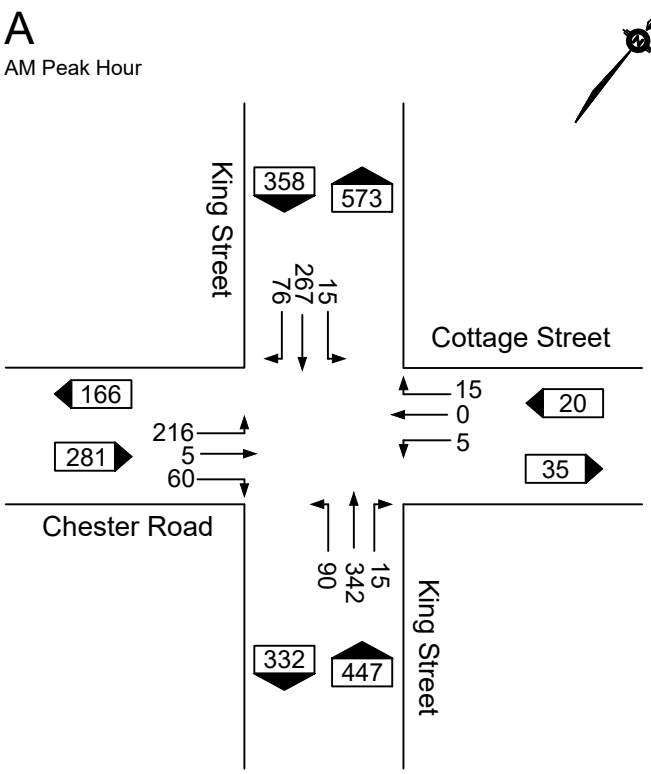




WSP	Intersection Infrastructure Needs Assessment Windsor, Nova Scotia	Figure A-5
	Intersection #4: King Street at Chester Road Scenario 1, 2 & 3 Weekday AM and PM Peak Hours	August 2021

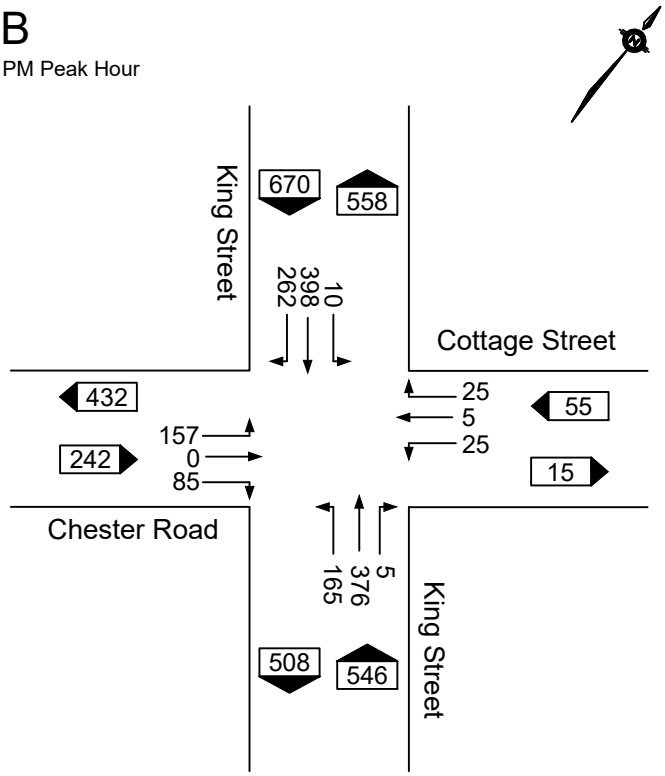
Scenario 2:
Projected 2030 Design Hourly Volumes
without Payzant Drive Connector

A
AM Peak Hour



NOT TO SCALE

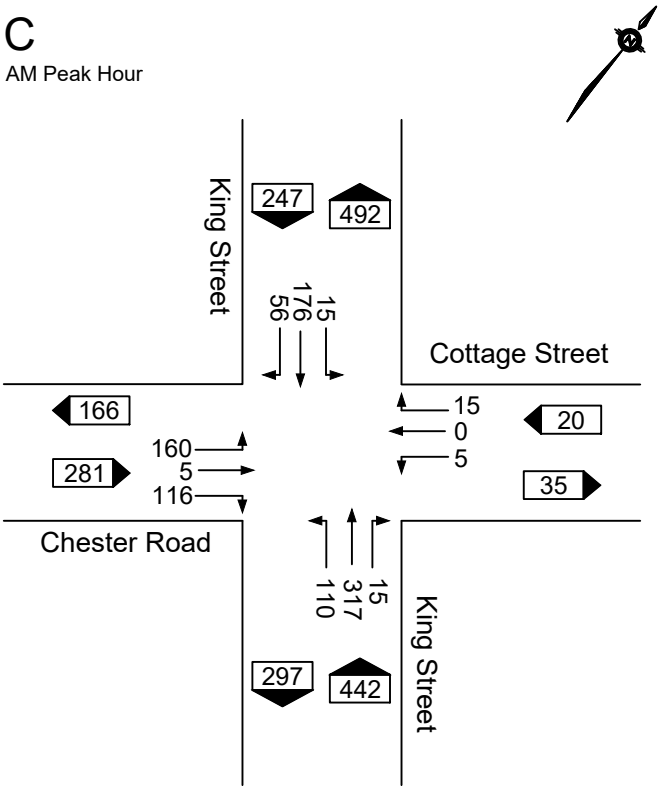
B
PM Peak Hour



NOT TO SCALE

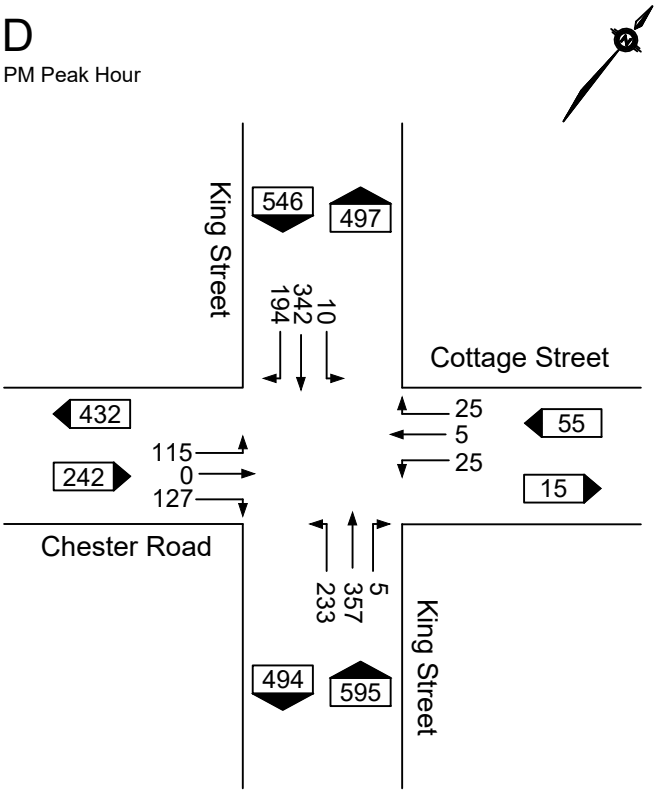
Scenario 3:
Projected 2030 Design Hourly Volumes
with Payzant Drive Connector

C
AM Peak Hour



NOT TO SCALE

D
PM Peak Hour

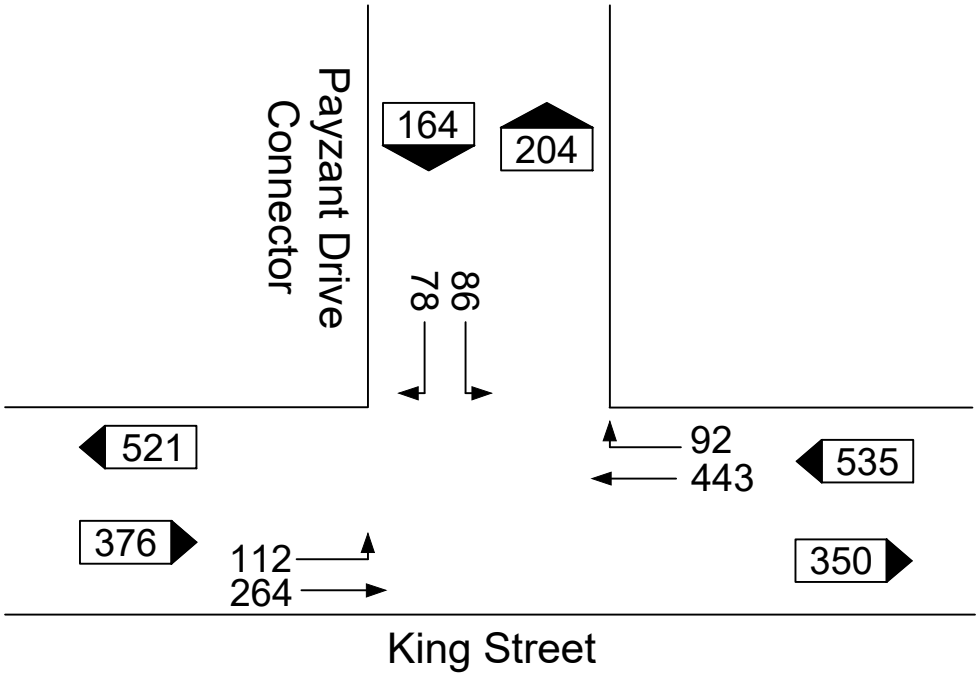


NOT TO SCALE

WSP	Intersection Infrastructure Needs Assessment Windsor, Nova Scotia	Figure A-6
	Intersection #4: King Street at Chester Road & Cottage Street Scenario 2 & 3 Weekday AM and PM Peak Hours	August 2021

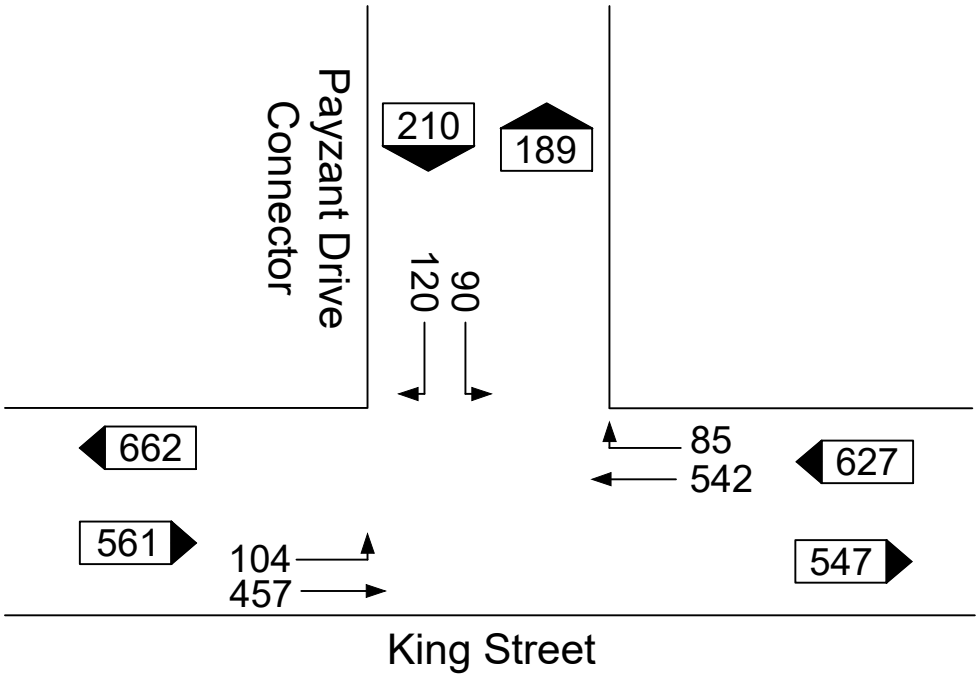
Scenario 3: Projected 2030 Design Hourly Volumes *with* Payzant Drive Connector

A
AM Peak Hour



NOT TO SCALE

B
PM Peak Hour



NOT TO SCALE

wsp	Intersection Infrastructure Needs Assessment Windsor, Nova Scotia	Figure A-7
	Intersection #5: King Street at Payzant Drive Connection Scenario 3 Weekday AM and PM Peak Hours	August 2021

Table A-5

2020 COUNT PROGRAM

Average Group Factors (2010 to 2019)

G:/im/Asset.sys/censustm/counts/factors/fac10-19.xlw

Week Number	2020 Starting Date	AA Week Factor	A Week Factor	B Week Factor	C Week Factor	D Week Factor	E Week Factor	F Week Factor	G Week Factor	H Week Factor
1	30-Dec	1.27	1.60	1.79	1.62	1.83	2.44	2.57	3.19	3.74
2	06-Jan	1.03	1.16	1.34	1.37	1.47	1.60	1.79	2.22	2.82
3	13-Jan	1.04	1.17	1.36	1.40	1.45	1.59	1.75	2.42	2.91
4	20-Jan	1.02	1.13	1.31	1.34	1.44	1.52	1.77	2.36	2.85
5	27-Jan	1.02	1.20	1.34	1.36	1.52	1.59	1.86	2.39	2.91
6	03-Feb	1.06	1.19	1.31	1.36	1.45	1.60	1.86	2.56	2.97
7	10-Feb	0.99	1.16	1.27	1.33	1.41	1.53	1.74	2.26	2.78
8	17-Feb	1.00	1.19	1.33	1.32	1.52	1.52	1.73	2.32	3.10
9	24-Feb	1.01	1.11	1.22	1.25	1.31	1.43	1.62	2.09	2.65
10	02-Mar	1.00	1.16	1.24	1.26	1.41	1.55	1.67	2.25	2.57
11	09-Mar	1.00	1.11	1.14	1.21	1.17	1.42	1.49	1.99	2.53
12	16-Mar	0.98	1.11	1.20	1.24	1.16	1.55	1.61	2.15	2.63
13	23-Mar	1.02	1.12	1.20	1.24	1.28	1.54	1.65	2.11	2.47
14	30-Mar	1.00	1.08	1.15	1.23	1.24	1.53	1.65	2.23	2.34
15	06-Apr	1.01	1.08	1.10	1.31	1.11	1.42	1.50	2.01	2.11
16	13-Apr	0.99	1.03	1.06	1.12	1.06	1.30	1.42	1.87	1.94
17	20-Apr	1.00	1.01	1.04	1.15	1.04	1.25	1.35	1.78	1.72
18	27-Apr	1.00	0.98	1.02	1.08	1.03	1.18	1.24	1.59	1.24
19	04-May	0.98	0.96	1.00	1.05	1.01	1.12	1.20	1.44	0.97
20	11-May	0.99	0.96	0.97	0.99	0.97	0.97	1.10	1.25	0.92
21	18-May	1.00	0.96	0.98	0.96	0.93	0.97	0.98	1.10	0.87
22	25-May	1.01	0.93	0.94	0.94	0.92	0.95	0.97	1.09	0.87
23	01-Jun	0.99	0.93	0.94	0.94	0.92	0.94	0.98	1.07	0.86
24	08-Jun	0.98	0.93	0.93	0.93	0.93	0.93	0.90	0.90	0.78
25	15-Jun	0.98	0.92	0.90	0.89	0.90	0.84	0.82	0.81	0.72
26	22-Jun	0.99	0.92	0.90	0.87	0.87	0.79	0.77	0.72	0.65
27	29-Jun	1.02	0.89	0.88	0.81	0.81	0.70	0.66	0.61	0.53
28	06-Jul	0.99	0.89	0.84	0.77	0.77	0.66	0.64	0.54	0.50
29	13-Jul	1.00	0.87	0.84	0.75	0.74	0.67	0.60	0.51	0.50
30	20-Jul	1.00	0.89	0.83	0.74	0.71	0.62	0.58	0.48	0.47
31	27-Jul	1.01	0.89	0.81	0.71	0.69	0.58	0.55	0.43	0.46
32	03-Aug	1.04	0.88	0.79	0.69	0.71	0.57	0.52	0.41	0.43
33	10-Aug	1.01	0.87	0.78	0.72	0.73	0.61	0.55	0.44	0.45
34	17-Aug	0.99	0.84	0.77	0.74	0.74	0.63	0.56	0.46	0.47
35	24-Aug	1.00	0.88	0.80	0.74	0.74	0.66	0.62	0.51	0.51
36	31-Aug	1.02	0.90	0.85	0.80	0.80	0.73	0.68	0.60	0.61
37	07-Sep	1.00	0.95	0.89	0.87	0.87	0.80	0.75	0.69	0.64
38	14-Sep	0.98	0.94	0.89	0.89	0.93	0.85	0.79	0.67	0.65
39	21-Sep	0.98	0.93	0.89	0.89	0.93	0.87	0.78	0.72	0.71
40	28-Sep	0.99	0.94	0.91	0.91	0.98	0.89	0.80	0.75	0.83
41	05-Oct	1.00	0.93	0.89	0.85	0.92	0.91	0.73	0.64	0.86
42	12-Oct	1.00	0.97	0.93	0.91	0.94	0.96	0.76	0.72	0.99
43	19-Oct	0.97	0.96	0.95	0.97	1.02	1.04	1.00	1.05	1.19
44	26-Oct	0.97	1.00	1.00	1.03	1.05	1.11	1.17	1.36	1.34
45	02-Nov	0.96	1.04	1.03	1.09	1.09	1.17	1.30	1.57	1.40
46	09-Nov	1.00	1.08	1.04	1.10	1.09	1.27	1.36	1.70	1.41
47	16-Nov	0.97	1.04	1.04	1.09	1.11	1.26	1.35	1.72	1.51
48	23-Nov	0.98	1.05	1.07	1.15	1.15	1.31	1.40	1.77	1.61
49	30-Nov	0.97	1.07	1.08	1.18	1.09	1.30	1.42	1.85	1.65
50	07-Dec	0.99	1.04	1.10	1.17	1.14	1.33	1.47	1.88	1.68
51	14-Dec	1.00	1.06	1.16	1.21	1.19	1.36	1.51	1.91	1.92
52	21-Dec	1.25	1.16	1.24	1.21	1.11	1.60	1.71	2.07	2.54
53	28-Dec	1.35	1.79	1.65	1.88	1.35	1.64	1.90	3.32	3.17

APPENDIX

B WARRANT ANALYSIS

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-1 - Wentworth Road at Payzant Drive / Driveway

Scenario 1 - 2021 Existing Conditions

Main Street (name)	Wentworth Road	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Payzant Drive	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
Wentworth Road	NB	1			1		450	1	
Wentworth Road	SB	1			1		680	1	
Payzant Drive	WB	1			1				
Driveway	EB			1					

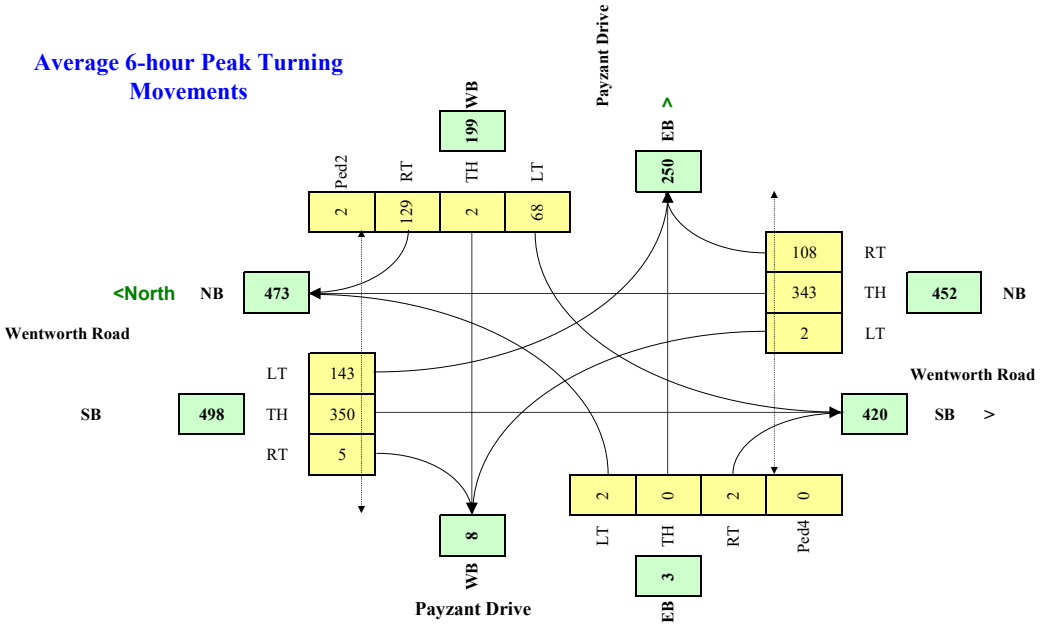
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
Wentworth Road	NS	50	2.0%	n	0.0
Payzant Drive	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	1	4	0	0
8:00 - 9:00	5	5	3	0
11:30 - 12:30	6	4	1	0
12:30 - 13:30	3	3	1	0
15:30 - 16:30	5	2	5	0
16:30 - 17:30	2	1	0	0
Total (6-hour peak)	**22**	**19**	**10**	**0**
Average (6-hour peak)	**4**	**3**	**2**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	0	395	230	295	420	5	65	0	170	0	0	0
8:00 - 9:00	0	295	175	220	315	5	50	0	130	0	0	0
11:30 - 12:30	0	225	70	95	230	5	45	0	85	0	0	0
12:30 - 13:30	0	225	70	95	230	5	45	0	85	0	0	0
15:30 - 16:30	5	420	45	70	415	5	95	5	140	5	0	5
16:30 - 17:30	5	495	55	80	490	5	110	5	165	5	0	5
Total (6-hour peak)	**10**	**2,055**	**645**	**855**	**2,100**	**30**	**410**	**10**	**775**	**10**	**0**	**10**
Average (6-hour peak)	**2**	**343**	**108**	**143**	**350**	**5**	**68**	**2**	**129**	**2**	**0**	**2**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	82	81	1
		Veh	*Ped*

NOT Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-2 - Wentworth Road at Payzant Drive

Scenario 2 - 2030 Without Payzant Drive Connector Open

Main Street (name)	Wentworth Road	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Payzant Drive	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
Wentworth Road	NB	1			1		450	1	
Wentworth Road	SB	1			1		680	1	
Payzant Drive	WB	1			1				
Payzant Drive	EB	1			1				

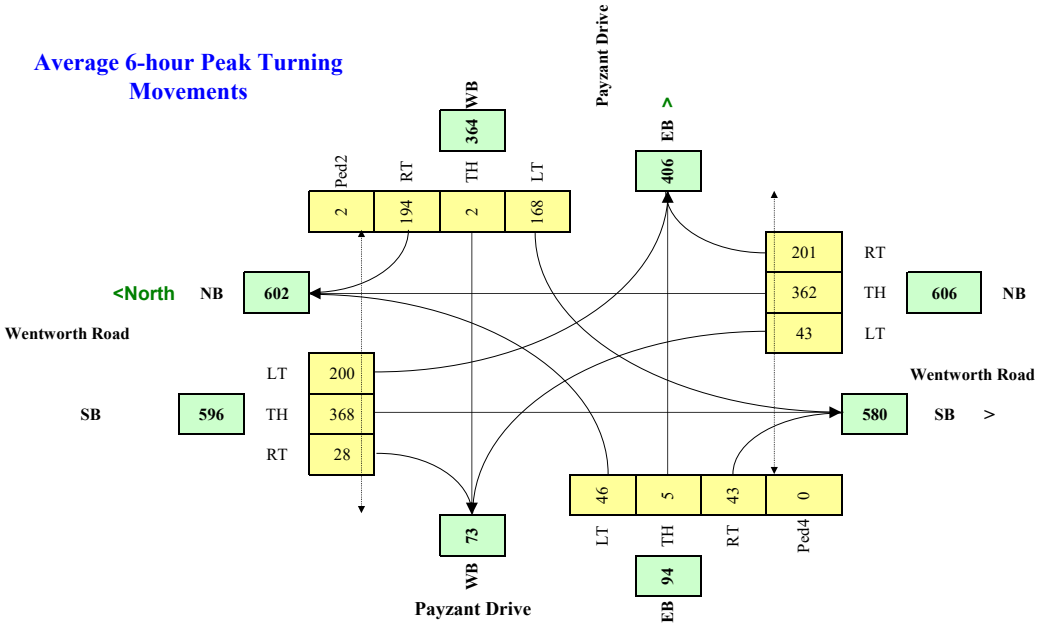
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
Wentworth Road	NS	50	2.0%	n	0.0
Payzant Drive	EW	50	2.0%	n	

	Ped3	Ped1	Ped2	Ped4
	NS	NS	EW	EW
	W Side	E Side	N Side	S side
7:00 - 8:00	1	4	0	0
8:00 - 9:00	5	5	3	0
11:30 - 12:30	6	4	1	0
12:30 - 13:30	3	3	1	0
15:30 - 16:30	5	2	5	0
16:30 - 17:30	2	1	0	0
Total (6-hour peak)	**22**	**19**	**10**	**0**
Average (6-hour peak)	**4**	**3**	**2**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	60	405	310	355	450	35	215	0	270	35	5	40
8:00 - 9:00	45	305	235	270	335	25	160	0	205	25	5	30
11:30 - 12:30	30	235	130	130	240	20	110	0	125	30	5	30
12:30 - 13:30	30	235	130	130	240	20	110	0	125	30	5	30
15:30 - 16:30	45	455	185	145	435	30	190	5	200	70	5	60
16:30 - 17:30	50	535	215	170	510	35	225	5	240	85	5	70
Total (6-hour peak)	**260**	**2,170**	**1,205**	**1,200**	**2,210**	**165**	**1,010**	**10**	**1,165**	**275**	**30**	**260**
Average (6-hour peak)	**43**	**362**	**201**	**200**	**368**	**28**	**168**	**2**	**194**	**46**	**5**	**43**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	229	227	2
		Veh	*Ped*

Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-3 - Wentworth Road at Payzant Drive

Scenario 3 - 2030 With Payzant Drive Connector Open

Main Street (name)	Wentworth Road	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Payzant Drive	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
Wentworth Road	NB	1			1		450	1	
Wentworth Road	SB	1			1		680	1	
Payzant Drive	WB	1			1				
Payzant Drive	EB	1			1				

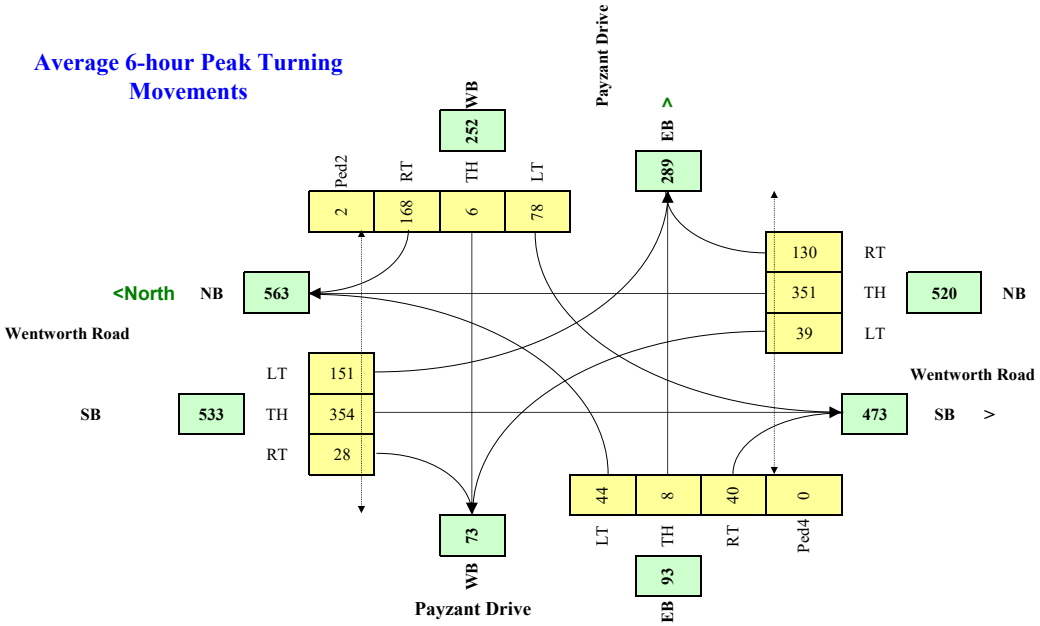
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
Wentworth Road	NS	50	2.0%	n	0.0
Payzant Drive	EW	50	2.0%	n	

	Ped3	Ped1	Ped2	Ped4
	NS	NS	EW	EW
	W Side	E Side	N Side	S side
7:00 - 8:00	1	4	0	0
8:00 - 9:00	5	5	3	0
11:30 - 12:30	6	4	1	0
12:30 - 13:30	3	3	1	0
15:30 - 16:30	5	2	5	0
16:30 - 17:30	2	1	0	0
Total (6-hour peak)	**22**	**19**	**10**	**0**
Average (6-hour peak)	**4**	**3**	**2**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	55	390	215	285	435	35	110	5	230	30	10	40
8:00 - 9:00	40	295	160	215	325	25	85	5	175	25	10	30
11:30 - 12:30	25	230	85	100	230	20	50	5	110	30	5	25
12:30 - 13:30	25	230	85	100	230	20	50	5	110	30	5	25
15:30 - 16:30	40	440	110	95	415	30	80	5	175	70	10	55
16:30 - 17:30	50	520	125	110	490	35	95	10	205	80	10	65
Total (6-hour peak)	**235**	**2,105**	**780**	**905**	**2,125**	**165**	**470**	**35**	**1,005**	**265**	**50**	**240**
Average (6-hour peak)	**39**	**351**	**130**	**151**	**354**	**28**	**78**	**6**	**168**	**44**	**8**	**40**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	145	143	2
		Veh	*Ped*

Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-4 - Wentworth Road at Empire Lane

Scenario 1 - 2021 Existing Conditions

Main Street (name)	Wentworth Road	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Empire Lane	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
Wentworth Road	NB	1		1			850	1	
Wentworth Road	SB				1		300	1	
	WB								
Empire Lane	EB	1				1			

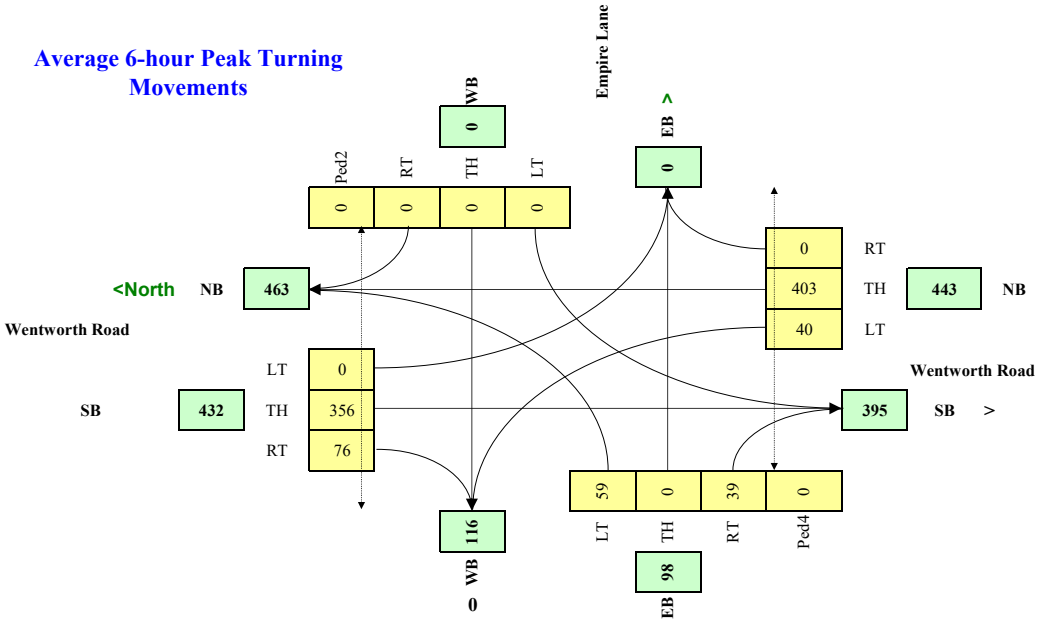
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
Wentworth Road	NS	50	2.0%	n	0.0
Empire Lane	EW	50	2.0%	n	

	Ped3	Ped1	Ped2	Ped4
	NS	NS	EW	EW
	W Side	E Side	N Side	S side
7:00 - 8:00	1	0	0	0
8:00 - 9:00	4	0	0	0
11:30 - 12:30	5	0	0	0
12:30 - 13:30	4	0	0	0
15:30 - 16:30	6	0	0	0
16:30 - 17:30	1	0	1	0
Total (6-hour peak)	**21**	**0**	**1**	**0**
Average (6-hour peak)	**4**	**0**	**0**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	45	620	0	0	390	80	0	0	0	30	0	25
8:00 - 9:00	35	465	0	0	295	60	0	0	0	25	0	20
11:30 - 12:30	25	265	0	0	230	50	0	0	0	40	0	25
12:30 - 13:30	25	265	0	0	230	50	0	0	0	40	0	25
15:30 - 16:30	50	370	0	0	455	100	0	0	0	100	0	65
16:30 - 17:30	60	435	0	0	535	115	0	0	0	120	0	75
Total (6-hour peak)	**240**	**2,420**	**0**	**0**	**2,135**	**455**	**0**	**0**	**0**	**355**	**0**	**235**
Average (6-hour peak)	**40**	**403**	**0**	**0**	**356**	**76**	**0**	**0**	**0**	**59**	**0**	**39**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	37	37	0
		Veh	*Ped*

NOT Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-5 - Wentworth Road at Empire Lane

Scenario 2 - 2030 Without Payzant Drive Connector Open

Main Street (name)	Wentworth Road	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Empire Lane	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
Wentworth Road	NB	1		1			850	1	
Wentworth Road	SB				1		300	1	
	WB								
Empire Lane	EB	1				1			

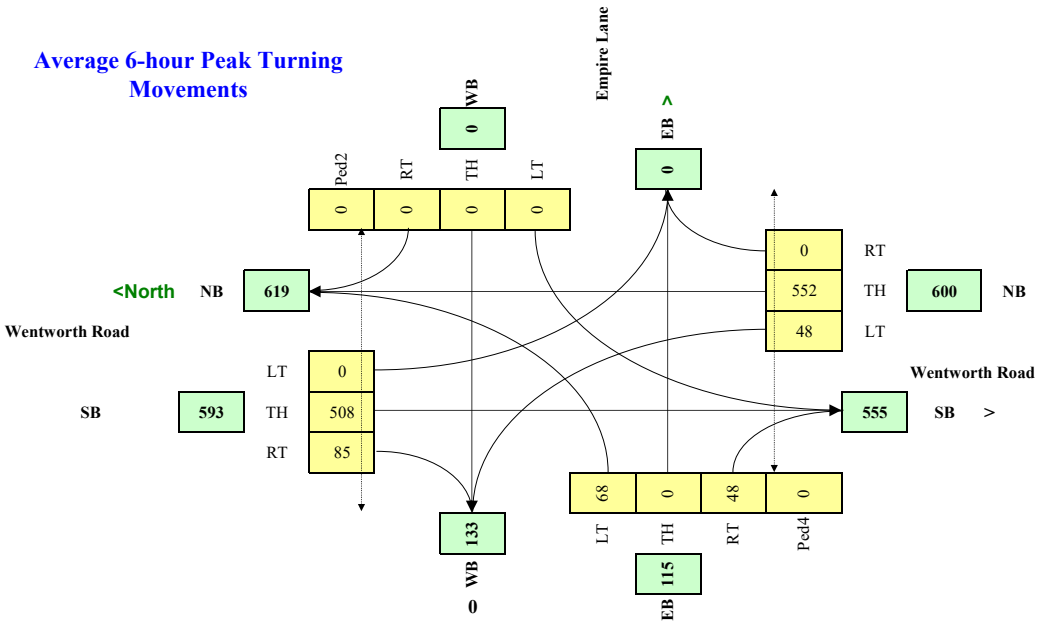
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
Wentworth Road	NS	50	2.0%	n	0.0
Empire Lane	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	1	0	0	0
8:00 - 9:00	4	0	0	0
11:30 - 12:30	5	0	0	0
12:30 - 13:30	4	0	0	0
15:30 - 16:30	6	0	0	0
16:30 - 17:30	1	0	1	0
Total (6-hour peak)	**21**	**0**	**1**	**0**
Average (6-hour peak)	**4**	**0**	**0**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	50	770	0	0	600	90	0	0	0	35	0	35
8:00 - 9:00	40	580	0	0	450	70	0	0	0	30	0	25
11:30 - 12:30	30	360	0	0	330	55	0	0	0	45	0	30
12:30 - 13:30	30	360	0	0	330	55	0	0	0	45	0	30
15:30 - 16:30	65	570	0	0	615	110	0	0	0	115	0	75
16:30 - 17:30	75	670	0	0	720	130	0	0	0	135	0	90
Total (6-hour peak)	**290**	**3,310**	**0**	**0**	**3,045**	**510**	**0**	**0**	**0**	**405**	**0**	**285**
Average (6-hour peak)	**48**	**552**	**0**	**0**	**508**	**85**	**0**	**0**	**0**	**68**	**0**	**48**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p})\ L) / K_2] \times C_i$$

W =	62	62	0
		Veh	*Ped*

NOT Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-6 - Wentworth Road at Empire Lane

Scenario 3 - 2030 With Payzant Drive Connector Open

Main Street (name)	Wentworth Road	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Empire Lane	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
Wentworth Road	NB	1		1			850	1	
Wentworth Road	SB				1		300	1	
	WB								
Empire Lane	EB	1				1			

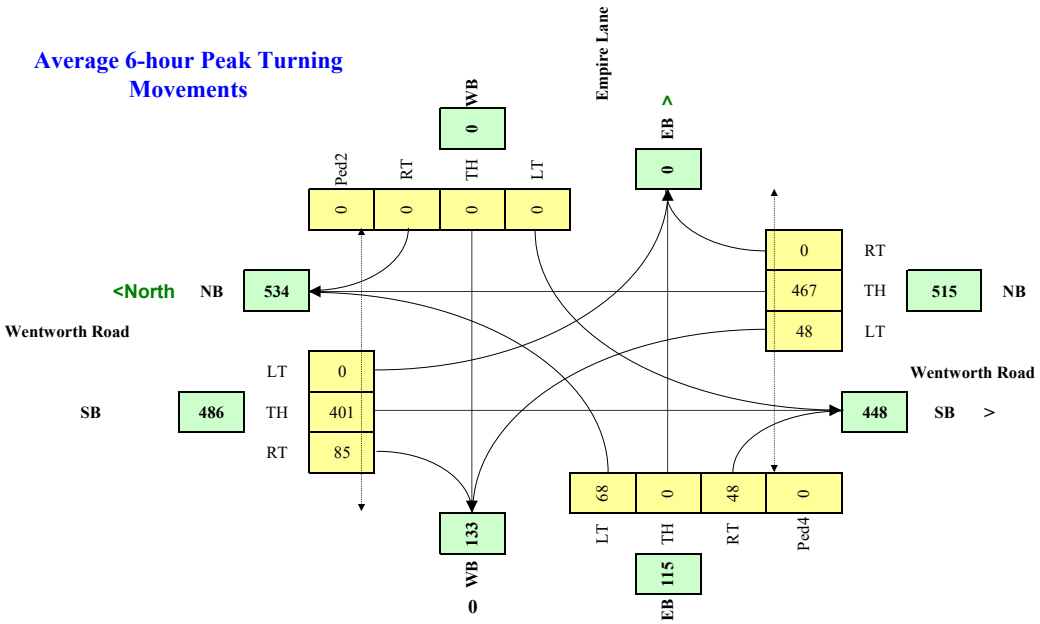
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
Wentworth Road	NS	50	2.0%	n	0.0
Empire Lane	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	1	0	0	0
8:00 - 9:00	4	0	0	0
11:30 - 12:30	5	0	0	0
12:30 - 13:30	4	0	0	0
15:30 - 16:30	6	0	0	0
16:30 - 17:30	1	0	1	0
Total (6-hour peak)	**21**	**0**	**1**	**0**
Average (6-hour peak)	**4**	**0**	**0**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	50	655	0	0	480	90	0	0	0	35	0	35
8:00 - 9:00	40	490	0	0	360	70	0	0	0	30	0	25
11:30 - 12:30	30	305	0	0	260	55	0	0	0	45	0	30
12:30 - 13:30	30	305	0	0	260	55	0	0	0	45	0	30
15:30 - 16:30	65	480	0	0	480	110	0	0	0	115	0	75
16:30 - 17:30	75	565	0	0	565	130	0	0	0	135	0	90
Total (6-hour peak)	**290**	**2,800**	**0**	**0**	**2,405**	**510**	**0**	**0**	**0**	**405**	**0**	**285**
Average (6-hour peak)	**48**	**467**	**0**	**0**	**401**	**85**	**0**	**0**	**0**	**68**	**0**	**48**

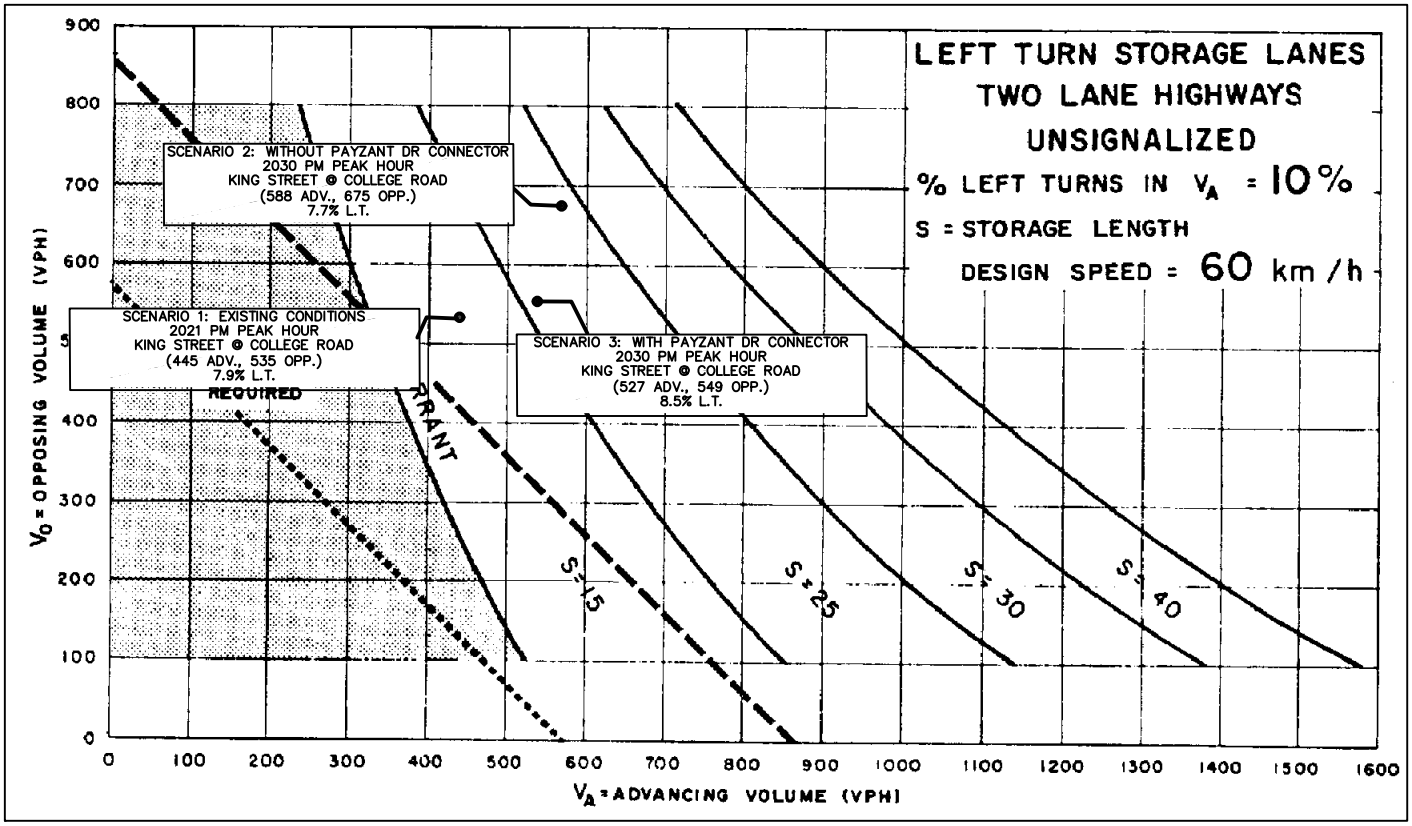
Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	50	50 *Veh*	0 *Ped*

NOT Warranted



WSP	Intersection Infrastructure Needs Assessment Windsor, NS	Figure B-1
	Left Turn Lane Warrants Intersection #3: King Street at College Road AM and PM Peak Hours	August 2021

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-8 - King Street at College Road

Scenario 2 - 2030 Without Payzant Drive Connector Open

Main Street (name)	King Street	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	College Road	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
King Street	NB	1		1			999	1	
King Street	SB				1		999	1	
	WB								
College Road	EB			1					

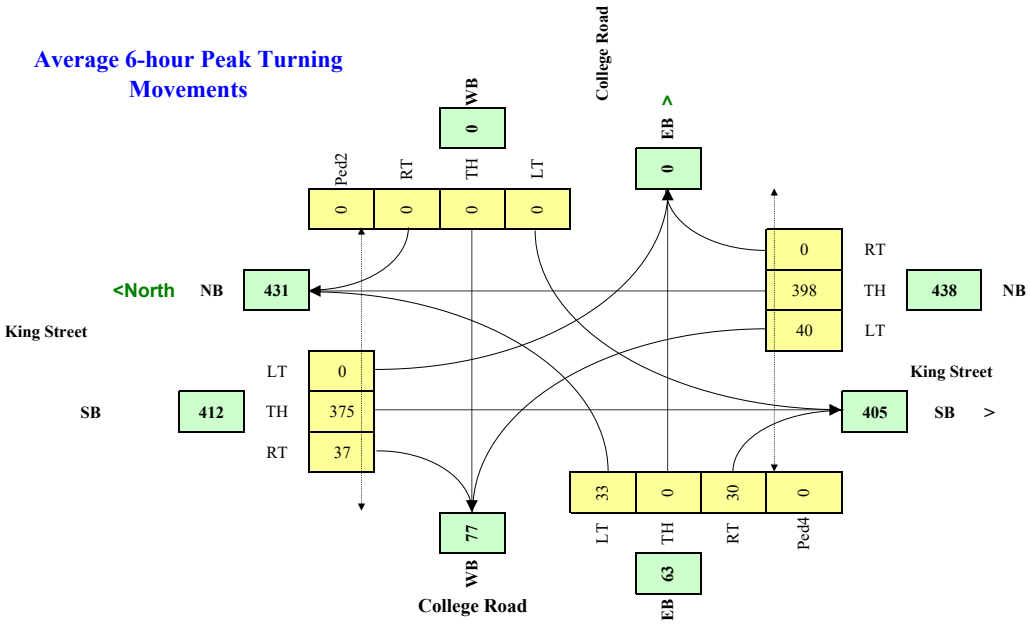
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
King Street	NS	50	2.0%	n	0.0
College Road	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	0	0	0	0
8:00 - 9:00	0	1	0	0
11:30 - 12:30	0	3	0	0
12:30 - 13:30	0	1	0	0
15:30 - 16:30	0	2	0	0
16:30 - 17:30	0	1	0	0
Total (6-hour peak)	**0**	**8**	**0**	**0**
Average (6-hour peak)	**0**	**1**	**0**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	60	490	0	0	350	40	0	0	0	40	0	40
8:00 - 9:00	45	370	0	0	260	30	0	0	0	30	0	30
11:30 - 12:30	25	260	0	0	245	25	0	0	0	20	0	20
12:30 - 13:30	25	260	0	0	245	25	0	0	0	20	0	20
15:30 - 16:30	40	460	0	0	530	45	0	0	0	40	0	30
16:30 - 17:30	45	545	0	0	620	55	0	0	0	50	0	40
Total (6-hour peak)	**240**	**2,385**	**0**	**0**	**2,250**	**220**	**0**	**0**	**0**	**200**	**0**	**180**
Average (6-hour peak)	**40**	**398**	**0**	**0**	**375**	**37**	**0**	**0**	**0**	**33**	**0**	**30**

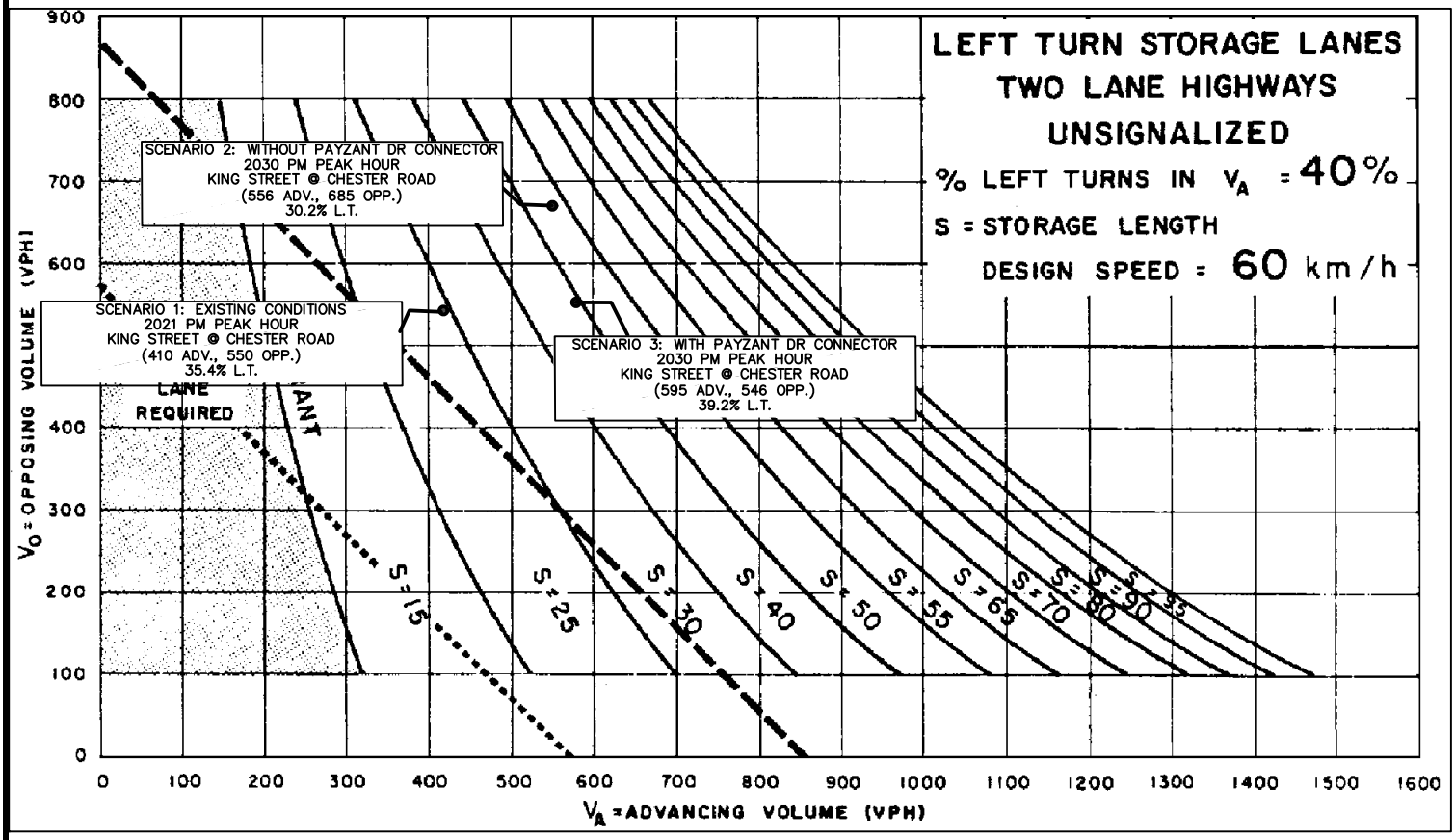
Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	29	29	0
		Veh	*Ped*

Not Warranted - Vs<75



4-LEG INTERSECTION

WSP	Intersection Infrastructure Needs Assessment Windsor, NS	Figure B-2
	Left Turn Lane Warrants Intersection #4: King Street at Chester Road AM and PM Peak Hours	August 2021

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-10 - King Street at Chester Road

Scenario 2 - 2030 Without Payzant Drive Connector Open

Main Street (name)	King Street	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Chester Road	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
King Street	NB	1		1			999	1	
King Street	SB				1		999	1	
	WB								
Chester Road	EB		1			1			

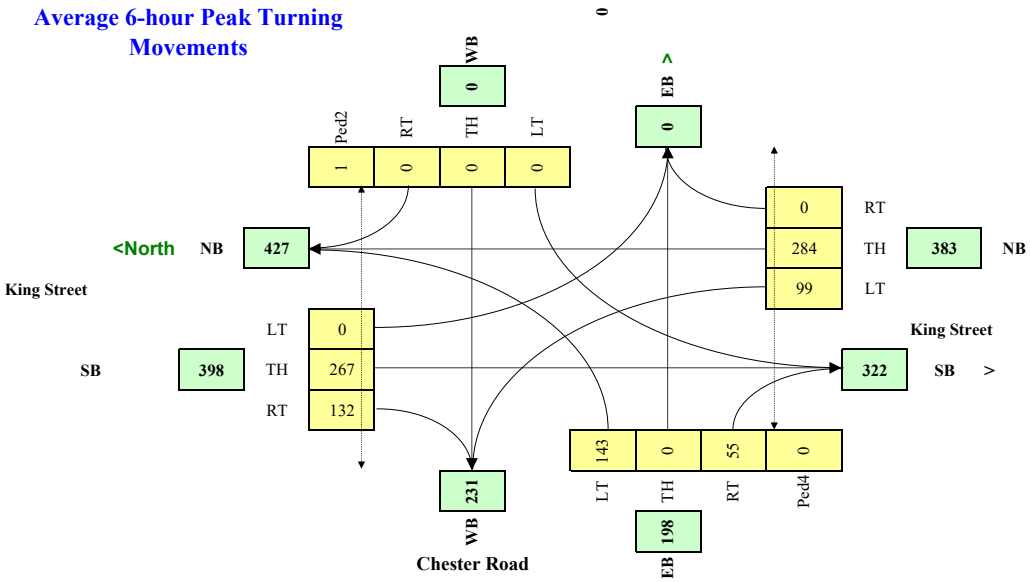
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
King Street	NS	50	2.0%	n	0.0
Chester Road	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	0	0	0	0
8:00 - 9:00	0	0	0	0
11:30 - 12:30	0	0	1	0
12:30 - 13:30	0	0	0	0
15:30 - 16:30	0	0	1	0
16:30 - 17:30	0	0	5	0
Total (6-hour peak)	**0**	**0**	**7**	**0**
Average (6-hour peak)	**0**	**0**	**1**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	90	360	0	0	270	75	0	0	0	215	0	60
8:00 - 9:00	70	270	0	0	205	55	0	0	0	160	0	45
11:30 - 12:30	65	185	0	0	175	85	0	0	0	95	0	35
12:30 - 13:30	65	185	0	0	175	85	0	0	0	95	0	35
15:30 - 16:30	140	325	0	0	355	225	0	0	0	135	0	70
16:30 - 17:30	165	380	0	0	420	265	0	0	0	155	0	85
Total (6-hour peak)	**595**	**1,705**	**0**	**0**	**1,600**	**790**	**0**	**0**	**0**	**855**	**0**	**330**
Average (6-hour peak)	**99**	**284**	**0**	**0**	**267**	**132**	**0**	**0**	**0**	**143**	**0**	**55**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	83	82	1
		Veh	*Ped*

NOT Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-11 - King Street at Chester Road

Scenario 3 - 2030 With Payzant Drive Connector Open

Main Street (name)	King Street	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Chester Road	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
King Street	NB	1		1			999	1	
King Street	SB				1		999	1	
	WB								
Chester Road	EB	1			1				

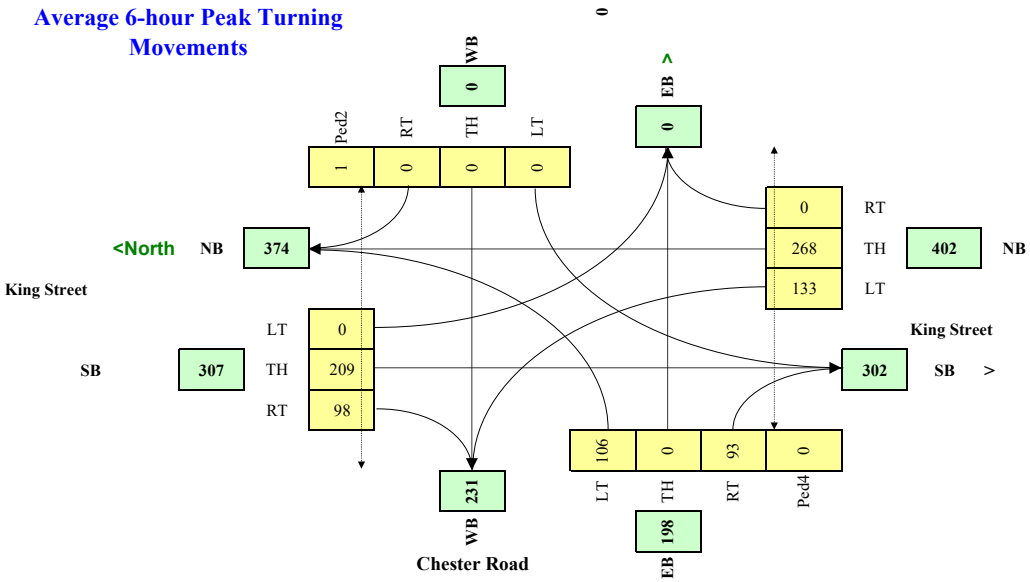
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
King Street	NS	50	2.0%	n	0.0
Chester Road	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	0	0	0	0
8:00 - 9:00	0	0	0	0
11:30 - 12:30	0	0	1	0
12:30 - 13:30	0	0	0	0
15:30 - 16:30	0	0	1	0
16:30 - 17:30	0	0	5	0
Total (6-hour peak)	**0**	**0**	**7**	**0**
Average (6-hour peak)	**0**	**0**	**1**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	110	335	0	0	180	55	0	0	0	160	0	115
8:00 - 9:00	85	255	0	0	135	40	0	0	0	120	0	85
11:30 - 12:30	85	175	0	0	135	65	0	0	0	70	0	60
12:30 - 13:30	85	175	0	0	135	65	0	0	0	70	0	60
15:30 - 16:30	200	310	0	0	310	165	0	0	0	100	0	110
16:30 - 17:30	235	360	0	0	360	195	0	0	0	115	0	125
Total (6-hour peak)	**800**	**1,610**	**0**	**0**	**1,255**	**585**	**0**	**0**	**0**	**635**	**0**	**555**
Average (6-hour peak)	**133**	**268**	**0**	**0**	**209**	**98**	**0**	**0**	**0**	**106**	**0**	**93**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	67	66	1
		Veh	*Ped*

NOT Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-12 - King Street at Chester Road / Cottage Street

Scenario 2 - 2030 Without Payzant Drive Connector Open

Main Street (name)	King Street	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Chester Road	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
King Street	NB	1		1			999	1	
King Street	SB	1		1		1	999	1	
Cottage Road	WB			1					
Chester Road	EB	1			1				

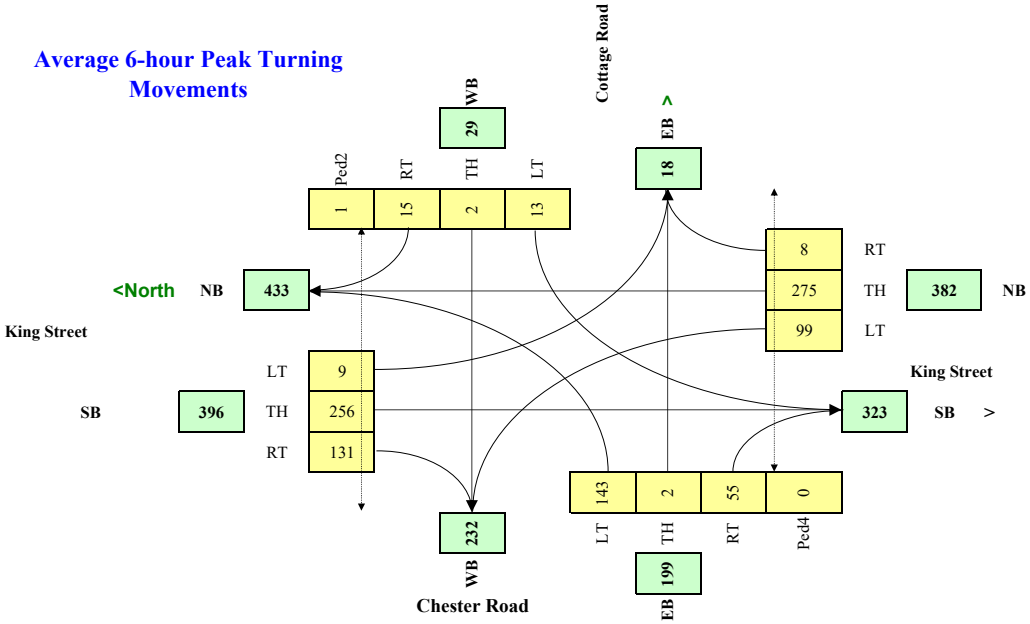
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
King Street	NS	50	2.0%	n	0.0
Chester Road	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	0	0	0	0
8:00 - 9:00	0	0	0	0
11:30 - 12:30	0	0	1	0
12:30 - 13:30	0	0	0	0
15:30 - 16:30	0	0	1	0
16:30 - 17:30	0	0	5	0
Total (6-hour peak)	**0**	**0**	**7**	**0**
Average (6-hour peak)	**0**	**0**	**1**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	90	340	15	15	265	75	5	0	15	215	5	60
8:00 - 9:00	70	255	10	10	200	55	5	0	10	160	5	45
11:30 - 12:30	65	180	5	5	165	85	10	0	10	95	0	35
12:30 - 13:30	65	180	5	5	165	85	10	0	10	95	0	35
15:30 - 16:30	140	320	5	10	340	225	20	5	20	135	0	70
16:30 - 17:30	165	375	5	10	400	260	25	5	25	155	0	85
Total (6-hour peak)	**595**	**1,650**	**45**	**55**	**1,535**	**785**	**75**	**10**	**90**	**855**	**10**	**330**
Average (6-hour peak)	**99**	**275**	**8**	**9**	**256**	**131**	**13**	**2**	**15**	**143**	**2**	**55**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	91	90	1
		Veh	*Ped*

NOT Warranted

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-13 - King Street at Chester Road / Cottage Street

Scenario 3 - 2030 With Payzant Drive Connector Open

Main Street (name)	King Street	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Chester Road	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
King Street	NB	1		1			999	1	
King Street	SB	1		1		1	999	1	
Cottage Road	WB			1					
Chester Road	EB	1				1			

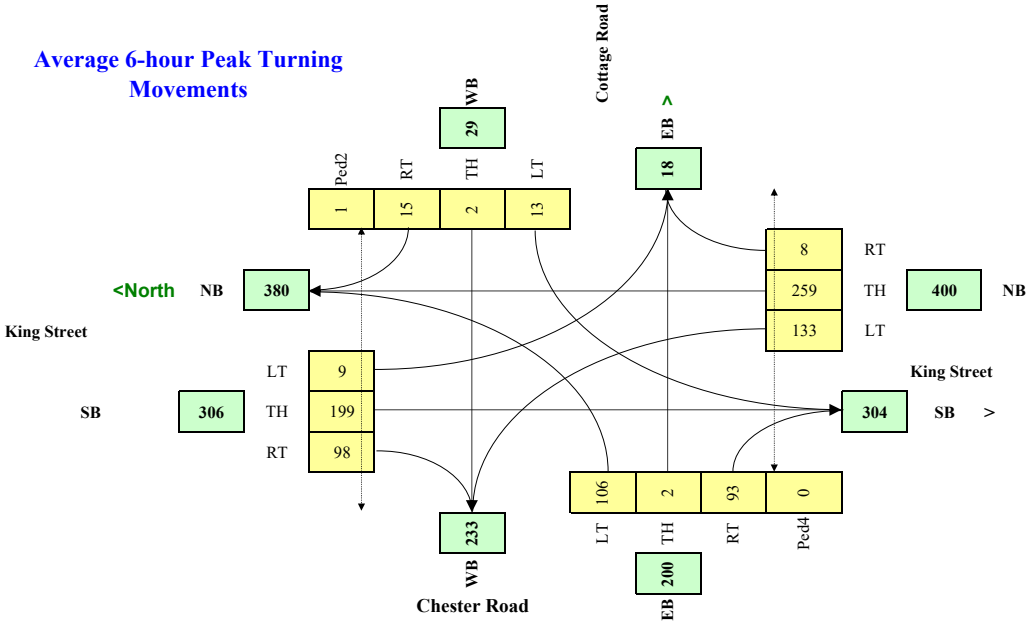
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
King Street	NS	50	2.0%	n	0.0
Chester Road	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	0	0	0	0
8:00 - 9:00	0	0	0	0
11:30 - 12:30	0	0	1	0
12:30 - 13:30	0	0	0	0
15:30 - 16:30	0	0	1	0
16:30 - 17:30	0	0	5	0
Total (6-hour peak)	**0**	**0**	**7**	**0**
Average (6-hour peak)	**0**	**0**	**1**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	110	315	15	15	175	55	5	0	15	160	5	115
8:00 - 9:00	85	240	10	10	130	40	5	0	10	120	5	85
11:30 - 12:30	85	170	5	5	130	65	10	0	10	70	0	60
12:30 - 13:30	85	170	5	5	130	65	10	0	10	70	0	60
15:30 - 16:30	200	305	5	10	290	165	20	5	20	100	0	110
16:30 - 17:30	235	355	5	10	340	195	25	5	25	115	0	125
Total (6-hour peak)	**800**	**1,555**	**45**	**55**	**1,195**	**585**	**75**	**10**	**90**	**635**	**10**	**555**
Average (6-hour peak)	**133**	**259**	**8**	**9**	**199**	**98**	**13**	**2**	**15**	**106**	**2**	**93**

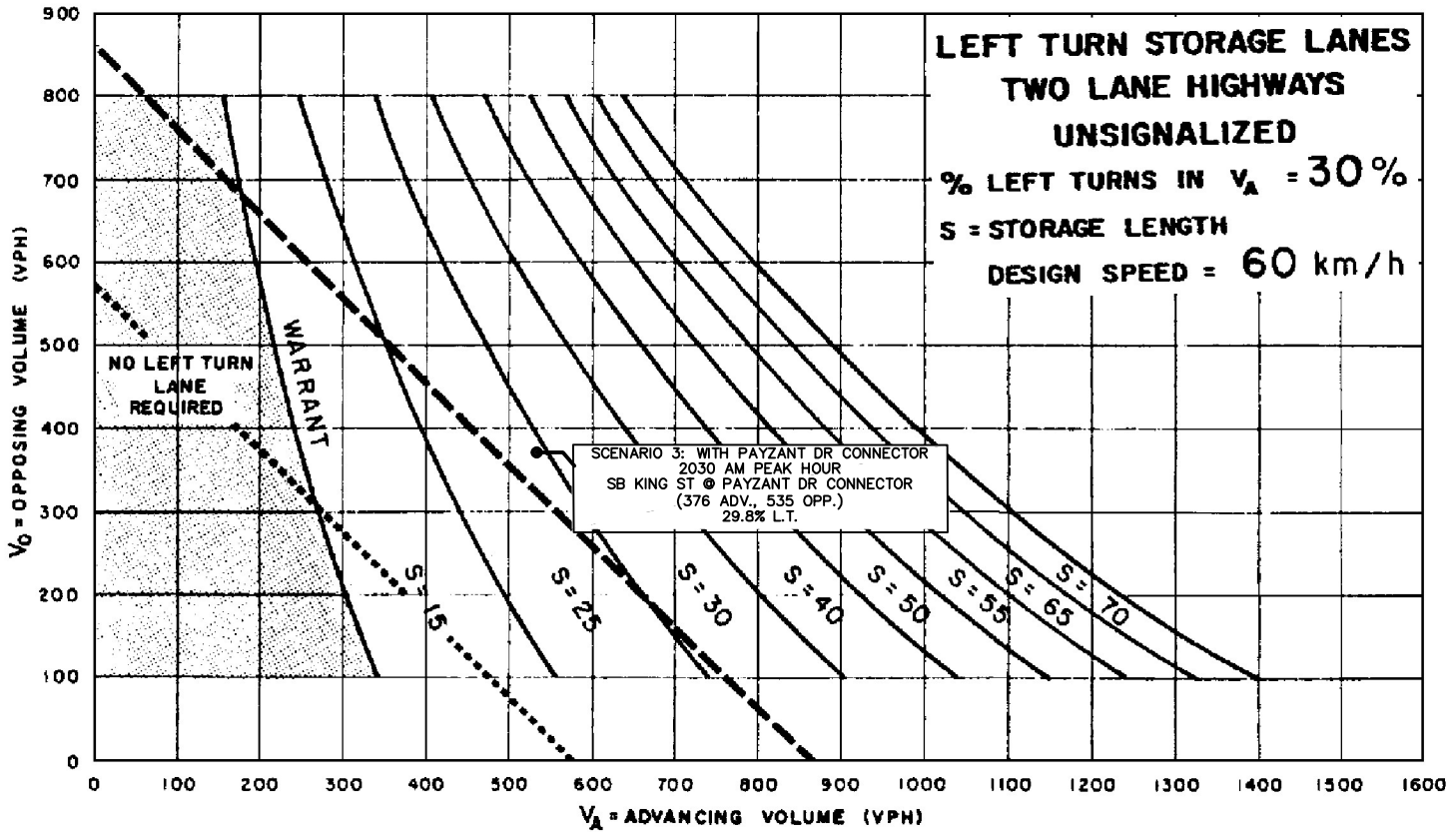
Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	75	74	1
		Veh	*Ped*

NOT Warranted



WSP	Intersection Infrastructure Needs Assessment Windsor, NS	Figure B-3
	Left Turn Lane Warrant Intersection #5: King Street at Payzant Drive Connector AM and PM Peak Hours	August 2021

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table B-15 - King Street at Payzant Drive Connector

Scenario 3 - 2030 With Payzant Drive Connector Open

Main Street (name)	King Street	Direction (EW or NS)	NS	Date:	August 2021
Side Street (name)	Payzant Drive	Direction (EW or NS)	EW	City:	Windsor, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
King Street	NB			1			999	1	
King Street	SB	1		1			999	1	
Payzant Drive	WB			1					
	EB								

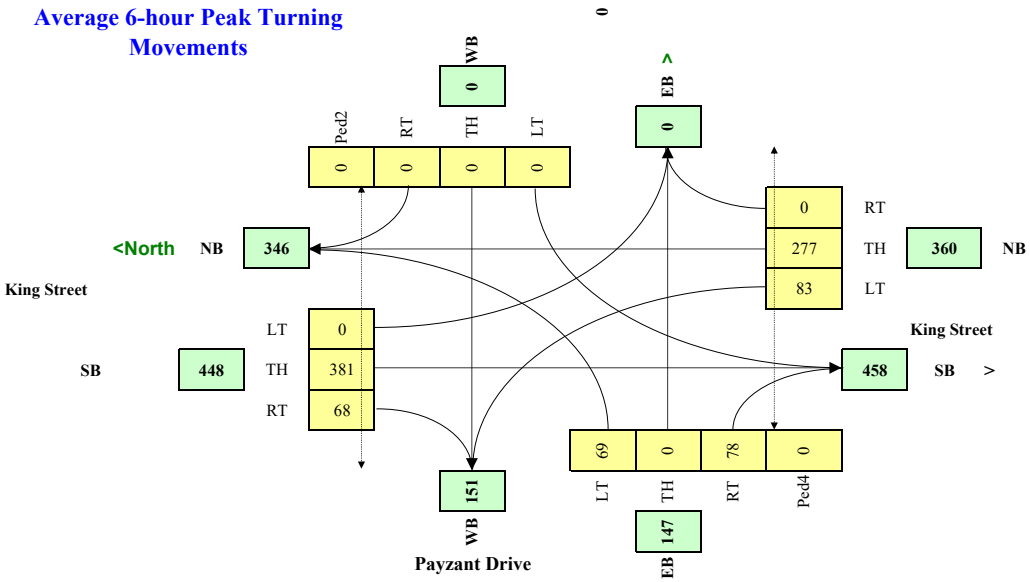
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
King Street	NS	50	2.0%	n	0.0
Payzant Drive	EW	50	2.0%	n	

	Ped3 NS W Side	Ped1 NS E Side	Ped2 EW N Side	Ped4 EW S side
7:00 - 8:00	0	0	0	0
8:00 - 9:00	0	0	0	0
11:30 - 12:30	0	0	0	0
12:30 - 13:30	0	0	0	0
15:30 - 16:30	0	0	0	0
16:30 - 17:30	0	0	0	0
Total (6-hour peak)	**0**	**0**	**0**	**0**
Average (6-hour peak)	**0**	**0**	**0**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	16,000
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	110	265	0	0	450	90	0	0	0	100	0	80
8:00 - 9:00	85	200	0	0	335	70	0	0	0	75	0	60
11:30 - 12:30	55	180	0	0	250	45	0	0	0	45	0	50
12:30 - 13:30	55	180	0	0	250	45	0	0	0	45	0	50
15:30 - 16:30	90	385	0	0	460	70	0	0	0	70	0	105
16:30 - 17:30	105	450	0	0	540	85	0	0	0	80	0	120
Total (6-hour peak)	**500**	**1,660**	**0**	**0**	**2,285**	**405**	**0**	**0**	**0**	**415**	**0**	**465**
Average (6-hour peak)	**83**	**277**	**0**	**0**	**381**	**68**	**0**	**0**	**0**	**69**	**0**	**78**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F(X_{v\text{-}p}) L) / K_2] \times C_i$$

W =	60	60	0
		Veh	*Ped*

NOT Warranted

APPENDIX

C

INTERSECTION PERFORMANCE ANALYSIS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	65	1	170	1	395	230	295	420	5
Future Volume (Veh/h)	1	1	1	65	1	170	1	395	230	295	420	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	1	71	1	185	1	429	250	321	457	5
Pedestrians		5			5						5	
Lane Width (m)		3.6			3.6						3.6	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		0			0						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1728	1792	464	1662	1670	564	467			684		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1728	1792	464	1662	1670	564	467			684		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	98	100	0	98	64	100			65		
cM capacity (veh/h)	32	52	595	55	61	521	1090			905		

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	3	71	186	1	679	321	462
Volume Left	1	71	0	1	0	321	0
Volume Right	1	0	185	0	250	0	5
cSH	57	55	501	1090	1700	905	1700
Volume to Capacity	0.05	1.30	0.37	0.00	0.40	0.35	0.27
Queue Length 95th (m)	1.3	50.3	13.6	0.0	0.0	12.9	0.0
Control Delay (s)	71.7	345.9	16.4	8.3	0.0	11.1	0.0
Lane LOS	F	F	C	A		B	
Approach Delay (s)	71.7	107.4		0.0		4.6	
Approach LOS	F	F					

Intersection Summary				
Average Delay	18.2			
Intersection Capacity Utilization	72.8%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	5	110	5	165	5	495	55	80	490	5
Future Volume (Veh/h)	5	1	5	110	5	165	5	495	55	80	490	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	1	5	120	5	179	5	538	60	87	533	5
Pedestrians		5			5						5	
Lane Width (m)		3.6			3.6						3.6	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		0			0						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1449	1328	540	1296	1300	578	543			603		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1449	1328	540	1296	1300	578	543			603		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	99	99	5	97	65	100			91		
cM capacity (veh/h)	63	139	539	126	145	511	1022			971		

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	11	120	184	5	598	87	538
Volume Left	5	120	0	5	0	87	0
Volume Right	5	0	179	0	60	0	5
cSH	115	126	478	1022	1700	971	1700
Volume to Capacity	0.10	0.95	0.38	0.00	0.35	0.09	0.32
Queue Length 95th (m)	2.5	50.8	14.3	0.1	0.0	2.4	0.0
Control Delay (s)	39.6	134.2	17.2	8.5	0.0	9.1	0.0
Lane LOS	E	F	C	A		A	
Approach Delay (s)	39.6	63.4		0.1		1.3	
Approach LOS	E	F					

Intersection Summary				
Average Delay	13.3			
Intersection Capacity Utilization	55.8%	ICU Level of Service		B
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	5	40	215	1	271	60	407	311	357	449	35
Future Volume (vph)	34	5	40	215	1	271	60	407	311	357	449	35
Satd. Flow (prot)	1770	1563	0	1770	1530	0	1770	1715	0	1770	1838	0
Flt Permitted	0.579			0.507			0.469			0.081		
Satd. Flow (perm)	1079	1563	0	944	1530	0	874	1715	0	151	1838	0
Satd. Flow (RTOR)		43			295			42			7	
Lane Group Flow (vph)	37	48	0	234	296	0	65	780	0	388	526	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	24.0	24.0		13.0	37.0		51.0	51.0		22.0	73.0	
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		4.0	6.0	
Act Effct Green (s)	11.6	11.6		23.7	21.7		45.2	45.2		69.3	67.3	
Actuated g/C Ratio	0.11	0.11		0.23	0.21		0.45	0.45		0.69	0.67	
v/c Ratio	0.30	0.22		0.78	0.53		0.17	0.99		0.99	0.43	
Control Delay	48.6	17.1		52.6	7.5		20.3	57.6		73.3	10.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.6	17.1		52.6	7.5		20.3	57.6		73.3	10.1	
LOS	D	B		D	A		C	E		E	B	
Approach Delay		30.8			27.4			54.7			36.9	
Approach LOS		C			C			D			D	
Queue Length 50th (m)	7.3	1.0		42.6	0.2		8.0	152.3		~64.4	46.7	
Queue Length 95th (m)	17.7	11.7		66.5	20.6		19.5	#267.2		#142.7	85.2	
Internal Link Dist (m)		208.9			175.7			168.9			157.6	
Turn Bay Length (m)	40.0			75.0			30.0			85.0		
Base Capacity (vph)	193	314		301	675		390	790		392	1226	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.19	0.15		0.78	0.44		0.17	0.99		0.99	0.43	

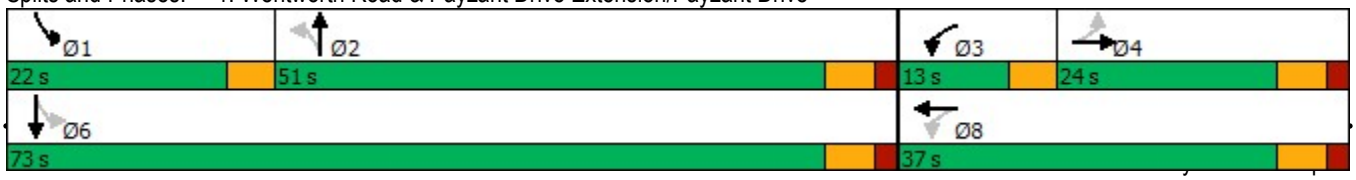
Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 101.1
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 40.9 — Intersection LOS: D
Intersection Capacity Utilization 102.0% — ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Wentworth Road & Payzant Drive Extension/Payzant Drive

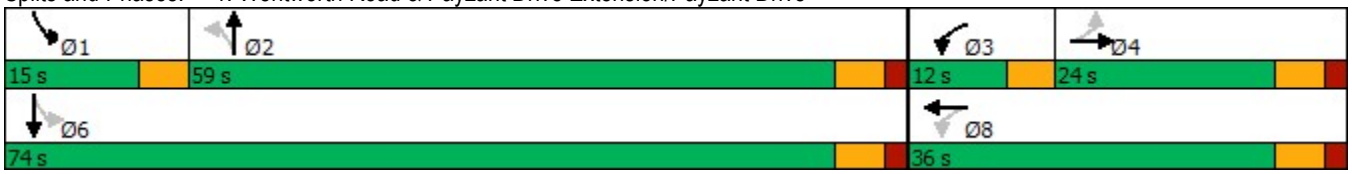


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	5	71	224	5	238	51	535	217	169	509	35
Future Volume (vph)	84	5	71	224	5	238	51	535	217	169	509	35
Satd. Flow (prot)	1770	1548	0	1770	1534	0	1770	1765	0	1770	1840	0
Flt Permitted	0.596			0.546			0.441			0.079		
Satd. Flow (perm)	1110	1548	0	1017	1534	0	821	1765	0	147	1840	0
Satd. Flow (RTOR)		77			259			26			6	
Lane Group Flow (vph)	91	82	0	243	264	0	55	818	0	184	591	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	24.0	24.0		12.0	36.0		59.0	59.0		15.0	74.0	
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		4.0	6.0	
Act Effct Green (s)	13.8	13.8		27.9	25.9		49.4	49.4		66.1	64.1	
Actuated g/C Ratio	0.14	0.14		0.27	0.25		0.48	0.48		0.65	0.63	
v/c Ratio	0.61	0.30		0.72	0.45		0.14	0.94		0.70	0.51	
Control Delay	60.5	13.6		46.3	7.0		16.3	45.0		33.4	12.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	60.5	13.6		46.3	7.0		16.3	45.0		33.4	12.5	
LOS	E	B		D	A		B	D		C	B	
Approach Delay		38.3			25.9			43.2			17.4	
Approach LOS		D			C			D			B	
Queue Length 50th (m)	19.0	1.0		45.1	0.8		6.2	153.4		19.1	61.0	
Queue Length 95th (m)	36.5	14.7		#70.2	20.8		14.9	#255.1		#53.1	97.6	
Internal Link Dist (m)		208.9			175.7			168.9			157.6	
Turn Bay Length (m)	45.0			75.0			30.0			85.0		
Base Capacity (vph)	197	338		337	636		429	935		271	1237	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.46	0.24		0.72	0.42		0.13	0.87		0.68	0.48	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 102.1
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 30.5 Intersection LOS: C
Intersection Capacity Utilization 93.1% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

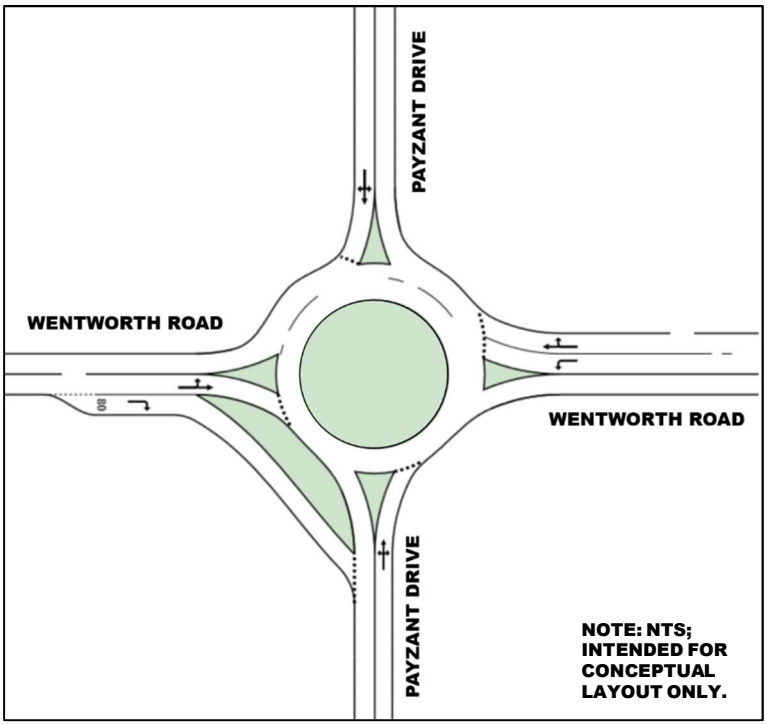
Splits and Phases: 1: Wentworth Road & Payzant Drive Extension/Payzant Drive



ARCADY ANALYSIS – 2030 AM & PM PEAK HOUR

Scenario 2

Wentworth Road at Payzant Drive *Without* Payzant Drive Connector



Arm	V- Approach Road half-width (m)	E-Entry Width (m)	l'- Effective flare length (m)	R – Entry Radius (m)	D – Inscribed circle diameter (m)	PHI – Conflict (entry) angle (deg)
Wentworth Rd SB	3.5	7.5	60	30	60	20
Wentworth Rd NB	3.5	3.5	0	30	60	20
Payzant Dr WB	3.5	3.5	0	30	60	20
Payzant Dr EB	3.5	3.5	0	30	60	20

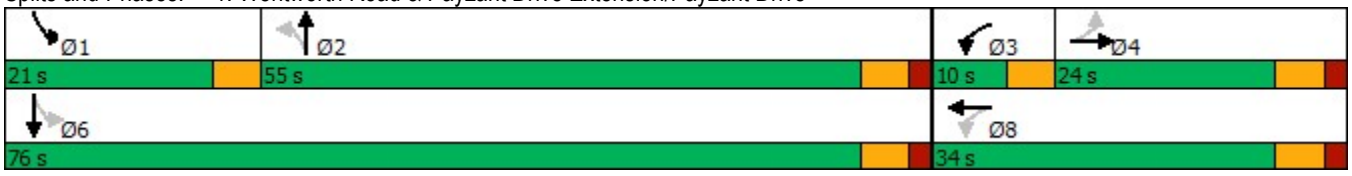
LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement				Overall Intersection	
	Payzant Drive		Wentworth Road			
	EB	WB	NB	SB	Delay	LOS
Scenario 2 - 2030 AM Peak Hour ***without*** Payzant Drive Connection						
Delay	7.8	9.9	10.1	3.9	7.4	A
LOS	A	A	B	A		
v/c	0.15	0.55	0.59	0.51		
Queue	3.5	19.6	17.5	10.5		
Scenario 2 - 2030 PM Peak Hour ***without*** Payzant Drive Connection						
Delay	8.6	18.0	12.8	3.5	10.3	B
LOS	A	C	B	A		
v/c	0.29	0.72	0.70	0.45		
Queue	11.2	79.8	56.0	13.3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	10	38	111	4	232	56	390	216	285	435	35
Future Volume (vph)	31	10	38	111	4	232	56	390	216	285	435	35
Satd. Flow (prot)	1770	1598	0	1770	1532	0	1770	1742	0	1770	1837	0
Flt Permitted	0.601			0.540			0.475			0.140		
Satd. Flow (perm)	1120	1598	0	1006	1532	0	885	1742	0	261	1837	0
Satd. Flow (RTOR)		41			252			33			7	
Lane Group Flow (vph)	34	52	0	121	256	0	61	659	0	310	511	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	24.0	24.0		10.0	34.0		55.0	55.0		21.0	76.0	
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		4.0	6.0	
Act Effct Green (s)	11.8	11.8		21.4	19.3		36.3	36.3		56.2	54.1	
Actuated g/C Ratio	0.14	0.14		0.25	0.22		0.42	0.42		0.65	0.63	
v/c Ratio	0.22	0.20		0.40	0.48		0.16	0.88		0.76	0.44	
Control Delay	42.8	18.6		33.6	7.9		17.8	36.3		27.6	9.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.8	18.6		33.6	7.9		17.8	36.3		27.6	9.7	
LOS	D	B		C	A		B	D		C	A	
Approach Delay		28.2			16.1			34.7			16.5	
Approach LOS		C			B			C			B	
Queue Length 50th (m)	5.6	1.8		17.2	0.6		6.3	95.6		26.0	40.2	
Queue Length 95th (m)	16.5	13.4		37.7	20.9		17.2	#190.7		#74.8	75.4	
Internal Link Dist (m)		208.9			175.7			168.9			157.6	
Turn Bay Length (m)	40.0			75.0			30.0			85.0		
Base Capacity (vph)	247	384		306	691		531	1060		485	1486	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.14	0.14		0.40	0.37		0.11	0.62		0.64	0.34	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 86.1
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 23.5 Intersection LOS: C
Intersection Capacity Utilization 88.8% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Wentworth Road & Payzant Drive Extension/Payzant Drive

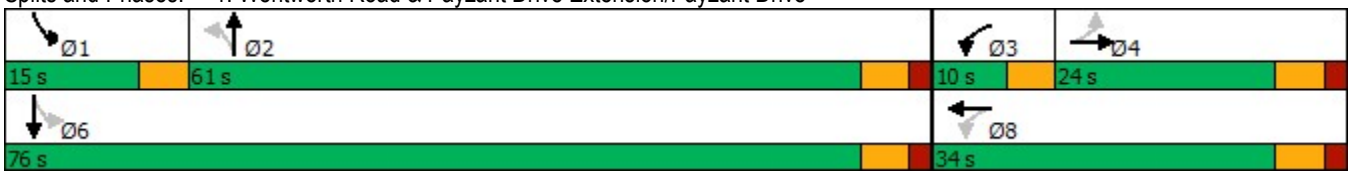


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	12	66	95	8	204	48	520	127	111	488	35
Future Volume (vph)	82	12	66	95	8	204	48	520	127	111	488	35
Satd. Flow (prot)	1770	1578	0	1770	1541	0	1770	1796	0	1770	1840	0
Flt Permitted	0.615			0.538			0.451			0.131		
Satd. Flow (perm)	1146	1578	0	1002	1541	0	840	1796	0	244	1840	0
Satd. Flow (RTOR)		72			222			16			6	
Lane Group Flow (vph)	89	85	0	103	231	0	52	703	0	121	568	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	24.0	24.0		10.0	34.0		61.0	61.0		15.0	76.0	
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		4.0	6.0	
Act Effct Green (s)	13.1	13.1		22.8	20.7		38.7	38.7		55.5	53.4	
Actuated g/C Ratio	0.15	0.15		0.26	0.24		0.45	0.45		0.64	0.62	
v/c Ratio	0.51	0.28		0.32	0.43		0.14	0.87		0.35	0.50	
Control Delay	49.6	15.3		30.4	7.8		15.6	33.8		9.7	11.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	49.6	15.3		30.4	7.8		15.6	33.8		9.7	11.4	
LOS	D	B		C	A		B	C		A	B	
Approach Delay		32.8			14.8			32.5			11.1	
Approach LOS		C			B			C			B	
Queue Length 50th (m)	14.8	2.0		13.9	1.2		5.2	105.8		7.6	51.0	
Queue Length 95th (m)	35.3	16.6		32.4	20.9		13.3	172.6		16.3	87.5	
Internal Link Dist (m)		208.9			175.7			168.9			157.6	
Turn Bay Length (m)	45.0			75.0			30.0			85.0		
Base Capacity (vph)	248	399		319	667		557	1196		358	1493	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.21		0.32	0.35		0.09	0.59		0.34	0.38	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 86.6
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 22.0
Intersection LOS: C
Intersection Capacity Utilization 84.0%
ICU Level of Service E
Analysis Period (min) 15

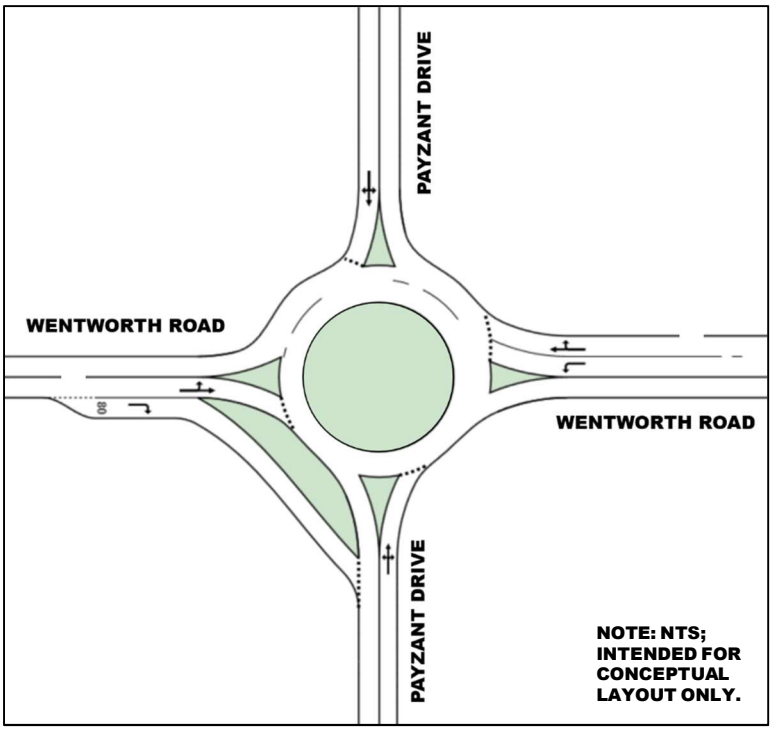
Splits and Phases: 1: Wentworth Road & Payzant Drive Extension/Payzant Drive



ARCADY ANALYSIS – 2030 AM & PM PEAK HOUR

Scenario 3

Wentworth Road at Payzant Drive *With* Payzant Drive Connector



Arm	V- Approach Road half-width (m)	E-Entry Width (m)	l'- Effective flare length (m)	R – Entry Radius (m)	D – Inscribed circle diameter (m)	PHI – Conflict (entry) angle (deg)
Wentworth Rd SB	3.5	7.5	60	30	60	20
Wentworth Rd NB	3.5	3.5	0	30	60	20
Payzant Dr WB	3.5	3.5	0	30	60	20
Payzant Dr EB	3.5	3.5	0	30	60	20

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement				Overall Intersection	
	Payzant Drive		Wentworth Road			
	EB	WB	NB	SB	Delay	LOS
Scenario 3 - 2030 AM Peak Hour ***with*** Payzant Drive Connection						
Delay	6.4	7.0	8.7	3.3	6.0	A
LOS	A	A	A	A		
v/c	0.13	0.38	0.54	0.44		
Queue	3.5	19.6	15.4	14.0		
Scenario 3 - 2030 PM Peak Hour ***with*** Payzant Drive Connection						
Delay	6.8	9.3	10.9	2.9	7.3	A
LOS	A	A	B	A		
v/c	0.25	0.47	0.65	0.39		
Queue	9.8	22.4	31.5	18.9		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	25	45	620	390	80
Future Volume (Veh/h)	30	25	45	620	390	80
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	27	49	674	424	87
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)				327		
pX, platoon unblocked						
vC, conflicting volume	1244	472	516			
vC1, stage 1 conf vol	472					
vC2, stage 2 conf vol	772					
vCu, unblocked vol	1244	472	516			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	91	95	95			
cM capacity (veh/h)	382	589	1045			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	33	27	49	674	511
Volume Left	33	0	49	0	0
Volume Right	0	27	0	0	87
cSH	382	589	1045	1700	1700
Volume to Capacity	0.09	0.05	0.05	0.40	0.30
Queue Length 95th (m)	2.3	1.2	1.2	0.0	0.0
Control Delay (s)	15.3	11.4	8.6	0.0	0.0
Lane LOS	C	B	A		
Approach Delay (s)	13.6		0.6		0.0
Approach LOS	B				

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	75	60	435	535	115
Future Volume (Veh/h)	120	75	60	435	535	115
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	130	82	65	473	582	125
Pedestrians	135					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	11					
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)				327		
pX, platoon unblocked						
vC, conflicting volume	1382	780	842			
vC1, stage 1 conf vol	780					
vC2, stage 2 conf vol	603					
vCu, unblocked vol	1382	780	842			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	60	77	91			
cM capacity (veh/h)	327	351	704			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	130	82	65	473	707
Volume Left	130	0	65	0	0
Volume Right	0	82	0	0	125
cSH	327	351	704	1700	1700
Volume to Capacity	0.40	0.23	0.09	0.28	0.42
Queue Length 95th (m)	14.7	7.1	2.4	0.0	0.0
Control Delay (s)	23.0	18.4	10.6	0.0	0.0
Lane LOS	C	C	B		
Approach Delay (s)	21.2		1.3		0.0
Approach LOS	C				

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	35	52	771	598	91
Future Volume (Veh/h)	37	35	52	771	598	91
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	38	57	838	650	99
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)				327		
pX, platoon unblocked						
vC, conflicting volume	1656	704	754			
vC1, stage 1 conf vol	704					
vC2, stage 2 conf vol	952					
vCu, unblocked vol	1656	704	754			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	86	91	93			
cM capacity (veh/h)	292	435	853			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	40	38	57	838	749
Volume Left	40	0	57	0	0
Volume Right	0	38	0	0	99
cSH	292	435	853	1700	1700
Volume to Capacity	0.14	0.09	0.07	0.49	0.44
Queue Length 95th (m)	3.7	2.3	1.7	0.0	0.0
Control Delay (s)	19.2	14.1	9.5	0.0	0.0
Lane LOS	C	B	A		
Approach Delay (s)	16.7		0.6		0.0
Approach LOS	C				

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	137	88	75	671	722	132
Future Volume (Veh/h)	137	88	75	671	722	132
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	149	96	82	729	785	143
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)				327		
pX, platoon unblocked						
vC, conflicting volume	1754	862	933			
vC1, stage 1 conf vol	862					
vC2, stage 2 conf vol	893					
vCu, unblocked vol	1754	862	933			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	46	73	89			
cM capacity (veh/h)	274	353	731			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	149	96	82	729	928
Volume Left	149	0	82	0	0
Volume Right	0	96	0	0	143
cSH	274	353	731	1700	1700
Volume to Capacity	0.54	0.27	0.11	0.43	0.55
Queue Length 95th (m)	24.0	8.7	3.0	0.0	0.0
Control Delay (s)	32.7	18.9	10.5	0.0	0.0
Lane LOS	D	C	B		
Approach Delay (s)	27.3		1.1		0.0
Approach LOS	D				

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	35	52	655	478	91
Future Volume (Veh/h)	37	35	52	655	478	91
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	38	57	712	520	99
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)				327		
pX, platoon unblocked						
vC, conflicting volume	1400	574	624			
vC1, stage 1 conf vol	574					
vC2, stage 2 conf vol	826					
vCu, unblocked vol	1400	574	624			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	93	94			
cM capacity (veh/h)	346	516	953			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	40	38	57	712	619
Volume Left	40	0	57	0	0
Volume Right	0	38	0	0	99
cSH	346	516	953	1700	1700
Volume to Capacity	0.12	0.07	0.06	0.42	0.36
Queue Length 95th (m)	3.1	1.9	1.5	0.0	0.0
Control Delay (s)	16.8	12.5	9.0	0.0	0.0
Lane LOS	C	B	A		
Approach Delay (s)	14.7		0.7		0.0
Approach LOS	B				

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	137	88	75	563	567	132
Future Volume (Veh/h)	137	88	75	563	567	132
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	149	96	82	612	616	143
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (m)				327		
pX, platoon unblocked						
vC, conflicting volume	1468	692	764			
vC1, stage 1 conf vol	692					
vC2, stage 2 conf vol	776					
vCu, unblocked vol	1468	692	764			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	55	78	90			
cM capacity (veh/h)	331	442	845			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	149	96	82	612	759
Volume Left	149	0	82	0	0
Volume Right	0	96	0	0	143
cSH	331	442	845	1700	1700
Volume to Capacity	0.45	0.22	0.10	0.36	0.45
Queue Length 95th (m)	17.9	6.5	2.6	0.0	0.0
Control Delay (s)	24.5	15.4	9.7	0.0	0.0
Lane LOS	C	C	A		
Approach Delay (s)	20.9		1.1		0.0
Approach LOS	C				

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	30	50	410	245	20
Future Volume (Veh/h)	25	30	50	410	245	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	33	54	446	266	22
Pedestrians				5		
Lane Width (m)				3.6		
Walking Speed (m/s)				1.2		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	831	282	288			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	831	282	288			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	96	96			
cM capacity (veh/h)	325	754	1274			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	60	500	288
Volume Left	27	54	0
Volume Right	33	0	22
cSH	473	1274	1700
Volume to Capacity	0.13	0.04	0.17
Queue Length 95th (m)	3.5	1.1	0.0
Control Delay (s)	13.7	1.3	0.0
Lane LOS	B	A	
Approach Delay (s)	13.7	1.3	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	25	35	410	500	35
Future Volume (Veh/h)	25	25	35	410	500	35
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	27	38	446	543	38
Pedestrians				5		
Lane Width (m)				3.6		
Walking Speed (m/s)				1.2		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1084	567	581			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1084	567	581			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	95	96			
cM capacity (veh/h)	231	521	993			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	54	484	581
Volume Left	27	38	0
Volume Right	27	0	38
cSH	320	993	1700
Volume to Capacity	0.17	0.04	0.34
Queue Length 95th (m)	4.8	1.0	0.0
Control Delay (s)	18.5	1.1	0.0
Lane LOS	C	A	
Approach Delay (s)	18.5	1.1	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	39	61	492	349	38
Future Volume (Veh/h)	38	39	61	492	349	38
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	41	42	66	535	379	41
Pedestrians				5		
Lane Width (m)				3.6		
Walking Speed (m/s)				1.2		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1066	404	420			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1066	404	420			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	82	93	94			
cM capacity (veh/h)	232	643	1139			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	83	601	420
Volume Left	41	66	0
Volume Right	42	0	41
cSH	343	1139	1700
Volume to Capacity	0.24	0.06	0.25
Queue Length 95th (m)	7.5	1.5	0.0
Control Delay (s)	18.8	1.5	0.0
Lane LOS	C	A	
Approach Delay (s)	18.8	1.5	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	38	45	543	622	53
Future Volume (Veh/h)	48	38	45	543	622	53
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	41	49	590	676	58
Pedestrians				5		
Lane Width (m)				3.6		
Walking Speed (m/s)				1.2		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1393	710	734			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1393	710	734			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	65	91	94			
cM capacity (veh/h)	147	432	871			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	93	639	734
Volume Left	52	49	0
Volume Right	41	0	58
cSH	208	871	1700
Volume to Capacity	0.45	0.06	0.43
Queue Length 95th (m)	16.9	1.4	0.0
Control Delay (s)	35.7	1.5	0.0
Lane LOS	E	A	
Approach Delay (s)	35.7	1.5	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	39	61	411	238	38
Future Volume (Veh/h)	38	39	61	411	238	38
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	41	42	66	447	259	41
Pedestrians				5		
Lane Width (m)				3.6		
Walking Speed (m/s)				1.2		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	858	284	300			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	858	284	300			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	94	95			
cM capacity (veh/h)	310	751	1261			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	83	513	300
Volume Left	41	66	0
Volume Right	42	0	41
cSH	441	1261	1700
Volume to Capacity	0.19	0.05	0.18
Queue Length 95th (m)	5.5	1.3	0.0
Control Delay (s)	15.0	1.5	0.0
Lane LOS	C	A	
Approach Delay (s)	15.0	1.5	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	38	45	482	496	53
Future Volume (Veh/h)	48	38	45	482	496	53
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	41	49	524	539	58
Pedestrians				5		
Lane Width (m)				3.6		
Walking Speed (m/s)				1.2		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1190	573	597			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1190	573	597			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	92	95			
cM capacity (veh/h)	197	517	980			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	93	573	597
Volume Left	52	49	0
Volume Right	41	0	58
cSH	271	980	1700
Volume to Capacity	0.34	0.05	0.35
Queue Length 95th (m)	11.8	1.3	0.0
Control Delay (s)	25.1	1.3	0.0
Lane LOS	D	A	
Approach Delay (s)	25.1	1.3	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	190	55	80	290	175	65
Future Volume (Veh/h)	190	55	80	290	175	65
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	207	60	87	315	190	71
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	720	230	266			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	720	230	266			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	44	93	93			
cM capacity (veh/h)	367	805	1292			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	267	402	261
Volume Left	207	87	0
Volume Right	60	0	71
cSH	418	1292	1700
Volume to Capacity	0.64	0.07	0.15
Queue Length 95th (m)	34.5	1.7	0.0
Control Delay (s)	27.6	2.2	0.0
Lane LOS	D	A	
Approach Delay (s)	27.6	2.2	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	8.9		
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	135	75	145	265	315	235
Future Volume (Veh/h)	135	75	145	265	315	235
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	147	82	158	288	342	255
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1078	474	602			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1078	474	602			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	27	86	84			
cM capacity (veh/h)	202	588	971			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	229	446	597
Volume Left	147	158	0
Volume Right	82	0	255
cSH	264	971	1700
Volume to Capacity	0.87	0.16	0.35
Queue Length 95th (m)	58.8	4.6	0.0
Control Delay (s)	67.8	4.5	0.0
Lane LOS	F	A	
Approach Delay (s)	67.8	4.5	0.0
Approach LOS	F		

Intersection Summary			
Average Delay	13.8		
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	216	60	90	362	272	76
Future Volume (Veh/h)	216	60	90	362	272	76
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	235	65	98	393	296	83
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	932	342	384			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	932	342	384			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	13	91	92			
cM capacity (veh/h)	270	697	1170			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	235	65	98	393	379
Volume Left	235	0	98	0	0
Volume Right	0	65	0	0	83
cSH	270	697	1170	1700	1700
Volume to Capacity	0.87	0.09	0.08	0.23	0.22
Queue Length 95th (m)	59.6	2.5	2.2	0.0	0.0
Control Delay (s)	67.0	10.7	8.4	0.0	0.0
Lane LOS	F	B	A		
Approach Delay (s)	54.8		1.7		0.0
Approach LOS	F				

Intersection Summary			
Average Delay	14.8		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	157	85	165	381	418	267
Future Volume (Veh/h)	157	85	165	381	418	267
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	171	92	179	414	454	290
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1376	604	749			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1376	604	749			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	81	79			
cM capacity (veh/h)	126	496	856			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	171	92	179	414	744
Volume Left	171	0	179	0	0
Volume Right	0	92	0	0	290
cSH	126	496	856	1700	1700
Volume to Capacity	1.36	0.19	0.21	0.24	0.44
Queue Length 95th (m)	90.4	5.4	6.3	0.0	0.0
Control Delay (s)	268.5	13.9	10.3	0.0	0.0
Lane LOS	F	B	B		
Approach Delay (s)	179.4		3.1		0.0
Approach LOS	F				

Intersection Summary			
Average Delay	30.7		
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	216	60	90	362	272	76
Future Volume (vph)	216	60	90	362	272	76
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.440			
Satd. Flow (perm)	1770	1583	820	1863	1863	1542
Satd. Flow (RTOR)		65				69
Lane Group Flow (vph)	235	65	98	393	296	83
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Total Split (s)	40.0	40.0	14.0	60.0	46.0	46.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Act Effct Green (s)	13.0	13.0	28.0	25.9	16.6	16.6
Actuated g/C Ratio	0.25	0.25	0.54	0.50	0.32	0.32
v/c Ratio	0.52	0.14	0.17	0.42	0.49	0.15
Control Delay	22.7	6.3	6.6	9.7	19.4	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	6.3	6.6	9.7	19.4	6.8
LOS	C	A	A	A	B	A
Approach Delay	19.1			9.1	16.6	
Approach LOS	B			A	B	
Queue Length 50th (m)	19.8	0.0	3.7	20.1	23.5	1.0
Queue Length 95th (m)	43.8	7.8	11.2	45.2	51.7	9.8
Internal Link Dist (m)	419.3			270.6	481.7	
Turn Bay Length (m)	45.0		25.0			25.0
Base Capacity (vph)	1212	1104	638	1788	1471	1232
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.06	0.15	0.22	0.20	0.07

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 51.4
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 14.1
Intersection LOS: B
Intersection Capacity Utilization 44.6%
ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road

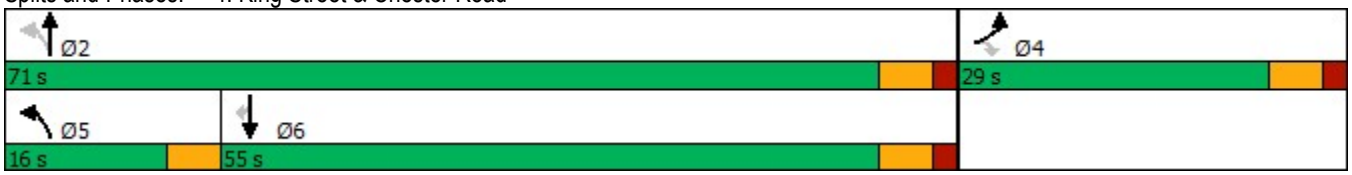


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	157	85	165	381	418	267
Future Volume (vph)	157	85	165	381	418	267
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.283			
Satd. Flow (perm)	1770	1583	527	1863	1863	1544
Satd. Flow (RTOR)		92				186
Lane Group Flow (vph)	171	92	179	414	454	290
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Total Split (s)	29.0	29.0	16.0	71.0	55.0	55.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Act Effct Green (s)	12.2	12.2	37.1	35.0	20.9	20.9
Actuated g/C Ratio	0.20	0.20	0.62	0.59	0.35	0.35
v/c Ratio	0.47	0.23	0.33	0.38	0.70	0.44
Control Delay	27.8	7.8	6.5	7.6	23.2	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.8	7.8	6.5	7.6	23.2	8.1
LOS	C	A	A	A	C	A
Approach Delay	20.8			7.3	17.3	
Approach LOS	C			A	B	
Queue Length 50th (m)	17.1	0.0	6.6	20.0	42.0	7.8
Queue Length 95th (m)	41.2	11.2	16.7	43.1	81.6	26.4
Internal Link Dist (m)	419.3			270.6	28.3	
Turn Bay Length (m)	45.0		25.0			25.0
Base Capacity (vph)	704	685	586	1803	1571	1331
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.13	0.31	0.23	0.29	0.22

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 59.6
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.70
Intersection Signal Delay: 14.2
Intersection LOS: B
Intersection Capacity Utilization 53.2%
ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	160	116	110	337	181	56
Future Volume (Veh/h)	160	116	110	337	181	56
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	174	126	120	366	197	61
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	838	232	263			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	838	232	263			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	43	84	91			
cM capacity (veh/h)	304	803	1296			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	174	126	120	366	258
Volume Left	174	0	120	0	0
Volume Right	0	126	0	0	61
cSH	304	803	1296	1700	1700
Volume to Capacity	0.57	0.16	0.09	0.22	0.15
Queue Length 95th (m)	26.7	4.4	2.4	0.0	0.0
Control Delay (s)	31.6	10.3	8.1	0.0	0.0
Lane LOS	D	B	A		
Approach Delay (s)	22.7		2.0		0.0
Approach LOS	C				

Intersection Summary			
Average Delay	7.4		
Intersection Capacity Utilization	38.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	115	127	235	362	362	197
Future Volume (Veh/h)	115	127	235	362	362	197
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	125	138	255	393	393	214
Pedestrians	5					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1408	505	612			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1408	505	612			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	76	74			
cM capacity (veh/h)	112	565	963			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1
Volume Total	125	138	255	393	607
Volume Left	125	0	255	0	0
Volume Right	0	138	0	0	214
cSH	112	565	963	1700	1700
Volume to Capacity	1.12	0.24	0.26	0.23	0.36
Queue Length 95th (m)	61.7	7.6	8.5	0.0	0.0
Control Delay (s)	193.0	13.4	10.1	0.0	0.0
Lane LOS	F	B	B		
Approach Delay (s)	98.8		4.0		0.0
Approach LOS	F				

Intersection Summary			
Average Delay	18.8		
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	160	116	110	337	181	56
Future Volume (vph)	160	116	110	337	181	56
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.481			
Satd. Flow (perm)	1770	1583	896	1863	1863	1542
Satd. Flow (RTOR)		126				61
Lane Group Flow (vph)	174	126	120	366	197	61
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Total Split (s)	39.0	39.0	16.0	61.0	45.0	45.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Act Effct Green (s)	10.0	10.0	24.4	22.4	12.6	12.6
Actuated g/C Ratio	0.22	0.22	0.55	0.50	0.28	0.28
v/c Ratio	0.44	0.28	0.18	0.39	0.38	0.13
Control Delay	20.0	5.9	6.0	8.6	18.0	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.0	5.9	6.0	8.6	18.0	6.1
LOS	C	A	A	A	B	A
Approach Delay	14.1			7.9	15.2	
Approach LOS	B			A	B	
Queue Length 50th (m)	12.2	0.0	4.0	16.1	13.7	0.0
Queue Length 95th (m)	30.4	10.4	11.1	35.7	33.1	7.3
Internal Link Dist (m)	419.3			270.6	481.7	
Turn Bay Length (m)	35.0		55.0			25.0
Base Capacity (vph)	1343	1232	730	1856	1621	1349
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.10	0.16	0.20	0.12	0.05

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 44.7
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 11.5
Intersection LOS: B
Intersection Capacity Utilization 37.8%
ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road

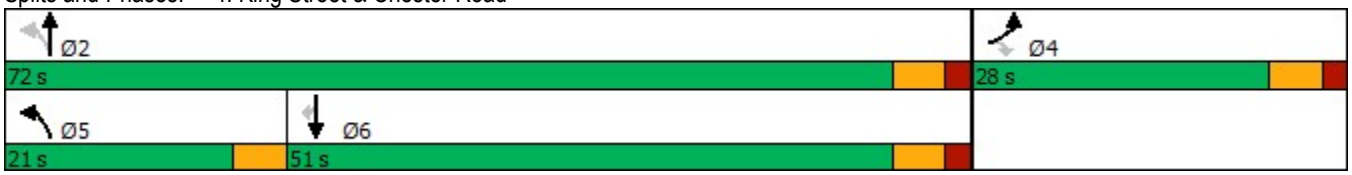


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	115	127	235	362	362	197
Future Volume (vph)	115	127	235	362	362	197
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.314			
Satd. Flow (perm)	1770	1583	585	1863	1863	1543
Satd. Flow (RTOR)		138				147
Lane Group Flow (vph)	125	138	255	393	393	214
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Total Split (s)	28.0	28.0	21.0	72.0	51.0	51.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Act Effct Green (s)	9.6	9.6	36.3	34.2	17.2	17.2
Actuated g/C Ratio	0.17	0.17	0.64	0.61	0.31	0.31
v/c Ratio	0.42	0.36	0.39	0.35	0.69	0.37
Control Delay	28.0	8.4	6.1	6.4	25.0	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	8.4	6.1	6.4	25.0	8.1
LOS	C	A	A	A	C	A
Approach Delay	17.7			6.3	19.1	
Approach LOS	B			A	B	
Queue Length 50th (m)	11.8	0.0	8.8	16.9	35.8	5.0
Queue Length 95th (m)	31.4	13.8	20.2	35.5	72.7	20.6
Internal Link Dist (m)	419.3			270.6	481.7	
Turn Bay Length (m)	45.0		25.0			25.0
Base Capacity (vph)	721	726	750	1824	1517	1284
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.19	0.34	0.22	0.26	0.17

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 56.3
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 13.4
Intersection LOS: B
Intersection Capacity Utilization 51.8%
ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	15	558	20	25	348
Future Volume (Veh/h)	5	15	558	20	25	348
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	16	607	22	27	378
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1050	618			629	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1050	618			629	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	97			97	
cM capacity (veh/h)	244	489			953	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	21	629	405
Volume Left	5	0	27
Volume Right	16	22	0
cSH	395	1700	953
Volume to Capacity	0.05	0.37	0.03
Queue Length 95th (m)	1.3	0.0	0.7
Control Delay (s)	14.6	0.0	0.9
Lane LOS	B		A
Approach Delay (s)	14.6	0.0	0.9
Approach LOS	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	30	533	5	10	645
Future Volume (Veh/h)	30	30	533	5	10	645
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	33	579	5	11	701
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1304	582			584	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1304	582			584	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	81	94			99	
cM capacity (veh/h)	175	513			991	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	66	584	712
Volume Left	33	0	11
Volume Right	33	5	0
cSH	261	1700	991
Volume to Capacity	0.25	0.34	0.01
Queue Length 95th (m)	7.8	0.0	0.3
Control Delay (s)	23.4	0.0	0.3
Lane LOS	C		A
Approach Delay (s)	23.4	0.0	0.3
Approach LOS	C		

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	15	558	20	25	343
Future Volume (Veh/h)	5	15	558	20	25	343
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	16	607	22	27	373
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			52			
pX, platoon unblocked	0.87	0.87			0.87	
vC, conflicting volume	1045	618			629	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	977	485			498	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	97			97	
cM capacity (veh/h)	235	506			927	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	21	629	400
Volume Left	5	0	27
Volume Right	16	22	0
cSH	397	1700	927
Volume to Capacity	0.05	0.37	0.03
Queue Length 95th (m)	1.3	0.0	0.7
Control Delay (s)	14.6	0.0	0.9
Lane LOS	B		A
Approach Delay (s)	14.6	0.0	0.9
Approach LOS	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	30	533	5	10	665
Future Volume (Veh/h)	20	30	533	5	10	665
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	33	579	5	11	723
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			52			
pX, platoon unblocked	0.88	0.88			0.88	
vC, conflicting volume	1326	582			584	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1303	456			458	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	94			99	
cM capacity (veh/h)	154	532			970	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	55	584	734
Volume Left	22	0	11
Volume Right	33	5	0
cSH	269	1700	970
Volume to Capacity	0.20	0.34	0.01
Queue Length 95th (m)	6.0	0.0	0.3
Control Delay (s)	21.8	0.0	0.3
Lane LOS	C		A
Approach Delay (s)	21.8	0.0	0.3
Approach LOS	C		

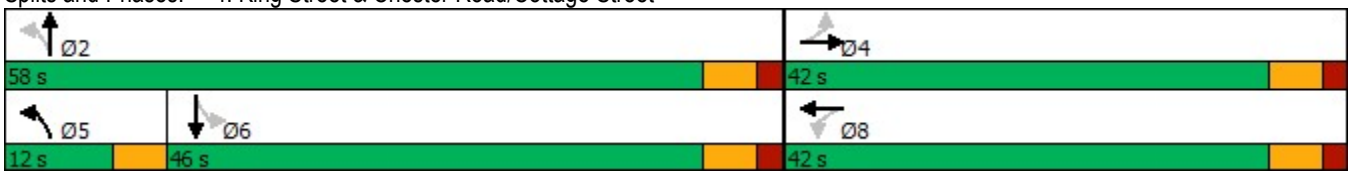
Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	5	60	5	1	15	90	342	15	15	267	76
Future Volume (vph)	216	5	60	5	1	15	90	342	15	15	267	76
Satd. Flow (prot)	1770	1604	0	0	1662	0	1770	1852	0	1770	1791	0
Flt Permitted	0.743				0.947		0.356			0.532		
Satd. Flow (perm)	1384	1604	0	0	1591	0	663	1852	0	991	1791	0
Satd. Flow (RTOR)		65			16			3			17	
Lane Group Flow (vph)	235	70	0	0	22	0	98	388	0	16	373	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	42.0	42.0		42.0	42.0		12.0	58.0		46.0	46.0	
Total Lost Time (s)	6.0	6.0			6.0		4.0	6.0		6.0	6.0	
Act Effct Green (s)	15.9	15.9			15.9		30.0	27.9		19.1	19.1	
Actuated g/C Ratio	0.28	0.28			0.28		0.53	0.49		0.34	0.34	
v/c Ratio	0.60	0.14			0.05		0.20	0.42		0.05	0.61	
Control Delay	26.5	6.6			10.6		8.2	11.1		15.9	21.6	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	26.5	6.6			10.6		8.2	11.1		15.9	21.6	
LOS	C	A			B		A	B		B	C	
Approach Delay		22.0			10.6			10.5			21.4	
Approach LOS		C			B			B			C	
Queue Length 50th (m)	22.0	0.4			0.5		4.4	22.9		1.2	32.9	
Queue Length 95th (m)	50.2	8.9			5.4		13.6	53.5		5.6	69.8	
Internal Link Dist (m)		419.3			114.8			270.6			481.7	
Turn Bay Length (m)	45.0						35.0			15.0		
Base Capacity (vph)	933	1103			1078		518	1642		727	1318	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.25	0.06			0.02		0.19	0.24		0.02	0.28	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 56.5
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 16.9
Intersection LOS: B
Intersection Capacity Utilization 65.0%
ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road/Cottage Street

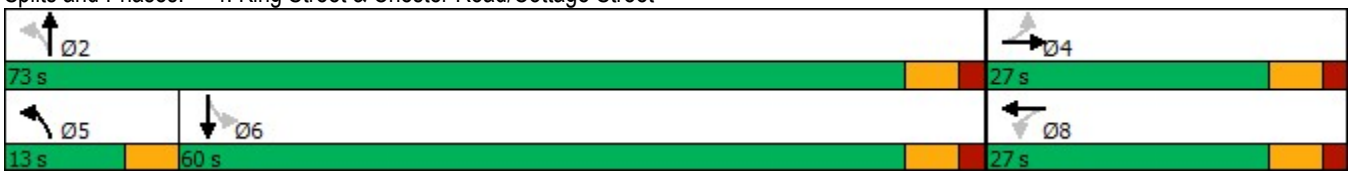


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	1	85	25	5	25	165	376	5	10	398	262
Future Volume (vph)	157	1	85	25	5	25	165	376	5	10	398	262
Satd. Flow (prot)	1770	1587	0	0	1709	0	1770	1859	0	1770	1734	0
Flt Permitted	0.719				0.838		0.146			0.520		
Satd. Flow (perm)	1339	1587	0	0	1464	0	272	1859	0	969	1734	0
Satd. Flow (RTOR)		92			27			1			52	
Lane Group Flow (vph)	171	93	0	0	59	0	179	414	0	11	718	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	27.0	27.0		27.0	27.0		13.0	73.0		60.0	60.0	
Total Lost Time (s)	6.0	6.0			6.0		4.0	6.0		6.0	6.0	
Act Effct Green (s)	15.2	15.2			15.2		50.4	48.3		35.1	35.1	
Actuated g/C Ratio	0.20	0.20			0.20		0.66	0.63		0.46	0.46	
v/c Ratio	0.64	0.24			0.19		0.50	0.35		0.02	0.87	
Control Delay	43.1	9.2			20.4		10.6	7.5		11.1	29.2	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	43.1	9.2			20.4		10.6	7.5		11.1	29.2	
LOS	D	A			C		B	A		B	C	
Approach Delay		31.2			20.4			8.4			28.9	
Approach LOS		C			C			A			C	
Queue Length 50th (m)	23.9	0.1			4.0		8.5	24.9		0.9	85.0	
Queue Length 95th (m)	54.9	13.1			16.5		19.8	47.3		3.7	149.6	
Internal Link Dist (m)		419.3			114.8			270.6			481.7	
Turn Bay Length (m)	45.0						35.0			15.0		
Base Capacity (vph)	389	526			445		366	1599		717	1297	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.44	0.18			0.13		0.49	0.26		0.02	0.55	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 76.2
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 21.6
Intersection LOS: C
Intersection Capacity Utilization 75.0%
ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road/Cottage Street

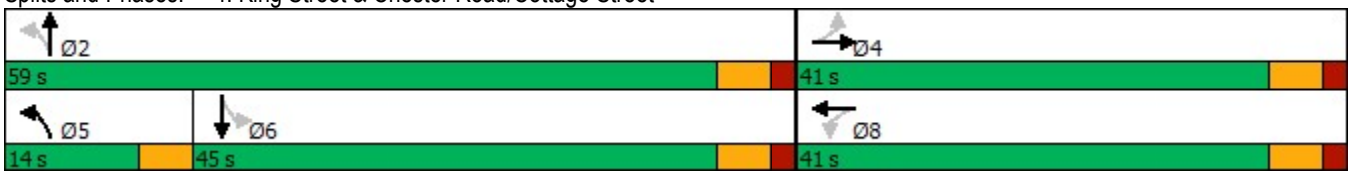


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	5	116	5	1	15	110	317	15	15	176	56
Future Volume (vph)	160	5	116	5	1	15	110	317	15	15	176	56
Satd. Flow (prot)	1770	1595	0	0	1662	0	1770	1850	0	1770	1784	0
Flt Permitted	0.743				0.927		0.482			0.546		
Satd. Flow (perm)	1384	1595	0	0	1558	0	898	1850	0	1017	1784	0
Satd. Flow (RTOR)		126			16			4			19	
Lane Group Flow (vph)	174	131	0	0	22	0	120	361	0	16	252	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	41.0	41.0		41.0	41.0		14.0	59.0		45.0	45.0	
Total Lost Time (s)	6.0	6.0			6.0		4.0	6.0		6.0	6.0	
Act Effct Green (s)	12.6	12.6			12.6		27.6	25.6		16.0	16.0	
Actuated g/C Ratio	0.25	0.25			0.25		0.55	0.51		0.32	0.32	
v/c Ratio	0.50	0.27			0.06		0.19	0.38		0.05	0.44	
Control Delay	23.6	6.0			10.3		6.6	9.1		15.6	17.6	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	23.6	6.0			10.3		6.6	9.1		15.6	17.6	
LOS	C	A			B		A	A		B	B	
Approach Delay		16.0			10.3			8.5			17.5	
Approach LOS		B			B			A			B	
Queue Length 50th (m)	14.7	0.4			0.5		4.4	17.3		1.1	17.8	
Queue Length 95th (m)	33.2	11.1			5.0		12.9	39.8		5.3	41.9	
Internal Link Dist (m)		419.3			114.8			270.6			481.7	
Turn Bay Length (m)	45.0						35.0			15.0		
Base Capacity (vph)	987	1174			1116		668	1785		797	1403	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.18	0.11			0.02		0.18	0.20		0.02	0.18	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 50.5
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.50
Intersection Signal Delay: 12.9
Intersection LOS: B
Intersection Capacity Utilization 60.6%
ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road/Cottage Street

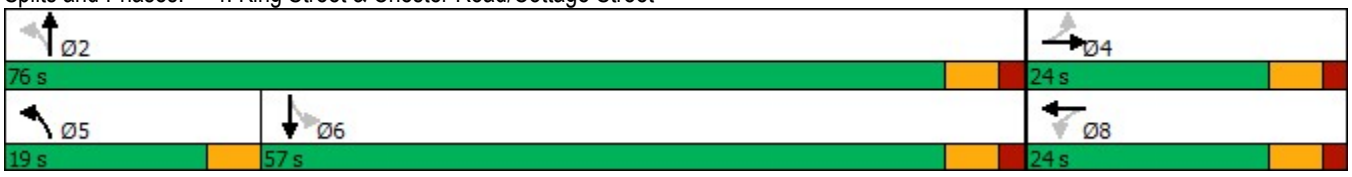


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	1	127	25	5	25	233	357	5	10	342	194
Future Volume (vph)	115	1	127	25	5	25	233	357	5	10	342	194
Satd. Flow (prot)	1770	1585	0	0	1709	0	1770	1859	0	1770	1746	0
Flt Permitted	0.719				0.807		0.186			0.530		
Satd. Flow (perm)	1339	1585	0	0	1410	0	346	1859	0	987	1746	0
Satd. Flow (RTOR)		138			27			2			42	
Lane Group Flow (vph)	125	139	0	0	59	0	253	393	0	11	583	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	24.0	24.0		24.0	24.0		19.0	76.0		57.0	57.0	
Total Lost Time (s)	6.0	6.0			6.0		4.0	6.0		6.0	6.0	
Act Effct Green (s)	12.7	12.7			12.7		45.6	43.5		26.5	26.5	
Actuated g/C Ratio	0.18	0.18			0.18		0.66	0.63		0.39	0.39	
v/c Ratio	0.51	0.34			0.21		0.51	0.33		0.03	0.84	
Control Delay	36.9	8.8			20.0		9.3	6.6		13.5	29.5	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	36.9	8.8			20.0		9.3	6.6		13.5	29.5	
LOS	D	A			B		A	A		B	C	
Approach Delay		22.1			20.0			7.6			29.2	
Approach LOS		C			B			A			C	
Queue Length 50th (m)	15.2	0.1			3.6		10.1	19.2		0.9	63.4	
Queue Length 95th (m)	39.1	15.5			15.8		27.1	40.1		4.1	117.0	
Internal Link Dist (m)		419.3			114.8			270.6			481.7	
Turn Bay Length (m)	45.0						35.0			15.0		
Base Capacity (vph)	367	535			406		555	1730		761	1356	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.34	0.26			0.15		0.46	0.23		0.01	0.43	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 68.8
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 18.7
Intersection LOS: B
Intersection Capacity Utilization 77.9%
ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 4: King Street & Chester Road/Cottage Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	15	558	20	25	343
Future Volume (Veh/h)	5	15	558	20	25	343
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	16	607	22	27	373
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			52			
pX, platoon unblocked	0.87	0.87			0.87	
vC, conflicting volume	1045	618			629	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	977	485			498	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	97			97	
cM capacity (veh/h)	235	506			927	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	21	629	27	373
Volume Left	5	0	27	0
Volume Right	16	22	0	0
cSH	397	1700	927	1700
Volume to Capacity	0.05	0.37	0.03	0.22
Queue Length 95th (m)	1.3	0.0	0.7	0.0
Control Delay (s)	14.6	0.0	9.0	0.0
Lane LOS	B		A	
Approach Delay (s)	14.6	0.0	0.6	
Approach LOS	B			

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	30	533	5	10	665
Future Volume (Veh/h)	20	30	533	5	10	665
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	33	579	5	11	723
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			52			
pX, platoon unblocked	0.88	0.88			0.88	
vC, conflicting volume	1326	582			584	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1303	456			458	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	94			99	
cM capacity (veh/h)	154	532			970	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	55	584	11	723
Volume Left	22	0	11	0
Volume Right	33	5	0	0
cSH	269	1700	970	1700
Volume to Capacity	0.20	0.34	0.01	0.43
Queue Length 95th (m)	6.0	0.0	0.3	0.0
Control Delay (s)	21.8	0.0	8.8	0.0
Lane LOS	C		A	
Approach Delay (s)	21.8	0.0	0.1	
Approach LOS	C			

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	98	78	448	90	112	264
Future Volume (Veh/h)	98	78	448	90	112	264
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	107	85	487	98	122	287
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1067	536			585	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1067	536			585	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	50	84			88	
cM capacity (veh/h)	215	545			990	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	107	85	585	122	287
Volume Left	107	0	0	122	0
Volume Right	0	85	98	0	0
cSH	215	545	1700	990	1700
Volume to Capacity	0.50	0.16	0.34	0.12	0.17
Queue Length 95th (m)	20.0	4.4	0.0	3.4	0.0
Control Delay (s)	37.1	12.8	0.0	9.1	0.0
Lane LOS	E	B		A	
Approach Delay (s)	26.4		0.0	2.7	
Approach LOS	D				

Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	82	122	542	83	104	452
Future Volume (Veh/h)	82	122	542	83	104	452
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	89	133	589	90	113	491
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1351	634			679	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1351	634			679	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	39	72			88	
cM capacity (veh/h)	145	479			913	

Direction, Lane #	WB 1	WB 2	NB 1	SB 1	SB 2
Volume Total	89	133	679	113	491
Volume Left	89	0	0	113	0
Volume Right	0	133	90	0	0
cSH	145	479	1700	913	1700
Volume to Capacity	0.61	0.28	0.40	0.12	0.29
Queue Length 95th (m)	26.0	9.0	0.0	3.4	0.0
Control Delay (s)	62.8	15.4	0.0	9.5	0.0
Lane LOS	F	C		A	
Approach Delay (s)	34.4		0.0	1.8	
Approach LOS	D				

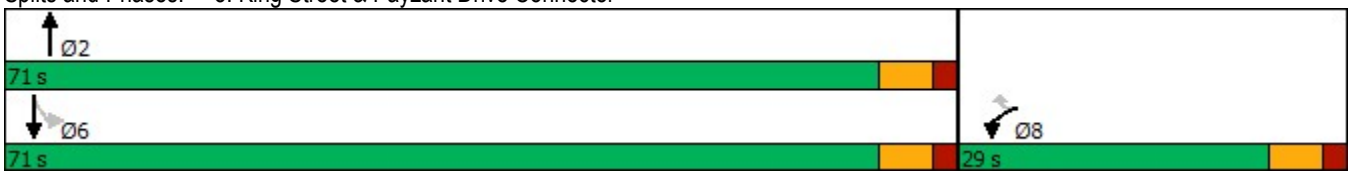
Intersection Summary			
Average Delay	5.8		
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	86	78	443	92	112	264
Future Volume (vph)	86	78	443	92	112	264
Satd. Flow (prot)	1770	1583	1820	0	1770	1863
Flt Permitted	0.950				0.373	
Satd. Flow (perm)	1770	1583	1820	0	695	1863
Satd. Flow (RTOR)		85	21			
Lane Group Flow (vph)	93	85	582	0	122	287
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases		8			6	
Total Split (s)	29.0	29.0	71.0		71.0	71.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Act Effct Green (s)	10.2	10.2	23.0		23.0	23.0
Actuated g/C Ratio	0.25	0.25	0.57		0.57	0.57
v/c Ratio	0.21	0.18	0.56		0.31	0.27
Control Delay	15.1	5.9	10.2		9.7	7.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	15.1	5.9	10.2		9.7	7.4
LOS	B	A	B		A	A
Approach Delay	10.7		10.2			8.1
Approach LOS	B		B			A
Queue Length 50th (m)	4.9	0.0	28.9		5.3	12.1
Queue Length 95th (m)	16.8	8.5	53.9		14.3	23.2
Internal Link Dist (m)	175.3		96.2			92.2
Turn Bay Length (m)	15.0				25.0	
Base Capacity (vph)	1019	947	1820		695	1863
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.09	0.09	0.32		0.18	0.15

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 40.4
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 9.5
Intersection LOS: A
Intersection Capacity Utilization 64.7%
ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 5: King Street & Payzant Drive Connector

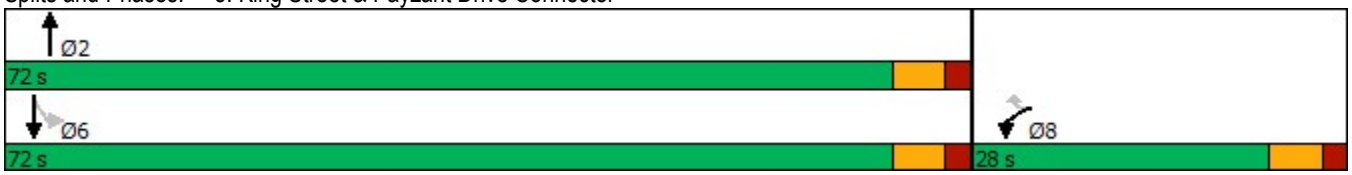


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	90	120	542	85	104	457
Future Volume (vph)	90	120	542	85	104	457
Satd. Flow (prot)	1770	1583	1829	0	1770	1863
Flt Permitted	0.950				0.281	
Satd. Flow (perm)	1770	1583	1829	0	523	1863
Satd. Flow (RTOR)		130	17			
Lane Group Flow (vph)	98	130	681	0	113	497
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases		8			6	
Total Split (s)	28.0	28.0	72.0		72.0	72.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Act Effct Green (s)	10.4	10.4	24.7		24.7	24.7
Actuated g/C Ratio	0.22	0.22	0.52		0.52	0.52
v/c Ratio	0.25	0.29	0.71		0.42	0.51
Control Delay	18.1	6.4	13.0		12.4	9.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	18.1	6.4	13.0		12.4	9.5
LOS	B	A	B		B	A
Approach Delay	11.4		13.0			10.0
Approach LOS	B		B			A
Queue Length 50th (m)	6.2	0.0	37.4		5.1	24.1
Queue Length 95th (m)	19.9	11.4	70.4		15.6	44.7
Internal Link Dist (m)	175.3		96.2			92.2
Turn Bay Length (m)	15.0				25.0	
Base Capacity (vph)	836	816	1829		523	1863
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.12	0.16	0.37		0.22	0.27

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 47.3
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 11.6 Intersection LOS: B
Intersection Capacity Utilization 69.5% ICU Level of Service C
Analysis Period (min) 15

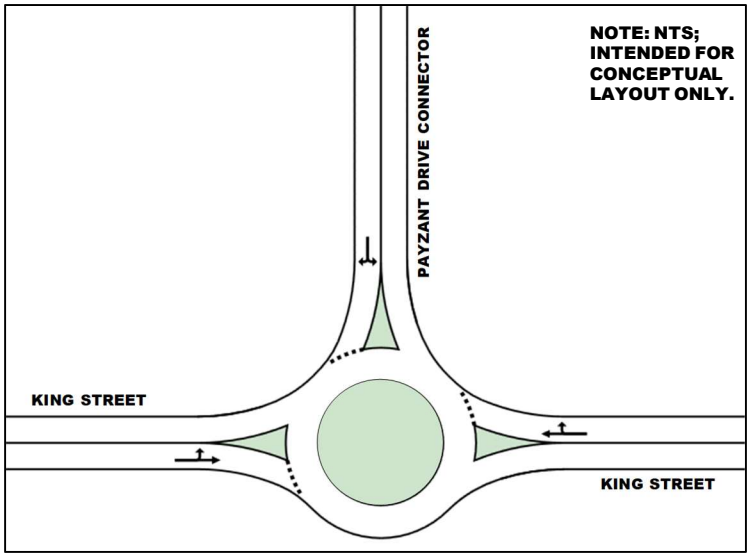
Splits and Phases: 5: King Street & Payzant Drive Connector



ARCADY ANALYSIS – 2030 AM & PM PEAK HOUR

Scenario 3

King Street at Payzant Drive



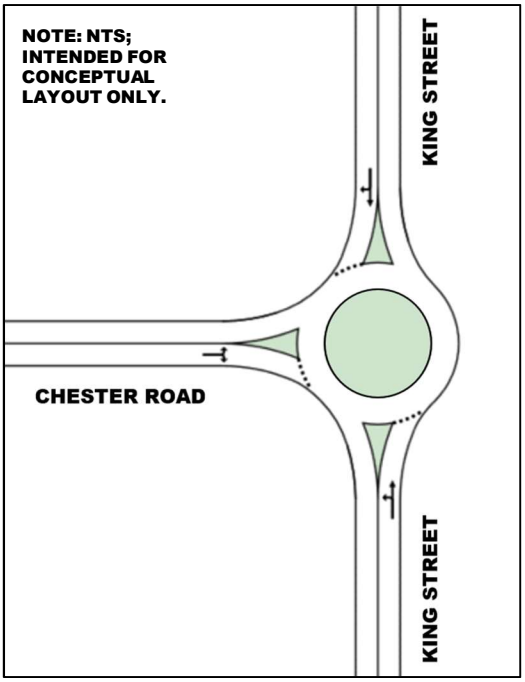
Arm	V- Approach Road half-width (m)	E-Entry Width (m)	l'- Effective flare length (m)	R – Entry Radius (m)	D – Inscribed circle diameter (m)	PHI – Conflict (entry) angle (deg)
King Street SB	3.5	3.5	0	30	50	20
King Street NB	3.5	3.5	0	30	50	20
Payzant Drive EB	3.5	3.5	0	30	50	20

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement			Overall Intersection	
	Payzant Drive Connector	King Street			
	EB	NB	SB	Delay	LOS
Scenario 3 - 2030 AM Peak Hour ***with*** Payzant Drive Connection					
Delay	5.4	5.7	8.2	6.9	A
LOS	A	A	A		
v/c	0.21	0.40	0.57		
Queue	8.4	18.9	10.5		
Scenario 3 - 2030 PM Peak Hour ***with*** Payzant Drive Connection					
Delay	6.5	8.5	10.5	9.1	A
LOS	A	A	B		
v/c	0.29	0.59	0.67		
Queue	11.2	11.9	33.6		

ARCADY ANALYSIS – 2030 AM & PM PEAK HOUR

Scenario 2

King Street at Chester Road



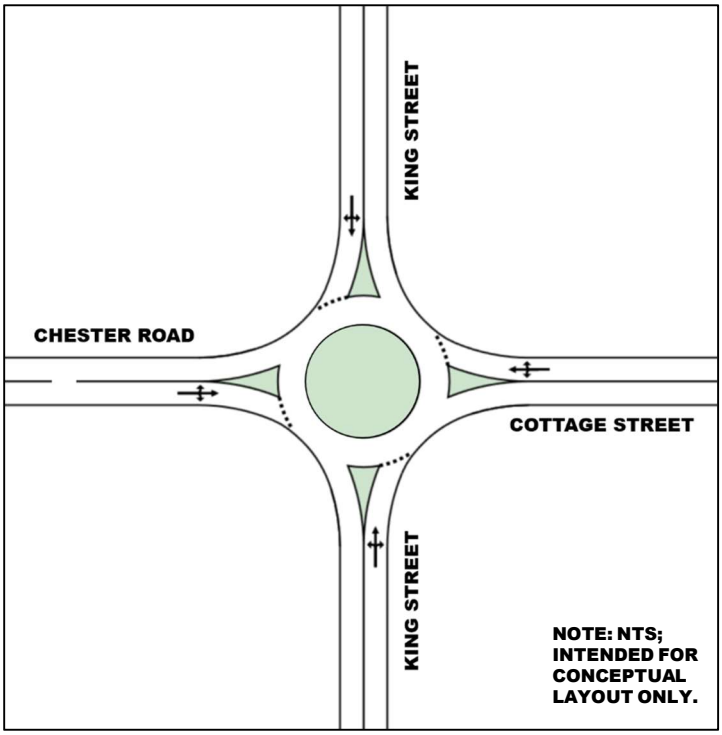
Arm	V- Approach Road half-width (m)	E-Entry Width (m)	l'- Effective flare length (m)	R – Entry Radius (m)	D – Inscribed circle diameter (m)	PHI – Conflict (entry) angle (deg)
King Street SB	3.5	3.5	0	30	50	20
King Street NB	3.5	3.5	0	30	50	20
Payzant Drive EB	3.5	3.5	0	30	50	20

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement			Overall Intersection	
	Chester Road	King Street			
	EB	NB	SB	Delay	LOS
Scenario 2 - 2030 AM Peak Hour ***without*** *Payzant Drive Connection*					
Delay	5.2	7.1	4.7	6.0	A
LOS	A	A	A		
v/c	0.31	0.49	0.25		
Queue	13.3	14.0	9.8		
Scenario 2 - 2030 PM Peak Hour ***without*** *Payzant Drive Connection*					
Delay	5.8	9.7	10.4	9.3	A
LOS	A	A	B		
v/c	0.30	0.64	0.64		
Queue	12.6	20.3	24.5		

ARCADY ANALYSIS – 2030 AM & PM PEAK HOUR

Scenario 2

King Street at Chester Road/ Cottage Street *Without* Payzant Drive Connector



Arm	V- Approach Road half-width (m)	E-Entry Width (m)	l'- Effective flare length (m)	R – Entry Radius (m)	D – Inscribed circle diameter (m)	PHI – Conflict (entry) angle (deg)
Wentworth Rd SB	3.5	3.5	0	30	50	20
Wentworth Rd NB	3.5	3.5	0	30	50	20
Payzant Dr WB	3.5	3.5	0	30	50	20
Payzant Dr EB	3.5	3.5	0	30	50	20

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement				Overall Intersection	
	Chester Road	Cottage Street	King Street			
	EB	WB	NB	SB	Delay	LOS
Scenario 2 - 2030 AM Peak Hour ***without*** Payzant Drive Connection						
Delay	5.4	4.9	7.1	4.8	6.0	A
LOS	A	A	A	A		
v/c	0.32	0.03	0.49	0.26		
Queue	14.0	3.5	14.7	7.7		
Scenario 2 - 2030 PM Peak Hour ***without*** Payzant Drive Connection						
Delay	5.9	5.7	9.8	10.5	9.2	A
LOS	A	A	A	B		
v/c	0.30	0.09	0.64	0.64		
Queue	12.6	3.5	21.7	23.1		

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☒	Decision Request ☐	Councillor Activity ☐

To: Committee of the Whole

Submitted by: Shelleena Thornton, Municipal Operations Supervisor

Date: September 14, 2021

Subject: Outdoor Fires By-Law RO-001

LEGISLATIVE AUTHORITY

Municipal Government Act, R.S.N.S. 1998, c. 18:

172 (1) A council may make by-laws, for municipal purposes, respecting

(a) the health, well being, safety, and protection of persons;

(b) the safety and protection of property;

(c) persons, activities and things in, on or near a public place or place that is open to the public;

(d) nuisances, activities and things that, in the opinion of the council, may be or may cause nuisances, including noise, weeds, burning, odours, fumes and vibrations…

Fire and Emergency Services

Powers where fire

297 (1) When any fire, rescue or emergency occurs, the fire chief or other officer in charge, and any person under the direction of that officer, shall endeavour to extinguish the fire and prevent it from spreading, conduct the rescue or deal with the emergency and, for that purpose, may

(a) command the assistance of persons present and any inhabitant of the municipality;

(b) remove property from buildings on fire or in danger of fire;

(c) take charge of property;

(d) enter, break into or tear down any building;

(e) exclude and remove persons and vehicles from the building or vicinity; and

(f) generally, do all things necessary to respond to the emergency.

(2) It is an offence to disobey any lawful order or command of the officer in charge.

DECISION REQUEST

…that Committee of the Whole recommends that Council give First Reading and proceed to a Public Hearing and Second Reading for the Outdoor Fires By-law RO-001, XXX, which includes the repeal of the Outdoor Fires By-Law #39 for the former Town of Windsor dated December 2, 2010; the Fire and Burning Materials By-Law 1-93 for the former Town of Hantsport dated October 29, 1993; and the Fire Protection By- Law for the former Municipality of West Hants dated May 12, 1994**,** as presented to Committee of the Whole on September 14, 2021.

BACKGROUND

Property ☐	Public Opinion ☐	Environment☒	Social ☐	Economic ☐	Councillor Activity ☐

With the creation of the West Hants Regional Municipality (WHRM) on April 1, 2021, it was necessary that a new Regional Outdoor Fire By-Law be created to clarify and consistently meet the needs for the entire region.

On July 1, 2015, the former Town of Hantsport dissolved into the West Hants Municipality and on April 1, 2020, the former Town of Windsor and West Hants Regional Municipality consolidated.

Prior to consolidation, each entity (the former Town of Windsor, former Town ofHantsport, and the former West Hants Municipality) had their own By-Laws regarding Outdoor Fires, Burning of materials and Fire protection. None of which uniformly addressed the needs of the entire region once consolidation occurred.

A Regional By-Law will encompass the entire West Hants Regional Municipality toensure consistency, cohesiveness, and clarity for all citizens within the Region.

At the November 10, 2020, Committee of the Whole meeting, staff was directed to review existing fire-related By-Laws.

With this directive, staff reviewed each entity's By-Law, consulted with Fire service experts, By-law Enforcement, the RCMP, and a new Regional By-Law where all communities within the Region uniformly agree to follow the same practices. The proposed by-law has also been vetted through the Solicitor.

DISCUSSION

The former Town of Hantsport Fire Burning Materials By-Law, number 1-93 only pertains to fires that are intended for the purpose of food preparation. Any other type of fire requires a special burn permit from the Fire Chief and is subject to financial penalties for violations.

The former Town of Windsor By-Law #39 does expand on areas of permitted outdoor fires that allows for fires outside of food preparation so long as the burning appliances installation instructions are followed, a mesh screen or spark arrestor are present, the burning appliance is more than 15 feet from any building, flammable/combustible material, or property line and it cannot be placed on a wooden deck or a combustible platform. This By Law also requires a special burn permit to burn trees, shrubs, brushes, wood, or other vegetation and is also subject to financial penalties up to but not exceeding $5,000.00 for violations.

The former West Hants Municipality Fire Protection By-Law allowed for open burning of materials that are defined as combustible under the By Law between the months of October 15th - April 15th without a permit. Outside of this time frame a permit issued by the Department of Natural Resources is required to have open fires so long as it is not within 100 feet of another property owners building. This By Law is also subject to financial penalties up to but not exceeding $10,000.00 for violators and imprisonment if payment is defaulted.

All three By-Laws outline varying definitions regarding terms of reference, definitions surrounding prohibited and permitted open air fires and safe, acceptable distances from combustible materials as well as varied financial penalties for violations. This causes confusion when interpretating the By-Law depending on location and which former By-Law is in effect for that area.

Upon direction from Council, staff reviewed all three former By-Laws, consulted the Municipal Government Act, and referenced Fire and Emergency Services to formulate a By-Law that encompasses a vast amount of the former regulations while expanding on definitions in areas to allow for chimineas, outdoor furnaces and such. A revised By-Law will expand to all communities within the West Hants Regional Municipality to ensure cohesiveness. Within this By-Law, a fire permit is no longer required so long as the individual complies with the NS Forest Act and meets all criteria outlined in the draft By-Law.

NEXT STEPS

Should COTW support this recommendation, Council will give first reading at its September 28, 2021 Council meeting and hold a public hearing and second reading at the October 26, 2021 Council meeting. Should second reading be approved, all former by-laws would be repealed. Notice of a public hearing will be placed in the newspaper, on the website and on social media.

The proposed steps for approval of the Outdoor Fires By-law RO-001 are:

Staff Review

▼

Committee of the Whole Review and Recommendation

▼

Regional Council First Reading (September 28, 2021)

▼

Advertise for Public Hearing in local newspaper

▼

Regional Council Public Hearing and Second Reading
(October 26, 2021)

▼

Notice to Municipal Affairs & Register with Dept. of Justice

▼

Notice of Approval in Local Paper
(done simultaneously when giving to Notice to Municipal Affairs and Dept. of Justice)

This by-law does not require Ministerial approval and would be effective when the Notice of Approval is in the local newspaper.

It is important to further note, that until registered with the Dept. of Justice and the Summary Offence Ticket booklet is updated, any penalty enforcement would need to be done by long-form rather than summary offence ticket.

FINANCIAL IMPLICATIONS

There are no financial implications.

ALTERNATIVES

1. Committee of the Whole could choose to not recommend that Council give first reading of the draft, Council may choose not to support the new revised By-Law which would not repeal the currentBy-Laws in place. This is not the recommendation to Council.
2. Council may choose to provide alternative direction, such as requesting further information which may include a revised By-Law.

ATTACHMENTS

- Proposed West Hants Regional Municipality Outdoor Fire By-law RO-001
- Former Town of Windsor #39 Outdoor Fires Bylaw
- Former Town of Hantsport By-Law 1-93, Fires and Burning of Materials By-Law
- Former Municipality of the District of West Hants Fire Protection By-Law

CHIEF ADMINISTRATIVE OFFICER REVIEW

The draft by-law is in keeping with the discussions and review by operations over the past year. It is further a reflection of feedback from the fire services in relation to the administration and enforcement of the by-law.

I support the recommendation and the draft by-law but make note that revisions can be made pending feedback from the public hearing process. Should revisions be substantial, the by-law adoption process would need to start over.

Report Prepared by: _____

Report Reviewed by: _____
Shelleena Thornton,
Municipal Operations Supervisor

Report Approved by: 
Mark Phillips, CAO

TOWN OF WINDSOR
BYLAW#39
Respecting

Outdoor Fires Bylaw

AUTHORITY

39.01

Sections 172 (a), (b), and (d) of the Municipal Government Act provides municipalities with the power to make bylaws respecting the health, well-being, safety and protection of persons, the safety and protection of property, and activities that may cause nuisances including burning, odours and fumes.

INTERPRETATION

39.02 In this bylaw:

(1) "Acceptable Outdoor wood burning appliance" means an outdoor receptacle which is constructed from bricks, concrete blocks, heavy gauge metal, stone or other suitable non-combustible components, and has a spark arrestor or metal mesh screen, and, does not include outdoor wood furnaces;

(2) "Council" means the Council for the Municipality of the Town of Windsor;

(3) "Fire Chief' means the Fire Chief of the Windsor Fire Department or his / her designate.

(4) "Garden and Yard Waste" means any shrubbery, tree prunings, leaves, brush, weeds, grass, roots, tree stumps, turf and similar vegetation;

(5) "General Waste" means any rubbish, garbage, non-wooden material, packaging, containers, bottles, cans, rags, clothing, petroleum products, manure or sewer;

(6) "Hazard" means a risk of damage or nuisance which may be caused by the burning of any general waste, and which may adversely affect property and/or persons;

(7) "Non-designated Material" means tires, waste dangerous goods as defined in the Dangerous Goods Management Regulations pursuant to the ***Environment Act,*** Stats. N.S., 1994-1995,c.1 and amendments

thereto; used oil as defined in the used oil regulations pursuant to the ***Environment Act,*** supra; railway ties or other wood treated with wood preservative; material containing rubber or plastic; painted wood; garbage, food products, organics such as animal remains;

(8) "Nuisance" means the causing of any smoke or other emission from any fire permitted under this bylaw, or otherwise, that adversely affects the reasonable enjoyment by other persons of their property;

(9) "Outdoor Wood Furnace" means an outdoor wood-burning appliance, or a solid fuel burning appliance, used for the space heating of buildings, the heating of water or other similar purposes;

(10) "Portable Barbecuing Appliance" means any appliance used for the purpose of cooking food outdoors, normally fuelled by liquefied petroleum gas, natural gas, compressed briquettes or charcoal;

(11) "Town" means the Town of Windsor.

OUTDOOR FIRES PROHIBITED

39.03 (1) No person shall be permitted to operate an open fire pit within the Town;

(2) No person shall be permitted to have an outdoor fire within the Town, on any land owned or occupied by such person, or on any public lands owned by the Town, unless contained in an acceptable outdoor wood burning appliance;

(3) No person shall be permitted to burn non-designated material, general waste, or garden and yard waste on any lands owned or occupied by such person, or on any other lands within the Town.

OUTDOOR FIRES PERMITTED

39.04 (1) Persons shall be permitted to cook food using a portable barbecue, other food preparation appliances (designed for outdoor use) or outdoor wood burning appliances;

(2) Persons using outdoor gas or wood burning appliances in the Town of Windsor shall be permitted to do so but the following provisions shall apply:

(a) The manufacturer's installation instructions must be followed;

(b) only dry seasoned firewood shall be used as it burns with little or no smoke by-product;

(c) a spark arrestor or mesh screen is used to contain any sparks or blowing debris;

(d) the acceptable outdoor wood burning appliance shall be located in excess of 15 feet from any building, flammable structure, combustible material or property line;

(e) notwithstanding Section 39.04 (2) (d), the acceptable outdoor wood burning appliance must not be placed on wooden decks or combustible platforms;

(f) the fire does not create a nuisance;

(g) a responsible adult is present on the property while the fire is burning and until the fire is extinguished;

(h) a fire extinguisher, or other means of extinguishing a fire, acceptable to the Fire Chief/or designate, is within reasonable distance from where the fire is located.

SPECIAL BURN PERMITS

39.05 Special burn permits are required for the following activities:

Open air burning of trees, wood, shrubs, bushes or other vegetation:

(a) special permission from the Fire Chief of the Windsor Fire Department;

(b) a burning permit; and

(c) compliance with the provisions of this By-Law

PERMITTED CIRCUMSTANCE

39.06 Nothing in this Bylaw shall apply to the Windsor Fire Department while engaged in training sessions or other related activities if authorized by the Fire Chief or his designate.

PERMIT APPLICATION

39.07 (1) Where a permit is required under this By-law, an application shall be madeto the Fire Chief;

(2) Where the Fire Chief determines that the proposed burning would be a hazard to safety or where there is a failure to meet the requirements of the By-Law, the Fire Chief shall refuse to issue a permit;

(3) In making a determination under Section 39.09 (2) the Fire Chief may take into consideration any number of factors which may include but are not necessarily be limited to the following:

(a) the number of permits issued on a particular day;

(b) the velocity of the wind;

(c) the general weather conditions prevalent;

(d) whether or not the applicant is suitably equipped to ensure the fire is maintained under control;

(e) the proposed manner and method of burning;

(f) whether the applicant owns or is the occupant of the land upon which the burning is intended to occur, or has the written consent,

produced prior to the issuance of the permit, of the owner of the land which the burning will occur;

(g) whether the applicant is 19 years of age or older and ensures that at least one other person, of 19 years of age or older, suitably equipped to control the fire, will be present while the fire is burning or smoldering;

(h) any other matter the Fire Chief determines relevant to safety.

(4) A permit issued under the authority of this By-Law may be revoked by the Fire Chief at any time where it is determined that the proposed burning will pose a hazard to persons or property or where the conditions of the permit have not been met;

(5) The Fire Chief may specify on the permit the hours of the day and the number of days during which the permit shall be valid, and in so doing, may distinguish between permits issued for commercial or other uses, but no permit shall be issued for a period exceeding fourteen (14) days;

(6) The Fire Chief may designate the location where and the hours during which applications for permits shall be received.

FEES

39.08 Where application is made for a permit, a non-refundable $ 50.00 (fifty dollars) ***Application Fee*** must be paid before application is processed.

Upon successful application, a $ 50.00 (fifty dollar) ***Permit Fee*** must be paid in full before permit is issued.

OFFENCES AND PENALTIES

39.09 (1) Any person who contravenes or fails to comply with any of the provisions of this bylaw shall be liable to a penalty no less than $250 and not exceeding $5,000 for each offence, as per Schedule A attached.

(2) In addition to any penalty imposed as a result of a guilty plea, the Town may levy a fee for reimbursement of all expenses incurred or damages associated with the offence.

REPEAL

39.10 **Bylaw #18** of the Town Bylaws entitled Prevention of Fires Bylaw and any amendments thereto, shall be hereby repealed.

EFFECTIVE DATE

39.11 This Bylaw shall be effectiveupon publication.

CAO/Clerk's Annotation (Office Use Only)

Date of first reading:	September 28, 2010
Dates of advertisement of Notice of Intent to Consider:	Oct. 21 & Nov. 4, 2010
Date of second reading:	November 23, 201O
*Date of advertisement of Passage of Bylaw:	December 02, 201O
Date of mailing to Minister a certified copy of Bylaw:	December 03, 2010

I certify that this Outdoor Fires Bylaw was adopted by Council and published as indicated above.

Louis Coutinho, CAO
Town of Windsor

Schedule "A"

Offence	Penalty
First Offence	$ 250.00
Second Offence	$ 1,000.00
Third Offence	$ 5,000.00

Town of Hantsport
By-law #1-93

Fires and Burning of Materials By-law

1. This By-law shall be known as the Fires and Burning of Materials By-law, number 1-93.

2. No person shall ignite, set fire to or burn any materials, articles or substances whatsoever, out of doors, within the limits of the Town of Hantsport, except as provided by this By-law.

3. This By-law shall not apply to the setting of fire or burning of charcoal or other flammable materials commonly used for the purpose of a barbeque or similar outdoor cooking, when intended for the purpose of food preparation.

4. The Fire Chief may, from time to time, issue a special burning permit to an applicant andmay prescribe within the permit:

    a) The number of people required to supervise the burning.
    b) The conditions under which the fire may be set.
    c) The types of materials that will be permitted to be burned.
    d) The hours and day on which the burning shall take place.
    e) The location at which the fire may be set.

5. The penalties for violation of the provision of this By-law are as provided by the Town's Act, R.S.N.S. 1989, c. 472, and amendments thereto.

6. This By-law shall not apply to the persons acting directly under the authority of the Fire Chief of the Hantsport Fire Department in the performance of his duties.

7. All Fires and Burning of Materials By-laws of the Town now in force are hereby repealed and this By-law substituted therefore.

Passed by the Town Council of the Town of Hantsport on the 5th day of October, 1993.

Approved by the Minister of Municipal Affairs on the 29th day of October, 1993.

BE IT RESOLVED THAT THE FOLLOWING BE AND THE SAME IS HEREBY ADOPTED AND ENACTED AS A BY-LAW OF THE MUNICIPALITY OF THE DISTRICT OF WEST HANTS

FIRE PROTECTION BY-LAW

1. The Fire Protection By-law passed by the Council of the Municipality of the District of West Rants on the 11th day of May, A.D., 1994 and approved by the Minister of Municipal Affairs on the 12th day of May, A.D., 1994 be and is hereby repealed and the following is substituted therefor.

2. In this By-law,

   (a) "Controlled Combustion Unit" means an incinerator, furnace, barrel, drum, tank or container;

   (b) "Designated Material" means:

      (i) tires;

      (ii) waste dangerous goods as defined in the Dangerous Goods Management Regulations pursuant to the *Environment Act,* Stats. N.S., 1994-1995, C. 1 and amendments thereto;

      (iii) used oil as defined in the used oil regulations pursuant to the *Environment Act,* supra;

      (iv) a railway tie or other wood treated with wood preservative;

      (v) a material containing rubber or plastic;

      (vi) painted wood;

      (vii) garbage, food products, organics such as animal and human remains but does not include dry leaves and dry grass.

   (c) "Furnace" means any equipment, apparatus, device or structure designed to burn solid, liquid or gaseous fuel for the purpose of heating, drying, generating power or processing steam or any combinations thereof;

   (d) "Incinerator" means any equipment, apparatus, devise or structure designed to incinerate waste which is capable of controlling the combustion temperature,

the degree of gaseous mixing and the length of time that the combustion gases reside in the incinerator;

(e) "Material" means combustible material other than designated material;

(f) "Municipality" means the Municipality of the District of West Hants;

(g) "Open Burning" means burning of material not carried out in a controlled combustion unit.

3. (a) No person shall carry out, cause, permit or be responsible for the open burning of designated material.

(b) Subsection (a) does not apply to open burning conducted by a person or organization that is authorized by the Province to conduct courses to train fire fighting personnel.

(c) Subsection (a) does not apply to a Municipality that conducts open burning in accordance with the provisions of the Municipal Waste Incinerator Regulations.

4. (a) Subject to Section 5(a)(ii) and 5(a)(iii), the burning of material shall be permitted at all times within a controlled combustion unit.

(b) Subject to Section 5(a)(i), open burning of materials shall be permitted except between the 15th day of April and the 15th day of October in each year without a permit.

(c) Subject to Section 5(a)(i), between the 15th day of April and the 15th day of October in each year, no person shall carry out, cause, permit or be responsible for the open burning of material without a permit issued by the Department of Natural Resources.

5. (a) No person shall carry out, cause, permit or be responsible for:

(i) the open burning of material;

(ii) burning of material in a barrel, drum, tank or other container;

(iii) burning within a furnace that is used for heating purposes which is

external to the building being heated;

within 30.48 meters or 100 feet of another property owner's building.

(b) Subsection (a) shall not apply to the burning of charcoal or propane within a barbecue for cooking purposes.

6. (a) Any person who carries out, causes, permits or is responsible for the burning of a fire which goes out of control is guilty of an offence.

(b) The Court may, in addition to any penalty imposed for this offence order the accused to pay the cost of putting out such fire and the cost shall be charged at the Department of Natural Resources (Nova Scotia) rates, and the sum so ordered by the Court shall constitute a first lien on the property of the accused and shall bear interest at the same rate as taxes and may be collected in the same manner as provided for ordinary rates and taxes under the *Municipal Government Act,* Stats. N.S., 1998 Chapter 18.

7. Any person who carries out, causes, permits or is responsible for the burning of a fire shall abide by the provisions of the *Environment Act,* Stats. N.S., 1994-1995, C. 1 and the regulations thereunder.

8. In any prosecution for an offence under this By-law, it is sufficient proof of the offence to establish that it was committed by an employee or agent of the accused, whether or not the employee or agent is identified or has been prosecuted for the offence, unless the accused establishes that the offence was committed without the knowledge or consent of the accused.

9. Where a corporation commits an offence under this By-law, any officer or director of the corporation who directed, authorized, assented to, acquiesce in or participated in the violation of this By-law is guilty of the offence and is liable to the punishment provided for the offence, whether or not the corporation has been prosecuted.

10. Where an offence under this By-law is committed or continued on more than one day, each day shall constitute a separate offence.

11. Anyone who violates the provisions of this By-law shall be liable to a minimum penalty of not less than Two Hundred Dollars ($200.00) and not exceeding Ten Thousand Dollars ($10,000.00) and in default in payment thereof to imprisonment fornot more than one year or both, including the imposition of a minimum fine.

I, DwightM. Bennett, C.A.O. and Municipal Clerk-Treasurer of the Municipality of the District of West Rants, do hereby certify that the foregoing is a true copy of the Fire Protection By-law duly passed at a duly called meeting of the Municipal Council of the Municipality of the District of Wes Rants dlJlY convened and held on the /:/ day of ,M,0 , A.D., 2004 and published in the Rants umal, a newspaper circulating in the Municipality on the o2o? day of ¥m/cu , A.D., 2004.

GIVEN under the hand of the Municipal Clerk and under the .J; orate seal of the said Municipality this a?..2. day of '1:£)tiuiOI L , A.D., 2004.

First Reading: 1do'/

Second Reading: 4 Y I'l/o'f

DWIGHT M. BENNETT, C.A.O.
MUNICIPAL CLERK-TREASURER

Enabling Legislation

Municipal Government Act, R.S.N.S. 1998, c. 18:

172 (1) A council may make by-laws, for municipal purposes, respecting

(a) the health, well being, safety, and protection of persons;

(b) the safety and protection of property;

(c) persons, activities and things in, on or near a public place or place that is open to the public;

(d) nuisances, activities and things that, in the opinion of the council, may be or may cause nuisances, including noise, weeds, burning, odours, fumes and vibrations…

Fire and Emergency Services

Powers where fire

297 (1) When any fire, rescue or emergency occurs, the fire chief or other officer in charge, and any person under the direction of that officer, shall endeavour to extinguish the fire and prevent it from spreading, conduct the rescue or deal with the emergency and, for that purpose, may

(a) command the assistance of persons present and any inhabitant of the municipality;

(b) remove property from buildings on fire or in danger of fire;

(c) take charge of property;

(d) enter, break into or tear down any building;

(e) exclude and remove persons and vehicles from the building or vicinity; and

(f) generally do all things necessary to respond to the emergency.

(2) It is an offence to disobey any lawful order or command of the officer in charge.

Title

1. This By-Law is entitled the "Outdoor Fires By-Law".

Definitions

2. In this By-Law:

(1) "acceptable appliance" means an outdoor receptacle which is constructed from bricks, concrete blocks, heavy gauge metal, stone or other suitable non-combustible components, has a spark arrestor or metal mesh screen, is positioned on a fire-proof surface, and does not exceed one (1) meter (3.3 feet) in width or in diameter when measured between the widest point or outside edges;

(2) "camp fire" means a fire not exceeding sixty (60) centimeters in width at the largest point, and not piled higher than forty-five (45) centimeters in height, located at least five (5) meters (16.5 feet) from other combustible materials, started and maintained with the permission of the owner of the property where the fire is located;

(3) "chimenea" means a chimenea or other small, commercially manufactured burning appliance constructed from a suitable fire resistant material and intended to burn small quantities of wood or charcoal;

(4) "Fire Chief" means a fire chief, fire captain or chief officer of a fire department, , or other person designated by such person in and for the applicable fire protection district or area;

(5) "fire-proof pad" means a pad made of non-combustible material(s), such as cement or concrete, that is resistant to heat;

(6) "Municipal and/or Municipality" means West Hants Regional Municpality;

(7) "nuisance" means interference with a neighbouring property owner's enjoyment of his or her property;

(8) "open air" means anywhere that is not fully enclosed by a building or structure;

(9) "owner" has the same meaning as in the Municipal Government Act;

(a) a part owner, joint owner, tenant in common or joint tenant of the whole or any part of land or a building,

(b) in the case of the absence or incapacity of the person having title to the land or building, a trustee, an executor, a guardian, an agent, a mortgagee in possession or a person having the care or control of the land or building,

(c) a person who occupies shores, beaches or shoals, and

(10) (d) in the absence of proof to the contrary, the person assessed for the property."solid waste" means solid waste as defined in the former Municipality of West Hants Solid Waste Management By-law and former Town of Windsor Solid Waste By-law;

(11) "special constable" means a person(s) appointed by the Municipality to enforce Municipal by-laws;

(12) "rural area" means that part of West Hants Regional Municipality which is not an urban area as defined herein;

(13) "urban area" means those areas within West Hants Regional Municipality **which are serviced by Municipal water and sewer.**

Prohibition on Open Air Fires

3. Subject to the provisions of Provincial legislation regarding fires, no person shall light, ignite, start, allow or cause to be lighted, ignited or started, or add fuel to, or otherwise permit or encourage to burn, a fire of any kind whatsoever in the open air except as permitted under section 4.

Permitted Open Air Fires

4. Except as may be otherwise prohibited by law, an open air fire is permitted:
   (1) for cooking food with propane, natural gas, charcoal or wood within a portable or fixed barbeque in which the fire is contained on its underside and on at least three sides;
   (2) in an acceptable fire pit or chiminea, provided that:
      (a) a spark arrestor or mesh screen is used to contain any sparks or blowing debris;
      (b) only clean, dry wood or charcoal is burned;
      (c) in the case of an acceptable fire pit, the fire pit is located at least five (5) meters (16.4 feet) from any building, flammable structure, combustible material or property line;
      (d) in the case of a chimenea:

(i) the chiminea is positioned on a fire-proof pad that extends at least fifty (50) centimeters (19.7 inches) outward from where the door of the chiminea is located and twenty (20) centimeters on all other sides;

(ii) the chiminea is at least five (5) meters (16.5 feet) from all buildings and at least one (1) meter (3.3 feet) from any wooden surface that is not appropriately screened with a CSA approved fire-proof material;

(iii) if the operating instructions that come with the chiminea are stricter that the standards in this By-Law, the position and operation of the chiminea must comply with those operating instructions;

(e) a responsible adult who is equipped with tools or equipment to contain an outdoor fire (which may include brooms, rakes, back tanks, shovels, hoses and an adequate water supply), is present on the property and supervising while the fire is burning and until the fire is fully extinguished;

(f) a fire extinguisher is available on the property and within a reasonable distance from where the fire is located; and

(g) the fire does not create a nuisance.

(3) for training purposes, or as a preventative measure intended to reduce the risk or spreading of a more serious fire, if the burning is carried out or supervised by a fire department, brigade or service which is registered pursuant to the Fire and Emergency Service Policy, COGE-007.00 or by any person responding reasonably to an emergency;

(4) for organized competitions where lighting fires is a component, such as the water boil in a woodsmen's competition;

(5) by a person lost or in distress in a wooded area, if reasonable precautions are taken against the spreading of the fire;

(6) for a campfire in a rural area;

(7) for a fire in a rural area between March 15th to October 15th as per the NS Forest Act provided that:

(a) the fire is initiated by or authorized by the owner of the property where the fire is situated;

(b) the fire is for the purpose of:

(i) weed control or other agricultural or forestry purposes, including the elimination of infestations of insects or disease;

(ii) brush removal or land clearing;

(iii) the burning of grass or other vegetation; or

(iv) the demolition of wooden structures or of wooden construction materials or other combustible waste which is not acceptable for composting under the Municipality's Solid Waste By-Laws.

(c) the fire is not within one hundred (100) meters (328 feet) of a dwelling located on other property;

(d) the fire is not within twenty (20) meters (66 feet) of any structure;

(e) the fire is not within twenty (20) meters (66 feet) of another property, except with the express written consent of the owner and occupant of such other property;

(f) the fire is not within three hundred five (305) meters (1,000 feet) of woods as per the Nova Scotia Forest Act;

(g) the fire is not started or permitted to continue when the wind is blowing of sufficient velocity to jeopardize the ability to control the fire;

(h) the fire is not left unattended by the owner of the property or an adult authorized and designated by the owner to be responsible for the fire;

(i) the owner or adult responsible for the fire is suitably equipped with appropriate tools such as rakes, shovels, and water tanks or other suitable water source, or, for substantial burning, mechanical equipment that may be used to suppress a fire, such as a bulldozer, and any other equipment that is necessary or prudent to control or extinguish the fire;

(j) the fire is not fueled by, or allowed to burn anything, except wood, brush, and vegetation or byproducts thereof; and

(k) any smoldering embers from the fire are completely extinguished after the burning is completed.

(8) between the dates of October 15 to March 15, provided that:

(a) the owner or person responsible for the fire have received any necessary approvals from the Province with respect to the fire;

(b) the fire is not within twenty (20) meters (66 feet) of any structure;

(c) the fire is not within twenty (20) meters (66 feet) of another property, except with the express written consent of the owner and occupant of such other property;

(d) the fire is not started or permitted to continue when the wind is blowing of sufficient velocity to jeopardize the ability to control the fire;

(e) the fire is not left unattended by the owner of the property or an adult authorized and designated by the owner to be responsible for the fire;

(f) the owner or adult responsible for the fire is suitably equipped with appropriate tools such as rakes, shovels, and water tanks or other suitable water source, or, for substantial burning, mechanical equipment that may be used to suppress a fire, such as a bulldozer, and any other equipment that is necessary or prudent to control or extinguish the fire;

(g) the fire is not fueled by, or allowed to burn anything, except wood, brush, and vegetation or byproducts thereof; and

(h) and any smoldering embers from the fire are completely extinguished after the burning is completed.

Outdoor Furnaces

5. Wood burning furnaces or appliances which are located outside a building intended to receive heat or hot water from such furnace or appliance may not be installed or used

(1) in an urban area unless:

(a) it has a chimney that extends to a height of at least four (4) meters above the grade of the surrounding soil; and

(b) the furnace or appliance, its chimney, and any support structure for the chimney, complies with any applicable requirements pursuant to the *Building Code Act*, *Fire Safety Act*, and the Municipality's Building Code Act By-Law RB-001; and

(c) the furnace or appliance is constructed, installed and operated in compliance with the same requirements as are set out in subsection (2) for such furnaces or appliances in rural areas;

(2) in a rural area unless:

(a) the manufacturer's installation instructions are followed;

(b) the furnace or appliance is not placed on a wooden deck or other combustible platform;

(c) clearance of five (5) meters is observed in all directions from other combustible materials, including any dwelling; and

Immediate Notification of Fire Department

6. In the case of any fire, the person who lit or otherwise started the fire, or allowed the fire to start, must notify the fire department in and for the applicable fire protection district if the fire is or appears to be unable to be controlled.

Authority of Fire Chief

7. (1) The Fire Chief shall have control over the prevention and suppression of fires governed by this By-Law, and shall have the authority to extinguish or order extinguished any fire which:

(a) poses a health or safety hazard to persons or property;

(b) in the opinion of the Fire Chief is causing a nuisance; or

(c) does not meet the provisions of this By-law.

(2) The Fire Chief, Special Constable, and/or RCMP may enter upon any land, at any reasonably necessary time, for the purpose of performing their duties and functions pursuant to this By-Law.

Penalty

8. (1) Any person who contravenes any provision of this By-Law is guilty of an offence punishable on summary conviction by a fine of not less than two hundred fifty dollars ($250.00) and not more than five thousand dollars ($5,000).

(a) In addition to any fine or imprisonment imposed, the Court or Judge may order the person convicted to pay all expenses incurred in correcting the

contravention of the by-law or any damages associated with such contravention.

(b) Where any person is in contravention of any provision of this By-law, the Fire Chief may direct in writing, that the contravention be remedied in the manner and within the time specified.

(c) Upon the failure of the person to comply with such notice, the Fire Chief may order the remedy, and recover the cost of such work from the property owner.

(d) The Municipality's cost to remedy the contravention pursuant to any provision of the by-law shall constitute a lien against the property owner which shall be applied and enforced in the same manner as for rates and taxes.

(2) In lieu of prosecution under this By-law, Special Constable may, in their sole and absolute discretion, issue to any person they believe, upon reasonable grounds, has committed an offence under this By-law, a Notice of Violation, which Notice shall require the person to whom it is directed, to pay to the Municipality with fourteen (14) days of the issuance of the Notice, the sum of $100.00 (one hundred dollars), for an offence outside that of Provincial legislation. Where a Notice of Violation is issued and if that sum is paid as required therein, no prosecution shall ensue in respect to the matter or matters referred to in the Notice. For greater certainty, nothing in this by-law requires the Municipality to issue a Notice of Violation before initiating a prosecution.

Repeal

9. (1) The former Town of Hantsport - By-Law 1-93 Fires and Burning of Materials By-law approved by the Minister on the 29th day of October, 1993; and

The former Town of Windsor Windsor Outdoor Fires Bylaw - #39 approved December 02, 2010; and

The former Municipality of the District of West Hants Fire Protection By-law dated September 14, 2004 are all hereby repealed.

I, (Municipal Clerk Name), Municipal Clerk of the West Hants Regional Municipality, in the Province of Nova Scotia, do hereby certify that this is a true copy of the By-law as adopted by the Council of the West Hants Regional Municipality at a meeting duly called and held on the _____day of _____(month), _____(year).

(Signature of Municipal Clerk)
(Typed name of Municipal Clerk)

By-law Adoption	
First Reading:	Date
Notice Published:	Date
Second Reading & Approval:	Date
Final Publication:	Date
Notice to Municipal Affairs:	Date
Description:	

WEST HANTS REGIONAL MUNICIPALITY









2021 /22 STRATEGIC PLAN

April 2021

Jointly prepared by Council and Senior Staff



STRATEGIC PRIORITIES TIMELINE with COUNCIL

Strategy Session #1
List of Priorities Identified
January 14, 2021

Strategy Session #2
Top 10 Discussed & Unpacked
January 20, 2021

Strategy Session #3
Theme Priorities Review
March 01, 2021

Top 15 from Session #1 Identified
January 18, 2021

Top 5 ‘Now” Identified
‘Next’ 5 Identified
February 20, 2021

2021/22 STRATEGIC THEMES

01. COMMUNICATION

02. ECONOMIC DEVELOPMENT

03. ENVIRONMENTAL STEWARDSHIP

04. COMMUNITY DIVERSITY AND WELCOMENESS

05. COMMUNITY MOBILITY AND CONNECTIVITY

1. COMMUNICATIONS - Theme Priority

OBJECTIVE 1: ESTABLISH A COMMUNICATIONS PLAN (Administration Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Review current communication methods and tools (Feb 2021)			X
B. Review demographics/geographics and identify gaps. Identify methods and tools to fill the gaps and identify resources. (Mar. 2021)			X
C Create an inclusive Communications Plan (May 2021)		X	X
D. Establish staff resources to carry-out Communications Plan (May 2021)		X	X
E. Communicate and implement Plan (June 2021)	X	X	
F. Develop user-friendly website (Dec. 2021)	X		
G. Re-evaluate the Plan (identify gaps and methods to fill) (June 2021 – Jan. 2022)	X		

1. COMMUNICATIONS - Theme Priority

OBJECTIVE 2: BRANDING PROJECT (Multi-year phase) (Administration Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Undergo new Regional Branding project (Feb – June 2021)		X	X
B. Adopt the final brand and image package created by the Brand Leadership Team and Prime Creative (July 2021)	X		X
C. Work with employees and stakeholders on the Brand Training Package (Brand Usage Guide) (on-going)	X	X	
D. Brand launch roll-out (on-going)	X	X	

1. COMMUNICATIONS - Theme Priority

OBJECTIVE 3: ESTABLISH A REGION-WIDE SIGNAGE PLAN (Multi-year phase) (Administration Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Create community identity signage plan in alignment with Brand (March 2022)	X		
B Begin roll-out of Region-wide signage (ongoing)	X		

2. ECONOMIC DEVELOPMENT - Theme Priority

OBJECTIVE 1: EXPLORE NEW REVENUE SOURCES (ex. through internet provision, user-rates, etc.) (Administration Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Review existing programs and expertise internally to explore "sales of service "options within each department.		X	
B. Review the fee structures associated with current programs and services being provided (user-rates, WHRM Fees Policy, By-laws, etc)		X	
C. Review cost/delivery options (ex. Internet provision, user-rates, partnerships, WHRM fees policy, by-laws for consistency (dog tags), etc)		X	
D. Identify and set a % target for new revenue sources outside of taxes	X		

2. ECONOMIC DEVELOPMENT - Theme Priority

OBJECTIVE 2: CREATE INVESTMENT-READY STRATEGIES (Community Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Inventory municipally-owned properties - Determine surplus properties			X
B. Inventory municipal & privately-owned industrial and commercial lands (vacant) (September 2021) - Evaluate service and infrastructure connectivity - Evaluate land-use readiness		X	
C. Investigate lands the Municipality may wish to purchase to improve business readiness. (ongoing)	X		

2. ECONOMIC DEVELOPMENT - Theme Priority

OBJECTIVE 3: PROMOTION OF AGRICULTURAL SECTOR (Community Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Inventory agricultural sector and include documentation of various types of agriculture that exists in the region. (September 2021)		X	
B. Work with Communications Team to identify promotion opportunities (ex. Meet your Farmer, locally grown and made for inclusion at Farm Markets, outlets, restaurants, wine and craft beer industry, and being the Equestrian Capital of NS) (throughout 2021)		X	
C. Work with NS Dept. of Agriculture - explore agricultural trends - soil composition awareness - vacancy rate - environmental risk assessment (ex. erosion, flooding, vegetation over-growth, etc) (March 2022)		X	
D. Mayor's round table discussions – sector led (synergies, concerns) (throughout 2021)	X		

2. ECONOMIC DEVELOPMENT - Theme Priority

OBJECTIVE 4: BUSINESS RETENTION EXPANSION (BRE) (Mar. 2022) (Community Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Encourage the Valley Regional Enterprise Network (Valley REN) to complete 12 BRE visits in the next 11 months (March 2022)	X		
B. Create a Business Navigation Portal on the WHRM website (this will align with website user-friendly overhaul) (February 2022)	X		
C. Create the environment that our region is "the" place to do business (cross-reference with "Investment-ready Strategies")		X	X
D. Create an employee attraction and retention package for public and private businesses (February 2022)		X	X
E. Mayor's round table discussions – sector led (synergies, concerns) (ex. Life sciences, agriculture, etc) (ongoing)	X	X	

3. ENVIRONMENTAL STEWARDSHIP - Theme Priority

OBJECTIVE 1. ENVIRONMENTAL POLICY REVIEW (MAR. 2022) (Planning & Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Review & inventory all existing policies related to Environment (ex. Green house gas policies, MCCAP, etc)		X	X
B. Identify gaps (ex. More green space, net-zero Municipal Buildings, coastal flooding/high tides protection, inland flooding, year-round food sources/supply, infill development, salinity (Lake Pisiquid), windmills (renewable energy), aboiteau and river flow)		X	X
C. Prioritize the 2021/22 Municipal Climate Change Adaptation Plan (MCCAP) goals & actions		X	X

3. ENVIRONMENTAL STEWARDSHIP – Theme Priority

OBJECTIVE 2. COMMUNITY BEAUTIFICATION STRATEGIES (Jan. 2022) (Community Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Review & inventory all existing policies that may pertain to community beautification (incl. those related to heritage, history).	X		X (All P & D policies inventory complete)
B. Create the Community Beautification Plan	X		

4. COMMUNITY DIVERSITY AND WELCOMENESS - Theme Priority

OBJECTIVE 1. ESTABLISH AN ACCESSIBLITY PLAN (March 2022) (Administration Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Activate the Accessibility Advisory Committee (March 2021)			X
B. Review & inventory existing policies, plans, and studies related to accessibility. (July 2021)	X	X	
C. Participate in experiential learning experiences (July 2021)	X	X	
D. Assess the need of an accessibility audit consultant that is Rick Hansen Foundation certified and identify financial resources (if applicable)	X		X
E. Draft the Accessibility Plan (Sept. 2021 – Feb. 2022)	X		
F. Submit the Plan to the Province of NS (Feb. 2022)	X		
G. Identify Municipal adjustments needed & ensure funding strategy is in place (Jan. 2022 and end during budget discussions May 2022)	X		
H. Implement the Plan and review annually to identify gaps and solutions	X		

4. COMMUNITY DIVERSITY AND WELCOMENESS - Theme Priority

OBJECTIVE 2. ESTABLISH A DIVERSITY/INCLUSION PLAN (May 2021) (Community Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Advertise for community committee members and then activate the committee. (June 2021)		X	
B. Review & inventory WHRM and other NS municipality's existing policies, plans, and studies related to safe communities, diversity and inclusion (July 2021)	X	X	
C. Establish a Diversity/Inclusion Action Plan incorporating cultural reconciliation and the recommendations in the February 2021 RAD report that was adopted by Council	X		

4. COMMUNITY DIVERSITY AND WELCOMENESS - Theme Priority

OBJECTIVE 3. SUPPORT AFFORDABLE HOUSING INITIATIVES (Planning & Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Review existing policies as they relate to affordable housing. (September 2021)		X	X
B. Create or amend documents to support affordable housing. (November 2021)		X	
C. Create an awareness campaign surrounding affordable housing opportunities in our region. (September 2021)	X	X	
D. Increase Municipal understanding of Provincial affordable housing development processes (presentation to council from Dept of Housing) (September 2021)	X awaiting a new Cabinet		
E. Create connectivity between property owners and developers (February 2022)	X	X	

5. COMMUNITY MOBILITY & CONNECTIVITY - Theme Priority

OBJECTIVE 1. ESTABLISH A CONNECTIVITY ACTION PLAN (INCL. PUBLIC TRANSIT, TRAILS, ACTIVE TRANSPORTATION) (Community Development Dept)	Not Started	In-progress	Complete/On-going
TASKS:			
A. Inventory and review WHRM's existing policies, plans, and studies related to connectivity. Identify gaps and next steps (action items/priority areas)			X
B. Inventory and review WHRM's existing trails, sidewalks, transportation options, and road networks as they relate to inter-community connectivity. Identify gaps (including the conditions of) and next steps (actions/priority areas). Use the inventory and gap analysis and assess landowner willingness of land-use agreements/easements, acquisitions of corridors to create better connectivity between smaller networks and/or connections between destination locations. (February 2022)		X	
C. Consider the accessibility and equitable access to existing trails, sidewalks, transportation options, and road networks. Create a planning tool that will an accessibility and equity lens to future infrastructure plans and development. (February 2022)	X		
D. Inventory and review current streetlights of rural areas. Identify gaps. (December 2021)	X	X	
E. Identify public transit routes and/or services that could be provided in both urban/rural areas through a Transportation Needs Assessment or similar. Identify gaps. Further, identify carpooling opportunities and connections between existing & future active transportation routes and public transit services. (December 2021)	X		
F. Establish the Plan and review annually. Identify gaps and adjust if needed.	X		

THEME PRIORITIES UP NEXT

- INFRASTRUCTURE
- PROGRAMS



ADVOCACY ITEMS

- RURAL INTERNET ACCESSIBILITY

- INDUSTRIAL PARK ACT – PROVINCE OF NS / WEST HANTS REGIONAL MUNICIPALITY COLLABORATION





“ If we fail to adapt, we fail to move forward.”

- John Wooden

West Hants Regional Municipality
September 14, 2021
Chief Administrative Officer Report

The following report captures activities and events between July 13, 2021 and the date of the report.

Governance

- COTW and Council meetings were not held over the month of August. The Council environment will continue to adjust pending changes from the Province as it relates to in-person meetings.
- Highway 101 Twinning Project / Causeway – The Honorable Bernadette Jordan, Federal Minister for Oceans and Fisheries continues to post bi-weekly orders promoting legislation compliance and improved fish passage.
- District 9 Council Appointment – John Smith was appointed Councillor for District 9 on August 10th. Congratulations John and welcome.

Administration

- Social Committee / Council – The planning for the annual staff recognition and appreciation event is well underway. The event is being led by Council. As the event was not held in 2020 it will be nice to gather as a unit and recognize staff receiving service awards.
- Tim Hortons Camp Day – It was a great day for members fo West Hants staff and the Mayor helping to promote Camp Day at the local Tim Hortons locations. Special thanks to Kathy Johnston from the Community Development Department for coordinating our participation and for bringing the costumes.
- Martock Fresh Water Project – Meetings have been ongoing during the months of July, August, and September with ACOA, project engineers, contractors and the Boylen's regarding the fresh water supply project. My office continues to support Martock in the capacity approved by Council as a facilitator and co-applicant to ACOA for project funding. The group remains optimistic the project has the ability to be carried out pending final approvals from the governing jurisdictions. The level of cooperation is high with all parties and key elements such as contractors, materials, equipment and and use of land approval are in place. Pending final funding approvals work will be carried out in advance of the ski season.
- Social Committee - Sundae Event and Office Olympics – special thanks to members of the Social Committee and other staff for planning and participating in the summer

events. The Office Olympics Champions will soon be announced and will earn bragging rights. The Social Committee has also done a fantastic job with the "Meet Your Co-Worker / Staff Series". It's been wonderful for folks to share with their co-workers a bit about themselves and what makes us all tick. Thank you very much Social Committee Members, please keep doing what you're doing.

- Executive Assistant – A Special WELCOME to Deanna Snair, Executive Assistant. It's great to have you as a new member of our team and office.

Finance

- Valley Community Fibre Network (VCFN) – The VCFN AGM was held in July. Mayor Wendy Donovan from Wolfville was appointed the Chair of the Committee. A revised business plan for the network remains outstanding as the group continues to evaluate the best manner to leverage the capacity and advantages offered by the network.

Community Development

- Hobarts Beach Boat Launch – planning and design continues for the revisions to the boat launch at Hobarts Beach in Summerville. Improvements to the launch area, a small board walk / viewing platform, additional parking and picnic / camp fire area is being planned. Once a design is completed it will be shared with Councillor Jannash for feedback in the community.
- HMCC Site Tour and Governance Overview – I received a site tour of the Hantsport Memorial Community Center (HMCC) including the pool, center, grounds and administration building. The organization is very active in providing recreation services to the community. Initial discussions have been had for the consideration of general rating the expenses associated with HMCC vs the area rate system currently administered. This matter will be revisited during 2022/23 budget deliberations.
- Sports Complex Parking – Director Kehoe and I have met with Windsor Agricultural Society representatives regarding the expansion of the parking lot for the Sports Complex. Early discussions include the expansion of the parking on the rear of the building on municipal owned lands as well as lands between the existing parking and Wentworth Rd owned by the society. At this time, it is anticipated gravel parking may be the best solution in the short-term pending future development plans by the Agricultural Society on their lands. This matter will be further discussed with Council.
- Trail Development – A joint project between East Hants and the West Hants Regional Municipality is progressing to complement existing trail networks between our communities. Progress is pending discussions by East Hants and their Council after the completion of a public input session hosted by East Hants in September.
- Surplus Municipal Parkland – staff are conducting a review of existing parklands and all lands owned by the Municipality. Through this process it is anticipated select lands may be deemed as surplus and presented to Council for their consideration and potential sale. A report is expected in September for Council's review.

- **West Hants Sports Complex Parking –** Discussions have been ongoing with the Windsor Agricultural Society regarding additional parking to support the WH Sports Complex. Discussions with Council during an in-camera session will provide direction regarding next steps.

Planning and Development

- Planning Advisory Committee / Heritage Advisory Committee (PAC/HAC) Meeting – The committee met on August 9th. Ongoing amendments and development agreement related items are being processed to accommodate development enquiries. The Planning Department remains very busy due to new builds and renovations. Correspondingly, the revenue generated by deed transfer tax is higher than anticipated indicating high levels of activities in the real-estate market.
- Wind Farms - Two separate wind farm projects have been presented to the Municipality as potential projects. They are both conceptual at this time and require permit approvals. Natural Forces Wind Farm held a meet and greet for the community in July at the South West Hants Fire Department.
- MCCAP Committee Meeting – A meeting was held in September. Milestone 3 of the PCP Program has been reviewed and recommended for Council's approval. The enclosed Action Plan outlines the goals and resources required to address the plan.

Economic Development

- Community Branding – The Community Branding Committee has completed their work. Chair Tim Carr is presenting the brand to Council and the Community at large. A special thank to all committee members. The municipality looks forward to our role in delivering the brand to our community.
- Develop Nova Scotia (DNS) – DNS, The Windsor Township Business Association (WTBA) and staff are planning a series of events this summer to attract residents and visitors to the Windsor Business District and the waterfront to support the Place Making Project awarded to the area. A grant will be provided by DNS to support the costs of events and materials and supplies to carry out the activities. Expect activities to take place now in October. During the events residents will be asked to provide feedback and input that will influence a future "Place Making Project" for the waterfront. A small group of municipal staff, WTBA members and community members are facilitating the activities. Activities will be centered around the area of the Coach House.

Public Works and Infrastructure

- Hantsport Fire Station – The HFD Station continues to be constructed. Director Richard has provided responses to Council enquiries about the demolition phase including the disposal of hazardous materials. The project continues to progress with initial delays due to the supply of materials.

Protective Services

- Regional Fire Services – The Fire Chiefs continue to meet with Shelleena Thornton and I monthly. Bylaw review, a uniform honorarium system and apparatus procurement remain as top subjects for discussion.
- Hants Border Fire Protection Area Rate Meeting – the meeting was hosted by the County of Kings in August. The meeting was held virtually with members of Kings County participating in the meeting expressing both compliments and concerns regarding the fire service. Particularly the new fire station.
- Police Advisory Board – the Police Advisory Board met in July.
- RCMP Ops Meeting – WHRM staff met with RCMP Ops members to discuss special events support and ongoing service delivery.
- EMO Preparedness Pilot Project – West Hants Fire Departments, Ground Search and Rescue, RCMP, EMO, Nova Scotia Power and Red Cross were all present at an event held in the Vaughan area on August 28th. Emergency Preparedness was the theme of the day. Agency representatives knocked on doors of residents to promote the message as well as they hosted residents at the South West Hants Fire Station for a day of aware, fun and games focused around being Fire Smart and Emergency prepared. A special thanks to HFD member Jennifer Danials for her coordination and lead in carrying out this event.
- REMO – Covid meetings occur monthly with the following stakeholders and representatives; Incident Commander, REMO Coordinator, Nova Scotia EMO, Finance, Community Development, Planning, Public Works, NSTIR, Fire, RCMP, IT, Department of Community Services, Hants Community Hospital, Glooscap 1st Nations, Communications, Safety and Logistics.
  A special thanks to Rick Sherrard for his work and dedication over the past six (6) months as he served as EMO Coordinator. Rick has successfully completed his workplan and greatly assisted the WHRM in being better prepared as a regional municipality to respond to emergency situations. THANK YOU Rick!
  - Revision of WHRMEMO Plan
  - Co-Creation of Remote Rural Emergency Response Pilot Presentation
    - EMO
    - RCMP
    - Fire
  - Planning and Ops Committee Meetings
  - Table-Top Exercise Preparation
  - Ongoing
- Covid – The municipality continues to adapt in response to changing Covid protocols. As reported through emails, operations have been modified to respond to Covid impacts. Masks will continue to be required after September 15th by the public as well as staff at 100 King Street and 76 Morison Drive in common areas and when social distancing cannot be achieved to ensure a higher duty of care and protection is in place for our public and staff.

Sincerely,

Mark Phillips

Mark Phillips
Chief Administrative Officer
West Hants Regional Municipality

Avon River Causeway Correspondence

(aka Hwy. 101 Twinning, Aboiteau, Causeway, Lake Pisiquid)

First Name	Last Name	Correspondence Date	Meeting / logged
Danny	Dill	2020-06-30	2020-07-14 COTW
Quentin	Davison	2020-07-06	2020-07-14 COTW
Alyson	Bremner	2020-07-07	2020-07-14 COTW
Cecil	Rolfe	2020-07-13	2020-07-14 COTW
Pat	Porter	2020-07-13	2020-07-14 COTW
Nikki-Marie	Lloyd	2020-08-02	2020-09-08 COTW
Heather	Boylan (Martock)	2020-09-01	2020-09-08 COTW
Greg	O'Leary	2020-09-03	2020-09-08 COTW
Dr. Abby	Kirumira	2020-09-02	2020-09-08 COTW
Dean	Manning	2020-09-08	2020-09-08 COTW
David & Michelle	Rideout	2020-09-08	2020-09-08 COTW
Colleen	Walsh-Bouman	2020-09-08	2020-09-08 COTW
Nicholas & Alyson	Juurlink/Bremner (Linked Farms)	2020-09-08	2020-09-22 Council
Tasha	Rogers	2020-09-08	2020-09-22 Council
Brad	Carrigan	2020-09-23	2020-10-13 COTW
Karen	Carrigan	2020-09-23	2020-10-13 COTW
Elaine	Morehouse	2020-09-24	2020-10-13 COTW
Gary	Morehouse	2020-09-24	2020-10-13 COTW
Dr. A	Kirumira	2020-09-24	2020-10-13 COTW
Blake	Sarsfield	undated	2020-10-13 COTW
Greg	Webster	2020-10-01	2020-10-13 COTW
Bobby	Kidston	2020-10-02	2020-10-13 COTW
NSTIR	(Province of NS)	2021-01-13	2021-01-26 Council
Darren	Porter	2021-03-19	2021-03-23 Council
Rylan	Carrigan	2021-03-29	2021-04-13 COTW
Robin	Bremner-Popma (Hants Co Fed of Agri)	2021-03-29	2021-04-13 COTW
Roslyn	MacDuff	2021-03-29	2021-04-13 COTW
Darlene	Taylor	2021-03-23	2021-04-13 COTW
Daniel	Oulton	2021-03-26	2021-04-13 COTW
Karen	Carrigan	2021-03-26	2021-04-13 COTW
Marie & Andrew	Connolly	2021-03-26	2021-04-13 COTW
Robin	Thomson (Atlantic Division Canoe Kayak Canada)	2021-03-30	2021-04-13 COTW
Barbara	Hughes	2021-03-29	2021-04-13 COTW
Laura	Fisher	2021-04-01	2021-04-13 COTW

Avon River Causeway Correspondence

(aka Hwy. 101 Twinning, Aboiteau, Causeway, Lake Pisiquid)

First Name	Last Name	Correspondence Date	Meeting / logged
Nikki-Marie	Lloyd	2021-04-06	2021-04-13 COTW
Ken	Donnelly (Hwy 101 Twinning CLC)	2021-04-01	2021-04-13 COTW
Darren	Porter	2021-04-06	2021-04-13 COTW
Karen	Lynch	2021-04-09	2021-04-13 COTW
Carilee	Eddy	2021-04-15	2021-04-27 Council
Nikki-Marie	Lloyd	2021-04-19	2021-04-27 Council
Sheldon	Hope	2021-04-19	2021-04-27 Council
Adrienne	Wood	2021-04-22	2021-04-27 Council
Magda	Montgomery	2021-04-22	2021-04-27 Council
Sheldon	Hope	2021-04-26	2021-04-27 Council
Andrew	Smiley	2021-05-02	2021-05-11 COTW
Carrilee	Eddy	2021-05-03	2021-05-11 COTW
Denise	Forand	2021-04-27	2021-05-11 COTW
Erin	Naugler	2021-05-02	2021-05-11 COTW
Janet	Comeau	2021-05-02	2021-05-11 COTW
Kristyn	Anderson	2021-05-02	2021-05-11 COTW
Laura	Fisher	2021-04-01	2021-05-11 COTW
Nick	Rafuse	2021-05-03	2021-05-11 COTW
Nicole	McLeod	2021-05-02	2021-05-11 COTW
Robyn	Cook	2021-05-02	2021-05-11 COTW
Sheldon	Hope	2021-05-02	2021-05-11 COTW
Tammy	Hilden	2021-05-02	2021-05-11 COTW
Tracey	Sexton	2021-05-03	2021-05-11 COTW
Ginette	Pitcher	2021-05-03	2021-05-11 COTW
Greg	Miller	2021-05-05	2021-05-11 COTW
David & Michelle	Rideout	2021-05-05	2021-05-11 COTW
Sylvia & Vince	Burgess	2021-05-05	2021-05-11 COTW
Scott (Adrienne)	Miniou (Wood)	2021-05-03	2021-05-11 COTW
Barbara	Sullivan	2021-05-06	2021-05-11 COTW
Sandra & Skip	Hogan	2021-05-06	2021-05-11 COTW
Marie & Andrew	Connolly	2021-05-06	2021-05-11 COTW
Karen	Carrigan	2021-05-07	2021-05-11 COTW
Adrienne	Wood (Petition)	2021-05-07	2021-05-11 COTW
Lisa	Hines	2021-05-07	2021-05-11 COTW

Avon River Causeway Correspondence

(aka Hwy. 101 Twinning, Aboiteau, Causeway, Lake Pisiquid)

First Name	Last Name	Correspondence Date	Meeting / logged
Cam	Hartley	2021-05-07	2021-05-11 COTW
Troy & Vicki	Harvie	2021-05-07	2021-05-11 COTW
Jenn	McDermott	2021-05-08	2021-05-11 COTW
Jennifer	Daniels	2021-05-09	2021-05-11 COTW
Krista & Colin	Duncan	2021-05-09	2021-05-11 COTW
Robin	Bremner-Popma	2021-05-07	2021-05-11 COTW
Roslyn (Darlene) [Barb]	MacDuff (Taylor) [Hughes]	2021-05-08	2021-05-11 COTW
Wayne & Dianne	Hines	2021-05-09	2021-05-11 COTW
Bob & Sandra	Langdon	2021-05-10	2021-05-11 COTW
Brad	Hood	2021-05-10	2021-05-11 COTW
Ed & Cathy	Kerr	2021-05-10	2021-05-11 COTW
Ann	MacArthur	2021-05-10	2021-05-11 COTW
Carole Anne	Casey	2021-05-10	2021-05-11 COTW
Sarah	MacDonald	2021-05-10	2021-05-11 COTW
Andre & Donna	Arsenault	2021-05-11	2021-05-11 COTW
Aaron	Leblanc	2021-05-12	2021-05-25 Council
Adrian	Rooney	2021-05-19	2021-05-25 Council
Adrienne	Wood	2021-05-12	2021-05-25 Council
Barb	Sullivan	2021-05-16	2021-05-25 Council
Barbara	Beck	2021-05-15	2021-05-25 Council
Bethany	Rozee	2021-05-12	2021-05-25 Council
Carl	Siler	2021-05-12	2021-05-25 Council
Carol	Bradley	2021-05-16	2021-05-25 Council
Carol	McKinley	2021-05-12	2021-05-25 Council
Chad	Pothier	2021-05-18	2021-05-25 Council
Chris	Cann	2021-05-21	2021-05-25 Council
Connie	Shay	2021-05-15	2021-05-25 Council
Conrad	Mullins	2021-05-18	2021-05-25 Council
Darlene	Taylor	2021-05-15	2021-05-25 Council
Darren	Porter	2021-05-12	2021-05-25 Council
Darren	Woods	2021-05-13	2021-05-25 Council
Dawson	Sheehy	2021-05-16	2021-05-25 Council
Deanna	Hamilton	2021-05-15	2021-05-25 Council
Debbie	Porter-Wood	2021-05-13	2021-05-25 Council
Debbie	Siler	2021-05-15	2021-05-25 Council
Denise	Forand	2021-05-13	2021-05-25 Council

Avon River Causeway Correspondence

(aka Hwy. 101 Twinning, Aboiteau, Causeway, Lake Pisiquid)

First Name	Last Name	Correspondence Date	Meeting / logged
Devan	Archibald	2021-05-18	2021-05-25 Council
Diane	Ogilvie	2021-05-13	2021-05-25 Council
Erin	Naugler	2021-05-13	2021-05-25 Council
Ernest	Eddy	2021-05-15	2021-05-25 Council
Gerry	Young	2021-05-15	2021-05-25 Council
Gina	Cochrane	2021-05-12	2021-05-25 Council
Harry	Ullock	2021-05-15	2021-05-25 Council
Hope	Moon	2021-05-12	2021-05-25 Council
Ian	Shaw	2021-05-16	2021-05-25 Council
J	Davis (and J Griffith)	2021-05-17	2021-05-25 Council
Jacqueline	Farvacque	2021-05-12	2021-05-25 Council
Jayne	Murray	2021-05-16	2021-05-25 Council
Jeff	Redden	2021-05-17	2021-05-25 Council
Jennifer	Shaw	2021-05-16	2021-05-25 Council
Jocelyne	Marchand	2021-05-12	2021-05-25 Council
John & Sarah	Monette	2021-05-19	2021-05-25 Council
Jordan	Macumber	2021-05-12	2021-05-25 Council
Josette	Dugue	2021-05-12	2021-05-25 Council
Judy	Lynch	2021-05-13	2021-05-25 Council
June	Pedersen-LaPierre	2021-05-15	2021-05-25 Council
Justin	Cochrane	2021-05-12	2021-05-25 Council
Karen	Lynch	2021-05-18	2021-05-25 Council
Kathryn	Bergeron	2021-05-16	2021-05-25 Council
Kathy	Veinot	2021-05-15	2021-05-25 Council
Kyle	Pellegrini	2021-05-12	2021-05-25 Council
Lachlan	Riehl	2021-05-12	2021-05-25 Council
Laura	Stewart	2021-05-19	2021-05-25 Council
Lee	Billington	2021-05-12	2021-05-25 Council
Lee	Millett	2021-05-12	2021-05-25 Council
Lexie	Barkhouse	2021-05-12	2021-05-25 Council
Linda	Card	2021-05-11	2021-05-25 Council
Monique	Wood	2021-05-16	2021-05-25 Council
Nancy	Sheehy	2021-05-16	2021-05-25 Council
Nancy	Sheehy	2021-05-18	2021-05-25 Council
Nikki-Marie	Lloyd	2021-05-12	2021-05-25 Council
Nikki-Marie	Lloyd	2021-05-17	2021-05-25 Council

Avon River Causeway Correspondence

(aka Hwy. 101 Twinning, Aboiteau, Causeway, Lake Pisiquid)

First Name	Last Name	Correspondence Date	Meeting / logged
Olena	Kharytonova	2021-05-15	2021-05-25 Council
Pat	Porter	2021-05-12	2021-05-25 Council
Paula	Lake	2021-05-12	2021-05-25 Council
Robert	Bowkett	2021-05-18	2021-05-25 Council
Roslyn	MacDuff	2021-05-15	2021-05-25 Council
Ruth	Angevine	2021-05-13	2021-05-25 Council
Scotch Village	Farm	2021-05-19	2021-05-25 Council
Shirley	Pineo	2021-05-12	2021-05-25 Council
Stephen	Brooks	2021-05-12	2021-05-25 Council
Trudy	Sheehy	2021-05-17	2021-05-25 Council
Steven	Bouman	2021-05-17	2021-05-25 Council
Sue	Sheehy	2021-05-14	2021-05-25 Council
Susie	Smith	2021-05-12	2021-05-25 Council
Tasha	Rogers	2021-05-12	2021-05-25 Council
Tera	Brommit	2021-05-17	2021-05-25 Council
Toni-Lee	Burns	2021-05-12	2021-05-25 Council
Tony	Wood	2021-05-18	2021-05-25 Council
Tracey	Sexton	2021-05-16	2021-05-25 Council
Trevor	Levy	2021-05-12	2021-05-25 Council
Tricia	Brommit	2021-05-17	2021-05-25 Council
Vince & Sylvia	Burgess	2021-05-16	2021-05-25 Council
Loretta	MacEachern	2021-05-20	2021-05-25 Council
Tim & Jennifer	Bayers	2021-05-21	2021-05-25 Council
Darlene	Taylor	2021-05-25	2021-06-08 COTW
Darlene	Taylor	2021-05-25	2021-06-08 COTW
Darren	Porter (forwarded email from/to another source)	2021-05-27	2021-06-08 COTW
Dawn	Allen	2021-05-25	2021-06-08 COTW
John	Monette	2021-05-25	2021-06-08 COTW
Richard	Dunham	2021-05-25	2021-06-08 COTW
Carrilee	Eddy	2021-06-06	2021-06-22 Council
Darlene	Taylor	2021-06-09	2021-06-22 Council
Darren	Porter	2021-06-06	2021-06-22 Council
Lisa	Bland	2021-06-08	2021-06-22 Council
Krista & Scott	Lloy	2021-06-07	2021-06-22 Council
Nancy	Sheehy	2021-06-06	2021-06-22 Council
Karen	Beazley	2021-07-06	2021-07-13 COTW

Avon River Causeway Correspondence

(aka Hwy. 101 Twinning, Aboiteau, Causeway, Lake Pisiquid)

First Name	Last Name	Correspondence Date	Meeting / logged
Quentin	Davison	2021-07-13	2021-07-13 COTW
Iain (Hon.)	Rankin	2021-07-16	2021-07-27 Council
Karen	Beazley	2021-07-15	2021-07-27 Council
G.E.	Morehouse	2021-07-22	2021-07-27 Council
Darlene	Taylor	2021-07-26	2021-09-14 COTW
Heather	MacLean	2021-08-13	2021-09-14 COTW

Stephanie Sedgwick
56 Underwood Drive
Windsor, NS

August 23, 2021

Dear Laurie Murley and Jim Ivey, Councillors of Windsor/West Hants Municipality,

I'm addressing this letter to you both as you are representatives for Districts 10 and 11, and I believe the Trecothic Trail is close to the edge of your shared Districts. This letter is to express my concerns re the current state of the Trecothic Trail. The trail is a wonderful addition to our community, providing active transportation opportunities to both residents of the area and visitors, particularly since there are so many species of birds, deer, muskrat, and other fauna that is often seen in that area. My immediate concerns are as follows:

1. Recently some property development has begun alongside one section of the trail. On July 27, we had the first big rainstorm seen since that development began. 30 days on from that storm, large sections of the straight path from the Payzant trailhead towards the stream are still heavily coated in mud, which doesn't seem to dry thoroughly. The mud has made the trail very slick, and it's very difficult to cross even for able-bodied individuals. The ground on both sides of the trail is also wet and soft right to the edges of the cleared ground. Several of the senior residents of The Crossing, who are in general a very physically active part of the population, have expressed their disappointment to me in passing. I've also spoken with other neighbours who live near the area and use the trail frequently with their children, and we all share the same concerns about whether the trail will be somehow repaired so that it's usable again.

   Please note that in the 5+ years since that trail was installed, never have I seen that section of the trail with significant mud, regardless of how heavy the rainfall. It seems to be obvious that the runoff through the land has been disturbed and changed by the construction development.

2. Directly related to #1, many of the residents I've spoken with lately have questioned the level of protection available for the waterway running parallel to the train tracks. We are concerned that the development and construction underway will have a huge impact on the natural state of the area, and a direct impact on the waterway itself. I don't know whether that area is legally considered a watershed or not, but either way I feel that it's the responsibility of Council to ensure that there are environmental protections in place.

3. Another concern on the same trail is the state of the railings along the "bridge" over the stream. One side of the railings has been pushed over into the water, and appears to be unrecoverable. There is some local debate about whether the destruction of the railing was only weather-related, or perhaps a combination of weather and vandalism, and I

don’t know the true cause. The opposite railing posts are loose at one end, and it is leaning far over the culvert, away from the path.

4. There is also a fast-growing amount of what I believe is a wild parsnip plant. It is a relative of the giant hogweed, a species known to cause extreme skin irritation. According to the USDA plants database, “contact with wild parsnip may cause skin irritation, blistering rashes and skin discoloration.” As I occasionally weed the Scout plant box at the Payzant trailhead, I have often removed wild parsnip from that area and did in fact receive what may have been a mild burn from the sap of that plant. This might indicate any maintenance along the path will need to include the appropriate PPE for your workers. I also wonder if the presence of that plant is the reason why the stretch of trail that runs parallel to the train tracks feels much narrower and more overgrown this summer.

As school is starting up soon, we will begin to see even more users on that trail within the next couple of weeks. I ask if WWH could please provide a public update as to what maintenance and plans are in place for the upkeep of Trecothic Trail, particularly given the scale of development immediately beside it which appears to be having a significant impact on runoff.

Again, this trail is an amazing addition to the community. I would hate to see the current lack of proper maintenance continue to the point where the trail became unsafe, or permanently unusable.

Sincerely,
Stephanie Sedgwick
Resident of Windsor

WINDSOR / WEST HANTS TOGETHER

West Hants Regional Municipality
Mayor
Abraham Zebian
76 Morison Drive
Windsor, NS
B0N2T0

902-798-8391 p
azebian@westhants.ca

August 10, 2021

Honourable Lloyd Hines, Minister
Transportation and Active Transportation
PO Box 186
Halifax, NS B3J 2N2
Email: TIRMIN@novascotia.ca

RE: Highway 101 Twinning over Avon River, Windsor, NS

Dear Minister Hines,

Please accept the following letter in relation to Highway 101 Twinning over the Avon River in Windsor, Nova Scotia. The 101 Highway twinning project affecting Three Mile Plains to Falmouth will address long-standing road safety issues and is considered a priority at all levels. Reported delays in construction due to design challenges at the causeway aboiteau portion of the project is cause for concern and must be addressed with the Province in order to mitigate any further safety issues.

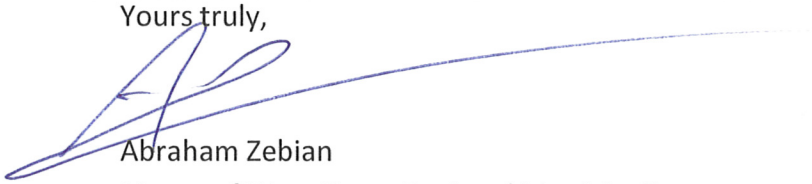
Council met on July 27, 2021 to discuss this matter further and made the following motion.

> **With public safety as a priority, the 101- Highway twinning project (Three Mile Plains to Falmouth) should not be delayed due to uncertaintly relating to the causeway aboiteau design.**

We understand there is an equal desire by the Province of Nova Scotia to proceed with this project in a timely manner as well as a shared concern about the safety of travellers. We

look forward to this matter being addressed as soon as possible and the continuation of work on this very important project.

Yours truly,



Abraham Zebian
Mayor of West Hants Regional Municipality

cc.
Member of Parliament for Kings–Hants, Kody Blois
MLA Hants West, The Honourable Chuck Porter
West Hants Regional Council
Chief Administrative Officer, Mark Phillips

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☐	Decision Request ☒	Councillor Activity ☐

To: West Hants Regional Municipality Council

Submitted by: Bekah Craik, Active Living Coordinator

Date: August 24, 2021

Subject: Advocacy for Active Transportation

LEGISLATIVE AUTHORITY

Bicycling Routes on Provincial Roads Policy PO1072, May 17, 2017 - Nova Scotia Department of Transportation and Active Transit (formerly Department of Transportation and Infrastructure Renewal).

DECISION REQUEST

The Active Avon Active Transportation Committee requests Committee of the Whole to write a letter to the Department of Transportation and Active Transit (DTAT) in request of Bog Road becoming a Designated Bicycle Route, submitted in accordance with the Bicycling Routes on Provincial Roads Policy (Policy Number: PO1072). The AT Committee also requests Committee of the Whole to advocate for DTAT completing renovations on the paved shoulders between Lighthouse Road and the Windsor/Falmouth bridge (on Trunk #1) in order for that route to meet the standards for designation as the Blue Route between Windsor and Hantsport.

BACKGROUND

Property☐	Public Opinion☐	Environment☒	Social☒	Economic☒	Councillor Activity ☐

The Active Avon Active Transportation Committee began discussions with NS Transportation & Infrastructure Renewal (TIR) in 2013 to have the Blue Route incorporated into any future road upgrade plans in West Hants. NS TIR stated that if the Blue Route is recognized on an AT Plan, TIR must look at making the necessary improvements for that designation. Thus, in June of 2014, the AT Committee released an RFP (request for proposal) for the creation of a Regional AT

Plan, which was completed early 2015 and adopted by the former Towns of Hantsport and Windsor, and the former Municipality of the District of West Hants.

Regular discussions continued of where the Blue Route might travel through Windsor/West Hants and TIR issued a contract in the fall of 2014 to upgrade and pave the section of the #1 Hwy from the Windsor/Falmouth Bridge to Lighthouse Road in Mt. Denson. The AT Committee had expressed interest in this section becoming part of the Blue Route and had been informed just months earlier that it wasn't in the five-year TIR plan for upgrades. The AT Committee communicated to TIR staff the disappointment felt at that time because there was no consideration given to AT during this upgrade even after the conversations that were held.

In 2016, TIR and Bicycle NS staff consulted the AT committee to outline where the Blue Route would be best situated. The route was agreed upon by consensus and the Committee moved forward with the necessary improvements to accommodate the Blue Route in any future upgrades on identified roads.

In fall 2017/spring 2018, Highway #1 from Lighthouse Road to Halfway River Bridge was upgraded with a paved shoulder. The AT Committee was told that these upgrades would accommodate the Blue Route, as well as a retroactively added paved shoulder on the previously paved section from 2014 (between the Windsor/Falmouth Bridge and Lighthouse Rd. The AT Committee believed that the Blue Route would leave Hantsport and makes its way into the Town of Windsor with signage being put into place by fall 2018. West Hants and Town of Windsor staff indicated support of the project.

In Aug 2018, the AT Committee learned that the Blue Route would not be going into West Hants after all for two reasons: (a) the paved upgrades were not constructed to a high enough standard to be considered for Blue Route designation, and (b) traffic counts between Bluff road and Tannery Road (through the County of Kings) had been miscalculated and were found to be in excess of the TIR bicycle route signage policy, therefore requiring paved shoulders to be installed before Blue Route designation could occur.

West Hants staff, Town of Windsor staff, and AT committee members devoted a lot of time, energy, and financial assistance into this project, and it failed to achieve any of the desired outcomes. As a result, the AT committee wrote a letter stating the disappointment and frustration with NS TIR over this project. This letter requested continued stakeholder communications in order to ensure future projects with AT opportunities were not missed. It also outlined the desire to rectify the lost potential between Windsor and Hantsport without waiting twenty years for the next

upgrade. The Bog Road is identified as an Alternate Blue Route option in the Active Transportation Plan, providing the opportunity to rectify this missed opportunity.

DISCUSSION

There has been a lot of provincial support and prioritization of active transportation over the last several years. The renaming of the Department of Transportation and Infrastructure Renewal (TIR)to Department of Transportation and Active Transit (DTAT) represents a positive shift in approaches to delivering safe, sustainable, and efficient active transit systems for all Nova Scotians. It helps acknowledge the importance of creating healthy communities where people are connected through safe active transportation infrastructure.

With this commitment to the support and advancement of active transportation, there is a great opportunity to ensure all the upgrades to roadway infrastructure are developed with an AT lens. Bog Road has been identified in the Active Avon Active Transportation Plan as the alternative Regional Route, should Trunk #1 not be found suitable. The advantages of Bog Road as a Blue Route are numerous and many cyclists use the road currently, despite its poor surface condition; it is very cyclist-friendly because the topography is quite flat, it would create a safe AT loop if ever the Trunk #1's paved shoulders are fixed, and it provides safe AT access between two communities which travels past a recreation area (Laurie Sauliner Memorial Trail) maintained through provincial funding by the Department of Natural Resources, Ducks Unlimited, and the Hants West Wildlife Association. While the Active Avon AT Committee understands traffic counts have not met the target levels to require a paved shoulder, it still feels strongly that the highest level of standard should be sought after as this is a highly used AT connection between the two communities. If paved shoulders are not feasible, the next best thing would be a designation of the road as a Bicycle Route.

After our March 18, 2019, letter was received, it was acknowledged there was room for improvement and continued communications between the formerly named NSTIR and Bicycle Nova Scotia were required to improve the Blue Route planning process and the situation on Trunk #1. The Active Avon Active Transportation Committee would gladly work with Council, the Department of Transportation and Active Transit, Bicycle Nova Scotia, and other stakeholders to support the Bog Road becoming a Designated Bicycle Route and the remediation of the Trunk #1 paved shoulders so it can meet the standards to become the Blue Route between Hantsport and Windsor.

NEXT STEPS

1. The Active Living Coordinator will continue to build relationships with other municipal departments, key stakeholders, and AT user groups to ensure ongoing positive communication, with the goal of an AT lens being brought to future infrastructure projects.
2. Committee of the Whole considers the Decision Request and decides what actions to take, if any. Council may approve/reject the motion from COTW, if any.

3. Council may direct staff or a council member to write a letter of request to the Hants County Area Manager who will conduct a site visit and a Bicycling Route Assessment – as per Policy: PO1072, Directives Section 1.3 – to forward onto the Active Transportation Coordinator who will provide a recommendation based on the Assessment and compliance with other DTAT policies.

FINANCIAL IMPLICATIONS

None.

ALTERNATIVES

1. Council may decide not to write a letter of support for the remediation of Trunk #1 paved shoulders.
2. Council may choose not to request Bog Road to become a Designated Bicycle Route.

ATTACHMENTS

1. March 18, 2019, Letter to Minister Lloyd Hines
2. Letter from Ms. Elizabeth Pugh in response to the March 18, 2019, letter
3. Bicycling Routes on Provincial Roads Policy (Policy Number: PO1072)

CHIEF ADMINISTRATIVE OFFICER REVIEW

I fully support the advocacy of bike lanes and improved AT infrastructure. This is a current priority of Council.

I support the recommendation as drafted.

Report Prepared by: _____
Bekah Craik, Active Living Coordinator

Report Reviewed by: _____
Kathy Kehoe, Director Community Development

Report Reviewed by: _____
Carlee Rochon, Director, Financial Services

Report Reviewed by: _____
Shelleena Thornton, Municipal Operations Supervisor

Report Approved by: _____
Mark Phillips, Chief Administrative Officer

Avon Region Active Transportation Committee
P.O. Box 3000, 76 Morison Drive
Windsor West Hants Ind. Park
Windsor, Nova Scotia, B0N 2T0

activeavon@gmail.com

March 18, 2019

Dear Honourable Lloyd Hines,

We are writing to express our disappointment, bewilderment and frustration regarding the recent news that the Blue Route will not extend into the Municipality of West Hants from the County of Kings. The Avon Region Active Transportation Working Group (AT Committee) is a committee made up of staff from West Hants and the Town of Windsor, along with residents from both municipalities and other organizations such as the Nova Scotia Health Authority, West Hants Trails Association, the West Hants Municipal RCMP, Bicycle Nova Scotia and the Nova Scotia Department of Transportation and Infrastructure Renewal (TIR).

Prior to the creation of an Active Transportation Plan for our region, the AT Committee began communicating on a regular basis with TIR as far back as March 2013. Most of the communications centered around the possibility of working together to incorporate the Blue Route into any future road upgrade plans. In 2013, our Committee requested AT be considered in a traffic study taking place in West Hants. At that point, TIR suggested there would be an increased likelihood of Blue Route requirements being integrated into future infrastructure upgrades if West Hants and the Town of Windsor developed a regional Active Transportation Plan. It was stated that if the Blue Route is recognized on an AT Plan, TIR must look at making the necessary improvements for that designation. Thus, in June of 2014, the AT Committee released an RFP for the creation of a Regional AT Plan, which was completed early 2015 and adopted by both councils.

After more than a year of communications, including discussions of where the Blue Route might travel through Windsor/West Hants, TIR issued a contract in the fall of 2014 to upgrade and pave the section of the #1 Hwy from the Windsor/Falmouth Bridge to Lighthouse Road in Mt. Denson. The AT Committee had expressed interest in this section becoming part of the Blue Route and had been informed just months earlier that it wasn't in the five-year TIR plan for upgrades. West Hants staff, on behalf of the AT Committee, communicated to TIR staff the disappointment felt at that time because there was no consideration given to AT during this upgrade even after the conversations that were held.

During the fall of 2016, TIR and Bicycle NS staff came to the AT committee with maps asking the Committee to outline where the Blue Route would be best situated. The route was agreed upon by consensus and the Committee felt confident moving forward that the necessary improvements to accommodate the Blue Route would be made during any future upgrades on identified roads.

In the fall 2017/spring 2018, we were excited to hear that a contract had been awarded and work was to begin on upgrades to the #1 Hwy from Lighthouse Rd to Halfway River Bridge with a paved shoulder that the AT Committee was told was to accommodate the Blue Route. Additionally, was the welcome news that a retroactively added paved shoulder would also be constructed on the previously paved section

from 2014, between the Windsor/Falmouth Bridge and Lighthouse Rd. The AT Committee was under the impression that the Blue Route would leave the community of Hantsport and make its way into the Town of Windsor, and that the signage – supplied by TIR – would be erected by fall 2018. Both West Hants and Town of Windsor staff indicated support would be given in whatever capacity necessary. By August 2018, no communications from TIR or Bicycle NS regarding the signage had been received. West Hants staff reached out to inquire as to the status of the project and were informed that, in fact, the Blue Route would not be going into West Hants after all for two reasons: (a) the paved upgrades were not constructed to a high enough standard to be considered for Blue Route designation, and (b) traffic counts between Bluff Road and Tannery Road (through the County of Kings) had been miscalculated and were recently found to be in excess of the TIR bicycle route signage policy, therefore requiring paved shoulders to be installed before Blue Route designation could occur.

The staff from West Hants, Town of Windsor and TIR along with Bicycle NS and other AT Committee members have invested a lot of time and energy into this project – not to mention the thousands of tax-payers dollars invested into the upgrades – which has, unfortunately, resulted in a failure to achieve any of the desired outcomes. We thought and were told all the right stakeholders were at the table and anticipated the project would be a win for everyone. This is the reason for the AT Committee's disappointment, bewilderment and complete frustration.

Moving forward, our AT Committee would like to know the following:

- What happened that allowed this potentially ground-breaking project to slip through the cracks when it was so close to coming to fruition?
- What are the holes in this process and what can the AT Committee do to support the patching of these holes for future projects?
- With upcoming road upgrades slated for the section of #1 Hwy south of Windsor (towards Halifax), is there anything the AT Committee and/or TIR can do to ensure that AT opportunities are not missed?
- What can the AT Committee and/or TIR do to rectify the lost potential between Windsor and Hantsport without waiting twenty years for the next upgrade.

Respectfully,

The Avon Region Active Transportation Working Group

CC: Honourable Chuck Porter
Mr. Gary Rafuse, Nova Scotia Department of Transportation and Infrastructure Renewal
Mr. Brad MacInnis Nova Scotia Department of Transportation and Infrastructure Renewal
Ms. Elizabeth Pugh, Nova Scotia Department of Transportation and Infrastructure Renewal
Mr. Ben Buckwold, Bicycle Nova Scotia

NOVA SCOTIA
Transportation and Infrastructure Renewal
Highway Planning & Design

1672 Granville Street
PO Box 186
Halifax, Nova Scotia
Canada B3J 2N2

Ms.Kathy Johnston-Isenor
activeavon@gmail.com

Dear Ms. Johnston-Isenor:

Thank you for your letter dated March 18, 2019, regarding the Avon Region Active Transportation Committee's frustration over the Blue Route not extending into the Municipality of West Hants from the County of Kings. I have been asked to respond to you on behalf of the Transportation Minister, Lloyd Hines.

I appreciate the committee's frustration over the Blue Route not extending into West Hants last year. I assure you, the Department of Transportation and Infrastructure Renewal (NSTIR) is also disappointed. Initially this section appeared easy to implement, however, once detailed planning began, we realized there were several factors that indicated that we were not ready to open this piece. You noted two of these factors; that shoulders are needed between Bluff Road and Tannery Road, and the quality of the shoulder paving. We also need to work more with Hantsport to decide if/what bicycle facilities are needed through town (Bicycle Nova Scotia (BNS) was working on some guidelines for small municipalities that were not ready last summer). We also need more information on how/where the Blue Route will enter Windsor.

This project has shown there is room for improvement in our Blue Route planning process, which we (NSTIR and BNS) will be working on to improve in the future. NSTIR is also discussing ways in which we might be able to improve the situation with the shoulders on Trunk 1. We will continue to work with your committee as we move forward with this project and will update you when we have any new information.

I can not answer your questions directly, however, I can assure you that your observations and comments will all feed into whatever improvements we implement into our process. Thank you again for taking the time to outline your concerns. We look forward to continuing to work with you and your committee as the Blue Route expands in the Avon region.

Sincerely,

E. P

Elizabeth Pugh P.Eng.
Special Projects Engineer

c: Honourable Chuck Porter, MLA Hants West
Honourable Lloyd P. Hines, Minister of Transportation and Infrastructure Renewal
Gary Rafuse, Area Manager, Transportation and Infrastructure Renewal
Brad MacInnis, Construction Manager Central, Transportation and Infrastructure Renewal
Guy Deveau, District Director Central, Transportation and Infrastructure Renewal
Ben Buckwold, Director, Bikeways and Blue Route Implementation, Bicycle Nova Scotia

Bicycling Routes on Provincial Roads

Policy Statement

To support bicycling in Nova Scotia, the Department of Transportation and Infrastructure Renewal (TIR) may designate some portions of provincial roads as bicycling routes.

Rationale

The Department is committed to supporting Active Transportation (AT), including bicycling on provincial roads. Bicycles are permitted to operate on all roads unless otherwise prohibited by regulation[1] or a sign.

Some roads are designated as "bicycling routes" to provide wayfinding assistance. Designating bicycling routes also helps to provide a consistent and positive bicycling experience.

The purpose of this policy is to provide directives and guidance in determining which portions of the provincial road network can be designated as a bicycling route.

Policy Objectives

To provide direction in determining when, and how, portions of a provincial road can be designated as a bicycling route.

Definitions

For the purposes of the Bicycling Routes on Provincial Roads Policy, the following definitions apply.

Annual Average Daily Traffic (AADT): The number of vehicles passing the count location in a 24-hour period, averaged on the basis of one year. The AADT for provincial roads is determined by TIR's Traffic Engineering and Road Safety section.

Active Transportation (AT): Any form of human-powered transportation including, but not limited to, walking and bicycling.

Active Transportation Coordinator (ATC): A TIR employee responsible for coordinating active transportation initiatives.

[1] Motor Vehicle Act s.88 and s.89 and Public Highways Act s.20

Blue Route: A designated provincial bicycling network, which will connect communities while recognizing regional differences, needs and opportunities. The location is determined by the Blue Route Team.

Blue Route Team: A committee of representatives from identified organizations that are responsible for the management of the Blue Route project. This group is identified in the Blue Route Team Terms of Reference (see Appendix A).

Bicycling Route: Bicycling routes should be continuous and may be a combination of many types of bicycle facilities, including trails, pathways, designated bicycling facilities, or roads. They may have no visible bicycling facilities or infrastructure, such as pavement markings or signs. These routes may be found in bicycle tour books, on local maps and on web sites.

Designated Bicycling Route: A designated route for bicycling on a provincial road that meets the criteria outlined in this policy. These routes will be marked with signs that are intended to guide bicyclists onto or along particular roadways or paths between a starting location and an ending location.

Paved Shoulders: The area to the right of the travel lane, between the white painted line and the edge of pavement. When wide enough to accommodate a cyclist, paved shoulders provide a separate space for AT use. They are not designated or marked as a bicycle lane.

Provincial Roads: Roads owned and maintained by TIR, as defined by the Public Highways Act.

Trans Canada Trail (TCT): The TCT is managed by a non-profit organization. The trail itself is a Canada wide network of recreational trails. When connected, the TCT will stretch 23,000 km from the Atlantic to the Pacific to the Arctic Oceans. It is multi-use and depending on the section, is used by hikers, bicyclists, horseback riders, cross country skiers and snowmobilers. The sections referenced in this policy would be road links, intended for bicyclists.

Application

This policy applies to those responsible for approving and signing a bicycling route on a provincial road including, but not limited to, the Chief Engineer, Area Managers, District Traffic Supervisors, and the Active Transportation Coordinator.

Accountability

Chief Engineer (CE): Responsible for approving proposed Blue Route locations on provincial roads.

Area Managers (AM): Responsible for receiving applications for proposed bicycling routes, conducting site visits, assessing the route's physical characteristics, seeking input from the Active Transportation Coordinator, and approving or rejecting bicycling routes proposed by municipal units.

District Traffic Supervisors (DTS): Responsible for advising the AM on the route and the requirements for Share the Road signage.

Active Transportation Coordinator (ATC): Responsible for assessing the proposed routes for their integration into provincial and other Municipal bicycling plans, participating on the Blue Route Team, reviewing and updating this policy.

Monitoring

District Directors and Director of Highway Engineering Services are responsible for monitoring the implementation and effectiveness of this policy.

The ATC will review and update this policy, with feedback from District staff and stakeholders, as conditions warrant.

Directives

1.1 Designation of Bicycle Routes

1.1.1 Designation of a Bicycling Route

TIR will review all municipal requests for designation of bicycling routes on provincial roads. Municipalities requesting this designation must identify if the proposed route is part of an AT plan, bicycling plan, or equivalent, and that the plan has been approved by Municipal Council.

1.1.2 Designation of the Blue Route

The Blue Route is a provincial bicycling route, agreed upon by the Blue Route Team, in consultation with municipalities, local interest groups, local trails groups, etc. The Blue Route must at a minimum meet the criteria of a designated bicycling route on provincial roads as indicated in this policy (see Directive 1.2). Additional criteria is established by the Blue Route Team. TIR has final approval regarding whether the Blue Route may be on a provincial road

1.1.3 Designation of the Trans Canada Trail as a Bicycling Route

Designation of any section of the Trans Canada Trail as a bicycling route will be done so in accordance with this policy.

1.2 Minimum Criteria for Bicycle Routes

Directive 1.2.1 applies to all bicycling route designations. Directives 1.2.2 and 1.2.3 do not apply to Blue Route designations.

1.2.1 Sections of road to be designated as a bicycling route must meet the same shoulder width criteria that is shown in the Standard Drawing *S-2011-200 Paved Shoulder Width for Active Transportation,* as per *Policy PO1063 Shoulder widths for Active Transportation Policy*, for repaving work.

1.2.2 Bicycle routes (other than the Blue Route) will not be designated on roads with speed limits in excess of 80 km/h. Speed zone reductions will not be considered solely for the purposes of designating a bicycling route.

1.2.3 Bicycle routes (other than the Blue Route or Trans Canada Trail) must have an active transportation connection within the community or provide a continuous recreational riding experience. It must meet **at least one** of the criteria below:

- Have important or recognizable starting and ending locations (origins and destinations);
- Complete a recreational riding loop from a recognizable origin;
- Provide a road link between two sections of multipurpose trail;
- Be known to be a route already appealing to bicyclists. This can be determined by (but not limited to) discussions with local bicycling groups, touring companies, heat maps, etc.

1.3 Approval Process for Designated Bicycling Routes other than the Blue Route or Trans Canada Trail

1.3.1 The Department will only consider requests for a designated bicycling route from municipalities. Requests from individuals will not be considered. Requests shall be submitted to the AM.

1.3.2 Notwithstanding 1.3.1, TIR will also select and designate bicycling routes on Provincial Roads should it determine a need.

1.3.3 The AM must conduct a site visit and assess the proposed route and complete the AM portions of the Bicycling Route Assessment Tool "Assessment Tool" (See Appendix B).

1.3.4 The AM will forward the bicycling route request to the Active Transportation Coordinator (ATC), with the completed AM sections of the Assessment Tool. The proposed routes will then be evaluated by the ATC, and other Highway Programs staff as necessary, to ensure compliance with the *S-2011-200 Paved Shoulder Width for Active Transportation* as per *Policy PO1063 Shoulder widths for Active Transportation Policy*. The ATC will also evaluate the proposed routes with respect to other bicycling initiatives to ensure there is no conflict or duplication of efforts.

1.3.5 The ATC must complete the ATC portions of the Bicycling Route Assessment Tool. The ATC will then provide a recommendation to the AM.

1.3.6 The AM will approve or reject the bicycling route proposal.

1.3.7 If approved, the AM will request that the DTS investigate the proposed location for placement of the "Share the Road" sign assembly in accordance with policy PO1024 *"Share the Road" Sign Assembly, Application Guide for Provincial Highways.*

1.3.8 If rejected, the AM will advise the ATC of any circumstances that have necessitated the rejection of a proposed bicycling route.

1.3.9 When a road section is approved as a designated bicycling route, bicycling route signage shall be applied as per the *Manual of Uniform Traffic Control Devices for Canada* and the *Bikeway Traffic Control Guidelines for Canada*.

1.4 Approval Process for the Blue Route

1.4.1 The location of the Blue Route, on provincially owned land, is determined by the Blue Route Team. Once determined, sections of the Blue Route that are located on provincial roads, are forwarded to CE, with a recommendation that they be designated Blue Route.

1.4.2 Upon receiving a recommendation, the CE will either:

- Approve the section(s) for designation if they meet the criteria outlined in Directive 1.2.
- Conditionally approve the section(s) for designation if they are acceptable but do not meet the criteria outlined in Directive 1.2.
- Reject the proposed sections.

1.4.3 After approval or conditional approval, sections of the Proposed Blue Route that require upgrading will be noted in TIR's Capital Program, for addition of paved shoulders when the section is scheduled for repaving or reconstruction.

1.4.4 When an approved Blue Route road section meets the criteria in Directive 1.2 or is conditionally approved under the Special Circumstances, the ATC will recommend to the AM that Blue Route Signage be erected on the section.

1.4.5 TIR will install and maintain the required Blue Route Signs on provincial roads.

1.4.6 Upon receiving this request, the AM will request that the DTS investigate the proposed location for placement of the "Share the Road" sign assembly in accordance with policy PO1024 *"Share the Road" Sign Assembly, Application Guide for Provincial Highways*.

1.4.7 Any requests for changes or additions to the proposed Blue Route location can be made to the Blue Route Team, via Bicycle Nova Scotia. These changes or additions can be suggested by bicycling clubs, trails groups, or a municipality.

1.4.8 The route change or addition will be assessed by the Blue Route Team and, if acceptable, the ATC will make a recommendation to CE to either approve or conditionally approve, subject to Directive 1.4.3, a section or sections of provincial highway to be designated as Blue Route.

1.5 Approval Process for the Trans Canada Trail as a Bicycling Route

1.5.1 Proposed TCT road links shall be submitted by the TCT committee, to the ATC.

1.5.2 The proposed road links shall be evaluated against Directive 1.2

1.5.3 Sections of the TCT that are located on provincial roads, are forwarded to CE, with a recommendation that they be designated TCT.

1.5.4 Upon receiving a recommendation, the CE will either:

- Approve the section(s) for designation if they meet the criteria outlined in Directive 1.2.
- Conditionally approve the section(s) for designation if don't meet the criteria outlined in Directive 1.2, however do meet the Special Circumstances in 2.3.
- Reject the proposed sections.

1.5.5 If approved, the ATC will request that the AM have their DTS investigate the proposed location for placement of the "Share the Road" sign assembly in accordance with policy PO1024 *"Share the Road" Sign Assembly, Application Guide for Provincial Highways.*

1.5.6 After approval or conditional approval, sections of the Proposed TCT that require upgrading will be noted in TIR's Capital Program, for consideration of the addition of paved shoulders when the section is scheduled for repaving or reconstruction.

1.5.7 When an approved TCT road section meets the criteria in Directive 1.2 or is conditionally approved under the Special Circumstances, the ATC will recommend to the AM that TCT Route Signage be allowed on the section. Signage will adhere to the "TCT Road Signage Guidelines" with modifications/restrictions as requested by TIR and outlined in Appendix C. TIR must approve any signage schedule proposed by TCT on provincial roads.

1.5.8 If the TCT is co-branded with the Blue Route, TCT signs will be added to the sign assembly to be used for the Blue Route.

Guidelines

2.1 Special Circumstances for Designating a Bicycling Route

2.1.1 Roads that have had 0.8m shoulders paved to facilitate bicycling, that were either unable to achieve the minimum width of the *S-2011-200 Paved Shoulder Width for Active Transportation*, as per *PO1063*, or were paved with a 0.8m shoulder prior to the implementation of that policy, are still eligible to be designated as a bicycling route, as per the directives outlined in this policy and approved by the Manager of Highway Planning and Design.

The bicycling assessment tool will be utilized to make and document this decision.

2.2 Special Circumstances for Designating the Blue Route

2.2.1 It is recognized that to meet regional needs, and connectivity between communities, the Blue Route may need to utilize roads with posted speeds greater than 80km/h. The Bicycling Route Assessment Tool will be utilized to make and document this decision.

2.2.2 The CE may approve the designation of the Blue Route on provincial roads if the traffic volumes or road geometry do not comply with S-2011-200 Paved Shoulder Widths for Active Transportation as per PO1063, however are appropriate for local conditions. The Bicycle Route Assessment Tool will be utilized to make and document this decision.

2.3 Special Circumstances for Designating the Trans Canada Trail as a Bicycling Route

2.3.1 In some instances, the Trans Canada Trail may be designated as a bicycling route on provincial roads, in order to provide connectivity between off road TCT sections. These roads will have speeds posted at 80km/h or less, and may have an AADT's of less than 1000, or may have paved shoulders as per PO1063.

References

Motor Vehicle Act, Nova Scotia
Public Highways Act, Nova Scotia
NSTIR Traffic Volumes: Primary Highway System and NSTIR Traffic Volumes: Secondary roads Book, recent editions.
PO1063, TIR Manual, Shoulder Widths for Active Transportation
PO1024, TIR Manual, "Share the Road" Sign Assembly, Application Guide for Provincial Highways.
Velo Quebec (2010) Planning and Design for Pedestrians and Cyclists
Manual of Uniform Traffic Control Devices for Canada
Transportation Association of Canada (TAC) Bikeway Traffic Control Guidelines for Canada

Enquiries

Active Transportation Coordinator

Appendices

Appendix A - Blue Route Team Terms of Reference
Appendix B - AT Bicycling Route Assessment Tool (Fillable Form)
Appendix C - TCT (Trans Canada Trail) Roadway Signage Guidelines

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☐	Decision Request ☐	Councillor Activity ☐

To: Committee of the Whole

Submitted by: Mark Mclean, Councillor, District 3

Date: September 14, 2021

Subject: Brooklyn Civic Centre Expense Write-off

LEGISLATIVE AUTHORITY

Municipal Government Act, Finance, Section 65 A authorizes Council to expend funds for municipal purposes.

DECISION REQUEST

The Committee of the Whole recommends to Council that $6,531.41 invoiced to the Brooklyn Civic Centre for September 2020 - March 2021 (fiscal year) be funded through the Operating Reserves.

BACKGROUND

Property☐	Public Opinion☐	Environment☐	Social☐	Economic☐	Councillor Activity ☐

The Brooklyn Civic Centre was completed in May 2010. An agreement was established between the former West Hants Municipality and the Brooklyn Fire Department that the financial responsibilities be divided so that 2/3 of the expenses were incurred by the Fire Department and the remaining 1/3 were incurred by the Civic Centre.

In 2019/20, the Municipality assumed the 2/3 portion to the Brooklyn Fire Department. The Municipality made this decision and paid the Fire Department so that they could then turn around and repay the 2/3 portion back to the Municipality.

The Brooklyn Civic Centre is home to the Brooklyn Fire Department, which has been providing quality service to the residents of Brooklyn, West Hants, and surrounding areas, when necessary, since 1962.

The Volunteer Fire Department consists of 96 members and 11 Fire apparatuses. This department alone responds to an average of over 400 calls per year. The Civic Centre is home to the Brooklyn Fire Depart, hosts their regular Monday night training sessions as well as monthly meetings.

Along with this important role, the Civic Centre is a focal point for the community of Brooklyn. This Centre serves to host numerous community activities, luncheons, wedding receptions, meetings, courses, anniversary, birthday, and community suppers that engages the community and enables them to converge in a large safe space that adapts to the needs of the individuals utilizing it.

The Brooklyn Civic Centre relies heavily on community-based programs/members and personal social events to meet their financial needs. Due to recent and ever evolving Covid -19 pandemic, these programs have not been able to run due to the Provincial restrictions surrounding gathering limits and shutdowns.

DISCUSSION

The Brooklyn Civic Centre is billed twice per year for these expenses. The first part of the fiscal year the billing was credited, and the municipality covered the expense due to the Covid -19 pandemic and the restrictions that were implemented by Department of Health and the Province of Nova Scotia. These restrictions hindered the Auxiliary's ability to rent the space or host fundraising events/functions. The restrictions in place due to Covid -19 were lifted and the facility was once again able to open their doors and rent the space. West Hants Regional Municipality used their own facility as a benchmark and the 1/3 portion equates to $6,531.41 after the HST rebate.

NEXT STEPS

A motion to use Operating Reserves is recommended as this invoice is from a previous fiscal year, should Council choose to accept this recommendation and utilize municipal funds to cover the $6,531.41 invoice.

FINANCIAL IMPLICATIONS

Should Council support the recommendation, funds totaling $6,531.41 will be taken from Operating Reserves.

ALTERNATIVES

Council can choose not to support this recommendation.

ATTACHMENTS

Brooklyn Civic Centre Operating Fund Expense Account Report.

CHIEF ADMINISTRATIVE OFFICER REVIEW

It should be noted that my office was exploring a recommendation to Council in 2020 that the Civic Center be transitioned to the operations of the municipality. This action and confirmation was not confirmed with Council until the current 2021/22 fiscal year. Admittedly, Covid and other operational demands influenced the timing of confirmation

that was eventually received by Council.
Further, the building is owned by the West Hants Regional Municipality promoting a natural connectivity between the Fire / Auxiliary Group as may not exist with other entities. Recognizing the history of the building and Civic Center space the timing of the transition and associated expenditures is the question before Council.

Administration endorsed the action to support the Fire Department, and specifically the civic center side, by absorbing expenditures associated with the first half of the 2020 fiscal year due to Covid restraints as well as recognizing the connectivity between the Municipality as the Owner and the Civic Center side of the building as the operator of that space. The second half of the 2020 fiscal year was seen in the same manner as other community and municipal spaces where the opportunity existed to rent spaces and generate the needed revenue to cover operating costs.

I support the recommendation in principal but Council should be mindful of a further extension of financial support to this organization as it will draw parallels to other "like" organizations.

Report Prepared by: _____
Mark McLean, Councillor, District 3

Report Reviewed by: _____
Carlee Rochon, Director of Financial Services

Report Approved by: _____
Mark Phillips, CAO

West Hants Regional Municipality - Brooklyn Civic Centre Receivables
April 2020 - March 2021
** Invoice totals include non-refundable tax portion

		Invoice Total	1/3 To Civic Centre
Balance Forward, March 31, 2020			**5,275.44**
Nova Scotia Power - March 2020	Apr. 2, 2020	$ 3,450.94	$ 1,150.31
Foster's Fire & Safety - Invoice 99873	Apr. 2, 2020	$ 278.66	$ 92.89
Nova Scotia Power - April 2020	May. 31, 2020	$ 2,504.72	$ 834.91
Nova Scotia Power - May 2020	Sep. 1, 2020	$ 341.79	$ 113.93
Nova Scotia Power - June 2020	Sep. 1, 2020	$ 1,392.28	$ 464.09
Nova Scotia Power - July 2020	Sep. 1, 2020	$ 1,791.40	$ 597.13
Nova Scotia Power - August 2020	Sep. 1, 2020	$ 2,905.66	$ 968.55
Cummins Canada ULC - Invoice AU-21118	Sep. 1, 2020	$ 1,424.42	$ 474.81
Nova Scotia Power - September 2020	Oct. 5, 2020	$ 2,624.67	$ 874.89
Nova Scotia Power - October 2020	Nov. 19, 2020	$ 1,872.01	$ 624.00
Brooklyn Civic Centre Payment - Cheque #734 (INV 7723)	Dec. 11, 2020	$ (5,275.44)	$ (5,275.44)
Nova Scotia Power - November 2020	Dec. 31, 2020	$ 2,339.16	$ 779.72
Nova Scotia Power - December 2020	Jan. 1, 2021	$ 2,435.88	$ 811.96
Carmichael Engineering - Invoice HA-1717162	Jan. 1, 2021	$ 805.27	$ 268.42
Brooklyn Civic Centre Credit on INV 277	Feb. 10, 2021	$ (4,221.82)	$ (4,221.82)
Nova Scotia Power - January 2021	Feb. 25, 2021	$ 3,001.53	$ 1,000.51
Brault Roofing Maritimes - Invoice 000135	Feb. 24, 2021	$ 1,629.99	$ 543.33
Nova Scotia Power - February 2021	Mar. 25, 2021	$ 3,077.60	$ 1,025.87
Foster's Fire & Safety - Invoice 104437	Mar. 29, 2021	$ 383.72	$ 127.91
Account Balance (as at March 30, 2021)		**$ 22,762.44**	**$ 6,531.41**
Outstanding Balance			$ -
Total Current Amount Due	Invoice Date: March 31, 2021		$ 6,531.41

Paid
Credit - Due to COVID-19

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☐	Decision Request ☐	Councillor Activity ☐

To: **Members of West Hants Council**

Submitted by: **Abraham Zebian, Mayor**

Date: September 14, 2021

Subject: Windsor Drainage Issues

LEGISLATIVE AUTHORITY

Part 12 of the MGA

RECOMMENDATION or DECISION REQUEST

…Council request a staff report on the historical issues of water drainage during heavy rains in the Stannus/Gray street areas and options to help prevent future issues.

BACKGROUND

On July 27, 2021, a heavy rainfall occurred with over 70 mm of rain falling in a span of a few hours. Heavy flooding resulted in certain areas in Windsor as the storm water drainage system was overwhelmed. The areas of Stannus, Gray, Monroe, and parts of Wiley and Victoria Streets appear to be the areas affected. CAO Phillips and myself visited residents on Stannus to view issues and I viewed parts of Gray and Victoria as well. On September 2, a less amount of rain fell and over a longer period of time but there was still smaller issues with drainage in the same areas.

Without having prior knowledge of this issue, I think it will serve Council well to get a background on the drainage issues and look at steps to mitigate them.

Property☐	Public Opinion☐	Environment☐	Social☐	Economic☐	Councillor Activity ☐

NEXT STEPS

Staff to prepare a report for Council to review.

FINANCIAL IMPLICATIONS

Financial implication would be staff time.

ALTERNATIVES

Council could not request a report.

ATTACHMENTS

None

CHIEF ADMINISTRATIVE OFFICER REVIEW

Understanding the historic design and performance of our public infrastructure as well as other influences such as topography, tidal influences and budget implications are important factors to understand as we review the noted areas and storm water systems should Council support the recommendation.

I support the recommendation.

Report Prepared by: Abraham Zebian, Mayor

Report Approved by: _____

Mark Phillips, Chief Administrative Officer

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☐	Decision Request☒	Councillor Activity ☐

To: **Members of West Hants Council**

Submitted by: **Abraham Zebian, Mayor**

Date: September 14, 2021

Subject: Mobile Canteen

LEGISLATIVE AUTHORITY

MGA Section 172 (c)(f) Power to make bylaws

MGA Section 172 (2)(e) Power to provide for a system on licenses, permits, or approvals in any bylaw.

RECOMMENDATION or DECISION REQUEST

COTW recommends that Council request a staff report on amending the Mobile Canteen By-Law (RV-001) to allow mobile canteens to operate on community hall properties.

BACKGROUND

On July 27, 2021 West Hants Regional Municipality Council passed seconding reading of the new Mobile Canteen bylaw. The bylaw is very clear in allowing mobile canteens to operate within certain zones in our region.

With the increasing popularity of mobile canteens and the increased interest from residents wishing to pursue business opportunities by operating a mobile canteen I began looking at the bylaw in more detail. At the same time, I was approached by a resident wishing to operate a mobile canteen in the parking lot of a community hall. The resident was informed they could not operate at the community hall parking lot because it did not fall within the permitted zone. So, I reached out to many of our local community halls to inquire their thoughts on having the ability to rent their parking to a mobile canteen as an extra revenue source. I did not have a single hall who did not like the idea and I was informed it would greatly help with revenue generation, especially after the limiting of fund raising due to Covid 19. I then looked at the possibility of a canteen conflicting with a bricks and mortar restaurants and I don't see any issues in regards to the remote locations of community halls.

I believe this is a win-win for our local community halls at the same time encouraging entrepreneurs without affecting brick and mortar restaurants.

Propert☒	Public Opinion☐	Environment☐	Social☒	Economic☒	Councillor Activity ☐

NEXT STEPS

If passed by Council, staff to provide a report on allowing mobile canteens to operate on community hall property.

FINANCIAL IMPLICATIONS

Financial implication would be staff time.

ALTERNATIVES

Council could not request a report on allowing mobile canteens on community hall property.

Council could request something different.

ATTACHMENTS

None

CHIEF ADMINISTRATIVE OFFICER REVIEW

It is my initial understanding that there is a desire to permit mobile canteens on properties identifiable as Community Halls. The spirit of the recommendation is to permit mobile canteens to enhance the events and activities at these locations, to create additional places for social gatherings, to provide food service alternatives and to generate potential revenues through the rental of space for community groups.

It is important to note the rationale for the current areas permitting mobile canteens and how they relate to the surrounding properties and not just the lands the community halls are on. Staff will explore these factors as well as timing and provisions for mobile canteens during special events as well as long term vacancy of canteens in restricted and permitted areas.

I support the recommendation.

Report Prepared by: Abraham Zebian, Mayor

Report Approved by: 

Mark Phillips, Chief Administrative Officer

WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☒	Recommendation ☐	Decision Request ☐	Councillor Activity ☐

To: Mark Phillips, Chief Administrative Officer

Submitted by: Bekah Craik, Active Living Coordinator

Date: September 9, 2021

Subject: Parkland Divestment

LEGISLATIVE AUTHORITY

- Municipal Government Act Section 50 (5) (b)
- Municipality of the District of West Hants Disposal of Surplus Real Property Policy C-01-007
- West Hants Regional Municipality 2021-2022 Strategic Plan (April 2021); Economic Development – Theme Priority Objective #2: Create Investment-Ready Strategies (Task A)

INFORMATION REPORT

Staff wish to inform Council of the following:

There are nineteen municipally owned parkland properties that are being reviewed for Council's consideration for divestment as outlined in the West Hants Parks and Open Space Plan.

BACKGROUND

Property☒	Public Opinion☐	Environment☐	Social☐	Economic☐	Councillor Activity ☐

The Parks and Open Space plan was adopted by West Hants Council in 2016 with two goals: (1) to direct the operations, maintenance, acquisition, divestment, funding, and programming of the Municipal parks and open space network; and (2) To ensure that the local network of parks and open space will continue to meet recreational needs and protect unique, natural, and cultural resources for the next ten years.

In addition to the establishment of park types and standards for West Hants, a key deliverable from this Parks and Open Space Plan is a Decision-Making Toolkit to be used by Municipal staff or a committee. The Toolkit can guide decisions about the Parks and Open Space network, to ensure decisions about land acquisition, divestment and development meet the intent of the plan, the needs of the citizens, and protect unique natural and cultural resources. Divestment is defined in the Parks and Open Space Plan as "The sale of unsuitable or unusable land by the Municipality". There are six primary scenarios where divestment of land is the best management option:

1. Location - There are Municipally owned lands in the current parks and open space network that are found in areas of low population density. In addition to density, some parcels are far from main roads or are outside of well-travelled areas. Due to the remote nature, these lands see few park users, especially if they are unmanaged lots. Isolated lots may also become areas for illegal dumping and vandalism.

2. Competing Uses - In some communities, there are a number of neighboring municipal parcels offering the same amenities or recreation opportunities. Having non-complementary parcels of land together may not be useful as a network. Here, divestment makes sense to concentrate resources into fewer parcels.

3. Useability - Subdivision development of previous decades may have resulted in land under Municipal ownership that does not meet the current definition of usable land or areas that might be considered hazardous.

4. Frequency of Use - Monitoring park use can help to decide if a piece of land is worth retaining. Underused spaces can be a drain on resources and unsafe if there is not frequent traffic.

5. Cost of Maintenance - Divestment might be the best option when the cost of maintenance outweighs community benefit, or if redevelopment costs to make a piece of land suitable or useable are beyond the parks and open space budget.

6. Interest from Non-Profit Groups - With a well-developed business plan, non-profit groups may purchase land from the Municipality. Broadly speaking, the divestment of Municipal property can positively influence the parks and open space networks. Revenue may be used to purchase new lands suitable for parks and open space or to fund management projects; lands may be leased, sold, or transitioned to community groups; lands may be swapped for more desirable spaces.

The Municipality has a GIS database of all parcels of land it owns, which can easily be used to create a map of the properties being recommended for divestment. Appendix 2 of the Parks and Open Space plan provides details on all the park holdings. The plan recommends 20 parcels for divestment; however, the municipality has since undertaken the development of one of the properties in collaboration with the West Hants Trails Association.

DISCUSSION

Staff have reviewed and re-evaluated each of the 19 parkland properties being reviewed for divestment. Site visits were completed in 2015 in the creation of the Parks and Open Space Plan and additional site visits were recently completed where possible to determine suitability for future park/trail development. Some properties (such as the Riverside Interior Parcel, Cheverie Salt Marsh Extension, MacLeod Court) have limited to no public access points or are extremely rural and inaccessible by vehicle. These sites have been scoped by way of online resources such as Property Online, Viewpoint, and Google Maps to determine usefulness of the property for the future of the Parks and Open Space network. Each of the 19 properties reviewed for divestment have little to no potential as a parkland amenity.

NEXT STEPS

With the direction of Council staff will prepare a recommendation report for the October Committee of the Whole Meeting for consideration.

FINANCIAL IMPLICATIONS

The lands were acquired by the municipality through the parkland dedication process and with the direction of Council, the surplus funds from the sale of each parcel may be deposited into a capital reserve account specifically for future development and maintenance of community parks and trails.

ALTERNATIVES

A. Council may choose to not to divest of any or all the properties being reviewed.
B. If the lands are deemed surplus and sold at a future date, Council may choose not to allocate the funds into a Capital Reserve account for future development/maintenance of community parks/trails.

ATTACHMENTS

1. West Hants Parks and Open Space Plan
2. List of parklands recommended for divestment

CHIEF ADMINISTRATIVE OFFICER REVIEW

Through the process of preparing and reviewing this report it was changed from a "recommendation report" to a "information report". There is a considerable amount of information included in the report with properties spanning several districts within our municipality. It was thought to be prudent that we provide Council with the information included in the report and that a recommendation from staff be delayed to ensure Council has had a reasonable amount of time to reflect on the parcels and the attached information. Divesting open space and park lands should be reviewed thoroughly to ensure with certainty there is no future use by the municipality.

I support the pending divestment recommendation at this time but feel further due diligence is achieved by promoting an extended review period before asking Council to make a decision. Assuming Council with receive this report as information, Council should expect a recommendation on the matter at the October COTW meeting.

Report Prepared by: _____
Bekah Craik, Active Living Coordinator

Report Reviewed by: _____
Kathy Kehoe, Director, Community Development

Report Reviewed by: _____
Carlee Rochon, Director, Financial Services

Report Reviewed by: _____
Shelleena Thornton, Municipal Operations Supervisor

Report Approved by: _____
Mark Phillips, Chief Administrative Officer

Riverview Road, Hantsport

10

Overview

PID: 45045952

Coordinates: 45.06459, -64.189

Date visited: November 26, 2015.

Address: Parcel C Rand Street, Hantsport.

Classification: Underused.

Size: 0.13 acres (0.05 ha).

Land cover: Parcel mostly treed (deciduous and evergreen) with the front half of the parcel being managed turf with a stand of trees along the street.

Topography: Land gently sloping to the east and north.

Maintained by: Municipality.

Use: Walking.

Access: From Riverview Road.

Parking: On Street.

Signage: None.

History: This land parcel was deeded to the former Town of Hantsport in 1984 by Harry Salter.

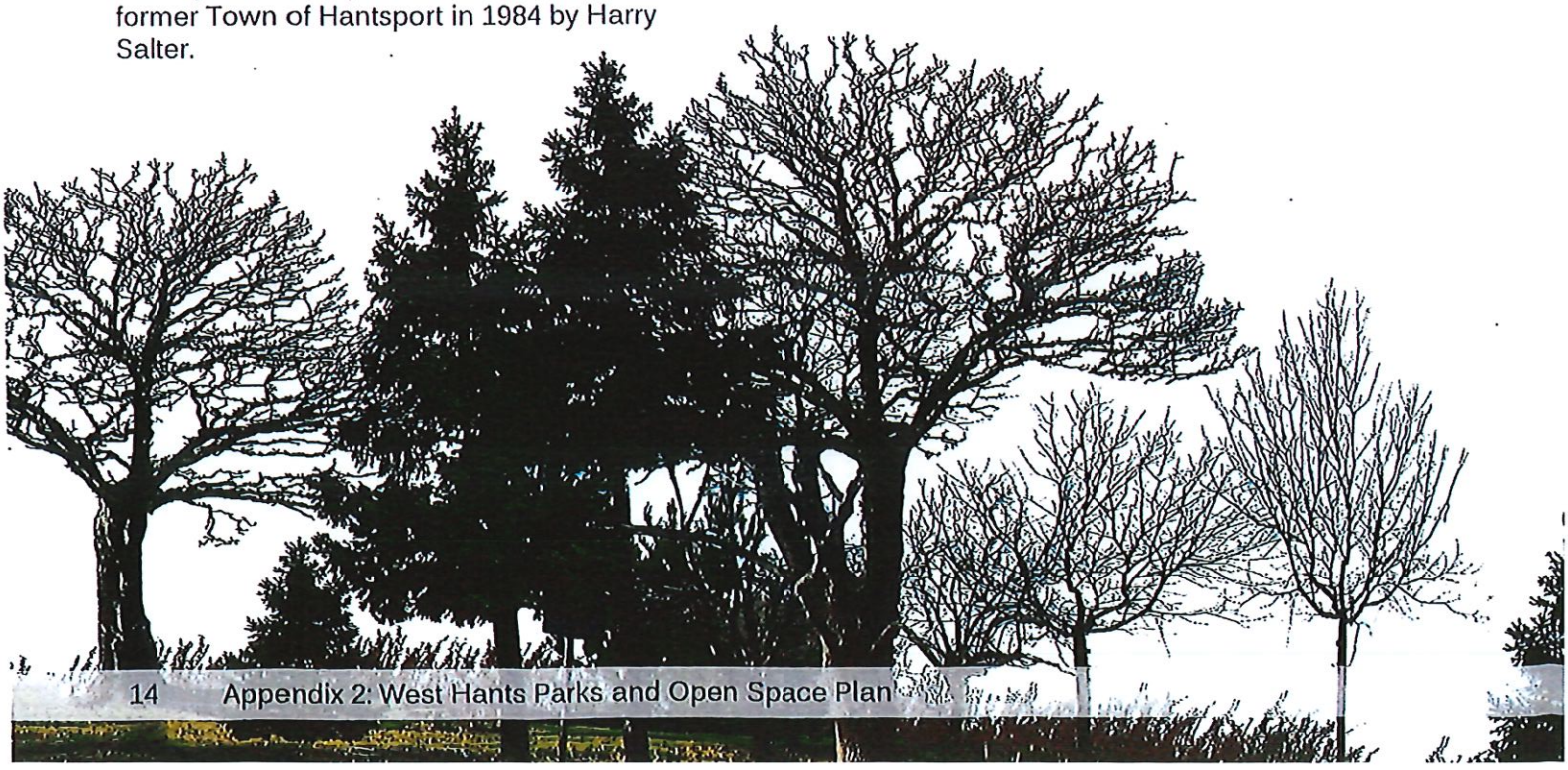
Overlapping Management Plans: None.

Observations

- Property grading and landscaping indicates the former site of a dwelling.
- An informal walking path apparent from Riverview Drive to the tree line.

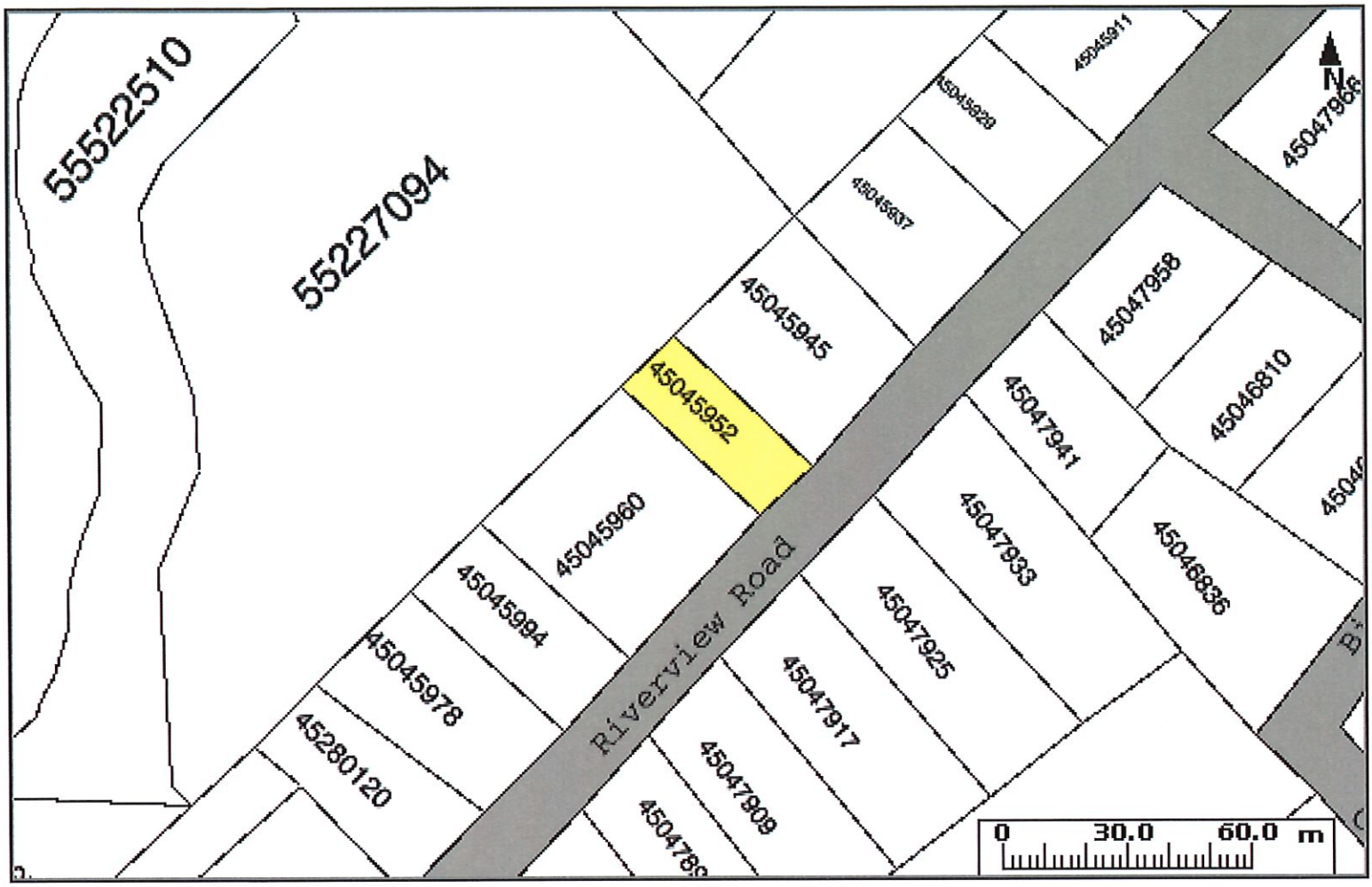
Opportunities

- Given the close proximity to other parks and open spaces, it is recommended that there is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



Property Online Map

Date: **Sep 8, 2021 5:23:44 P**



:D:	45045952	Owner:	MUNICIPALITY OF THE DISTRICT OF WEST HANTS	AAN:	00538426
ɔunty:	HANTS COUNTY	Address:	18 RIVERVIEW ROAD HANTSPORT	Value:	$34,500 (2021 RESIDENTIAL EXEMPT)
? Status:	NOT LAND REGISTRATION				

ıe Provincial mapping is a graphical representation of property boundaries which approximate e size, configuration and location of parcels. Care has been taken to ensure the best possible ıality, however, this map is not a land survey and is not intended to be used for legal escriptions or to calculate exact dimensions or area. The Provincial mapping is not conclusive as the location, boundaries or extent of a parcel [*Land Registration Act* subsection 21(2)]. THIS I: OT AN OFFICIAL RECORD.

Property Online version 2.0

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11

McCully Crescent

Overview

PID: 45387768

Coordinates: 45.05938, -64.1829

Date visited: November 26, 2015.

Address: Lot Hdl-3 Holmes Hill Road, Hantsport.

Classification: Underused.

Size: 1.74 acres (0.70 ha).

Land cover: Property cleared, but now naturalizing with perennials. A stand of trees grows along western boundary.

Topography: Property sloping upward to the north and north west. A berm rises along the western edge.

Maintained by: Municipality.

Use: None.

Access: From McCully Crescent.

Parking: Along the road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

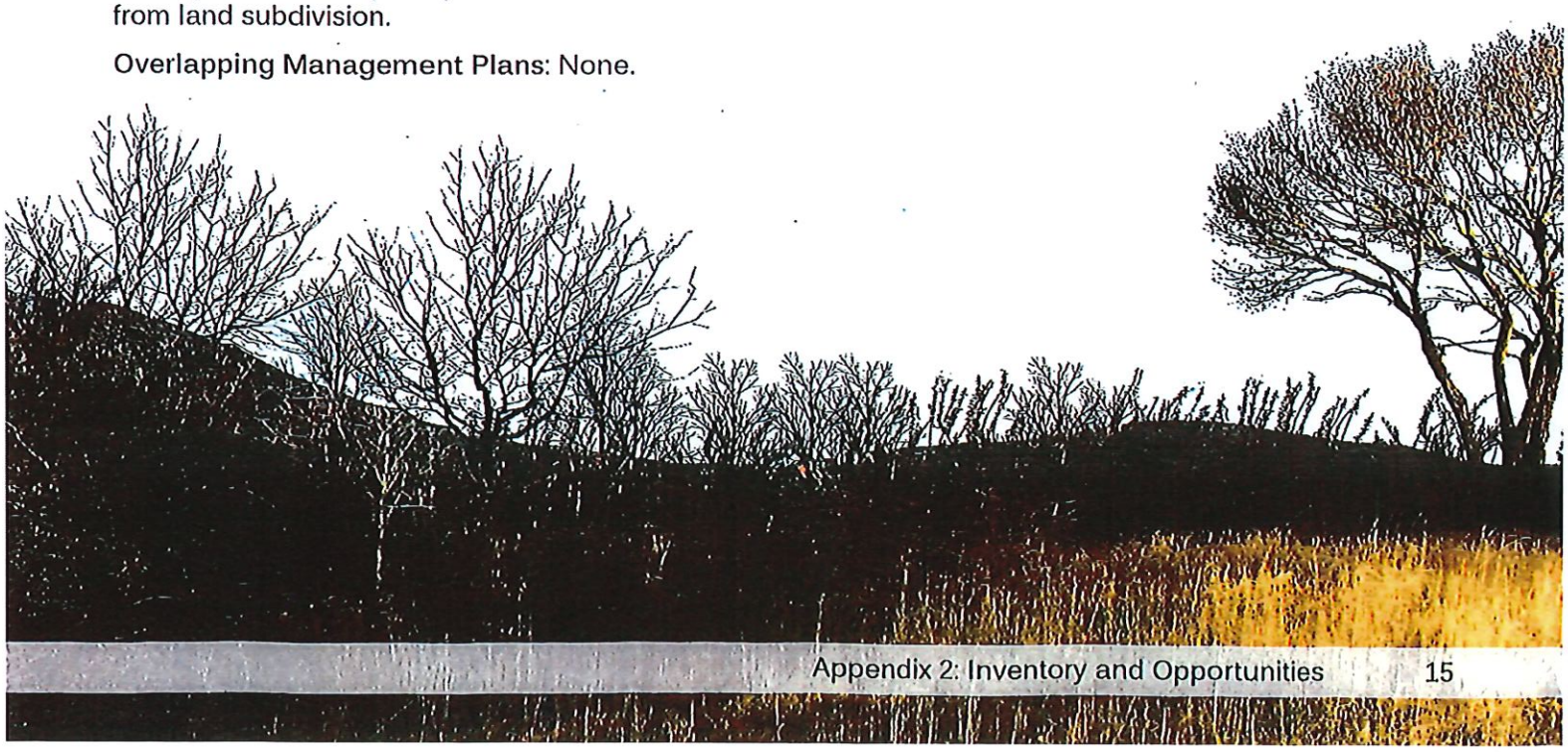
Overlapping Management Plans: None.

Observations

- Little evidence of human activity on site.

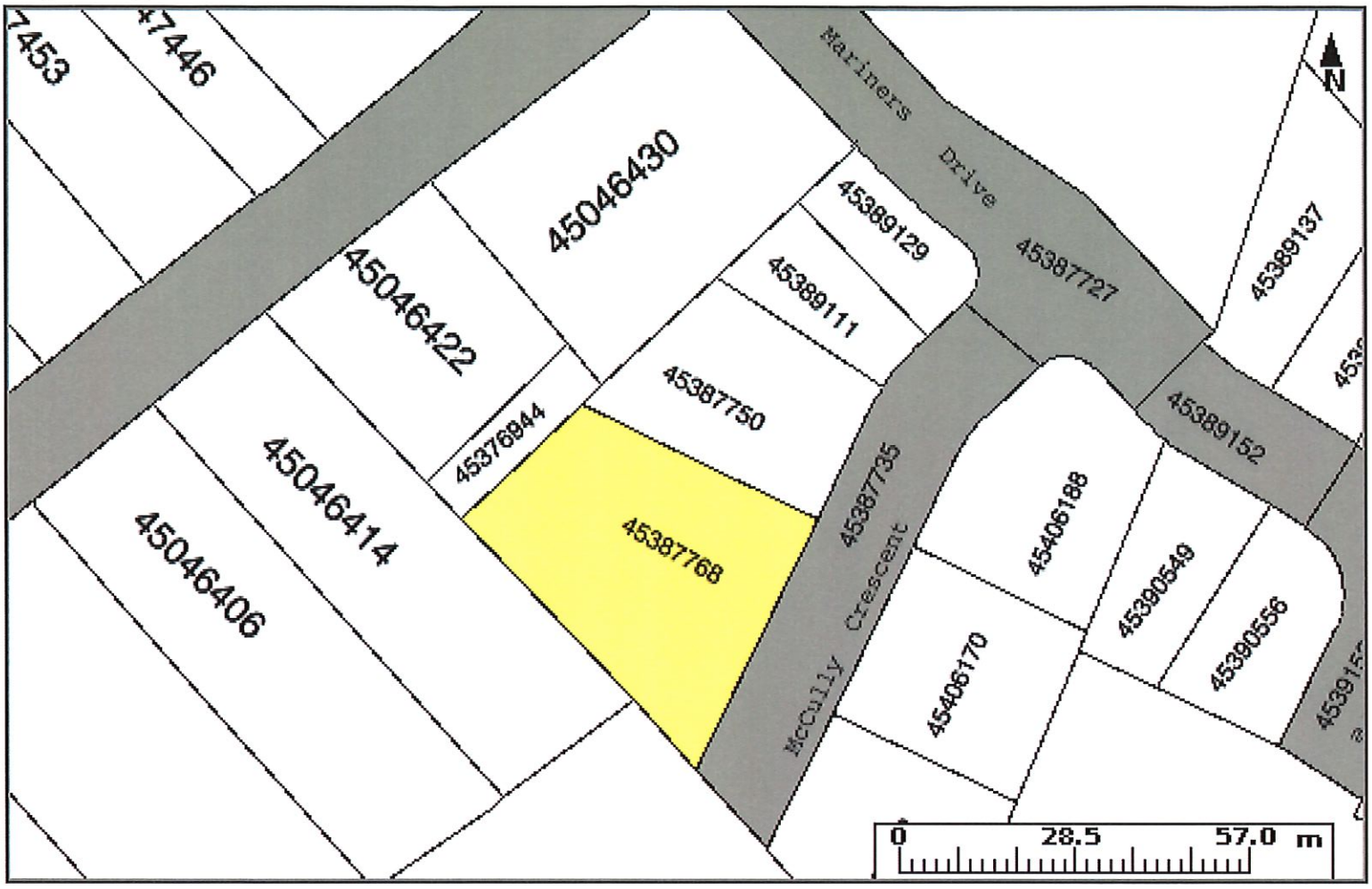
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



roperty Online Map

Date: **Sep 8, 2021 5:24:46 P**



:D:	45387768	Owner:	MUNICIPALITY OF THE DISTRICT OF WEST HANTS	AAN:	10415756
ounty:	HANTS COUNTY	Address:	HOLMES HILL ROAD HANTSPORT	Value:	$34,500 (2021 RESIDENTIAL EXEMPT)
R Status:	LAND REGISTRATION				

ıe Provincial mapping is a graphical representation of property boundaries which approximate e size, configuration and location of parcels. Care has been taken to ensure the best possible ıality, however, this map is not a land survey and is not intended to be used for legal escriptions or to calculate exact dimensions or area. The Provincial mapping is not conclusive as the location, boundaries or extent of a parcel [*Land Registration Act* subsection 21(2)]. THIS I OT AN OFFICIAL RECORD.

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13

Mariner's Drive Wood Lot

Overview

PID: 45391554

Coordinates: 45.05908, -64.1812

Date visited: November 26, 2015.

Address: Lot Hdl-19z Mariner's Drive, Hantsport.

Classification: Underused.

Size: 0.20 acres (0.08 ha).

Land cover: White pine planted in rows, mixed perennial understory.

Topography: Land sloping to the south east.

Maintained by: Municipality.

Use: None.

Access: From Mariner's Drive.

Parking: 2-3 spaces at the foot of Mariner's Drive.

Signage: None.

History: White pine tree farm or plantation.

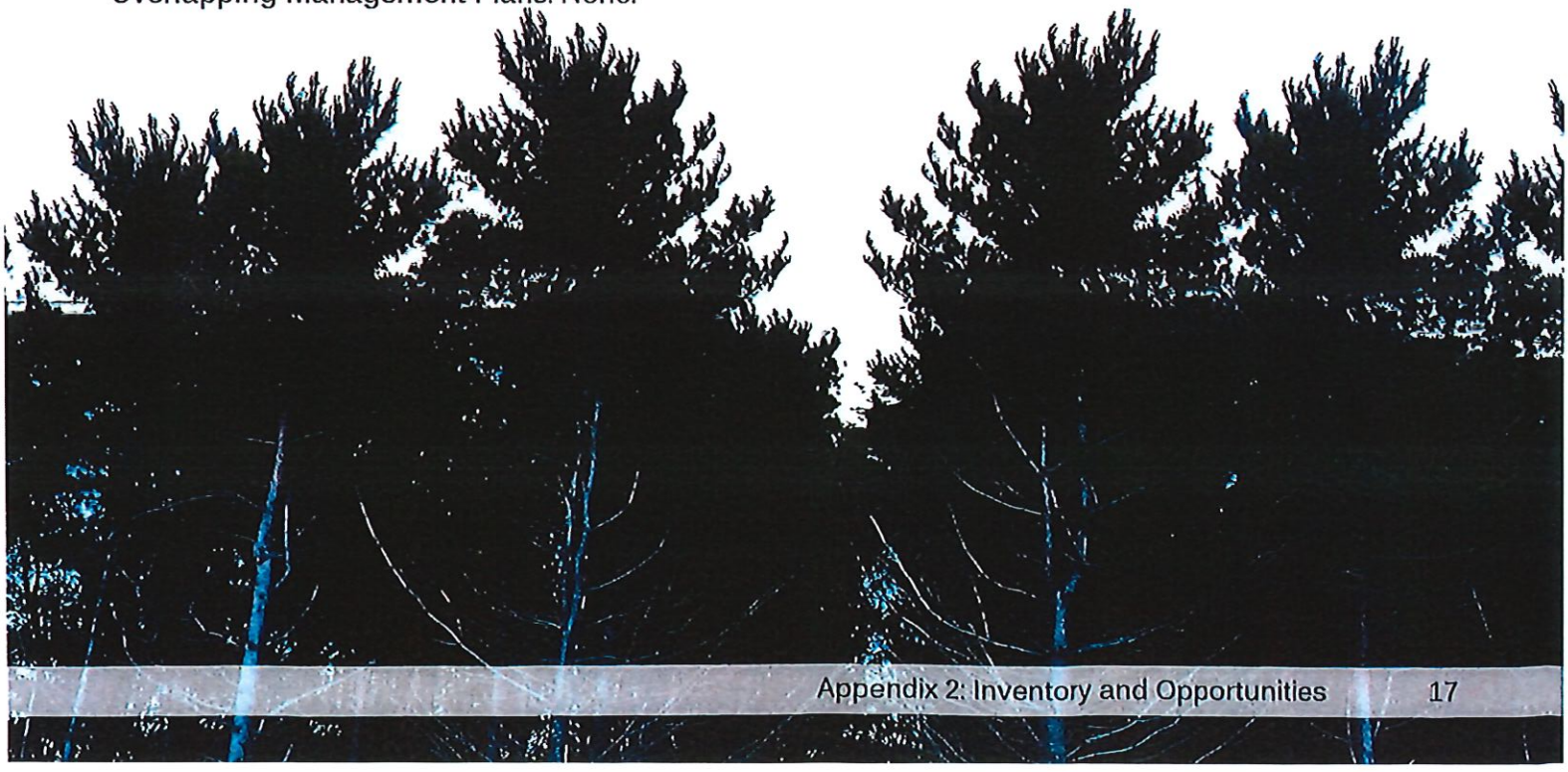
Overlapping Management Plans: None.

Observations

- White pine trees planted in rows is an indicator of a former woodlot or tree farm.
- Land is accessible from Mariner's Drive should people want to walk through.

Opportunities

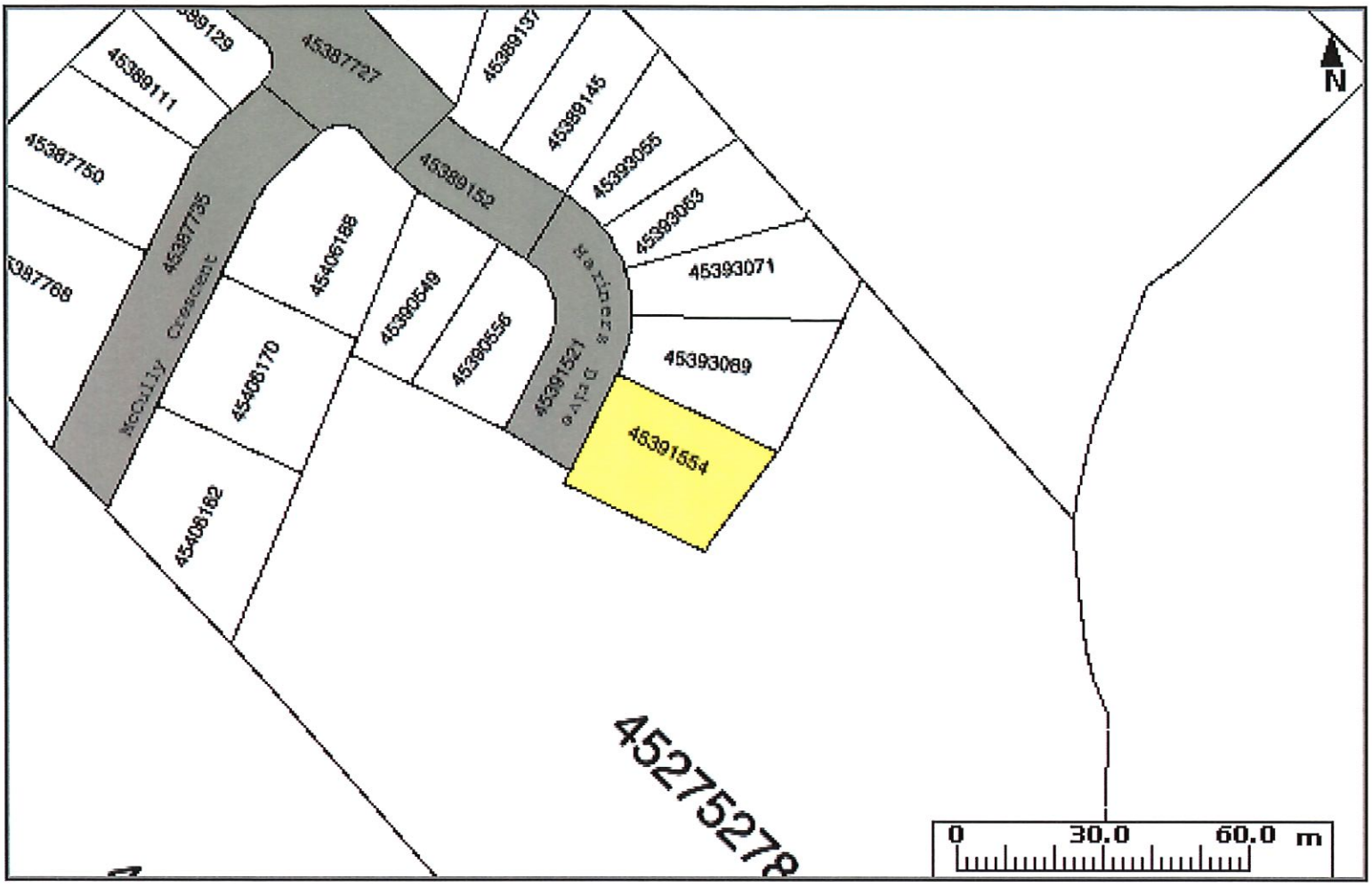
- Parcel ideal for residential lot.
- Lumber from trees can be harvested for community purpose (e.g. amenity structure).
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



PROPERTY Online NOVA SCOTIA
Service Nova Scotia and Municipal Relations

Property Online Map

Date: **Sep 8, 2021 5:25:52 PM**



ID:	45391554	Owner:	MUNICIPALITY OF THE DISTRICT OF WEST HANTS	AAN:	10473497
County:	HANTS COUNTY	Address:	MARINER'S DRIVE HANTSPORT	Value:	$34,500 (2021 RESIDENTIAL TAXABLE)
LR Status:	LAND REGISTRATION				

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Halewood Drive Lot

9

Overview

PID: 45226636

Coordinates: 45.00002, -64.184

Date visited: November 9, 2015.

Address: Parcel P-1 Halewood Drive, Falmouth.

Classification: Underused.

Size: 0.57 acres (0.23 ha).

Landcover: Wooded lot. Mixture of evergreen and deciduous plant species. Drainage ditch along the north length of the property.

Topography: Land sloping to the north and east.

Maintained by: Municipality.

Use: None.

Access: No formal access created. Access would be from Halewood Drive.

Parking: No organized parking; road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

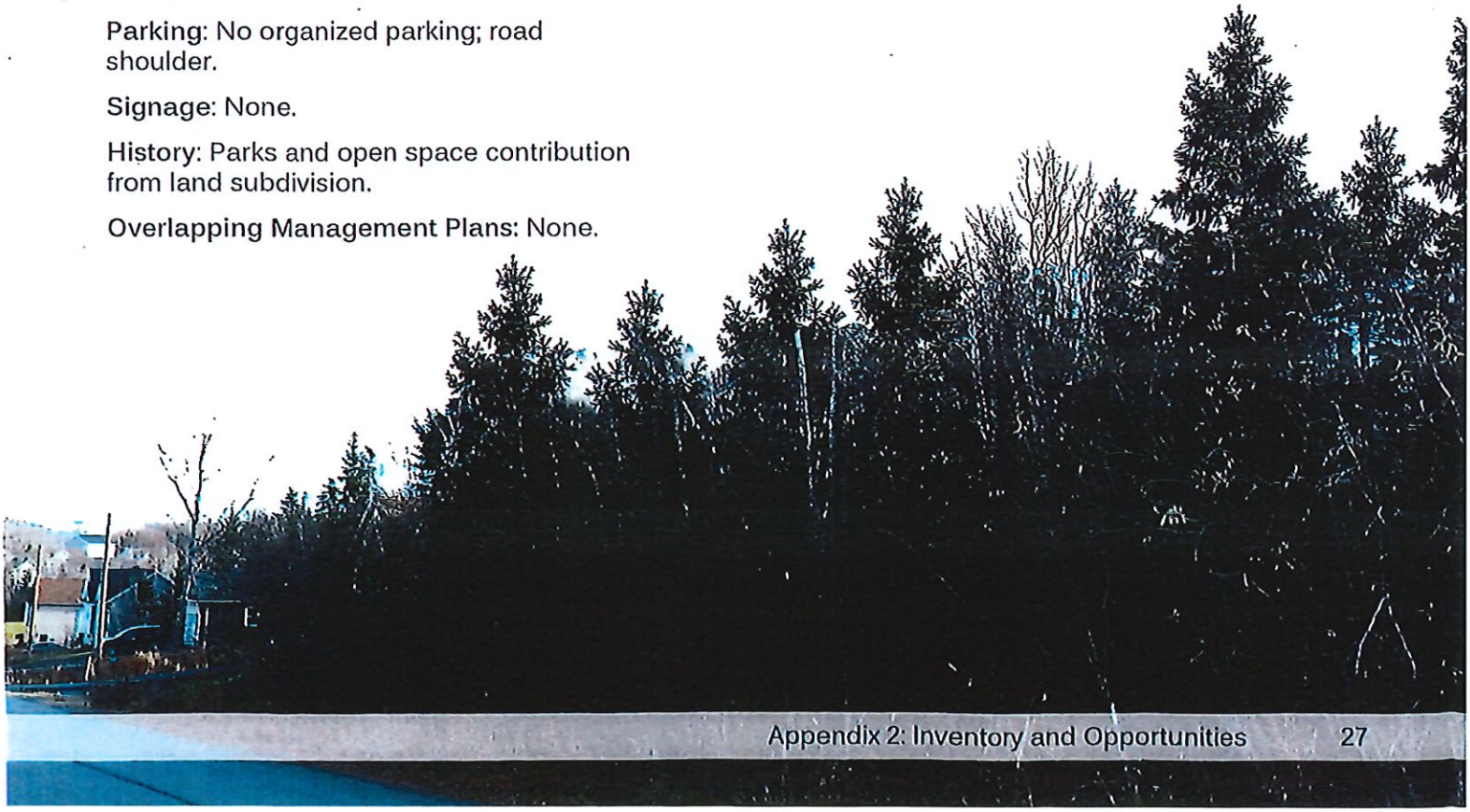
Overlapping Management Plans: None.

Observations

- No obvious signs of access of use by residents.

Opportunities

- Given the number of parks and open space parcels in the neighbourhood, it is recommended that there is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.

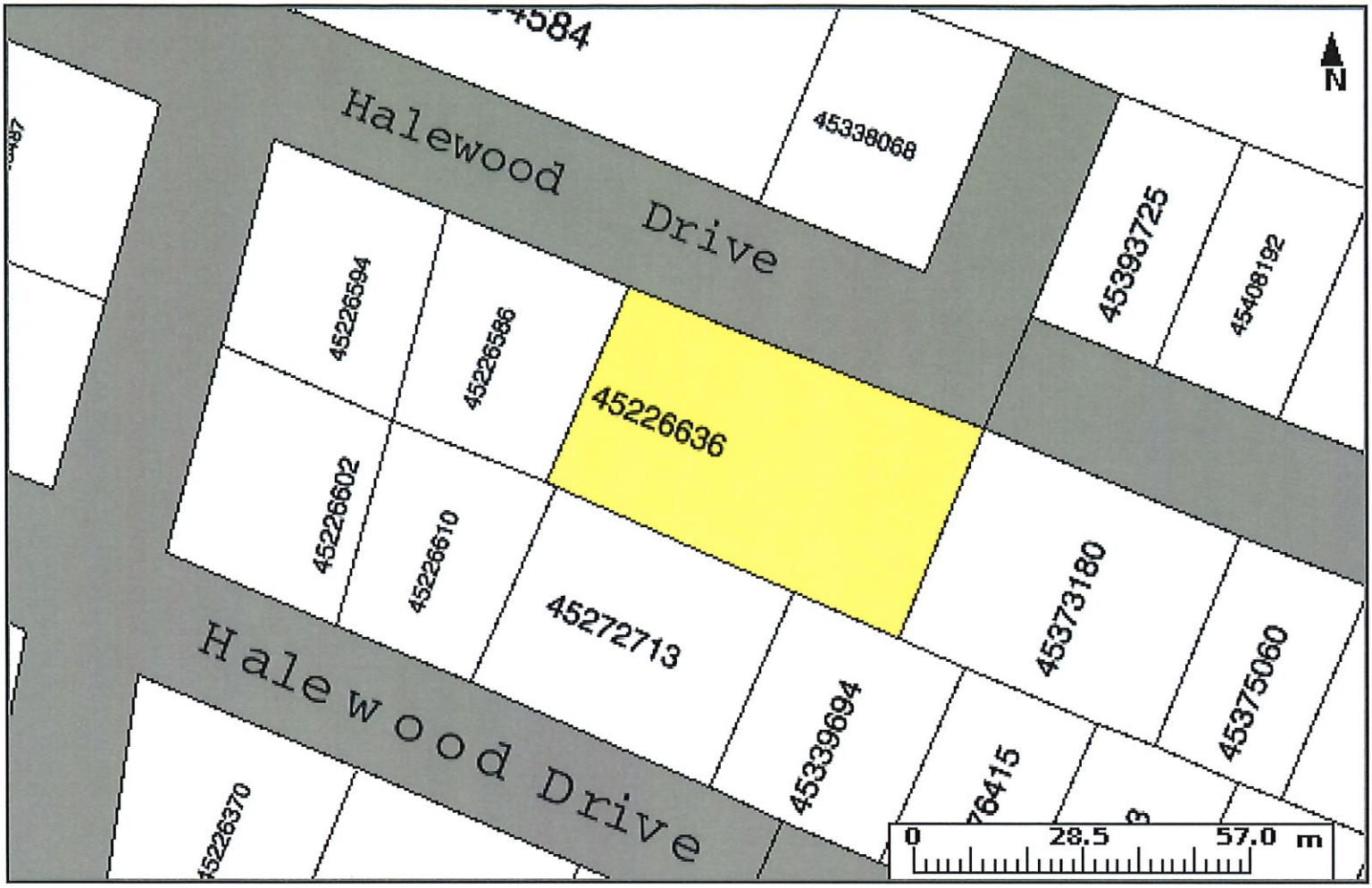


PROPERTY Online

NOVA SCOTIA
Service Nova Scotia and Municipal Relations

roperty Online Map

Date: **Sep 9, 2021 10:51:39 A**



:D:	45226636	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST	AAN:	07850212
ounty:	HANTS COUNTY	Address:	HALEWOOD DRIVE FALMOUTH	Value:	$30,100 (2021 COMMERCIAL EXEMPT)
R Status:	NOT LAND REGISTRATION				

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11

Falmouth Dyke Road Parcel

Overview

PID: 45196268

Coordinates: 44.98617, -64.1796

Date visited: November 26, 2015.

Address: Parcel E Falmouth Dyke Road, Falmouth.

Classification: Underused.

Size: 0.46 acres (0.19 ha).

Land cover: Small parcel with 100% tree cover.

Topography: Land sloping to the South West.

Maintained by: Municipality.

Use: None.

Access: None.

Parking: None.

Signage: None.

History: This land parcel was deeded to the Municipality in 1978 through the parks and open space contribution from land subdivision by the Greenwood Estates Ltd.

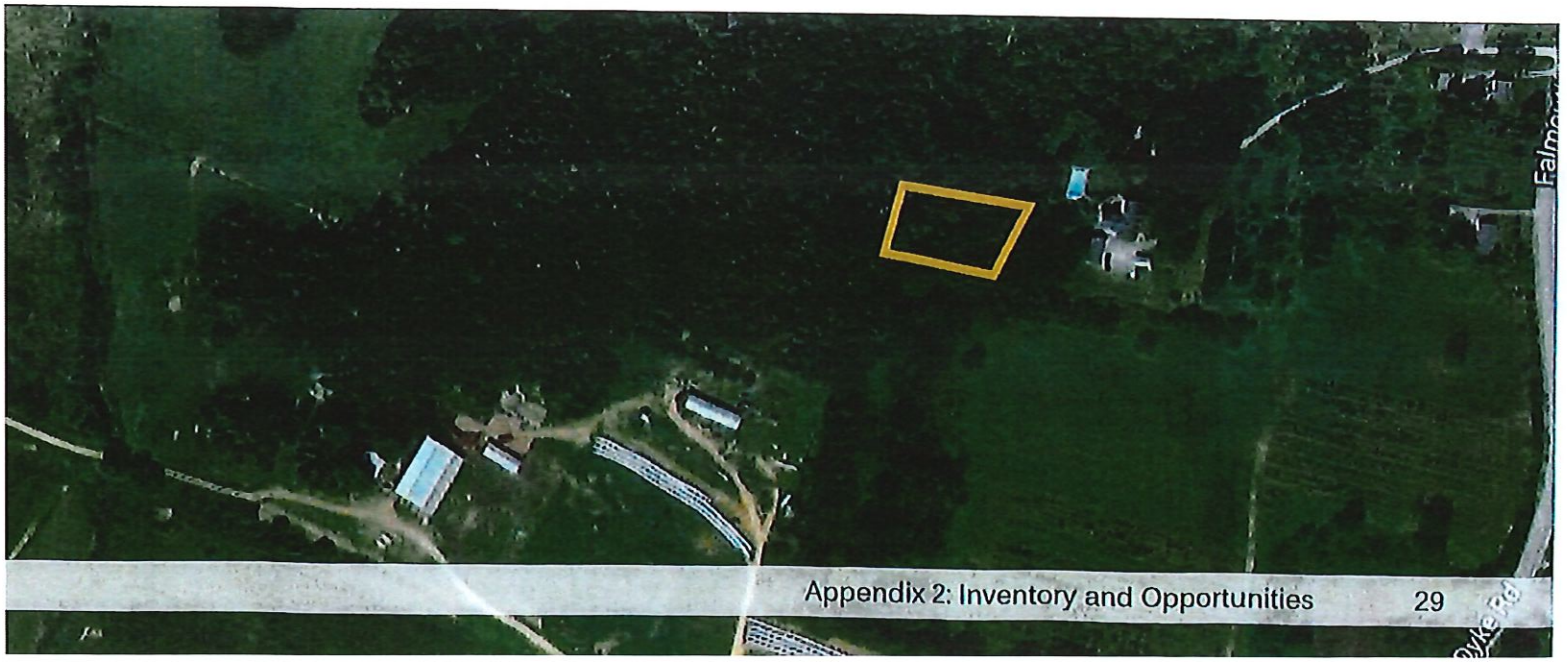
Overlapping Management Plans: None.

Observations

- No access through public right-of-way.

Opportunities

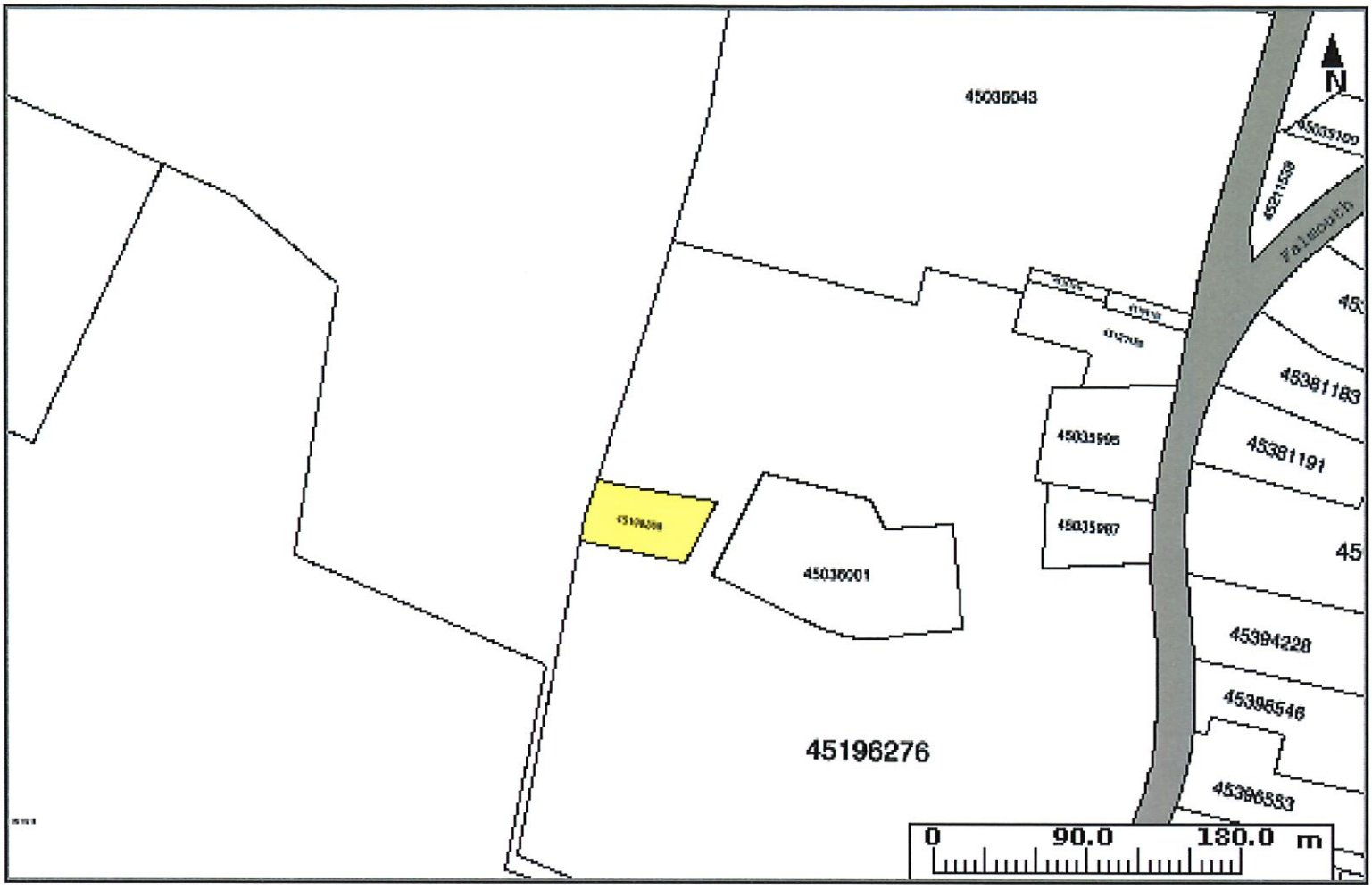
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



PROPERTY Online NOVA SCOTIA
Service Nova Scotia and Municipal Relations

Property Online Map

Date: **Sep 9, 2021 10:53:36 AM**



ID: 45196268
County: HANTS COUNTY
PR Status: NOT LAND REGISTRATION

Owner: MUNICIPALITY OF THE DISTRICT OF WEST HANTS
Address: FALMOUTH DYKE ROAD
FALMOUTH

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13

Falmouth Back Road

Overview

PIDs: 45062676

Coordinates: 44.992355, -64.188832

Date visited: November 26, 2015.

Address: Lot P-1 Falmouth Back Road, Falmouth.

Classification: Unused.

Size: 1.86 acres (0.75 ha).

Land cover: The western-half of the parcel is forested with white pine and paper birch. The eastern-half of the parcel is occupied by a flood plain, vegetated with grass species and perennials.

Topography: Parcel slopes more than 5m (16.4 feet) to the north and east towards a brook below.

Maintained by: Municipality.

Use: None (other than electrical towers).

Access: No formal access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

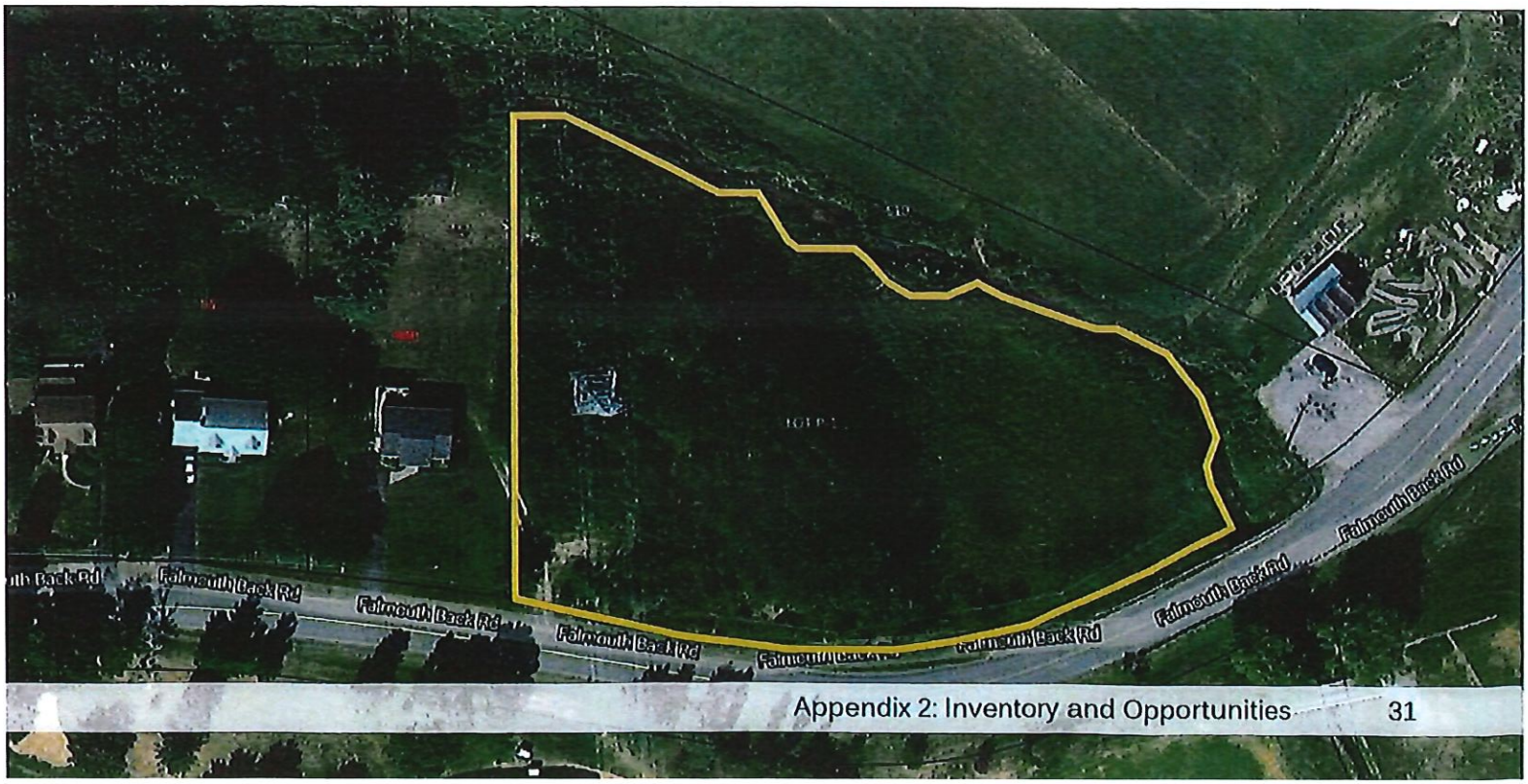
Overlapping Management Plans: None.

Observations

- Parcel intersected by power transmission corridor and houses a transmission tower.
- Neighbouring property uses municipal parcel for personal property access and parking.
- The slope of the parcel and presence of a floodplain limits the site useability for parks and open space.

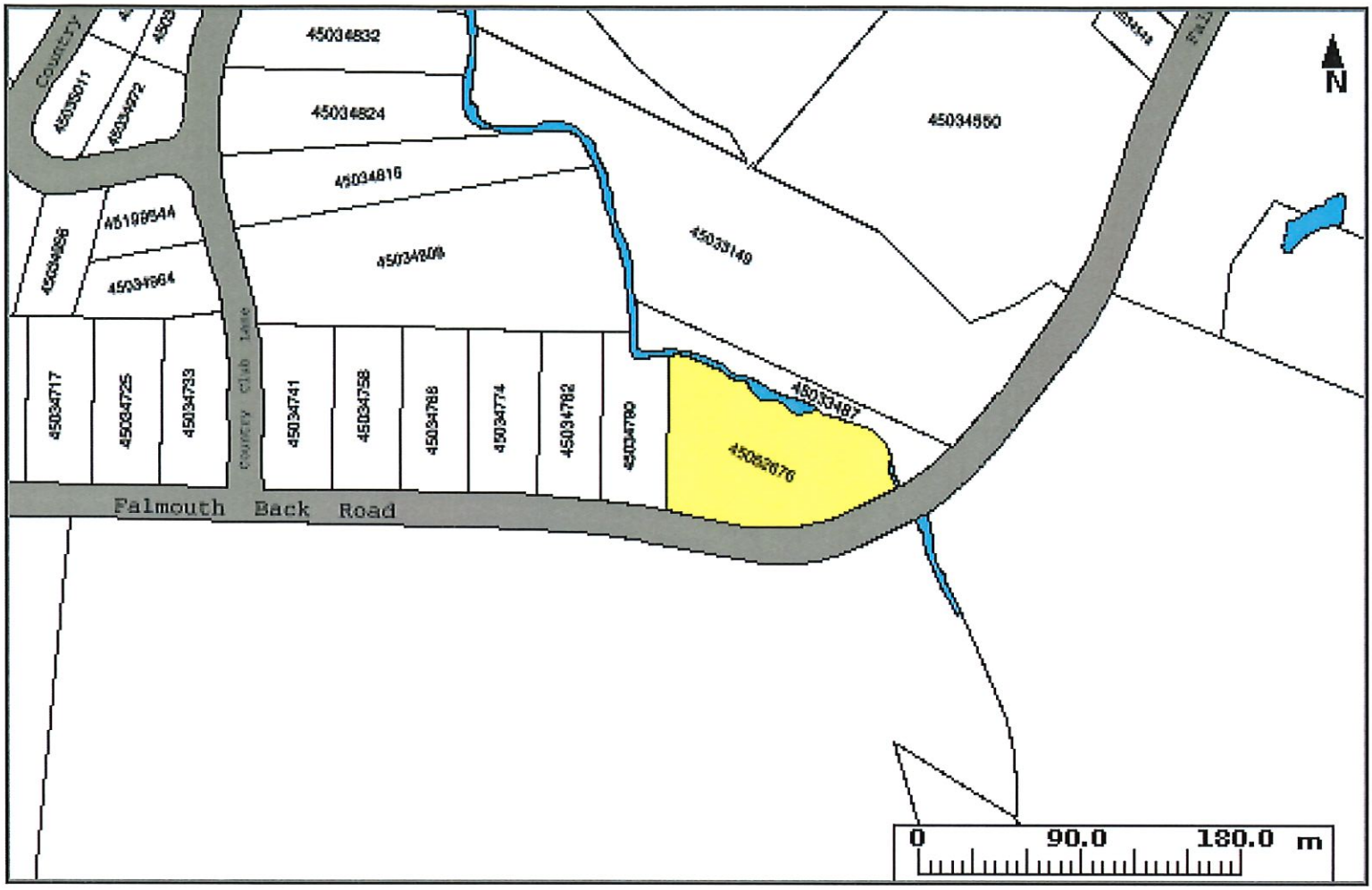
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



roperty Online Map

Date: **Sep 9, 2021 10:54:12 A**



:D: 45062676
ounty: HANTS COUNTY
R Status: NOT LAND REGISTRATION

Owner: MUNICIPALITY OF THE DISTRICT OF WEST HANTS
Address: FALMOUTH BACK ROAD
FALMOUTH

ıe Provincial mapping is a graphical representation of property boundaries which approximate e size, configuration and location of parcels. Care has been taken to ensure the best possible ıality, however, this map is not a land survey and is not intended to be used for legal escriptions or to calculate exact dimensions or area. The Provincial mapping is not conclusive as the location, boundaries or extent of a parcel [*Land Registration Act* subsection 21(2)]. THIS I OT AN OFFICIAL RECORD.

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11

MacLeod Court

Overview

PID: 45231586

Coordinates: 44.95837, -64.0828

Date visited: November 26, 2015.

Address: PARCEL P-1 MacLeod Court.

Classification: Underused.

Size: 0.18 acres (0.07 ha).

Land cover: Parcel covered with naturalized perennials and shrubs with some tree cover to the western boundary.

Topography: Slight slope to the north.

Maintained by: Municipality.

Use: None.

Access: No municipal access to the site.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

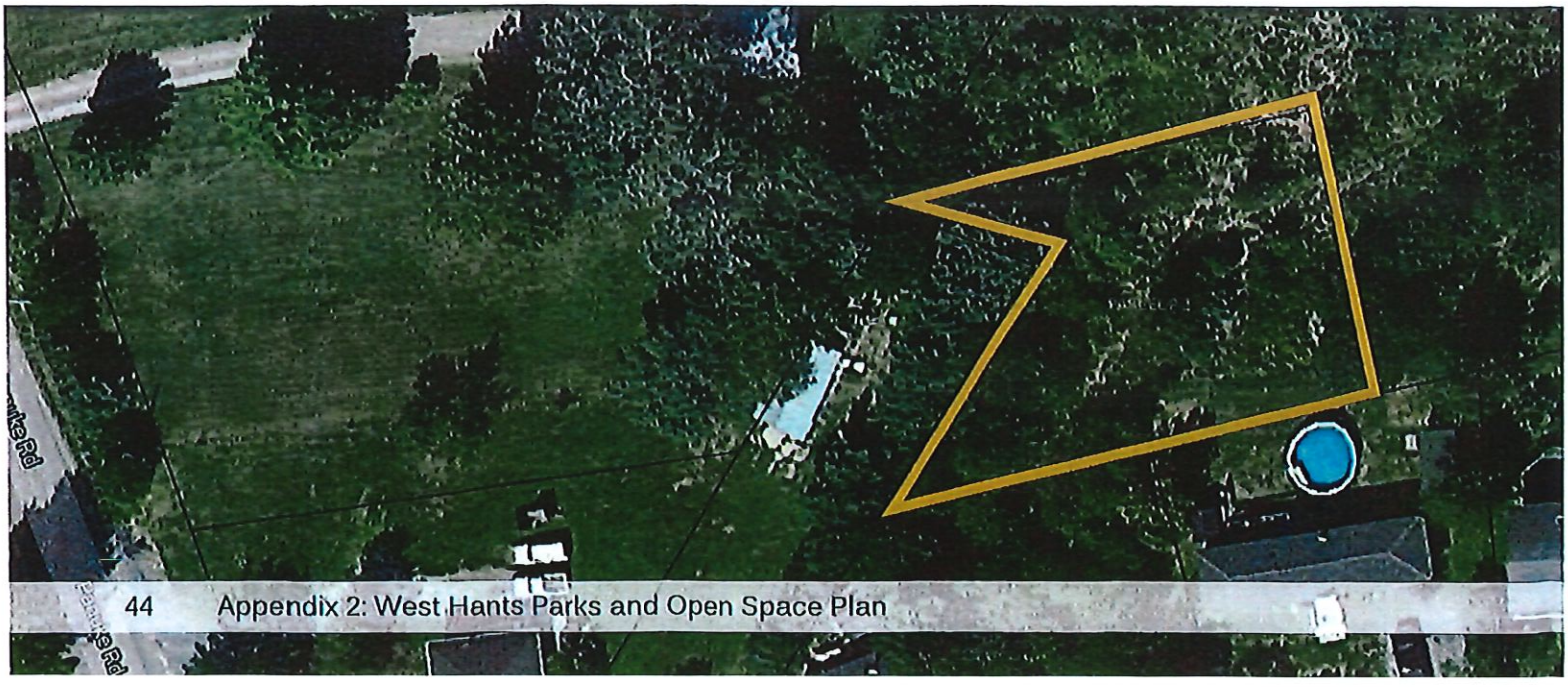
Overlapping Management Plans: None.

Observations

- No access from public right-of-way.

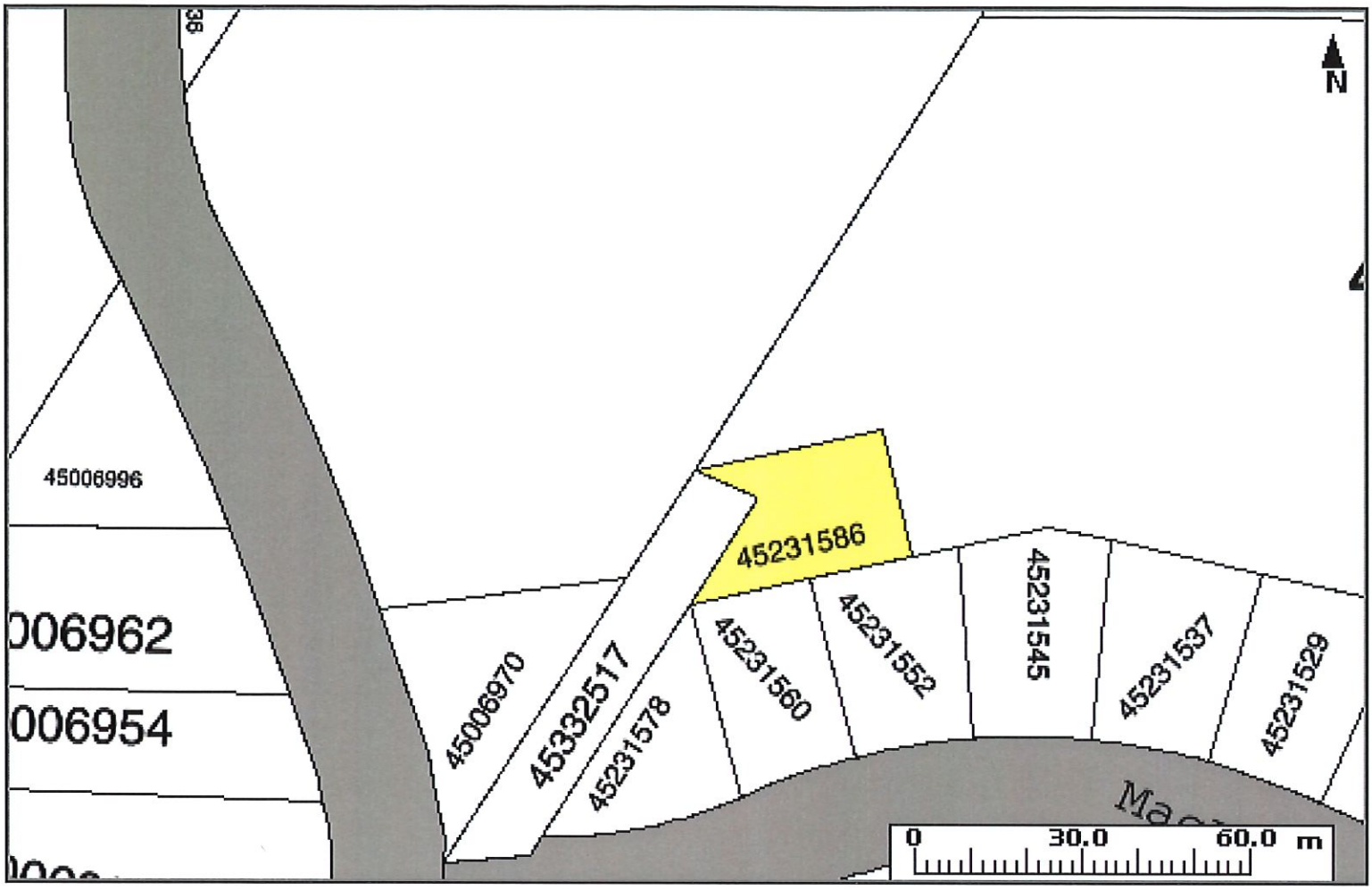
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



Property Online Map

Date: **Sep 9, 2021 11:49:22 AM**



ID: 45231586
County: HANTS COUNTY
PR Status: NOT LAND REGISTRATION

Owner: MUNICIPALITY OF THE DISTRICT OF HANTS WEST
Address: MACLEOD COURT
THREE MILE PLAINS

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15

Robert Drive Parcel

Overview

PID: 45061181

Coordinates: 44.92348, -63.9047

Date visited: 26 November, 2015.

Address: 16 Robert Drive, Ardoise.

Classification: Underused.

Size: 1.20 acres (0.49 ha).

Land cover: Forested parcel with narrow access point from the road.

Topography: Parcel sloping down from road to the west.

Maintained by: Municipality.

Use: No programmed use; informal walking.

Access: From Robert Drive. No cleared access. Worn down foot path apparent.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Close to the border of Forest Lakes Community.
- Well traveled ATV paths running adjacent to parcel.
- Wet and muddy conditions in low points.
- Very dense understory growth.

Opportunities

- Work with developer at Forest Lakes Community to outline future parks and open space development in close proximity to Robert Drive parcel. This parcel could become a municipal access point to proposed open space and trails. If road access to Forest Lakes is created at the foot of Robert Drive, there would be little potential to develop as amenity space. At that time, this parcel should be considered for divestment.

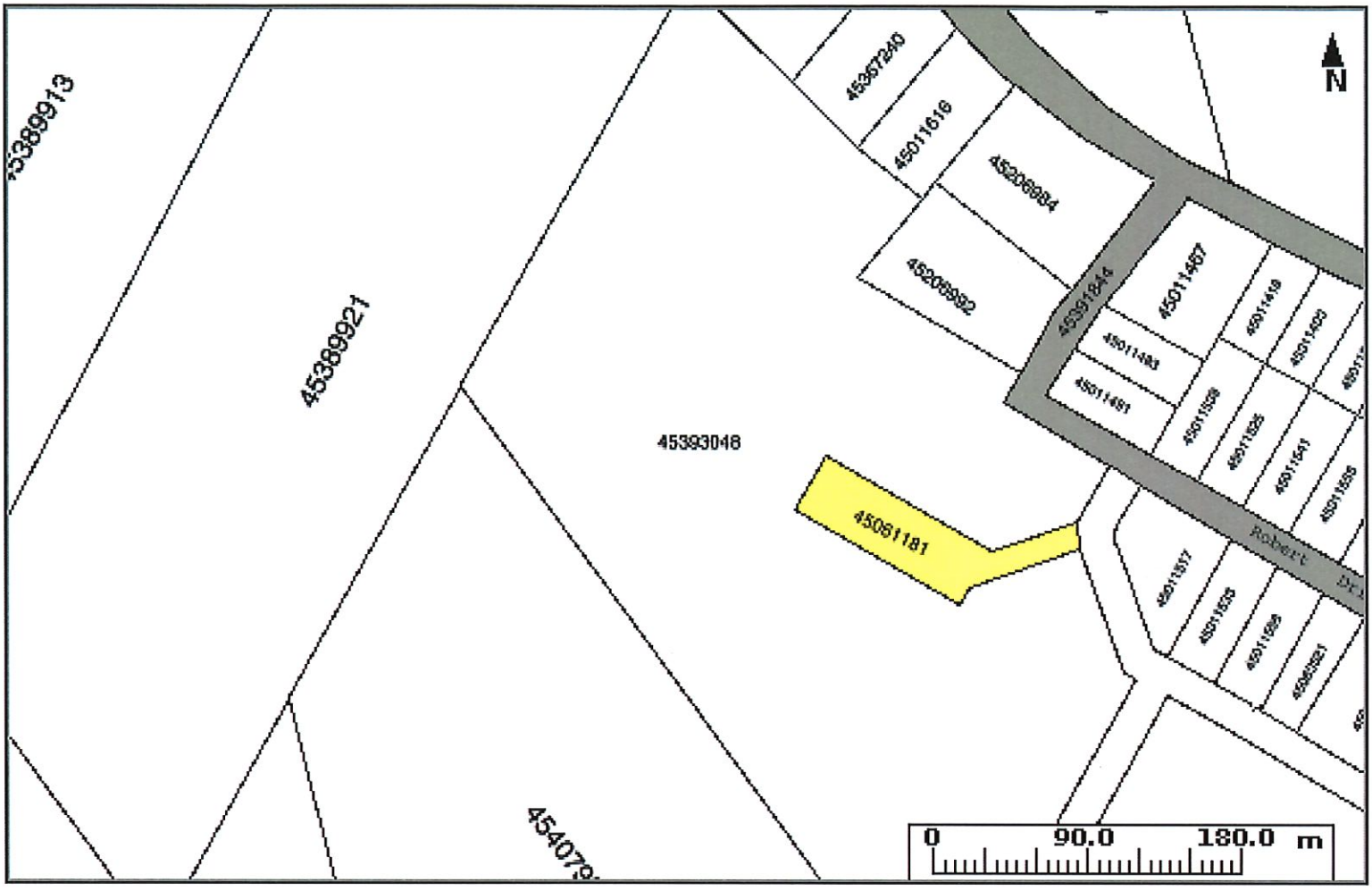


PROPERTY Online

NOVA SCOTIA
Service Nova Scotia and Municipal Relations

Property Online Map

Date: **Sep 9, 2021 10:55:32 AM**



ID: 45061181
County: HANTS COUNTY
PR Status: NOT LAND REGISTRATION

Owner: MUNICIPALITY OF THE DISTRICT OF WEST HANTS
Address: ROBERT DRIVE
ARDOISE

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16

Swinamer Drive

Overview

PID: 45289790

Coordinates: 44.966915, -64.105733

Date visited: November 26, 2015.

Address: Lot 12 Swinamer Drive, Three Mile Plains.

Classification: Unused.

Size: 0.37 acres (0.15 ha).

Land cover: Naturalized property with small shrubs and perennial species present. Presence of water tolerant perennial species indicate standing water in the low-point of the parcel.

Topography: Relatively flat parcel with a low point in the centre of the parcel.

Maintained by: Municipality.

Use: None.

Access: No formal access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Public land that feels private with arrangement of surrounding houses.
- Narrow street frontage.
- Standing water on-site.

Opportunities

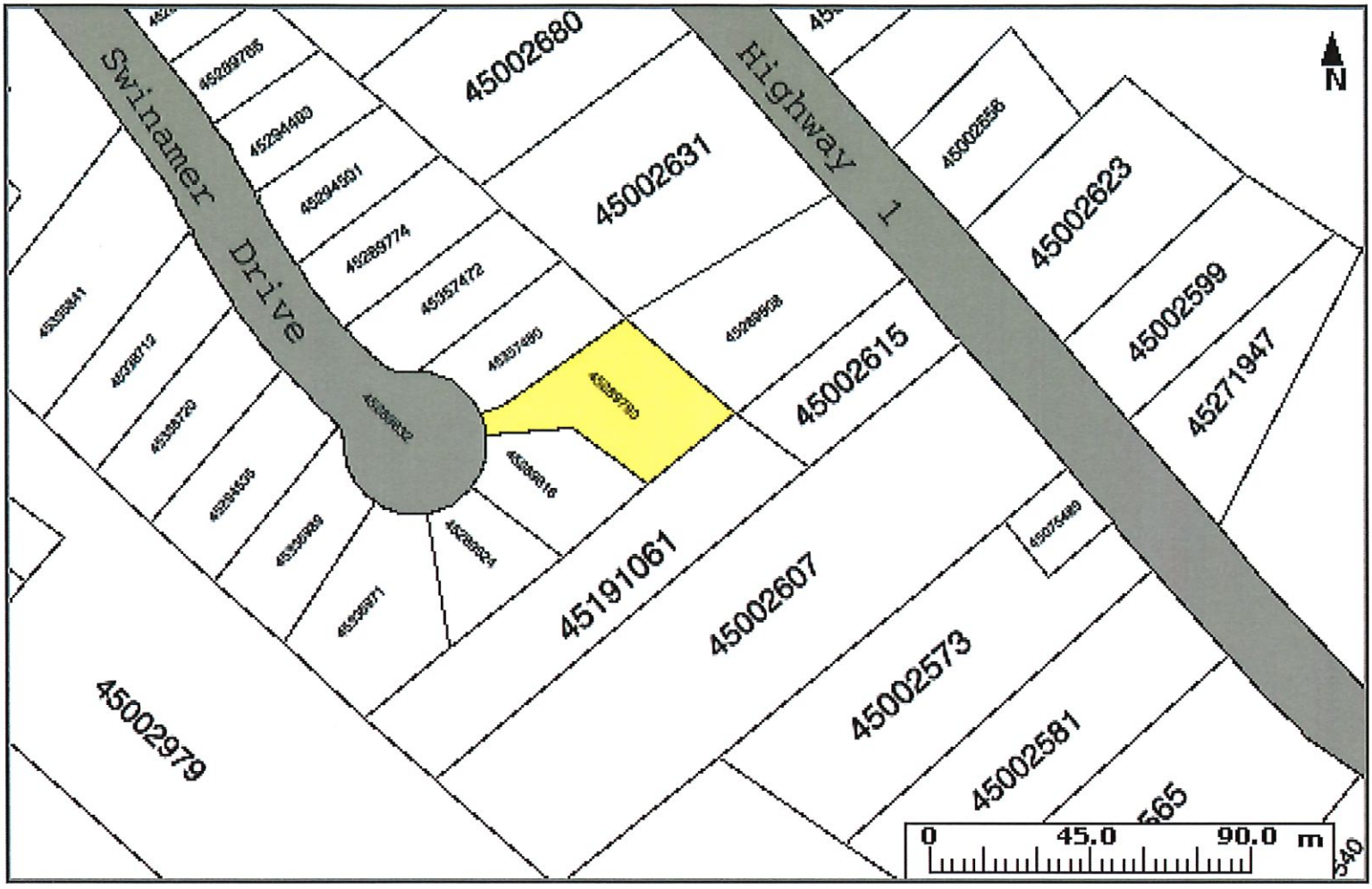
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



PROPERTY Online NOVA SCOTIA
Service Nova Scotia and Municipal Relations

Property Online Map

Date: **Sep 9, 2021 10:56:12 AM**



ID:	45289790	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST	AAN:	07913613
County:	HANTS COUNTY	Address:	SWINAMER DRIVE THREE MILE PLAINS	Value:	$36,000 (2021 RESIDENTIAL EXEMPT)
R Status:	NOT LAND REGISTRATION				

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10

Cove Road Extension

Overview

PID: 45063146

Coordinates: 45.1897, -64.1578

Date visited: November 16, 2015.

Address: PARCEL P-1andP-2 Cove Road Extension, Bramber.

Classification: Underused.

Size: 0.73 acres (0.29 ha).

Land cover: Forested parcel with turf maintained at road shoulder and along northeast corner of parcel.

Topography: Fairly flat parcel with western edge sloping to the west.

Maintained by: Municipality.

Use: None.

Access: Park access from Cove Road Extension.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- No obvious signs of park use.
- Road terminates at western property boundary.
- Close proximity to public beach access.

Opportunities

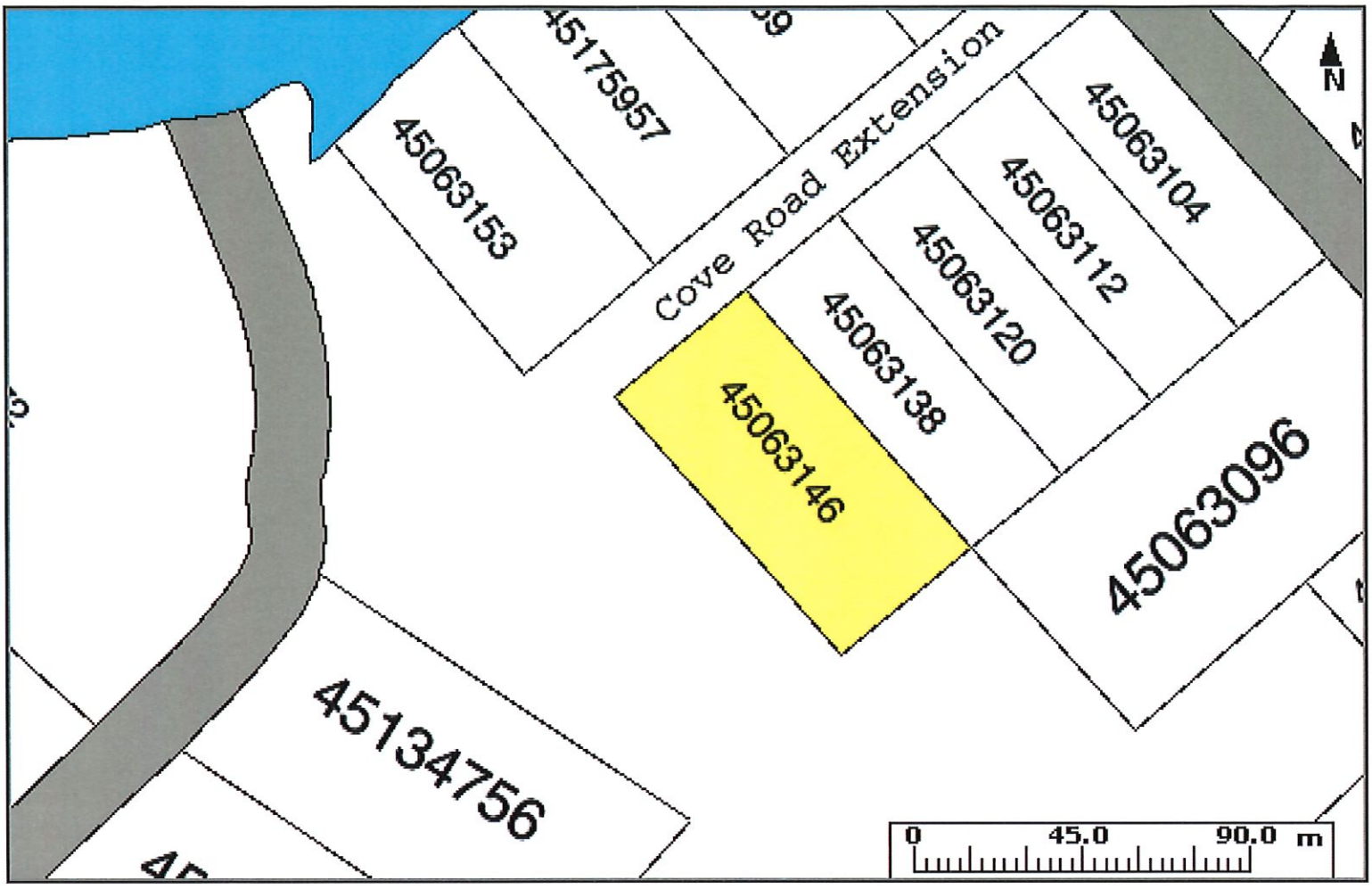
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



PROPERTY Online NOVA SCOTIA
Service Nova Scotia and Municipal Relations

Property Online Map

Date: **Sep 9, 2021 10:56:52 AM**



ID: 45063146
County: HANTS COUNTY
LR Status: NOT LAND REGISTRATION

Owner: MUNICIPALITY OF THE DISTRICT OF WEST HANTS
Address: COVE ROAD EXTENSION
BRAMBER

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11 Birchwood Trail

Overview

PID: 45182912

Coordinates: 45.14649, -64.1644

Date visited: November 16, 2015.

Address: Birchwood Trail, Cheverie.

Classification: Underused.

Size: 6.34 acres (2.57 ha).

Land cover: Forested parcel fronting on two roads with a drainage ditch.

Topography: Parcel sloping north from road shoulder. Small pond of standing water in northeast boundary line of parcel.

Maintained by: Municipality.

Use: None.

Access: From Birchwood Trail and Bayswater Drive.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

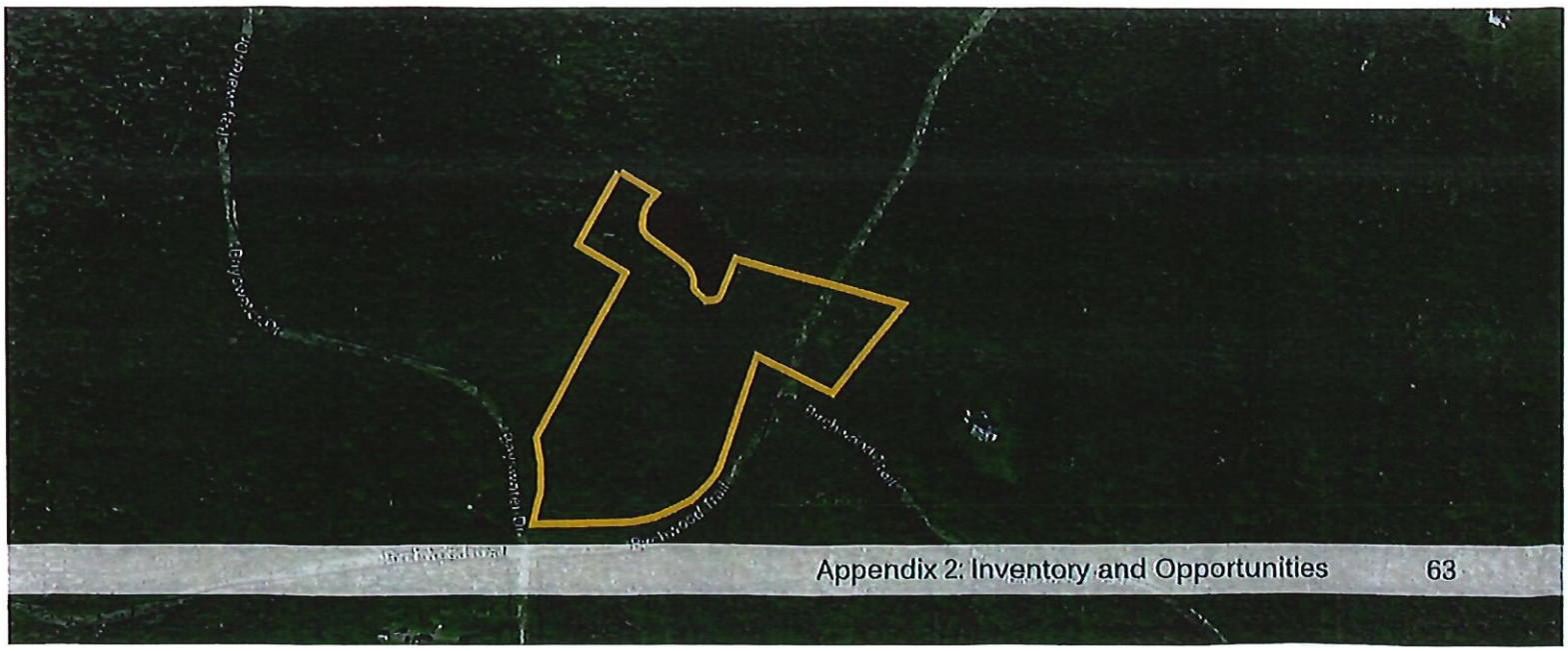
Overlapping Management Plans: None.

Observations

- Very poor road conditions leading to parcel (i.e., grading, washouts).
- Low population density in subdivision.
- Parcel a densely forested property with no obvious signs of use or access.
- Standing water observed on site.

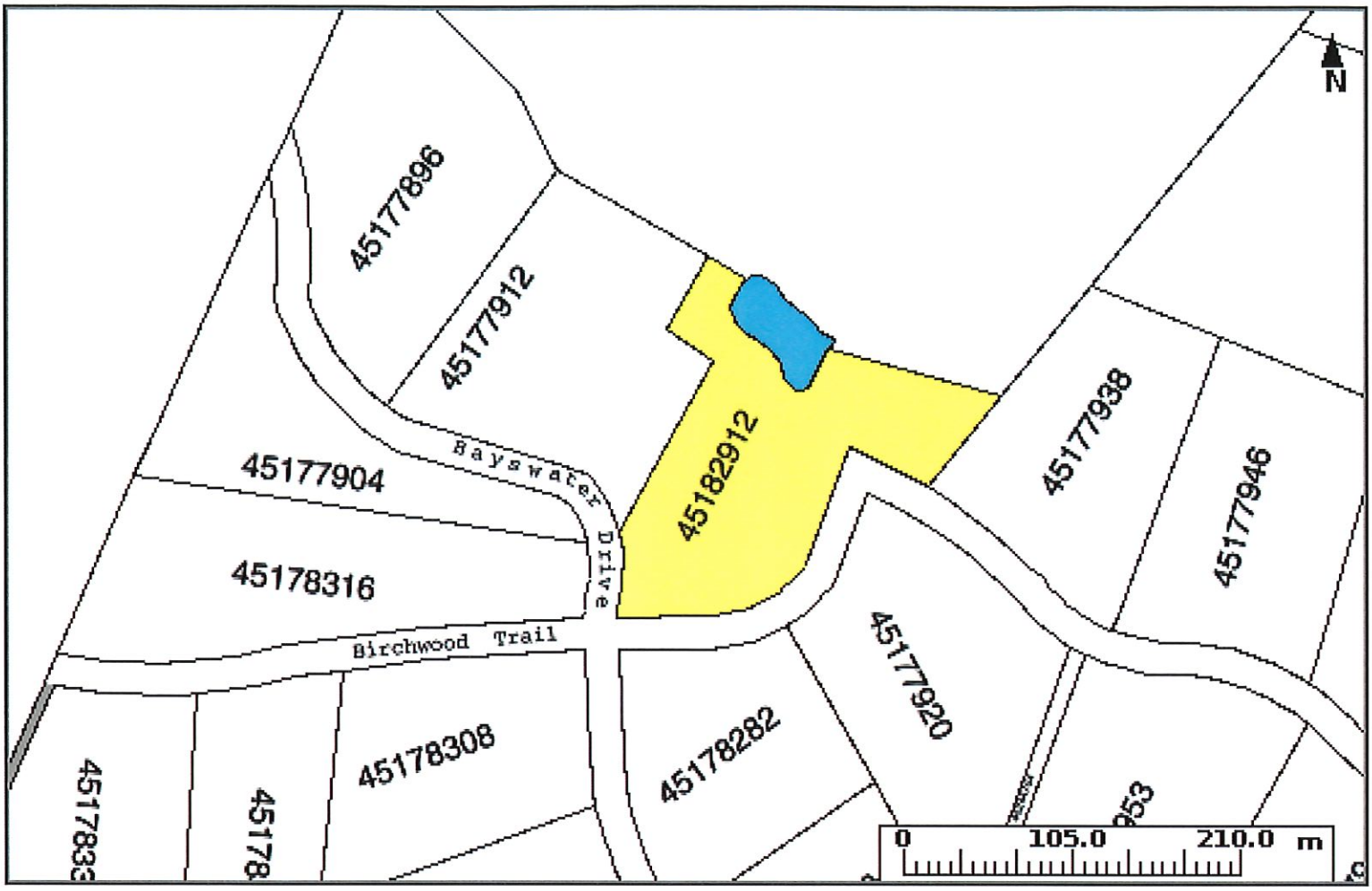
Opportunities

- With large wooded residential parcels adjacent to Municipal parcel, it is unlikely that the development of public park would be well-used.
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



roperty Online Map

Date: **Sep 9, 2021 10:57:48 A**



:D:	45182912	Owner:	MUNICIPALITY OF THE DISTRICT OF WEST HANTS	AAN:	03405575
ounty:	HANTS COUNTY	Address:	BIRCHWOOD TRAIL CHEVERIE	Value:	$3,800 (2021 RESOURCE EXEMPT)
R Status:	NOT LAND REGISTRATION				

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12

Saubren Lane

Overview

PID: 45225018

Coordinates: 45.14967, -64.1883

Date visited: November 16, 2015.

Address: Saubren Lane, Cheverie.

Classification: Underused.

Size: 1.74 acres (0.70 ha).

Land cover: Primarily forested parcel with a cleared approach from Saubren Lane.

Topography: Flat, dry, relatively cleared of trees, unmaintained.

Maintained by: Municipality.

Use: None.

Access: From Saubren Lane.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Front approach to parcel is regularly maintained by adjacent land owners.
- Signs of ATV use on the southern border of the parcel.
- Signs of previous land clearing and tree regrowth.

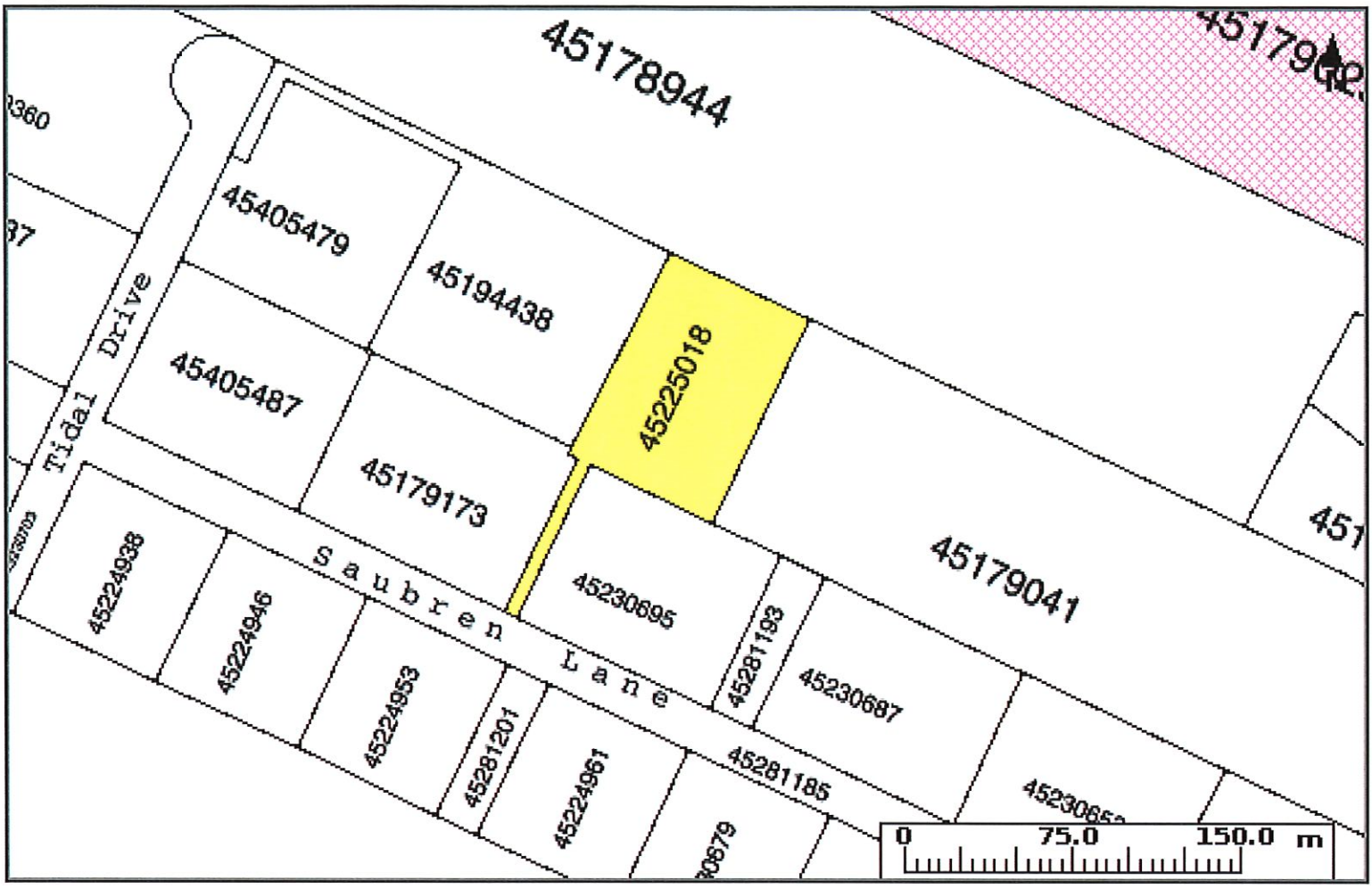
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



Property Online Map

Date: **Sep 9, 2021 10:58:28 AM**



PID:	45225018	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST	PAN:	07848242
County:	HANTS COUNTY	Address:	SAUBREN LANE CHEVERIE	Value:	$10,000 (2021 RESIDENTIAL EXEMPT)
PR Status:	NOT LAND REGISTRATION				

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13

Riverside Interior Parcel

Overview

PID: 45233517

Coordinates: 45.12471, -64.1319

Date Visited: N/A

Address: Kempt Forest Dr, Kempt Shore.

Classification: Underused.

Size: 16.3 acres (6.6 ha).

Land cover: Densely forested parcel.

Topography: unknown

Maintained by: Municipality.

Use: None.

Access: No access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

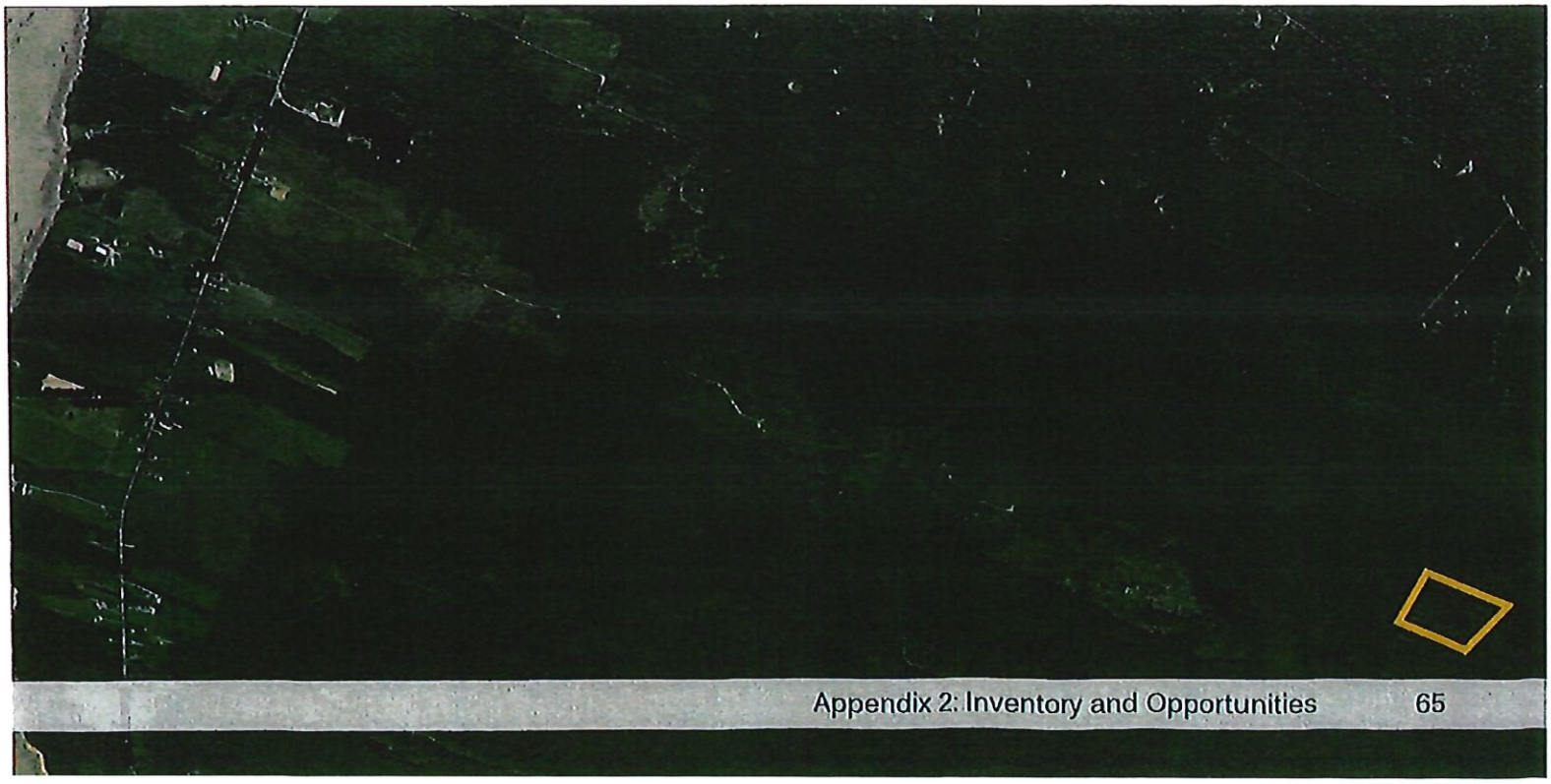
Overlapping Management Plans: None.

Observations

- Parcel is inaccessible.

Opportunities

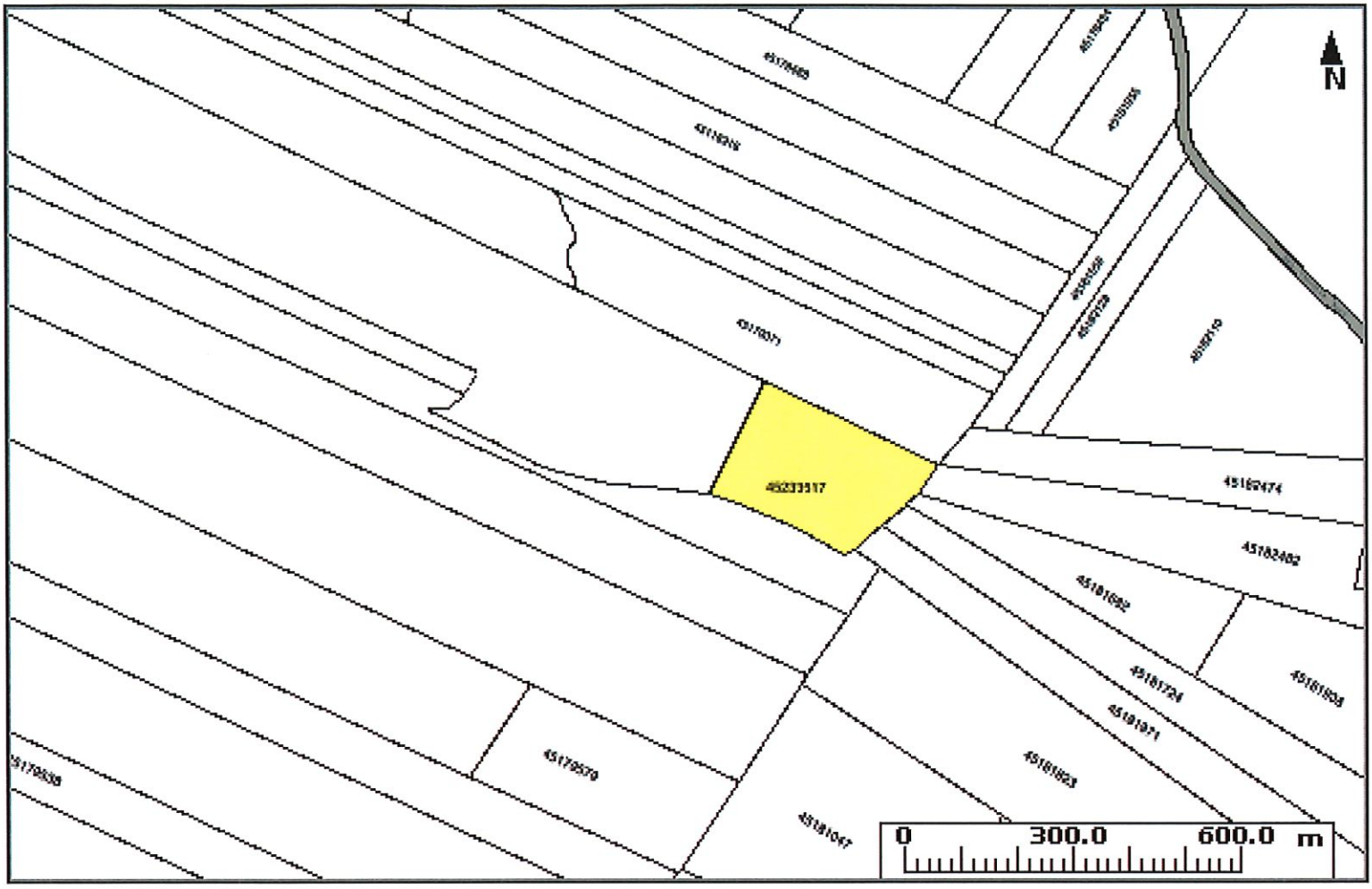
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



PROPERTY Online NOVA SCOTIA
Service Nova Scotia and Municipal Relations

Property Online Map

Date: **Sep 9, 2021 10:59:53 AM**



ID:	45233517	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST	AAN:	07857985
County:	HANTS COUNTY	Address:	KEMPT FOREST DRIVE KEMPT SHORE	Value:	$9,900 (2021 RESOURCE EXEMPT)
ER Status:	NOT LAND REGISTRATION				

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14

Millard Court

Overview

PID: 45236601

Coordinates: 45.02995, -64.0171

Date visited: November 26, 2015.

Address: Lot 13 Millard Court, Union Corner.

Classification: Underused.

Size: 2.05 acres (0.83 ha).

Land cover: Forested parcel of spruce and birch with a shrubby and turf area near the road.

Topography: Land sloping to the north east.

Maintained by: Municipality.

Use: None.

Access: Parcel fronts onto Millard Court.

Parking: None; parking on the road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

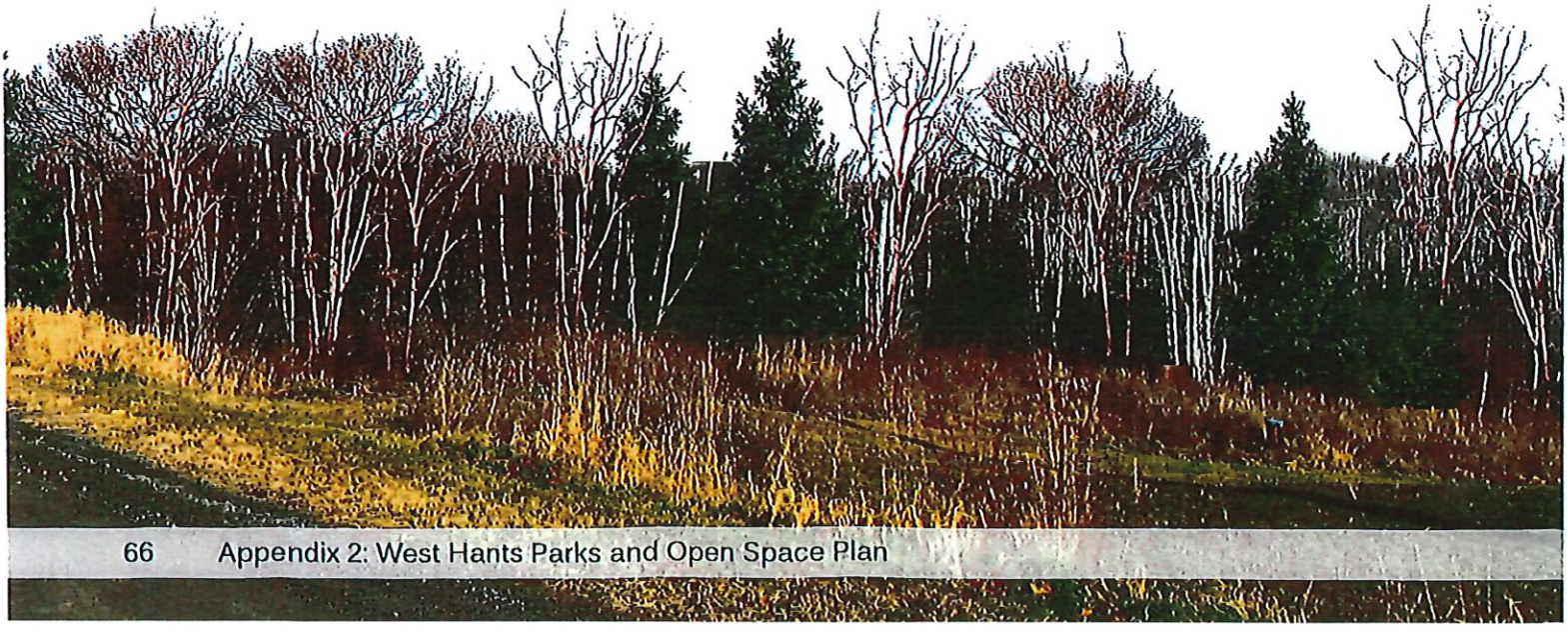
Overlapping Management Plans: None.

Observations

- Low population density surrounding parcel.
- Signs of an informal trail and ATV activity.
- Standing water at north east corner of parcel.
- Parcel surrounded by other forested parcels.

Opportunities

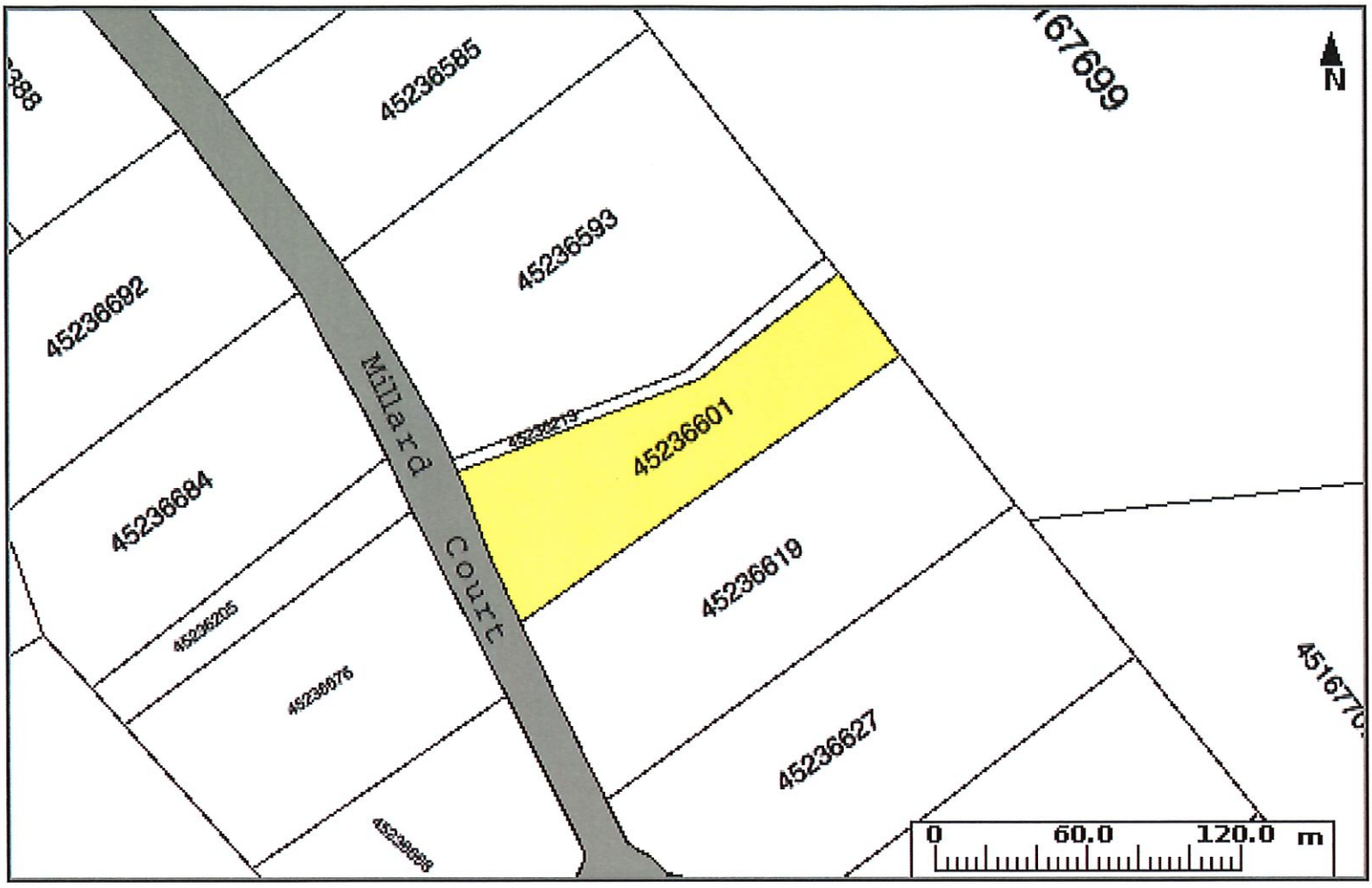
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



PROPERTY Online NOVA SCOTIA
Service Nova Scotia and Municipal Relations

Property Online Map

Date: **Sep 9, 2021 11:02:48 AM**



ID: 45236601
County: HANTS COUNTY
PR Status: NOT LAND REGISTRATION

Owner: MUNICIPALITY OF THE DISTRICT OF HANTS WEST
Address: MILLARD COURT
UNION CORNER

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15

Riverview Drive

Overview

PID: 45215290

Coordinates: 45.00908, -64.0214

Date visited: November 26, 2015.

Address: Lot 22 Riverview Drive, Brooklyn.

Classification: Underused.

Size: 2.75 acres (1.11 ha).

Land cover: Forested parcel (e.g. red and white spruce, white pine, white birch).

Topography: Very steep slope to the north west towards the river (30m drop).

Maintained by: Municipality.

Use: None.

Access: From Riverview Drive; no cleared access point.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- No signs of human access.

Opportunities

- Little potential for water access or recreation use due to steep slope.
- Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



Property Online Map

Date: **Sep 9, 2021 11:37:12 AM**



ID:	45215290	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST
County:	HANTS COUNTY	Address:	RIVERVIEW DRIVE BROOKLYN
PR Status:	NOT LAND REGISTRATION		

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7

Middle Lake North Road

Overview

PID: 45221868

Coordinates: 44.84118, -64.1925

Date visited: November 20, 2015.

Address: Parcel A Middle Lake North Road, Vaughan.

Classification: Underused.

Size: 5.35 acres (2.17 ha).

Land cover: Forested lot with marsh conditions and standing water.

Topography: Fairly flat parcel sloping towards Middle Lake.

Maintained by: Municipality.

Use: None.

Access: From Middle Lake North Road.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

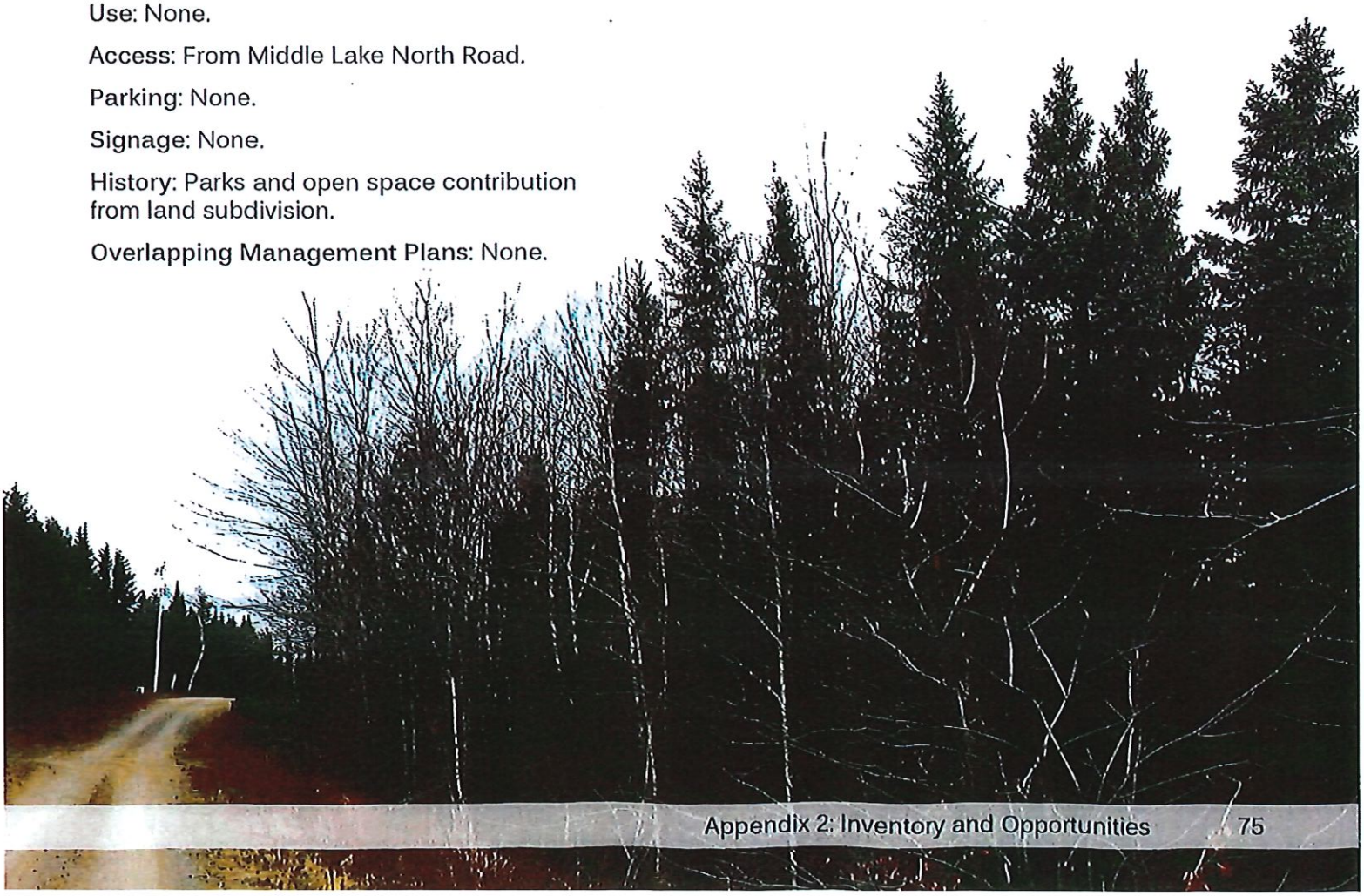
Overlapping Management Plans: None.

Observations

- Difficult walking conditions due to the presence of blowdown and dense understory growth.
- Property meets Middle Lake, but no formal access created.

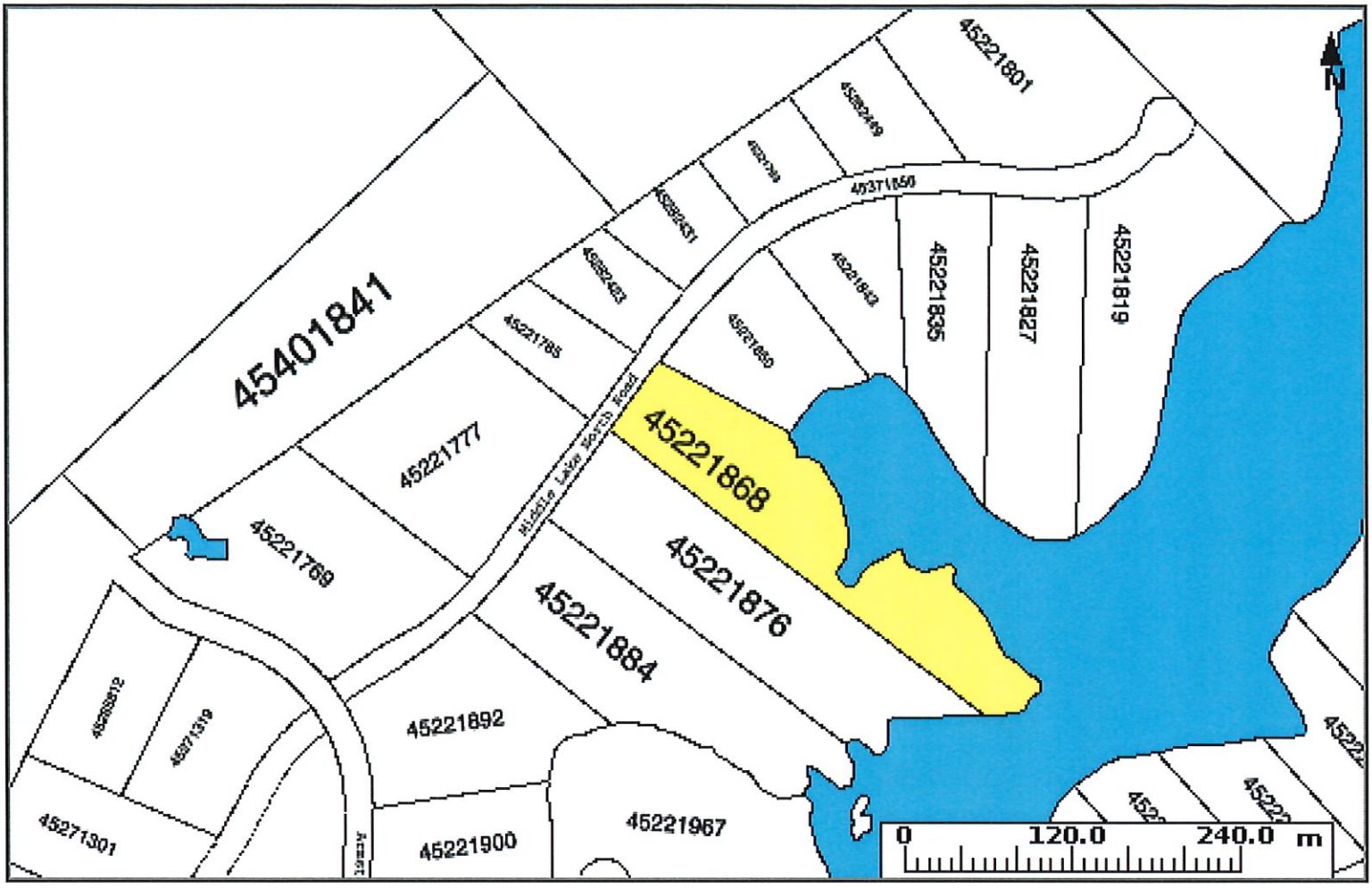
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby Municipally owned parcels for parks and open space use.



Property Online Map

Date: **Sep 9, 2021 11:38:00 AM**



ID:	45221868	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST
County:	HANTS COUNTY	Address:	MIDDLE LAKE NORTH ROAD VAUGHAN
LR Status:	NOT LAND REGISTRATION		

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8

Middle Lake South Road

Parcel C

Overview

PID: 45222049

Coordinates: 44.83537, -64.191

Date visited: November 20, 2015.

Address: Parcel C Middle Lake South Road, Vaughan.

Classification: Underused.

Size: 12.64 acres (5.12 ha).

Land cover: Spruce/birch forest with dense undergrowth at southern boundary and wetland on remainder of site. Rock outcrops evident.

Topography: This parcel is almost entirely wetland with little undulation in topography. Road position at a high point above the parcel.

Maintained by: Municipality.

Use: None.

Access: No formal access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Wetland conditions for most of property.
- Residential properties to the north of the parcel.

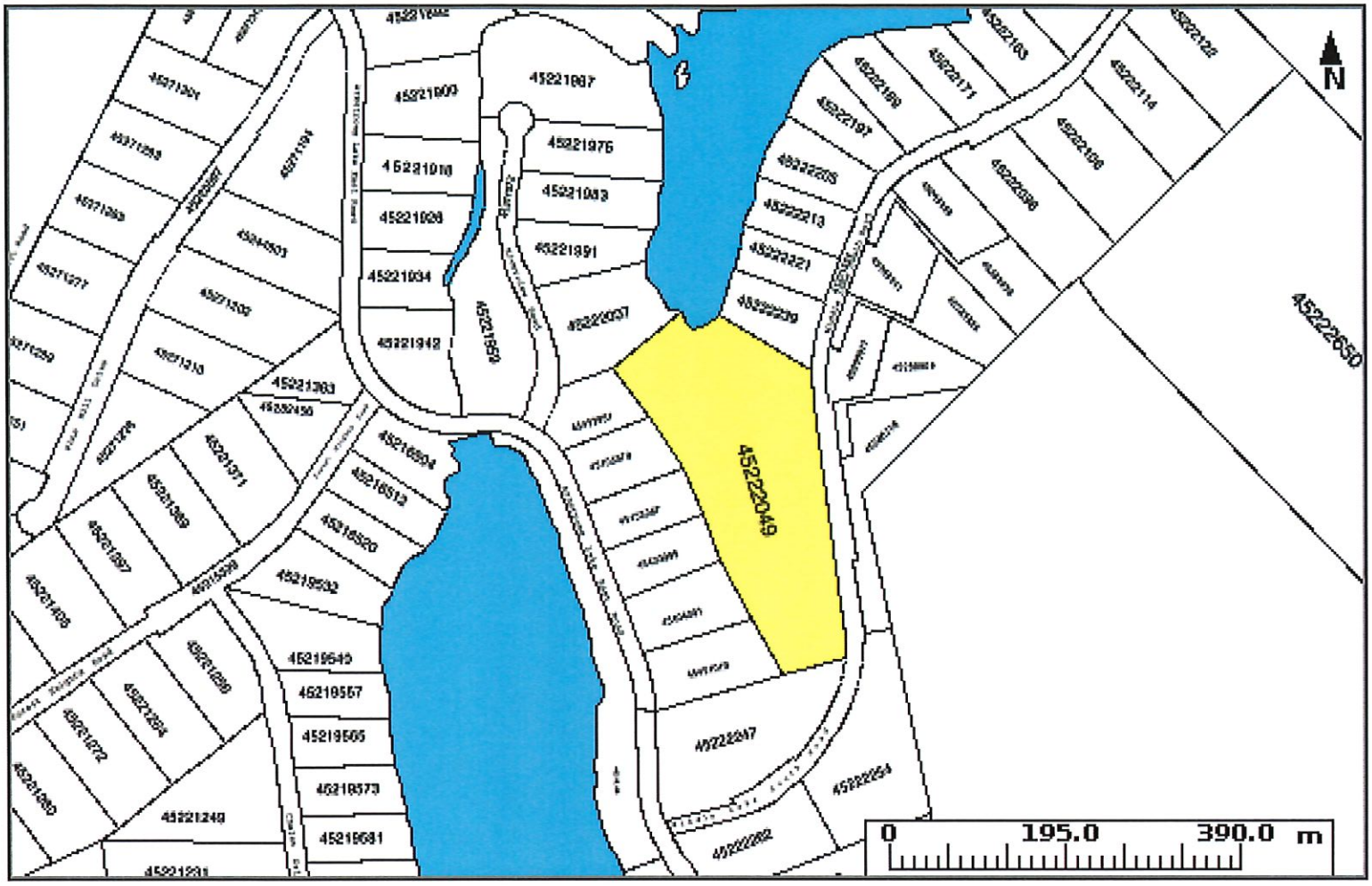
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



roperty Online Map

Date: **Sep 9, 2021 11:40:08 A**



:D: 45222049
ounty: HANTS COUNTY
R Status: NOT LAND REGISTRATION

Owner: MUNICIPALITY OF THE DISTRICT OF HANTS WEST
Address: MIDDLE LAKE SOUTH ROAD
VAUGHAN

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9

Middle Lake South Road

Parcel D

Overview

PID: 45222254

Coordinates: 44.83266, -64.1893

Date visited: November 20, 2015.

Address: Parcel D Middle Lake South Road, Vaughan.

Classification: Underused.

Size: 3.86 acres (1.56 ha).

Land cover: Spruce/birch forest with dense undergrowth and standing water. A portion of this parcel is wetland.

Topography: The road shoulder is a high point with land dropping off and sloping to the east.

Maintained by: Municipality.

Use: None.

Access: None.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

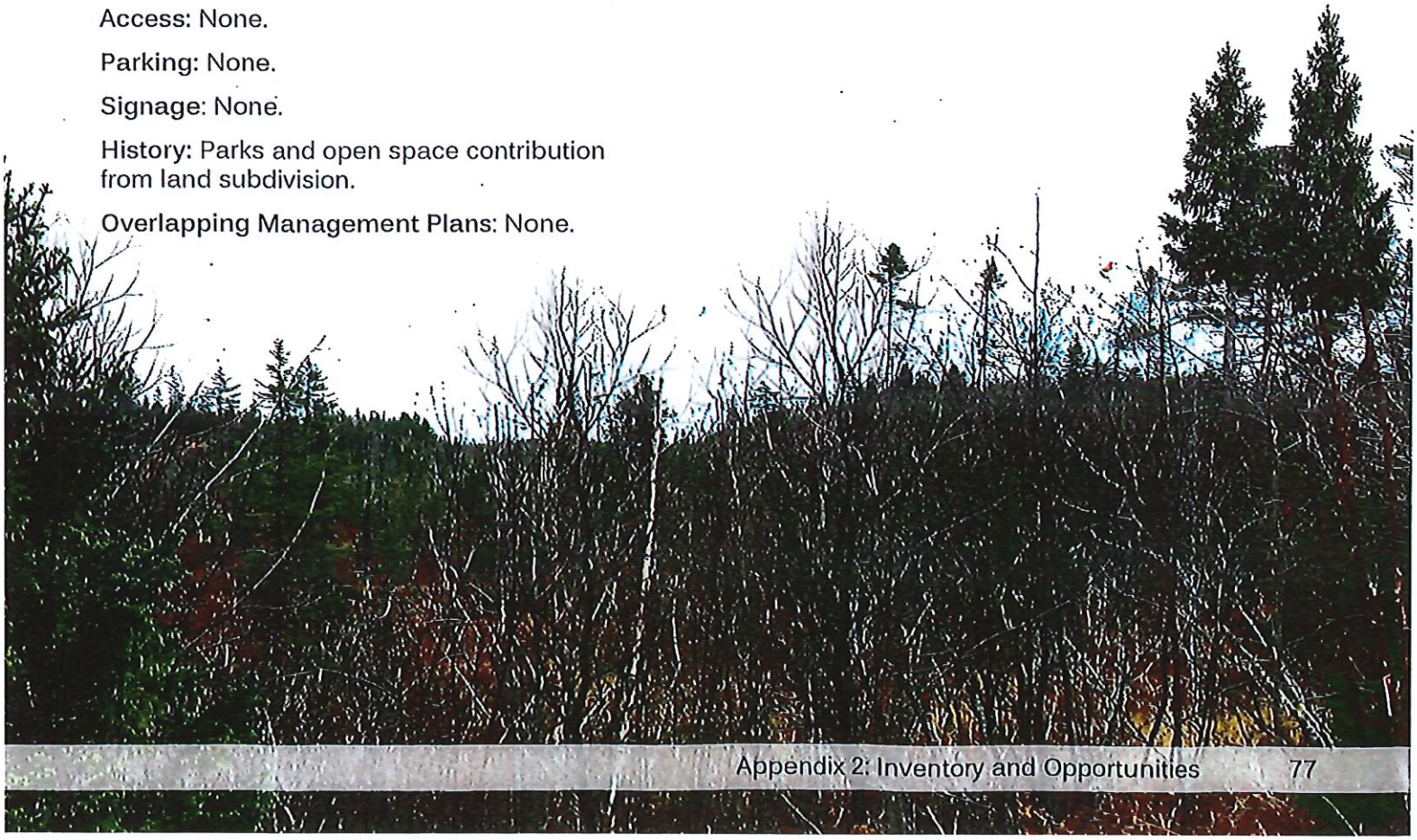
Overlapping Management Plans: None.

Observations

- Topography and poor drainage makes use of this site difficult.

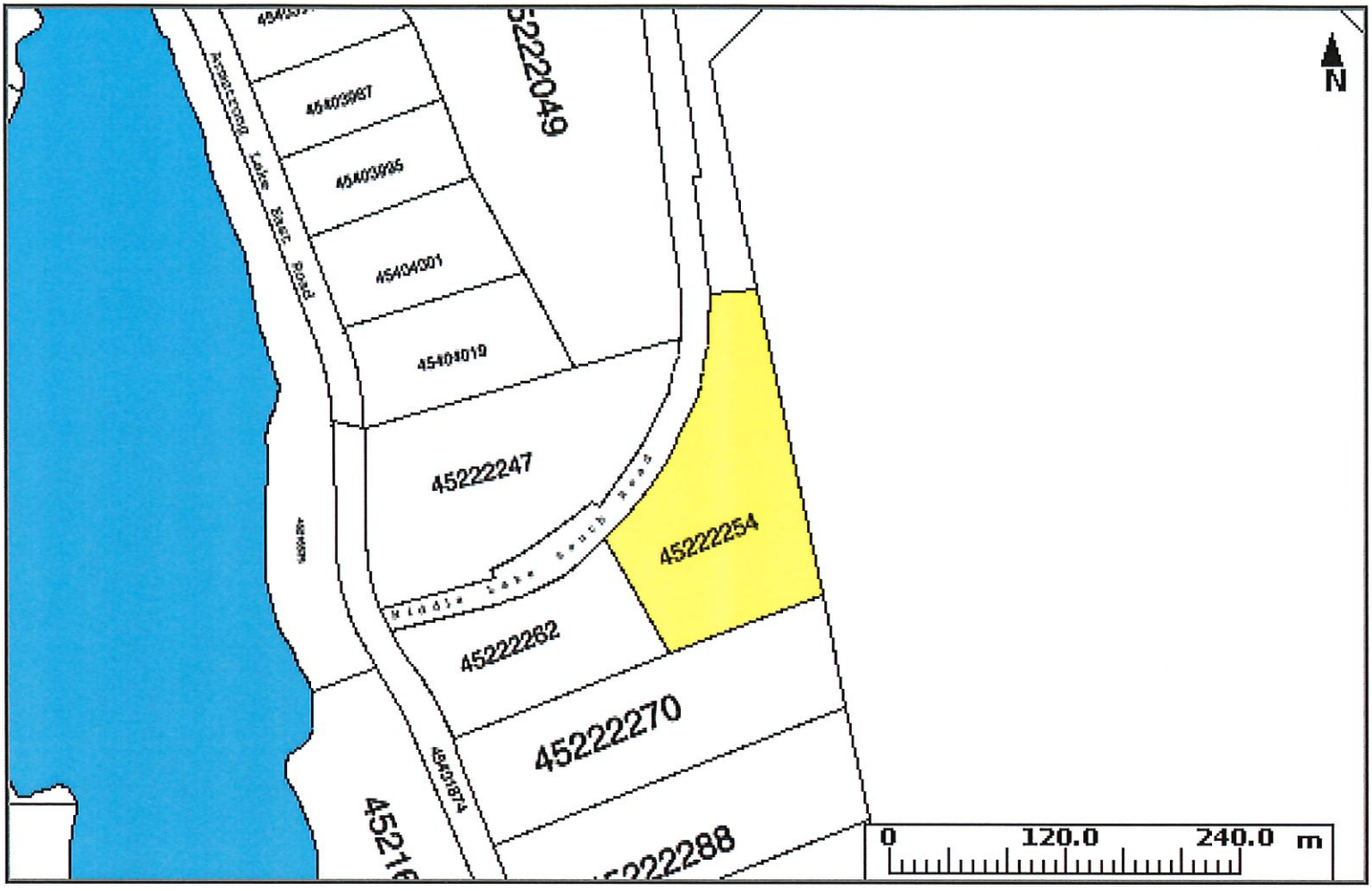
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



Property Online Map

Date: **Sep 9, 2021 11:41:05 AM**



ID:	45222254	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST	AAN:	07844697
County:	HANTS COUNTY	Address:	MIDDLE LAKE SOUTH ROAD VAUGHAN	Value:	$2,300 (2021 RESOURCE EXEMPT)
R Status:	NOT LAND REGISTRATION				

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10

Armstrong Lake East Road

Overview

PID: 45218658

Coordinates: 44.81883, -64.1857

Date visited: November 20, 2015.

Address: Lot 128 Armstrong Lake East Road, Vaughan.

Classification: Underused.

Size: 16.17 acres (6.54 ha).

Land cover: Large forested parcel with 95-100% tree cover.

Topography: Land sloping to the south east.

Maintained by: Municipality.

Use: None.

Access: From Armstrong Lake East Road; no cleared access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Parcel positioned behind low density residential lots.
- Drainage ditch along parcel frontage.
- Large parcel with no formal access point.
- No obvious signs of human activity on the property.

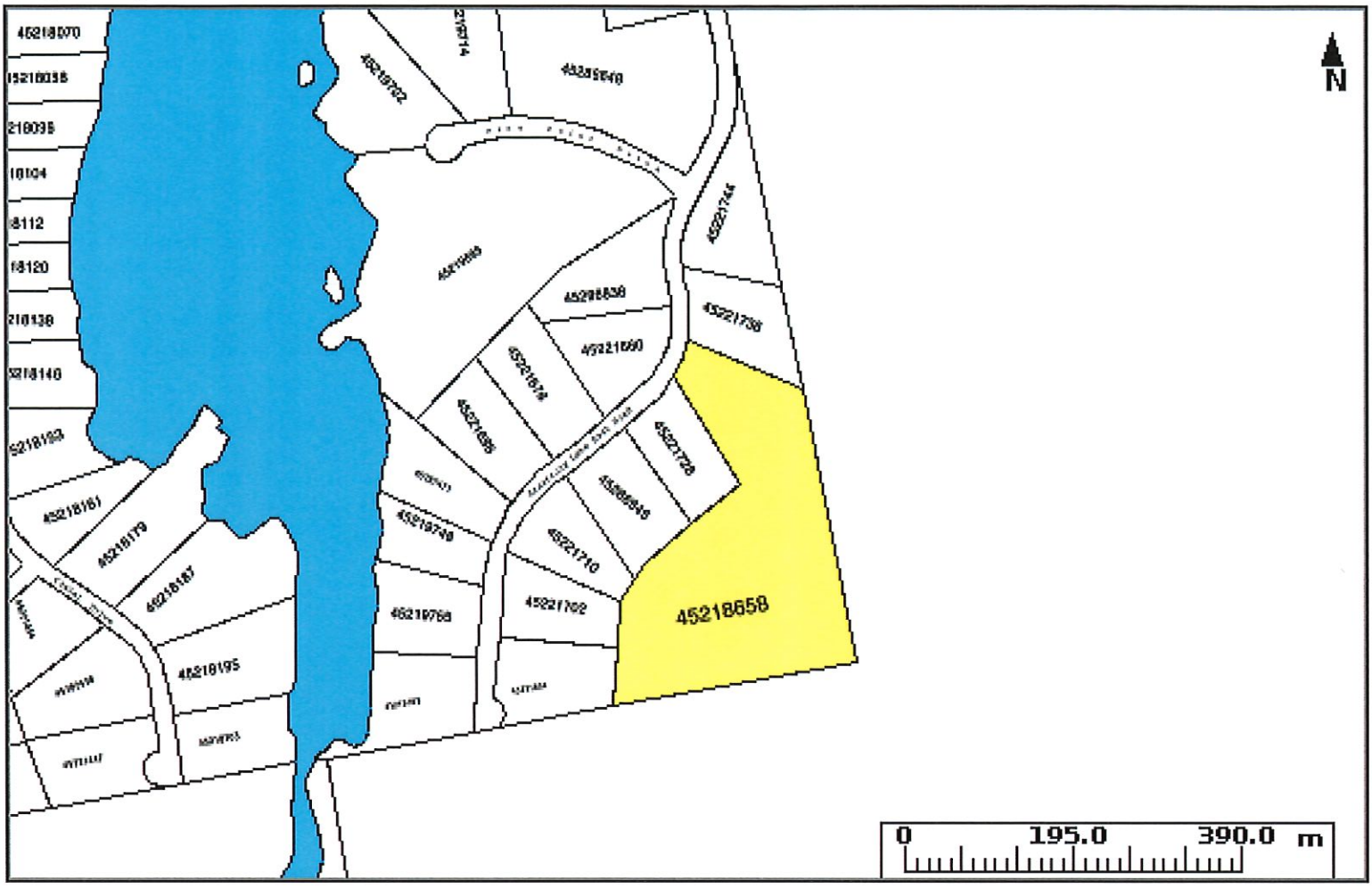
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



Property Online Map

Date: **Sep 9, 2021 11:41:50 AM**



ID:	45218658	Owner:	MUNICIPALITY OF THE DISTRICT OF HANTS WEST
County:	HANTS COUNTY	Address:	ARMSTRONG LAKE EAST ROAD VAUGHAN
PR Status:	NOT LAND REGISTRATION		

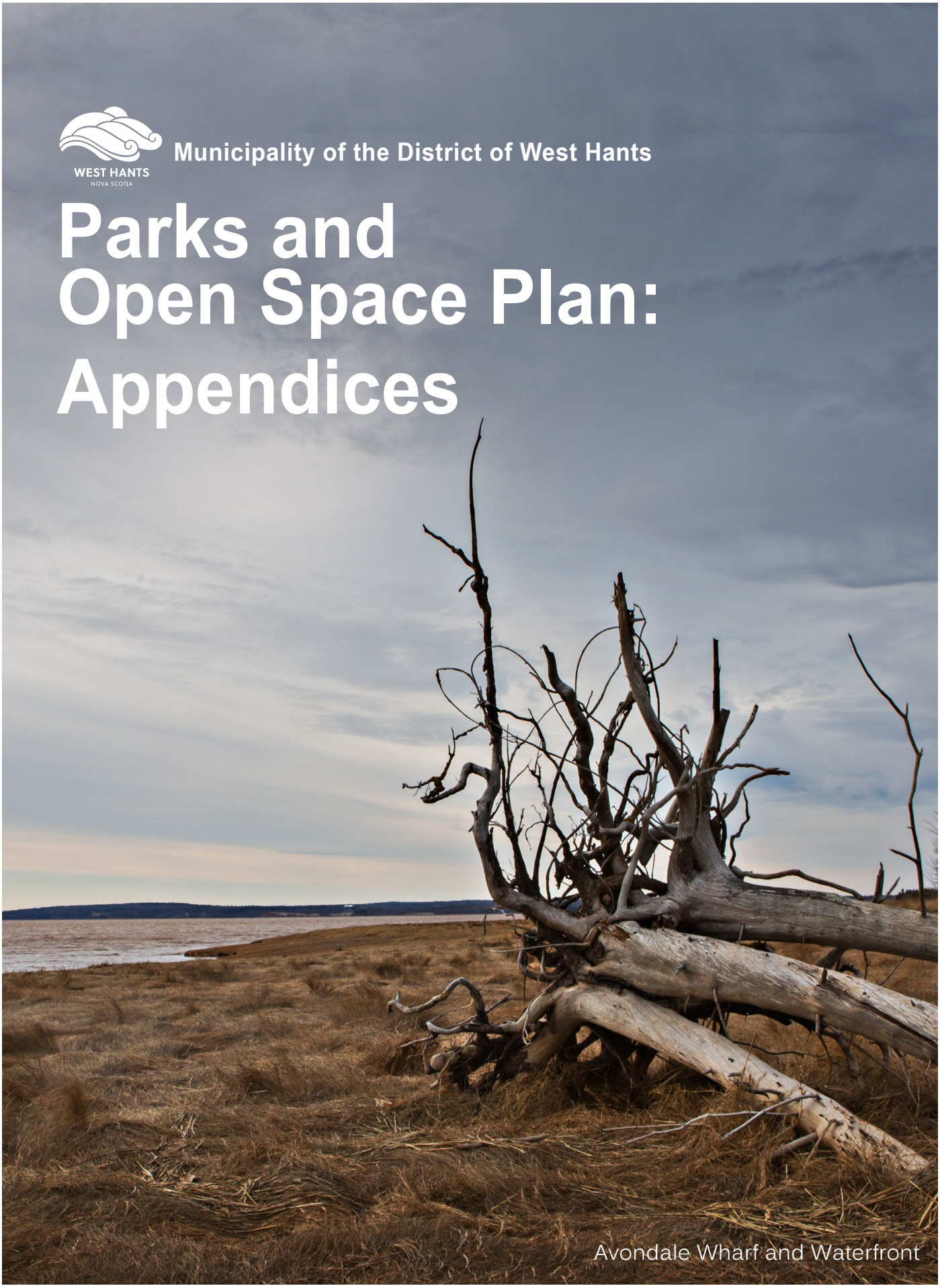
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Municipality of the District of West Hants

Parks and Open Space Plan: Appendices



Avondale Wharf and Waterfront

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Appendix 2: Detailed Inventory

Appendix 3: Detailed Population Information

Appendix 4: Detailed Best Practice Review

Appendix 5: Detailed Policy Framework

Appendix 6: Policy and By-Law Changes for Plan Implementation

Photo Credits

Appendices Cover: Chris Geworsky, 2016.

Appendix 1 Cover: Stephen Cushing, 2016.

Appendix 2 Cover: Chris Geworsky, 2016.

Appendix 3 Cover: Stephen Cushing, 2016.

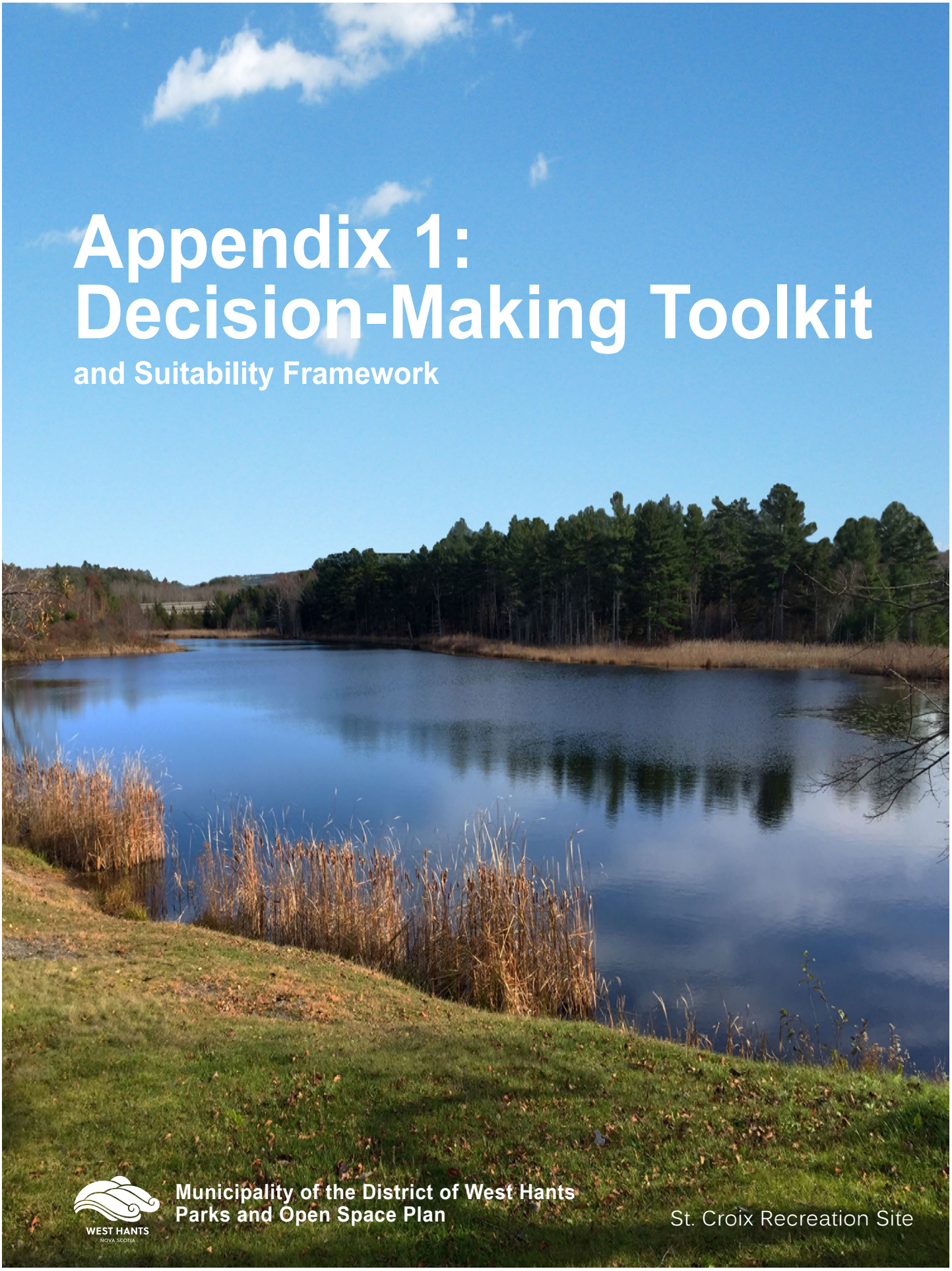
Appendix 4 Cover: Stephen Cushing, 2016.

Appendix 5 Cover: Chris Geworsky, 2016.

Appendix 6 Cover: Municipality of the District of West Hants Staff, 2016.

Appendix 1: Decision-Making Toolkit

and Suitability Framework



WEST HANTS
NOVA SCOTIA

Municipality of the District of West Hants
Parks and Open Space Plan

St. Croix Recreation Site

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i. Introduction

Acquisition to Meet Needs and Protect Resources

This Decision Making Toolkit was developed to be used by Municipal staff. The Toolkit will guide decisions about the West Hants Parks and Open Space network to ensure decisions about parkland acquisition, divestment and development meet the needs of citizens and protect unique natural and cultural resources. Users will be able to evaluate and prioritize lands for acquisition based on four standard issues: useability, suitability, budget and urgency.

Priority land is that which provides a solution to all of the four issues. This is illustrated in Figure 1 below.

This planning toolkit includes information about acquisition methods, an acquisition flowchart, the definition of useable land, a suitability framework of park and open space criteria, opportunities for park and open space funding, scenarios outlining urgency of acquisition, and land divestment scenarios.



Figure 1: Acquisition Priority. All lands considered for acquisition must meet the basic criteria of usability and suitability, but budget and urgency will influence priority.

ii. Process to Identify Priority Lands

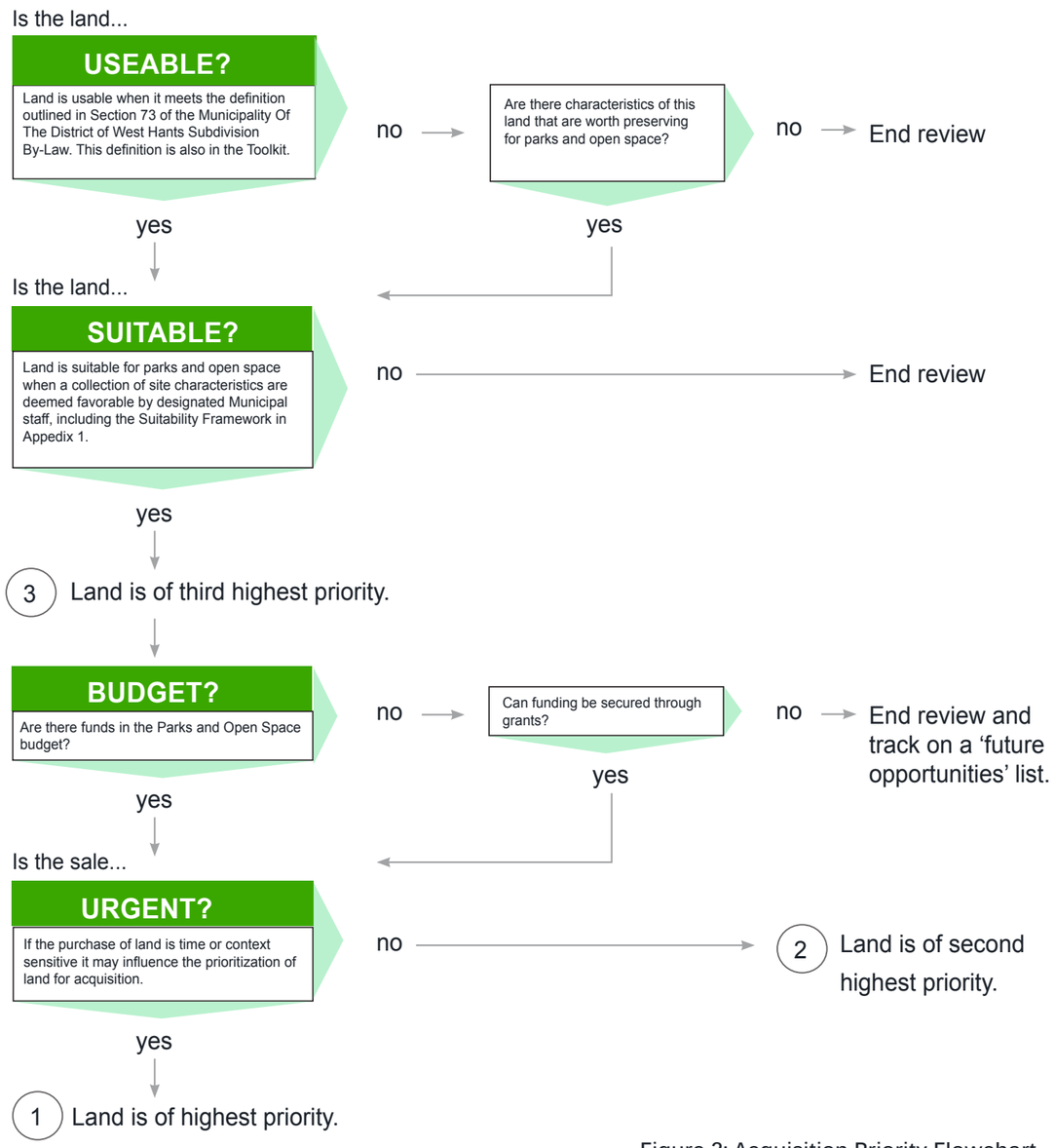


Figure 2: Acquisition Priority Flowchart.

iii. Useable Land: Definition

Useable Land

The definition of useable land differs from the suitability of land in that it describes detailed physical land characteristics that must be considered before acquiring land for parks and open space use. The definition of useable land (May 2016) in the West Hants Subdivision By-Law is:

73. (a) For the purposes of Sections 71 and 72, useable land shall be defined as land that:

(i) has an average slope over the entire parcel of not more than fifteen percent (15%), provided that any part of the parcel with a slope of fifteen percent (15%) or more shall not exceed one-quarter (¼) of the area of the entire parcel;

(ii) consists of a parcel having an area of one-half (½) acre or more;

(iii) is serviced by central water and sewer systems, or is capable of supporting an on-site sewage disposal system, unless the parcel is intended for recreational purposes, such as linear walking or hiking trails, which do not require an on-site sewage disposal system or services;

(iv) is not a clearing and grubbing disposal area; (v) is not swampland or subject to flooding;

(vi) is not an electrical transmission corridor; and

(vii) where applicable, is able to meet the requirements for lot area and lot frontage contained in the Land Use By-law.

(b) The criteria in subsection 73(a) may be waived if the land to be transferred is considered unique by the Development Officer in that the parcel is:

(i) land suitable for preservation as an interpretive natural reserve area based on the opinion of a qualified professional;

(ii) land of significant historical or archeological value to the Municipality;

(iii) land adjacent to parkland or open space owned by the Municipality;

(iv) land deemed by the Recreation Director for the Municipality to be required for recreational purposes; or

(v) land located in the Water Supply (W) zone.

(c) Any land to be conveyed to the Municipality other than that meeting the requirements of subsection 73(b) shall abut a public road or private road. Land to be conveyed to the Municipality pursuant to the requirements of subsection 73(b) shall be accessible by a public street or private road or by a public easement a minimum of 15.24 metres (50 feet) in width and providing a connection to a public road.

iv. Suitability Framework

Suitability Process

This 'Suitability Framework' contains criteria that can help determine what land parcels are suitable, and not-suitable, for parks and open space use. Many criteria are based in community values.[1] Best practice precedents, Municipal goals and sustainable environmental practices also form suitability criteria.

Municipal staff will use this Suitability Framework to determine whether a specific land parcel is suitable for acquisition. Ideally, these staff members would be representatives from Public Works, Recreation, and Planning, among others, who can best comment on the parks and open space criteria highlighted.

The Suitability Framework is divided into five sections:

- Guiding Principles (same Principles throughout the Parks and Open Space Plan)
- Criteria
- Available Score
- Maximum Score
- Total Score

Lands being considered for acquisition are evaluated and scored based on land characteristics matching those outlined in the Suitability Framework. Each piece of land will have a total score that will fall into the categories of low, medium, and high suitability.



Low Suitability: Score 0-50

Medium Suitability: Score 51-150

High Suitability: Score 151-235

Figure 3: Traffic Light System for Land Suitability.

In addition to suitability scores, a piece of land might be considered for acquisition if it possesses outstanding ecological or cultural merit.

For example, `Land A` is considered low priority because of its score of only 45, but it is considered to be an environmentally sensitive area that supports wildlife habitat. These qualities might warrant acquisition, if determined to be important by Municipal staff.

1 Values are the qualities and characteristics of parks and open space that people appreciate. Values in this plan were identified during public and stakeholder engagement sessions.

iv. Suitability Framework

Table 1: Suitability Framework

Guiding Principles	Criteria	Available Score	Maximum Score	Applied Score
Prioritize environmental protection				
Environmental protection must be considered a priority in order to ensure sensitive lands, waters, and wildlife habitat are not unduly harmed by human recreation.	Significant ecological area.	20	50	
	Special natural area/ geologically significant.	15		
	Potential or need for restoration.	10		
	Adjacent to other ecological areas.	5		
	Not applicable.	0		
Plan green infrastructure to adapt to climate change				
Green infrastructure includes the planted and natural greenspaces within the Municipality that are used to ensure the health and safety of citizens and to adapt to a changing climate. Green infrastructure includes parks and open space, stormwater infiltration and street trees. Parks and open space will become increasingly important to mitigate the negative effects of climate change. These mitigative actions include carbon sequestration, stormwater capture, flood mitigation and shoreline stabilization.	Potential to buffer against negative effects of climate change in vulnerable areas.	15	30	
	Potential to intercept stormwater.	10		
	Not expected to be negatively impacted by a changing climate.	5		
	Not applicable.	0		

iv. Suitability Framework

Table 1 (continued): Suitability Framework

Guiding Principles	Criteria	Available Score	Maximum Score	Applied Score
Plan spaces for all ages and abilities				
A healthy population is an active population. In West Hants, parks and open space should cater to a range of ages and abilities. Opportunities for recreation should build on already existing amenities (e.g., water and trail access for fishing, ATV'ing, biking, walking). Opportunities for passive recreation (e.g. sitting, viewing, picnicking, gathering) are valuable for personal and mental well-being and should be made accessible.	Supports or has the potential for recreational activity.	20	55	
	Land is accessible to people with limited mobility.	15		
	Land exhibits natural beauty (e.g. views, scenery).	10		
	Land supports quiet reflective spaces (i.e. for mental well-being).	10		
	Not applicable.	0		
Promote Community Identity and History				
Important social elements can be promoted in parks and open spaces. Sense of identity is strengthened when the places people feel closely connected to are enhanced. Community stewardship programs play a huge role in providing events, maintenance and park identity. A community development approach is central to this plan, one that sees the community involved in the decision-making process.	Representation of local culture and identity (e.g. historical significance, archeological evidence).	15	30	
	Satisfies cultural and local practices (e.g. fishing, gardening, farming, harvesting, foraging).	10		
	Potential to support or spur local business growth.	5		
West Hants has a rich history of settlement, landscape use, agricultural production, and resource extraction. There are many park and open space uses that can foster this history and be used to educate citizens and visitors (e.g. Mi'kmaq and Acadian land works and settlements, resource production and harvesting, among others).	Not applicable.	0		

iv. Suitability Framework

Table 1 (continued): Suitability Framework

Guiding Principles	Criteria	Available Score	Maximum Score	Applied Score
Link communities to parks and open space				
A parks and open space network relies on connections to fully satisfy social and environmental values held by the public and the municipality. Connections for people (e.g. trail system, beach access/network) and nature (e.g. wildlife corridors, plant biodiversity corridors) are considered during parks and open space management.	Satisfies a parks and open space need in an underserviced area (see Gap Analysis in section 4.3).	20	55	
	Provides expansion of current park or open space.	15		
	Supports the connection of existing trails.	10		
	Enables access to water.	10		
	Not applicable.	0		
Evaluate and update plans over time				
Parks and open space objectives and outcomes should be regularly evaluated in order to meet modern needs. Regular review of standardized evaluation, management and design guides, such as the Decision-Making Toolkit and Municipal regulations, is essential to being adaptive.	Potential to be modified to suit the needs of changing demographics.	15	15	
	Identified in other municipal management documents as land to acquire.	10		
	Not applicable.	0		

Comments & Actions	☐ Low Suitability: Score 0-50 ☐ Medium Suitability: Score 51-150 ☐ High Suitability: Score 151-235

v. Budget: Funding Opportunities

Table 2: Parks and Open Space Funding Opportunities for Management (e.g. acquisition, maintenance, development).

Funding Source	Amount	Description	Submission Requirements	Deadline	More Information
Subdivision By-law Provision (Cash-in-lieu)	Annually generates approx. $25,000.00	At the discretion of the developer, required parks and open space contribution may come in the form of cash, equivalent to five percent (5%) of the market value of the land being subdivided, exclusive of streets, easements, and the residue of the land.	-	-	http://www.westhants.ca/subdivision.html
Donations	varies	Donations in the form of money that feed directly into a Parks and Open Space Management Fund.	-	-	
Fundraising	varies	Financial campaign to raise money for park and open space management (e.g. acquisition, maintenance, development).	-		
Business or corporations	varies	Advertising, sampling, and dedicated sponsorship for special events are only a few of the ways companies can receive exposure for their companies while funding open spaces.	-	-	
Municipal tax revenue	varies	Redistribution of tax revenue to increase parks and open space budget.	-	-	
Federal Gas Tax Reserve Fund	varies	Predictable, long-term, stable funding for Canadian municipalities to help them build and revitalize their local public infrastructure while creating jobs and long term prosperity.	-	-	http://www.infrastructure.gc.ca/plan/gtf-fte-eng.html
Debt financing	varies	Long-term or short-term debt financing can allow the Municipality to fund desirable open space acquisition and development. A loan authorization bylaw may be required and the terms must be considered by the Municipality. Consideration must be given, but is not limited to: • the length of the loan period (when considering the life expectancy of the service • the amount of borrowing permitted (e.g. on a per capita or annual basis). • the term of repayment	-	-	
Road Right-of-way dedication	varies	Easements on behalf of the Municipality, or dedication of road right of way land fee simple to the Municipality may be obtained and developed for active transportation and recreational use.	-	-	
Grants					
Environment Canada Eco-Gift Program	varies	Under this program donors receive a tax 'write- off' for the use of their lands. This may be in the form of a fee simple transaction or a conservation easement, covenant or servitude.	Apply online: http://www.ec.gc.ca/pde-egp/default.asp?lang=En&n=23F53F80-1	Applications received throughout the year	http://www.ec.gc.ca/pde-egp/
MEC	$10,000 - $100,000	MEC has funds available to acquire land that is: Important for ecological significance and/or outdoor activity use; Outdoor activities must focus on one or more of the following core activities MEC supports: cycling, hiking, running, climbing, paddling, yoga, skiing, and snowshoeing; Shows the urgency of the acquisition is evident; Has a strategy in place for public engagement and/or education about the protection effort; Has demonstrated broad-based community or stakeholder support; Has investigated other sources of funding.	Complete the online application:http://www.mec.ca/AST/ContentPrimary/Community/CommunityContributions/ApplyForSupport.jsp	March and September	http://www.mec.ca/AST/ContentPrimary/Community/CommunityContributions/LandAcquisition.jsp

v. Budget: Funding Opportunities

Table 2: Parks and Open Space Funding Opportunities for Management (e.g. acquisition, maintenance, development).

Funding Source	Amount	Description	Submission Requirements	Deadline	More Information
Tree Canada Edible Trees Program	up to $4000.00	For community-based projects that provide citizens with access to fresh fruit and nut trees while making a positive difference to the Canadian environment	Submit your application via email to info@treecanada.ca	February	https://treecanada.ca/en/programs/edible-trees/application/
Go Wild Community Grants	$1,000 to $10,000	To support creative ideas from Canadians on how to protect, restore, monitor, educate,and celebrate nature.	Submit your application via email to gowild@wwfcanada.org	December	http://www.wwf.ca/takeaction/gowild/
Canada 150 Community Infrastructure Program	Funding to a maximum of 50% of total eligible project costs. Preference given to projects requiring 1/3 funding from the program.	The Canada 150 Community Infrastructure Program (CIP 150) supports projects that rehabilitate existing community facilities across Canada. The program is part of the Government of Canada's celebration of our country's 150th anniversary of Confederation. The program will be in effect until March 31, 2018. Projects must fall under one of the eligible project categories (including parks and recreation trails).	Contact your nearest ACOA office to discuss your project: Hants/Kings Office 80 Water Street, Suite 2 Windsor, NS B0N 2T0	The program will be in effect until March 31, 2018.	http://www.acoa-apeca.gc.ca/eng/ImLookingFor/ProgramInformation/Pages/Canada-150-Infrastructure-Program.aspx
Atlantic Lottery		"Community Festivals and Events: Think local festivals or events featuring food, entertainment and family fun. Community celebrations let us experience all that is uniquely Atlantic Canadian.	Submissions for large events should be in to us 9-12 months in advance, and 4-6 months for small and medium sized events. The evaluating process usually takes about 6 to 8 weeks.	March for Summer events	http://corp.alc.ca/Programs.aspx?id=10065
AVIVA	varies	If you're involved with a charity or community organization that's making a local difference, then we want you to submit an idea. Secure enough votes from friends, family and supporters, and your idea could make it to the Finals, where a judging panel will select the Grand Prize Winners to share $1 million in funding.	Complete the online idea submission form https://media.avivacommunityfund.org/files/ideasubmissionguide.en.pdf and submit at avivacommunityfund.org	September to October	https://www.avivacommunityfund.org/about-the-competition
Canada Post	up to $50,000	Applications from registered charities, school programs or community organizations are invited for funding of projects consistent with the Foundation's objective to provide support for initiatives that benefit children.	Submit an online application: https://www.canadapost.ca/cpo/mc/aboutus/cpfoundation/grants.jsf	March, closing in April	https://www.canadapost.ca/cpo/mc/aboutus/cpfoundation/grants.jsf
RBC Blue Water Project: RBC Community Action Grants	$1,000 to $10,000	Awarded to local or community-based organizations in Canada, the United States or the Caribbean. We have established an application deadline for Community Action Grants, rather than accepting applications year round. This will allow us to review all applications in a fair and consistent manner.	Submit an online application: http://www.rbc.com/community-sustainability/apply-for-funding/index.html	February	http://www.rbc.com/community-sustainability/apply-for-funding/guidelines-and-eligibility/blue-water-pr oject.html
RBC Blue Water Project: RBC Leadership Grants	$10,001 to $100,000	Awarded to organizations that are leaders in providing programs in North America and other countries where RBC does business.	Interested organizations must submit an Expression of Interest:http://www.rbc.com/community-sustainability/apply-for-funding/guidelines-and-eligibility/blue-water-project.html	Annually	http://www.rbc.com/community-sustainability/apply-for-funding/guidelines-and-eligibility/blue-water-project.html

v. Budget: Funding Opportunities

Table 2: Parks and Open Space Funding Opportunities for Management (e.g. acquisition, maintenance, development).

Funding Source	Amount	Description	Submission Requirements	Deadline	More Information
RBC Learn to Play Community Action Grants and RBC Learn to Skate Program	$1,000 to $10,000	Awarded to local organizations that teach new skills or sports to kids, and/or expose them to a multiple sports or multiple skills such as swimming or skating lessons. Programs eligible for funding include those that: Provide instruction/learning of a new skill or sport that the child/youth would otherwise not have an opportunity to experience; and/or Emphasize and expose children/youth to a multi-sport or multi-skill participation experience; and/or Implement a new approach/delivery to sport and physical activity through the creation of programs recommended by Canadian Sport for Life	Submit an online application: http://www.rbc.com/community-sustainability/apply-for-funding/guidelines-and-eligibility/learn-to-play.html	2016 deadline to be announced	http://www.rbc.com/community-sustainability/apply-for-funding/guidelines-and-eligibility/learn-to-play.html
The RBC–Evergreen Watershed Champions Award	$2,500-$3,500	The RBC–Evergreen Watershed Champions Award recognizes classes that demonstrate learning about their local watershed and who take action to care for it.	Complete an online application: https://evergreen.submittable.com/submit/39290	April	http://www.evergreen.ca/our-impact/children/outdoor-learning-play/watershed-champions/award/
RBC Learn to Play Leadership Grants	$10,001 to $25,000	Awarded to community groups that are developing or implementing action plans to transform the way sport and physical activities are planned and delivered, such as programs that makes sports available for new immigrant youth. Communities are defined as municipalities and/or a group of organizations that come together for a common purpose and share mutual objectives. Proposals that facilitate collaboration between sport, education, recreation and health sectors and align programming within the community are encouraged.	Submit an online application: http://www.rbc.com/community-sustainability/apply-for-funding/guidelines-and-eligibility/learn-to-play.html	2016 deadline to be announced	http://www.rbc.com/community-sustainability/apply-for-funding/guidelines-and-eligibility/learn-to-play.html
TD Friends of the Environment Foundation Leadership Grant	up to $5,000	TD Friends of the Environment Foundation (TD FEF) recognizes that investing in talent and leadership development is integral to capacity building of small to medium-sized organizations.The TD FEF Leadership Grant program aims to enhance the organizational capacity of environmental charities by providing funding for both formal and informal training and development opportunities for leaders within these organizations.TD FEF's Leadership Grants will allow charities to move beyond day-to-day activities and build stronger, more vibrant organizations.	Submit an online application: https://fef.td.com/funding/leadership-grant/	February and July	https://fef.td.com/funding/leadership-grant/
TD Friends of the Environment Foundation	based on project costs	The Foundation supports a wide range of environmental initiatives, with a primary focus on environmental education, urban greening and enhancing biodiversity, and energy conservation.	Submit an online application: https://fef.td.com/funding/leadership-grant/	February and July	https://fef.td.com/funding/

*Funding deadlines and contact information is subject to change on an annual basis.

v. Budget: Funding Opportunities

Table 2: Parks and Open Space Funding Opportunities for Management (e.g. acquisition, maintenance, development).

Funding Source	Amount	Description	Submission Requirements	Deadline	More Information
Toyota Evergreen Learning Grounds School Ground Greening Grants	up to $3,500	The Toyota Evergreen Learning Grounds program helps schools create outdoor classrooms to provide students with a healthy place to play, learn and develop a genuine respect for nature. Since the program began in 2000, it has provided funds to over 3,000 schools from coast to coast, providing countless opportunities for students to engage with nature on their school grounds.	Schools in NS must arrange a design consultation site visit with an Evergreen School Ground Consultant prior to submitting an application: http://www.evergreen.ca/get-involved/funding-opportunities/school-ground-grants/	September, December and March	http://www.evergreen.ca/get-involved/funding-opportunities/school-ground-grants/
Province of Nova Scotia Funding					
West Hants/Uniacke Community Health Board	up to $3000	The Wellness Fund enables community organizations to programs, events, or to purchase equipment and supplies in pursuit of a healthy community. The Municipality can encourage groups to apply for this funding. Potential projects outlined in the Community Health Plan (http://www.cdha.nshealth.ca/cobequid-community-health-board/news/community-health-plan) .	Contact funding coordinator, Andrea Parker: andrea.parker@nshealth.ca	November 1	http://www.cdha.nshealth.ca/west-hantsuniacke-community-health-board/wellness-funds-formerly-community-development-funds
One-time Emerging Culture and Heritage Initiatives Program	up to $10,000	The One-Time Emerging Culture and Heritage Initiatives Program is designed for organizations that primarily focus on cultural and heritage development. This program is also available to organizations partnering with specific culture and heritage interests provided they are working to build capacity or foster innovation within Nova Scotia's culture community or that they are working in support of cultural development within diverse communities.	Contact Craig Beaton, Director, Programs Phone: (902) 424-8443 E-mail: Craig.Beaton@novascotia.ca	April	https://cch.novascotia.ca/sites/default/files/inline/documents/s4conetime-guidelines-201503pdf.pdf
OHV Infrastructure Fund - Trails	50% of the total project cost, usually not to exceed $50,000 in one fiscal year.	Goals of the OHV Infrastructure Fund (Trails) are: to provide funding for OHV trail and riding area development; to support the planning and design associated with these facilities; to provide funding to help maintain OHV accessible infrastructure.	Complete online application and send to Krista Brewer-Mackenzie PO Box 194, Lakeside, NS, B3T 1M6.	November Emergency funding available on an ongoing basis.	http://novascotia.ca/natr/ohv/fund.asp
Community Recreation Capital Grant Program (CRCG)	up to $5,000	This program assists in the development of small scale indoor and outdoor capital recreation projects, less than $20,000. A priority of the Department of Health and Wellness is to conserve existing community recreation facilities (e.g. replacing a roof, furnace or playground component) and to develop new small-scale facilities. CRCG program funding must be used for: public, community recreation purposes; items of a permanent, non-consumable, capital nature; and projects where the need for financial assistance is demonstrated.	Contact Valley Region Representative: Mike. Trinacty@Novascotia.ca, 1-902-697-4391	Applications received by regional representative throughout the year	http://novascotia.ca/dhw/pasr/documents/Grant-Programs-Overview-(PASR).pdf

v. Budget: Funding Opportunities

Table 2: Park and Open Space Funding Opportunities for Management (e.g. acquisition, maintenance, development).

Funding Source	Amount	Description	Submission Requirements	Deadline	More Information
Trail Maintenance Program	Projects that fall under the regular maintenance and aging infrastructure components will be eligible for up to 50% of the total cost of the project to a maximum of $1,000 annually	Provides funding to community trail groups who are involved in regular and on-going maintenance on their trails, as well as emergency funding for major maintenance issues due to fire, flooding, hurricanes, etc.	Applications should be submitted to: Nova Scotia Department of Health and Wellness Trails Consultant PO Box 488 Halifax NS B3J 2R8	Applications received by regional representative throughout the year	http://novascotia.ca/dhw/pasr/documents/Trail-Maintenance-Program.pdf
Community Trails Leadership Fund	Applicants are expected to contribute at least fifty per cent (50%) of the overall cost of the initiative, inclusive of contributions obtained from other sources (financial and in- kind).	Supports trail development in Nova Scotia through the provision of funds for leadership, organizational development, and capacity building to community trail groups. The fund helps organizations to offer training and educational opportunities for volunteers and the trail professionals who support them. It also helps the organizations acquire the expertise needed for specific aspects of trail projects.	Contact Valley Region Representative: Mike. Trinacty@Novascotia.ca, 1-902-697-4391	Applications received by regional representative throughout the year	http://novascotia.ca/dhw/pasr/documents/Community-Leadership-Guidelines.pdf
Engineering Assistance Grant Program	The contribution level depends on need and the ability of the applicant to contribute.	Designed to provide trail builders and managers with funding to help them hire engineering expertise when it is required. This could include the building of bridges or other large structures or components that require expertise to ensure they are safe and pose no risk to the environment.	Contact Valley Region Representative: Mike. Trinacty@Novascotia.ca, 1-902-697-4391	Applications received by regional representative throughout the year	http://novascotia.ca/dhw/pasr/documents/Engineering-Assistance-Grant-Guidelines.pdf
Recreational Facility Development (RFD)	Up to one-third of the total capital cost to a max. of $150,000.	Facilities may include: community centres and halls, pools, arenas, athletic fields, parks, playgrounds, trails and enhanced schools for community use and other facilities that promote sport and physical recreation.	Contact the regional office in your area.	2016-17 apps are due May 2, 2016.	www.novascotia.ca/dhw/pasr/grants-and-incentives.asp
Regional Development Grant (RDG) and Other Provincial Grants	Contact the regional office in your area.	Regional Development Grant (RDG) is designed to partner with regional, community, local or municipal organizations involved in physical activity, sport or recreation to increase people's participation in sport.	Contact the regional office in your area.	Contact the regional office in your area.	www.novascotia.ca/dhw/pasr/grants-and-incentives.asp
Planning Assitance Grant and Other Provincial Grants	Contact the regional office in your area.	The Planning Assistance Program assists community organizations and municipalities in obtaining professional assistance in planning, designing and researching proposed and existing sport and physical recreation facilities.	Contact the regional office in your area.	Throughout the year.	www.novascotia.ca/dhw/pasr/grants-and-incentives.asp

vi. Urgency: Priority Requests

Occasionally, lands may become available for purchase which require swift action due to time sensitivities. Other factors may also be present, such as the protection of sensitive environments or seizing a unique opportunity.

Examples of urgencies include and are not limited to:

1. Limited Window of Opportunity to Purchase

Example: A private landowner offers their land to the Municipality for purchase stating they would like the Municipality to use it for park use. Otherwise, the landowner will sell on the private market.

2. Opportunity to Purchase with another Organization

Example: There may be a parcel of land available for purchase identified as important by other levels of government or other organizations. Here, the swift establishment of cost sharing may be necessary.

3. Offer of 'First Right of Refusal' on Land Available for Sale

Example: The Province of Nova Scotia has unused road right-of-way or other lands potentially useful to the Municipality and offers 'First Right of Refusal' on lands they are divesting.



Upper Burlington Planters Trail

vii. Acquisition Methods

The Municipality has a number of methods to acquire new lands for parks and open space. Most land acquisitions in West Hants will be subject to Policy Council-01-006 *Acquisition of Real Property*.[2] It is important to note that the Municipality does not zone private lands for parks and open space use. Some acquisition methods include, but are not limited to:

1. Donations of land

Land may be donated to the Municipality from private landowners or other government owners as long as the Municipality is considered a 'donee' by the Canadian Revenue Agency (CRA). The donation of real property may be subject to specific requirements of the Policy Council-01-006 *Acquisition of Real Property*.

Ecologically sensitive land may be donated through Environment Canada's 'Eco-Gift' Program (described in detail Part v. above).

2. A 'right of first refusal' or a 'first option to purchase'

A Municipality may request a 'first option' on lands strategically positioned to enhance the park and open space network. This option is conditional and contingent upon the owner's will or desire to sell.

3. Easement and/or maintenance agreement

The Municipality may request the use of Provincial, Federal, or private lands for parks or open space use through an easement or maintenance agreement. This method may transfer liability to the Municipality. In the case of Private lands see the Eco-Gift option.

4. Offer to purchase lands

Municipalities may approach or accept invitations from private landholders for the acquisition of desired open space lands using the 'willing seller, willing buyer' method.

5. Subdivision By-Law

During the creation of a subdivision of more than three lots, the Municipality currently receives land in the amount equal to 5 percent of the lots to be created, or cash-in-lieu equal to the market value of such land.

6. Land Swap

The exchange or swap of lands is a non-purchase scenario for acquiring lands in priority areas. Land swaps are common with large landholders like the Provincial and Federal governments, but can also be accommodated with other private landholders.

7. Municipal Planning Strategy

The Municipality may have policy requirements for the amount of land that must be useable for parks and open space, such as through a Development Agreement. For example, a multi-family development or development of mobile home parks.

2 http://www.westhants.ca/component/com_docman/Itemid,456/dir,DESC/gid,109/limit,100/limitstart,0/order,name/task,cat_view/

viii. Divestment

There may be scenarios where the divestment of land is the best management option, primarily:

1. Location

There are Municipally-owned lands in the current parks and open space network that are found in areas of low population density. In addition to density, some parcels are far from main roads or are outside of well-travelled areas. Due to the remote nature, these lands see few park users, especially if they are unmanaged lots. Isolated lots may also become areas for illegal dumping and vandalism.

2. Competing Uses

In some communities, there are a number of neighbouring municipal parcels offering the same amenities or recreation opportunities. Having non-complementary parcels of land together may not be useful as a network. Here, divestment makes sense to concentrate resources into fewer parcels.

3. Useability

Subdivision development of previous decades may have resulted in land under Municipal ownership that does not meet the current definition of usable land or areas that might be considered hazardous.

4. Frequency of Use

Monitoring park use can help to decide if a piece of land is worth retaining. Under-used spaces can be a drain on resources and unsafe if there is not frequent traffic.

5. Cost of Maintenance

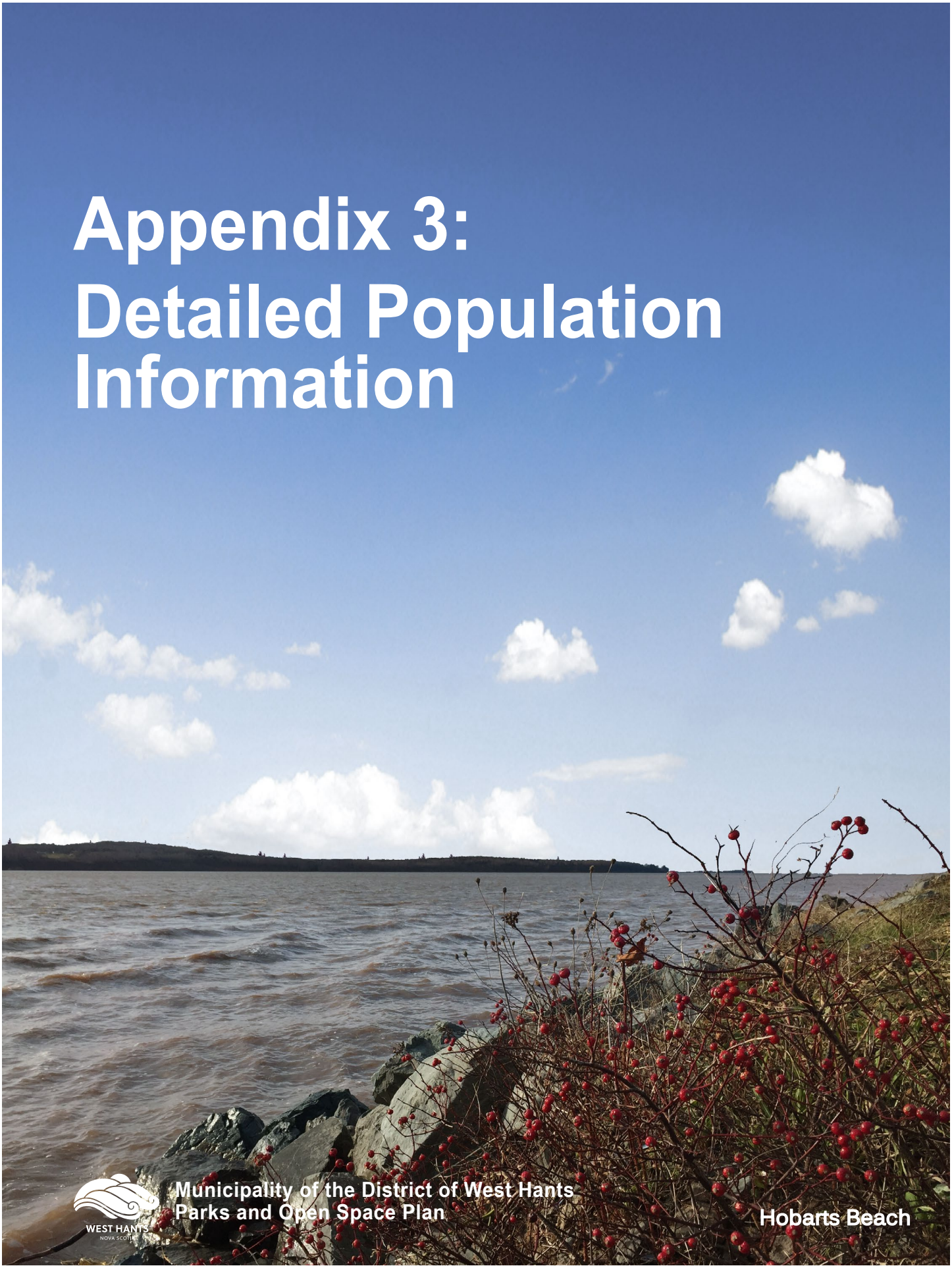
Divestment might be the best option when the cost of maintenance outweighs community benefit, or if redevelopment costs to make a piece of land suitable or useable are beyond the parks and open space budget.

6. Interest from Non-Profit Groups

With a well-developed business plan, non-profit groups may purchase land from the Municipality.

Broadly speaking, the divestment of Municipal property can positively influence the parks and open space network. Revenue may be used to purchase new lands suitable for parks and open space or to fund management projects; lands may be leased, sold, or transitioned to community groups; lands may be swapped for more desirable spaces.

Appendix 3: Detailed Population Information



Municipality of the District of West Hants
Parks and Open Space Plan

Hobarts Beach

Table A3.1: 2011 Statistics Canada Census Summary for West Hants and Hantsport

	West Hants	Hantsport	Nova Scotia
Population and Migration			
2011 Population	14,165	1,159	921,727
Population under 20 years (2011)	3,230	245	195,660
...as a percent of total population	23%	21%	21.2%
Population over 65 years (2011)	2,255	275	153,370
...as a percent of total population	16%	24%	16.6%
Population Growth, 2006-2011	2.1%	-2.7%	0.9%
Total Census Families, 2011	4,535	365	270,065
Couple Families with Children, 2011	1,740	135	223,330
Lone Parent Families, 2011	590	55	46,730
Immigration, % of Total, 2011	2.8%	3%	5.3%
Mobility (past 5 years), 2011	26%	25%	31.9%
Moved within Municipality	11%	3%	18.2%
Moved from other municipality within NS	10%	18%	6.0%
Moved from other province	4%	4%	5.7%
Moved from outside Canada	1%	0%	1.9%
Income, 2010			
Median after-tax income ($) for individuals with income	$ 25,406	$ 29,134	$ 25,178
Median after-tax household income ($), 2010	$ 50,887	$ 44,383	$ 47,495
Unemployment Rate, 2011	9.6%	9.4%	10.0%
Low Income Households, 2010	16.0%	11.3%	17.4%
Low Income less than 18 years, 2010	17.2%	11.6%	20.9%
Low Income 65 years and over, 2010	19.0%	12.9%	18.0%
*Based on after-tax low-income measure (LIM-AT)			
Transportation (commuting) of working adults			
Car, truck or van - as a driver	88.7%	82.6%	76.7%
Car, truck or van - as a passenger	6.7%	0.0%	7.9%
Public transit	0.9%	0.0%	6.6%
Walked	2.4%	12.8%	6.8%
Bicycle	0.0%	0.0%	0.7%
Other	1.1%	0.0%	1.3%

Table A3.2: Age Group as % of Total Population for West Hants and Hantsport (combined), 2001-2011

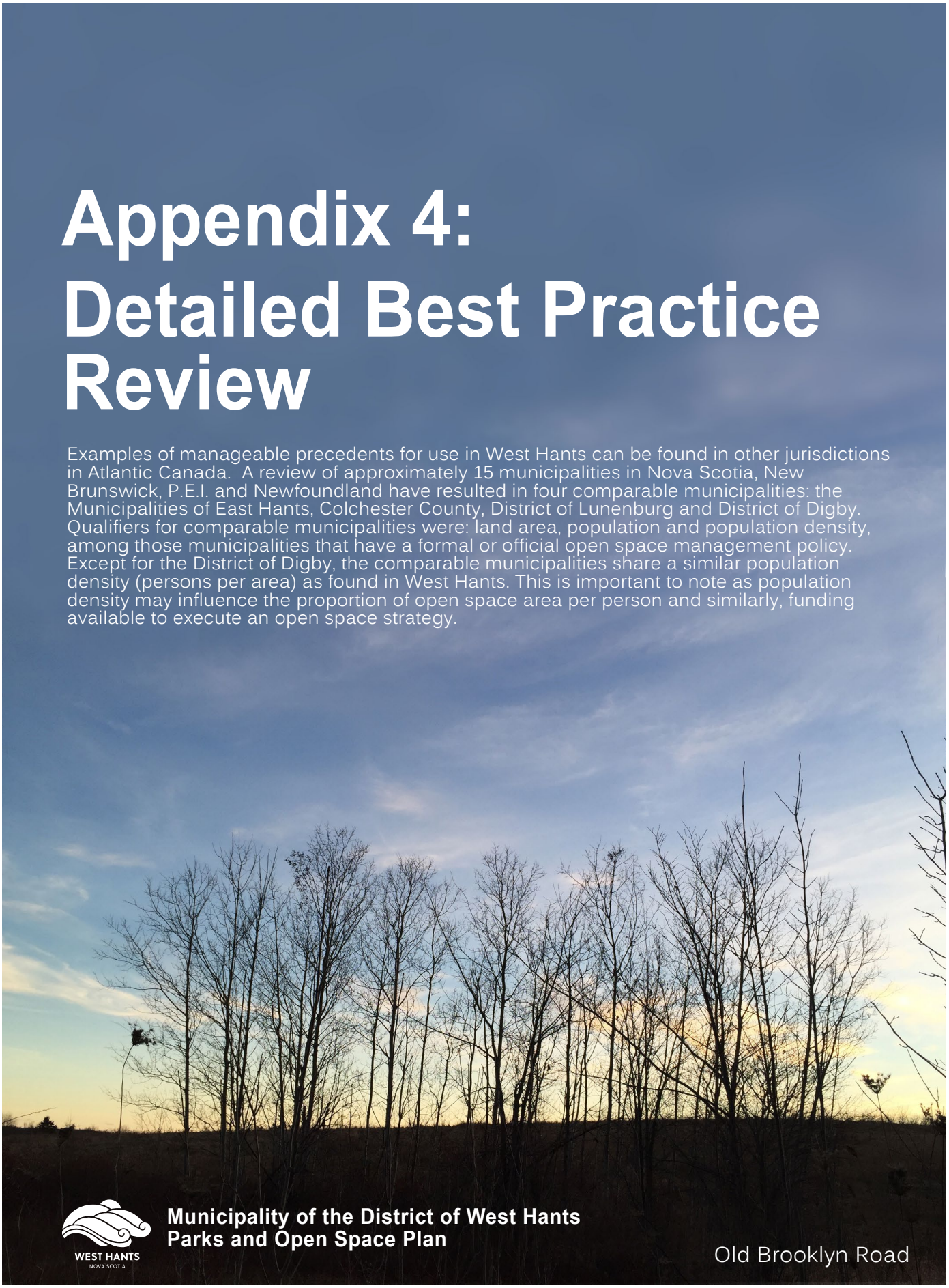
	2001		2006		2011	
	#	%	#	%	#	%
Total Reporting	14,980	100%	15,075	100%	15,325	100%
By Selected Age Groups						
Preschool Age (< 5 yrs)	765	5%	720	5%	795	5%
Elementary (5-19 yrs)	3,070	20%	2,905	19%	2,680	17%
Labour Force Ages						
20-24 yrs	695	5%	655	4%	710	5%
25-44 yrs	4,335	29%	3,990	26%	3,540	23%
45-64 yrs	4,055	27%	4,570	30%	5,065	33%
Seniors						
65-74 yrs	1,175	8%	1,290	9%	1,565	10%
75+ yrs	875	6%	945	6%	965	6%

Table A3.3: % Change in Population by Age Group for West Hants and Hantsport (combined), 2001-11

	% Change 2001-2011	
	MDWH	NS
All Age Groups	2.3%	1.5%
By Selected Age Groups		
Preschool Age (< 5 yrs)	4%	-7%
Elementary (5-19 yrs)	-13%	-15%
Labour Force Ages		
20-24 yrs	2%	6%
25-44 yrs	-18%	-17%
45-64 yrs	25%	26%
Seniors		
65-74 yrs	33%	28%
75+ yrs	10%	14%

Appendix 4: Detailed Best Practice Review

Examples of manageable precedents for use in West Hants can be found in other jurisdictions in Atlantic Canada. A review of approximately 15 municipalities in Nova Scotia, New Brunswick, P.E.I. and Newfoundland have resulted in four comparable municipalities: the Municipalities of East Hants, Colchester County, District of Lunenburg and District of Digby. Qualifiers for comparable municipalities were: land area, population and population density, among those municipalities that have a formal or official open space management policy. Except for the District of Digby, the comparable municipalities share a similar population density (persons per area) as found in West Hants. This is important to note as population density may influence the proportion of open space area per person and similarly, funding available to execute an open space strategy.



Old Brooklyn Road

Appendix 4: Detailed Best Practice Review

Place	Province	Population	Area (km2)	Pop/ km2	Policy Document	Park Types	Policies of Interest	Subdivision Dedication	Definition of Usable Land	Parkland Management Fund	Parks Budget
West Hants (Municipal District)	NS	14,500	1,238	11.7	West Hants Municipal Planning Strategy	N/A	Section 13.2	Land dedicated upon subdivision is currently 5% of the land or the equivalent market value of 5% of the land in cash to the Municipality. A combination of land and cash is also permitted, as well is a transfer of land that is not a part of the proposed subdivision.	Generally, useable land is defined as land that: (i) average slope not more than 15%, no part of the parcel with a slope of 15% or more shall exceed 25% of the area of the entire parcel; (ii) consists of a parcel having an area of 1/2 acre or more; However these criteria may be waived for open space uses if so determined by the Recreation Director or Development Officer for various defined activities.	N/A	TBC
East Hants (Municipal District)	Central NS	22,111	1,786	12.4	East Hants Municipal Planning Strategy	Regional Community Neighbourhood Urban Greenspace Conservation Areas Heritage Spaces	1. The extensive definition of usable land in the Subdivision By-Law includes a requirement for lands dedicated for open space to be capable of supporting active recreation, passive recreation and conservation uses, as determined by the Municpality. 2. The Municipality actively acquires lands in sensitive areas.	10% of land designated for open space in serviced areas, 5% of land designated for non-serviced areas.	Fine grained example; see East Hants Subdivision By-Law Section 13: Public Open Space.	Community Park Funding, $80,000 annual fund for park development. Groups apply for up to 50% of development costs.	Obligatory reserve, approx. $15,000 annually.
Colchester County (County)	Central NS	50,000	3,628	13.8	Municipal Parkland Strategy	Tot Lot Neighbourhood Parks Athletic Parks: Regional and Community Regional Recreation Parks Natural Parks Garden Areas Special Purpose Trail	Due to the population size in rural areas, parkland requirements will figure no parks are required that are smaller than Regional parks that attract people from outside those communities. Neighbourhood parks, community parks, cultural parks, Active Transportation (AT) and trails should be considered in rural areas on a case-by-case basis, to meet the needs of rural communities.	Subdivision By-Law, 5% of land designated for open space or cash in lieu, 2% in rural Colchester areas not supported by the MPS.	Land donated must meet specific criteria (e.g. size, slope, frontage, usage).	Community Trail Funding, $1million fund (over 5 years) established in 2004. Groups apply for up to 50% of maintenance and development costs.	TBC
Digby District (Municipal District)	Western NS	7,460	1,656	4.5	Open Space Strategic Plan	Places for: short repose, day use, everyday active use, sightseeing, organised sport and play, transportation, protected areas, areas of cultural significance.	Parkland Management Fund to be developed, values-based land suitability evaluation system developed.	Subdivision by-law 5% of area of new lots when 20 or more lots are created.	Average slope of 15% or less, provided the portion of land with a slope of 15% or more does not exceed 25% of the land area. Land must have frontage on a road. Is not a swampland or subject to flooding.	$50,000	TBC
District of Lunenburg (Municipal District)	South Shore NS	25,120	1,760	14.3	Open Space Strategic Plan	Various (not classified)	Considers future activity on various sites in the Municipality, including on private lands.	Cash in the amount of two percent (2%) of the market of all new lots created.	No clear definition.	TBC	TBC

Appendix 5: Detailed Policy Framework



Municipality of the District of West Hants
Parks and Open Space Plan

A West Hants Beach

Guiding Principle	Topic	Planning Document	Policy/Regulation	Description
1. Place high priority on environmental protection.	Watershed Protection	West Hants MPS	Policy 9.3.2	Limit the permitted uses in the Water Supply (W) zone to uses such as woods camps, forestry uses excluding processing structures, municipal water treatment and distribution uses, outdoor recreation uses without permanent structures, historic buildings and structures, and agricultural uses excluding dwellings, livestock operations and greenhouse operations.
	Watershed Protection	West Hants MPS	Policy 9.3.6	In the Water Supply (W) zone, it shall be the policy of Council to establish a minimum lot size of 10 acres (4.05 hectares) except for municipal water treatment and distribution uses.
	Watercourses	West Hants MPS	Policy 4.21.1	It shall be the policy of Council to control in the Land Use By-law the development of lands adjacent to watercourses. The purpose of such regulation is to preserve natural habitat and to limit environmental impacts such as siltation. This control shall be accomplished by establishing a minimum separation distance from watercourses.
	Watershed Protection	West Hants MPS	Policy 9.3.6	...it shall be the policy of Council to establish a minimum water frontage requirement in the Water Supply zone which shall apply to the creation of new lots abutting Mill Lake and Davidson Lake.
	Rezoning	West Hants MPS	Policy 5.3.7	It shall be the policy of Council to consider Zoning land within the Three Mile Plains Growth Centre to R-3 subject to the following: ... (e) adequate open space or recreational space is provided;
	Rezoning	West Hants MPS	Policy 8.8.5	It shall be the policy of Council to consider rezoning land zoned Prime Agriculture (P/Ag) to allow new Rural Residential (R-4) or Open Space (OS) uses subject to the following: (a) the development site has been determined to have little or no agricultural capability in accordance with Policy 8.6.1; (b) adequate separation distances are provided to minimize potential land use conflicts; (c) the proposed use is compatible with adjacent land uses; (d) the proposed use will not adversely affect other farms in the area; and (e) Policy 16.3.1.
	Environmentally Sensitive Areas	West Hants MPS	Policies 12.1.1, 12.1.2, 12.1.7, 12.1.8, 12.2.1	Regarding environmental constraints around Dykelands and gypsum formations.
	Watersheds, Watercourses	Hantsport MPS	GP-7	It shall be a policy of Council to establish in the Land Use By-law a setback from a watercourse.
	Environmentally Sensitive Areas	Hantsport MPS	Goal 1	Protect the environmentally sensitive areas of the former Town of Hantsport
	Watersheds, Watercourses	Hantsport MPS	Goal 4	Protect the source of the Town's water supply The following goals also fall under the other pillars of sustainability.
	Zoning	Hantsport MPS	Policy OS-3	It shall be a policy of Council to establish a "Conservation Open Space (COS) Zone" and to place the environmentally sensitive areas in this zone.
	Future Land Use	Hantsport MPS	Policy OS-1	It shall be a policy of Council to designate the existing recreational open space and the environmentally sensitive areas as "Open Space" on the Generalized Future Land Use Map.
	Park development	West Hants LUB	34.4(e)	The infilling and alteration of topography of any property in areas shown as Dykeland on Schedule A of this By- law shall not be permitted except as necessary for: construction of sports fields, golf courses, boat launches, trails and other recreational uses which require a limited amount of infilling and alteration of topography, but do not involve buildings.
	Hazard: Drought	MCCAP	4.1.5 Drought Action Items	Create policy to regulate the development of municipal infrastructure and facilities in areas known to be highly susceptible to sinkholes

Guiding Principle	Topic	Planning Document	Policy/Regulation	Description
	Hazard: Wildland Fire	MCCAP	4.2.3 Wildland Fire Action Items	Introduce a fire risk reduction program for municipally owned property (e.g. plant only low fire risk species).
	Natural Systems	MCCAP	8.1 Natural Stresses on Natural Systems	West Hants will remain attentive to sensitive habitats, ecosystems, wildlife and endangered species.
	Natural Systems	MCCAP	8.1 Natural Stresses on Natural Systems	The municipality will assist the Province, however practical and possible, in the protection of Parks, Protected Areas and Sites of Ecological Interest including:
	Natural Systems	MCCAP	8.1 Natural Stresses on Natural Systems	• Panuke Lake Nature Reserve: 150.9 ha (373 ac) including 47 ha (116 ac) of old growth eastern hemlock-red spruce forest • St. Croix River International Biological Program Site: mixed forest on karst topography; rare flora including Ram's-head Lady Slipper (species listed as Endangered in the Nova Scotia Species at Risk Act). • Akins Marsh: Eastern Habitat Joint Venture Site, Mount Denson. • Falls Lake Provincial Park: 4.86 ha (12 ac) on Falls Lake, Vaughan. • Smileys Provincial Park: 40.47 ha (100 ac) on Meander River, McKay Section. • Cheverie Salt Marsh Restoration Project: Highway 215, Cheverie
	Hazard: Sinkholes	MCCAP		Partner with local industry, stakeholders and DNR to acquire mapping of karst terrain to build knowledge about sinkhole susceptibility.
	Watersheds, Watercourses	West Hants ICSP	Goal 1	Protection of watercourses, shorelines, and wetland
	Watersheds, Watercourses	West Hants ICSP	Goal 3	Protect the source of public water supplies
2.. Plan green infrastructure to adapt to climate change.	Hazard: Coastal Erosion	MCCAP	4.7.3 Coastal Erosion Action Ideas	Request that TIR address erosion at Cheverie causeway.
	Hazard: Extreme Heat Events	MCCAP	4.8.3 Extreme Heat Event Action Ideas	Consider creating a policy addressing the safety of municipally coordinated outdoor recreation events during hot and very hot days, defined as days that are 30°C and 35°C days respectively.
	Areas of Increased Risk	MCCAP	(info)	[Maps were created to show a) coastal flooding b) inland flooding c) coastal erosion susceptibility]
	Municipal Park Maintenance	MCCAP	7.3 Climate Change Opportunities & Challenges to Municipal Operations	The maintenance regimes of parks and all municipally maintained outdoor spaces should respect the increase in growing degree days.
	Municipal Park Maintenance	MCCAP	7.3 Climate Change Opportunities & Challenges to Municipal Operations	Landscaping and maintenance choices should also take into consideration increased water deficits and fire risk.
	Municipal Park Maintenance	MCCAP	7.3 Climate Change Opportunities & Challenges to Municipal Operations	Prudent property maintenance should, by design, require little to zero irrigation.
	Municipal Park Maintenance	MCCAP	7.3 Climate Change Opportunities & Challenges to Municipal Operations	To manage fire risk, the location of plantings, stand thinning, and choices about what to plant are all critical. The Alberta Fire Smart program details guidelines for managing fire risk that could easily be employed by West Hants.

Guiding Principle	Topic	Planning Document	Policy/Regulation	Description
	Municipal Park Maintenance	MCCAP	7.3 Climate Change Opportunities & Challenges to Municipal Operations	West Hants will strive to maintain natural drainage, material and nutrient flows in the parks maintained by the Municipality, which are: • St. Croix Recreation Site • Eldridge Road Recreation Site • Irishmans Road Recreation Site • Halewood Drive (small parcel of parkland) • Falmouth Mini Park and Causeway Trail and Causeway Trail and Causeway Trail • Armstrong Lake (small parcel of parkland) • Kempt Quarry Recreation Site • Hobarts Beach
3. Plan spaces for all interests and abilities.	Future Land Use	West Hants MPS	Section 3.2	Provide a variety of community and neighbourhood recreational sites.
	Parkland Dedication	West Hants MPS	Policy 5.3.9 (f) re: Manufactured Home Parks	...a minimum of 10 percent of the total area of the park shall be devoted to parks, playgrounds and other useable recreational space, except that Council may consider reducing the required recreational space by up to five percent when the dimensions of the individual home spaces are substantially larger than the zone standard;
	Parkland Dedication	West Hants MPS	Policy 5.4.4 (d) Re: Multi-unit Residential Development	...regarding Multiple Unit Residential in Falmouth Growth Centre: the gross density of the development shall not exceed 4.5 dwelling units per acre; where the gross density exceeds 3 dwelling units per acre, at least 10 percent of the total area of the property shall be dedicated to the Municipality for parkland or open space purposes;
	Parkland Dedication	West Hants MPS	Policy 9.1.11(f) Re: Resort Development	...regarding Resort Development: a minimum of 25 percent of the property shall be used for parks and open space areas and active recreational facilities, of which at least half shall be allocated for active recreational facilities;
	Future Land Use	West Hants MPS	Policy 13.0.1	...establish a Community Use designation as shown on the Generalized Future Land Use Map (Map 1) to be applied to existing large-scale institutional, municipal recreation and open space uses.
	Zoning	West Hants MPS	Policy 13.2.1	...establish an Open Space (OS) zone which applies to parks and other public outdoor recreation uses, cemeteries, historic sites and similar uses. Generally, open space uses do not involve main buildings, but the zone may also be applied to certain institutional uses, such as museums and interpretive centres, which are located on large parcels of land used as parkland.
	Zoning	West Hants MPS	Policy 13.2.2	Zone only public lands for open space purposes.
	Future Land Use	West Hants MPS	Policy 13.2.3	It shall be the policy of Council to permit parks and playgrounds in any zone, provided accessory buildings are small scale, any signage meets the requirements of the zone and all other requirements of the Land Use By-law are met.
	Zoning	West Hants MPS	Policy 13.3.1	...establish a Recreation Commercial (RecC) zone which shall apply to existing commercial recreation facilities such as ski lodges and facilities, campgrounds, tennis and golf clubs, and similar uses which are open to the general public but are owned by private interests.
	Zoning	West Hants MPS	Policy 8.8.5	...consider rezoning land zoned Prime Agriculture (P/Ag) to allow new Rural Residential (R-4) or Open Space (OS) uses subject to the following: (a) the development site has been determined to have little or no agricultural capability in accordance with Policy 8.6.1; etc.
	Future Land Use	West Hants MPS	Policy 13.0.1	It shall be the policy of Council to establish a Community Use designation as shown on the Generalized Future Land Use Map (Map 1) to be applied to existing large-scale institutional, municipal recreation and open space uses.
	Zoning	Hantsport MPS	Policy OS-2	It shall be the policy of Council to establish a “Recreational Open Space (ROS) Zone and to place all of the publicly owned recreational areas into this zone.
	Develop a park and open space plan	Hantsport MPS	Policy ICSP-18	It shall be the policy of Council to continue to maintain the parks within the Town and to provide recreational services for all residents.
	Future Land Use	Hantsport MPS	Policy GP-1	It shall be the intention of Council to provide for the overall development of the Town in accordance with the Generalized Future Land Use Map attached as Schedule A of this document.

Guiding Principle	Topic	Planning Document	Policy/Regulation	Description
	Zoning	West Hants LUB	33.1	The following uses shall be permitted in the Open Space (OS) zone: • Cemeteries • Historic sites, interpretive centres and museums • Outdoor recreation uses • Parks and playgrounds • Uses, buildings and structures necessary for the prevention of floods, soil erosion and other similar natural occurrences"
	Zoning	West Hants LUB	17.1	The following uses shall be permitted in the Recreation Commercial (RecC) zone: • Campgrounds • Driving ranges • Golf courses and club houses • Single unit dwellings • Ski lodges and facilities • Tennis courts and club houses
	Zoning	West Hants LUB	24.1	The following uses shall be permitted in the Water Supply (W) zone: • Agricultural uses excluding dwellings, the keeping of livestock and greenhouse operations • Forestry uses excluding processing structures • Historic buildings and sites • Municipal water treatment and distribution uses • Outdoor recreation uses provided no permanent structures are erected • Uses, buildings and structures necessary for the prevention of floods, soil erosion and other similar natural occurrences • Woods camps
	Zoning	Hantsport LUB	13.1	Conservation Open Space (COS) Zone Permitted Uses: • recreational uses that do not involve structures other than open air structures • agricultural uses that do not involve structures other than open air structures and greenhouses
	Zoning	Hantsport LUB	12.1	Recreation Open Space Zone (OS) Permitted Uses: • cemeteries • pavilions, band shells • sports fields • buildings and structures accessory to the foregoing including canteens and related amenities
	Wetlands and Watercourses	Hantsport LUB	5.2	All main buildings shall be set back from a watercourse as shown on the Zoning Map a distance of 30 metres.
	Programming	Active Living Strategy	Engagement Outcome	Public consultation garnered citizens' desire to perform the following activities: • safe roadsides/trails for walking • use of Trails • swimming • kayaking • canoeing • snowshoeing • hiking and • orienteering.
	Programming	Active Living Strategy	Engagement Outcome	Regarding the importance of having activities in every community.
	Programming	Active Living Strategy	Engagement Outcome	Regarding more public time at the KES swimming pool and Brooklyn arena.
	Programming	Active Living Strategy	Recreation Survey Results	Ipsos Reid Recreation Survey highlights on page 22 of Report.
	Active Transportation	West Hants ICSP	Goal: Promote Active Transportation (p 43)	Expanding the number of walking trails may well be an objective in a parks and open space strategy. Indoor walking trails are also important; one has been incorporated in a recently constructed civic centre.
	Food Security	West Hants ICSP	Goal: Encourage backyard and community gardens Support the "Buy Local Food" movement	Council will encourage the establishment of community gardens in the more urban areas of the Municipality.

Guiding Principle	Topic	Planning Document	Policy/Regulation	Description
	Tourism	West Hants ICSP	Goal: Promote Tourism (p36)	a) Council will investigate opportunities to attract more tourists to the Municipality. b) Better signage, interpretive centres, bicycle routes, salt marshes are a number of areas that may warrant further investigation to attract visitors
	Partnerships	West Hants ICSP	Goal: Provide recreational programs and opportunities for all residents (p 39)	Council will consider entering into partnership in the provision of recreational services.
4. Link parks and open space with other places.	Water Access	West Hants MPS	Policy 4.21.2	It shall be the policy of Council to prevent development from eliminating public access to lakes and rivers in West Hants. This will be accomplished either by the acceptance of waterfront land given under the parkland dedication provisions of the West Hants Subdivision By-law or by the purchase of such lands with the money collected in lieu of land dedication.
	Connections to Active Transportation	Active Transportation Plan	Section 2.9 Community Input	Connection between schools and neighbourhoods needed to allow youth to get to school/recreation by bike.
	Connections to Active Transportation	Active Transportation Plan	Section 3.2 Network Opportunities	Inactive rail lines owned by the Windsor to Hantsport Rail Company present another major opportunity to establish key connections within a region-wide active transportation network.
	Wayfinding	Active Transportation Plan	Section 4.3 Wayfinding	Improve linkages between trail or park facilities and adjacent community amenities.
	Wayfinding	Active Transportation Plan	Section 4.3 Wayfinding	Use off site directional signage where needed.
	Tourism	Active Transportation Plan	Section 2.9 Community Input	Regarding connection to blue route needed for tourism.
	Active Transportation	West Hants ICSP	Goal: Promote Active Transportation (p 43)	a) Council will consider amending its subdivision by-law to require sidewalks and/or bicycle lanes for new municipal public streets. b) Council will encourage the province to provide for bicycle use as part of highway renewal projects, except for controlled access highways. c) Council will explore the potential of designating a number of roads in the municipality as bicycle routes and promoting their use.
	Water Access	Active Living Strategy	Outdoor Recreation (p 14)	It is imperative that the Municipality maintain access along the shores of lakes and the Minas Basin waters for public use through a Parks and Open Spaces Plan.
5. Showcase community identity and history.	Municipal Park Maintenance	MCCAP	7.3 Climate Change Opportunities & Challenges to Municipal Operations	Essential to the functioning and well-being of West Hants are a variety of socially valued assets, including (but not limited to): • Civic Centre in Brooklyn • Community Halls • Churches • Elementary Schools (Brooklyn, Summerville, Newport, Falmouth, Windsor Forks) • West Hants Middle School• Avonview High School • Windsor Elms Village• Provincial Parks located within West Hants • Municipally maintained parks: - St. Croix Recreation Site - Eldridge Road Recreation Site - Irishmans Road Recreation Site - Halewood Drive (small parcel of parkland) - Falmouth Mini Park and Causeway Trail and Causeway Trail and Causeway Trail and Causeway Trail, Armstrong Lake (small parcel of parkland), Kempt Quarry Recreation Site - Hobarts Beach • Avondale Wharf & Waterfront/ Museum• Commercial Districts such as in Brooklyn • Town of Windsor, particularly its grocery stores • Avon Valley Golf Course • French Mill Brook Watershed

Guiding Principle	Topic	Planning Document	Policy/Regulation	Description
	Smart Growth	Active Transportation Plan	5.2 Policies and Planning	Siting of recreation opportunities close to existing communities is critical to maintain community feel and reduce costs
	Wayfinding	Active Transportation Plan	Section 4.3 Wayfinding	Improve sense of arrival by installing trailhead or park signs at entrances to AT facilities.
	Wayfinding	Active Transportation Plan	Section 4.3 Wayfinding	Use entrance signage to improve sense of arrival and communicate usage.
6. Evaluate and update plans over time.	Future Land Use	West Hants MPS	Policy 16.1.1	It shall be the policy of Council to review and make amendments to this Strategy:... (c) when Council deems it necessary because of a change in policy intentions or the development environment.
	Develop a parks and open space plan	Hantsport MPS	Goal 2.4.1 (Goals)	Provide parks and recreational opportunities.
	Develop and parks and open space plan	Active Living Strategy	Public Lands Profile (p 12)	An analysis of [Municipal] lands (including value and liability) and development of a Parks and Open Spaces Plan is needed to identify opportunities and priorities.
	Develop and parks and open space plan	Active Living Strategy	GOAL 3: SUPPORTIVE PHYSICAL ENVIRONMENTS To create, maintain and enhance physical environ-ments, both built and natural, that support PA.	Develop and implement a Parks and Open Spaces Plan (presented to Council 2015).
	Develop a parks and open space strategy	West Hants ICSP	Goal: Provide recreational programs and opportunities for all residents (p 39)	Council will consider the preparation of a Parks and Open Space Strategy for the Municipality.

Appendix 6:
Policy and By-Law Changes for Plan Implementation



WEST HANTS
NOVA SCOTIA

Municipality of the District of West Hants
Parks and Open Space Plan

Avondale Wharf and Waterfront

It is recommended that staff in consultation with the Planning Advisory Committee and Council will update relevant planning documents to enable a compatible relationship between this Parks and Open Space Plan and those planning documents. In addition to such updates some changes are identified under each planning document title below that may contribute to the successful implementation of this Plan:

West Hants Subdivision By-law

1. Part 14: Change "Parkland Dedication" to "**Parks and Open Space Dedication**".

2. Section 71:

   Prior to approval by the Development Officer of the final plan of subdivision, the subdivider shall either:

   (a) transfer to the Municipality, free of encumbrances, for parks, playgrounds, and similar public purposes, an area of useable land within the area being subdivided equal to five percent (5%) of the area of the lots to be approved, as shown on the final plan of subdivision, exclusive of streets, easements, and the residue of the land of the subdivider, **or ten percent (10%) when the proposed location of subdivision is listed in growth areas identified in the West Hants Municipal Planning Strategy;** or

   (b) provide to the Municipality a sum of money equivalent to five percent (5%) of the market value, as determined by an assessor, of the lots to be approved, as shown on the final plan of subdivision, exclusive of streets, easements, and the residue of the land of the subdivider **or ten percent (10%) when the proposed location of subdivision is listed in growth areas identified in the West Hants Municipal Planning Strategy;** or

   ...

   (e) When lands to be transferred are not needed to meet the needs of people residing either full time or part time in the area, the Municipality may request the transfer of cash-in-lieu.

3. Section 73: Definition of Useable Land: Change to reflect the ideas noted below in **bold:**

   (a) For the purposes of Sections 71 and 72, useable land shall be defined as land that:

   (i) has an average slope over the entire parcel of not more than **ten percent (10%) and** that any part of the parcel with a slope of **ten percent (10%)** or more shall not exceed one-quarter (¼) of the area of the entire parcel;

   (ii) consists of a parcel having an area of one half (1/2) acre or more;

   (iii) is serviced by central water and sewer systems, or is capable of supporting an on-site sewage disposal system, unless the parcel is intended for **Linear Parks**, **Neighbourhood Parks, Cultural Parks or Preservation and Production Open Space that** do not require an on-site sewage disposal system or services;

   (iv) is not a clearing and grubbing disposal area;

   (v) is not swampland or subject to flooding;

   (vi) is not an electrical transmission corridor;

   (vii) where applicable, is able to meet the requirements for lot area and lot frontage contained in the Land Use By-law;

   (viii) has a public street or private road frontage consistent with one of the following conditions:

   i. Public street or private road frontage of 30.5 metres (100 feet) or more; or

   (ix) achieves a moderate or high degree of Suitability (by using the Suitability Framework).

   (b) The criteria in subsection 73(a) may be waived if the land to be transferred is considered unique by the **Development Officer** in that the parcel is:

   (i) land suitable for preservation as an interpretive natural reserve area based on the opinion of a qualified professional;

(ii) land of significant historical or archaeological value to the Municipality;

(iii) land adjacent to, **or within a 500m (1,640 feet) distance of,** a park or open space owned by the Municipality;

(iv) land deemed by the Recreation Director for the Municipality to be required for recreational purposes;

(v) land located in the Water Supply (W) zone; **or**

(vi) land that is outside of the subdivision area and owned by the landowner that will contribute to the parks and open space network described in the Parks and Open Space Plan or meets the needs of citizens who are underserviced in terms of parks and open space.

(c) Any land to be conveyed to the Municipality other than that meeting the requirements of subsection 73(b) shall abut a public road or private road **and contain a frontage on said public road or private road of not less than 30.48 metres (100 feet) unless a frontage of less than 30.48 m (100') is considered desirable for the future development of a Neighbourhood Park, as determined by the Development Officer in consultation with the Recreation Director.** Land to be conveyed to the Municipality pursuant to the requirements of subsection 73(b) shall be accessible by a public street or private road or by a public easement a minimum of 15.24 metres (50 feet) in width and providing a connection to a public road.

Municipal Planning Strategy for West Hants

1. Change the title at Section 13.2 "Open Space" to "Parks and Open Space" and change the word "open space" to 'parks and open space" where appropriate throughout the MPS;

2. Include in Section 13.2 or 16.4, policy that enables 10% Dedication in growing areas, such as: "Notwithstanding other requirements of this Municipal Planning Strategy, an amount of land, cash-in lieu of land or a combination of land and cash-in-lieu equal to 10% of the market value of lands to be subdivided shall be transferred to the Municipality if such lands fall within areas on the West Hants Generalized Future Land Use Map (GFLUM) labelled as Hamlet, Village, Village Core, Residential, and Commercial Core. These areas are generally seen as growth areas within the Municipality";

3. Update Policy 16.4.1(c) to state: "requirements for dedication of **open space** or cash-in-lieu **for the purpose of parks and open space**; and,

4. Update the West Hants Zoning Map and Generalized Future Land Use Map (GFLUM) to reflect the parks and open space opportunities identified in this plan.

5. Include provisions to accommodate the addition of 71(e).

6. Include provisions to accommodate the addition of 73(a)(ix).

7. Include provisions to accommodate the addition of 73(b)(vi).

Municipal Planning Strategy for Hantsport

1. Update the Hantsport Generalized Future Land Use Map (GFLUM) to reflect the parks and open space opportunities identified in this plan. Of particular note are opportunities for Municipally owned lands west of the Hantsport Riverbank Cemetery (identified in 'Area 1 Network Opportunities') and overall roadside improvements for walking.

Municipality of the District of West Hants

Parks and Open Space Plan

2016 - 2026













ARCHITECTS+PLANNERS

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Glossary

Acquisition	The process of purchasing or obtaining parks or open space. Acquisition may also apply to access of outdoor spaces that are not Municipally-owned, such as through land lease agreements.
Action	A term used in this plan to indicate the steps required or recommended for the Municipality to ensure the successful implementation of this plan.
Active Transportation	All forms of human powered or non-motorized transportation. It typically refers to walking, running and cycling, but also rollerblading, skateboarding, wheelchair use, etc.
Adaptive Management	Referred to as 'adaptive management', parks and open space plan objectives and outcomes should be regularly evaluated in order to meet the changing needs of people and the environment. Regular refinement of standardized evaluation, management and design guides, such as the Decision-Making Toolkit and Municipal policy and recommendations, is essential to being 'adaptive'.
ArcGIS	Produced by ESRI, it is a geographic information system (GIS), or software, for creating and working with maps and geographic information.
Asset Mapping	A mapping activity that relies on the community to identify its assets and to generate a plan to solve problems.
Citizens	People who reside in West Hants either full time or part time during the course of a year.
Community Park	Typically 2 hectares (5 acres) or more, these parks are usually home to athletic facilities, picnic areas, paths, schools and other passive recreation opportunities. May accommodate community food garden plots. These typically attract people within a 5 kilometre radius of the park.
Crown Land	Public land administered by Provincial and Federal governments. Crown land is officially entitled to the Canadian monarch, Queen Elizabeth II, however this is in her position as sovereign, not an individual therefore Crown land cannot be sold by the sovereign without the proper advice and consent of her (Canadian) ministers.
Cultural Park	These include outdoor spaces that have an attached historical or cultural value (e.g. gardens, cemeteries, church properties, memorials, etc.). Cultural Parks may accommodate community food garden plots and they attract people from 30 kilometres of the park.

Dissemination Area	The smallest standard geographic area for which all Statistics Canada census data are disseminated, it is a relatively stable geographic unit with a population of 400 to 700 persons.
Divestment	The sale of unsuitable or unusable land by the Municipality.
Downzoning	The assignment of a zoning grade to land under which the permitted density of housing and development (and therefore future profitability) is reduced.
Environmentally Sensitive Areas	Areas required for the preservation of plant and animal life; habitats for fish and wildlife species; areas required for ecological and other scientific purposes; rivers, streams, bays, estuaries and coastal beaches, lake shores, banks of rivers and streams, and watershed lands.
Gap Analysis	The comparison of actual performance with potential or desired performance (e.g. of policy, or park lands)
Geographic Information System	(GIS). A computerized system for geographical data collection, storage, manipulation, and analysis.
Green Infrastructure	The planted and natural greenspaces of the Municipality that are used to ensure the health and safety of citizens and to adapt to a changing climate. Green infrastructure includes parks and open space, stormwater infiltration and street trees.
Hazard Area	Areas requiring special management or regulations, (e.g. steep slope areas, floodplains, wetlands, watersheds, geo-hazards)
Integrated Community Sustainability Plan	A long-term plan, developed in consultation with citizens, to help the community realize sustainability objectives within environmental, cultural, social and economic dimensions of its identity.
Ipsos Reid	Canada's largest market research and public opinion polling firm.
Land Use By-Law (LUB)	Land Use By-laws are regulations that specify development controls and land use development policies found in the MPS.
Level of Service	The measurable quantity and quality of service (of parks and open space) provided to citizens by the Municipality.

Linear Park

A variety of outdoor connections such as trails, riparian buffers, road right-of ways, dykelands, coastal protected areas, and shorelines. Both recreation and nature conservation are promoted.

Management

Outdoor space operations, maintenance, acquisition of new spaces, divestment of superfluous spaces, funding for outdoor spaces, and coordination of outdoor community groups.

Municipality

The Municipality of the District of West Hants.

Municipal Climate Change Adaptation Plan

(MCCAP). A plan adopted by Council that identifies the impacts of climate change in West Hants, and also policy and procedures that could help protect people, properties, special places, and essential municipal services.

Municipal Government Act

The legislative framework that delegates provincial authority to municipal councils in Nova Scotia.

Municipal Planning Strategy

A Municipal document that provides the framework to guide the growth and development in West Hants and sets out the policies of council regarding future developments.

Natural Areas

Areas designated by the Province of Nova Scotia to be protected as representative native ecosystems, for the protection of endangered species, and used for education and research.

Neighbourhood Park

The smallest-sized park type in West Hants, which is used on a daily basis by members of a neighbourhood typically within a 1 kilometre radius of the park. Informal active recreation or passive recreation are typical and informal fields, playgrounds, picnic areas, and seating are found. May accommodate community food garden plots.

Open Space

Lands owned by government or other entity that are not programmed for recreational use and typically do not contain buildings or other structures. These may be unused naturalized land, environmentally-sensitive land, landscape views or lands within prescribed setbacks or other reserves on private property. In this plan, Open Space falls within the Preservation and Production park, and open space type.

Opportunities, standards and other references to Open Space in this plan refer to Municipally-owned lands only, unless otherwise specified.

Park

Land owned by the Municipality or other entity that is programmed for active or passive recreational enjoyment. There are five park types in West Hants, which are defined by uses, size and numbers of people serviced: Neighbourhood, Community, Regional, Cultural and Linear. Parks typically contain buildings or sports/play infrastructure and standard levels of service apply.

Park Planning Area

Useful for determining levels of service, and for education and promotion, these signify the sections of West Hants where citizens both live and recreate (without going outside of that Area), as determined through public engagement.

Preservation And Production (Open Space)

Typically at least 4 hectares (~10acres) in size, these have few or no built amenities. These spaces act primarily as preserves to protect natural (e.g. woodlands, wetlands, conservation areas, streams, ponds and lakes, watersheds, agriculture lands, dykelands and coastline) or agricultural resources.

Protected Water Area (PWA)

A designation administered by the Province of Nova Scotia under the Environment Act that enables the universally accepted multiple-barrier framework for managing municipal drinking water supplies in Nova Scotia.

West Hants is host to three water supply areas, two that are designated and one with designation in draft form, respectively: Mill Lake, French Mill Brook and Davidson Lake.

Regional Park

Typically 20 - 100 hectares in size, these serve citizens of the entire Municipality and attract visitors from outside the Municipality. Portions of these parks may be set aside for natural and cultural conservation. Opportunities for passive and active recreation is programmed. Regional Parks are often owned and managed by the Provincial government or private enterprises, such as large Provincial Parks, ski resorts and golf courses.

Opportunities, standards and other references in this plan refer to Municipally-owned lands only, unless otherwise specified.

'Right of First Refusal' or 'Option on Land'

A contractual right to acquire property prior to it being available on the open market. It is typically obtained through a formal request to the land owner and may or may not be accompanied by a fee.

Stakeholder

Groups, individuals, or organizations (e.g. business, government, recreation) who have a financial, business, or public stake in the parks and open space network. The interest and stake is different than that of the general public.

Stormwater

Water originating from precipitation events (e.g. rain, snow) that 'runs off' of paved surfaces (e.g. sidewalks, roads, parking lots) into catch basins, drainage areas, or water bodies.

Subdivision

The division of land into smaller pieces for ease of sale or development.

Usable Land	Land considered usable as parks or open space as defined by the Municipality of the District of West Hants and the former Town of Hantsport Subdivision By-laws.
Subdivision By-law	This by-law includes regulations that establish standards for how land can be subdivided.
Value	Qualities and characteristics that citizens of West Hants describe as important in their outdoor spaces.
Values-Based Planning Approach	The inclusive and transparent process that considers the values of West Hants citizens into parks and open space decision-making. Values can be used in many ways including the prioritization of open space management, to determine the allocation of resources, to identify conflicts in the landscape, and to maintain or enhance landscape elements that are favoured.
West Hants	The geographic area governed at the municipal level by the Municipality of the District of West Hants, which excludes Windsor but has included Hantsport since July 1, 2015.
Wilderness Areas	Areas designated by the Province of Nova Scotia to contain representative landscapes and native biodiversity and also used for recreation.

Acronyms

AT	Active Transportation
DA	Dissemination Area
GIS	Geographic Information System
ICSP	Integrated Community Sustainability Plan
GFLUM	Generalized Future Land Use Map
LUB	Land Use By-law
MCCAP	Municipal Climate Change Adaptation Plan
MGA	Municipal Government Act
MPS	Municipal Planning Strategy
PWA	Protected Water Area



Cambridge Beach

EXECUTIVE SUMMARY

Citizens of the Municipality of the District of West Hants use parks and open space for personal and organized recreation, to connect with people, and to enjoy nature. A ten-year comprehensive plan has been developed to direct the management (e.g. operations, maintenance, acquisition, divestment, funding, programming, education) of approximately 175 hectares (435 acres) of Municipally-owned land. This plan will ensure that the local network of parks and open space will continue to meet recreational needs, and protect unique natural and cultural resources.

The Municipality of the District of West Hants Parks and Open Space Plan stands as a milestone in the Municipality for two reasons: First, a full inventory and review of approximately 165 Municipally-owned parcels has been conducted. Second, for the first time, citizens of the Municipality have been consulted on what they value about the entire parks and open space network and what the future of the network should look like. Identifying what people value in their outdoor spaces is a more proactive approach than focusing on problems. These values help define 'suitable' future parks and open space when using the Suitability Framework found in Appendix 1. This plan also includes a review of public policy, planning precedents, gap analysis, and six Guiding Principles to shape future decisions.

Four methods of data collection contributed to the formation of the Parks and Open Space Plan: 1) a review of best planning practices across Canada; 2) a review of existing policy frameworks set out by the Municipality of the District of West Hants, and policy set in place by the Province of Nova Scotia; 3) an extensive public engagement process including paper and online surveys, community open houses and workshops, a stakeholder workshop, and a youth engagement session; and 4) ground-truthing of 165 parcels to collect pertinent site information, which is now available to the Municipality in a database.

A series of 15 prioritized management actions stem from the analysis of collected parks and open space information. Three analysis tools were used to reveal these 15 actions. First, a gap analysis was completed to identify the locations of citizens who are lacking access to certain types of parks. Second, using plan Guiding Principles as a framework, gaps in parks and open space policy was revealed. Third, site opportunities were developed from the review and synthesis of the parks and open space data collected during site visits. A 'top 5' list of well-used and frequently visited parks and open space was identified. For each of the five spaces, site opportunities were extensively evaluated and cost estimates provided. Concept drawings were illustrated to highlight the approximate locations of site opportunities. Additionally, five park planning areas were identified based on park location, park capture area, and location of dwellings.

In addition to the establishment of park types and standards for West Hants, a key deliverable from this Parks and Open Space Plan is a Decision Making Toolkit to be used by Municipal staff or a committee. The Toolkit can guide decisions about the Parks and Open Space network, to ensure decisions about land acquisition, divestment and development meet the intent of the plan. Users of this toolkit will be able to evaluate and prioritize lands for acquisition based on the four standards described in detail in the Toolkit: usability, suitability, budget, and urgency.

For the next ten years, decision-makers, community groups, and other stakeholders will be able to use this plan to deliver a parks and open space network that will meet the needs of citizens in West Hants.



Irishmans Road Recreation Site

1.0 INTRODUCTION

1.1 Purpose

Parks and open space are public properties that enable recreation and enjoyment. They also protect the environment, and preserve culturally important places. This Parks and Open Space Plan comprehensively reviews community values and the West Hants parks and open space inventory to identify the best possible network to meet the needs of citizens for the next ten years.

Municipal policy documents[1] have called for the creation of a Parks and Open Space Plan. As a result, this plan serves as an important milestone in West Hants for two reasons:

A Citizens' Values are Identified

For the first time, citizens of West Hants were consulted on what they value about the entire parks and open space network and what the future of the network should look like. This is significant as parks and open space research and planning show that a truly sustainable network of open space and the resources within it depends on a broad set of values identified by the public (e.g. Digby Open Space Strategic Plan, HRM Urban Forest Master Plan, Point Pleasant Park Master Plan, CSA Sustainable Forest Management). This is balanced by public policy and planning precedents.

B Management Plan Identified

The development of this plan included the inventory and analysis of Municipally-owned land. This plan ensures that all Municipally-owned and accessible lands will be inventoried and analysed. Importantly, management actions have been outlined for the horizon of 2016 to 2026.

West Hants spans some 1,345 square kilometres (332,356 acres). The Municipality owns and manages 175 hectares (435 acres) of parks and open space lands. Although this plan strategically considers all parts of the network (e.g. Municipal, Provincial and private lands), Municipally-owned lands are the primary focus.

1.2 Values Based Planning Approach

Identifying what people value in outdoor spaces is a more positive approach than simply focusing on problems. Values are qualities and characteristics that citizens of West Hants have described as important in their outdoor spaces. A range of values have been collected and used to inform this Plan. These values are easily organized into two types:

- Ecological (e.g. biodiversity of plant species, removal of carbon from the atmosphere, wildlife habitat, flooding mitigation, soil stabilization, mitigation of climate change effects), and
- Social (e.g. physical activity, personal well-being, natural beauty, community gathering).

In the West Hants Parks and Open Space Plan, values have been used, in part, to:

- Define 'suitable land' for parks and open space use in West Hants;
- Identify challenges with the current parks and open space network; and to
- Suggest improvements to the current parks and open space network.

1 Plans include the Active Living Strategy, West Hants Municipal Planning Strategy and Integrated Community Sustainability Plan

1.3 Guiding Principles

Guiding principles direct the creation and management of the parks and open space network. These principles come from community values, municipal policies, and best practices:

Table 1: Guiding Principles

Prioritize environmental protection.	Environmental protection must be considered a high priority to ensure sensitive lands, waters, and wildlife habitat are not unduly harmed by human recreation.
Plan green infrastructure to adapt to climate change.	Green infrastructure includes the planted and natural greenspaces that are used to ensure the health and well-being of citizens and to mitigate the negative effects of climate change. Mitigative actions include carbon sequestration, stormwater capture, flood mitigation and shoreline stabilization. Green infrastructure may be a key component of parks such as trees, garden, rain gardens, and swales. Parks may be developed around green infrastructure such as stormwater management ponds.
Plan spaces for all interests and abilities.	Access to active and passive recreation is important to all citizens of West Hants for their physical and mental health. 'Access' means having appropriate amenities, such as flat and stable walking surfaces, water access, and stimulating appropriate recreation spaces within a suitable proximity to where citizens live.
Link parks and open space with other places.	Linking people from their home to parks using trails, multi-use paths, and water access points enables active transportation, and the freedom for people of all ages to access the parks and open space network.
Showcase community identity and history.	Sense of identity is strengthened when valued outdoor spaces are enhanced. Enhancements may prominently display park aspects related to West Hants history, resource production, natural processes, and geography (e.g. Mi'kmaw and Acadian land works and settlements, resource production and harvesting, among others). Good park maintenance and design can also strengthen community pride.
Evaluate and update plans over time.	Referred to as 'adaptive management', parks and open space plan objectives and outcomes should be regularly evaluated in order to meet the changing needs of people and the environment. Regular refinement of standardized evaluation, management and design guides, such as the Decision-Making Toolkit and Municipal policy and recommendations, is essential to being 'adaptive'.

1.4 Methods and Analysis

Methods

M1 Best Practice Review

Four park and open space plans and related subdivision by-laws were reviewed in detail for local understanding. This review included definitions of usable land, park department budgets and park types. This review is attached in Appendix 5 (Detailed Policy Framework). Plans from across Canada were used as precedents and to inform the Suitability Framework, Guiding Principles, park size and catchment area standards, and gap analysis.

M2 Policy Review

The West Hants Parks and Open Space Plan conforms to Municipal and Provincial policy. To design the best parks and open space network, amendments to policy and regulation were evaluated. Policy documents reviewed for this plan are described in Section 2.0 Planning Context. A detailed review using the Guiding Principles to identify gaps is in Appendix 5, and proposed changes to existing regulation are in Appendix 6.

M3 Public Engagement

A) Online and Paper Survey

To reach a large group of citizens in West Hants, surveys were distributed in digital and paper formats. The online survey was hosted on the survey website called Survey Monkey and the link was distributed via the Municipal website, Facebook, Twitter, posters in public spaces and at schools, and newspaper and various organizations' newsletter advertisements. The paper survey was distributed at schools, public buildings, at a youth engagement session and to interested seniors groups. A mixture of open and closed-ended questions were administered to create an accurate picture of where people go outside, what they do, what they value and would like to improve in these outdoor spaces.

B) Community Open Houses and Workshops

Five community engagement sessions were held in the Municipality in November 2015. The program for engagement included:

> ***Open House:*** Upon arrival, event participants were given unstructured time to interact with the Consultant Team to ask questions and gain clarity on the purpose and methods of the Parks and Open Space Plan. At each open house session, participants were able to illustrate, with stickers on a map, where they live and recreate within the Municipality.
>
> ***Workshop***: Each session began with an introduction of the Consultant Team and a brief presentation on the value of public participation and how the session would run.
>
> In small groups, participants were invited to respond to a series of questions by writing and drawing on maps, paper, and post-it notes.
>
> After each session, participants reviewed and prioritized all responses collected during the engagement session.

C) Stakeholder Workshop

Parks and open space stakeholders are individuals, organizations, or groups within West Hants that have a special interest in the parks and open space network (e.g. outdoor related businesses, recreation groups, school board, tourism groups). A stakeholder workshop was conducted on November 12, 2015. Questions specific to organizational mandates, funding opportunities, and open space network were asked.

D) Youth Engagement Session

Youth in West Hants were an asset in the development of the Parks and Open Space Plan. Youth, active in their respective communities in West Hants, were invited to attend an interactive workshop on October 19, 2015. Discussion, asset mapping, and multimedia exercises were used to draw out ' ideas for the future of outdoor spaces in West Hants. The youth from this session were given surveys and posters to disseminate at their respective schools and communities.

M4 Ground Truthing

After a detailed desktop review of parks and open space in West Hants, the consultant team visited and evaluated each parcel of municipally-owned land (approximately 165 parcels) to collect pertinent site condition information showing in the Parks and Open Space Inventory in this Plan. Detailed site criteria were collected from October to December, 2015.[2]

2 The resulting inventory is showcased in Appendix 2

Analysis

Three analysis tools were used to evaluate the data collected.

A1 Park and Open Space Standards Gap Analysis

A gap analysis was completed to identify the locations of citizens who are lacking access to certain types of parks. This analysis was done using mapping software (ESRI ArcMap); Catchment areas of various standard sizes were drawn around parks according to the park type.[3]

A2 Park and Open Space Policy Gaps

An opportunity exists for the Municipality to have a parks and open space network that fulfils the Guiding Principles. After Municipal policies were sorted by the Guiding Principles, gaps in policy (related to certain Principles) became apparent. Some recommendations in this report suggest policy amendments that provide new or updated policy that will address important aspects of each Guiding Principle, such as proposed amendments to the definition of usable land found in the Subdivision By-Law(s).

A3 Parks and Open Space Network Analysis

Based on the parks and open space data collected during site visits, opportunities and recommendations were developed. A further analysis for surrounding activities and connections was made possible through a desktop analysis using mapping tools (e.g. ArcGIS, aerial photos land owner information, park and open space maps developed in this plan).

The full inventory of West Hants parks and open space is presented in Appendix 2 (Inventory and Opportunities).

3 Park types and standards, and park type catchment areas are explained in Table 3.

Information Limitations

Information in this plan is based on trends, assumptions, and data, which come from various sources. As such, information has its parameters and limitations. The list below reports such parameters and limitations by chapter in this Plan:

2.0 Planning Context

Population Counts: Statistics Canada 2011, grouped by Dissemination Area - part time citizens such as cottagers are likely not to be included in this population count.

Park Planning Areas: derived from public engagement sessions, existing road network, and Dissemination Area boundaries. Public input was limited to those who responded.

Resident Locations: Building points for buildings not commercial, cottage, industrial or otherwise non-residential. Hantsport building points not readily available for display.

Ipsos Reid Survey: See survey to view limitations.

3.0 Public Engagement

1A: Where We Go - Based on responses received through online and paper surveys. More than 450 people were represented, achieving a 95% confidence level for responses. Age groups were adequately represented. These were 0-15, 16-30, 31-40, 41-60 and 60+.

1B: What We Do - This is from responses received through online and paper surveys. Respondents listed the activities they perform and these responses were tallied.

1C: What We Value - Based on Responses received through online and paper surveys, as well as workshop sessions, Top 5 values were chosen from a list of values, and other values described are related to Top 5 but in the words of individuals rather than the prescribed options.

4.0 Inventory + Opportunities

Map 3: Current Parks and Open Space - Parks are limited to Municipally-owned lands only.

Map 4: Water Access Locations - Limited to locations noted during public consultation, and planning consultants' observances during site visits to Municipal lands. Locations may or may not be on public land.

Table 3: Parks and Open Space Types in West Hants - Park Types were adapted from planning standards and enhanced to address local conditions

4.3: Current Parks and Open Space Level of Service - Based on the Park Type Standards. The amount of land area for Neighbourhood Parks is comparable to that of Community Parks because most Community Parks are also considered Neighbourhood Parks. Many parks have more than one park type designation.

Map 5: Gap Analysis of Park Types - Green, grey and hatched buffers represent catchment areas for each Municipal parcel that is considered 'used' by citizens for park use. Parcels that are deemed 'under-used' do not have a buffer attached and therefore are not seen as servicing citizens. 'Used' and 'under-used' designations are found in the Detailed Inventory in Appendix 2.

4.4: Top 5 Parks - These parks were selected based on popularity and future infrastructure needs. Proposed infrastructure and site opportunities were identified through public consultation, from Municipal Staff knowledge, and consultant input (based on experience and best practices).

4E: Network Opportunities - These were derived from public consultation, Municipal Staff knowledge and consultant input, which is based on experience and best practices.



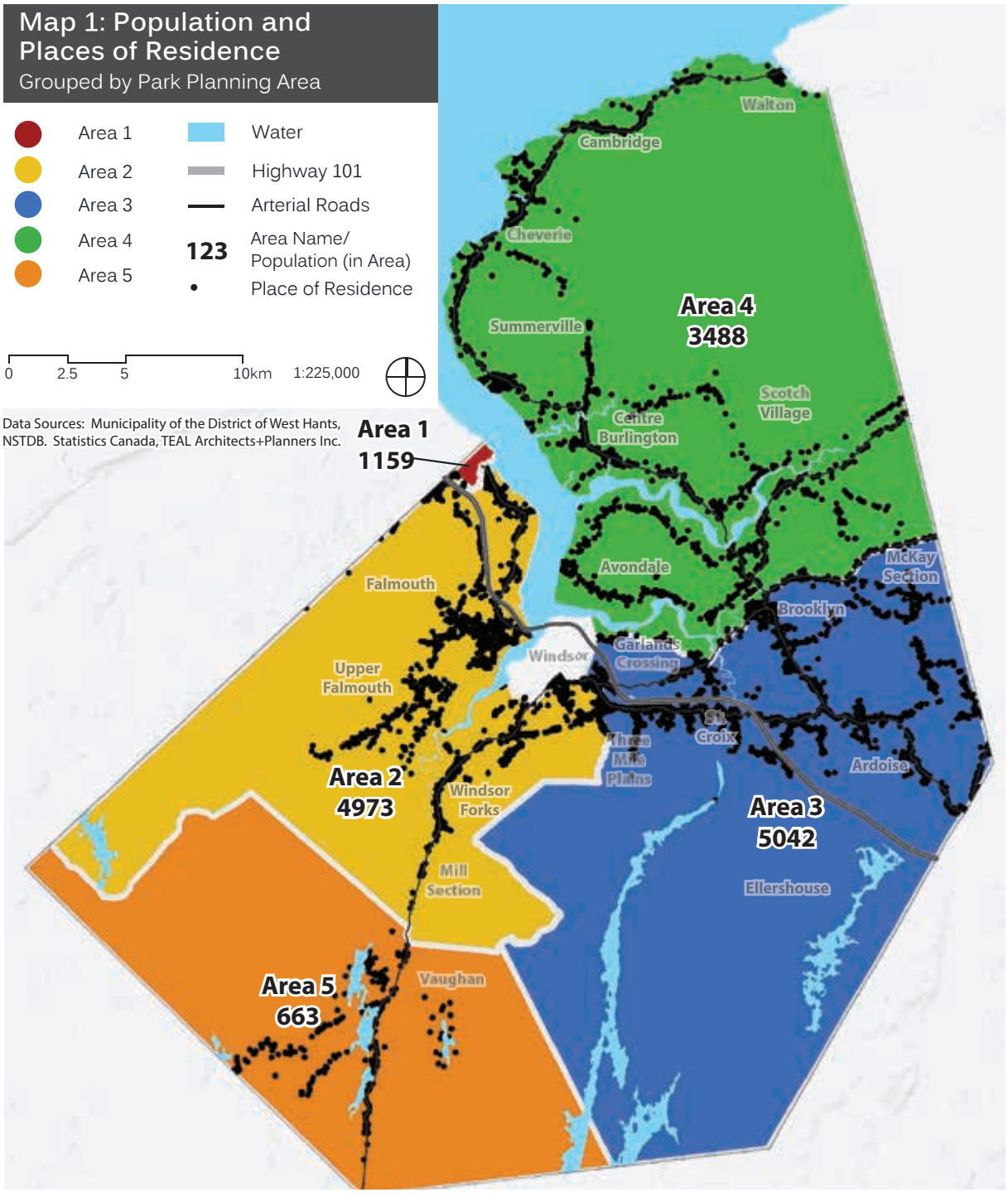
Kempt Quarry Recreation Site



A West Hants Open Space, Hantsport

2.0 PLANNING CONTEXT

This chapter identifies current and future demographics, the existing parks and open space network, and the local policy context that form the base understanding for planning the future West Hants park network. The planning context and other information throughout this Plan are grouped into five 'Park Planning Areas', which are seen below. These high-level areas generally represent the boundaries of where people live and the parks and open spaces they visit and are useful in understanding the gaps in parks and open space service provided by the Municipality.



2.1 People and Recreation

West Hants is one of the few municipal districts in Nova Scotia that is experiencing positive population growth. The former Town of Hantsport dissolved and merged with West Hants on July 1, 2015.[4,5] At the time of the 2011 Census, West Hants had a population of 14,165 and Hantsport had a population of 1,159.

A report completed prior to the dissolution of Hantsport projected that the population of West Hants would increase by 4.5% by the year 2031.[6] The same study projected that Hantsport (then a separate municipality) would lose 12.6% of its population. In actual numbers, this would result in total populations of 14,802 for West Hants (excluding Hantsport) and 1013 in Hantsport, a total of 15,815 in West Hants (including Hantsport) in the year 2031.[7] Combining projections for both areas, this represents overall growth of 3.2% between the years 2011 and 2031.

The distribution of citizens of West Hants is shown in Map 1. A successful parks network enables most current and future citizens to access various park types, such as neighbourhood and community parks. As the population grows, West Hants will have to monitor what is needed to service parks and open space needs. Service standards are detailed further in this Plan.

West Hants has a slightly younger population compared to that of Nova Scotia, with 23% of people under 20 years of age and 16% over 65, compared to 21% and 17%, respectively, for Nova Scotia. Trends of an aging population are similar to those of most, if not all, communities in Nova Scotia. Trends show an increasing number of older people, and a decreasing number of younger people. Trends are displayed in more detail in Appendix 3.

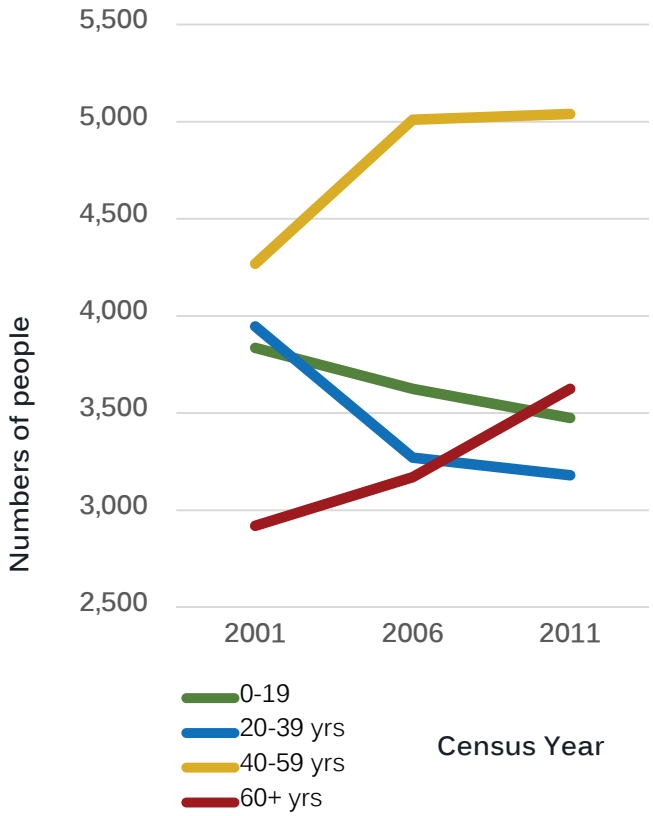


Figure 1: Population of West Hants by Age Category (2001 - 2011)

An Ipsos Reid phone survey of 300 West Hants citizens over the age of 18 was conducted in 2012. Information collected from this survey complements data gathered from the survey and public workshops completed during the creation of this Plan.

The Ispos Reid Survey found that the most popular activity for adults was walking. Sixty percent (60%) of respondents said they walk on a regular basis. Other activities mentioned by at least 7% to 9% of respondents were swimming, running, biking, and skiing/snowboarding. The most popular activities for children, as reported by parents, were skiing/snowboarding, soccer, and swimming.

Facilities used by both groups include trails or pathways, and sports fields or courts. Activities that both adults and children take part in are swimming, skiing/snowboarding, walking, and running.

4 The addition of Hantsport's population to that of West Hants is not reflected in Census data and is not a contributor to population growth in West Hants for the purpose of this report.
5 Census information for West Hants and Hansport used in this section has been combined unless otherwise indicated. Data tables are displayed in Appendix 01.
6 Hantsport Governance Study (2014), S. 2.4
7 This 10-year plan time horizon falls short of the year 2031 by 5 years, however these projections are nonetheless considered appropriate for the purposes of this plan.

Outdoor spaces used at least once a month include:

Adults[8]

Sidewalks and road shoulder	*67%*
Trails or pathways	*56%*
Parks or green spaces	*47%*
Beaches or lakes	*37%*
Sports fields or courts	*18%*

Children (reported by parents)[9]

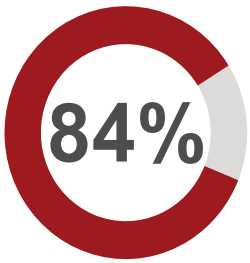
Sports fields or courts	*67%*
Playgrounds	*62%*
Trails or pathways	*55%*

When asked what would help adults become more physically active, most adults (84%) chose "access to paths, trails, and green spaces" as an important factor. Other responses suggest that adults' physical activity could increase with the following improvements to parks and open space:

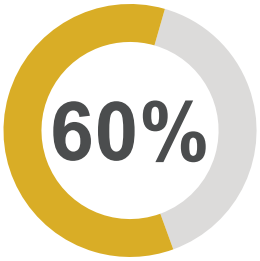
- Improve walking routes to key destinations (shops, services, work, school, community facilities)
- Provide walking space at the sides of roads (paved shoulder, trail, or sidewalks)
- Support walking events, programs, or clubs
- Develop more trails and pathways
- Improve safety (not crime-related) on walking routes (consider vehicle traffic, barriers or obstructions)

8 The lists of facilities were not extensive and some facilities listed as options for adults were not listed as options of facilities used by children (e.g. "sidewalks and space at the side of the road", "beaches or lakes" and "parks or green space").

9 Percentage represents the portion of parents who responded that their child (or children) participates in the activities listed. Each positive response may represent one or more children participating in the activities.



Adults walk on a regular basis



Adults say access to paths, trails, and green spaces would encourage physical activity.

2.2 Policy Context

A successful parks and open space network is described in complementary policy and planning documents. In West Hants, land-use plans and by-laws exist for both West Hants and Hantsport. Only the Active Transportation Plan (2014) considers the two communities together (see Figure 2).

Consideration has been given to strategic initiatives undertaken by other organizations, such as the Waterfront Development Committee's Waterfront Strategic Plan (for Lake Pisiquid) and Bicycle Nova Scotia's Blue Route. It is anticipated that coordination between organizations will occur at appropriate times to ensure the success of all initiatives.

Key components from relevant municipal documents are listed below and on the following pages. A comprehensive review of Municipal policies, regulations and other statements is found in Appendix 5.

MGA

The Municipal Government Act (MGA) is Provincial legislation that enables and requires Municipalities, in various ways, to plan their communities. In terms of parks and open space planning, highlights from the MGA include:

- A requirement for the Municipality to make the public aware and seek feedback when considering the divestment of lands for parks or open space acquired through the subdivision process.
- Minimum and maximum amount of land, or cash-in-lieu, to be taken by the Municipality upon the subdivision of land.
- The ability for Municipalities to define 'useable land' for parks and open space use.

- Money in exchange for lands that were acquired through the subdivision process must be re-invested in the parks and open space network.

Subdivision By-law, West Hants

- Lands for parks and open space use are collected primarily through the dedication of land upon subdivision approval.[10]
- Land required to be dedicated upon subdivision is currently 5% of the total land area or the equivalent of 5% of market value of the land in cash to the Municipality.[11,12]
- A combination of land and cash is also permitted, as well as a transfer of land that is not a part of the proposed subdivision but located elsewhere.
- Notably, when lands proposed for subdivision have water frontage, the By-law requires a portion of the land to be dedicated for public access to the water.

Subdivision By-law, Hantsport

- No requirement for 'parkland' dedication, nor a definition of usable land.

Municipal Planning Strategy (MPS), West Hants

- Open Space is intended to be permitted in all zones.
- Community use designation is intended to be applied to all open spaces for community recreation in the Generalized Future Land Use map.
- Only municipally-owned lands should be zoned for open space purposes.

Municipal Planning Strategy (MPS), Hantsport

- Several mentions of the municipality's responsibility to provide open space and recreation opportunities.
- Future land use should be according to the Generalized Future Land Use map.

Land Use By-law, West Hants

- Parks and open space are permitted in all zones, pursuant to Section 5.35
- Three zones and one overlay (special area) exist specifically for the designation of parks and open space and related uses: Open Space (OS) zone, Recreation Commercial (RecC) zone and Water Supply zone, and Dykelands Overlay. It is to be noted that new structures are extremely limited in the Dykelands Overlay pursuant to Section 34.1.
- Water Supply (W) zone promotes the protection of watersheds by limiting subdivision of land and permitted uses. This zone establishes a 4.05 hectare (10 acre) minimum lot size requirement and a 91.4m (300 ft) minimum length of water frontage.
- All structures must be set back from a watercourse a distance of 15.24 m (50 ft), pursuant to Section 5.49.

Land Use By-law, Hansport

- Buildings must be set back from a watercourse a distance of 30 m (~98 ft).
- Two zones exist to serve the purpose of designating areas for parks and open space: Recreation Open Space (ROS) zone and Conservation Open Space (COS) zone.

10 Municipality of the District of West Hants Municipal Planning Strategy (2008), p.103, http://www.westhants.ca/planning.html
11 Municipality of the District of West Hants Subdivision By-law (2008, as amended), http://www.westhants.ca/component/com_docman/Itemid,180/view,docman/
12 These funds must be used for the acquisition or development of parks and open space.

Municipality of the District of West Hants Integrated Community Sustainability Plan (ICSP)

- Commits Council to consider the preparation of a Parks and Open Space Plan for the Municipality.
- Encourages eco-tourism development (e.g. salt water marshes, bike routes, interpretive centres, etc.).
- Encourages community gardens in urban areas.

Active Avon: Active Transportation Plan for the Avon Region

- Proposes improved linkages between trails, AT routes, and existing recreation facilities.
- Proposes connections between schools and neighbourhoods for youth to walk and bike.
- Notes that siting of recreation opportunities close to existing communities is critical to maintaining a community feel and reducing costs to the municipality.
- Notes that signage can improve sense of arrival at parks and open spaces.
- Identifies trailhead opportunities.
- Identifies proposed trail locations.

Municipality of the District of West Hants: Active Living Strategy

- Calls for the protection of public access to lakes and the Minas Basin waters through a parks and open space plan.
- Mentions the need to develop a parks and open space plan to identify ways to improve citizens' access to physical activities.

Municipality of the District of West Hants: Municipal Climate Change Adaptation Plan (MCCAP)

Reveals that coastal flooding, drought, and inland flooding are the three most concerning natural hazards in terms of risks to life and damage to infrastructure.

- Lands within a 10m elevation from the current highwater mark are projected to be affected by rising tides and storm surges by 2100.
- Presents strategies to limit greenhouse gas emissions, improve organizational adaptive capacity, strengthen emergency management capabilities and reduce risks of adverse effects of climate change.



Figure 2: Policy Documents



West Hants Public Engagement

3.0 PUBLIC ENGAGEMENT

Information in this section was derived from the online and paper survey.

3.1 Where We Go

Useful for determining levels of service, and for education and promotion, the charts signify the sections of West Hants where citizens both live and recreate (without going outside of that Area), as determined through public engagement.

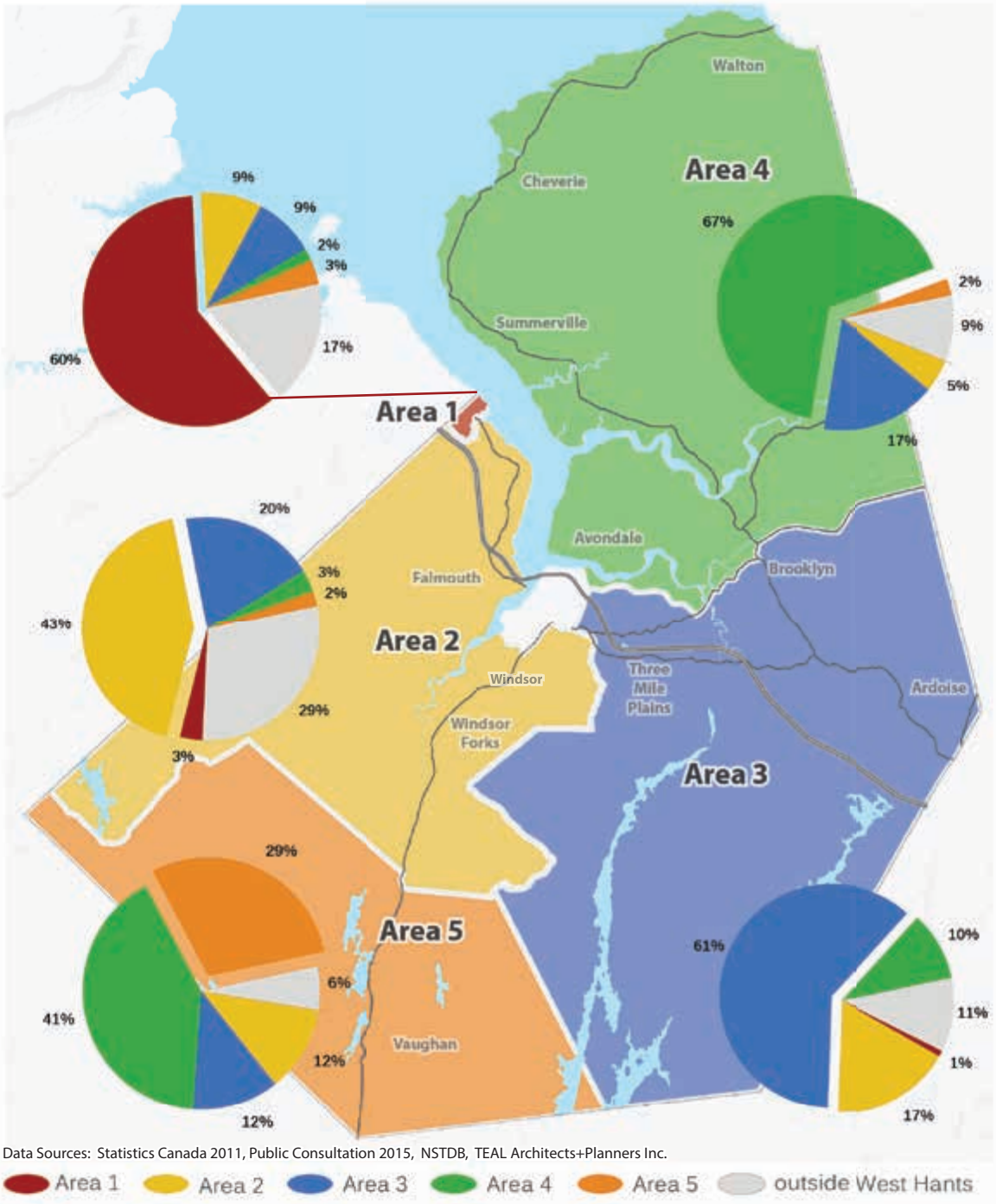


Figure 3: The Planning Areas Where Residents of Each Planning Area Recreate

Table 2: Which parks and open space properties do you visit?

Municipal Locations	# of mentions
Falmouth Mini Park and Causeway Trail	21
Eldridge Road Recreation Site	17
Avondale Wharf and Waterfront	13
Hobarts Beach	12
Irishmans Road Recreation Site	12
Kempt Quarry Recreation Site	11
Cheverie Salt Marsh Restoration Trail	6
Brooklyn District Elementary School Trail	5
Foundry Field	5
St. Croix Recreation Site	4

Locations	# of mentions
Falmouth Mini Park and Causeway Trail	21
Eldridge Road Recreation Site	17
Avondale Wharf and Waterfront	13
Hobarts Beach	12
Irishmans Road Recreation Site	12
Kempt Quarry Recreation Site	11
Cheverie Salt Marsh Restoration Trail	6
Brooklyn District Elementary School Trail	5
Foundry Field	5
St. Croix Recreation Site	4
Beaches along Kempt Shore	12
Bramber Beach	5
Windsor Forks District School	4
Provincial - Smileys Park	48
Private - HMCC	28
Private - Ski Martock	19
Provincial - Falls Lake	9
Provincial - road sides	7
Laurie Saulnier Memorial Trail (Akins Marsh)	6
Rail or old road	6
Private - Castle Frederick Farm Trails	5
Private - Grey Mountain	5

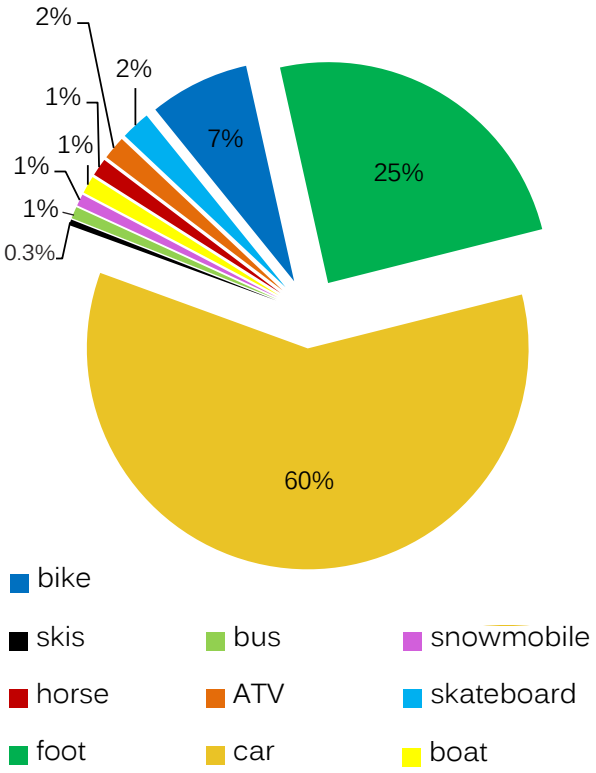
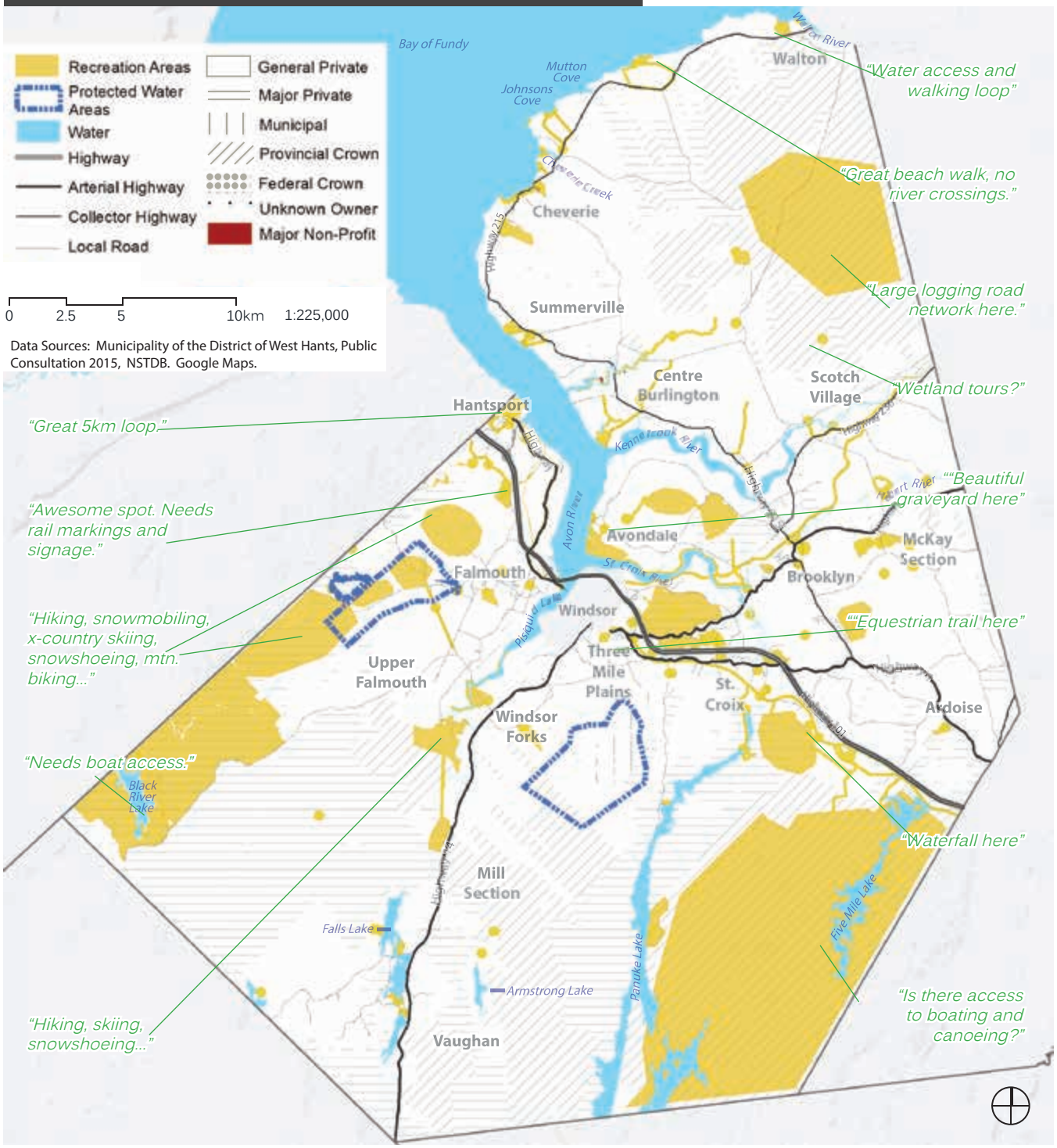


Figure 4: How do you get to your parks?

3.2 What We Do

Draw on a map where you recreate.*

Map 2: Places People Recreate or Would like to Recreate



* This map is a representation of responses from public engagement events and is not an endorsement by the Municipality to recreate on private lands.

Top 10 Activities:

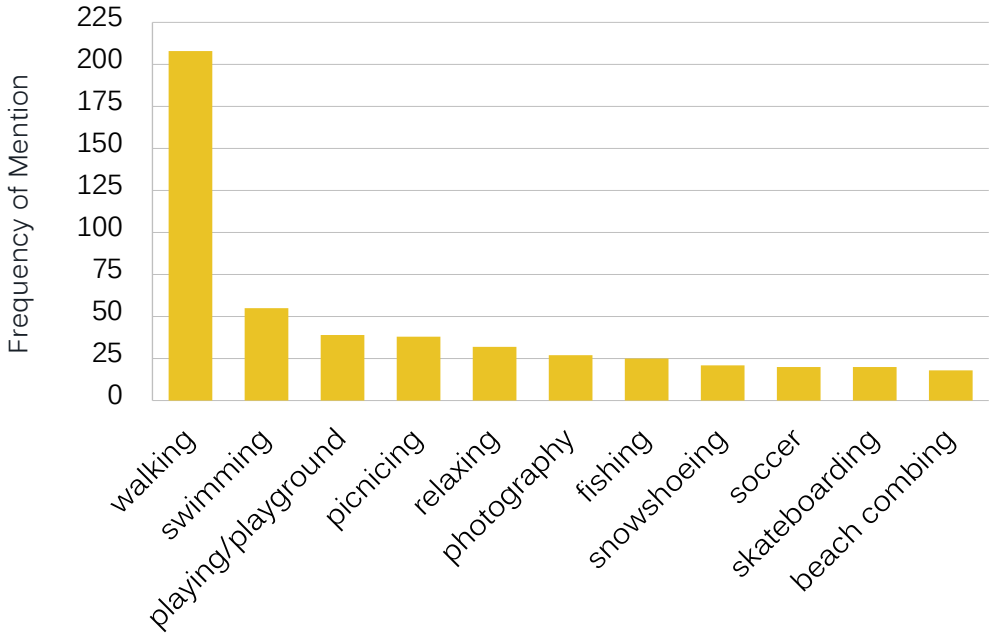


Figure 5: What activities do we do?

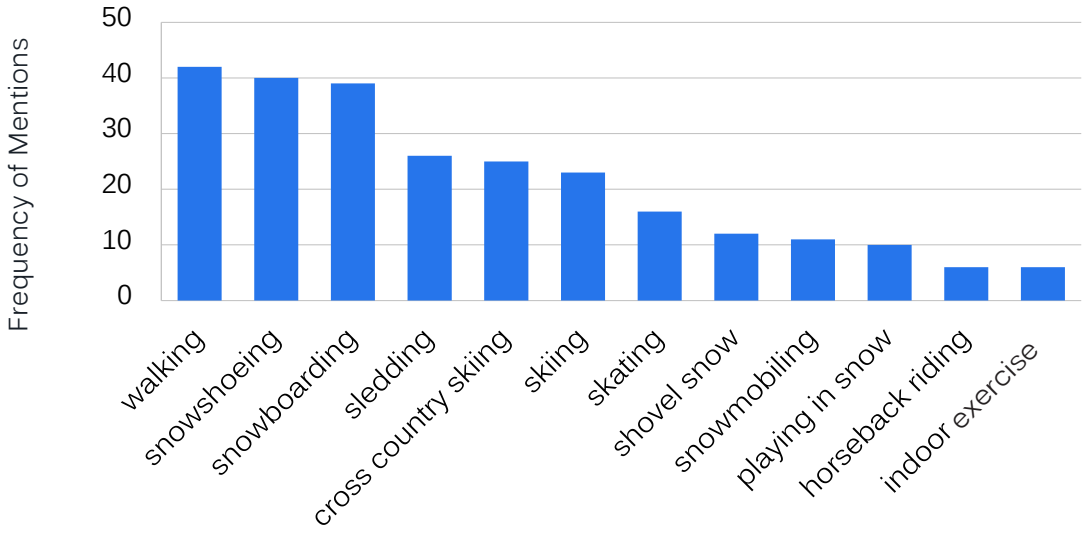


Figure 6: What activities do we do in Winter?

3.3 What We Value

Physical health
exercise, fresh air, health benefit, multi-use, sports, activities

Mental well-being
peace, serenity, freedom, isolation, permission relaxation, tranquillity, zen, adventure

Recreation
good connection to other trails, extensive networks for ATV, safe for children

Aesthetics & natural beauty
clean natural beauty, natural processes (tides), natural quality, no traffic, views, smells

Wildlife habitat
fauna, flora, habitat conservation

Figure 7: For what do we most value our parks and open space?

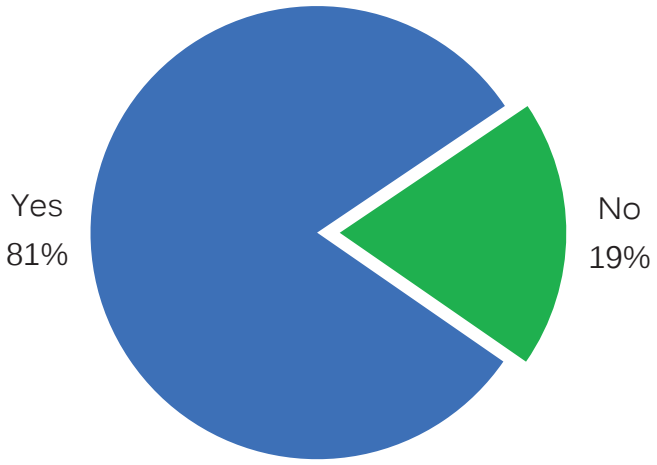


Figure 8: Should we spend more money on parks and open space?



Hobarts Beach

4.0 INVENTORY + OPPORTUNITIES

4.1 Existing Parks and Open Space

An inventory of the West Hants parcels has been developed using Municipal data, a desktop review and by visiting each parcel. The highlights below help form a base understanding of the existing network that may be enhanced over the lifetime of this Plan.

The Municipality currently owns and/or manages over 20 parks and seven (7) school parks including:

1. Dr. Silas Rand Park
2. Shamrock Ball Field
3. Chittick Park
4. John Wiley Walkway
5. Fundy Centennial Park
6. Foundry Field
7. McDade Park
8. Hantsport Riverbank Cemetery
9. Prince Street Path
10. Eldridge Road Recreation Site
11. Halewood Drive Field 1
12. Halewood Drive Field 2
13. Halewood Drive Path
14. Falmouth Mini Park and Causeway Trail
15. Falmouth District School
16. Falmouth Boat Launch
17. Windsor Forks District School
18. Underwood Road Parcels 1+2
19. Three Mile Plains District School
20. Irishmans Road Recreation Site
21. Newport Station District School (closed)
22. St. Croix Recreation Site
23. Lakewood Drive Pond
24. Brooklyn Fire Hall Trail
25. Brooklyn District Elementary School
26. Brooklyn Municipal Cemetery
27. Bramber Beach Water Access
28. Cheverie Salt Marsh Restoration Trail
29. Kempt Quarry Recreation Site
30. Hobarts Beach
31. Dr. Arthur Hines Elementary School
32. Upper Burlington Planters Trail
33. Avondale Wharf and Waterfront
34. West Hants Middle School
35. Chateau Lane
36. Armstrong Lake
37. Riverview Road, Vaughan

- There are 43 parcels of land are held by the Municipality that are used by citizens for recreation. Some parcels are small, such as a pathway off Halewood Drive (<0.25 acres or 0.1 ha), and some are large, such as Irishmans Road Recreation Site (172 acres or 69.6 ha).
- 11 parcels of land are held by the Municipality for the purpose of recreation, are currently under-used but have potential to be a part of the future park and open space network.
- 19 parcels of land held by the Municipality for the purpose of recreation are under-used by citizens and may not benefit current or future citizens due to their location and/or condition.
- 199 hectares (492.5 acres) of West Hants land is owned by the Municipality and is currently used for recreation purposes.

Some of the parks and open space that citizens in West Hants use are not owned by the Municipality. Some of these lands are owned by the Province of Nova Scotia, some are privately-owned and managed, and some are maintained by the Municipality under a land lease (these lands are included in the comprehensive Inventory found in this plan).

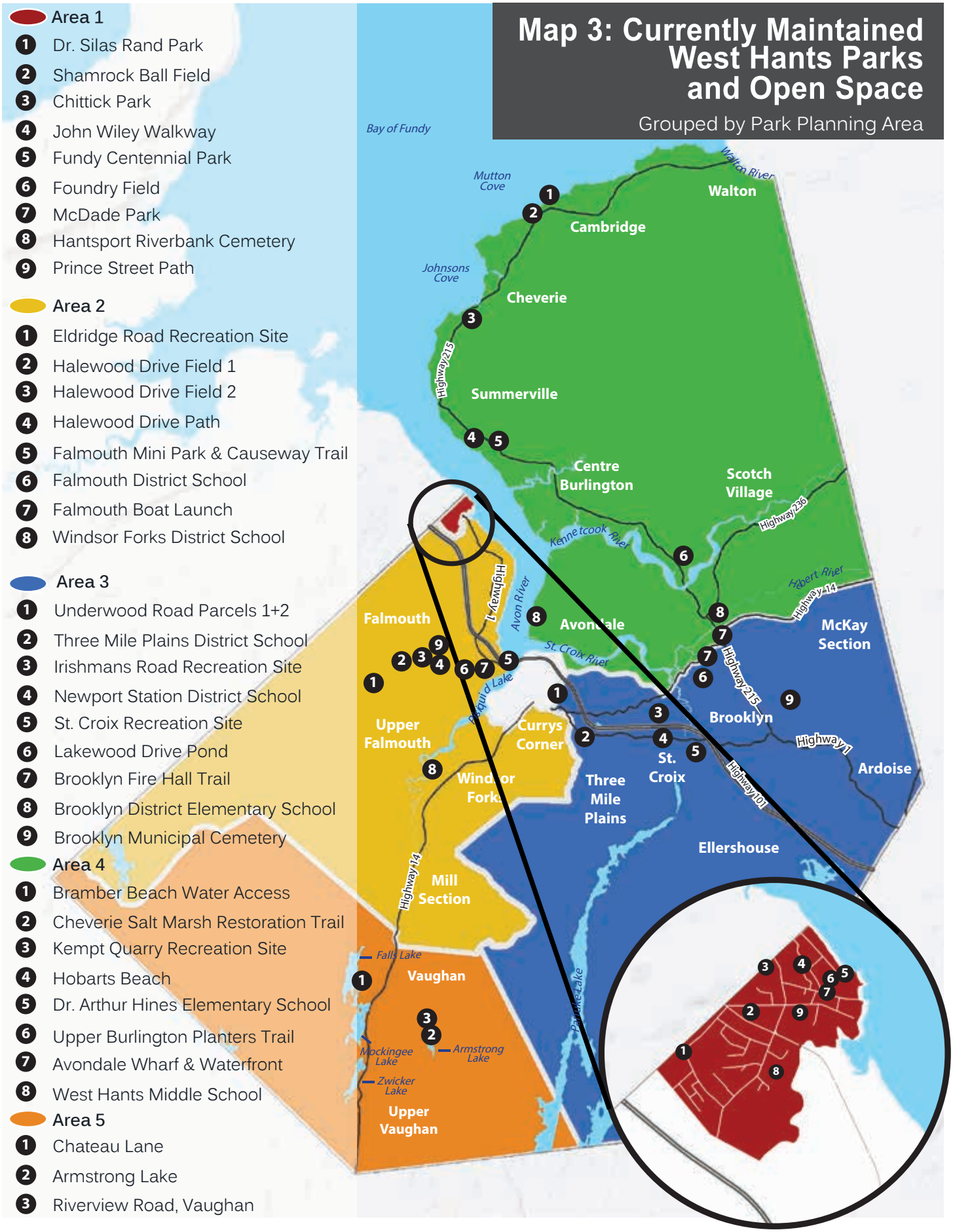
Newport Station District School has closed, however, the park amenities remain in place.

Falmouth Mini Park and Causeway Trail is an example of a park managed by the Municipality, but whereby the land is not owned by the Municipality.

Most non-Municipal lands used by citizens for recreation are included in the mapping found in this plan and are identified as such, however, a comprehensive review by the Municipality is essential when acquisition or maintenance opportunities arise.

Map 3: Currently Maintained West Hants Parks and Open Space

Grouped by Park Planning Area



Area 1

1. Dr. Silas Rand Park
2. Shamrock Ball Field
3. Chittick Park
4. John Wiley Walkway
5. Fundy Centennial Park
6. Foundry Field
7. McDade Park
8. Hantsport Riverbank Cemetery
9. Prince Street Path

Area 2

1. Eldridge Road Recreation Site
2. Halewood Drive Field 1
3. Halewood Drive Field 2
4. Halewood Drive Path
5. Falmouth Mini Park & Causeway Trail
6. Falmouth District School
7. Falmouth Boat Launch
8. Windsor Forks District School

Area 3

1. Underwood Road Parcels 1+2
2. Three Mile Plains District School
3. Irishmans Road Recreation Site
4. Newport Station District School
5. St. Croix Recreation Site
6. Lakewood Drive Pond
7. Brooklyn Fire Hall Trail
8. Brooklyn District Elementary School
9. Brooklyn Municipal Cemetery

Area 4

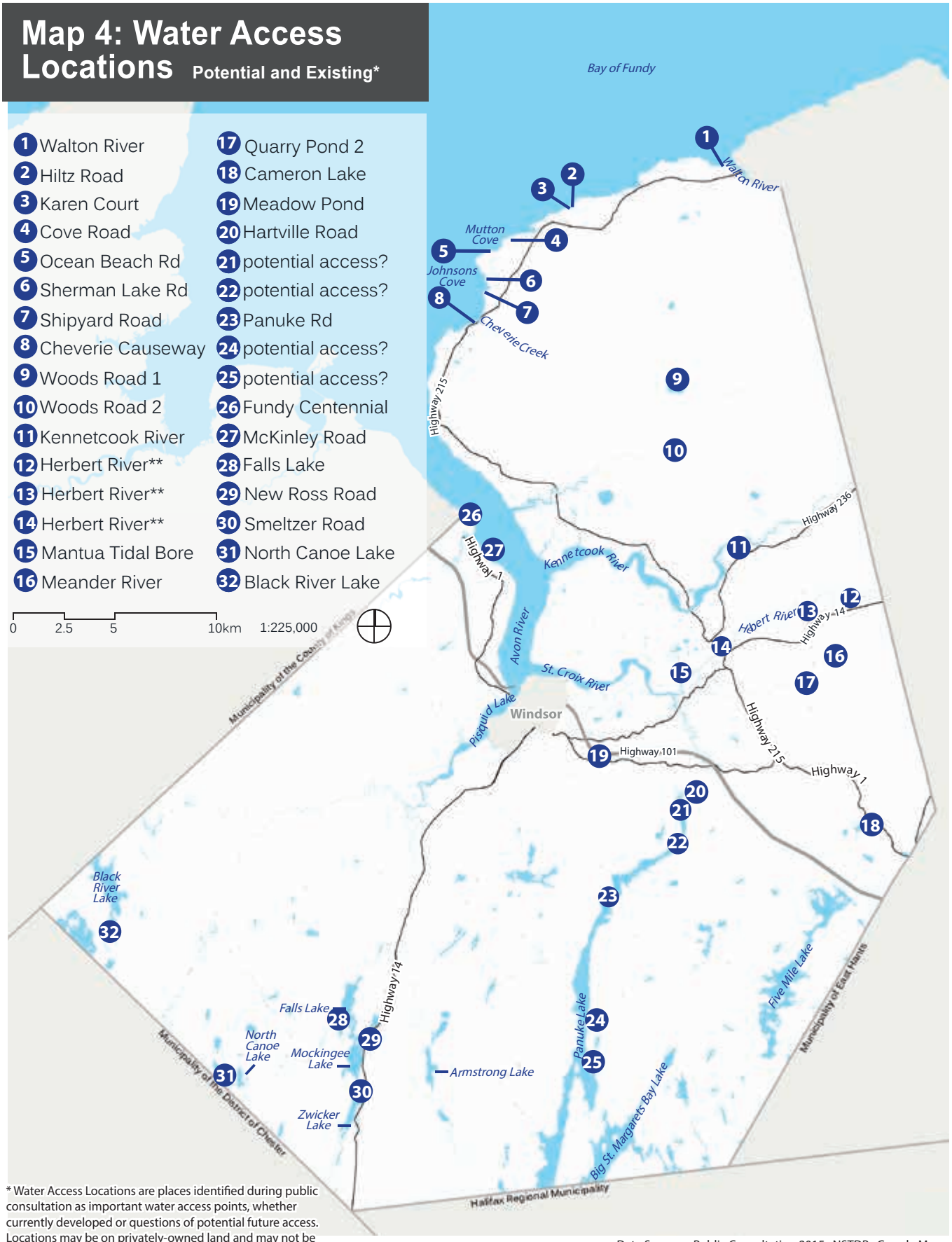
1. Bramber Beach Water Access
2. Cheverie Salt Marsh Restoration Trail
3. Kempt Quarry Recreation Site
4. Hobarts Beach
5. Dr. Arthur Hines Elementary School
6. Upper Burlington Planters Trail
7. Avondale Wharf & Waterfront
8. West Hants Middle School

Area 5

1. Chateau Lane
2. Armstrong Lake
3. Riverview Road, Vaughan

Data Sources: Public Consultation 2015, NSTDB. Google Maps, CBCL Ltd., TEAL Architects+Planners Inc.

Map 4: Water Access Locations Potential and Existing*



* Water Access Locations are places identified during public consultation as important water access points, whether currently developed or questions of potential future access. Locations may be on privately-owned land and may not be currently available for all residents. For more detail contact the Municipal Office.

** Herbert River water access locations noted in numbers 12 and 13 are suggestions for paddling entry points, and number 14 is a suggested paddling exit point.

Data Sources: Public Consultation 2015, NSTDB. Google Maps, CBCL Ltd., TEAL Architects+Planners Inc.

4.2 Parks and Open Space Types in West Hants

The parks and open space type classifications in Table 3 are sorted by characteristics of open space types. Each type has typical characteristics, such as size, primary purpose, and expected amenities. Parks and open space types have been adapted from the Ontario Ministry of Culture and Recreation's open space standards[13] and enhanced to address local conditions. Establishing parks and open space types, specific to West Hants, will provide guidance to the Municipality in determining geographic locations and distribution of varying types of parks and open space throughout the Municipality.

13 Guidelines for Developing Public Recreation Facility Standards (1998), Ontario Ministry of Tourism, Culture and Sport, http://lin.ca/resources/guidelines-developing-public-recreation-facility-standards



Cheverie Salt Marsh Restoration Trail

Table 3: Parks and Open Space Types in West Hants

Parks and Open Space Type	Description	Catchment Area	Provision Standard / 350 people (min.)	Parcel Size	Local Examples	Base-Level Development Standards
Neighbourhood	The smallest-sized park, which is used on a daily basis by citizens of a neighbourhood, typically drawing from a one kilometre radius of the park. Informal active recreation or passive recreation are typical and infrastructure may include multi-purpose fields, playgrounds, picnic areas, and seating. May accommodate community food garden plots.	1km (0.62 miles)	1ha (2.47 acres)	0.04 ha + (0.1 acres +)	• Falmouth Mini Park and Causeway Trail • Halewood Drive Field 1 and 2 • Chittick Park • McDade Park	• Grading, levelling and seeding of park site, including sliding hills • Shade tree(s) • Park sign • Social gathering place(s) (e.g., picnic table bench, fire pit, games table, etc.) • Bicycle parking/rack(s) • Garbage receptacle(s) • Adequate lighting
Community	Community parks are typically two hectares or more in area. These parks are usually home to athletic facilities, picnic areas, paths, schools and other passive recreation opportunities. May accommodate community food garden plots. These typically attract people within a five kilometre radius of the park.	5km (3.11 miles)	1.5ha (3.71 acres)	2ha + (5 acres +)	• School parks • Foundry Field • Fundy Centennial Park • Avondale Wharf and Waterfront • Hobarts Beach • HMCC* * HMCC is not owned or managed by the Municipality.	• Grading, levelling and seeding of park site, including sliding hills • Shade tree(s) • Park sign • Social gathering place(s) (e.g., picnic table bench, fire pit, games table, etc.) • Bicycle parking/rack(s) • Garbage receptacle(s) • Playground infrastructure (base, drainage, curbing and sand) • Parking for sports fields • Adequate lighting

Parks and Open Space Type	Description	Catchment Area	Provision Standard/350 ppl (min.)	Parcel Size	Local Examples	Base-Level Development Standards
Regional	Regional Parks are typically 20 - 100 hectares in size, these serve citizens of the entire Municipality and attract visitors from outside the Municipality. Portions of these parks may be set aside for natural and cultural conservation. Opportunities for passive and active recreation is programmed. Regional Parks are often owned and managed by the Provincial government or private enterprises, such as large Provincial Parks, ski resorts and golf courses, however in West Hants the Municipality owns and operates three Regional Parks itself.	30km (18.64 miles)	3ha (7.41 acres)	20-100ha (49.42 - 247.10 acres)	• St. Croix Recreation Site • Irishmans Road Recreation Site • Eldridge Road Recreation Site	• Grading, levelling and seeding of park site, including sliding hills • Shade tree(s) • Park sign • Social gathering place(s) (e.g., picnic table bench, fire pit, games table, etc.) • Bicycle parking/rack(s) • Garbage receptacle(s) • Playground infrastructure (base, drainage, curbing and sand) • Parking for sports fields • Washroom(s) as part of on-site facilities • Adequate lighting
Cultural	Cultural Parks include outdoor spaces that have an attached historical or cultural value (e.g. gardens, cemeteries, church properties, memorials, etc.). Cultural Parks may accommodate community food garden plots and they attract people from a 30 kilometre radius of the park.	30km (18.64 miles)	N/A	Varies greatly	• Upper Burlington Planters Trail • McDade Park • Avondale Wharf and Waterfront	N/A

Parks and Open Space Type	Description	Catchment Area	Provision Standard/350 ppl (min.)	Single Open Space Size	Local Examples	Base-Level Development Standards
Linear	Linear Parks form a variety of outdoor connections such as trails, riparian buffers, road right-of ways, dykelands, coastal protected areas, and shorelines. Both recreation and nature conservation are promoted.	N/A	N/A	Varies greatly	• Falmouth Mini Park & Causeway Trail • Cheverie Salt Marsh Restoration Trail	N/A
Preservation and Production	Preservation and Production lands are typically at least 4 hectares in size, these have few or no built amenities. These spaces act primarily as preserves to protect natural (e.g. woodlands, wetlands, conservation areas, streams, ponds and lakes, watersheds, agriculture lands, dykelands and coastline) or agricultural resources.	N/A	4ha (9.88 acres)	Varies greatly	• Upper Burlington Planters Trail • Avondale Wharf and Waterfront • Protected Water Areas (PWA)	N/A

4.3 Current Parks and Open Space Level of Service

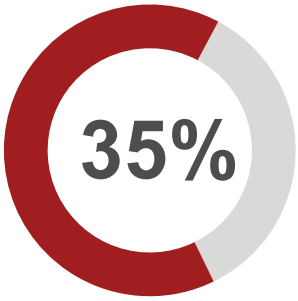
Arguably, the most-used parks are those near the homes of citizens, such as Neighbourhood Parks and Community Parks. These types of parks serve the every-day social and physical needs of users and are consequently the focus of gap analysis mapping (Map 5).

Overall, citizens of the Municipality of the District of West Hants are well-served in terms of parks and open space in terms of area and park type (e.g. neighbourhood, cultural, etc.) This is determined by mapping where people live and the catchment area of each park type. For example, the Brooklyn District Elementary School property (including the trail system) serves approximately 365 citizens of West Hants within a 1km radius as a Neighbourhood Park, and approximately 2,042 citizens within 5km as a Community Park. Comparing these facts with the Park Type Standards in Section 4.2 of this plan identifies the level of service each resident receives. As citizens spread throughout rural West Hants, providing services to every household is likely to be financially impossible for the Municipality.

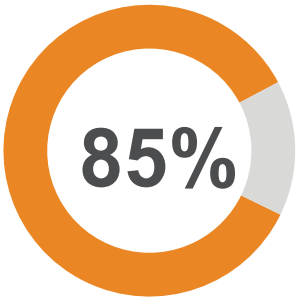
There are many reasons why citizens may or may not feel they are being adequately served in terms of parks and open space. By using service standards adapted to the local context, an adequate level of service can be identified. Many parks are currently in good condition and are well-used. Some parks should be improved to encourage more use. Potential improvements are listed by park in Section 4.4 and Appendix 2.

The following pages show the gap analysis catchment buffers of each Neighbourhood and Community Park in the Municipality. All citizens are serviced with District and Cultural Parks and therefore are not shown on Gap Analysis maps. Solid buffers represent parks managed by the Municipality whereas hatched buffers represent well-used privately-owned park spaces. A grid was used to view all areas of West Hants adequately (the Park Planning Areas vary too much in size).

Further details about the level of service can be accessed by contacting the West Hants Municipal Office, where staff have the digital form of mapped information (using ESRI ArcMap).



% citizens served by a Neighbourhood Park



% citizens served by a Community Park

16

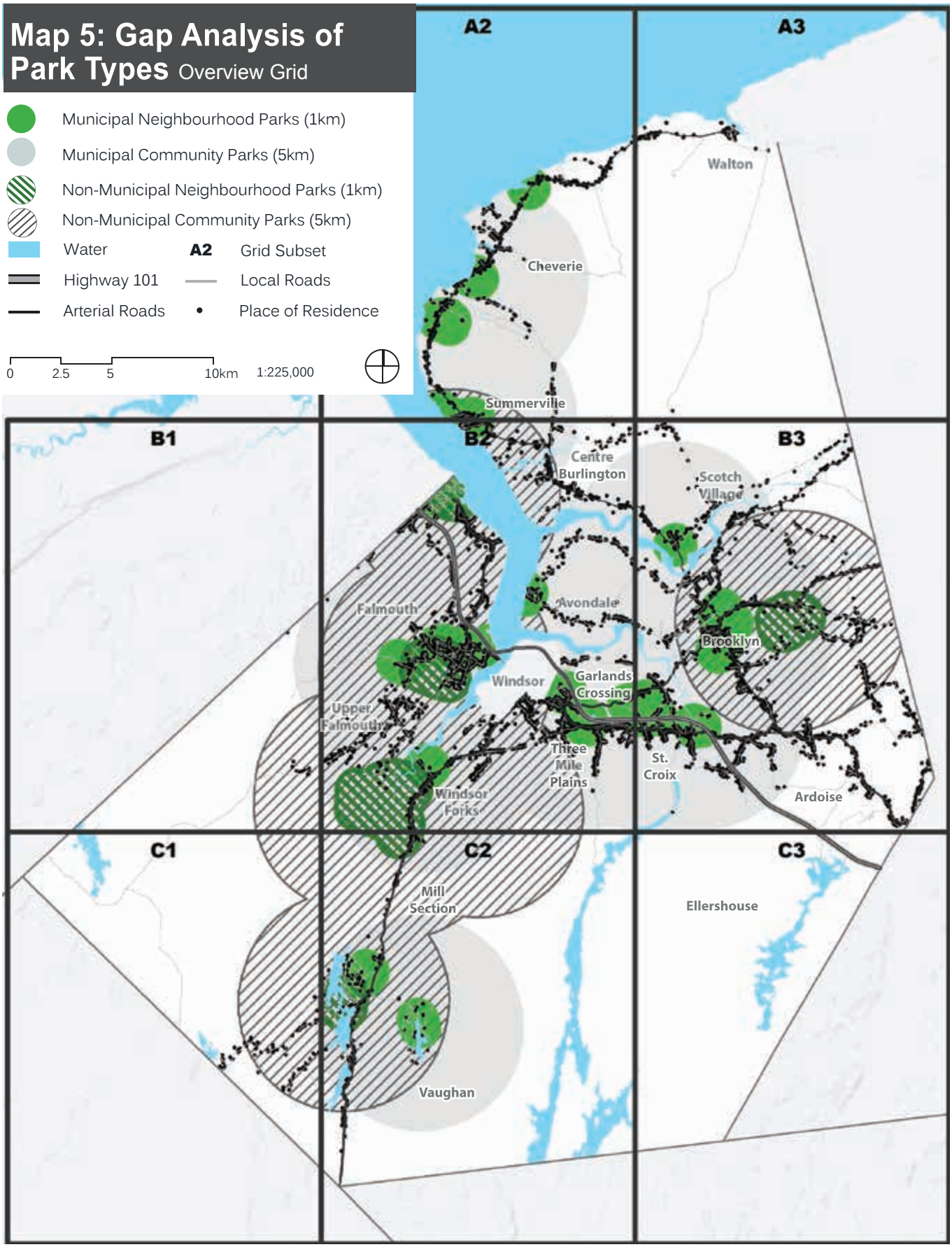
Number of hectares of Neighbourhood Parks (40 acres)*

155

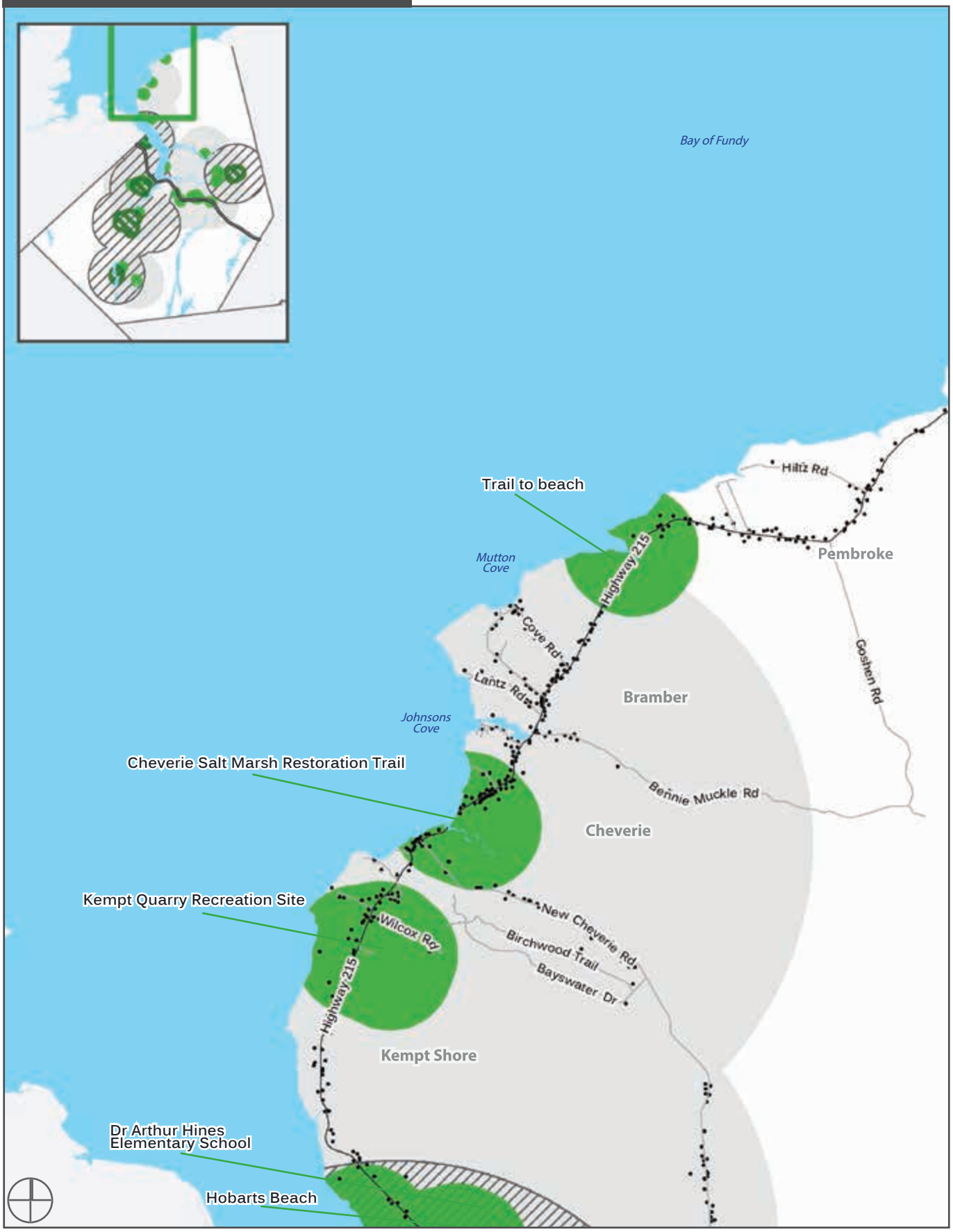
Number of hectares of Community Parks (383 acres)**

** Regional and Community Parks are often used as Neighbourhood Parks as well. This total area for Neighbourhood Parks* would be 161ha (398 acres).

** Regional Parks are often doubled as Community Parks and are factored into this area.


Map 5: Gap Analysis of Park Types Overview Grid
Municipal Neighbourhood Parks (1km)
Municipal Community Parks (5km)
Non-Municipal Neighbourhood Parks (1km)
Non-Municipal Community Parks (5km)
Water
A2 Grid Subset
Highway 101
Local Roads
Arterial Roads
Place of Residence
0 2.5 5 10km 1:225,000
A2
A3
B1
B2
B3
C1
C2
C3
Walton
Cheverie
Summerville
Centre Burlington
Scotch Village
Avondale
Falmouth
Brooklyn
Windsor
Garlands Crossing
Upper Falmouth
Three Mile Plains
St. Croix
Ardoise
Windsor Forks
Mill Section
Ellershouse
Vaughan

Gap Analysis Subset A2



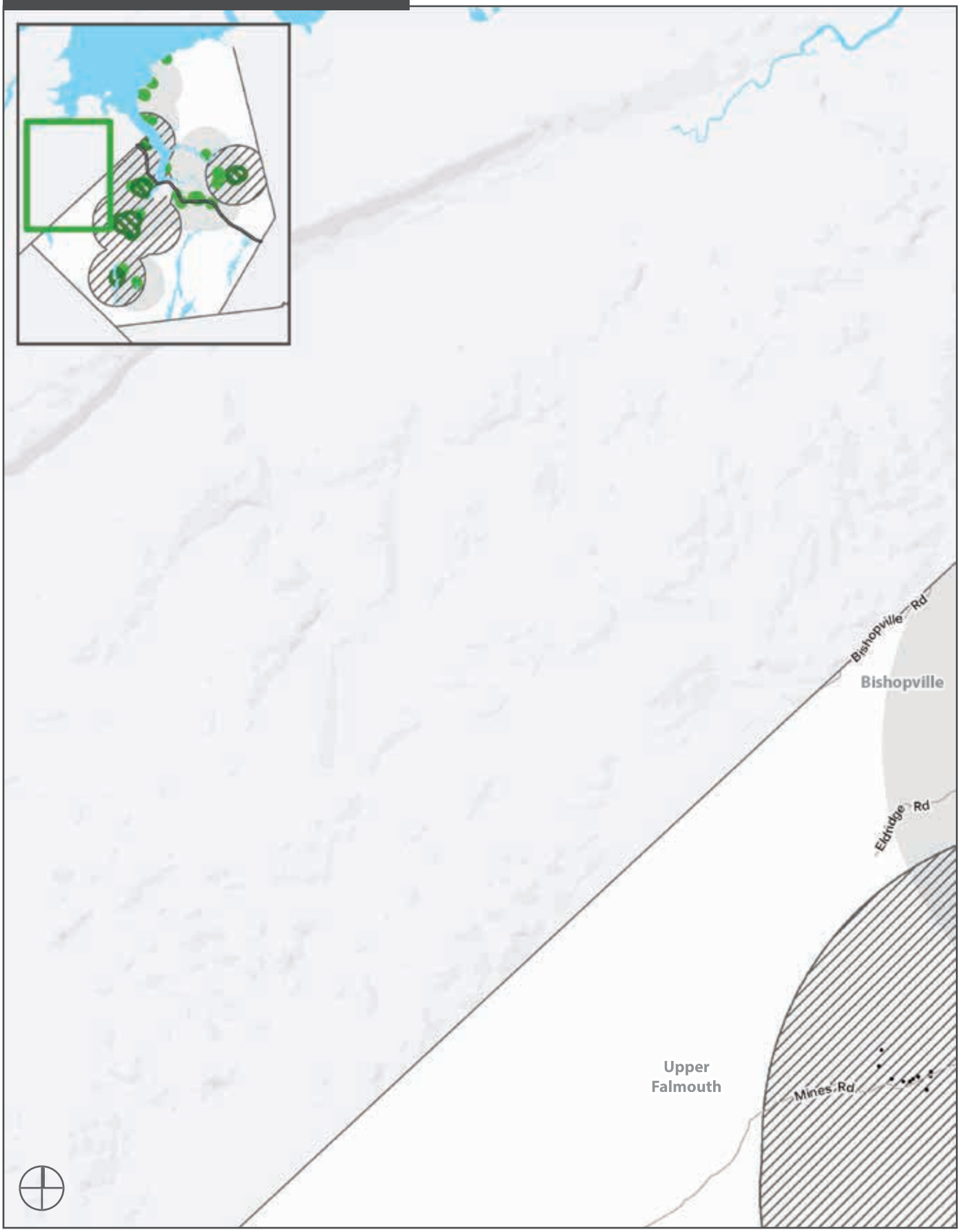
0 1.25 2.5 5km 1:70,000

Gap Analysis Subset A3



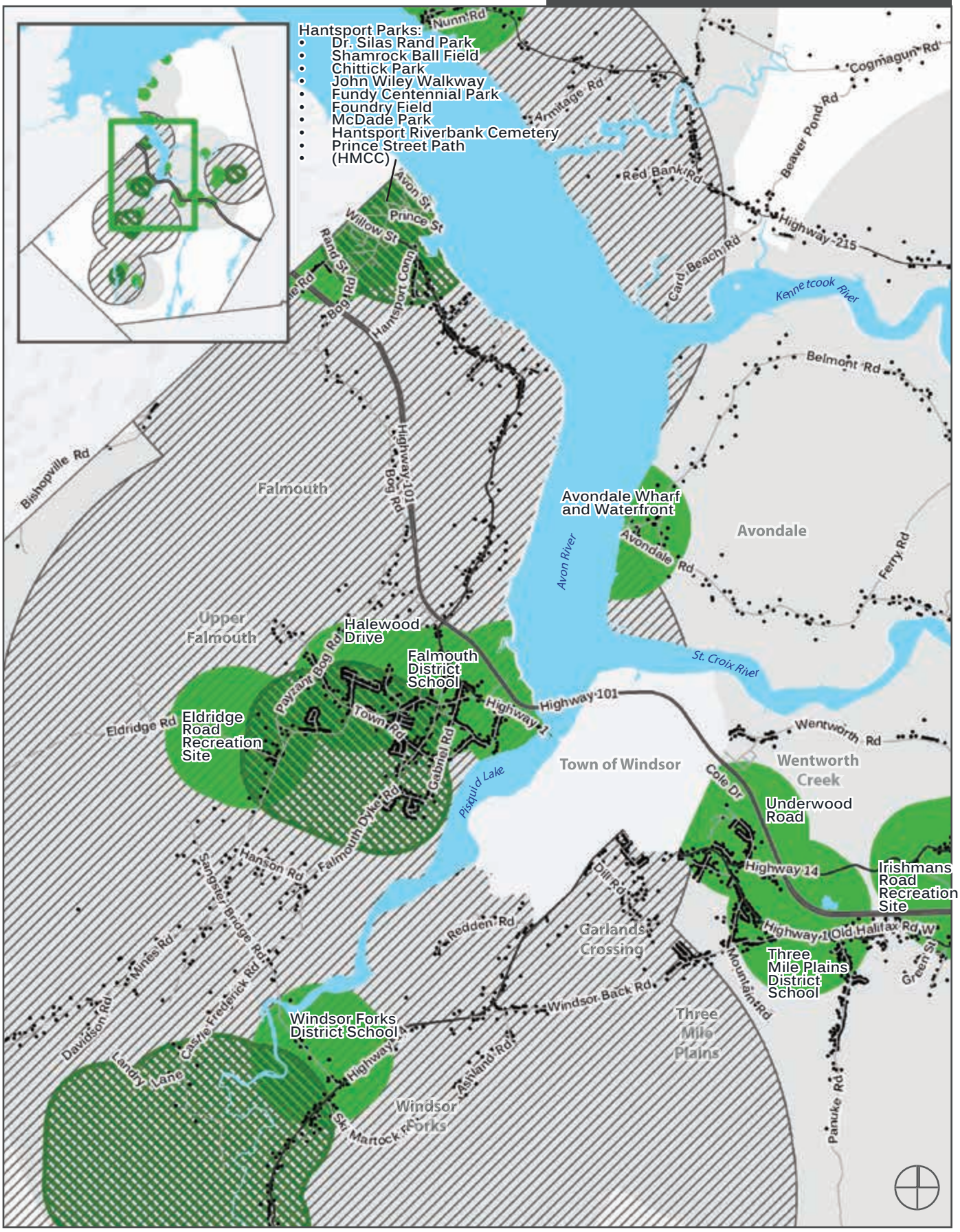
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Gap Analysis Subset B1

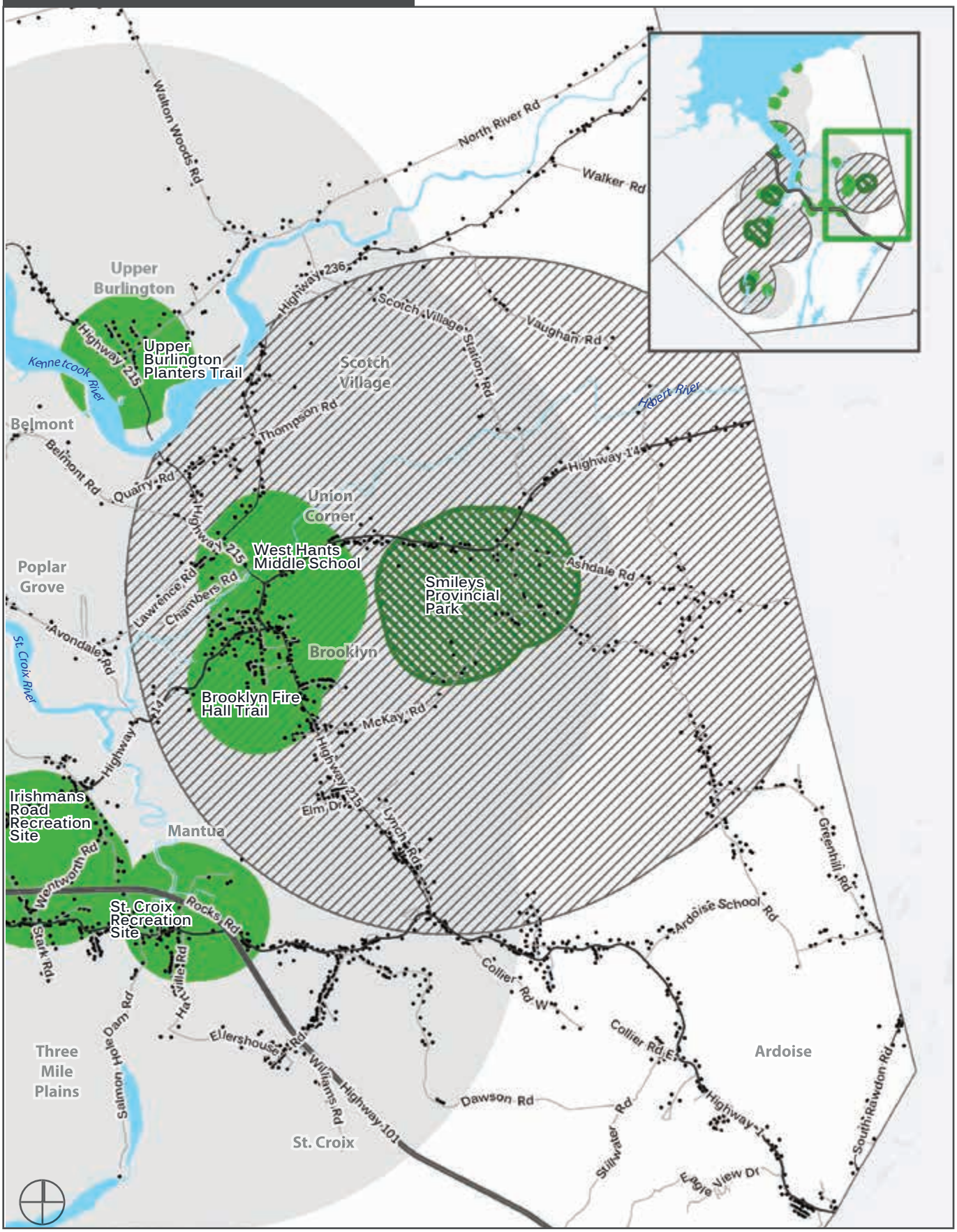


0 1.25 2.5 5km 1:70,000

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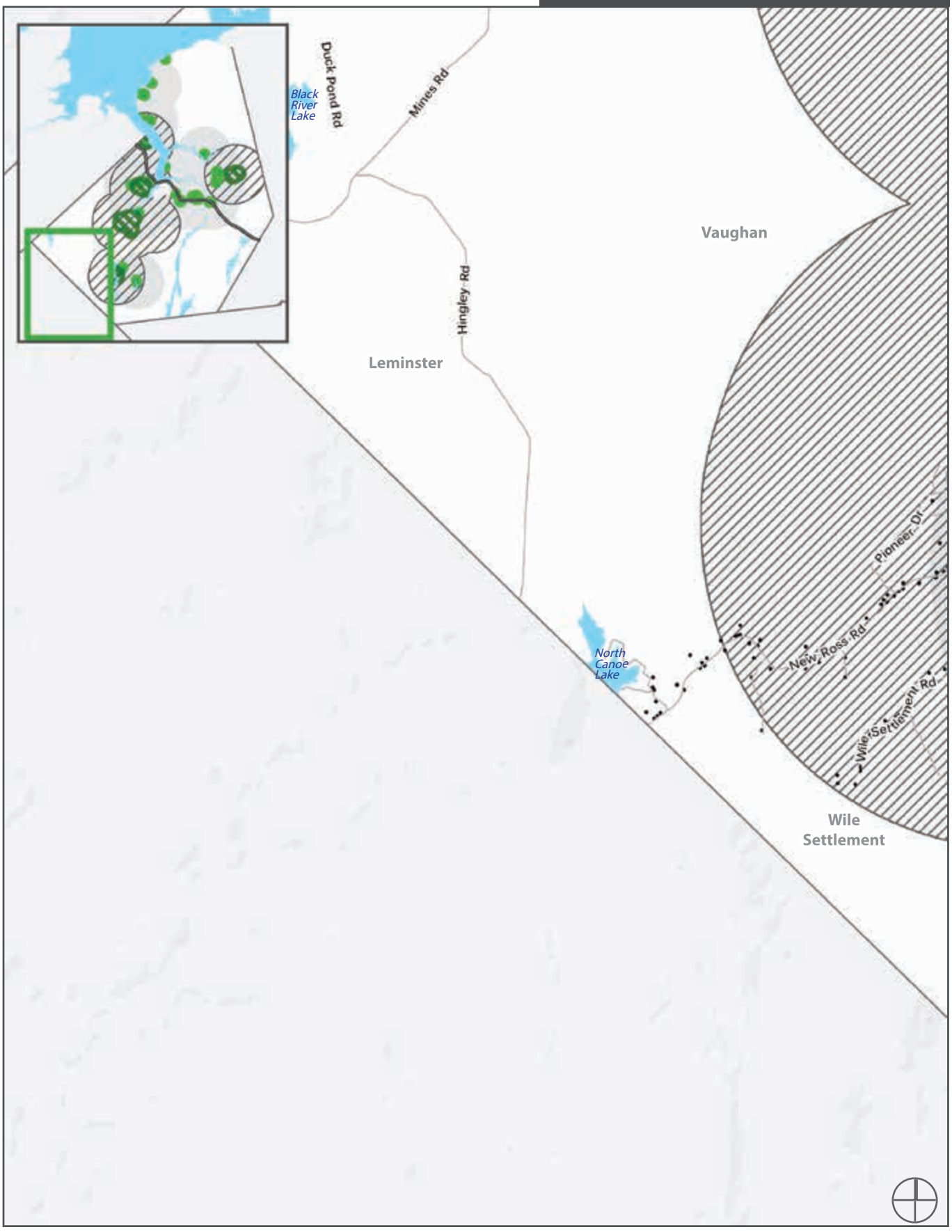


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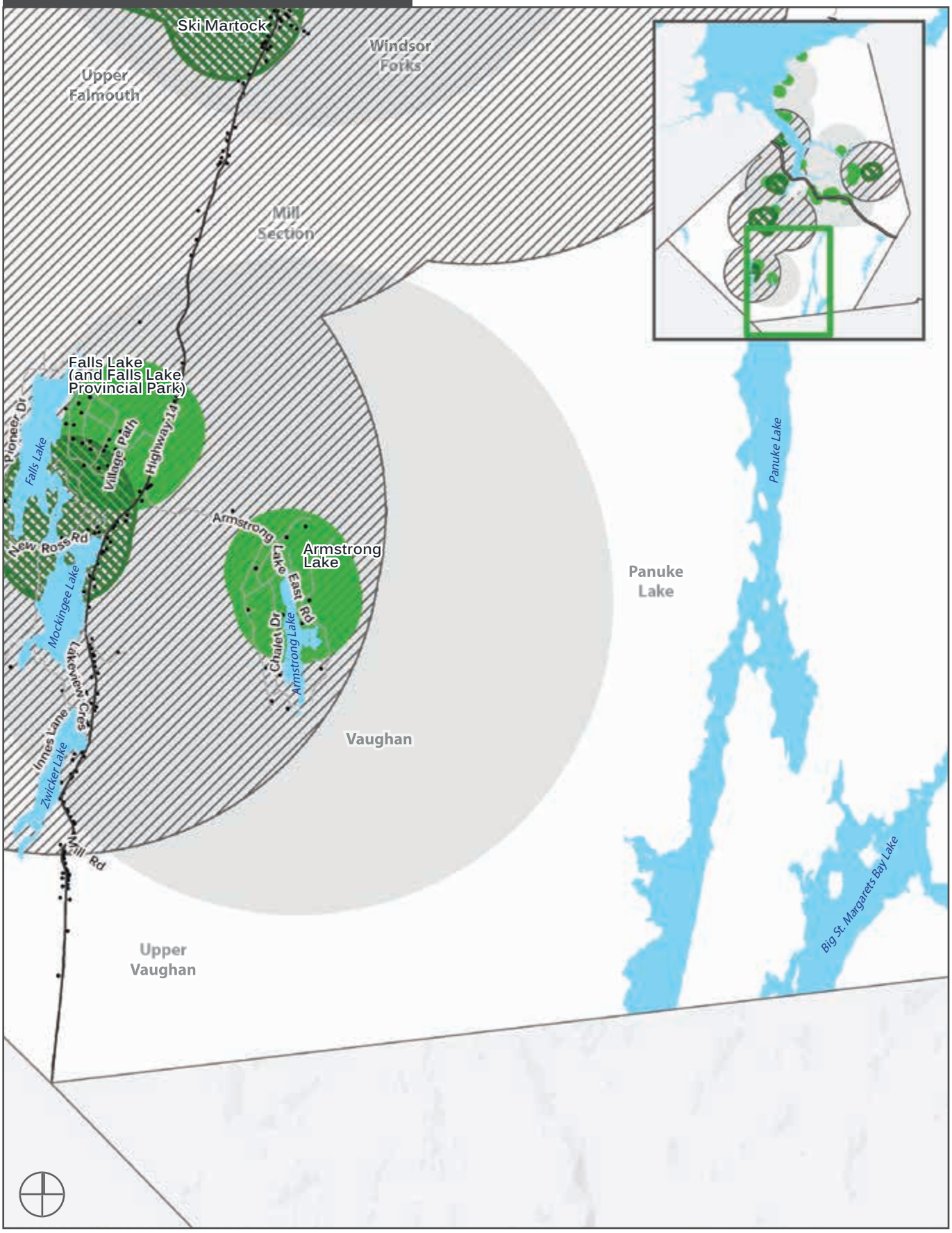
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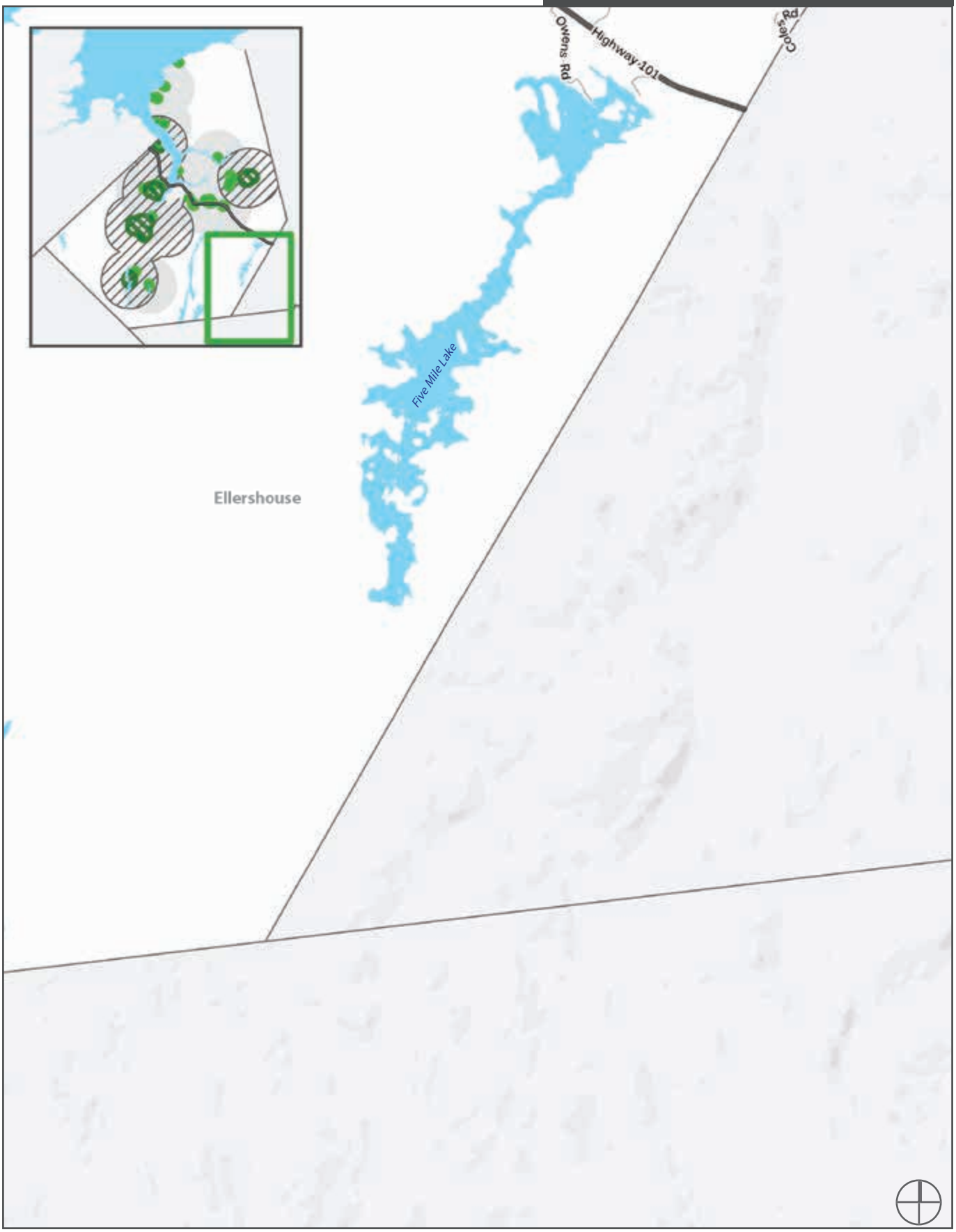
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Gap Analysis Subset C2



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Gap Analysis Subset C3



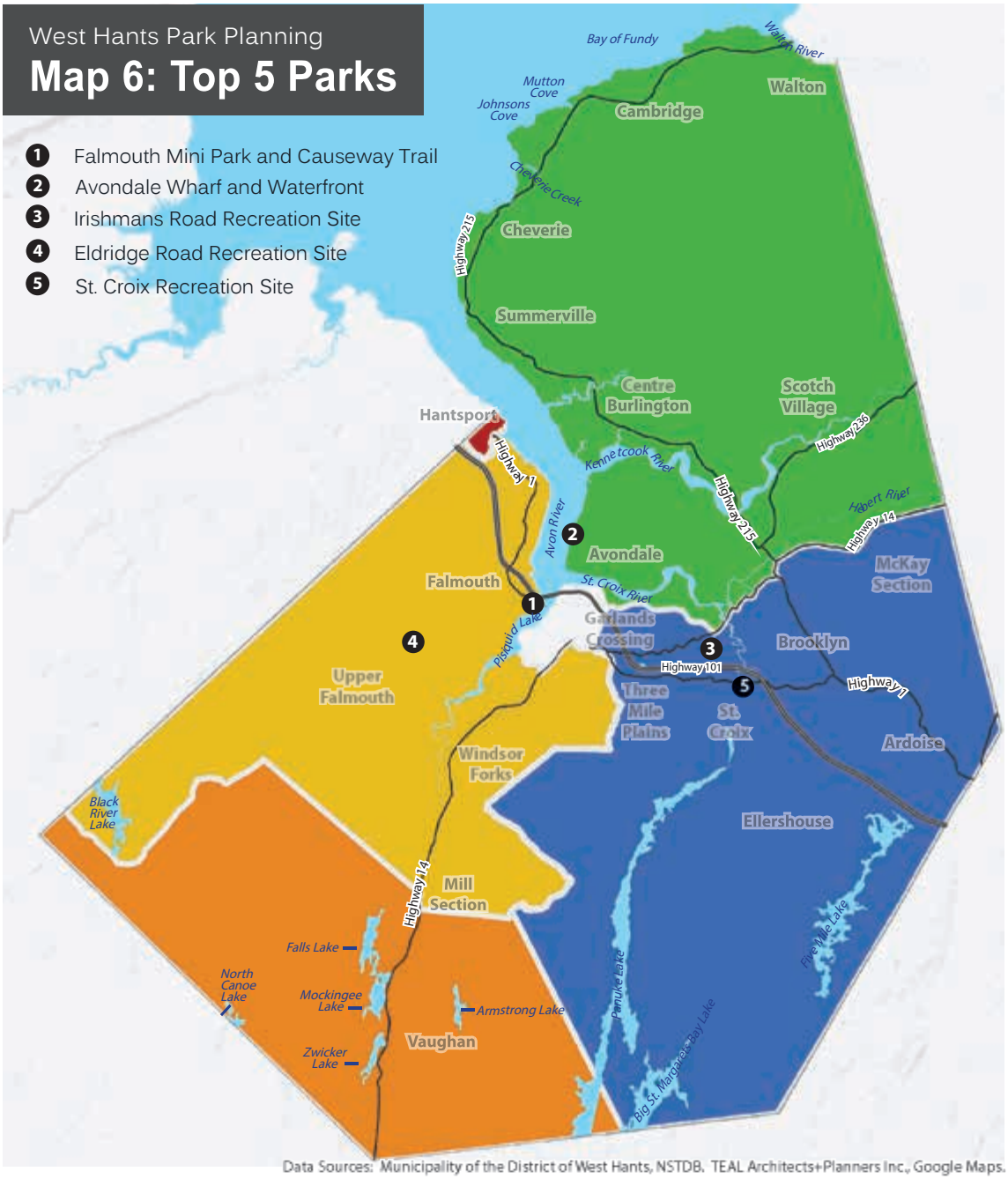
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4.4 Top 5 Priority Parks and Costs

Five parks in West Hants have been identified as priorities for investment or upgrades:

- Falmouth Mini Park and Causeway Trail
- Avondale Wharf and Waterfront
- Irishmans Road Recreation Site
- Eldridge Road Recreation Site
- St. Croix Recreation Site

Details for each park follow the next page. For each of the five parks, site opportunities have been extensively evaluated and a "Class D" cost assessment provided. These assessments estimate the cost of improvements and it should be noted that true costs may be within 25% of the estimate. Conceptual park layout drawings are also included, which highlight the approximate locations of possible site improvements.



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

1

Falmouth Mini Park and Causeway Trail

Overview

PID: 45224458

Coordinates: 44.9942, -64.1474

Date visited: November 9, 2015.

Address: 2127 Highway #1 Falmouth, NS.

Classification: Neighbourhood, Community Parks.

Size: 1.55 acres (0.63 ha), Total area of provincial land in which the park occupies: 9.10 acres (3.68 ha).

Land cover: A mixture of turfed open areas (75%) and treed naturalized areas (25%). Paved paths and gravel parking area are part of these open areas.

Topography: A fairly flat parcel gently sloping from the northwest to the southeast towards the water. Steep banks to the water in the northwest cove, a more gentle slope at the picnic area.

Maintained by: Municipality; owned by the Province of Nova Scotia.

Use: Swimming, boating, walking, picnicking.

Access: From Evangeline Trail or multiple points in Downtown Windsor.

Parking: 5-10 spaces; not well defined.

Signage: No signage indicating park from the road. Park maintenance signage throughout the park.

History: The Municipality entered into a lease agreement with the Department of Transportation in the early 1980's that allowed the use of the land for recreational purposes. In the early 1990's the Municipality and the Windsor and Area Jaycees agreed to develop the lands and create what is now the Falmouth Mini Park.

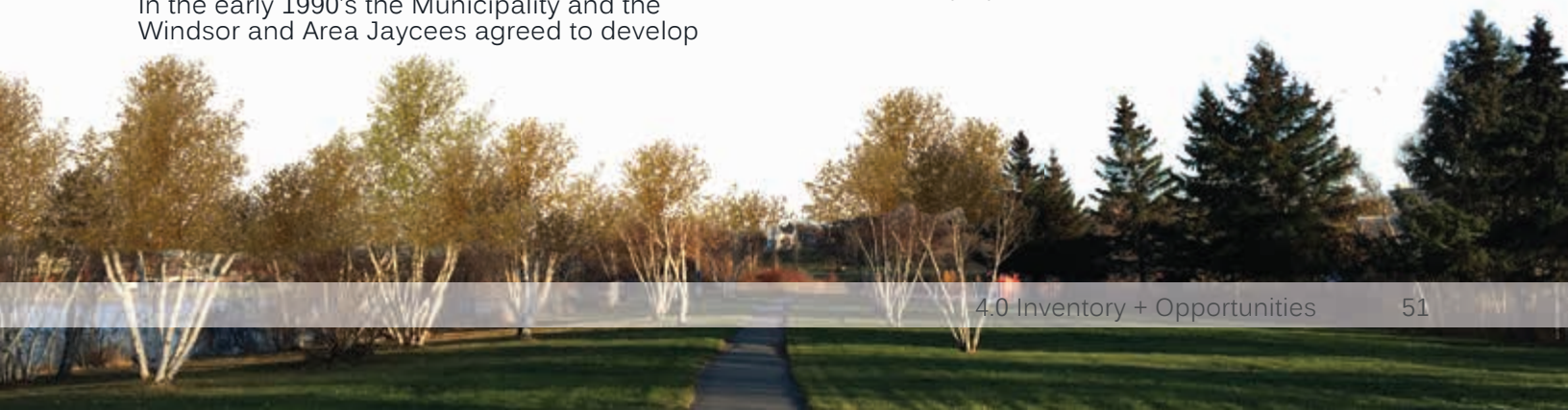
Overlapping Management Plans: 2013 Trails Plan, p.55.

Observations

- No entrance signage indicating park, use, or a map.
- Parking area in conflict with pedestrian spaces/playground.
- Many small trees, but few large shade trees on site.
- Fencing along the west side of the park is in need of replacement.
- Well maintained grounds.
- Access to water isn't clearly indicated or available.

Opportunities

- Reconfigure parking area that makes better use of space and separates pedestrians from cars.
- Landscape park entrance to buffer from road traffic and provide an aesthetic gateway to park.
- Design and development of new trail on highway side of park for shorter secondary loop.
- Improve access to the water from the picnic area.
- Install dock for small boat access, fishing, sitting.
- Improve lighting along highway and in interior of the park.
- Design and install interpretive signage highlighting stormwater movement through the park.
- Create shade over children's play area (e.g. trees, shade structure).
- Phase out invasive species (e.g. Norway Maple).



Falmouth Mini Park and Causeway Trail

Cost Estimate

Description	Unit	Quantity	Unit Price ($)	Amount ($)
Signage				
Park map (48” x 36”)	each	1	850.00	850.50
Parking upgrades				
Roadway	m^2	400	32.00	12,800.00
Parking area	m^2	400	32.00	4,800.00
Causeway Trail Loop				
Trail	m	200	40.00	8,000.00
Fence	m	240	105.00	25,000.00
Beach Upgrade				
Beach construction & retaining wall	L.S.	1	30,000.00	30,000.00
Floating dock	L.S.	1	2,500.00	2,500.00
Entrance landscape plan & landscaping	L.S.	1	15,000.00	15,000.00
Lighting				
Option 1: strategically placed bollards	each	30	375.00	11,250.00
Option 2: bollards along entire length of trail loop (not including length along Highway 101)	each	84	375.00	31,500.00
TOTAL (with Option 2)				**$130,450.50**

Prices include 25% allowance for contingencies and engineering, but exclude HST.

Probable construction costs have been made based on experience, qualifications, and best judgment. Construction costs may vary from the estimated costs above. Design fees are not included.



District of the Municipality of West Hants
Parks and Open Space Plan

Park Opportunities Concept Plan: Falmouth Mini Park and Causeway Trail

Item	Description
A	Redesigned parking area to separate people from cars.
B	New landscaping to create a buffer between the park and road and to create a sense of entrance.
C	Proposed beach area with retaining wall and steps.
D	Proposed area of bollard lighting.
E	Proposed dock for launching canoes, kayaks.
F	Shade tree planting around play structures.
G	Proposed stormwater interpretive panel.
H	Opportunity area for future park and open space development.
I	Proposed 200m trail loop.
J	New fence along shoreline.
K	Proposed picnic /rest area.

Prepared by: SC

Date: April 3, 2016

Avondale Wharf and Waterfront

Main Parcel

2

Overview

PID: 45171279

Coordinates: 45.02204, -64.1312

Date visited: November 26, 2015.

Address: 15 Belmont Rd, Avondale.

Classification: Community, Cultural, Neighbourhood Parks.

Size: 1.61 acres (0.65ha).

Land cover: Mostly managed turf with compacted gravel driveway and parking areas, and building footprints.

Topography: Relatively flat terrain sitting lower than Belmont Road at the field and at road elevation at Museum entrance. Gently sloping towards the wharf.

Maintained by: Primarily by community volunteers with support from the Municipality.

Use: Baseball, soccer, sitting, picnicking, walking, playground, bird watching, boating, fishing.

Access: From Belmont Road and Avondale Road.

Parking: No formal parking, opportunities for approximately 10-20 cars.

Signage: Collection of signs at Heritage Museum entrance for buildings/amenities. Newport Landing sign along road shoulder along field. Park entrance sign at southern driveway.

History: This area is formerly a New England Planter settlement. Due to the proximity to water, ship building was an important industry. The Wharf was divested from the Federal Government to the Municipality in 1990 and was rebuilt by the community for $13,000.00. In 1996, the Municipality entered into a lease agreement with the Avon River Heritage Society to allow that organization to develop a portion of the property.

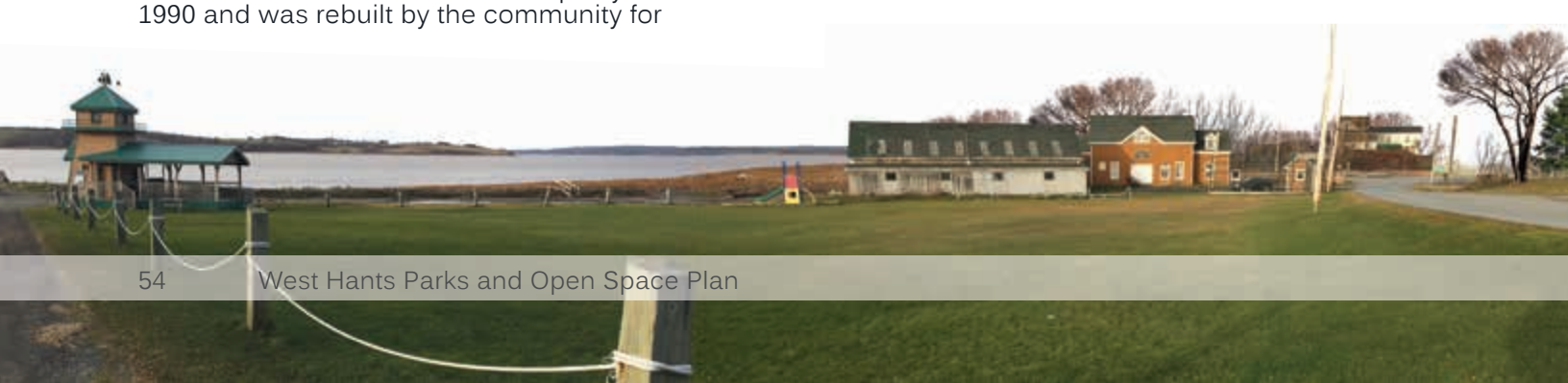
Overlapping Management Plans: MCCAP.

Observations

- Outdoor spaces around museum and boat house not well-defined (e.g. parking, gardens, turf).
- Sports field is well maintained. Standing water at field perimeter.
- Playground in good condition.
- Poor drainage, uneven surface, and irregular mixture of materials (e.g. soil, gravel) outside the playground and shipyard shed.
- Tide rising over wharf, boat launch, and driveway causing erosion and structural damage.
- Signage is not coordinated, should be centralized with park use, ownership, and rules identified.

Opportunities

- Site landscape plan to identify optimal pedestrian circulation and landscaping.
- Evaluate the stability and effectiveness of dykes/berms. Further development may be necessary along river to the north and boat launch to the south.
- Engineering assessment of wharf structure.
- New park signage consistent with municipal brand and materials at park entrances.
- The Municipality should consider climate change and work with the MCCAP Committee on projects that relate to the Avondale Wharf and Waterfront.
- Work with the MCCAP Committee to address climate change effects on parcel.



Avondale Wharf and Waterfront

South Shoreline

2

Overview

PID: 45183118

Coordinates: 45.02126, -64.132

Date visited: November 26, 2015.

Address: 1 Avondale Rd, Newport Landing.

Classification: Community Park, Production and Protection.

Size: 1.10 acres (0.45ha).

Land cover: Primarily tidal grassland with trees and shrubs growing at eastern border.

Topography: Slight slope from eastern edge of parcel to the water.

Maintained by: Not a maintained parcel, but owned by the Municipality.

Use: Tidal zone, wildlife habitat, no current recreational use.

Access: From the beach at low tide or from Avondale Wharf and Waterfront Main Parcel driveway.

Parking: Few potential spaces at boat launch.

Signage: None.

History: Deeded to the Municipality of the District of West Hants in 1996 by USG Canadian Mining Limited.

Overlapping Management Plans: MCCAP.

Observations

- No obvious human activity on site.
- Large area covered by water during high tide.

Opportunities

- Little recreational opportunity due to tidal flow, but valuable as wildlife habitat.
- Potential to develop a dyke/berm system to prevent flooding into southern border of Avondale Wharf and Waterfront Main Parcel.



2

Avondale Wharf and Waterfront

North Shoreline

Overview

PID: 45225513

Coordinates: 45.02268, -64.1318

Date visited: November 26, 2015.

Address: 1 Avondale Road, Newport Landing.

Classification: Community Park, Production and Protection.

Size: 1.13 acres (0.46ha).

Land cover: Primarily tidal grassland with exposed sand/sediment during low tide.

Topography: River channel flowing through property. Steep grass-covered/muddy banks on either side of channel.

Maintained by: Not a maintained parcel, but owned by the Municipality.

Use: Tidal flow, wildlife habitat, boat access.

Access: From Avondale Wharf and Waterfront Main Parcel.

Parking: Parking available in Avondale Wharf and Waterfront Main Parcel and roadside,

Signage: None.

History: In May, 1760 the first New England Planters arrived aboard sloops Lydia and Sally. Water lot was deeded to the Municipality in 1990

Overlapping Management Plans: MCCAP.

Observations

- Boat access damaged during previous weather events.

Opportunities

- Improve access to water.



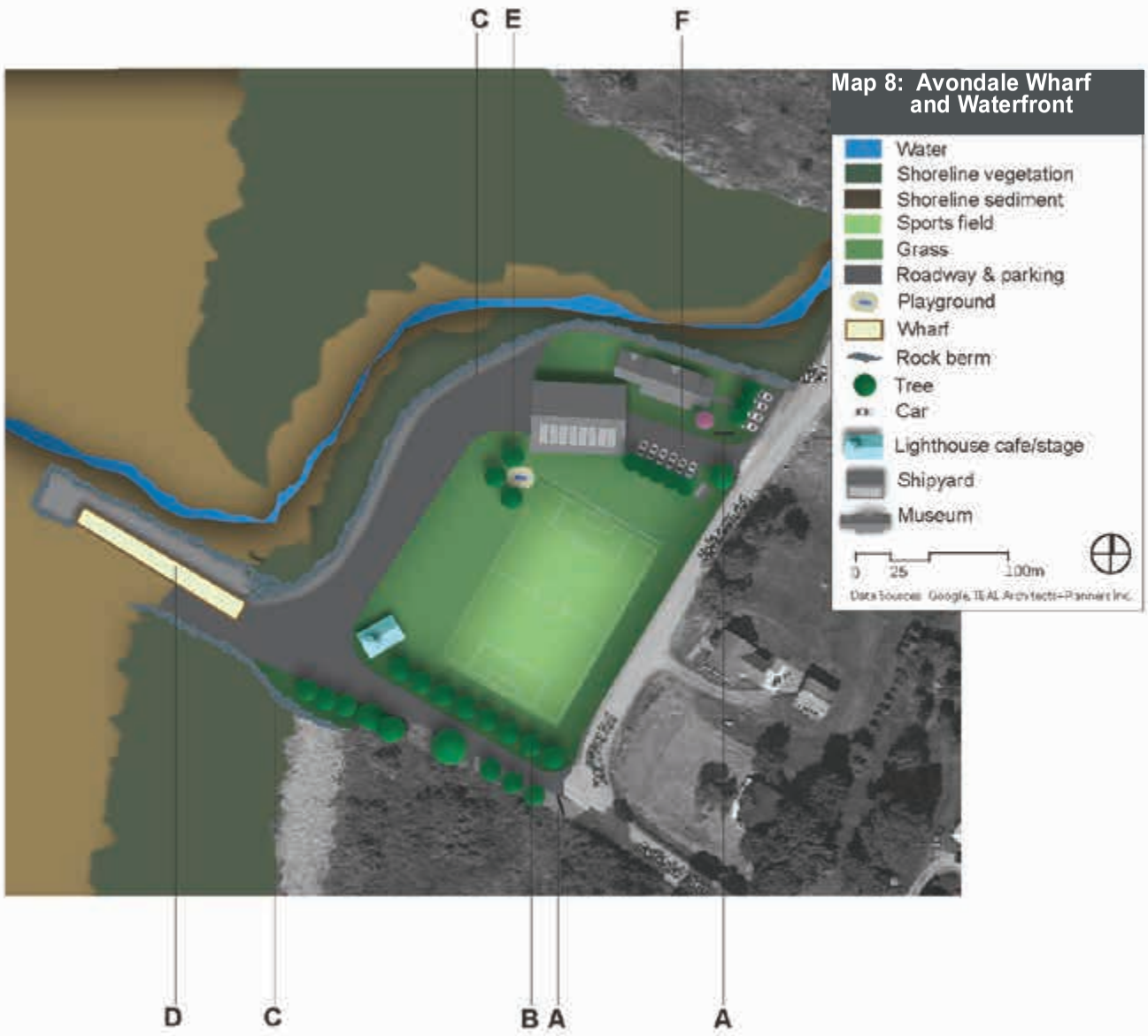
Avondale Wharf and Waterfront

Cost Estimate

Description	Unit	Quantity	Unit Price ($)	Amount ($)
Wharf upgrades				
Option 1: Remove existing wharf, do not replace.	L.S.	1	20,000	20,000
Option 2: Repair existing decking, ladders, curbs.	L.S.	1	60,000	60,000
Option 3: Remove existing wharf & replace with new wharf at same deck elevation.	L.S.	1	170,000	170,000
Option 4: Remove existing wharf & replace with new wharf at 1.5m above existing deck elevation.	L.S.	1	310,000	310,000
A high tide is estimated to over top the existing wharf by approximately 1.0m. An extreme high tide is estimated to over top the existing wharf by approximately 2.5m.				
Reconfigured parking area	m^2	350	32.00	6,400
Berm upgrades & development				
North berm (1.0m additional height)	L.S.	1	120,000	120,000
South Berm (1.0m average height)	L.S.	1	25,000	25,000
Detailed Landscape Plan	L.S.	1	15,000	15,000
TOTAL (with Option 4)				**$476,400**

Prices include 25% allowance for contingencies and engineering, but exclude HST.

Probable construction costs have been made based on experience, qualifications, and best judgment. Construction costs may vary from the estimated costs above. Design fees are not included. Price would vary depending on the type, length and quality of the wharf to be constructed. Required permits have not been factored into the cost estimate.



District of the Municipality of West Hants
Parks and Open Space Plan

Park Opportunities Concept Plan:
Avondale Wharf & Waterfront

Item	Description
A	Existing/new signage moved closer to the main road.
B	Trees added to define the entrance and create shade fo sp spectators, visitors.
C	Berms strengthened and raised to prevent tide from flooding park.
D	Wharf upgraded to make structurally sound.
E	Trees planted to shade playground.
F	Redesigned entrance area.

Prepared by: SC

Date: April 3, 2016

3

Irishmans Road Recreation Site

Overview

PID: 45061843

Coordinates: 44.97263, -64.0588

Date visited: November 16, 2015.

Address: 151 Irishmans Road, Newport Station.

Classification: District, Community, Neighbourhood Parks.

Size: 172 acres (69.61 ha).

Land cover: Primarily a mixed forested stand of red and white spruce, hemlock, yellow birch, sugar maple and American beech. Turf is managed on two sports fields and at their perimeter and along driveways. Gravel parking areas are found at the main entrance and at the upper sports field.

Topography: Main road bed is relatively flat with slight incline to the north east (with drainage ditch on either side). Upper sports field to the west is 25-30 feet above main road. Lower sports field in a depression. Trail to the is north of the lower sports field rises and falls with the hillside. Karst topography (i.e. sinkholes formed by soluble gypsum). Is visible in the north and west portions of the park.

Maintained by: Municipality. Portion leased by Glooscap Heritage Archers Association.

Use: Archery, walking, running, mountain biking, soccer.

Access: Park access from Irishmans Road.

Parking: 20-30 spaces along driveway and at the second gate, 20-30 spaces at the top field, evidence of additional parking on grass shoulders and at the sport field entrances.

Signage: No official signage indicating "Irishmans Road Recreation Park". Signage indicating management and use and prohibiting motorized vehicle use.

History: The park sits on land formerly used as a Municipal landfill, which was decommissioned in 1984. The soccer fields were named the Ryan Lahey Memorial Soccer fields in 2011 in memory or Ryan Lahey.

Overlapping Plans: 2013 Trails Plan, p.47.

Observations

- Entrance to the trail from the second gate is unclear.
- Free standing wall (remaining from landfill) to the north east of the lower field.
- Standing water along trail to the north of the lower field.
- Bleachers at upper field in need of upgrades (e.g. wooden boards).
- Upper parking area needs new base material. Shale is difficult parking surface.
- Area of karst topography found in the north and west areas of the park.
- Fence on the west of the upper field in need of replacement.
- Slumping observed on the west side of the upper field.

Opportunities

- Install entrance and trail signage.
- Design and install interpretive panels to educate the community about former uses, and reclamation of former landfill lands into a recreation facility.
- Expansion of parking area at the second gate and at the upper field.
- Development of a new trail and interpretive area to learn about Karst Topography.
- New fence along the west side of the upper sports field.
- Upgrade sports field (e.g. topdressing, seeding, corrected slumping).
- Potential for additional trails

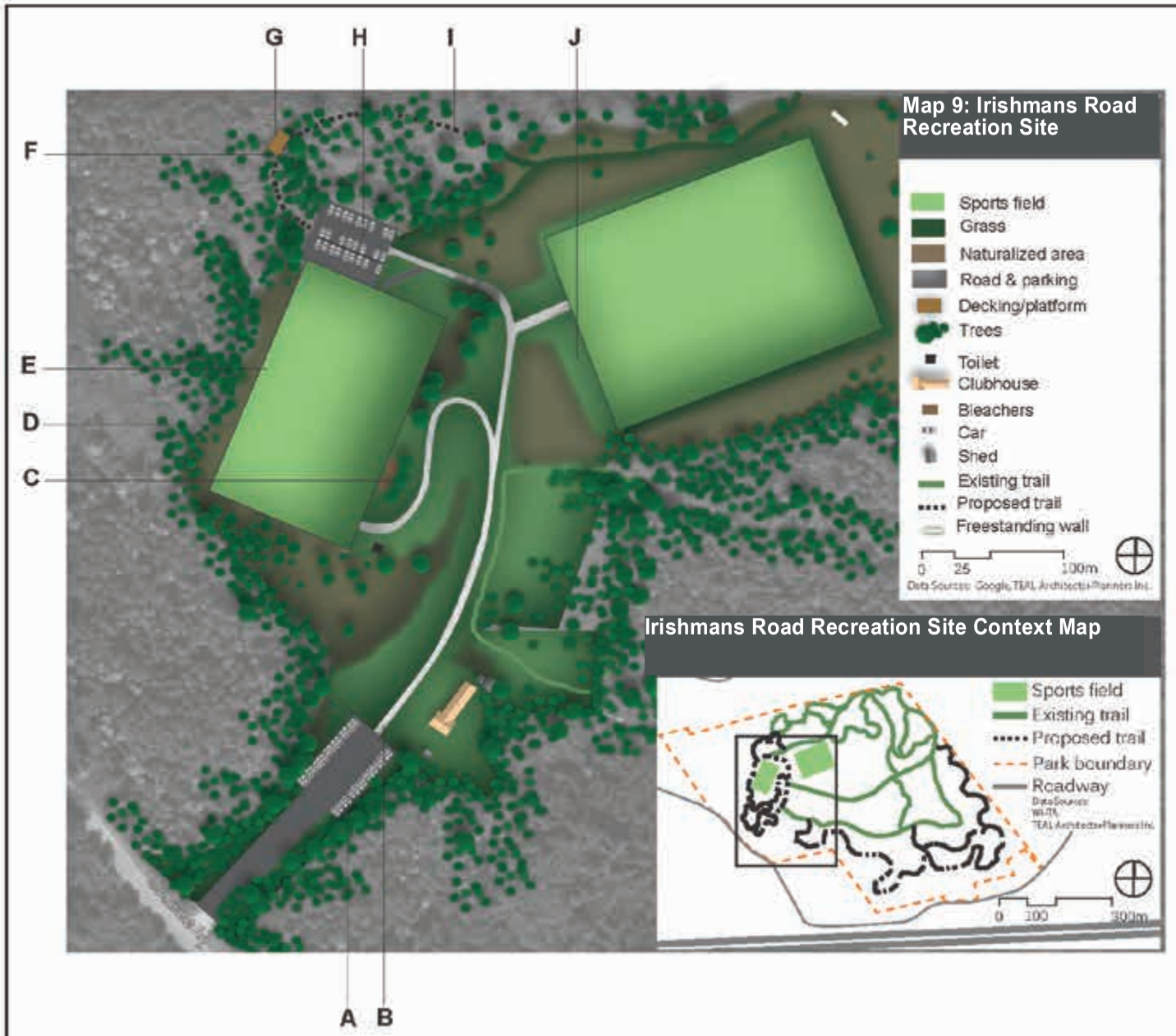
Irishmans Road Recreation Site

Cost Estimate

Description	Unit	Quantity	Unit Price ($)	Amount ($)
Signage				
Landfill remediation interpretive board.	each	1	850.00	850.00
Karst topography interpretive board.	each	1	850.00	850.00
Parking upgrades (gravel)				
Upper parking area	m^2	1,200	32.00	38,400.00
Entrance parking area	m^2	300	32.00	9,600.00
West sports field fence upgrade				
Removal of current fencing	L.S.	1	1,000.00	1,000.00
Ground work	L.S.	1	7,000.00	7,000.00
Fencing installation	L.S.	1	4,000.00	4,000.00
Karst Topography look-off				
Trail loop	m	250	40.00	10,000.00
Wood platform (7m x 3m)	L.S	1	5,000.00	5,000.00
Fencing (post and rail)	m	25	60.00	1,500.00
Sports field upgrades				
Aeration *(in-house staff & equipment, 2-3 times per year)*				
East field	L.S.	1	375.00	375.00
West field	L.S.	1	250.00	250.00
Topdressing				
East field	m^2	10,400	0.48	5,000.00
West field	m^2	7,600	0.48	3,750.00
Overseeding				
East field	m^2	10,400	0.075	780.00
West field	m^2	7,600	0.075	570.00
TOTAL				**$88,145**

Prices include 25% allowance for contingencies and engineering, but exclude HST.

Probable construction costs have been made based on experience, qualifications, and best judgment. Construction costs may vary from the estimated costs above. Design fees are not included.



District of the Municipality of West Hants
Parks and Open Space Plan

Park Opportunities Concept Plan: Irishman s Road Recreation Site

Item	Description
A	Expanded gravel parking area.
B	New interpretive board outlining the former landfill site and reclamation into a recreation park.
C	New shade trees planted behind bleachers.
D	Chain link fence replacement.
E	Installation of new sub-base to correct field slumping.
F	New interpretive board highlighting Karst Topography, plant life, and significance to the area.
G	New platform/decking overlooking Karst Topography.
H	Resurfaced and expanded parking area.
I	New trail to Karst Topography look-off.
J	New bleacher seating.

Prepared by: SC

Date: April 3, 2016

4

Eldridge Road Recreation Site

Overview

PID: 45211836

Coordinates: 44.99139, -64.208

Date visited: November 20, 2015.

Address: 156 Eldridge Rd, Upper Falmouth.

Classification: District, Community, Neighbourhood Parks.

Size: 15.55 acres (6.29 ha).

Land cover: Sports complex area is primarily managed turf; gravel parking lot and roadway; remaining property forested (e.g. red and white spruce, sugar maple, white and yellow birch, red oak, balsam fir) with turf, soil, and gravel paths.

Topography: Fairly flat terrain with undulating places due to drainage swales and natural depressions.

Maintained by: Municipality.

Use: Soccer, tennis, basketball, walking, tug-of-war, playing (playground), picnicking, sitting, snowmobiling.

Access: From Eldridge Road.

Parking: Unmaintained gravel lot with overflow parking on grass at eastern park entrance.



Signage: Signage indicating maintenance and sponsors; faded trail markings at former softball field.

History: Parcel was purchased in 1988 from Bernard Curry. The land was developed cooperatively between the Falmouth Community Hall Association and the Municipality of the District of West Hants.

Overlapping Management Plans: None.

Observations

- Recent investment in infrastructure (e.g. tennis court surface, playground).
- Standing water on north and south length of west soccer field.
- North soccer field slow to drain.
- Former softball dugouts in fair shape, roof needs repairs.
- Parking area with standing water.
- Standing water outside play space.
- Former softball field post and chain fence rusting and leaning.
- Retaining wall around former softball field is deteriorating.

Opportunities

- Landscaping upgrades at park entrance.
- Install signage to identify site amenities and trails.
- Correct field drainage for sports fields.
- Paint lines on basketball court.
- Repair and replace damaged boards on benches, picnic tables, bleacher seating.
- Upgrade dugout roofs.
- Redesign the layout of parking area to make more efficient and separate from people spaces.
- Install drainage and new sod around playground space.
- Install new fence along north soccer field perimeter.
- Remove wood retaining wall behind the dugouts at north soccer field perimeter. Replace with drainage swale.

Eldridge Road Recreation Site

Cost Estimate

Description	Unit	Quantity	Unit Price ($)	Amount ($)
Signage				
Park map	each	1	850.00	850.00
Soccer field drainage improvements				
Option 1:French drain along north boundary	m	150	35.00	5,250.00
Option 2: Shallow swale along north boundary	m	150	65.00	9,750.00
Parking upgrades				
Roadway	m^2	1,300.00	32.00	41,600.00
Parking area	m^2	600	32.00	19,200.00
Basketball court grade correction				
Option 1: Chain-link fence on North and East side of court	m	45	165.00	7,425.00
Option 2: Add fill to lessen slope on North and East sides of court	L.S.	1	5,000.00	5,000.00
Basketball court line painting	L.S.	1		
Back soccer field fence extension	m	48	105.00	5,040.00
Back soccer field swale	m	60	150.00	9,000.00
Site lighting (tennis courts, parking lots), mounted on existing utility poles	L.S.	2	2,0000.00	4,000.00
Entrance landscape plan & landscaping	L.S.	1	20,000.00	20,000.00
Picnic area upgrades				
Steel park grill/BBQ	each	3	400.00	1,200.00
Picnic tables	each	3	250.00	750.00
Total (with Soccer field drainage Option 2 and basketball court Option 2)				**$129,065**

Prices include 25% allowance for contingencies and engineering, but exclude HST.

Probable construction costs have been made based on experience, qualifications, and best judgment. Construction costs may vary from the estimated costs above. Design fees are not included.



Map 10: Eldridge Road Recreation Site

District of the Municipality of West Hants
Parks and Open Space Plan

Park Opportunities Concept Plan: Eldridge Road Recreation Site

Item	Description
A	Redesigned parking area.
B	Regraded drainage swale.
C	Painted basketball court lines.
D	Interior park lighting.
E	Snowmobile off-loading area.
F	Redesigned entrance parking area.
G	New entrance landscaping.
H	New shade trees at playground.
I	New drainage system for soccer field perimeter.
J	Picnic/bbq space in clearing.
K	New swale around backstop of former softball field.
L	Chain link fence extension.

Prepared by: SC

Date: April 3, 2016

5

St. Croix Recreation Site

Overview

PID: 45339231

Coordinates: 44.96515, -64.0255

Date visited: November 12, 2015.

Address: 54 Ball Park Rd, St. Croix.

Classification: District, Community, Neighbourhood Parks.

Size: 9.60 acres (3.88 ha).

Land cover: Primarily managed turf with gravel surfaces for driveway, parking, and pathways.

Topography: Grade level, seeded, maintained.

Maintained by: Municipality.

Use: Softball, community gathering, horseshoe, picnicking, fishing.

Access: From Ball Park Road.

Parking: 150-200 cars possible on road shoulder, abandoned field, and gravel area to the east.

Signage: No entrance signage. Signage present to indicate maintenance, security, and horseshoe club, but signs are dated and in need of replacement.

History: Land originally owned by Aubrey Smiley and was purchased by the Crown when Highway 101 was constructed. The Crown deeded the remaining lands to the Municipality in 1975 with the stipulation that it be used for recreation purposes.

Overlapping Management Plans: None.

Observations

- Out-buildings are showing signs of weather damage (e.g. water damaged wood, outdated electrical, rotting windows/trim).
- Bleacher footprints made of gypsum (unsuitable structural base).
- Field to east of ballfields is abandoned with old backstop still in place.
- Slope around east ball field bleachers too steep and inaccessible.
- Wiring on east ball field unearthed and is a tripping hazard.
- Wood decking at the top of west ball field is narrow and showing signs of rot.
- Clubhouse ramp on crumbling concrete footings.

Opportunities

- Develop easy access to pond.
- Coordinate signage to indicate park, maintenance, usage, and wayfinding.
- Upgrade wooden out-buildings and clubhouse.
- Replace gypsum bleacher footings with more stable base.
- Install new pathways to improve site accessibility.
- Develop regrading plan for east ball field bleachers are to reduce slope or overcome slope and refine surface materials (e.g. sod instead of large gravel).
- Upgrade decking at top of west ball field observation area.

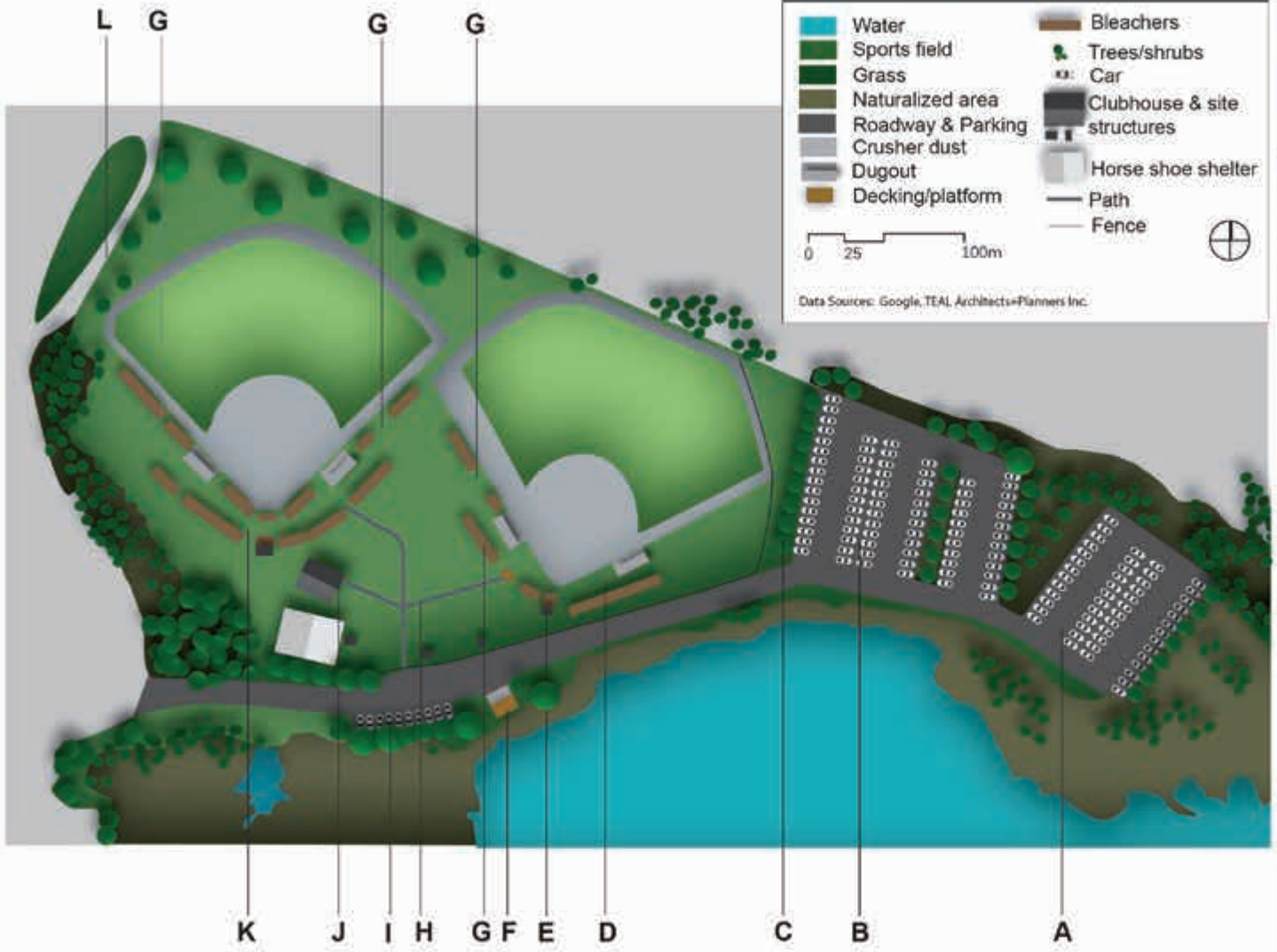


St. Croix Recreation Site

Cost Estimate

Description	Unit	Quantity	Unit Price ($)	Amount ($)
Lighting upgrades				
Clubhouse, Horseshoe area, Announcer's towers	L.S.	1	2,000.00	2,000.00
Site grading				
Stairs built into berm at Eastern field	each	2	2,000.00	4,000.00
Replace gravel underneath bleachers	L.S.	1	3,500.00	3,500.00
Backstop removal	L.S.	1	2,000.00	2,000.00
Parking upgrades (gravel)				
East parking area	m^2	1,875	13.00	24,375.00
West parking area	m^2	2,850	32.00	91,200.00
West gravel turn-around	m^2	450	13.00	5,850.00
Accessible pathways				
To East bleachers	m	30	40	1,200.00
To West bleachers	m	30	40	1,200.00
Structural upgrades				
Horse shoe shed painting	L.S.	1	1	450.00
Entrance shed (new slab, framing, cladding, external painting)	L.S.	1	1	2,050.00
Ticket booth (new slab, framing, cladding, external painting)	L.S.	1	1	800.00
Announcer's tower West field (new framing, cladding, external painting), or if more feasible, replace.	L.S.	1	1	13,400.00
Announcer's tower East field (replace selected framing and cladding panels, external painting), or if more feasible, replace.	L.S.	1	1	6,700.00
Club house interior (new internal painting, floor upgrades, plumbing fixture upgrades, kitchen counter upgrades)	L.S.	1	1	30,700.00
Clubhouse exterior (selected cladding replacement, and external stripping and repainting)	L.S.	1	1	5,600.00
Site landscaping plan & landscaping	L.S.	1	1	10,000.00
TOTAL				**$205,025**

Prices include 25% allowance for contingencies and engineering, but exclude HST. Probable construction costs have been made based on experience, qualifications, and best judgment. Construction costs may vary from the estimated costs above. Design fees are not included.



District of the Municipality of West Hants
Parks and Open Space Plan

Park Opportunities Concept Plan: St. Croix Recreation Site

Item	Description
A	Resurfaced overflow parking area.
B	New parking area.
C	Site landscaping.
D	Re-graded slopes in viewing area.
E	Out-buildings upgraded and lighting added.
F	Proposed decking/platform overlooking the pond.
G	New aggregate base to replace gypsum base underneath bleachers.
H	Accessible paths to viewing platform.
I	Retain existing parking area for accessible parking.
J	Clubhouse upgrades (e.g. new siding, floors, lighting).
K	Upgrades to wood decking in between West ballfield and clubhouse.
L	New gravel surface in turn-around.

Prepared by: SC
Date: April 3, 2016

4.5 Future Parks and Open Space Network: Summary of Opportunities

These 'Priority 2 Park' opportunities were identified through:

- Gap analysis;
- Public engagement sessions;
- Review of all parks and open space in West Hants for spaces that connect parks and open space to people/other key locations.

It is expected that these Priority 2 Parks will be addressed when budgets and opportunities to partner arise. Partnerships are needed for the development of some parks, as noted below. Municipally-owned 'second priority' parks and opportunities are explained in detail in the Network Opportunities in Section 4.5, as referenced below.

Municipal Parks

1. Kendall Lane (see page 73)
2. Hobarts Beach (see page 79)
3. Kempt Quarry Recreation Site (see page 79)
4. Underwood Road (see page 76)

Government Partnerships

5. Roadsides improved for walking and walking loops signed (see pages 71)
   - Sign well-used and appropriate roadside walking loops throughout the Municipality. Some are shown in GIS data under the consultation input file's 'areas' and 'suggestions' Shapefiles, such as a 5k loop through Hantsport and the Hiltz Road walking loop in Cheverie.
6. Fundy Shore Beach Walks (see page 80)
7. McKinley Road Park (see page 74)

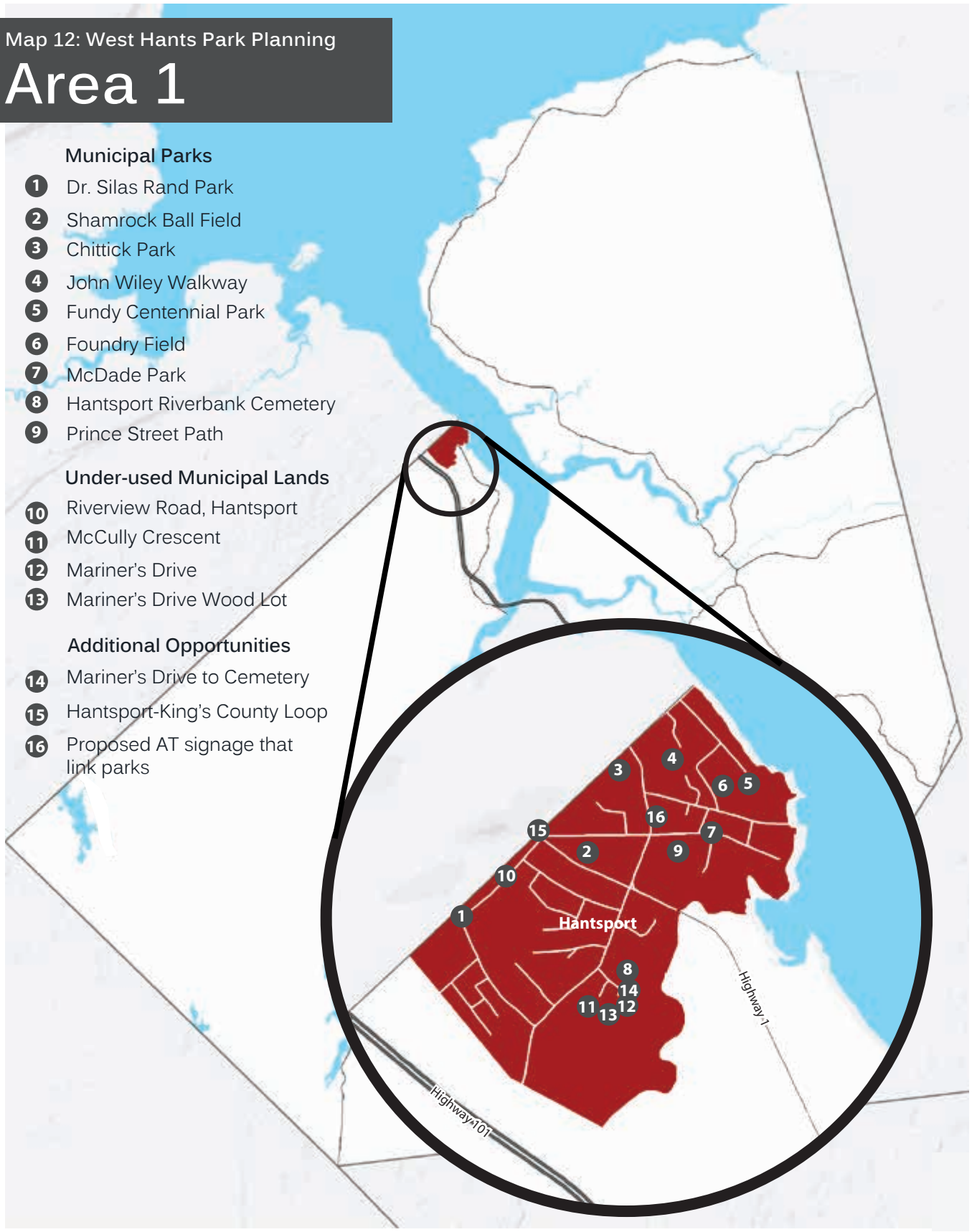
Private Partnerships

8. Castle Frederick Farm Trails (see page 74)
9. Rail to Trail (throughout West Hants)
   - Work with landowners to formalize trail in railway right-of-way including lease agreements, signage, trailheads, receptacles, emergency kits where appropriate and doggy bags.



Map 12: West Hants Park Planning

Area 1



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

Network Opportunities for Area 1

Details for each parcel area provided in Appendix 2.

Municipal Parks

1 Dr. Silas Rand Park

- Park signage.
- More seating options.
- Addition of a shade tree or shade/picnic structure.
- Opportunity for community gardens.

2 Shamrock Ball Field

- Park signage.
- Addition of garbage receptacles by dugouts.
- Dugout upgrades (e.g. concrete patch work, improve drainage behind dugouts, painting).
- If desired, a treed buffer between residents to the south and west of the field could be planted.
- Investigate community interest and cost of field lighting.

3 Chittick Park

- Signage, including interpretive sign related to river and history.
- Staff education regarding mowing around trees.
- Have an arborist monitor tree condition around fountain.

4 John Wiley Walkway

- Property serves as potential access point to rail-trail if rail line is to be converted.



5 Fundy Centennial Park

- Park signage.
- Need for more garbage receptacles on site.
- Renovation of gazebo needed (e.g. shingles, trim).
- Reset brick pad to gazebo.

6 Foundry Field

- Ensure Maintenance.

7 McDade Park

- Park signage.
- Create plan to reorganize park monuments to have better use of space.
- New coat of paint on park bench.
- Addition of garbage can by park bench.
- Remove block planter from park. Plant shrubs directly into ground. No need for raised planter.

8 Hantsport Riverbank Cemetery

- Park signage.
- Create a plan for future cemetery expansion.
- Strategically plant shade and ornamental trees for shade and visual interest for visitors.
- Develop a trail loop along upper portion of slope past cemetery, along adjacent Municipally-owned land through to Mariner's Drive.

9 Prince Street Path

- Maintain connection to HMCC from Prince Street.
- Walkway signage indicating ownership/ maintenance.

Under-used Municipal Lands

10 Riverview Road, Hantsport

- Given the close proximity to other parks and open spaces, it is recommended this parcel be divested to fund the development of nearby municipally-owned parcels.

11 McCully Crescent

- Divest parcel from Municipal holdings and invest in other park and open space opportunities in the area.

Network Opportunities for Area 1

Details for each parcel area provided in Appendix 2.

12 Mariner's Drive

- Retain parcel as part of future park and open space expansion (with adjacent municipally-owned land for Hantsport Cemetery).
- Portion of property (e.g. along McCully Crescent) could be subdivided without compromising future park development on this parcel.
- Any park and open space/trail development would require a fence along the top of the slope.

13 Mariner's Drive Wood Lot

- Parcel ideal for residential lot.
- Lumber from trees can be harvested for community purpose (e.g. amenity structure).
- Divest land to fund the development of nearby municipally-owned parcels for park and open space use.

Additional Opportunities

14 Mariner's Drive to Hantsport Cemetery

- Subdivide and divest lands not needed to enhance trail connection/loop and Cemetery park. Expand on Cemetery with loop and parkland.

15 Hantsport - King's County Walking Loop (Priority 2 Park)

- Consider signing urban walking loops. A 5k loop was identified during consultation and in former Town of Hantsport Trails Map in the Hantsport Municipal Planning Strategy.

16 Proposed AT signage that link parks

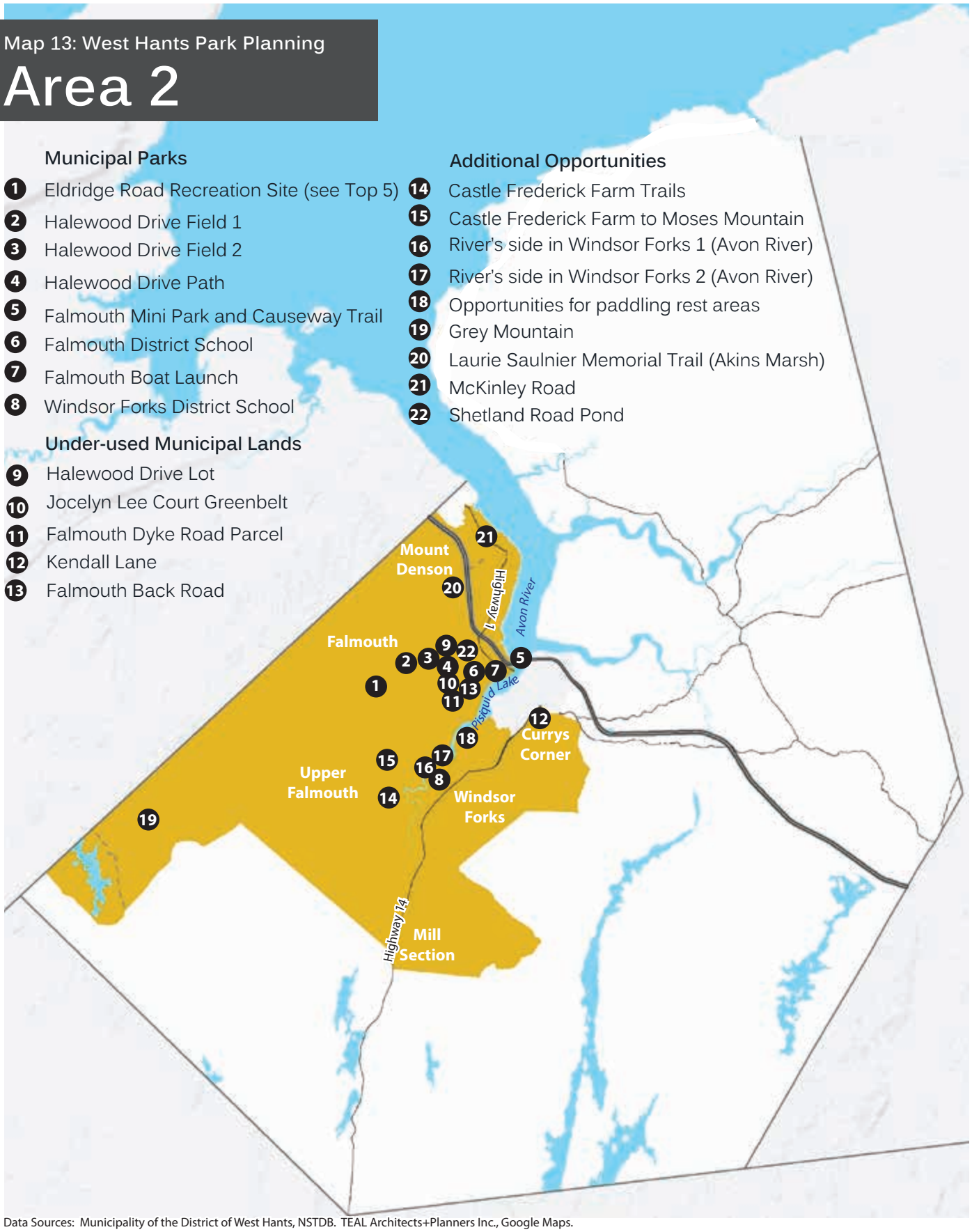
- Consider signing AT corridors to direct traffic to parks and open space.



Hantsport Cemetery

Map 13: West Hants Park Planning

Area 2



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

Network Opportunities for Area 2

Details for each parcel area provided in Appendix 2.

Municipal Parks

1. Eldridge Road Recreation site (See Top 5)

2. Halewood Drive Field 1
   - Signage
   - Continue to own and maintain parcel to be used by the neighbourhood.
   - Formalize entrance to parcel from Halewood Drive.
   - Consider adding amenity features to the site (e.g. benches, trail loop).

3. Halewood Drive Field 2
   - Signage indicating ownership, management, hours of use.
   - Signage to identify stormwater movement on site and importance of water management for local ecology.
   - Low point in south eastern portion of field requires topsoil fill.

4. Halewood Drive Path
   - Signage to indicate ownership and maintenance.
   - Pave the path for ease of maintenance.
   - Lighting attached to existing utility poles.
   - If privacy becomes a concern by neighbouring residents, consider wooden post style fencing along each side rather than chain link fencing.

5. Falmouth Mini Park and Causeway Trail (See Top 5 pages)

6. Falmouth District School
   - No recommendations for properties managed by School Board.

7. Falmouth Boat Launch
   - Signage upgrades (when needed)
   - Cut back vegetation from ramp shoulders.
   - Remove existing concrete ramp and replace with gravel (short term), concrete (long term).

8. Windsor Forks District School
   - No recommendations for properties managed by School Board.

Under-used Municipal Lands

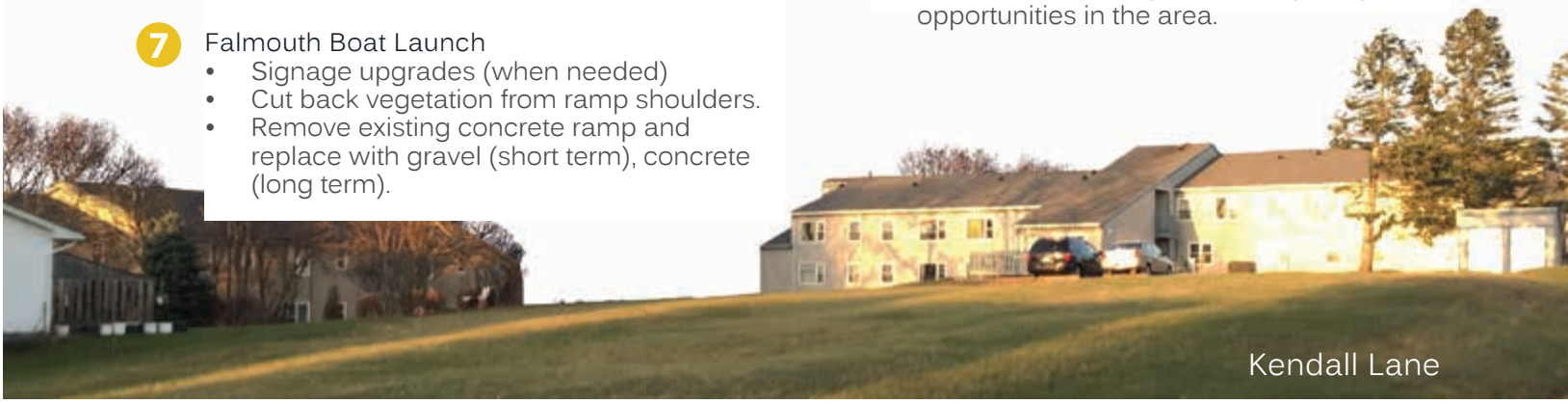
9. Halewood Drive Lot
   - Given the number of parks and open space parcels in the neighbourhood, it is recommended this parcel be divested to fund the development of nearby municipally-owned parcels.

10. Jocelyn Lee Court Greenbelt
    - Retain as municipal greenbelt.
    - Trail loop possible on upper side of slope.

11. Falmouth Dyke Road Parcel
    - Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.

12. Kendall Lane (Priority 2 Park)
    - Signage.
    - Consider regrading a portion of the parcel to create flat accessible surface; will require wall construction and drainage.
    - Opportunity for shade trees, community garden, sitting areas, playground.
    - Work with Kendall Court Seniors Complex and surrounding neighbours to identify parks and open space needs.

13. Falmouth Back Road
    - Divest parcel from Municipal holdings and invest in other parks and open space opportunities in the area.



Kendall Lane

Network Opportunities for Area 2

Details for each parcel area provided in Appendix 2.

Additional Opportunities

14 Castle Frederick Farm Trails (Priority 2 Park)
- Portions of this land are culturally significant and are voluntarily protected by the landowner in partnership with the Archaeological Land Trust of Nova Scotia. Detailed information is found here: http://www.altns.ca/castlefrederick.htm
- Work with owners of Castle Frederick Farm to: install wayfinding, entrance and interpretive signage; enhance accessibility of the trails; and develop appropriate rest and play areas.

15 Castle Frederick Farm to Moses Mountain
- See MWH Trails Plan p. 82 for proposed trail network, also supported through consultation for this Parks and Open Space Plan.

16 River's side in Windsor Forks 1 (Avon River)
- Explore possibility of a picnic table/ paddling rest area.

17 River's side in Windsor Forks 2 (Avon River)
- Explore possibility of a picnic table/ paddling rest area (on island).

18 Opportunities for paddling rest areas
- Explore other locations for picnic table/ paddling rest area.

19 Grey Mountain
- Explore the value of land use or lease agreements to the parks and open space network on privately held land holdings throughout Grey Mountain areas (excluding the Water Protection Areas.

20 Laurie Saulnier Memorial Trail (Akins Marsh)
- See Trails Plan 2013 for details.
- Support relationship between Hants West Wildlife Association, DNR, Ducks Unlimited Wildlife Habitat Canada.

21 McKinley Road
- Develop a Neighbourhood Park overlooking water with signed and safe water access for paddlers and possibly swimmers. If permitted, connect to rail to trail. Seek partnership with Provincial Government to establish park on its land.

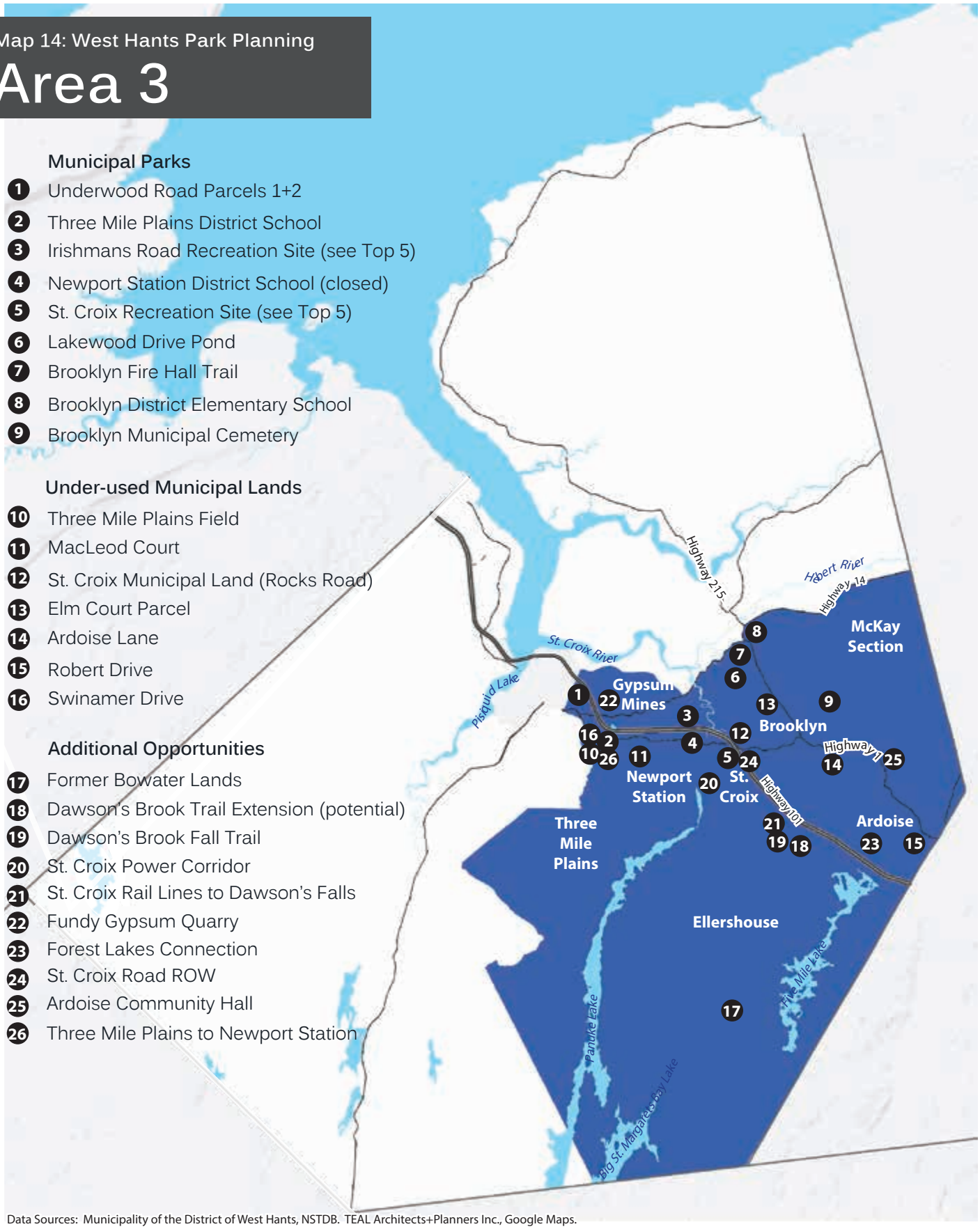
22 Shetland Road Pond
- This is a stormwater retention pond. However, due to its visual significance and recreation potential for sitting, watching and playing nearby, issues regarding liability and safety should be considered to enable the safe use by residents.
- Improve seating, signage, trees to buffer noise and view from the highway and shade tree for shelter.



Atkins Marsh

Map 14: West Hants Park Planning

Area 3



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

Network Opportunities for Area 3

Details for each parcel area provided in Appendix 2.

Municipal Parks

1 Underwood Road Parcels 1+2

- Signage.
- Evaluate encroachment into municipal land by surrounding residents (e.g. tree clearing, landscaping).
- Retain as treed, naturalized area for shade, stormwater attenuation, wildlife habitat. Retain open space and develop as formal neighbourhood park.
- Formalized access into the park (e.g. delineate public from private property along entrance).
- Work with neighbourhood to develop a park needs assessment for future park amenities.

2 Three Mile Plains District School

- No recommendations for properties managed by School Board.

3 Irishmans Road Recreation Site (see Top 5)

4 Newport Station District School (closed)

- Close proximity to Irishmans Road. Explore potential to link the properties via a new trail corridor.
- Explore partnerships with community groups who may be able to lease the building.
- Explore opportunities for a Public/ Private Partnership or sale of building to retrofit school into seniors living.

5 St. Croix Recreation Site (see Top 5)

6 Lakewood Drive Pond

- Improve access to water.
- Signage indicating ownership, use, and maintenance.

7 Brooklyn Fire Hall Trail

- Create resting spots for sitting, picnicking, include receptacles.
- Switchbacks or curve in trail bed would lessen the slope in some areas and create more visual interest.
- Trail bed could be made more accessible by using crusher dust.
- Planting of trees (native or ornamental) would provide visual interest along the trail route.
- The addition of trees and/or children's playspaces **must** be reviewed in conjunction with Fire Department Executive due to space limitations as this is a helicopter landing area.

8 Brooklyn District Elementary School

- No recommendations for properties managed by School Board.

9 Brooklyn Municipal Cemetery

- More noticeable signage to mark cemetery.
- Interpretive boards documenting history.
- Expansion of gravel pad at entrance for additional parking.

Under-used Municipal Lands

10 Three Mile Plains Field

- Retain as a multi-functional space for use by community centre users.

11 MacLeod Court

- Divest parcel to fund the development of nearby municipally-owned parcels.



Irishmans Road Recreation Site

Network Opportunities for Area 3

Details for each parcel area provided in Appendix 2.

Under-used Municipal Land con't

12 St. Croix Municipal Land (Rocks Road)
- See Trails Plan 2013 for additional details.
- Although isolated by the highway, this property is an excellent display of local geology, West Hants dykelands, freshwater ecology, and walking trails.
- Public access to the creek.
- Promote as recreation area (e.g. walking, picnicking, sitting, sports).
- Work with the Province of Nova Scotia on possible trail connections to St. Croix Recreation Site underneath Highway 101.

13 Elm Court Parcel
- Develop as a Neighbourhood Park.
- Regrade entrance to make accessible.
- Create simple trail loop
- Install garbage bin and seating area.
- Entrance signage indicating use and management

14 Ardoise Lane
- Although this parcel is in an ideal geographic location for a Neighbourhood Park, this lot and its set back into a quiet residential street does not suit itself to be a well-visited park space.
- Divest from Municipal holdings and invest in other parks or open space in the area.

15 Robert Drive
- Work with developer at Forest Lakes Community to outline future parks and open space development in close proximity to Robert Drive parcel. This parcel could become a municipal access point to proposed open space and trails. If road access to Forest Lakes is created at the foot of Robert Drive, this municipal parcel would not be required. At that time, this parcel should be considered for divestment

16 Swinamer Drive
- Divest parcel from Municipal holdings and invest in other parks and open space opportunities in the area.

Additional Opportunities

17 Former Bowater Lands
- Consider working with the Province of NS and motorized vehicle groups such as SANS and ATVNS to determine if signage or amenities are required and/or possible in the motorized vehicle trail network.

18 Dawson's Brook Trail Extention (potential)
- Identify and connect trail to any waterfalls.

19 Dawson's Brook Fall Trail
- See trails Plan 2013 for details.
- Formalize walking trail with landowner to Dawson's Falls; sign roadways.

20 St Croix Power Corridor
- Consider working with landowner to formalize walking trail in power and turbine corridor to Dawson's Falls; sign roadways.

21 St Croix Rail Lines to Dawson's Falls
- Consider working with landowner to formalize walking on old railbed to Dawson's Falls; sign roadways.

22 Fundy Gypsum Quarry
- Maintain relationship with Fundy Gypsum Lands in the event that trails may be developed through the site.

23 Forest Lakes Connection
- Ensure public trail connections to (future) Forest Lakes Country Club greenspaces.

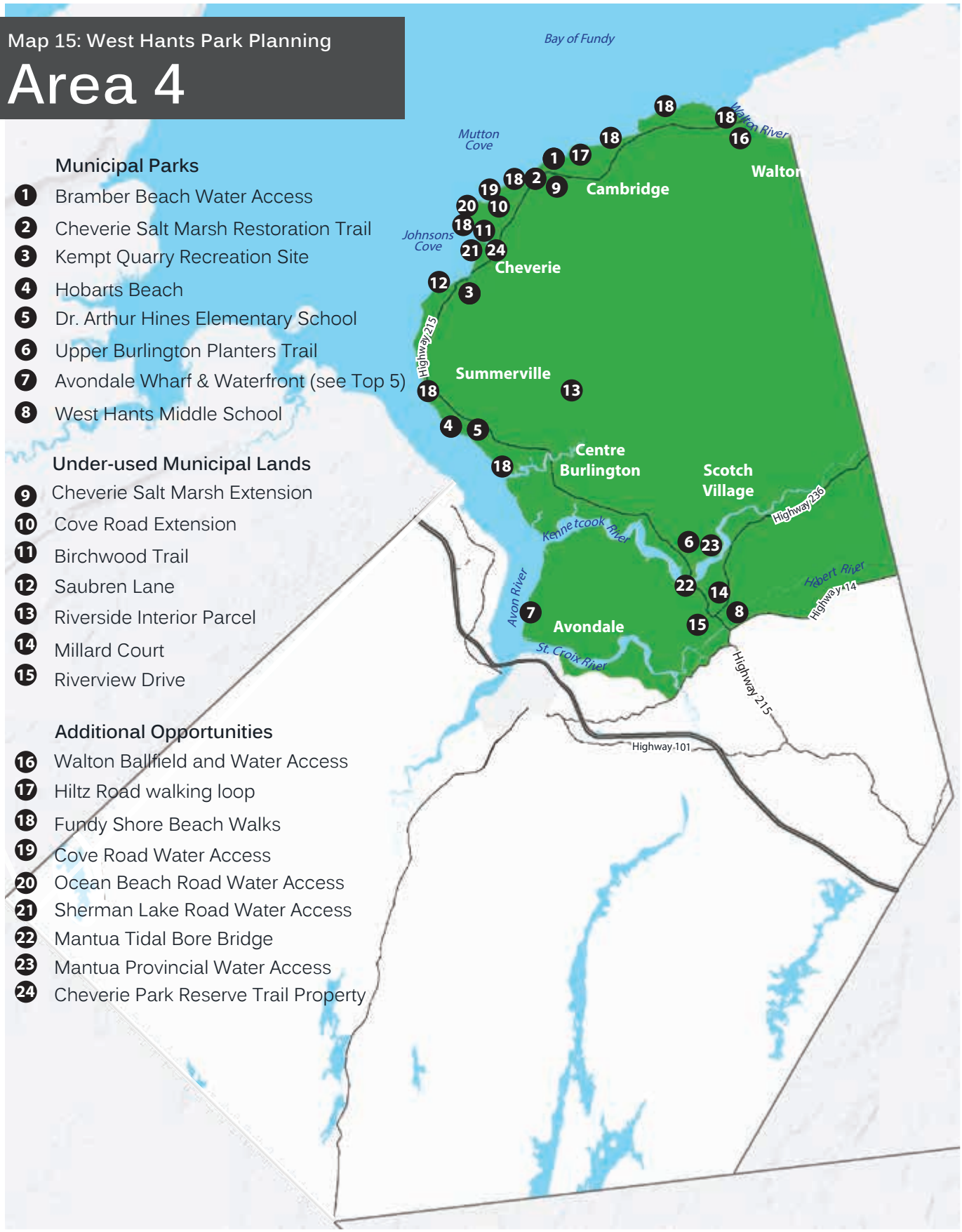
24 St. Croix Road ROW
- Connect St. Croix Recreation Site with underused Municipal parcel on opposite side of Highway PID 45061223.

25 Ardoise Community Hall
- Consolidate parking to one side (e.g. across road), expand community garden, create outdoor social/passive recreation space, outdoor learning space for children.

26 Three Mile Plains to Newport Station
- Evaluate opportunity to develop a trail loop connecting Three Mile Plains District School, Gypsum Mines, Irishmans Road and Newport Station District School.

Map 15: West Hants Park Planning

Area 4



Municipal Parks

1. Bramber Beach Water Access
2. Cheverie Salt Marsh Restoration Trail
3. Kempt Quarry Recreation Site
4. Hobarts Beach
5. Dr. Arthur Hines Elementary School
6. Upper Burlington Planters Trail
7. Avondale Wharf & Waterfront (see Top 5)
8. West Hants Middle School

Under-used Municipal Lands

9. Cheverie Salt Marsh Extension
10. Cove Road Extension
11. Birchwood Trail
12. Saubren Lane
13. Riverside Interior Parcel
14. Millard Court
15. Riverview Drive

Additional Opportunities

16. Walton Ballfield and Water Access
17. Hiltz Road walking loop
18. Fundy Shore Beach Walks
19. Cove Road Water Access
20. Ocean Beach Road Water Access
21. Sherman Lake Road Water Access
22. Mantua Tidal Bore Bridge
23. Mantua Provincial Water Access
24. Cheverie Park Reserve Trail Property

Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

Network Opportunities for Area 4

Details for each parcel area provided in Appendix 2.

Municipal Parks

1 Bramber Beach Water Access

- Install signage to identify ownership, uses, and to house tidal information.
- Expand parking area at trailhead.
- Regrade trail bed to improve walking surface and drainage. Raising the trail bed may be required near the beach.
- Monitor for illegal dumping and/or add receptacles at trail head.
- Connect to larger network of beach access points on Highway 215.

2 Cheverie Salt Marsh Restoration Trail

- Repairs to Camera Obscura internal structure (e.g. door).
- Signage to identify Camera Obscura, maintenance, views.
- Define path (trailhead) from parking lot to Camera Obscura.

3 Kempt Quarry Recreation Site (Priority 2 Park)

- Signage and wayfinding.
- Develop visual/physical barrier between trail and parking.
- Upgrade paths to improve accessibility around the pond to picnic and swimming area.
- Install sod over exposed gravel (on gypsum sinkholes).
- Consult with an arborist to evaluate tree health around amenities.
- Basic site landscaping at entrance and picnic area to improve park aesthetic.
- More seating and picnic opportunities around the Quarry.

4 Hobarts Beach (Priority 2 Park)

- Redesign parking lot for more efficient layout, to create a visual/physical barrier between people and cars, and to improve drainage.
- Shoreline stabilization necessary around boat launch.
- Signage at top of Block Wharf Road and at parking lot.
- Formalize fire pits with steel boxes/BBQ.
- Regrade picnic area for accessibility.
- Monitor for illegal dumping.

5 Dr. Arthur Hines Elementary School

- No recommendations for properties managed by School Board.

6 Upper Burlington Planters Trail

- Signage at roadside indicating trail and cultural site, signage at trail head.
- Interpretive signage/shelter in need of structural and cosmetic upgrades.
- Weeding of gravel baseball diamond
- New or updated basketball court

7 Avondale Wharf & Waterfront (see Top 5)

8 West Hants Middle School

- No recommendations for properties managed by School Board.

Under-used Municipal Lands

9 Cheverie Salt Marsh Extention

- Consider future connection to existing trail and boardwalk.

10 Cove Road Extension

- Divest from Municipal holdings and invest in other parks or open space in the area.

11 Birchwood Trail

- With large wooded residential parcels adjacent to municipal parcel, it is unlikely that the development of public park would be well-used; divest from municipal ownership to fund other parks and open space in the area.

12 Saubren Lane

- Divest parcel from municipal holdings and invest in other parks and open space opportunities in the area.

13 Riverside Interior Parcel

- Divest from Municipal holdings and invest in other parks or open space in the area.

Network Opportunities for Area 4

Details for each parcel area provided in Appendix 2.

Under-used Municipal Land con't

14 Millard Court
- Divest from Municipal holdings and invest in other parks or open space in the area.

15 Riverview Drive
- Little potential for water access or recreation use due to steep slope.
- Divest from Municipal holdings and invest in other parks or open space in the area.

Additional Opportunities

16 Walton Ballfield and Water Access
- Consider exploring partnership with landowner to clear a stable walking track around the ballfield and formalize water access.

17 Hiltz Road walking loop
- Explore opportunity for walking loop clearing, formalizing access to beach, promotion, signage

18 Fundy Shore beach walks (2nd Priority)
- Identify beach walks with existing or potential formalized water/land access points; develop a consistent wayfinding and interpretive signage program for key points along the walks; consistency should be in signage materials, colours, locations, information available (excepting special site-specific information); include tide charts at each interpretive sign.

19 Cove Road Water Access
- Formalize beach access: signage from road and at beach, garbage receptacles, grading/mitigate impacts of erosion on accessway.

20 Ocean Beach Road Water Access
- Formalize beach access: signage from road and at beach, garbage receptacles, grading/mitigate impacts of erosion on accessway.

21 Sherman Lake Road Water Access
- Formalize beach access: signage from road and at beach, garbage receptacles, grading/mitigate impacts of erosion on accessway.

22 Mantua Tidal Bore Bridge
- Install interpretive signage at this bridge.

23 Mantua Provincial Water Access
- Consider working with Province to install water access park, signage for tubers, boogie boarders, swimmers, etc. of the Mantua Tidal Bore (if appropriate location and widely desirable activities. This was noted during public engagement.)

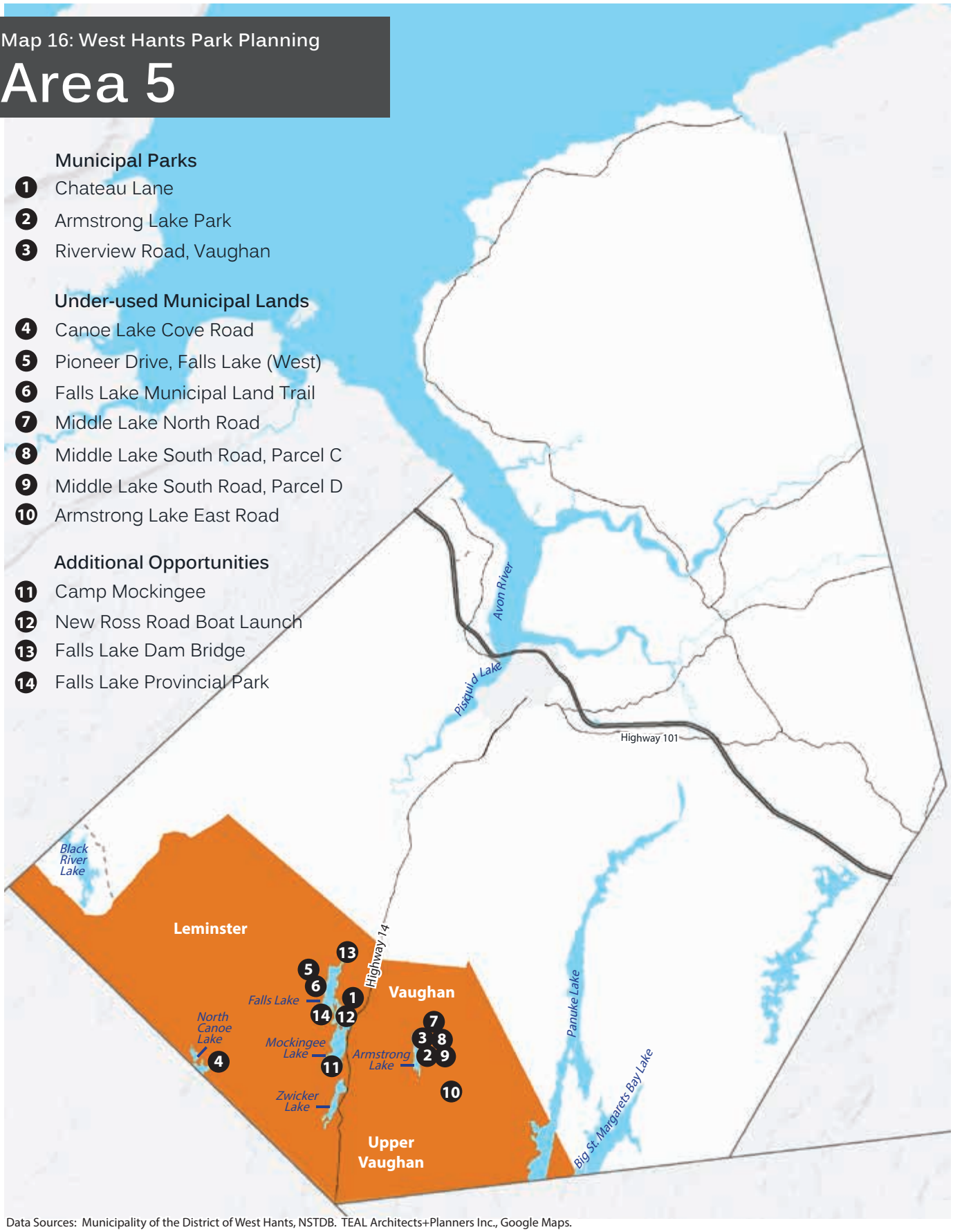
24 Cheverie Park Reserve Trail Property
- See Trails Plan 2013 for details on the property.
- Request right of first refusal should adjacent lands ever be for sale.



Cheverie Salt Marsh Restoration Trail

Map 16: West Hants Park Planning

Area 5



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

Network Opportunities for Area 5

Details for each parcel area provided in Appendix 2.

Municipal Parks

1 Chateau Lane

- Install entrance signage and trail markers.
- Retain land and develop as formal trail loop.
- Create formal access point from surrounding roadway.
- Potential for expanded/renovated trail system on property.
- Establish partnership with Sugar Shack property owners to encourage use of trail and outdoor programs.

2 Armstrong Lake Park

- Entrance signage
- New interpretive signage about local wildlife (to replace Loon signage that is damaged).
- New trail /water access markings with post.
- New gravel surface for boat launch to improve access to water.

3 Riverview Road, Vaughan

- Retain land to protect wetland habitat and for recreation value.
- Partner with community group or NGO to highlight importance of ecosystem.
- Interpretive signage before the bridge at gravel area.
- Boardwalk or platform on the water for recreation (e.g. fishing) and interpretation.
- Signage to signify ownership and park use.
- Formally connect parcel with Armstrong Lake Park to the south.

Under-used Municipal Lands

4 Canoe Lake Cove Road

- Develop public access to the lake.

5 Pioneer Drive, Falls Lake (West)

- Trail connection opportunity to improve water access from Levy Meadow Trail.
- Subdivide or enact an easement/land use agreement on the remainder of the property.
- Trail connection opportunity to improve water access from Levy Meadow Trail.
- Subdivide or enact an easement on the remainder of the property.

6 Falls Lake Municipal Land Trail

- More visible signage.
- Promote as a public water recreation area.
- Beach improvement (e.g. sand, benches, fire pit/BBQ area).
- Garbage receptacles.
- Periodic site monitoring.

7 Middle Lake North Road

- Middle Lake is not a high value amenity area. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.

8 Middle Lake South Road, Parcel C

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.

9 Middle Lake South Road, Parcel D

- Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.

10 Armstrong Lake East Road

- Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



Riverview Road

Network Opportunities for Area 5

Details for each parcel area provided in Appendix 2.

Additional Opportunities

11 Camp Mockingee
- Consider future acquisition by obtaining first right of refusal upon the future sale of the land (if ever up for sale).

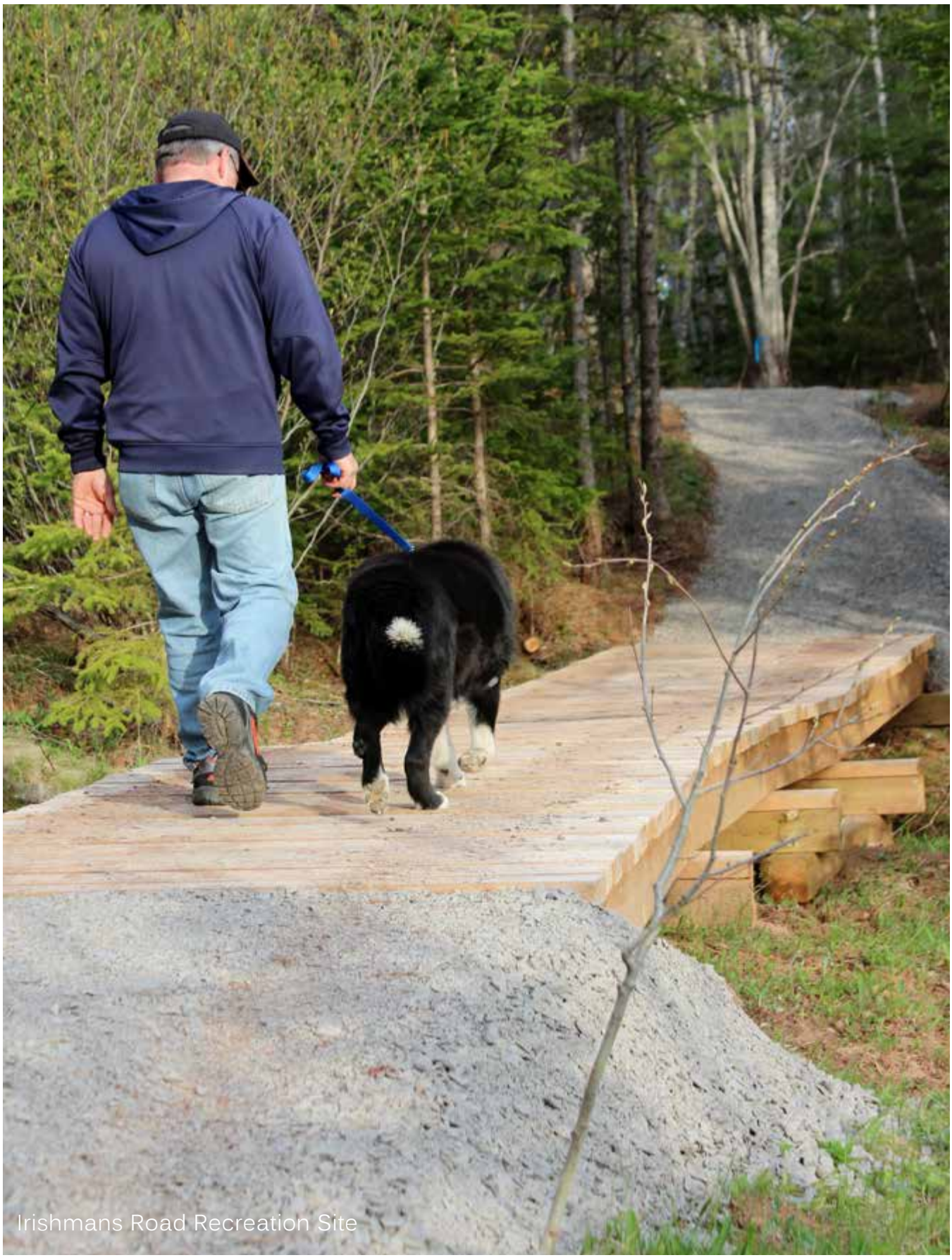
12 New Ross Road Boat Launch
- Consider acquiring easement or purchase property and enable an easement for NS Power to ensure safe public access to the boat launch.

13 Falls Lake Dam Bridge
- Consider partnership with NS Power to permit the public to cross the dam's pedestrian bridge. (This was noted during Public Engagement).

14 Falls Lake Provincial Park
- Consider future acquisition by obtaining first right of refusal upon the future sale of the land (if ever up for sale).



Armstrong Lake



Irishmans Road Recreation Site

5.0 IMPLEMENTATION

5.1 Prioritized Actions

Year 1

1. Request Council to adopt this Plan, which includes Appendix 1: iv. *Suitability Framework*, which may help the Municipal staff to evaluate the suitability of new lands for park and open space purposes.

2. Present this Parks and Open Space Plan to Stakeholders and general public for promotion. Collectively, citizens of West Hants may work together in various ways to achieve the opportunities identified during consultation and which are listed in this plan.

3. Amend policy documents to enable the outcomes of this plan. See Appendix 6 for suggestions for the Subdivision By-law(s) and Municipal Planning Strategies.

4. Ensure the Municipality has the ability to provide tax receipts for donations to the 'parks budget' (e.g. Charitable Status with Canadian Revenue Agency).

5. Assign staff to regularly track and update a new database of funding and partnership opportunities for the development and maintenance of parks and open space.

6. Phase in new Active Avon signage with upgrades to parks and open space.

7. Adopt a plan review at the one-year and five-year points after the initial adoption of this plan. Amendments should be made and adopted by Council before the end of each scheduled review period.

8. Obtain and train staff on a tracking software to monitor and schedule park maintenance, acquisition and development of parks and open space.

Years 1 - 3

9. Build on existing parks and open space education programs, as recommended in Section 5.3, to increase knowledge of natural assets and benefits of outdoor spaces in West Hants.

10. Initiate an official marketing campaign to promote the existing and potential West Hants Parks and Open Space Network. Use opportunities identified in this plan to supplement other Municipal initiatives.

Years 1 - 10

11. Actively seek to identify, protect and develop, through easement or acquisition, water access points (some are identified on Map 4). This could be facilitated by a 'West Hants Water Access Plan'.

12. Develop or upgrade Priority 2 Parks and Partnership Opportunities seen in Section 4.5 as soon possible.

13. Improve the places where people walk as recommended in the Avon Region Active Transportation Plan.

14. Consider adding to the lending program of sports equipment - free of charge - for items such as cross country skis, etc.

15. Consider adding the West Hants Cultural Landscape to this Plan. Survey the Municipal District for locations of cultural significance, such as Acadian Heritage sites, Mi'kmaq Heritage Sites, Planters Heritage Sites, culturally-significant views, and so on. Consider connecting with the group that promotes Acadian Heritage to protect or support promotion for Acadian Heritage sites, seen online at http://ns1763.ca/remem/acadianheritagesigns.html.

    (Note: Two Acadian Heritage Sites currently fall on or within 50m of Municipal lands: one across from Cheverie Salt Marsh and one at Avondale Wharf and Waterfront.)

These Actions should be completed in their order to achieve the intent of this Plan.

5.2 Decision-Making Toolkit for Land Management Decisions

A Decision Making Toolkit was developed to be used by Municipal staff. The Toolkit will guide decisions about the West Hants Parks and Open Space network to ensure decisions about parkland acquisition, divestment and development meet the needs of citizens and protect unique natural and cultural resources. Users will be able to evaluate and prioritize lands for acquisition based on four standard issues: useability, suitability, budget and urgency.

Priority land is that which provides a solution to all of the four issues. This is illustrated in Figure 9 below.

Also included in the Toolkit is information about acquisition methods, the definition of useable land, a land suitability criteria, funding opportunities, and scenarios that illustrate the issues of urgency and land divestment.

The Toolkit is in Appendix 1.

The decision-making process is on the next page.



Figure 9: Acquisition Priorities.

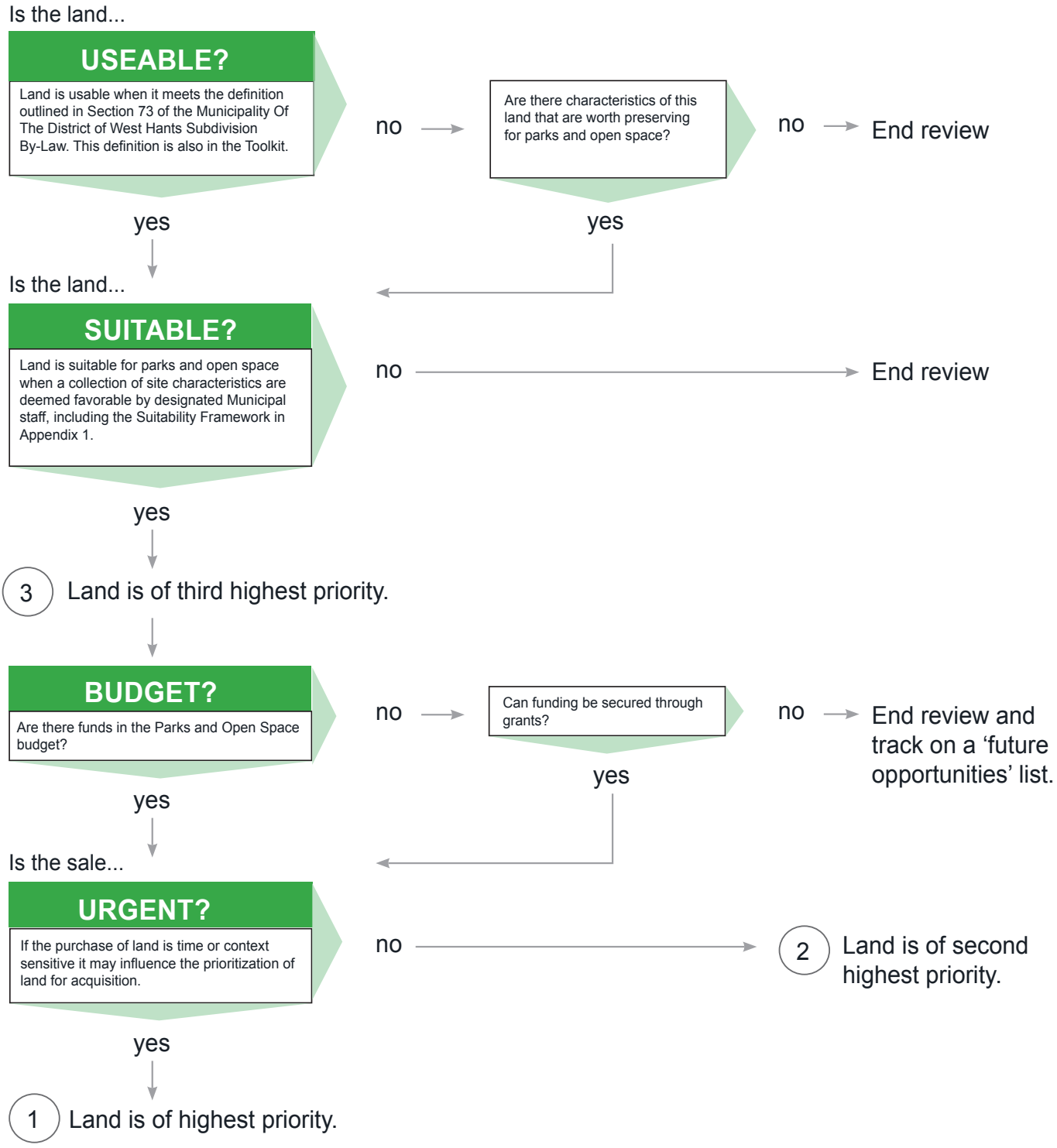


Figure 10: Process to Identify Priority Lands.

5.3 Education and Promotion Opportunities

The more citizens know about the parks and open space in their communities the more they will feel pride and desire to use and even become stewards of these shared spaces. When information is shared about events in these spaces people can be connected to members of the broader West Hants community. Citizens can plan day trips to various parks and open space when the unique features of each space is available and promoted and physical health can improve with increased activity in the great outdoors. Widely promoting the West Hants parks and open space network will attract visitors who will come to experience the rich history, beauty and local business offerings in West Hants. Below identifies many opportunities for education and promotion of the West Hants parks and open space network:

A. Initiate an online parks and open space marketing campaign

I. Develop a Web Page

Promoting parks and open space is more than hosting information online, it should also be action oriented. Online promotional methods can profile outdoor spaces and activities in the Municipality. In addition to background information, news postings should be frequent, consistent in quality and message, and highlight the benefits of parks and open space to citizens.

The West Hants Municipal Website should contain a stand-alone page for Parks and Open Space. This space would be available for park-related documents (for download), links to interactive mapping or relevant parks and recreation sites (like Acadian Heritage Sites page, Trails NS, NS Department of Environment, West Hants Trail Association, etc.).

Effort must be made to launch West Hants Park Network information on other agencies' websites (e.g. Province of Nova Scotia). The quality and accuracy of parks and open space information hosted on these websites must be monitored and updated. 'Active Avon' branding should be used.

II. Develop an online interactive map for use by citizens and visitors.

Municipally-hosted interactive maps enable Municipal Staff to distribute up-to-date, and easy-to-understand park and open space network information to a large audience. Information includes parks and open space sizes, locations, measuring tools, amenities available, activities on site, photos, related links and so on. Unlike paper maps, online maps can be easily updated as information changes and the number of people viewing online content can be monitored.



B. Printed park and trails maps/ brochures.

Some citizens of West Hants do not have (nor require) access to internet. We see value in producing a parks and open space brochure with inset maps to highlight 'Places To Go'. These brochures can be hosted in prominent locations around the Municipality (e.g. fire halls, community halls, gas stations, municipal office, convenience stores). In addition to hosting information, these brochures in themselves are promotional material that can easily be shared and used while in parks and open space for direction.

C. Establish a coordinated system of cultural and environmental interpretation.

Some outdoor spaces have great examples of park interpretation associated with them (e.g. Upper Burlington Community Hall, Cheverie Salt Marsh), but their design and content is inconsistent. Creating a coordinated design, materials, and shelters (if required) will help create a Municipal wide brand that will help to inform citizens and visitors of the unique features of outdoor spaces in the Municipality.

A key component to a coordinated Fundy Shore Beach Walk is signage at multiple locations that highlight the changing schedule of tides. The timing and height of tide change with the day and the season, a calendar of high and low tides will allow citizens and visitors to plan their beach walks accordingly. This tidal signage would be changed seasonally and would be in line with 'Active Avon' branding.

Actively promote parks and open space for regional, national, and international sporting and entertainment events: Promoting existing parks and open space as ideal destinations for entertainment and sporting events can generate revenue from venue rental and spin-offs to the local economy. Local citizens can be involved in planning which can create a sense of pride and ownership of the spaces.

D. Guided outdoor walks and talks.

Building on existing guided walks we see value in expanding this program to highlight each of the six park planning areas. This would bring attention to not only the large parks and open space, but the smaller spaces and connections in between. Information sharing can be a new component to these events. Informative walks related to native tree and plant species, karst topography, or Acadian or Mi'kmaq cultural tours (among others) would allow for visiting educators or locally led tours.



E. Enable Stewardship

i. Volunteering and Donations

Create opportunities for volunteers to be stewards of parks and open space. Examples of stewardship may be pruning of fruit and shade trees, gardening, donating plants or doggy bags, design/build projects such as community gardens, rain gardens and special play spaces (e.g. trails, natural playgrounds public art).

Another opportunity is for citizens to donate funds, perform activities such as gardening or other maintenance like the 'Adopt a Highway' Program.

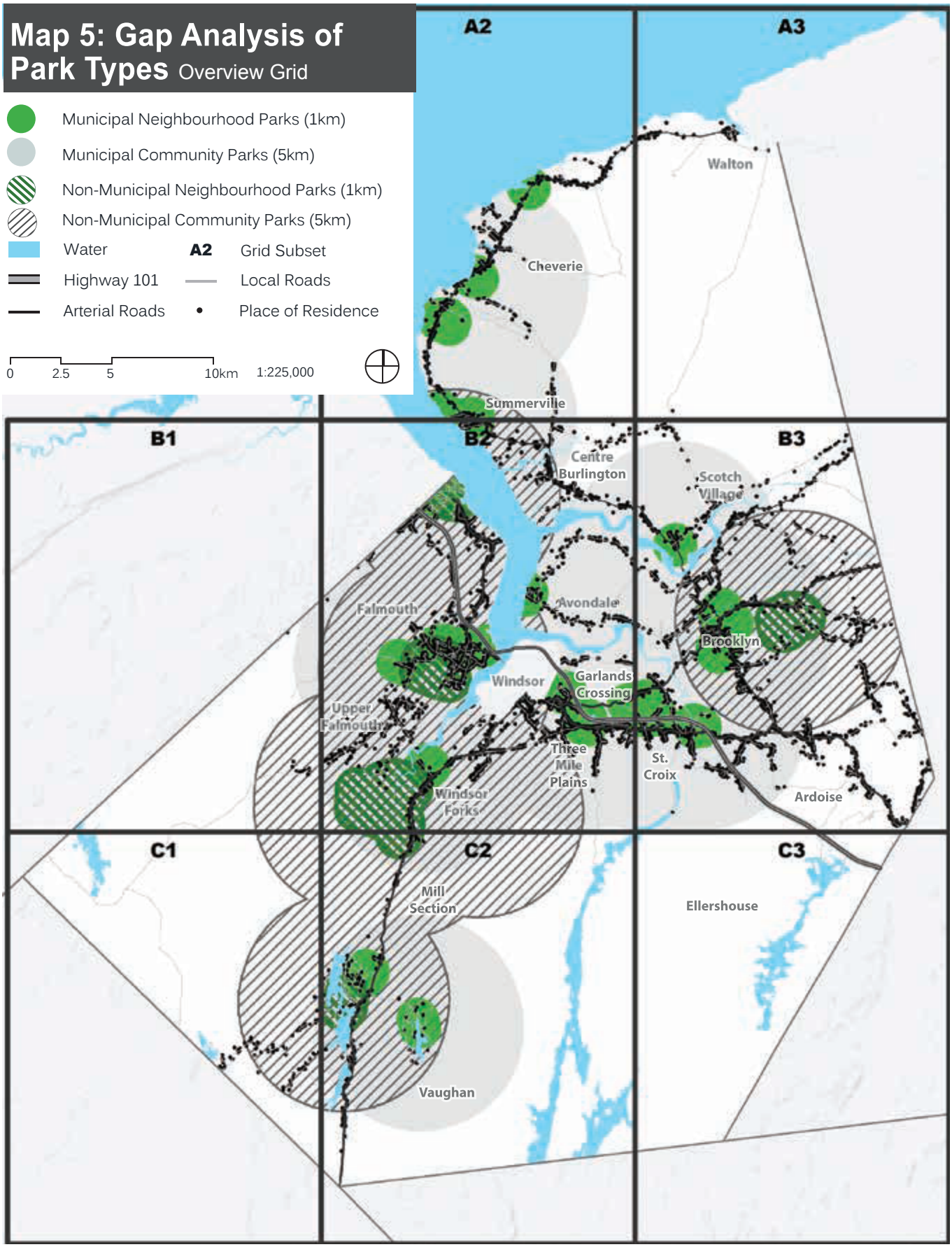
Opportunities may be facilitated on a section of the Website where citizens see maintenance and capital items needed for parks and open space.

ii. Workshops

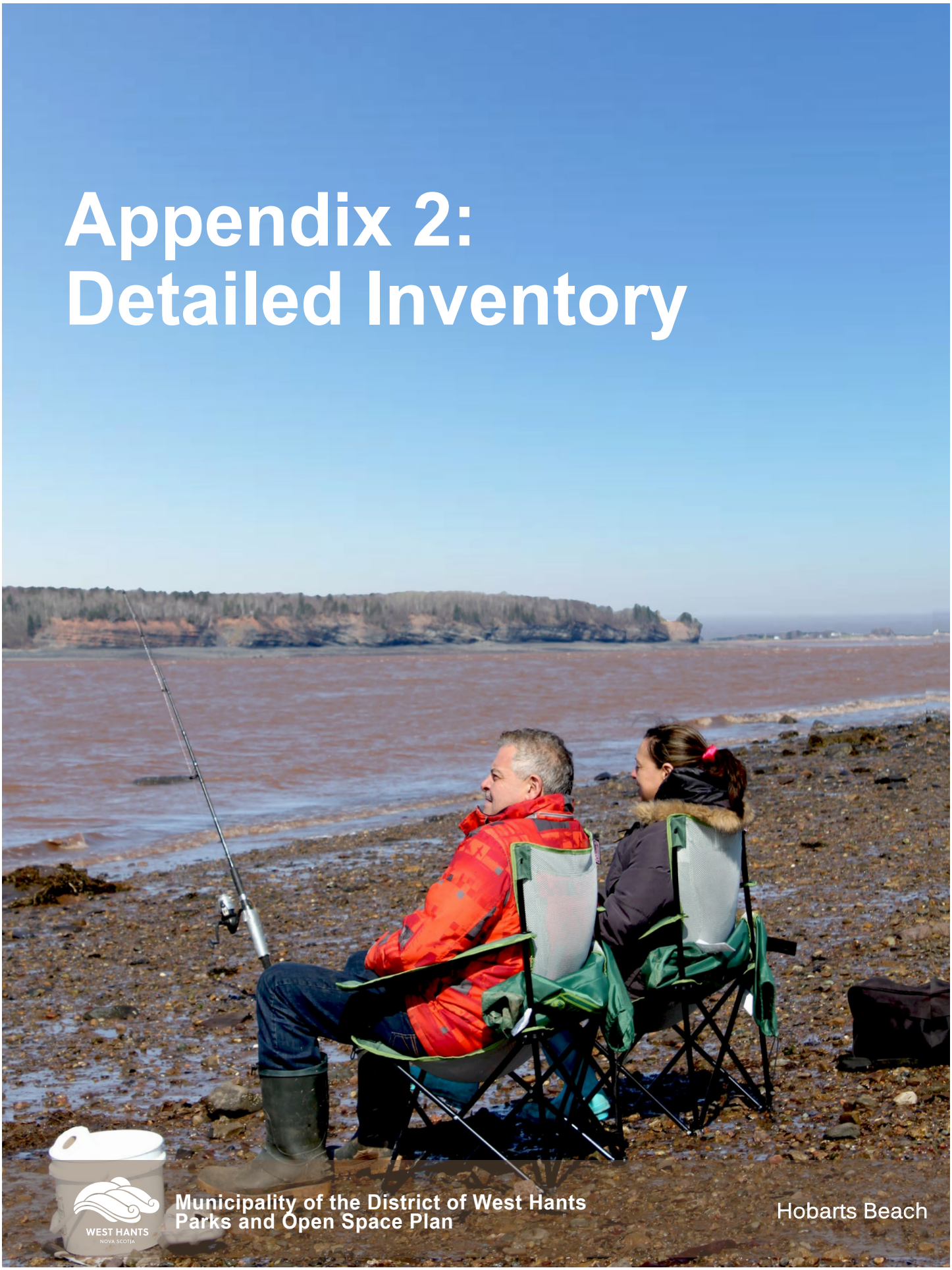
Community learning may be possible by hosting workshops with trained professionals (e.g. horticulturists, trail groups, designers, community facilitators, etc.).



Bike Maintenance 101 Workshop


Map 5: Gap Analysis of Park Types Overview Grid
Municipal Neighbourhood Parks (1km)
Municipal Community Parks (5km)
Non-Municipal Neighbourhood Parks (1km)
Non-Municipal Community Parks (5km)
Water
A2 Grid Subset
Highway 101
Local Roads
Arterial Roads
Place of Residence
0 2.5 5 10km 1:225,000
A2
A3
B1
B2
B3
C1
C2
C3
Walton
Cheverie
Summerville
Centre Burlington
Scotch Village
Avondale
Falmouth
Brooklyn
Windsor
Garlands Crossing
Upper Falmouth
Three Mile Plains
St. Croix
Ardoise
Windsor Forks
Mill Section
Ellershouse
Vaughan

Appendix 2: Detailed Inventory



Municipality of the District of West Hants
Parks and Open Space Plan

Hobarts Beach

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Photo Credits

Cover photo: Municipality of the District of West Hants Staff, 2016.

Other photos: Stephen Cushing and Municipality of the District of West Hants Staff, 2016.

Introduction

Inventory Organization

This document highlights the field work conducted by the Consultant Team. A full inventory of site features and analysis of opportunities has been provided for each of the 73 Municipally-owned parcels of parks and open space land.

Top 5 Priority Park Sheets

Found in Chapter 4.0, five parks in West Hants have been highlighted based on need for park investment/upgrades:

- Falmouth Mini Park and Causeway Trail
- Avondale Wharf and Waterfront
- Irishmans Road Recreation Site
- Eldridge Road Recreation Site
- St. Croix Recreation Site

For each of the above parks, Site opportunities have further been evaluated and a “Class D” cost assessment provided. A concept plan with locations highlights the approximate locations of site opportunities.

Inventory Sheets by Area

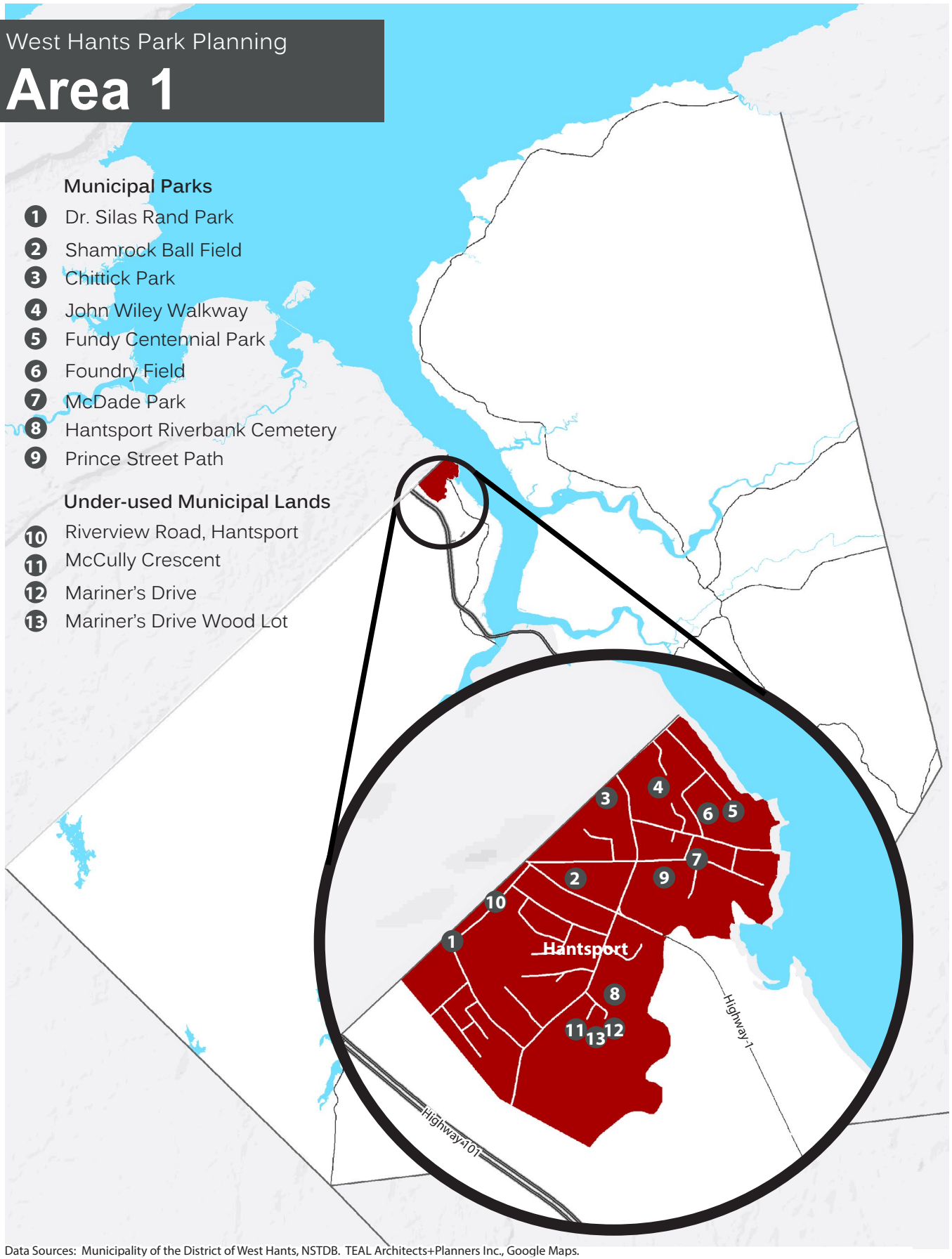
The remaining 68 parks are organized by the Park Planning Area they fall into within West Hants. Five Park Planning Areas were created that represent where people live and play. These Areas are defined by population, household location, geographic area, and potential to promote as a parks and open space destination.

Additional Opportunities

Unachieved opportunities were discovered during the creation of this Plan. These are listed in Chapter 4.0 within each Park Planning Area subsection.

West Hants Park Planning

Area 1



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

Dr. Silas Rand Park

1

Overview

PID: 45062668

Coordinates: 45.06278, -64.1916

Date visited: November 26, 2015.

Address: Riverview Road, Hantsport.

Classification: Neighbourhood Park.

Size: 0.12 acres (0.05 ha).

Land cover: Managed turf with a crusher dust path.

Topography: Land gently sloping to the north and west.

Maintained by: Municipality.

Use: Sitting, walking.

Access: From Rand Street and Riverview Road.

Parking: Gravel pad to the north, space for 1 car.

Signage: Small plaque on boulder in a garden close to the intersection.

History: Land donated to the former Town of Hantsport from Leo and Joyce Vaughn in 1995. Park named after Dr. Silas Rand, a Baptist Missionary to the Mi'kmaq people.

Extensive history is available at the Municipal Office.

Overlapping Management Plans: None.

Observations

- Low wooden fence along eastern perimeter.
- Overgrown corner garden with park history plaque.
- Gravel path filling in with grass.
- No opportunity for shade.

Opportunities

- Park signage.
- More seating options.
- Addition of a shade tree or shade/picnic structure.
- Opportunity area for community gardening groups.



2

Shamrock Ball Field

Overview

PID: 45048246

Coordinates: 45.06578, -64.1829

Date visited: November 26, 2015.

Address: 11 School St, Hantsport.

Classification: Community, District Parks.

Size: 2.00 acres (0.81ha).

Land cover: Managed turf and a sand ball diamond.

Topography: Very flat parcel graded specifically for baseball.

Maintained by: Municipality.

Use: Baseball, softball.

Access: From School Street.

Parking: None. 28 parking spaces in adjacent school lot. Parking on road shoulder.

Signage: None.

History: This land parcel was deeded to the former Town of Hantsport in 1928 by the Hantsport Amateur Athletic Association.

Overlapping Management Plans: None.

Observations

- Well maintained park and structures.
- Standing water in sand and outfield.
- Standing water behind dugouts.
- Two bleachers on site, one outside backstop on sidewalk. Both in good shape.
- Fence on top of dugouts pulling off.
- Some rusting on western bleachers.

Opportunities

- Park signage.
- Addition of garbage receptacles by dugouts.
- Dugout upgrades (e.g. concrete patch work, improve drainage behind dugouts, painting).
- If desired, a treed buffer between residents to the south and west of the field could be planted.
- Investigate community interest and cost of field lighting.



3

Chittick Park

Overview

PID: 45057387

Coordinates: 45.06915, -64.1819

Date visited: November 16, 2015.

Address: 19 Chittick Ave, Hantsport.

Classification: Community Park.

Size: 8 acres (3.24 ha).

Land cover: Turfed park with gravel walking paths. Much of upper park around fountain is under tree cover. Small garden beds along road on either side of fountain. Park continues along vegetated and naturalized river channel.

Topography: Flat.

Maintained by: Municipality.

Use: Sitting, reflecting, walking, riparian habitat, stormwater/drainage channel.

Access: From Chittick Avenue.

Parking: Road Shoulder, parking lot behind the grocery store.

Signage: Brass plaque identifying memorial to fire fighters.

History: The park was created during the former Town of Hantsport's Centennial year, 1995.

Overlapping Management Plans: None.

Observations

- Many trees damaged at bases by mower and trimmer activity.
- Upper park lit by flood lights.
- Fountain in good condition, some stone caps lifting.
- Trees and seating along upper river bed by Evangeline Trail Bridge.
- Well established shade trees.

Opportunities

- Park signage.
- Staff education related to mowing around trees.
- Have an arborist monitor tree condition around fountain.



4

John Wiley Walkway

Overview

PID: 45239100

Coordinates: 45.07062, -64.178

Date visited: November 26, 2015.

Address: LOT GA-1 Smith Crescent, Hantsport.

Classification: Linear Park.

Size: 0.21 acres (0.08 ha).

Land cover: Managed turf with small gravel parking area at the south eastern end of the parcel.

Topography: Flat parcel.

Maintained by: Municipality; The Municipality holds a lease with the Windsor and Hantsport Railway Company for the remainder of the trail between Smith Crescent and Foundry Road.

Use: No signs of use, possibly used by adjacent residents for sitting, playing.

Access: From Smith Crescent or via trail that connects Foundry Road.

Parking: 2-3 spaces at the end of Smith Crescent or along road shoulder.

Signage: None.

History: This land parcel was deeded to the former Town of Hantsport in 1993 by Donald and Nancy Hussey.

Overlapping Management Plans: None.

Observations

- Well maintained turf area.
- Neighbour parking RV on property.

Opportunities

- Property serves as potential access point to rail-trail if rail line is to be converted.
- Continue maintenance.



5

Fundy Centennial Park

Overview

PIDs: 45045028, 45238664

Coordinates: 45.06922, -64.1739

Date visited: November 26, 2015.

Address: 1 Avon St, Hantsport.

Classification: Neighbourhood Park.

Size: 1.30 acres (0.53 ha).

Land cover: The park is divided into two parcels. The northern parcel has a tree cover of approximately 90%. Managed turf and a gravel path lead towards the shoreline. Beyond a naturalized slope is a rocky shoreline. The southern portion of the park is a managed turf area with a gravel parking lot, asphalt path and a brick paver walkway to a gazebo.

Topography: The property boundary on the south east corner of the southern parcel is the highest point of the two parcels. The landscape slopes to the north west, north, and north east from this high point. A very steep slope exists along the water's edge.

Maintained by: Municipality.

Use: Walking, sitting, swimming, picnicking.

Access: From Avon Street or from Foundry Road. A asphalt turn around available for pedestrian drop-off.

Parking: A gravel parking lot for approximately 10 cars.

Signage: No obvious signage to identify the park, use, or maintenance. A small plaque mounted on a large gypsum boulder outlines park history. An interpretive panel at the top of the wooden stairs indicate the history of shipping gypsum in Hants County.

History: Lands donated by USG Canadian Mining Ltd, Fundy Gypsum Company Division to the former Town of Hantsport for recreation in 1993. The park was created during the former Town of Hantsport's Centennial year, 1995.

Overlapping Management Plans: None.

Observations

- Washrooms available on site; well maintained and in good shape.
- Park gazebo showing signs of weather damage.
- Wooden staircase to water in good shape.
- Time capsule marked by granite post.
- Brick pad to gazebo (and gazebo base is sunken and filling in with sediment).

Opportunities

- Park signage.
- Need for more garbage receptacles on site.
- Renovation of gazebo needed (e.g. shingles, trim).
- Reset brick pad to gazebo.



6

Foundry Field

Overview

PID: 45044948

Coordinates: -64.17551, 45.06932

Date visited: November 26, 2015.

Address: 10 Foundry Road, Hantsport.

Classification: Community.

Size: 4.04 acres (1.63 ha).

Land cover: Turfed, grassed.

Topography: Flat.

Maintained by: Municipality; owned by Minas Basin Pulp and Power Company Limited.

Use: Sports, play, dog play.

Access: From Foundry Road.

Parking: Avon Street parking lot, along road shoulders.

Signage: Park name sign.

History: A lease agreement was developed in 2005 between the Minas Basin Pulp and Power Company Ltd. and the former Town of Hantsport to develop a soccer field for soccer players, who had previously been using the baseball pitch.

Overlapping Management Plans: None.

Observations

- Well-managed property.

Opportunities

- Continue maintenance.



7

McDade Park

Overview

PID: 45044187

Coordinates: 45.06665, -64.1761

Date visited: November 26, 2015.

Address: Prince Street, Hantsport.

Classification: Community Park, Neighbourhood Park.

Size: 0.14 acres (0.056 ha).

Land cover: Half of the parcel is managed turf with an asphalt path and the other half is a densely planted area of pine trees with turf below. Firefighter memorial established. Marker of former church also present.

Topography: A flat parcel with a raised berm occupying the north and east of the park.

Maintained by: Municipality.

Use: Sitting, walking.

Access: From Prince and Oak Streets.

Parking: None.

Signage: A small plaque identifying the park's history.

History: Park named after 19th mayor of the former Town of Hantsport, Garnet McDade.

The park sits on the original site of the Presbyterian Church (1897-1980).

Overlapping Management Plans: None.

Observations

- Park bench showing signs of weather damage.
- No garbage receptacles.
- Concrete block planter falling apart; overgrown with plant material.
- Large European Beech tree in south west corner a healthy specimen tree.
- Park monuments (valuable community elements, but layout has resulted in a cluttered park).

Opportunities

- Park signage.
- Create plan to reorganize park monuments to create better use of space. Consider moving the firefighter memorial to Chittick Park.
- New coat of paint on park bench.
- Addition of garbage receptacle by park bench.
- Remove block planter from park. Plant shrubs directly into ground. No need for raised planter.



8

Hantsport Riverbank Cemetery

Overview

PIDs: 45048261, 45277845

Coordinates: 45.06109, -64.1798

Date visited: November 26, 2015.

Address: Riverbank Drive, Hantsport.

Classification: Cultural.

Size: 9.60 acres (3.88 ha).

Land cover: A mixture of cleared (60%) and forested conditions (40%). Cleared areas composed of managed turf with memorial headstones. Forested areas primarily along slope towards the river.

Topography: Undulating topography with a high point within the top driveway loop. Very steep slope along forested slope down to the river.

Maintained by: Municipality.

Use: Memorial, walking.

Access: From Riverbank Road.

Parking: Along road shoulders.

Signage: None.

History: Part of this land parcel was deeded to the former Town of Hantsport in 1956 by Raymond Burgess. The other portion parcel was a parks and open space contribution from land subdivision.

Overlapping Management Plans: Town of Hantsport Riverbank Cemetery By-Law.

Observations

- Well managed property with horticultural features.
- Property used as local walking trail.
- Property with view of river and agricultural land.

Opportunities

- Create a plan for future cemetery expansion.
- Strategically plant shade and ornamental trees for shade and visual interest for visitors.
- Develop a trail loop along upper portion of slope past cemetery, along adjacent Municipally-owned land through to Mariner's Drive.



9

Prince Street Path

Overview

PID: 45048113

Coordinates: 45.06616, -64.1779

Date visited: November 26, 2015.

Address: Prince St, Hantsport.

Classification: Linear Park.

Size: 0.24 acres (0.09 ha).

Land cover: Gravel turn-around with managed turf on either side of this driveway. Trees border this long narrow parcel.

Topography: Gentle slope upward to the south.

Maintained by: Municipality.

Use: Walking.

Access: From Prince Street and HMCC.

Parking: None.

Signage: Signage indicating park surveillance.

History: This land parcel was deeded to the former Town of Hantsport in 1975 by Doris Harrington. The path was created during the former Town of Hantsport's Centennial year, 1995.

Overlapping Management Plans: None.

Observations

- Fire hydrant at walkway entrance.
- Trees surround parcel on neighbouring properties.

Opportunities

- Maintain connection to HMCC from Prince Street.
- Walkway signage indicating ownership/ maintenance.



Riverview Road, Hantsport

10

Overview

PID: 45045952

Coordinates: 45.06459, -64.189

Date visited: November 26, 2015.

Address: Parcel C Rand Street, Hantsport.

Classification: Underused.

Size: 0.13 acres (0.05 ha).

Land cover: Parcel mostly treed (deciduous and evergreen) with the front half of the parcel being managed turf with a stand of trees along the street.

Topography: Land gently sloping to the east and north.

Maintained by: Municipality.

Use: Walking.

Access: From Riverview Road.

Parking: On Street.

Signage: None.

History: This land parcel was deeded to the former Town of Hantsport in 1984 by Harry Salter.

Overlapping Management Plans: None.

Observations

- Property grading and landscaping indicates the former site of a dwelling.
- An informal walking path apparent from Riverview Drive to the tree line.

Opportunities

- Given the close proximity to other parks and open spaces, it is recommended that there is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



11

McCully Crescent

Overview

PID: 45387768

Coordinates: 45.05938, -64.1829

Date visited: November 26, 2015.

Address: Lot Hdl-3 Holmes Hill Road, Hantsport.

Classification: Underused.

Size: 1.74 acres (0.70 ha).

Land cover: Property cleared, but now naturalizing with perennials. A stand of trees grows along western boundary.

Topography: Property sloping upward to the north and north west. A berm rises along the western edge.

Maintained by: Municipality.

Use: None.

Access: From McCully Crescent.

Parking: Along the road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Little evidence of human activity on site.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



12

Mariner's Drive

Overview

PID: 45275278

Coordinates: 45.05864, -64.1812

Date visited: November 26, 2015.

Address: Lot 2b (portion of) Mariner's Drive, Hantsport.

Classification: Underused.

Size: 5.70 acres (2.30 ha).

Land cover: Both treed (40%) and open land (60%). Trees limited to western boundary and along eastern slope. Open area primarily naturalized perennials species.

Topography: Parcel is relatively flat at its top then sloping to the east and south east. Slope becomes almost a vertical face at tree line falling towards the river.

Maintained by: Municipality.

Use: None.

Access: From McCully Crescent and Mariner's Drive.

Parking: 2-3 spaces at the foot of Mariner's Drive.

Signage: None.

History: This land parcel was deeded to the former Town of Hantsport in 2011 by the Hantsport Development Limited.

Overlapping Management Plans: None.

Observations

- Evidence of walking paths from the end of Mariner's Drive.
- Young tree species beginning to colonize after land clearing.
- Slope along eastern boundary is dangerously steep.

Opportunities

- Retain parcel as part of future parks and open space expansion (with adjacent municipally-owned land for Hantsport Riverbank Cemetery).
- Portion of property (e.g. along McCully Crescent) could be subdivided without compromising future park development on this parcel.
- Any parks and open space/trail development would require a fence along the top of the slope.



13

Mariner's Drive Wood Lot

Overview

PID: 45391554

Coordinates: 45.05908, -64.1812

Date visited: November 26, 2015.

Address: Lot Hdl-19z Mariner's Drive, Hantsport.

Classification: Underused.

Size: 0.20 acres (0.08 ha).

Land cover: White pine planted in rows, mixed perennial understory.

Topography: Land sloping to the south east.

Maintained by: Municipality.

Use: None.

Access: From Mariner's Drive.

Parking: 2-3 spaces at the foot of Mariner's Drive.

Signage: None.

History: White pine tree farm or plantation.

Overlapping Management Plans: None.

Observations

- White pine trees planted in rows is an indicator of a former woodlot or tree farm.
- Land is accessible from Mariner's Drive should people want to walk through.

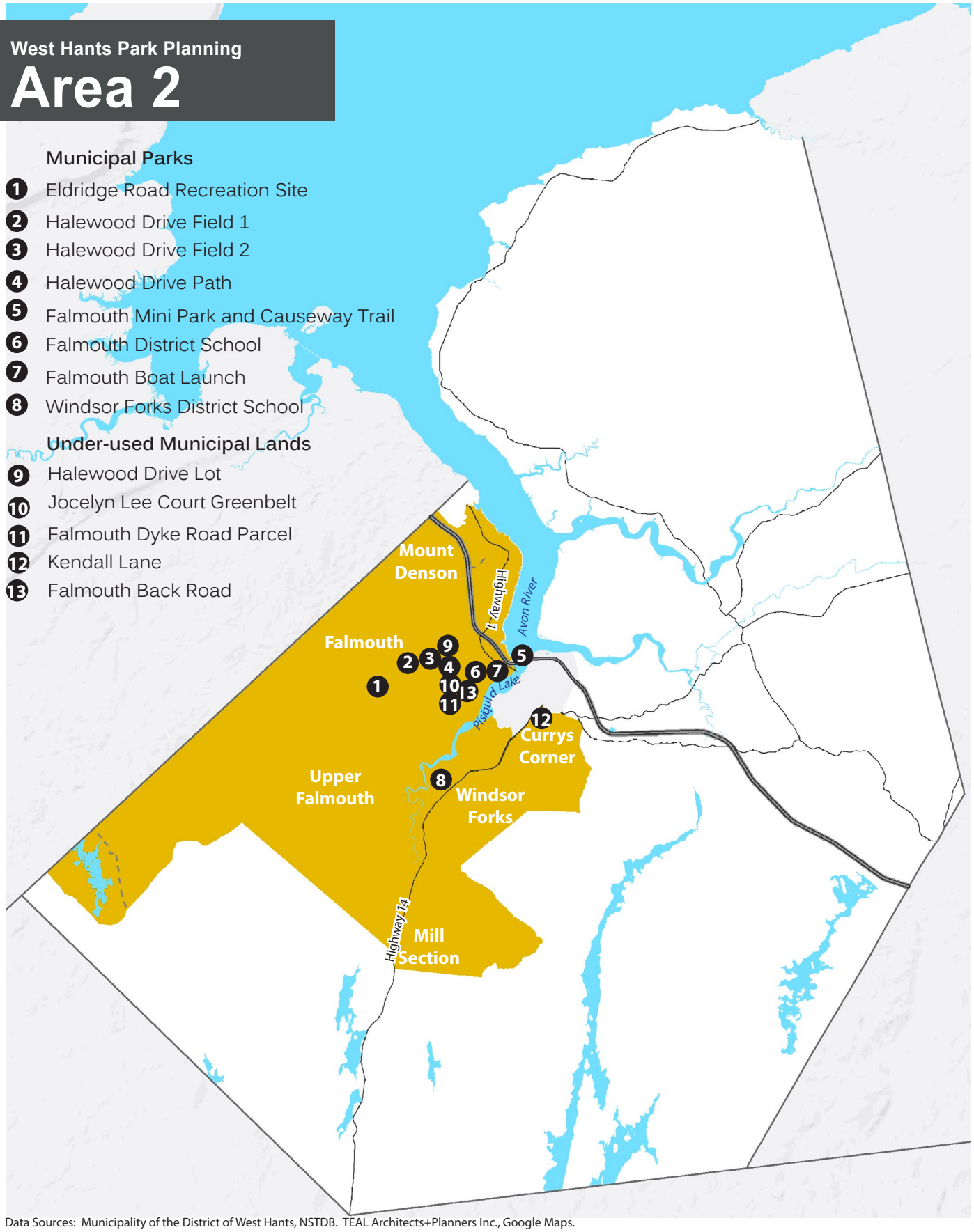
Opportunities

- Parcel ideal for residential lot.
- Lumber from trees can be harvested for community purpose (e.g. amenity structure).
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



West Hants Park Planning

Area 2



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

1

Eldridge Road Recreation Site

Overview

PID: 45211836

Coordinates: 44.99139, -64.208

Date visited: November 20, 2015.

Address: 156 Eldridge Rd, Upper Falmouth.

Classification: District, Community, Neighbourhood Parks.

Size: 15.55 acres (6.29 ha).

Land cover: Sports complex area is primarily managed turf; gravel parking lot and roadway; remaining property forested (e.g. red and white spruce, sugar maple, white and yellow birch, red oak, balsam fir) with turf, soil, and gravel paths.

Topography: Fairly flat terrain with undulating places due to drainage swales and natural depressions.

Maintained by: Municipality.

Use: Soccer, tennis, basketball, walking, tug-of-war, playing (playground), picnicking, sitting, snowmobiling.

Access: From Eldridge Road.

Parking: Unmaintained gravel lot with overflow parking on grass at eastern park entrance.

Signage: Signage indicating maintenance and sponsors; faded trail markings at former softball field.



History: Parcel was purchased in 1988 from Bernard Curry. The land was developed cooperatively between the Falmouth Community Hall Association and the Municipality of the District of West Hants.

Overlapping Management Plans: None.

Observations

- Recent investment in infrastructure (e.g. tennis court surface, playground).
- Standing water on north and south length of west soccer field.
- North soccer field slow to drain.
- Former softball dugouts in fair shape, roof needs repairs.
- Parking area with standing water.
- Standing water outside play space.
- Former softball field post and chain fence rusting and leaning.
- Retaining wall around former softball field is deteriorating.

Opportunities

- Landscaping upgrades at park entrance.
- Install signage to identify site amenities and trails.
- Correct field drainage for sports fields.
- Paint lines on basketball court.
- Repair and replace damaged boards on benches, picnic tables, bleacher seating.
- Upgrade dugout roofs.
- Redesign the layout of parking area to make more efficient and separate from people spaces.
- Install drainage and new sod around playground space.
- Install new fence along north soccer field perimeter.
- Remove wood retaining wall behind the dugouts at north soccer field perimeter. Replace with drainage swale.

2

Halewood Drive Field 1

Overview

PIDs: 45026259, 45226982

Coordinates: 44.99877, -64.1846

Date visited: November 26, 2015.

Address: 422 Falmouth Back Rd, Falmouth.

Classification: Neighbourhood.

Size: 1.11 acres (0.45 ha).

Land cover: Parcel is 50% forested and 50% cleared (e.g. managed turf).

Topography: Flat parcel with slight undulations in managed turf where water collects.

Maintained by: Municipality.

Use: Walking.

Access: From Halewood Drive.

Parking: None.

Signage: None.

History: This is a Public Works parcel which once had a open water reservoir pond. The pond was filled in when the Falmouth Water Standpipe was installed.

Overlapping Management Plans: None.

Observations

- Entrance to the parcel is not clear from Halewood Drive. Drainage ditch limits access from Municipal right-of-way.
- Some maintenance completed by surrounding neighbours.

Opportunities

- Park signage.
- Continue to own with potential for future community recreational use.
- Formalize entrance to parcel from Halewood Drive.
- Consider adding amenity features to the site (e.g. benches, trail loop).



3

Halewood Drive Field 2

Overview

PID: 45363264

Coordinates: 44.99917, -64.1813

Date visited: November 9, 2015.

Address: Parcel P-1 Halewood Drive, Falmouth.

Classification: Neighbourhood Park.

Size: 0.61 acres (0.25 ha).

Land cover: Primarily turf. Mixture of evergreen and deciduous tree and shrub species (planted and natural) around three sides with drainage ditch surrounding. Stormwater/drainage corridor from park to south loop of Halewood Drive.

Topography: Multi-purpose field is relatively flat with slight undulations. Entire western portion of property is a stormwater drainage area running from south to north.

Maintained by: Municipality.

Use: Field sports, drainage area.

Access: Park access from Halewood Drive.

Parking: No organized parking; road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Drainage ditch along north side of the field, access via a driveway in the north east corner of the parcel.
- Residential properties back onto park.
- Part of stormwater drainage area in neighbourhood.
- Informal trail from field through drainage area to south Halewood Drive.

Opportunities

- Park signage indicating ownership, management, hours of use.
- Signage to identify stormwater movement on site and importance of water management for local ecology.
- Low point in south eastern portion of field requires topsoil fill.



4

Halewood Drive Path

Overview

PID: 45363249

Coordinates: 44.99886, -64.1794

Date visited: November 26, 2015.

Address: Parcel Ww-1 Aylward Road, Falmouth.

Classification: Linear Park.

Size: 0.16 acres (0.66 ha).

Land cover: Gravel path with managed turf shoulders. Trees planted along eastern side of path.

Topography: Land sloping upward towards the east.

Maintained by: Municipality.

Use: Walking.

Access: From Halewood Drive and Aylward Road.

Parking: None.

Signage: None.

History: The Halewood Drive subdivision was created in 2006 during which a waterline connection was installed between the Halewood Drive subdivision and Aylward Road. The developer established a path on top of the buried waterline to create pedestrian crossing between Halewood Drive and Aylward Road.

Overlapping Management Plans: None.

Observations

- Utility poles pass through same right-of-way.
- Right-of-way not defined.

Opportunities

- Park signage to indicate ownership and maintenance.
- Pave the path for ease of maintenance.
- Lighting attached to existing utility poles.
- If privacy becomes a concern by neighbouring residents, consider wooden post style fencing along each side rather than chain link fencing.



5

Falmouth Mini Park and Causeway Trail

Overview

PID: 45224458

Coordinates: 44.9942, -64.1474

Date visited: November 9, 2015.

Address: 2127 Highway #1 Falmouth, NS.

Classification: Neighbourhood, Community Parks.

Size: 1.55 acres (0.63 ha), Total area of provincial land in which the park occupies: 9.10 acres (3.68 ha).

Land cover: A mixture of turfed open areas (75%) and treed naturalized areas (25%). Paved paths and gravel parking area are part of these open areas.

Topography: A fairly flat parcel gently sloping from the northwest to the southeast towards the water. Steep banks to the water in the northwest cove, a more gentle slope at the picnic area.

Maintained by: Municipality; owned by the Province of Nova Scotia.

Use: Swimming, boating, walking, picnicking.

Access: From Evangeline Trail or multiple points in Downtown Windsor.

Parking: 5-10 spaces; not well defined.

Signage: No signage indicating park from the road. Park maintenance signage throughout the park.

History: The Municipality entered into a lease agreement with the Department of Transportation in the early 1980's that allowed the use of the land for recreational purposes.

In the early 1990's the Municipality and the Windsor and Area Jaycees agreed to develop the lands and create what is now the

Falmouth Mini Park.

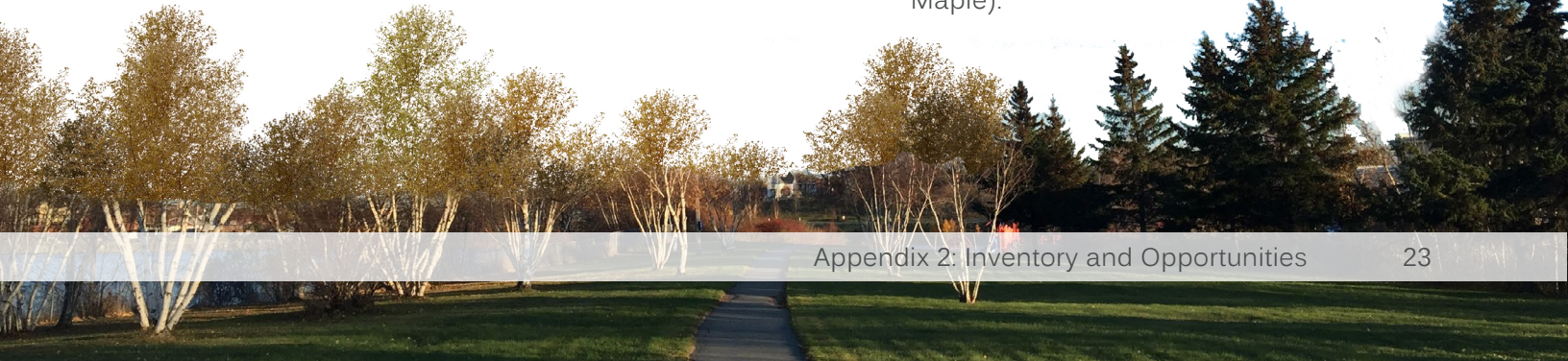
Overlapping Management Plans: 2013 Trails Plan, p.55.

Observations

- No entrance signage indicating park, use, or a map.
- Parking area in conflict with pedestrian spaces/playground.
- Many small trees, but few large shade trees on site.
- Fencing along the west side of the park is in need of replacement.
- Well maintained grounds.
- Access to water isn't clearly indicated or available.

Opportunities

- Reconfigure parking area that makes better use of space and separates pedestrians from cars.
- Landscape park entrance to buffer from road traffic and provide an aesthetic gateway to park.
- Design and development of new trail on highway side of park for shorter secondary loop.
- Improve access to the water from the picnic area.
- Install dock for small boat access, fishing, sitting.
- Improve lighting along highway and in interior of the park.
- Design and install interpretive signage highlighting stormwater movement through the park.
- Create shade over children's play area (e.g. trees, shade structure).
- Phase out invasive species (e.g. Norway Maple).



Falmouth District School

6

Overview

PID: 45075108

Coordinates: 44.99421, -64.1664

Date visited: 26 November, 2015.

Address: 30 School St, Falmouth.

Classification: Neighbourhood Park, Community Park.

Size: 5.21 acres (2.11 ha).

Land cover: Large open space composed of managed turf (40%), 40% of parcel is asphalt parking and building footprint. Woodlot in southern portion of parcel occupies almost 20% of land area.

Topography: Land sloping to the south west.

Maintained by: Annapolis Valley Regional School Board.

Use: Walking, playing (playground), sitting, picnicking, sports (e.g. soccer, football, basketball).

Access: From School Street.

Parking: School parking lot has a capacity for approximately 30 cars.

Signage: On the school building.

History: Property is under the management of the Annapolis Valley Regional School Board.

Overlapping Management Plans: None.

*No management recommendations are provided as management is at the discretion of the Annapolis Valley Regional School Board.



7

Falmouth Boat Launch

Overview

PID: 45192507

Coordinates: 44.99347, -64.1501

Date visited: November 9, 2015.

Address: 2058 Highway 1, Falmouth.

Classification: Linear Park.

Size: 3.5 acres (1.42 ha).

Land cover: Entire parcel is a road and vegetated right-of-way with trees, shrubs, and tall grasses growing along the driveway shoulder.

Topography: Relatively flat road parcel with slight slope to the east. Boat launch more steeply sloped to the water.

Maintained by: Municipality.

Use: Water access.

Access: From Evangeline Trail.

Parking: Parking for 5-10 in gravel turn around and more parking available along driveway shoulder.

Signage: Entrance signage, warning of boat launch conditions.

History: This 3.5 acre property was deeded to the Municipality in 1972 by the Dominion Atlantic Railway Company. As been used by the community as boat launch area for access to Lake Pisiquid.

Overlapping Management Plans: None.

Observations

- Concrete boat launch ramp deteriorating and pieces have fallen away.
- Top of ramp paved with asphalt, in good shape.

Opportunities

- Cut back vegetation from ramp shoulders.
- Remove existing concrete ramp and replace with gravel (short term), concrete (long term).



8

Windsor Forks District School

Overview

PID: 45061355

Coordinates: 44.94585, -64.1907

Date visited: November 26, 2015.

Address: 120 Sangster Bridge Road.

Classification: Community Park, School.

Size: 10.60 acres (4.29 ha).

Land cover: Located in an agricultural area, this property is surrounded by open fields. The back sports field is the only managed turf area. The remainder of the parcel is naturalized with trees, shrubs, and perennials (50% of land area) An asphalt paved driveway and school yard exists around the school footprint.

Topography: Flat, grassed.

Maintained by: Annapolis Valley Regional School Board.

Use: Walking, playing (playground), sitting, picnicking, sports (e.g. soccer, football, basketball).

Access: From Sangster Bridge Road.

Parking: 20 marked spaces.

Signage: Entrance signage and signage on the building.

History: Property is under the management of Annapolis Valley Regional School Board.

Overlapping Management Plans: None.

*No management recommendations are provided as management is at the discretion of the Annapolis Valley Regional School Board.



9

Halewood Drive Lot

Overview

PID: 45226636

Coordinates: 45.00002, -64.184

Date visited: November 9, 2015.

Address: Parcel P-1 Halewood Drive, Falmouth.

Classification: Underused.

Size: 0.57 acres (0.23 ha).

Landcover: Wooded lot. Mixture of evergreen and deciduous plant species. Drainage ditch along the north length of the property.

Topography: Land sloping to the north and east.

Maintained by: Municipality.

Use: None.

Access: No formal access created. Access would be from Halewood Drive.

Parking: No organized parking; road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

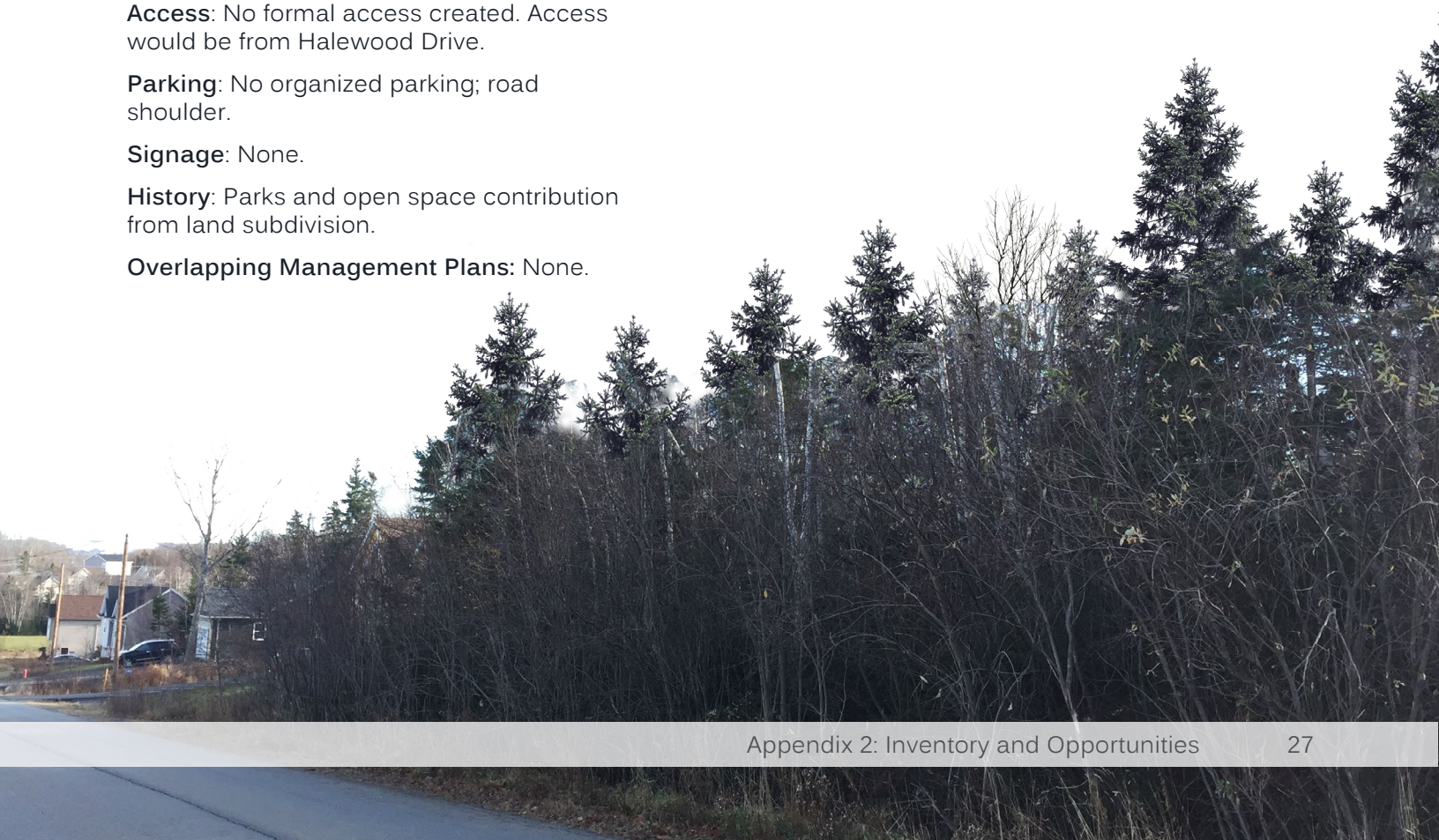
Overlapping Management Plans: None.

Observations

- No obvious signs of access of use by residents.

Opportunities

- Given the number of parks and open space parcels in the neighbourhood, it is recommended that there is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



10

Jocelyn Lee Court Greenbelt

Overview

PID: 45293016

Coordinates: 44.99086, -64.1776

Date visited: 26 November, 2015.

Address: Between 49 and 44 Jocelyn Lee Court, Falmouth.

Classification: Underused.

Size: 5.92 acres (2.40 ha).

Land cover: Parcel treed along the western boundary with the remained naturalizing with shrub and perennial species.

Topography: Parcel is at the top of the slope which slopes to the north west. Beyond the property line is a 20m drop to a river below. Access point at the end of Jocelyn Lee Court is a low point with undulated soil that has naturalized with perennial species.

Maintained by: Municipality.

Use: None.

Access: From Jocelyn Lee Court.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

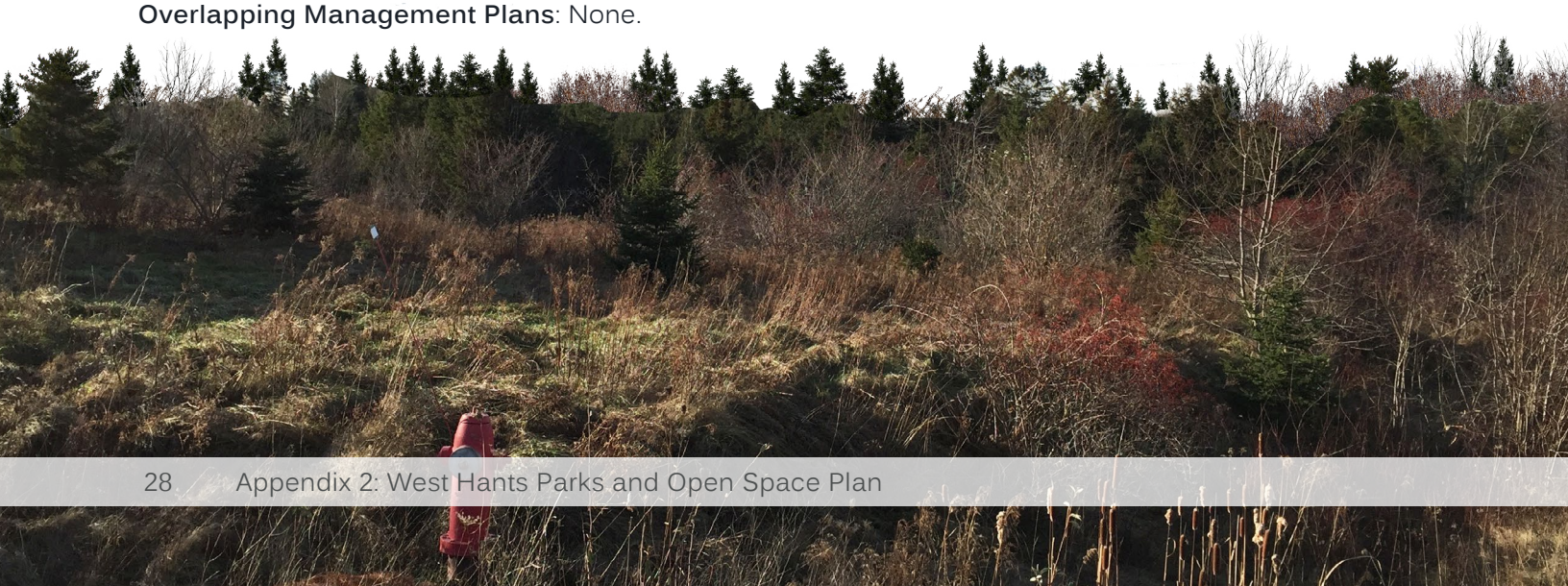
Overlapping Management Plans: None.

Observations

- Only one public access point.
- Informal walking trails observed.
- No formal access point to parcel.
- Residential properties back onto parcel
- Encroachment into municipal land apparent (e.g. land clearing, landscaping)
- Topography makes this site difficult for walking.

Opportunities

- Retain as municipal greenbelt.
- Trail loop possible on upper side of slope.



11

Falmouth Dyke Road Parcel

Overview

PID: 45196268

Coordinates: 44.98617, -64.1796

Date visited: November 26, 2015.

Address: Parcel E Falmouth Dyke Road, Falmouth.

Classification: Underused.

Size: 0.46 acres (0.19 ha).

Land cover: Small parcel with 100% tree cover.

Topography: Land sloping to the South West.

Maintained by: Municipality.

Use: None.

Access: None.

Parking: None.

Signage: None.

History: This land parcel was deeded to the Municipality in 1978 through the parks and open space contribution from land subdivision by the Greenwood Estates Ltd.

Overlapping Management Plans: None.

Observations

- No access through public right-of-way.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



12

Kendall Lane

Overview

PIDs: 45191541, 45191533

Coordinates: 44.97456, -64.1279

Date visited: November 25, 2015.

Address: Lot 2,3 Kendall Lane, Currys Corner.

Classification: Underused.

Size: 0.37 acres (0.15 ha) total.

Land cover: Managed turf.

Topography: Land sloping to the south and south west.

Maintained by: Municipality.

Use: No obvious signs of use.

Access: From Kendall Lane.

Parking: Parking on the road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Access to the site is limited due a perimeter drainage ditch.
- Not many neighbourhood park opportunities in the local area.

Opportunities

- Park signage.
- Consider regrading a portion of the parcel to create flat accessible surface; will require wall construction and drainage.
- Opportunity for shade trees, community garden, sitting areas, playground.
- Work with Kendall Court Seniors Complex and surrounding neighbours to identify parks and open space needs.



13

Falmouth Back Road

Overview

PIDs: 45062676

Coordinates: 44.992355, -64.188832

Date visited: November 26, 2015.

Address: Lot P-1 Falmouth Back Road, Falmouth.

Classification: Unused.

Size: 1.86 acres (0.75 ha).

Land cover: The western-half of the parcel is forested with white pine and paper birch. The eastern-half of the parcel is occupied by a flood plain, vegetated with grass species and perennials.

Topography: Parcel slopes more than 5m (16.4 feet) to the north and east towards a brook below.

Maintained by: Municipality.

Use: None (other than electrical towers).

Access: No formal access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Parcel intersected by power transmission corridor and houses a transmission tower.
- Neighbouring property uses municipal parcel for personal property access and parking.
- The slope of the parcel and presence of a floodplain limits the site useability for parks and open space.

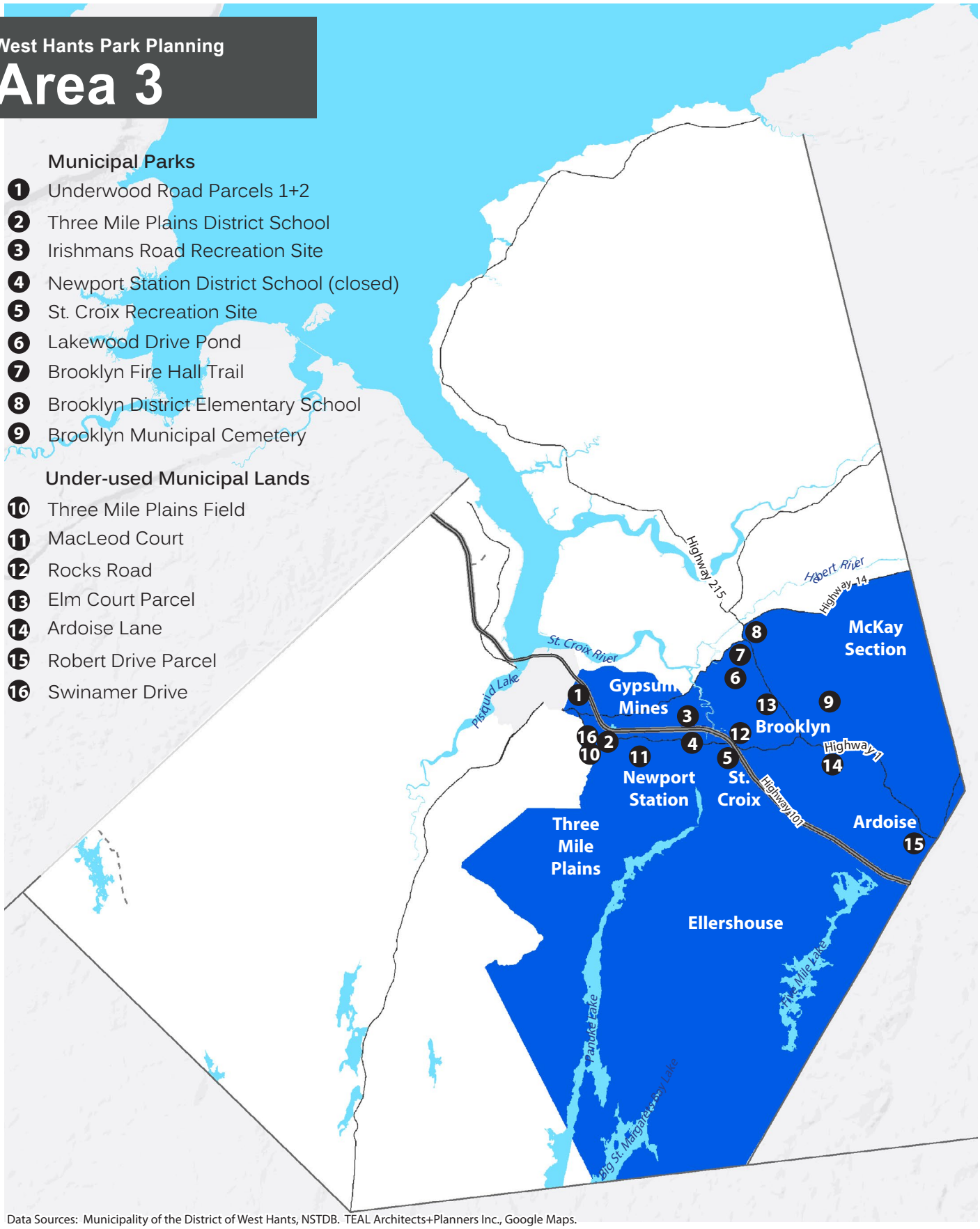
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



West Hants Park Planning

Area 3



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

1

Underwood Road

Parcel 1

Overview

PID: 45208188

Coordinates: 44.97933, -64.1065

Date visited: November 25, 2015.

Address: Lot A-1b Underwood Road, Garlands Crossing.

Classification: Neighbourhood Park.

Size: 0.77 acres (0.32 ha).

Land cover: Managed turf area occupies approximately 60% of land area, naturalized area in remaining area (40%).

Topography: The main gathering area of this space is a flat managed turf surface. Houses to the south about 10 feet above the open area, houses to the north at the same elevation. Mid-way through the property, a naturalized area of trees and shrubs occupies the low point of the property.

Maintained by: Municipality, community volunteers.

Use: Playing, walking, community gathering.

Access: From Underwood Road.

Parking: Available along road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Well used outdoor spaces used primarily by surrounding residents.
- Access point from Underwood Road is not defined from adjacent empty lot.

Opportunities

- Retain parcel and develop as formal Neighbourhood Park.
- Park signage.
- Formalized access into the park (e.g. delineate public from private property along entrance).
- Work with neighbourhood to develop a park needs assessment.



1

Underwood Road

Parcel 2

Overview

PID: 45365285

Coordinates: 44.97886, -64.1059

Date visited: November 25, 2015.

Address: Parcel Bdl-1 Jared Court, Garlands Crossing.

Classification: Neighbourhood Park.

Size: 0.96 acres (0.39 ha).

Land cover: Almost 50% treed. Remaining parcel is managed turf.

Topography: Fairly flat parcel.

Maintained by: Municipality.

Use: Playing, walking, community gathering.

Access: From Jared Court.

Parking: Available along road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Access to parcel is not obviously public.
- Well-treed parcel shared by surrounding residents.

Opportunities

- Park signage.
- Evaluate encroachment into Municipal land by surrounding residents (e.g. tree clearing, landscaping).
- Retain as treed, naturalized area for shade, stormwater attenuation, wildlife habitat.



2

Three Mile Plains District School

Overview

PID: 45075470

Coordinates: 44.9667, -64.0941

Date visited: November 12, 2015

Address: 4555 Hwy 1, Three Mile Plains.

Classification: Community, Neighbourhood Parks; school.

Size: 38.00 acres (15.37 ha).

Land cover: Two parcels make up this property. To the north and south of Highway 10. The north parcel is 90% forested with a small clearing along the highway that has an ATV trail. To the south of the highway is the school property, including a pond. The school property is forested to the north and west with scattered trees along the eastern and southern boundary. Turf is managed for a sports field and play space behind the school. Asphalt driveway, parking, school yard, and building footprint occupy almost 5% of the southern parcel.

Topography: The school building is positioned on a high point of the south property with land sloping away in all directions. The slope to the west is steep, but more gentle to the other directions.

Maintained by: Annapolis Valley Regional School Board.

Use: Walking, playing, sitting, picnicking, sports (e.g. soccer, football, basketball).

Access: From Evangeline Trail.

Parking: Parking for 60-70 cars; most spaces occupied by school staff.

Signage: On the school building.

History: In operation since 1963. Property is under the management of Annapolis Valley Regional School Board.

Overlapping Management Plans: 2013 Trails Plan, p.70.

*No management recommendations are provided as management is at the discretion of the Annapolis Valley Regional School Board.



3

Irishmans Road Recreation Site

Overview

PID: 45061843

Coordinates: 44.97263, -64.0588

Date visited: November 16, 2015.

Address: 151 Irishmans Road, Newport Station.

Classification: District, Community, Neighbourhood Parks.

Size: 172 acres (69.61 ha).

Land cover: Primarily a mixed forested stand of red and white spruce, hemlock, yellow birch, sugar maple and American beech. Turf is managed on two sports fields and at their perimeter and along driveways. Gravel parking areas are found at the main entrance and at the upper sports field.

Topography: Main road bed is relatively flat with slight incline to the north east (with drainage ditch on either side). Upper sports field to the west is 25-30 feet above main road. Lower sports field in a depression. Trail to the is north of the lower sports field rises and falls with the hillside. Karst topography (i.e. sinkholes formed by soluble gypsum). Is visible in the north and west portions of the park.

Maintained by: Municipality. Portion leased by Glooscap Heritage Archers Association.

Use: Archery, walking, running, mountain biking, soccer.

Access: Park access from Irishmans Road.

Parking: 20-30 spaces along driveway and at the second gate, 20-30 spaces at the top field, evidence of additional parking on grass shoulders and at the sport field entrances.

Signage: No official signage indicating "Irishmans Road Recreation Park". Signage indicating management and use and prohibiting motorized vehicle use.

History: The park sits on land formerly used as a Municipal landfill, which was decommissioned in 1984. The soccer fields were named the Ryan Lahey Memorial Soccer fields in 2011 in memory or Ryan Lahey.

Overlapping Plans: 2013 Trails Plan, p.47.

Observations

- Entrance to the trail from the second gate is unclear.
- Free standing wall (remaining from landfill) to the north east of the lower field.
- Standing water along trail to the north of the lower field.
- Bleachers at upper field in need of upgrades (e.g. wooden boards).
- Upper parking area needs new base material. Shale is difficult parking surface.
- Area of karst topography found in the north and west areas of the park.
- Fence on the west of the upper field in need of replacement.
- Slumping observed on the west side of the upper field.

Opportunities

- Install entrance and trail signage.
- Design and install interpretive panels to educate the community about former uses, and reclamation of former landfill lands into a recreation facility.
- Expansion of parking area at the second gate and at the upper field.
- Development of a new trail and interpretive area to learn about Karst Topography.
- New fence along the west side of the upper sports field.
- Upgrade sports field (e.g. topdressing, seeding, corrected slumping).
- Potential for additional trails

4

Newport Station District School

Overview

PID: 45062270

Coordinates: 44.96551, -64.0547

Date visited: November 26, 2015.

Address: 1989 Wentworth Rd, Newport Station.

Classification: Community Park.

Size: 19.28 acres (7.80 ha).

Land cover: Primarily a forested parcel (60%) with a clearing created for the school footprint, paved school yard, sports field, and playground.

Topography: School yard is positioned at high point on the property. Property slopes in all directions away from the school, steeply on the south side of the school and more gently to the north.

Maintained by: Municipality.

Use: Walking, playing (playground), sitting, picnicking.

Access: From Wentworth Road.

Parking: 40-50 spaces on paved school yard.

Signage: None.

History: Formerly a school property, but now under Municipal management.

Overlapping Management Plans: Trails Plan 2013, p.59.

Observations

- Open area set back some distance from Wentworth Road.
- Densely forested buffer between the road and school building/playground.
- Outdoor spaces and equipment still well managed despite not being used as a school.

Opportunities

- Close proximity to Irishmans Road Recreation Site. Explore potential to link the properties via a new trail loop.
- Explore partnerships with community groups who may be able to lease the building.
- Re-establish old and build new trails at the site.



5

St. Croix Recreation Site

Overview

PID: 45339231

Coordinates: 44.96515, -64.0255

Date visited: November 12, 2015.

Address: 54 Ball Park Rd, St. Croix.

Classification: District, Community, Neighbourhood Parks.

Size: 9.60 acres (3.88 ha).

Land cover: Primarily managed turf with gravel surfaces for driveway, parking, and pathways.

Topography: Grade level, seeded, maintained.

Maintained by: Municipality.

Use: Softball, community gathering, horse-shoe, picnicking, fishing.

Access: From Ball Park Road.

Parking: 150-200 cars possible on road shoulder, abandoned field, and gravel area to the east.

Signage: No entrance signage. Signage present to indicate maintenance, security, and horseshoe club, but signs are dated and in need of replacement.

History: Land originally owned by Aubrey Smiley and was purchased by the Crown when Highway 101 was constructed. The Crown deeded the remaining lands to the Municipality in 1975 with the stipulation that it be used for recreation purposes.

Overlapping Management Plans: None.

Observations

- Out-buildings are showing signs of weather damage (e.g. water damaged wood, outdated electrical, rotting windows/trim).
- Bleacher footprints made of gypsum (unsuitable structural base).
- Field to east of ballfields is abandoned with old backstop still in place.
- Slope around east ball field bleachers too steep and inaccessible.
- Wiring on east ball field unearthed and is a tripping hazard.
- Wood decking at the top of west ball field is narrow and showing signs of rot.
- Clubhouse ramp on crumbling concrete footings.

Opportunities

- Develop easy access to pond.
- Coordinate signage to indicate park, maintenance, usage, and wayfinding.
- Upgrade wooden out-buildings and clubhouse.
- Replace gypsum bleacher footings with more stable base.
- Install new pathways to improve site accessibility.
- Develop regrading plan for east ball field bleachers are to reduce slope or overcome slope and refine surface materials (e.g. sod instead of large gravel).
- Upgrade decking at top of west ball field observation area.



6 Lakewood Drive Pond

Overview

PID: 45208329

Coordinates: 44.9982, -64.0131

Date visited: November 26, 2015.

Address: Lakewood Dr, Brooklyn.

Classification: Neighbourhood Park.

Size: 4.01 acres (1.62 ha).

Land cover: A densely forested lot (deciduous and evergreen) with a large oval pond.

Topography: Fairly flat parcel with the banks of the pond sloping inward towards the water.

Maintained by: Municipality.

Use: Boating, skating, pond hockey.

Access: From Lakewood Drive.

Parking: Along road shoulders.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Hockey net stored on shoreline indicated winter use.
- Access to water not cleared.
- Water collection infrastructure at roadside for Fire Department.

Opportunities

- Improve access to water.
- Signage indicating ownership, use, and maintenance.



7

Brooklyn Fire Hall Trail

Overview

PID: 45060761

Coordinates: 45.00423, -64.0091

Date visited: November 26, 2015.

Address: 995 Highway 215, Brooklyn.

Classification: Community Park.

Size: 7.18 acres (2.91 ha).

Land cover: A mainly open parcel with trees and shrubs along the parcel perimeter. Managed turf along trail shoulders.

Topography: The centre of the parcel is a high point and sloping away from centre in all directions, more steeply to the north, west, and south.

Maintained by: Municipality.

Use: Walking.

Access: From western side of Fire Hall parking lot.

Parking: At Fire Hall.

Signage: Signage at north and south trailhead.

History: The path was developed in 2011 as an outdoor of the indoor walking opportunity that is hosted at the Brooklyn Civic Centre.

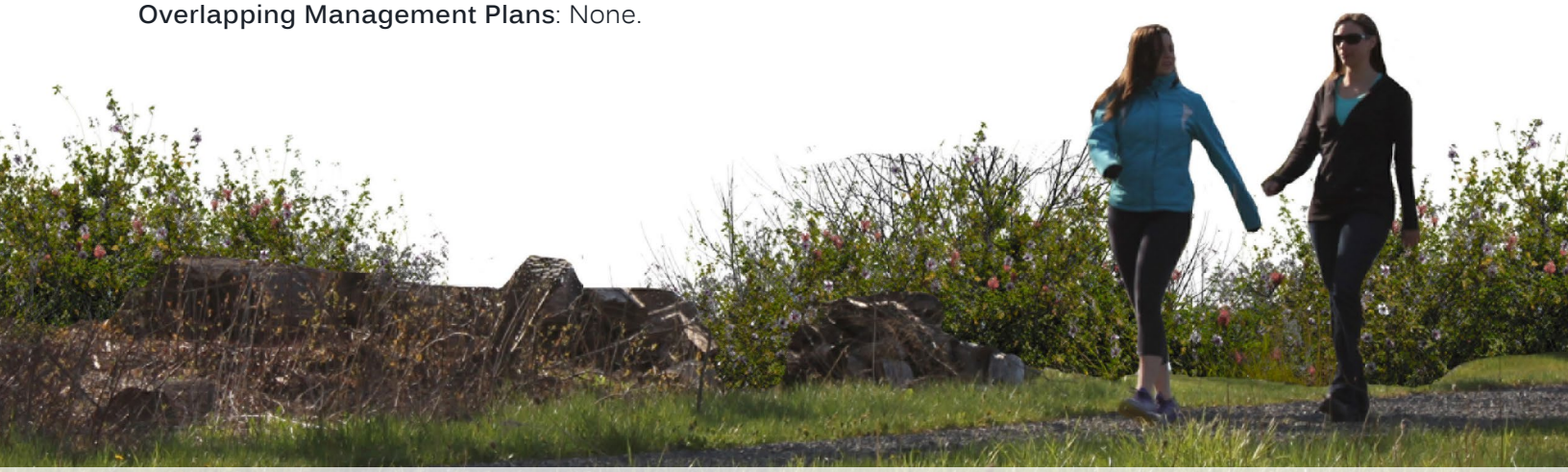
Overlapping Management Plans: None.

Observations

- No benches or garbage receptacles.
- Damage by ATV use in interior of parcel.
- Trailhead in northeastern corner very steep.
- Dumping of waste in northwestern corner of parcel.

Opportunities

- Create resting spots for sitting, picnicking, include garbage receptacles. (Clearly identifying walking and sitting areas should deter ATV use in desirable locations).
- Switchbacks or curve in trail bed would lessen the slope in some areas and create more visual interest.
- Trail bed made more accessible by using crusher dust.
- Planting of trees (native or ornamental) would provide visual interest along the trail route.
- The addition of trees and/or children's playspaces **must** be reviewed in conjunction with Fire Department Executive due to space limitations as this is a helicopter landing area.



8

Brooklyn District Elementary School

Overview

PID: 45060795

Coordinates: 45.01087, -64.0071

Date visited: November 26, 2015.

Address: 8008 Highway 14, Brooklyn.

Classification: Community Park, School.

Size: 22.78 acres (9.22 ha).

Land cover: Primarily a forested parcel (80%) with managed areas (e.g. school footprint, sports field, tennis courts, playground, and parking).

Topography: Parcel lowest at Highway 14 sloping upward to the south.

Maintained by: Annapolis Valley Regional School Board.

Use: Walking, playing, sitting, picnicking, sports (e.g. soccer, football, basketball, tennis).

Access: From Highway 14.

Parking: Parking for approximately 50 cars (school parking occupies most of the available volume).

Signage: Entrance signs and limited wayfinding trail signage.

History: Trail system in the southern portion of the parcel was developed in the early 1990s by the school Physical Education teacher. Property is under the Management of Annapolis Valley Regional School Board.

Overlapping Management Plans: 2013 West Hants Trails Plan, p.20.

*No management recommendations are provided as management is at the discretion of the Annapolis Valley Regional School Board.



9

Brooklyn Municipal Cemetery

Overview

PID: 45062395

Coordinates: 44.99392, -63.9849

Date visited: November 26, 2015.

Address: 241 McKay Rd, McKay Section.

Classification: Cultural Park.

Size: 0.67 acres (0.27 ha).

Land cover: Forested parcel of White Pine with managed turf understory. Stone grave markers underneath trees.

Topography: Drainage ditch along entire southern border of parcel along road. Steep slope to the north towards the river. Undulating topography along ridge at highest point.

Maintained by: Municipality.

Use: Municipal Cemetery.

Access: From McKay Road.

Parking: One space at main gate.

Signage: Entrance signage present.

History: Previous location of the West Hants County Poor Farm, closed in 1966.

Overlapping Management Plans: None.

Observations

- Well-managed property.
- Property fenced with wire fencing and wooden posts.
- Erosion on the slope on the north side of the parcel.

Opportunities

- More noticeable signage to mark cemetery.
- Interpretive boards documenting history.
- Expansion of gravel pad at entrance for additional parking.
- Address slope erosion as necessary.



10

Three Mile Plains Field

Overview

PID: 45000502

Coordinates: 44.96446, -64.0993

Date visited: November 26, 2015.

Address: Lot 2 No 1 Hwy, Three Mile Plains.

Classification: Underused.

Size: 1.09 acres (0.44 ha).

Land cover: An open area with managed turf. A small stand of trees present at the southern property boundary. Northern boundary, along the drainage ditch, is naturalized with perennials.

Topography: Land gently sloping to the north and east.

Maintained by: Municipality.

Use: Unclear.

Access: From the adjacent Community Hall.

Parking: In the parking lot of the adjacent Community Hall.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Well maintained parcel, but use is unclear.
- Slope too steep for field sports, but gentle enough for passive recreation.

Opportunities

- Retain as a multi-functional space for use by community centre users.



11

MacLeod Court

Overview

PID: 45231586

Coordinates: 44.95837, -64.0828

Date visited: November 26, 2015.

Address: PARCEL P-1 MacLeod Court.

Classification: Underused.

Size: 0.18 acres (0.07 ha).

Land cover: Parcel covered with naturalized perennials and shrubs with some tree cover to the western boundary.

Topography: Slight slope to the north.

Maintained by: Municipality.

Use: None.

Access: No municipal access to the site.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- No access from public right-of-way.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



12

Rocks Road

Overview

PID: 45061223

Coordinates: 44.96576, -64.0197

Date visited: November 26, 2015.

Address: Rocks Rd, St Croix.

Classification: Preservation and Production.

Size: 50.40 acres (20.40 ha).

Land cover: Approximately 50% of the parcel is forested with the remaining space being managed grassland or naturalized perennials and shrubs. A portion of the land is managed for agriculture. A dyke runs along the west, north boundary of the parcel. Thumb Hill Creek runs parallel to the dyke and then continues through the middle of the parcel.

Topography: A fairly flat parcel with a raised dyke and drop towards the creek's edge.

Maintained by: Municipality.

Use: agriculture, walking, swimming.

Access: From Rocks Road.

Parking: None on site; parking available at the park-and-ride area at the south east corner of the parcel.

Signage: None.

History: Land parcel originally owned by Aubrey Smiley was purchased by the Crown when Highway 101 was constructed.

The Crown deeded the remaining lands, divided into two land parcels, to the Municipality in 1975 with the stipulation that it be used for recreation purposes.

Overlapping Management Plans: 2013 Trails Plan, p.66.

Observations

- Informal footpaths and ATV routes found within the property.
- Large displays of exposed gypsum cliffs.
- Evidence of agricultural activity, unsure if field is still in use.
- No signage to indicate property maintenance or usage.

Opportunities

- Although isolated by the highway, this property is an excellent display of local geology, West Hants dykelands, freshwater ecology, and walking trails.
- Public access to the creek.
- Promote as recreation area (e.g. walking, picnicking, sitting, field sports).
- Work with the Province of Nova Scotia on possible trail connections to St. Croix Recreation Park underneath Highway 101.



13

Elm Court Parcel

Overview

PID: 45060779

Coordinates: 44.98104, -63.9936

Date visited: November 26, 2015.

Address: Parcel P-1 Elm Court, Brooklyn.

Classification: Underused.

Size: 2.00 acres (0.81 ha).

Land cover: Cleared parcel with forested (deciduous and evergreen) boundary to the south and forested north west corner. Shrubs and tall perennials filling in remainder of parcel.

Topography: Gently sloping to the east towards Highway 215.

Maintained by: Municipality.

Use: Walking, ATVing.

Access: From Elm Court.

Parking: 5-8 cars.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Gravel turn-around and shoulder used for parking.
- Two main ATV tracks well traveled by two properties on east side of parcel.
- ATV use has left parcel rutted with standing water.
- Uneven surfaces difficult for walking.

Opportunities

- Develop as neighbourhood park for residents.
- Regrade entrance to make accessible.
- Create simple trail loop.
- Install garbage receptacles and seating area.
- Entrance signage indicating use, management, etc.



14

Ardoise Lane

Overview

PID: 45219284

Coordinates: 44.95866, -63.9529

Date visited: November 26, 2015.

Address: Lot 4 Ardoise Lane, Ardoise.

Classification: Underused.

Size: 1.16 acres (0.47 ha).

Land cover: Undeveloped forested lot with forested and partially cleared lots surrounding.

Topography: Relatively flat parcel sloping away from road. Drainage ditch at road shoulder.

Maintained by: Municipality.

Use: Walking.

Access: From Ardoise Lane.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- No obvious site access.
- Power lines and poles along drainage ditch.
- White spruce/white pine forest.
- Low population density in the surrounding neighbourhood.

Opportunities

- Although this parcel is in an ideal geographic location for a Neighbourhood Park, this lot and its set back into a quiet residential street does not suit itself to be a well-visited park space.
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



15

Robert Drive Parcel

Overview

PID: 45061181

Coordinates: 44.92348, -63.9047

Date visited: 26 November, 2015.

Address: 16 Robert Drive, Ardoise.

Classification: Underused.

Size: 1.20 acres (0.49 ha).

Land cover: Forested parcel with narrow access point from the road.

Topography: Parcel sloping down from road to the west.

Maintained by: Municipality.

Use: No programmed use; informal walking.

Access: From Robert Drive. No cleared access. Worn down foot path apparent.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Close to the border of Forest Lakes Community.
- Well traveled ATV paths running adjacent to parcel.
- Wet and muddy conditions in low points.
- Very dense understory growth.

Opportunities

- Work with developer at Forest Lakes Community to outline future parks and open space development in close proximity to Robert Drive parcel. This parcel could become a municipal access point to proposed open space and trails. If road access to Forest Lakes is created at the foot of Robert Drive, there would be little potential to develop as amenity space. At that time, this parcel should be considered for divestment.



16

Swinamer Drive

Overview

PID: 45289790

Coordinates: 44.966915, -64.105733

Date visited: November 26, 2015.

Address: Lot 12 Swinamer Drive, Three Mile Plains.

Classification: Unused.

Size: 0.37 acres (0.15 ha).

Land cover: Naturalized property with small shrubs and perennial species present. Presence of water tolerant perennial species indicate standing water in the low-point of the parcel.

Topography: Relatively flat parcel with a low point in the centre of the parcel.

Maintained by: Municipality.

Use: None.

Access: No formal access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Public land that feels private with arrangement of surrounding houses.
- Narrow street frontage.
- Standing water on-site.

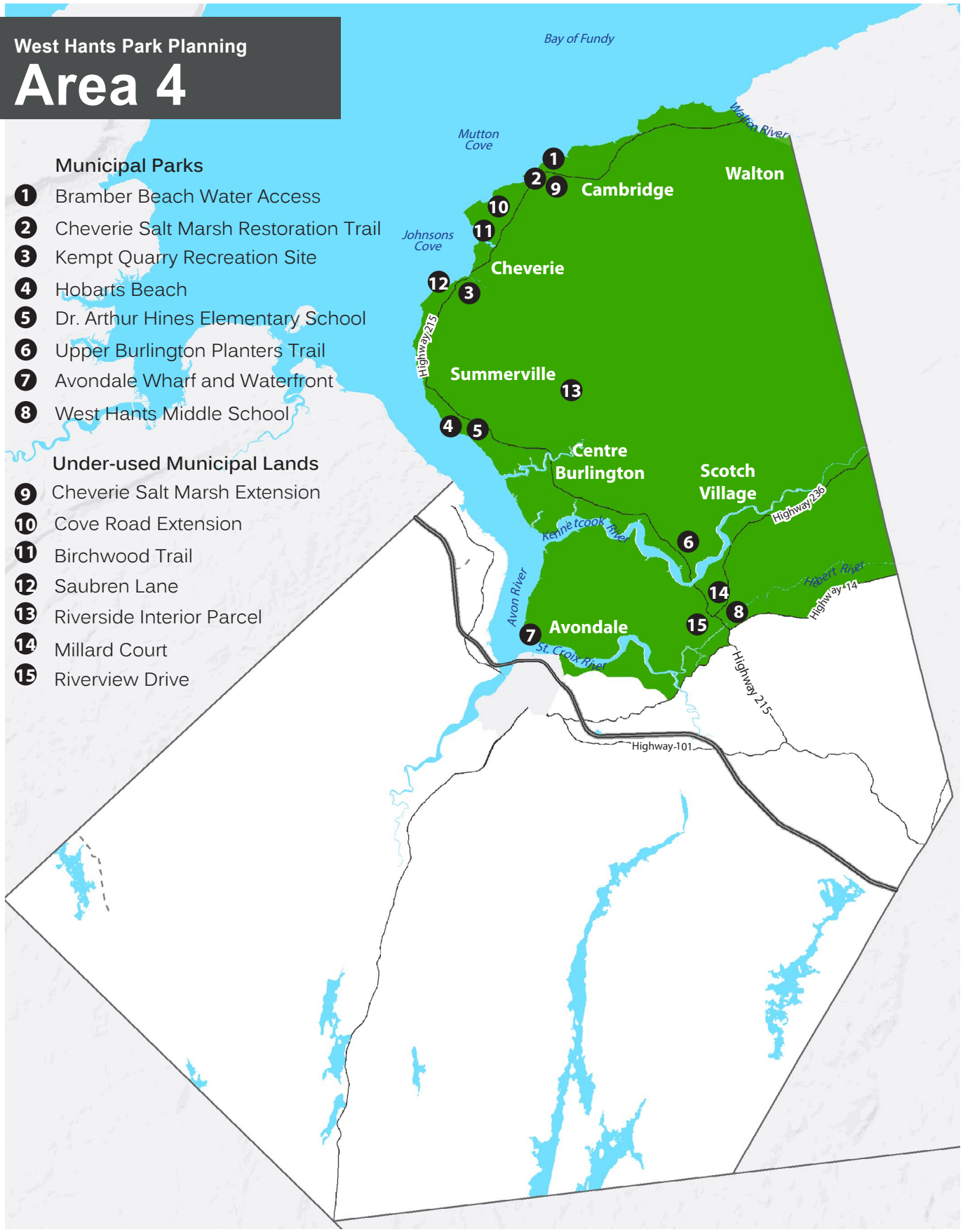
Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



West Hants Park Planning

Area 4



Municipal Parks

1. Bramber Beach Water Access
2. Cheverie Salt Marsh Restoration Trail
3. Kempt Quarry Recreation Site
4. Hobarts Beach
5. Dr. Arthur Hines Elementary School
6. Upper Burlington Planters Trail
7. Avondale Wharf and Waterfront
8. West Hants Middle School

Under-used Municipal Lands

9. Cheverie Salt Marsh Extension
10. Cove Road Extension
11. Birchwood Trail
12. Saubren Lane
13. Riverside Interior Parcel
14. Millard Court
15. Riverview Drive

Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

1

Bramber Beach Water Access

Overview

PID: 45154861

Coordinates: 45.19936, -64.1332

Date visited: November 16, 2015.

Address: No 215 Hwy, Bramber.

Classification: Neighbourhood, Community Parks.

Size: 1.50 acres (0.61 ha).

Land cover: Grass path leading to tidal shoreline. Grasses and perennials line the embankment towards the river and thick shrubbery imposes into the path from the private property and Crown Land to the east.

Topography: Parcel sloping north towards the beach and west towards the river.

Maintained by: Municipality.

Use: Walking, beach access.

Access: Pedestrian access from Highway 215.

Parking: One parking space.

Signage: None.

History: Designated a beach under the Beaches Preservation and Protection Act in 1986.

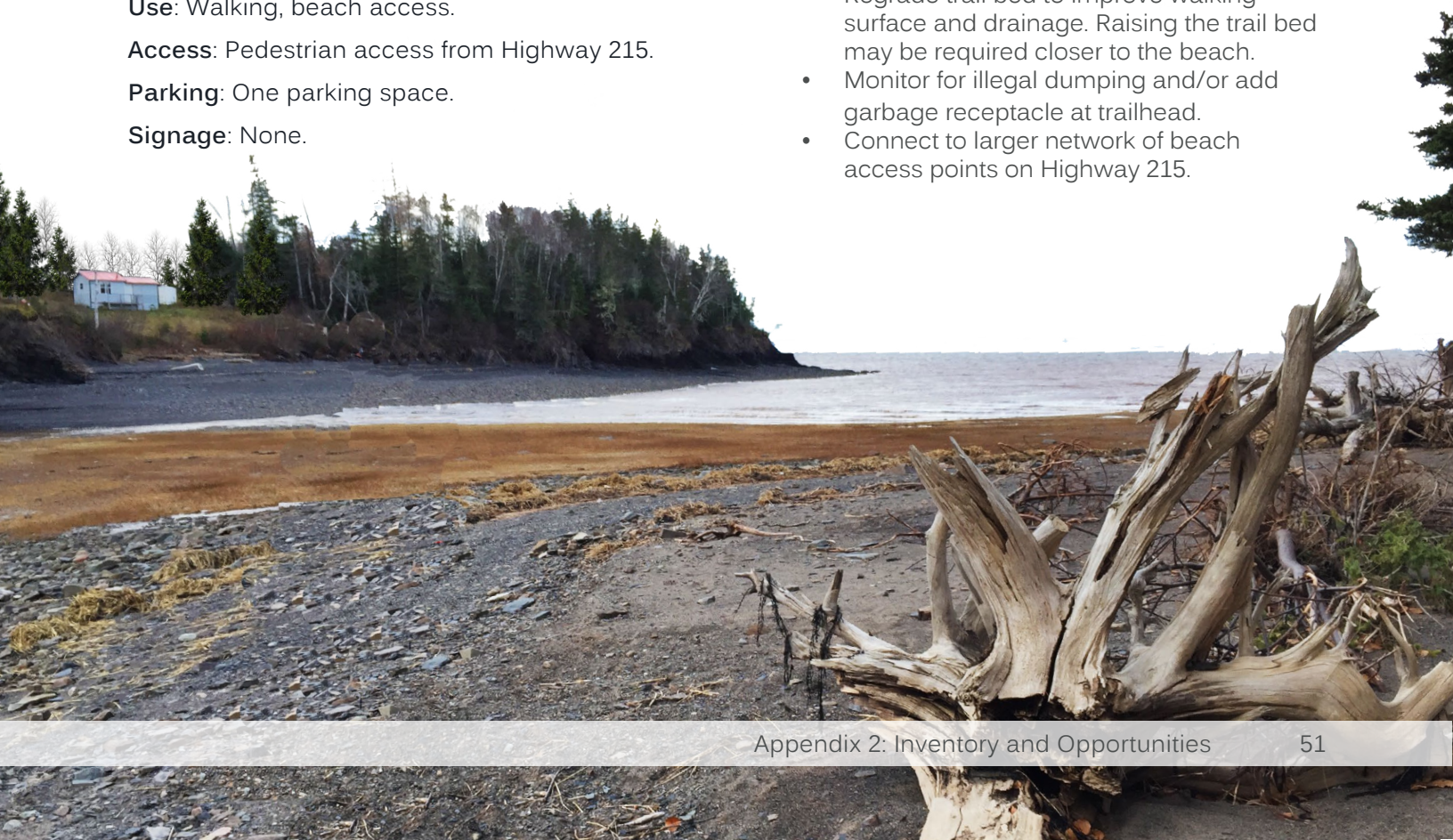
Overlapping Management Plans: None.

Observations

- Standing water at trailhead (large pothole).
- Appears to be well-used by community.
- Garbage collecting on site.
- Path empties into grassed tidal area.
- Erosion apparent at northern edge of parcel.

Opportunities

- Install entrance signage to identify ownership, uses, and to house tidal information.
- Expand parking area at trailhead.
- Regrade trail bed to improve walking surface and drainage. Raising the trail bed may be required closer to the beach.
- Monitor for illegal dumping and/or add garbage receptacle at trailhead.
- Connect to larger network of beach access points on Highway 215.



2

Cheverie Salt Marsh Restoration Trail

Overview

PID: 45177706

Coordinates: 45.16016, -64.1658

Date visited: November 16, 2015.

Address: 6500 Highway 215, Cheverie.

Classification: Community, District Parks.

Size: 8.98 acres (3.63 ha).

Land cover: Partially wooded parcel in between marsh and Camera Obscura. Turf trail cut into naturalized shrubs and grasses. Turf picnic area at entrance. Parking lot and driveway are compacted gravel. Wetland along southern boundary of property.

Topography: Northern edge of parcel is a high point that slopes to the south and west.

Maintained by: Municipality and the West Hants Trails Association.

Use: Parking, walking, picnicking, sitting.

Access: From Highway 215.

Parking: Gravel parking lot/turn-around.

Signage: Entrance signage for marsh. Interpretive panels and maps; roadside signage.

History: This parcel was purchased in 2006 by the Municipality from Lacy Calcutt and Willie McKay. The Restoration Trail is leased by the West Hants Trails Association and the inventory and restoration of the salt marsh was initiated by the community. The local community organized the Cheverie Crossway Salt Marsh Society. Camera Obscura built by Dalhousie University Architecture students in 2012.

Overlapping Management Plans: 2013 West Hants Trails Plan, p.28.

Observations

- Marsh signage visible from road, but only indicating marsh. No signage indicating direction to, purpose, or use of Camera Obscura.
- Camera Obscura doors cracked/broken preventing closure.
- Unobstructed views of water and Blomidon.
- Picnic tables and garbage receptacles sited at park entrance.
- Well maintained trail bed, vegetation, trailhead signage, boardwalk.
- Land agreement with adjacent property owner for looping trail from marsh to Camera Obscura.

Opportunities

- Repairs to Camera Obscura internal structure (e.g. door).
- Park signage to identify Camera Obscura, maintenance, views.
- Define path (trailhead) from parking lot to Camera Obscura.



3

Kempt Quarry Recreation Site

Overview

PID: 45179199

Coordinates: 45.14055, -64.1835.

Date visited: November 16, 2015.

Address: Kempt Forest Drive, Kempt Shore.

Classification: Community, District Parks.

Size: 43.7 acres (17.7 ha).

Land cover: Primarily tree covered property with grassed open areas for recreation. Pond on property occupies approximately 40% of parcel. Driveway and parking is compacted gravel.

Topography: Fairly flat terrain with low points in the pond and lower elevations (sinkholes) in wooded area.

Maintained by: Municipality.

Use: Daily use: picnicking, swimming, sitting, trail walking/running.

Access: From Highway 215.

Parking: Large parking area with overflow parking on grass.

Signage: Entrance signage; sinkhole warning signage.

History: Decommissioned gypsum quarry. The land was deeded to the Municipality in 1976. It was developed as a recreation site in the mid 1990's, spearheaded by the community.

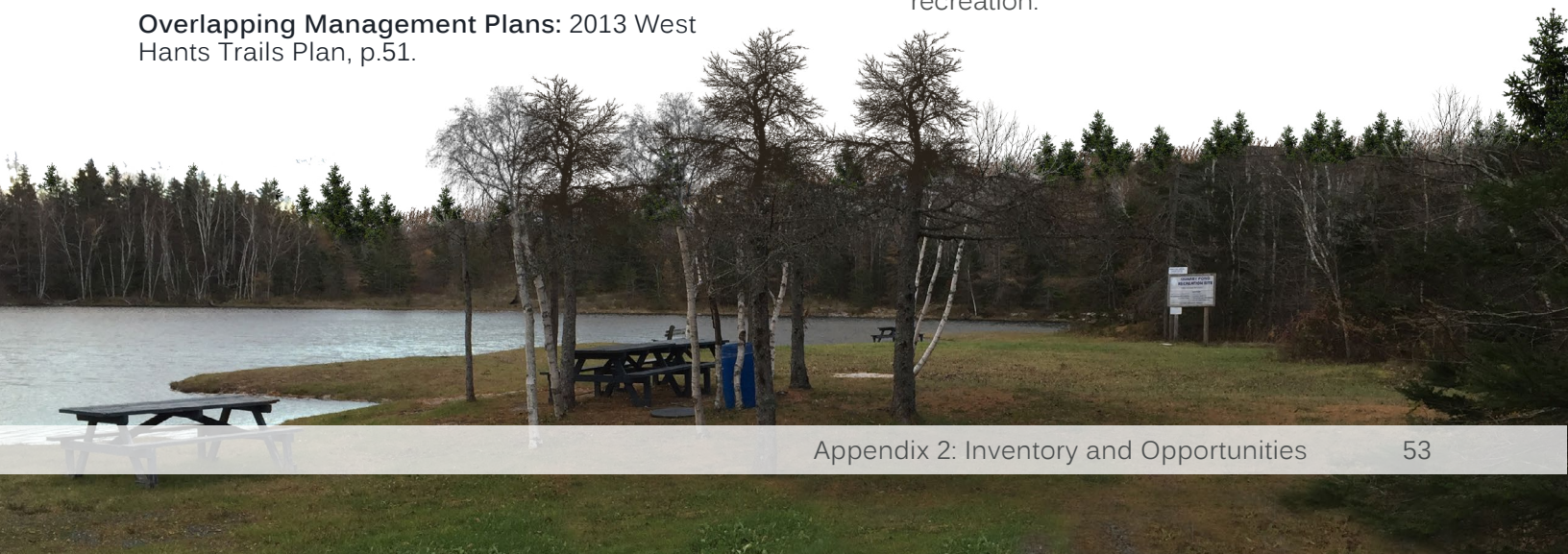
Overlapping Management Plans: 2013 West Hants Trails Plan, p.51.

Observations

- Park signage aging and vandalized.
- Parking area not well defined which leads to parking on shoulders and grass with unsuitable base.
- Standing water in parking area.
- Boundary between trail and parking area is unclear.
- Obvious efforts to fill sinkholes with gravel.
- Dead and declining trees around picnic area.
- Trail to picnic area filling in with grass.
- Long plastic drainage pipe (beaver barrier) on surface of brook connecting to pond.
- Fire department water pumping station on west end of the pond.
- Seating and picnic tables sited on south side of the pond.

Opportunities

- Park/trail signage and wayfinding.
- Develop visual/physical barrier between trail and parking.
- Upgrade paths to improve accessibility around the pond to picnic and swimming area.
- Install sod over exposed gravel (sinkholes).
- Consult with an arborist to evaluate tree health around amenities.
- Basic site landscaping at entrance and picnic area to improve park aesthetic.
- More opportunities for sitting around the pond.
- Maintain ice surface in winter for recreation.



4

Hobarts Beach

Overview

PID: 45182623

Coordinates: 45.09981, -64.1839

Date visited: November 26, 2015.

Address: 192 Block Wharf Rd, Summerville.

Classification: Community Park.

Size: 9 acres (3.6 ha).

Land cover: Sandy beach during low-tide, only rocky shoreline exposed during high-tide. Managed turf picnic and seating area to the north of the existing parking lot. Approximately 90% of the parcel is forested.

Topography: Block Wharf Road slopes westerly towards the beach. Parking area relatively flat. Land sloping upward to the north of the parking lot. Undulating topography from parking area to northern boundary. Steep bank sloping west towards the waters edge.

Maintained by: Municipality.

Use: Swimming, fishing, bird watching, walking, picnicking, sitting, bonfires.

Access: From Block Wharf Road.

Parking: Approximately 15-20 spaces.

Signage: None.

History: Deeded to Municipality on November 21, 1991 by Fundy Gypsum Company Limited.

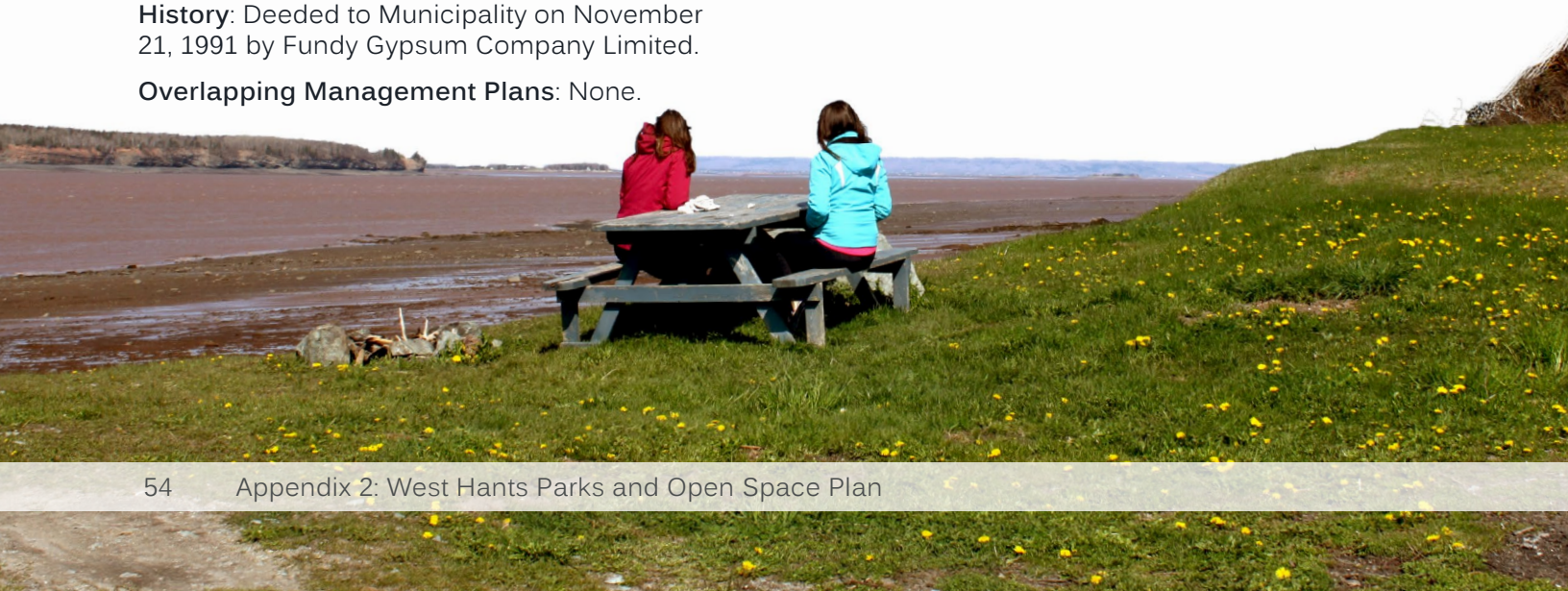
Overlapping Management Plans: None.

Observations

- Parking lot ill-defined from recreation areas.
- Standing water in parking lot.
- Shoreline erosion around boat launch.
- Transition from parking area to picnic area not accessible.
- Irregular grade in picnic area.
- Boat launch filled with rocks and debris limiting access to water and beach.
- Litter and illegal dumping apparent.
- Fire pits not fully enclosed by rocks.

Opportunities

- Redesign parking lot for more efficient layout, to create a visual/physical barrier between people and cars, and to improve drainage.
- Shoreline stabilization necessary around boat launch.
- Signage at top of Block Wharf Road and at parking lot.
- Formalize fire pits with steel boxes/BBQ.
- Regrade picnic area for accessibility.
- Monitor for illegal dumping.



5

Dr. Arthur Hines Elementary School

Overview

PID: 45180429

Coordinates: 45.09831, -64.1678

Date visited: November 26, 2015.

Address: 75 Musgrave Road, Summerville.

Classification: Community Park, School

Size: 6.00 acres (2.43 ha).

Land cover: Managed turf with asphalt and gravel surfaces around the school.

Topography: Relatively flat terrain. Raised berm amphitheater in centre of parcel. Steep bank along the southern edge of the sports field.

Maintained by: Annapolis Valley Regional School Board.

Use: Playground, soccer, football, gardening, sitting, picnicking. There is an unmaintained trail that surrounds the property (Harmony Park).

Access: From Musgrave Road.

Parking: School parking for approximately 40 cars.

Signage: Granite park marking on east side of the school.

History: Under Management of Annapolis Valley Regional School Board. Friends of Harmony Park Society operates, maintains, and improves Harmony Park.

Overlapping Management Plans: 2013 West Hants Trails Plan, p.31.

*No management recommendations are provided as management is at the discretion of the Annapolis Valley Regional School Board.



6

Upper Burlington Planters Trail

Overview

PID: 45285103

Coordinates: 45.04414, -64.0398

Date visited: November 26, 2015.

Address: No 215 Hwy/ Old Walton Road, Upper Burlington.

Classification: Community, Cultural Parks.

Size: 3.00 acres (1.21 ha).

Land cover: Approximately 50% of the parcel is managed for agricultural purposes. A fallow gravel baseball diamond to the east of the agricultural field. Shrubby perimeter along the southern border of the parcel. Forested eastern boundary and north eastern corner of parcel.

Maintained by: Municipality.

Topography: Mainly flat parcel with slight slope rising to the north towards the Community Hall.

Use: Agriculture, walking, sitting, basketball, baseball, education.

Access: From North River Road (Community Hall) or Old Walton Road.

Parking: None. Parking for 10 cars at the adjacent Community Hall.

Signage: Trail signage, interpretive panels.

History: This park parcel is situated on (and near) land that was once inhabited by Mi'kmaq, Acadian, Planter, and Loyalist communities. This 3.0 acre property was purchased by the Municipality in September 1998 and then leased to the Upper Burlington Community Hall Association on January 13, 2000 to be used for recreation purposes only.

Overlapping Management Plans: None.

Observations

- Community Hall playground and shed on Municipal land.
- Wooden playground not structurally sound. Structure leaning and chains rusting.
- Basketball court (concrete pad) very small with chipping paint.
- Baseball diamond growing in with weeds.
- Interpretive panels in fair shape, some rotting wood, cracked panels, and water damage.
- Trail running from Community Hall along eastern border and along entire southern border.

Opportunities

- Signage at roadside indicating trail and cultural site, signage at trailhead.
- Interpretive signage/shelter in need of structural and cosmetic upgrades.
- Weeding of gravel baseball diamond
- New or updated basketball court



7

Avondale Wharf and Waterfront

Main Parcel

Overview

PID: 45171279

Coordinates: 45.02204, -64.1312

Date visited: November 26, 2015.

Address: 15 Belmont Rd, Avondale.

Classification: Community, Cultural, Neighbourhood Parks.

Size: 1.61 acres (0.65ha).

Land cover: Mostly managed turf with compacted gravel driveway and parking areas, and building footprints.

Topography: Relatively flat terrain sitting lower than Belmont Road at the field and at road elevation at Museum entrance. Gently sloping towards the wharf.

Maintained by: Primarily by community volunteers with support from the Municipality.

Use: Baseball, soccer, sitting, picnicking, walking, playground, bird watching, boating, fishing.

Access: From Belmont Road and Avondale Road.

Parking: No formal parking, opportunities for approximately 10-20 cars.

Signage: Collection of signs at Heritage Museum entrance for buildings/amenities. Newport Landing sign along road shoulder along field. Park entrance sign at southern driveway.

History: This area is formerly a New England Planter settlement. Due to the proximity to water, ship building was an important industry. The Wharf was divested from the Federal Government to the Municipality in 1990 and was rebuilt by the community for $13,000.00. In 1996, the Municipality entered into a lease agreement with the Avon River Heritage Society to allow that organization to develop a portion of the property.

Overlapping Management Plans: MCCAP.

Observations

- Outdoor spaces around museum and boat house not well-defined (e.g. parking, gardens, turf).
- Sports field is well maintained. Standing water at field perimeter.
- Playground in good condition.
- Poor drainage, uneven surface, and irregular mixture of materials (e.g. soil, gravel) outside the playground and shipyard shed.
- Tide rising over wharf, boat launch, and driveway causing erosion and structural damage.
- Signage is not coordinated, should be centralized with park use, ownership, and rules identified.

Opportunities

- Site landscape plan to identify optimal pedestrian circulation and landscaping.
- Evaluate the stability and effectiveness of dykes/berms. Further development may be necessary along river to the north and boat launch to the south.
- Engineering assessment of wharf structure.
- New park signage consistent with municipal brand and materials at park entrances.
- The Municipality should consider climate change and work with the MCCAP Committee on projects that relate to the Avondale Wharf and Waterfront.
- Work with the MCCAP Committee to address climate change effects on parcel.



7

Avondale Wharf and Waterfront

South Shoreline

Overview

PID: 45183118

Coordinates: 45.02126, -64.132

Date visited: November 26, 2015.

Address: 1 Avondale Rd, Newport Landing.

Classification: Community Park, Production and Protection.

Size: 1.10 acres (0.45ha).

Land cover: Primarily tidal grassland with trees and shrubs growing at eastern border.

Topography: Slight slope from eastern edge of parcel to the water.

Maintained by: Not a maintained parcel, but owned by the Municipality.

Use: Tidal zone, wildlife habitat, no current recreational use.

Access: From the beach at low tide or from Avondale Wharf and Waterfront Main Parcel driveway.

Parking: Few potential spaces at boat launch.

Signage: None.

History: Deeded to the Municipality of the District of West Hants in 1996 by USG Canadian Mining Limited.

Overlapping Management Plans: MCCAP.

Observations

- No obvious human activity on site.
- Large area covered by water during high tide.

Opportunities

- Little recreational opportunity due to tidal flow, but valuable as wildlife habitat.
- Potential to develop a dyke/berm system to prevent flooding into southern border of Avondale Wharf and Waterfront Main Parcel.



7

Avondale Wharf and Waterfront

North Shoreline

Overview

PID: 45225513

Coordinates: 45.02268, -64.1318

Date visited: November 26, 2015.

Address: 1 Avondale Road, Newport Landing.

Classification: Community Park, Production and Protection.

Size: 1.13 acres (0.46ha).

Land cover: Primarily tidal grassland with exposed sand/sediment during low tide.

Topography: River channel flowing through property. Steep grass-covered/muddy banks on either side of channel.

Maintained by: Not a maintained parcel, but owned by the Municipality.

Use: Tidal flow, wildlife habitat, boat access.

Access: From Avondale Wharf and Waterfront Main Parcel.

Parking: Parking available in Avondale Wharf and Waterfront Main Parcel and roadside,

Signage: None.

History: In May, 1760 the first New England Planters arrived aboard sloops Lydia and Sally. Water lot was deeded to the Municipality in 1990

Overlapping Management Plans: MCCAP.

Observations

- Boat access damaged during previous weather events.

Opportunities

- Improve access to water.



8 West Hants Middle School

Overview

PID: 45060787

Coordinates: 45.01459, -64.0103

Date visited: November 26, 2015.

Address: 8009 Highway 14, Brooklyn.

Classification: Community Park, School.

Size: 16.30 acres (6.60 ha).

Land cover: Mainly cleared parcel (e.g. managed turf, asphalt parking, building footprint) with tree-lined southern boundary and large forested area to the north of the school along the river.

Topography: Relatively flat parcel with sports field to the west in a depression. Trail extends to Newport Rink.

Maintained by: Annapolis Valley Regional School Board.

Use: Sitting, walking, sports (e.g. football, soccer).

Access: From Highway 14.

Parking: Parking for approximately 60 cars (school parking occupies most of the available volume).

Signage: Entrance signage and signage on building front.

History: Property is under the management of Annapolis Valley Regional School Board.

Overlapping Management Plans: None.

*No management recommendations are provided as management is at the discretion of the Annapolis Valley Regional School Board.



9

Cheverie Salt Marsh Extension

Overview

PID: 45177763

Coordinates: 45.15626, -64.1605

Date visited: November 16, 2015

Address: Highway 215, Cheverie.

Classification: Underused.

Size: 5.25 acres (2.12 ha).

Land cover: Open wetland.

Topography: Unknown.

Maintained by: Municipality.

Use: None (currently).

Access: None.

Parking: On adjacent Municipal parcel.

Signage: None.

History: This parcel was deeded to the Municipality in 2006 by Lacy Calcutt and Willie McKay. It was purchased at the same time as the Cheverie Salt Marsh Restoration Trail land parcel.

Overlapping Management Plans: 2013 West Hants Trails Plan, p.28.

Observations

- No cleared access to parcel.
- Land is in riparian area and primary land cover is wetland.

Opportunities

- Consider how to link to existing board-walk or if parcel is needed at all.



10

Cove Road Extension

Overview

PID: 45063146

Coordinates: 45.1897, -64.1578

Date visited: November 16, 2015.

Address: PARCEL P-1andP-2 Cove Road Extension, Bramber.

Classification: Underused.

Size: 0.73 acres (0.29 ha).

Land cover: Forested parcel with turf maintained at road shoulder and along northeast corner of parcel.

Topography: Fairly flat parcel with western edge sloping to the west.

Maintained by: Municipality.

Use: None.

Access: Park access from Cove Road Extension.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- No obvious signs of park use.
- Road terminates at western property boundary.
- Close proximity to public beach access.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



11

Birchwood Trail

Overview

PID: 45182912

Coordinates: 45.14649, -64.1644

Date visited: November 16, 2015.

Address: Birchwood Trail, Cheverie.

Classification: Underused.

Size: 6.34 acres (2.57 ha).

Land cover: Forested parcel fronting on two roads with a drainage ditch.

Topography: Parcel sloping north from road shoulder. Small pond of standing water in northeast boundary line of parcel.

Maintained by: Municipality.

Use: None.

Access: From Birchwood Trail and Bayswater Drive.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Very poor road conditions leading to parcel (i.e., grading, washouts).
- Low population density in subdivision.
- Parcel a densely forested property with no obvious signs of use or access.
- Standing water observed on site.

Opportunities

- With large wooded residential parcels adjacent to Municipal parcel, it is unlikely that the development of public park would be well-used.
- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



12

Saubren Lane

Overview

PID: 45225018

Coordinates: 45.14967, -64.1883

Date visited: November 16, 2015.

Address: Saubren Lane, Cheverie.

Classification: Underused.

Size: 1.74 acres (0.70 ha).

Land cover: Primarily forested parcel with a cleared approach from Saubren Lane.

Topography: Flat, dry, relatively cleared of trees, unmaintained.

Maintained by: Municipality.

Use: None.

Access: From Saubren Lane.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Front approach to parcel is regularly maintained by adjacent land owners.
- Signs of ATV use on the southern border of the parcel.
- Signs of previous land clearing and tree regrowth.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



13

Riverside Interior Parcel

Overview

PID: 45233517

Coordinates: 45.12471, -64.1319

Date Visited: N/A

Address: Kempt Forest Dr, Kempt Shore.

Classification: Underused.

Size: 16.3 acres (6.6 ha).

Land cover: Densely forested parcel.

Topography: unknown

Maintained by: Municipality.

Use: None.

Access: No access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

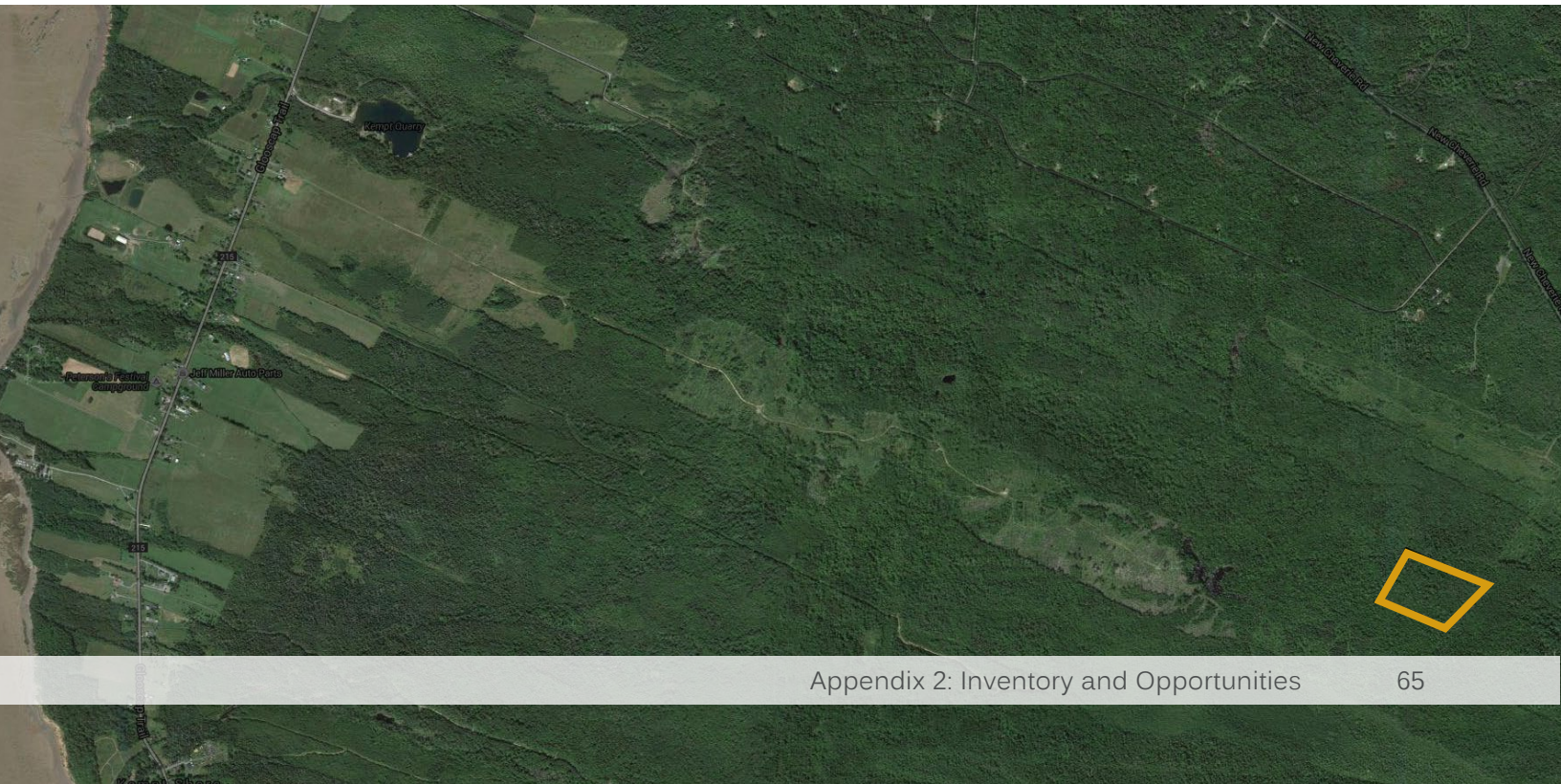
Overlapping Management Plans: None.

Observations

- Parcel is inaccessible.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



14

Millard Court

Overview

PID: 45236601

Coordinates: 45.02995, -64.0171

Date visited: November 26, 2015.

Address: Lot 13 Millard Court, Union Corner.

Classification: Underused.

Size: 2.05 acres (0.83 ha).

Land cover: Forested parcel of spruce and birch with a shrubby and turf area near the road.

Topography: Land sloping to the north east.

Maintained by: Municipality.

Use: None.

Access: Parcel fronts onto Millard Court.

Parking: None; parking on the road shoulder.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Low population density surrounding parcel.
- Signs of an informal trail and ATV activity.
- Standing water at north east corner of parcel.
- Parcel surrounded by other forested parcels.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



15

Riverview Drive

Overview

PID: 45215290

Coordinates: 45.00908, -64.0214

Date visited: November 26, 2015.

Address: Lot 22 Riverview Drive, Brooklyn.

Classification: Underused.

Size: 2.75 acres (1.11 ha).

Land cover: Forested parcel (e.g. red and white spruce, white pine, white birch).

Topography: Very steep slope to the north west towards the river (30m drop).

Maintained by: Municipality.

Use: None.

Access: From Riverview Drive; no cleared access point.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- No signs of human access.

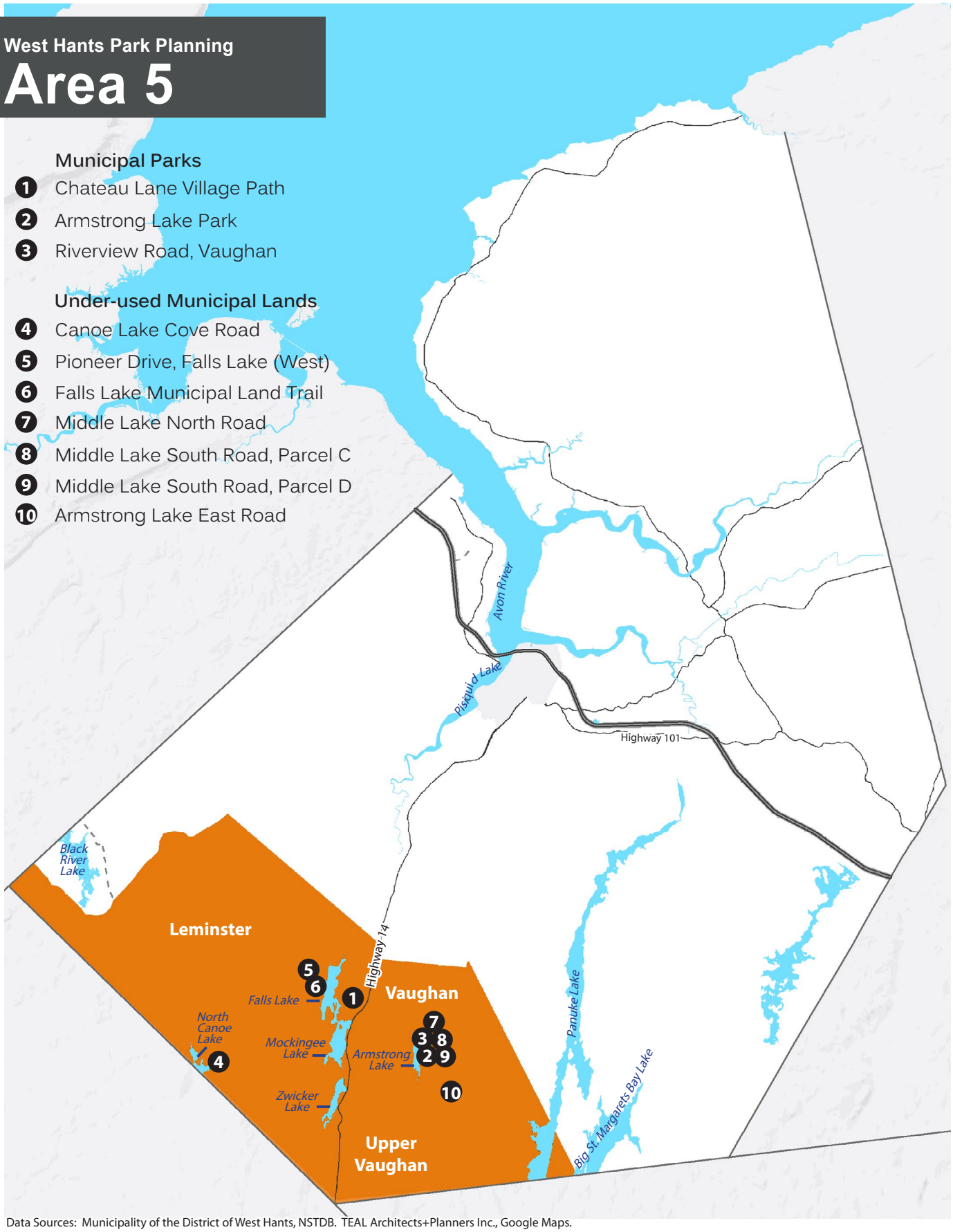
Opportunities

- Little potential for water access or recreation use due to steep slope.
- Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



West Hants Park Planning

Area 5



Data Sources: Municipality of the District of West Hants, NSTDB. TEAL Architects+Planners Inc., Google Maps.

1 Chateau Lane Village Path

Overview

PID: 45214632

Coordinates: 44.855, -64.2267

Date visited: November 20, 2015.

Address: Lot 24 Alpine Way, Vaughan.

Classification: Neighbourhood Park.

Size: 18.50 acres (7.48 ha).

Land cover: Forested lot with sections of standing water.

Topography: Fairly flat parcel of land with slight undulations throughout. Village Path (to the north) raised above the parcel.

Maintained by: Municipality.

Use: Trail walking, ATVing.

Access: Through private property (Sugar Shack).

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

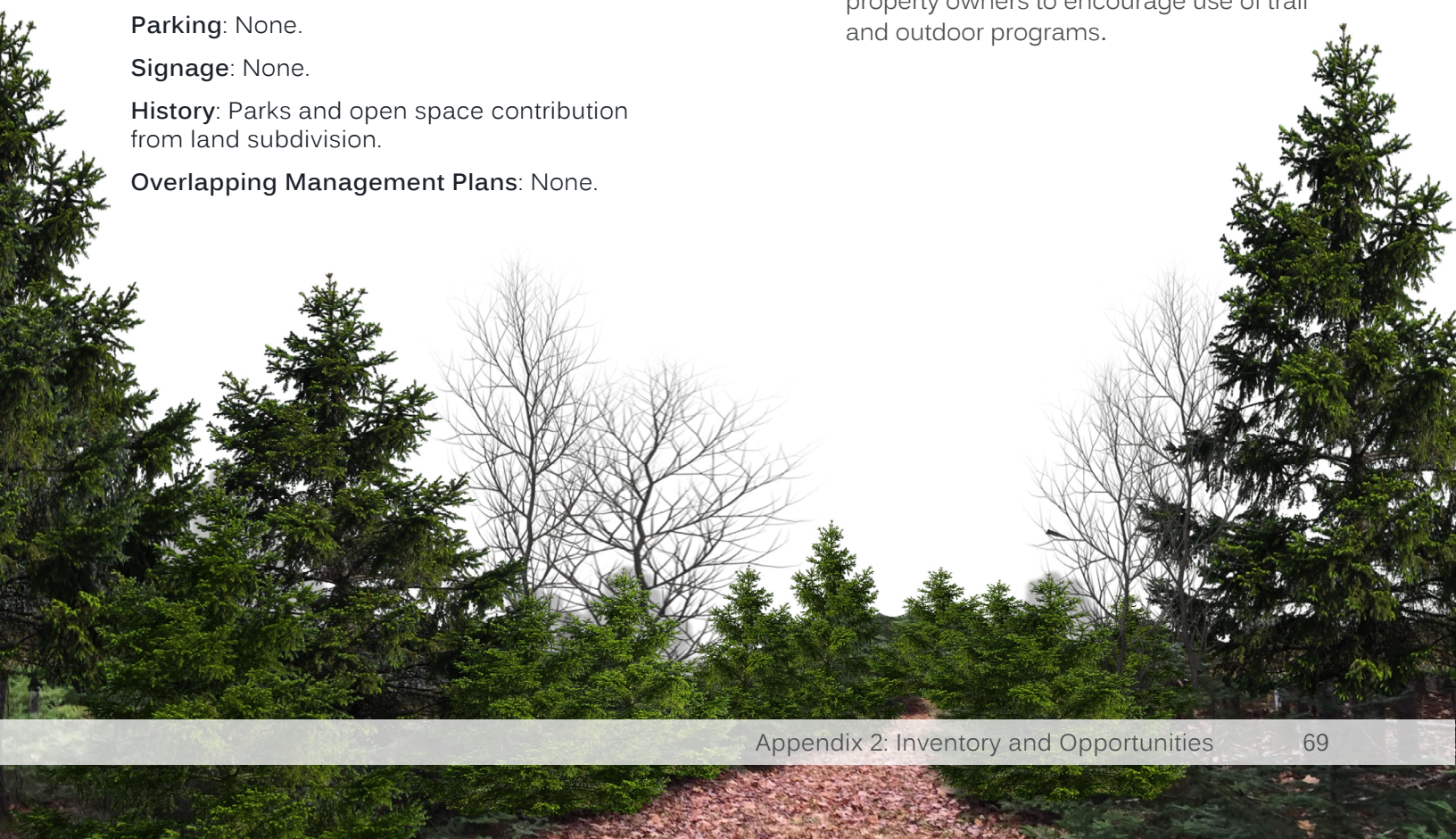
Overlapping Management Plans: None.

Observations

- Two looping trails currently accessed from private property.
- Trails used by locals for walking and ATV use.
- Trails in good shape, save for a few areas deeply rutted by ATV use.
- Standing water in low points.

Opportunities

- Installation of entrance signage, trail markers.
- Retain land and develop as formal trail loop.
- Create formal access point from surrounding roadway.
- Potential for expanded/renovated trail system on property.
- Establish partnership with Sugar Shack property owners to encourage use of trail and outdoor programs.



Armstrong Lake Park

2

Overview

PID: 45216538

Coordinates: 44.83331, -64.1931

Date visited: November 20, 2015.

Address: 640 Armstrong Lake East Road, Vaughan.

Classification: Community Park, Neighbourhood Park.

Size: 4.15 acres (1.68 ha).

Land cover: Primarily a forested (e.g. white pine, balsam fir, red spruce, paper birch) parcel with a small clearing for a park entrance along Armstrong Lake East Road.

Topography: Undulating topography, but generally sloping from the east to the west towards the lake.

Maintained by: Municipality.

Use: Walking, sitting, canoeing, swimming.

Access: From Armstrong Lake East Road.

Parking: Parking for 8-10 vehicles.

Signage: Trail and canoe launch signs. Educational signage about Loons.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Loon information sign fallen over.
- Signage fastened to trees.
- Footpath naturalized, uneven surface.
- Boat launch surface uneven with large rocks.

Opportunities

- Entrance signage.
- New interpretive signage about local wildlife (to replace Loon signage that is damaged).
- New trail/water access signage.
- New gravel surface for boat launch to improve access to water.



3

Riverview Road, Vaughan

Overview

PID: 45221959

Coordinates: 44.83702, -64.1947

Date visited: November 20, 2015.

Address: Parcel B Riverview Road, Vaughan.

Classification: Neighbourhood.

Size: 3.80 acres (1.53 ha).

Land cover: Marsh conditions with forested boundary to the east.

Topography: Land fairly flat with gentle slope to the west (towards the river).

Maintained by: Municipality.

Use: Boating, fishing.

Access: From Riverview Road, or by water via Armstrong Lake.

Parking: Gravel parking space for 1-2 cars.

Signage: None.

History: Parks and open space contribution from land subdivision.

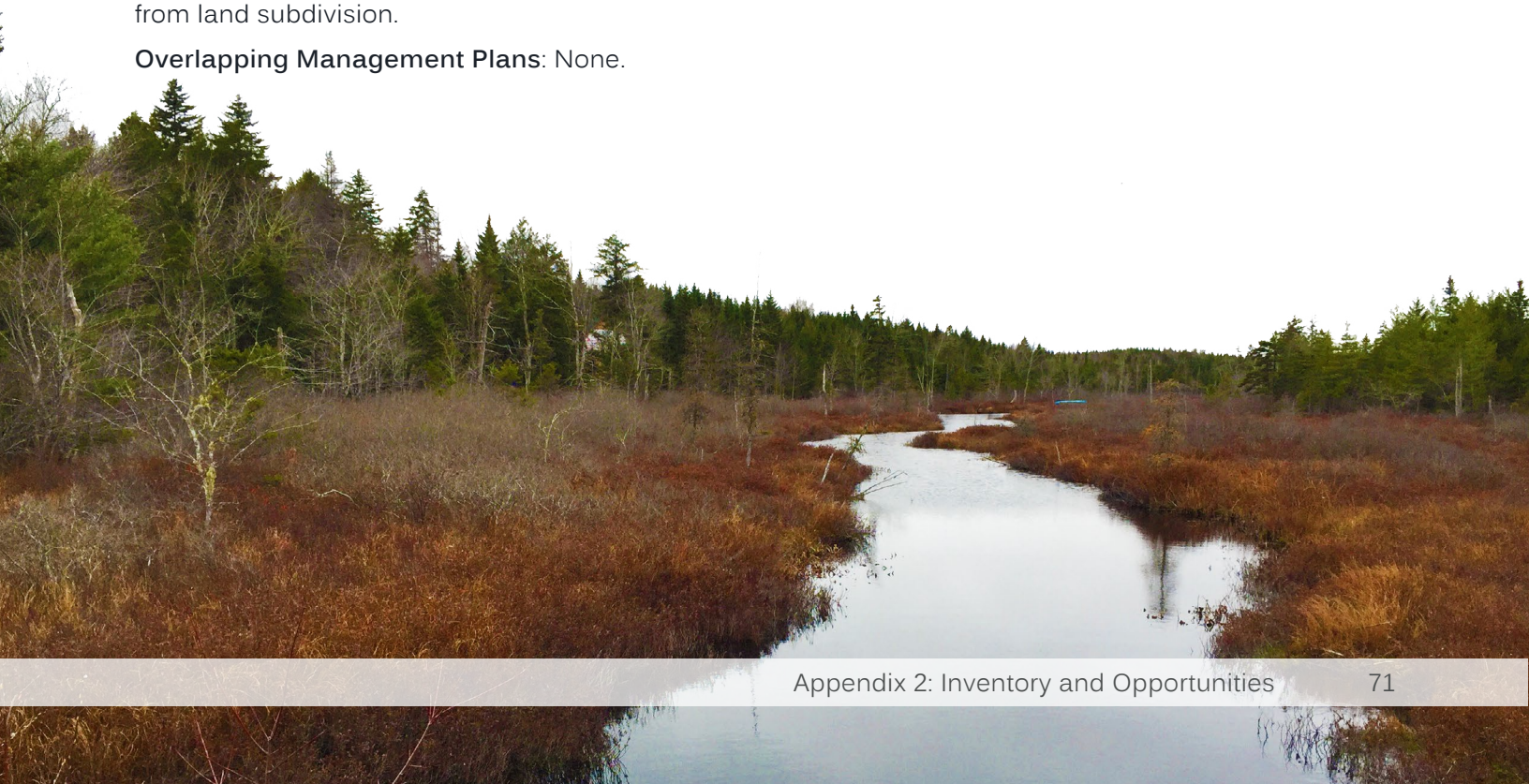
Overlapping Management Plans: None.

Observations

- River connects Middle Lake to Armstrong Lake.
- Bridge a popular stopping place to view the river and the lake.
- Fresh water bog with aesthetic interest.

Opportunities

- Retain land to protect wetland habitat and for recreation value.
- Partner with community group or NGO to highlight importance of ecosystem.
- Interpretive signage before the bridge at gravel area.
- Boardwalk or platform on the water would pair well with recreation (e.g. fishing) and interpretation.
- Park signage to signify ownership and park use.
- Formally connect parcel with Armstrong Lake Park to the south.



4

Canoe Lake Cove Road

Overview

PID: 45182953

Coordinates: 44.82312, -64.3205

Date visited: November 20, 2015.

Address: Canoe Lake Cove Road, Leminster.

Classification: Underused.

Size: 1.22 acres (0.49 ha).

Land cover: Parcel is 100% forested with both deciduous and evergreen species.

Topography: Land sloping to the south west (towards lake).

Maintained by: Municipality.

Use: None.

Access: From Canoe Lake Cove Road.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

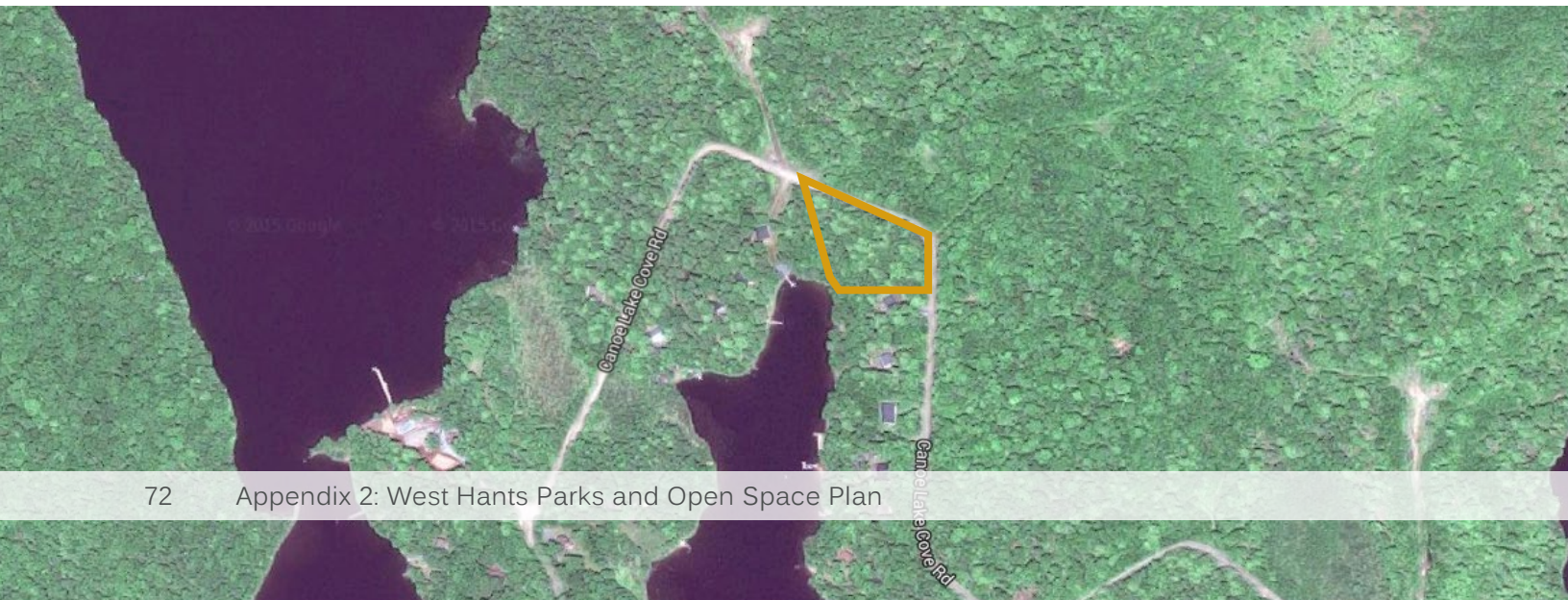
Overlapping Management Plans: None.

Observations

- Parcel has small area of water frontage.
- Parcel positioned in a cove off of North Canoe Lake.

Opportunities

- Develop public access to the lake.
- Improve/install park signage.



5

Pioneer Drive, Falls Lake

West

Overview

PID: 45281664

Coordinates: 44.85033, -64.2535

Date visited: November 20, 2015.

Address: Pioneer Dr, Vaughan.

Classification: Underused.

Size: 11.8 acres (4.75 ha).

Land cover: Primarily forested lot (e.g. spruce, white pine, hemlock, balsam fir, maple, birch, larch). There is a pond within the parcel with brook flowing east towards Falls Lake.

Topography: Parcel gently sloping towards Falls Lake.

Maintained by: Municipality.

Use: None.

Access: From Pioneer Drive. Municipally owned connection from Levy Meadow Trail.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Crescent-shaped pond in parcel.
- Running water through parcel.
- Densely forested.
- Directly across from another Municipally owned parcel.
- No sign of human activity from the road.

Opportunities

- Trail connection opportunity to improve water access from Levy Meadow Trail.
- Subdivide or enact an easement on the remainder of the property.



6

Falls Lake Municipal Land Trail

Overview

PID: 45275914

Coordinates: 44.84927, -64.2505

Date visited: November 20, 2015.

Address: 550 Pioneer Dr, Vaughan.

Classification: Linear Park.

Size: 4.00 acres (1.61 ha).

Land cover: Densely forested parcel (e.g. hemlock, spruce, maple). Running water present on parcel flowing toward Falls Lake. Parcel meets ditched road and lake front.

Topography: Parcel gently sloping towards lake.

Maintained by: Municipality.

Use: None.

Access: From Pioneer Drive.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

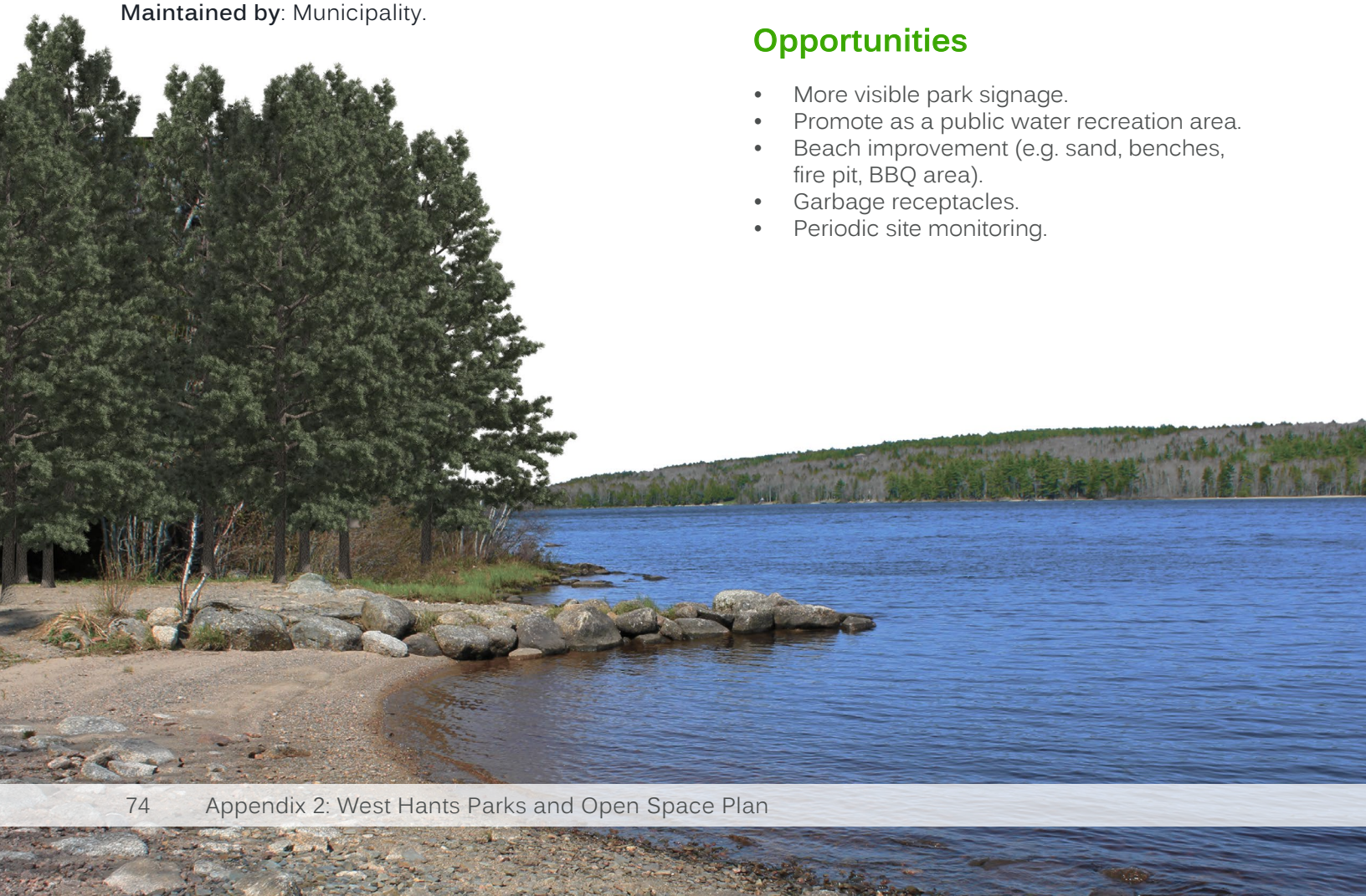
Overlapping Management Plans: None.

Observations

- Directly across from other Municipally owned parcel.
- Roadway cut into the property for water access.
- Garbage observed on site.

Opportunities

- More visible park signage.
- Promote as a public water recreation area.
- Beach improvement (e.g. sand, benches, fire pit, BBQ area).
- Garbage receptacles.
- Periodic site monitoring.



7

Middle Lake North Road

Overview

PID: 45221868

Coordinates: 44.84118, -64.1925

Date visited: November 20, 2015.

Address: Parcel A Middle Lake North Road, Vaughan.

Classification: Underused.

Size: 5.35 acres (2.17 ha).

Land cover: Forested lot with marsh conditions and standing water.

Topography: Fairly flat parcel sloping towards Middle Lake.

Maintained by: Municipality.

Use: None.

Access: From Middle Lake North Road.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Difficult walking conditions due to the presence of blowdown and dense understory growth.
- Property meets Middle Lake, but no formal access created.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby Municipally owned parcels for parks and open space use.



8

Middle Lake South Road

Parcel C

Overview

PID: 45222049

Coordinates: 44.83537, -64.191

Date visited: November 20, 2015.

Address: Parcel C Middle Lake South Road, Vaughan.

Classification: Underused.

Size: 12.64 acres (5.12 ha).

Land cover: Spruce/birch forest with dense undergrowth at southern boundary and wetland on remainder of site. Rock outcrops evident.

Topography: This parcel is almost entirely wetland with little undulation in topography. Road position at a high point above the parcel.

Maintained by: Municipality.

Use: None.

Access: No formal access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

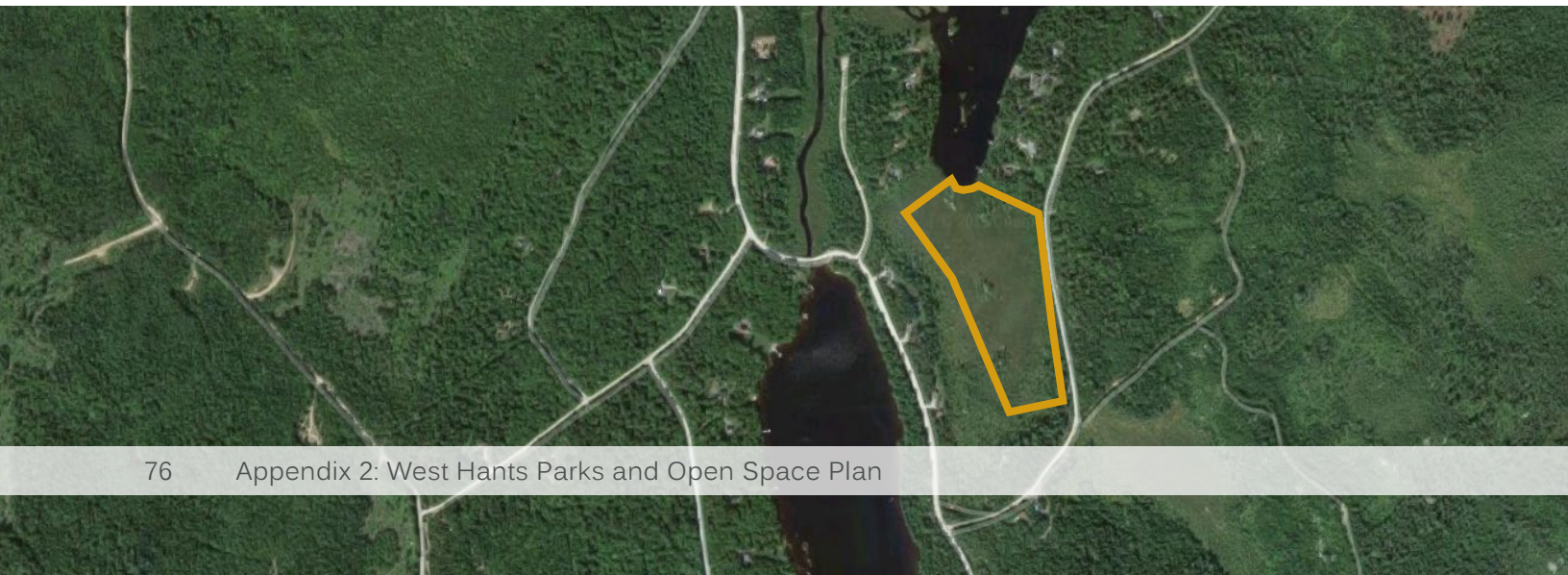
Overlapping Management Plans: None.

Observations

- Wetland conditions for most of property.
- Residential properties to the north of the parcel.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



9

Middle Lake South Road

Parcel D

Overview

PID: 45222254

Coordinates: 44.83266, -64.1893

Date visited: November 20, 2015.

Address: Parcel D Middle Lake South Road, Vaughan.

Classification: Underused.

Size: 3.86 acres (1.56 ha).

Land cover: Spruce/birch forest with dense undergrowth and standing water. A portion of this parcel is wetland.

Topography: The road shoulder is a high point with land dropping off and sloping to the east.

Maintained by: Municipality.

Use: None.

Access: None.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

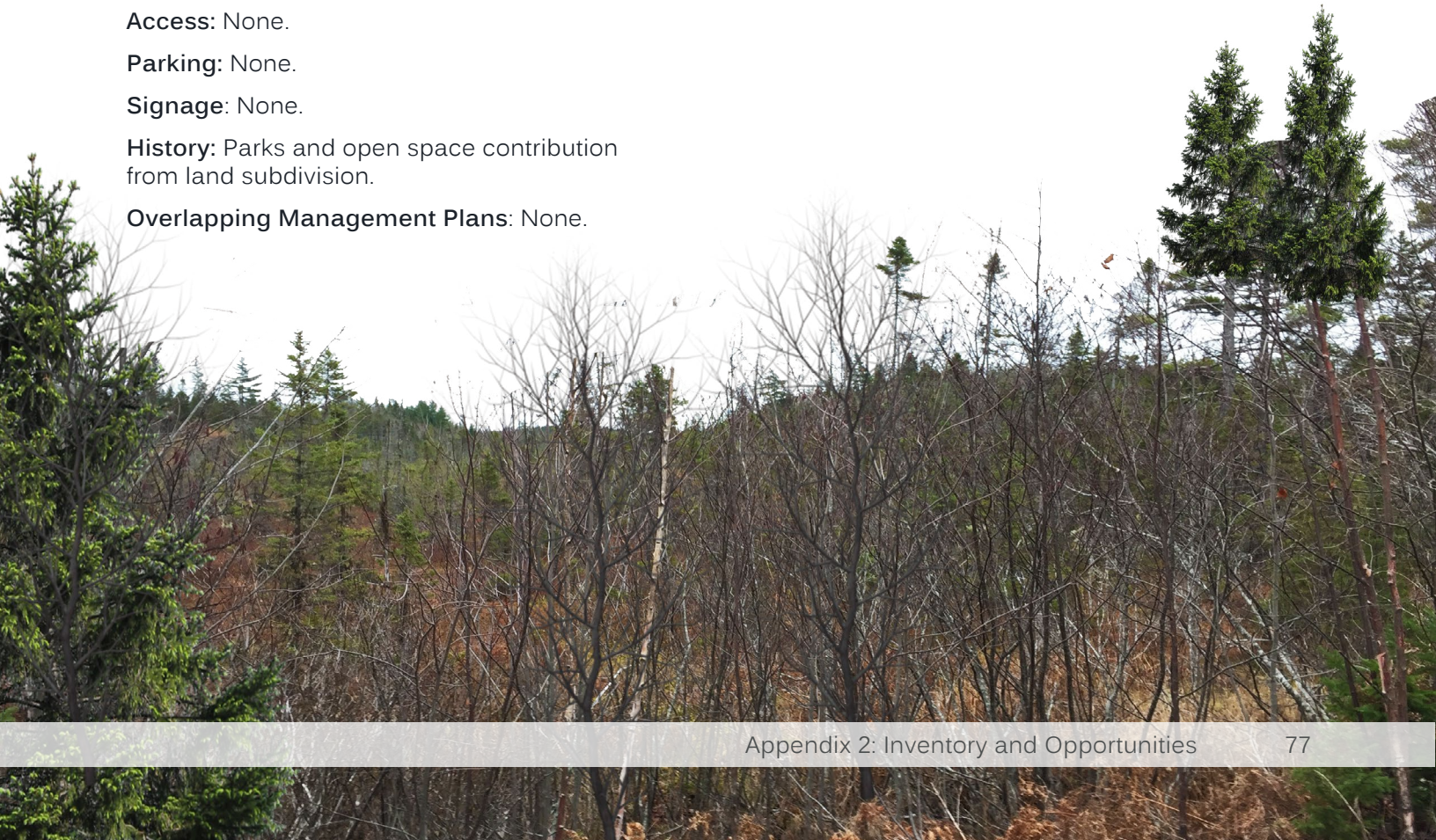
Overlapping Management Plans: None.

Observations

- Topography and poor drainage makes use of this site difficult.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



10

Armstrong Lake East Road

Overview

PID: 45218658

Coordinates: 44.81883, -64.1857

Date visited: November 20, 2015.

Address: Lot 128 Armstrong Lake East Road, Vaughan.

Classification: Underused.

Size: 16.17 acres (6.54 ha).

Land cover: Large forested parcel with 95-100% tree cover.

Topography: Land sloping to the south east.

Maintained by: Municipality.

Use: None.

Access: From Armstrong Lake East Road; no cleared access.

Parking: None.

Signage: None.

History: Parks and open space contribution from land subdivision.

Overlapping Management Plans: None.

Observations

- Parcel positioned behind low density residential lots.
- Drainage ditch along parcel frontage.
- Large parcel with no formal access point.
- No obvious signs of human activity on the property.

Opportunities

- There is little potential to develop as amenity space. Divest land to fund the development of nearby municipally-owned parcels for parks and open space use.



WINDSOR / WEST HANTS TOGETHER

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation x	Decision Request ☐	Councillor Activity ☐

To: Mayor Zebian and Members of West Hants Regional Municipality Council

Submitted by: _____
Sara Poirier, Senior Planner

Date: September 14, 2021

Subject: PCP Milestone 3: Local Action Plan

LEGISLATIVE AUTHORITY

Council Resolution to Join the FCM-ICLEI (Local Governments for Sustainability) Partners for Climate Protection (PCP) Program on September 11, 2018.

RECOMMENDATION

Should the Committee of the Whole (COTW) wish to complete Milestone 3 of the PCP program, the following motion would be in order:

…that COTW recommends that Council complete Milestone 3 of the PCP program by submitting the report attached as Appendix A to the MCCAP Committee report dated September 8, 2021 to the PCP program.

BACKGROUND

Property☐	Public Opinion☐	Environment X	Social☐	Economic☐	Councillor Activity ☐

Milestone 3 of the PCP program requires municipalities to create a local action plan which outline the actions that the Municipality will take to reduce its emissions to meet the goal established in Milestone 2.

Jessica Pitman presented the draft actions for the local action plan to the MCCAP Committee on July 27, 2021.

The local action plan outlines 21 planned actions to ensure the Municipality reaches the goal of 45% reduction in both community and corporate emissions by 2030. It also includes 11 wishlist actions which are higher cost, higher reward actions that could be pursued if external funding is obtained. Each action outlines the cost and potential funding source, if available, and identifies the Department responsible for completing the task.

The MCCAP Committee recommended in favour of the local action plan on September 8, 2021.

ATTACHMENTS

Attachment A 2021-09-08 Staff Report to MCCAP: Local Action Plan

CHIEF ADMINISTRATIVE OFFICER REVIEW

The goals and action items listed in the Plan are in alignment with the overall support and direction of the MCCAP Committee and Council. Action items requiring additional resources including consultants and additional staff will have to be reviewed prior to 2022 budget deliberations or prior to grant applications.

I support the recommendation as stated in the report and further support the goals and action items in principal as listed in the plan, pending budget deliberations and a resource review.

Report Reviewed by: _____
Madelyn LeMay, Director of Planning and Development

Report Approved by: 
Mark Phillips, Chief Administrative Officer


WWH
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PCP Milestone 3: Local Action Plan

COTW

September 14, 2021

Partners for Climate Protection (PCP) Program

- In September 2018, the former Municipality of the District of West Hants joined the PCP program
- A five (5) step milestone process that assists municipalities in developing and implementing an action plan to reduce greenhouse gas emissions at the corporate and community level
- Managed and delivered by the Federation of Canadian Municipalities and International Council for Local Environmental Initiatives

Partners for Climate Protection (PCP) Program



Milestone	Task	Date Complete
1	Develop a GHG emissions inventory	June 9, 2021
2	Set emissions reduction targets	June 9, 2021
3	Develop a local action plan	-
4	Implement the local action plan	-
5	Monitor progress and report results	-

Milestone 3 – Local Action Plan

- Developed by Sustainability Planner, Jessica Pitman; 15-week Clean Foundation intern for the summer of 2021
- To complete Milestone 3 the local action plan must include:
  - Description of the activities that will help the Municipality achieve the target reductions;
  - Description of how the public or internal stakeholders participated in developing the plan;
  - Description of the costs and/or funding sources; and
  - Names of the municipal department(s) and/or organization(s) responsible for the plan and the actions outlined in it.

Milestone 3 – Local Action Plan

- Outlines 21 planned actions which will ensure the Municipality reaches the goal of 45% reduction in both community and corporate emissions by 2030
- Includes 11 additional wishlist actions which are higher cost, higher reward actions that could be pursued if external funding is obtained
- Describes the public and staff participation
- Lists funding sources and Municipal Departments responsible

Process

Staff Review

Municipal Climate Change Action Plan (MCCAP) Committee Recommendation – September 8

Committee of the Whole Recommendation – September 14

Council Decision – September 28

Recommendation

- …that COTW recommends that Council complete Milestone 3 of the PCP program by submitting the report attached as Appendix A to the MCCAP Committee report dated September 8, 2021 to the PCP program.

WWH

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WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☑	Decision Request ☐	Councillor Activity ☐

To: Committee of the Whole

Submitted by: Carlee Rochon

Carlee Rochon, Director, Financial Services

Date: September 14, 2021

Subject: MFC Fall 2021 Debenture

LEGISLATIVE AUTHORITY

Municipal Government Act, Part VI, Power to Spend Money 65 (A) & Power to Borrow Money 66.

RECOMMENDATION

Committee of the Whole recommends that . . .

…Council approves the Mayor and Municipal Clerk to sign the Resolution for Pre-Approval of Debenture Issuance, subject to interest rate confirmation not to exceed 5.5% to enable West Hants Regional Municipality to issue a 25-year debenture of $2,091,896, for design and build of the West Hants Sport Complex.

BACKGROUND

Property☐	Public Opinion☐	Environment☐	Social☐	Economic☑	Councillor Activity ☐

In August 2018 West Hants Council made a motion to move forward with the construction of a new rink. In September 2018 Council authorized additional funds to go towards the construction of an indoor multi-use sports field contingent on matching funds being made available at the Provincial and Federal level. In April 2019, West Hants Council approved the Design Build Contract to Lindsay Construction Limited.

In April 2020, West Hants Regional Council approved an additional project cost of $1,276,200. In October 2020 Lindsay Construction Limited sent their Certificate of Substantial Performance, and the Facility was opened under reduced capacity. The

project costs were finalized as of March 31, 2021, including holdback release. In June 2021, TATE Engineering Inc. submitted the Declaration of Substantial Completion. The last installment of the Investing in Canada Infrastructure Program was received July 8, 2021.

The total budget including Furniture, fixtures, and equipment (FF&E) was $17,515,942. This project has come in under budget by $79,184.80.

Total Budget Vs. Actuals - March 31, 2021

	Building & Land	FF&E	Total
Budget	17,065,942.00	450,000.00	17,515,942.00
Actuals	17,032,205.89	404,551.31	17,436,757.20
Remaining	33,736.11	45,448.69	79,184.80

DISCUSSION

The project had multiple funding sources, with balance coming from long-term borrowing through Municipal Finance Corporation.

Total Project Breakdown

			Budget
Expenditures	Original Project Cost 2019	$	16,239,742
	Additional Request 2020	$	1,276,200
		$	17,515,942
Sources of Funding	Government of Canada	$	4,430,400
	Province of Nova Scotia	$	3,691,631
	Additional Province of Nova Scotia	$	4,000,000
	Carry forward Fundraising	$	57,580
	Municipal - WH Reserves	$	1,117,711
	Municipal - WIN Reserves	$	1,534,559
	Municipal - Gas Tax (FF&E)	$	450,000
		$	15,281,881

The Municipal Finance Corporation offers favorable fixed lending rates for municipal capital purchases. To meet the necessary lending requirements a Temporary Borrowing Resolution (TBR) is required, which needs Council's approval.

The Municipality of the District of West Hants approved a $5,135,000, temporary borrowing resolution (TBR) based on the original estimate of borrowing in 2019 assuming no fundraising. This TBR was renewed by West Hants Regional Council on October 27, 2020. This TBR received approval from the Minister of Municipal Affairs on November 12, 2020.

To be able to participate in the upcoming MFC semi-annual debenture call, a 'Resolution for Pre-Approval of Debenture Issuance Subject to Interest Rate' must be approved by

Council. Approving this now, would qualify the Municipality to take part in the Fall debenture call.

It should be noted that the Minister approval date of the TBR in the resolution document has been left blank. The resolution document is an MFC procedural step and should be left blank for MFC staff to complete.

The total project costs less budgeted debt servicing, results in $2,091,896 in required funding through long-term debt.

Total Project Breakdown - March 31, 2021

			Actuals
Expenditures	Building & Land	$	17,032,206
	FF&E	$	404,551
		$	17,436,757
Sources of Funding	Government of Canada	$	4,430,400
	Province of Nova Scotia	$	3,691,631
	Additional Province of Nova Scotia	$	4,000,000
	Carry forward Fundraising	$	89,834
	Municipal - WH Reserves	$	1,117,711
	Municipal - WIN Reserves	$	1,534,559
	Municipal - Gas Tax (FF&E)	$	404,551
		$	15,268,686
	Long Term Borrowing (WHM)	$	2,168,071
	Debt Servicing Budgeted 2020-21	$	(76,175)
	Debt Servicing Budgeted 2021-22	$	(76,175)
	Long Term Borrowing (WHM)	$	2,091,896

This project originated in West Hants, and based on the financial update in April 2020, the Community of Windsor have contributed their approved funding portion from the Town of Windsor operating reserve. The remaining is the approved Community of West Hants portion, and as such the debt servicing cost has been budget and will only be applicable to the Community of West Hants.

NEXT STEPS

Should Council approve the Resolution for Pre-Approval of Debenture Issuance, schedule a time for the Mayor and Municipal Clerk to sign documents. Prepare packages for submission to Municipal Finance Corporation by noon on October 1, 2021.

FINANCIAL IMPLICATIONS

The Municipal Finance Corporation offers favourable fixed lending rates for municipal capital purchases. Participating in the MFC debenture has will allow the Municipality to clear it internal loan between the General Operating fund and the Capital fund.

ALTERNATIVES

- Council could reject moving forward with the MFC spring debenture and direct staff as to how the items are to be funded. This is not the recommended approach.

ATTACHMENTS

- Resolution for Pre-Approval of Debenture Issuance Subject to Interest Rate
- Min Cert - 08-2020-0107 - WHRM - WH Sports Complex
- Sport Complex – April 21, 2020, Update

CHIEF ADMINISTRATIVE OFFICER REVIEW

The Sports Complex has not only changed the landscape in the Regional Municipality but it has successfully created an environment where athletics, physical activity and social interaction can flourish.

Director Rochon's report reflects the bricks and mortar as well as FF&E costs associated with the project from 2019 up to March 31, 2021. The costs displayed above including the $2,091,896 noted in the recommendation reflect a significant reduction to the residents of the former West Hants Municipality. It is further noted that the dedicated $2,091,896 is assigned to the former West Hants Municipality as the project and cost was started prior to consolidation.

I support the recommendation.

Report Prepared by: _____
Carlee Rochon, Director, Financial Services

Report Reviewed by: _____
Kathy Kehoe, Director, Community Development

Report Approved by: _____
Mark Phillips, Chief Administrative Officer

Name of Unit: West Hants Regional Municipality

Resolution for Pre-Approval of Debenture Issuance Subject to Interest Rate

WHEREAS clause 66 (1) of the Municipal Government Act (the "Act") provides that a municipality may borrow to carry out an authority to expend funds for capital purposes conferred by the Act or another Act of the Legislature;

AND **WHEREAS** clause 91(1)(a) of the Act provides that where a municipality is authorized to borrow money, subject to the approval of the Minister of Municipal Affairs (the "Minister"), that the sum shall be borrowed by the issue and sale of debentures, in one sum or by installments, as determined by the council;

AND WHEREAS clause 91(1)(b) of the *Municipal Government Act* authorizes the council to determine the amount and term of, and the rate of interest, on each debenture, when the interest on a debenture is to be paid, and where the principal and interest on a debenture are to be paid;

AND WHEREAS clause 91(2) of the *Municipal Government Act* states, that in accordance with the *Municipal Finance Corporation Act*, the mayor or warden and clerk or the person designated by the council, by policy, shall sell and deliver the debentures on behalf of the municipality at the price, in the sums and in the manner deemed proper;

AND WHEREAS the resolution of council to borrow for was approved by the municipal council on_____.
(council's TBR approval date)

BE IT THEREFORE RESOLVED

THAT under the authority of Section 91 of the *Municipal Government Act*, the

West Hants Regional Municipality
(Name of Unit)

borrow by the issue and sale of debentures a sum or sums not exceeding $ 2,091,896 , for a period not to exceed 25 years, subject to the approval of the Minister;

THAT the sum be borrowed by the issue and sale of debentures of the

West Hants Regional Municipality
(Name of Unit)

in the amount that the mayor or warden and clerk or the person designated by the council deems proper, provided the average interest rate of the debenture does not exceed the rate of 5.5%;

THAT the debenture be arranged with the Nova Scotia Municipal Finance Corporation with interest to be paid semi-annually and principal payments made annually;

THAT this resolution remains in force for a period not exceeding twelve months from the passing of this resolution.

For MFC use only:

TBR #: _____

Minister signed: _____

THIS IS TO CERTIFY that the foregoing is a true copy of a resolution duly passed at a meeting of the Council of the
West Hants Regional Municipality
(Name of Unit)

held on the day of 20

GIVEN under the hands of the Mayor/Warden and the Clerk of the
West Hants Regional Municipality
(Name of Unit)

this day of 20

Mayor/Warden

Clerk

CR 08-2020-0107

NOVA SCOTIA
Department of Municipal Affairs and Housing

Certificate

TEMPORARY BORROWING RESOLUTION

West Hants Regional Municipality

This is to certify that, pursuant to Section 88 of the *Municipal Government Act*, the resolution passed at a duly convened meeting of the Council of the West Hants Regional Municipality on the 27th of October, 2020 with a request to borrow a sum or sums not exceeding Five Million One Hundred Thirty-Five Thousand Dollars ($5,135,000) for purposes of capital borrowing related to the West Hants Sports Complex and under the terms and conditions as set out within the resolution, is hereby approved.

DATED this 12th day of November, 2020.

Honourable Chuck Porter
Minister of Municipal Affairs and Housing

Windsor / West Hants Municipal Sports Complex Review
21-Apr-20
CAO, Mark Phillips

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Budget for Project April 1 2019
Sports Complex Construction

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Expenditures		April 1 2019	Projected As of March 31 2020	
Building Related	Complex cost / Award to Lindsays	$ 14,359,034	$ 14,359,034	
	Owner Reserve or FF&E	$ 242,760	$ 18,720	
	Contingency	$ 1,022,126	$ 1,036,977	
Professional Services	Project Engineer	$ 125,000	$ 125,000	
	Ice Engineer	$ 70,000	$ 70,000	
	Climate Lens	$ 19,760	$ 19,760	
	Energy Model	$ 27,800	$ 27,800	
Property Related	Flood Assessment	$ 17,938	$ 17,938	
	Geotechnical	$ 11,437	$ 11,437	
	Land appraisal, survey, etc.	$ 11,814	$ 11,814	
	Payment Certifier	$ 24,000	$ 24,000	
	Land purchase	$ 288,000	$ 288,000	
Other	Miscellaneous Costs	$ -	$ -	
	Legal	$ 20,073	$ 20,073	
	Total cost	**$ 16,239,742**	**$ 16,030,553**	**$ 209,189** Contingency needed to complete project "as is"

Sources of Funding		April 1 2019	As of March 31 2020	
	Government of Canada	$ 4,430,400	$ 4,430,400	
	Province of NS #1 Contribution	$ 3,691,631	$ 3,691,631	
	Province of NS #2 Contribution		$ 4,000,000	
	Town of Windsor	$ 1,000,000	$ 1,000,000	
	Fundraising	$ 2,000,000	$ 57,580	
	Mun. of West Hants	$ 5,117,711	$ 1,117,711	
	Total Funds	**$ 16,239,742**	**$ 14,297,322**	
	Shortfall	$ -	$ 1,733,231	**carry forward to 2020/21**

Project Transition from West Hants Council to New Regional Council
2020/21 Capital Budget Additions

3 of 8

Item	Description	Item Cost	Options	Option Costs
1	Interior Upgrades - Public Hygiene	$ 69,160.00	1	$ 69,160.00
2	Millwork - Staircase Display / Lobby Standing Counter	$ 116,003.00	1 + 2	$ 372,086.00
	Rink Dressing Rooms			
	Glazed Interior Railing	$ 181,923.00		
	Exterior Signage Support and Electrical	$ 5,000.00		
3	Various Drywall Upgrades	$ 88,500.00	1 + 2 + 3	**$ 700,000.00**
	Painting Structural Steel	$ 166,000.00		
	Interior Corrugated Cladding	$ 178,500.00		

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2020 /21 Capital Budget Additions
Sports Complex Construction

Expenditures		April 1 2020		
Building Related	Contemplated Change Orders Options 1 + 2 +3	$ 700,000		
	Contingency for Noted Option (7% equivalent)	$ 49,000		
	FF&E (Furniture / Fixtures & Equipment)	$ 450,000		
Professional Services	Project Engineer	$ 68,200		
	Payment Certifier	$ 9,000		
Other				
	Miscellaneous Costs	$ -		
	Total cost	**$ 1,276,200**	1280642	$ 4,442

Sources of Funding		April 1 2020
	Geographic Area of Windsor (18%)	$ 226,688.80
	Geographic Area of West Hants (82%)	$ 1,049,511.20
	Total Funds	**$ 1,276,200**

2020 /21 Budget Additions		$	1,276,200

Population 2016			Uniform Assessment 2019		Blended %	
Windsor	3,648.00	19%	$ 230,527,300.00	16%	18%	$ 226,688.80
West Hants	15,368.00	81%	$ 1,180,137,700.00	84%	82%	$ 1,049,511.20
	19,016.00	100%	$ 1,410,665,000.00	100%	100%	$ 1,276,200

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Total Project Municipal Contribution

Municipal Geographic Area	Contribution	Total		
Windsor 2019 Project Related	$ 1,000,000			
Windsor 2020 Project Related	$ 226,689			
Windsor 2020 Share of $1,733,231 Fundraising	$ 307,870	$ 1,534,559	30%	
West Hants 2019 Project Related	$ 1,117,711			
West Hants 2020 Project Related	$ 1,049,511			
West Hants 2020 Share of $1,733,231 Fundraising	$ 1,425,361	$ 3,592,583	70%	
	$ 5,127,142	**$ 5,127,142**	100%	

2020 /21 Coverage of Fundraising		$	1,733,231

Population 2016			Uniform Assessment 2019		Blended %	
Windsor	3,648.00	19%	$ 230,527,300.00	16%	18%	$ 307,870.36
West Hants	15,368.00	81%	$ 1,180,137,700.00	84%	82%	$ 1,425,361.06
	19,016.00	100%	$ 1,410,665,000.00	100%	100%	$ 1,733,231

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Total Project Breakdown

Expenditures			
	Original Project Cost 2019	$ 16,239,742	
	Additional Requests 2020	$ 1,276,200	
	Total Costs	**$ 17,515,942**	
Sources of Funding	Government of Canada	$ 4,430,400	25.3%
	Province of NS Contribution	$ 7,691,631	43.9%
	Municipal	$ 5,127,142	29.3%
	Carry Forward Contingency from 2019	$ 209,189	1.2%
	Carry Forward Fundraising from 2019	$ 57,580	0.3%
	Total Funds	**$ 17,515,942**	100%