Frontenac County Council Meeting
Wednesday, October 16, 2019 – 9:00 a.m.
Kingston Frontenac Rotary Auditorium,
2069 Battersea Road, Glenburnie
Council will resolve into Closed Meeting
and will reconvene as regular Council at 9:30 a.m.

AGENDA

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Call to Order

Closed Session

a) **Resolved That** Council resolve itself into Committee of the Whole closed session as authorized under Section 239 of The Municipal Act, to consider:

1. Adoption of Closed Minutes of Meetings held September 18, 2019;
2. Advice that is subject to solicitor-client privilege, including communications necessary for that purpose - as it relates to benchmarking of Fairmount Home;
3. Advice that is subject to solicitor-client privilege, including communications necessary for that purpose - as it relates to enforcing the 2005 Agreement with the City of Kingston for the Apportionment of Costs for Joint Services;
4. Litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board - as it relates to enforcing the 2005 Agreement with the City of Kingston for the Apportionment of Costs for Joint Services.

Resolved That Council rise from Committee of the Whole closed session with/without reporting

Approval of Addendum

Disclosure of Pecuniary Interest and General Nature Thereof

Adoption of Minutes

11 - 27 a) Minutes of Meeting held September 18, 2019

Resolved That the minutes of the regular Council meeting held September 18, 2019 be adopted.

Deputations and/or Presentations

a) Presentation to **Alison Vandervelde,** Community Development Officer - Economic Developer's Association of Canada 2019 Marketing Canada Award – Frontenac County for Best Event - Open Farms in Frontenac

28 - 48 b) **Dr. Moore**, Medical Officer of Health, KFL&A Public Health, will present to County Council, highlights of Public Health programs and services along with an overview of the its draft 2020 budget.

49 - 64 c) **Lester Webb**, Chief Librarian/CEO, Kingston Frontenac Public Library, will present to County Council, highlights of the library programs and services along with an overview of the Library's draft 2020 budget.

65 - 88 d) **Ms. Ruth Noordegraaf,** will provide County Council with a presentation of the draft Housing and Homelessness Plan update and Early Years System Plan.

Proclamations

a) **GIS Day**
November 13, 2019

Whereas Geography Awareness Week is November 10 - 16, 2019;

And Whereas International Geographic Information System (GIS) Day is November 13, 2019;

And Whereas Geography Awareness Week promotes GIS and geographic literacy;

And Whereas GIS is an important part of geography awareness;

And Whereas the County of Frontenac is committed to expanding GIS awareness throughout the County in order to showcase real-world applications with GIS.

Now Therefore Be It Resolved That the Council of the County of Frontenac hereby proclaims November 13, 2019 as GIS Day in Frontenac County.

Move into Committee of the Whole

a) **That** Council adjourn and meet as Committee of the Whole Council, with the Deputy Warden in the Chair.

Briefings

89 - 105 a) **Consultant Briefing:** Jared Sunderland, J. L. Richards & Associates

Limited will brief County Council on the County of Frontenac Asset Condition Assessment - Building Condition Assessment Report and the Ontario Structure Inspection Manual (OSIM) K&P Trail Bridge Report.
[See Information Reports from the Chief Administrative Officer, clause a)]

106 - 123 b) **Mr. Kelly Pender**, Chief Administrative Officer, will provide Council with his monthly CAO briefing.

124 - 132 c) **Ms. Megan Rueckwald**, Manager of Community Planning, will brief Council on Bill 108 regarding changes to the Planning Act and Local Planning Appeal Tribunal Act.
[See Chief Administrative Officer Information Reports, clause c)]

Unfinished Business

Recommend Reports from the Chief Administrative Officer

133 - 135 a) **2019-118**
Corporate Services
Frontenac-Howe Islander Ferry Fees and Fares Schedule

Recommendation:

Resolved That Council of the County of Frontenac receive the Corporate Services –Frontenac-Howe Islander Ferry Fees and Fares Schedule report;

And Further That a by-law be introduced later in the meeting to adopt the 2020 Frontenac-Howe Islander Ferry Fees and Fares Schedule.

136 - 156 b) **2019-119**
Corporate Services
Support of the Association of Municipalities of Ontario (AMO) Submission to the Attorney General on Liability and Insurance Cost Reforms

Recommendation:

Be It Resolved That the Council of the County of Frontenac receive for information the Corporate Services – Support of the Association of Municipalities of Ontario (AMO) Submission to the Attorney General on Liability and Insurance Cost Reforms report;

And Further That the Council of the County of Frontenac endorse the report and its recommendations, those being:

1. The provincial government adopt a model of full proportionate liability to replace joint and several liability.
2. Implement enhancements to the existing limitations period

including the continued applicability of the existing 10-day rule on slip and fall cases given recent judicial interpretations, and whether a 1-year limitation period may be beneficial.
3. Implement a cap for economic loss awards.
4. Increase the catastrophic impairment default benefit limit to $2 million and increase the third-party liability coverage to $2 million in government regulated automobile insurance plans.
5. Assess and implement additional measures which would support lower premiums or alternatives to the provision of insurance services by other entities such as non-profit insurance reciprocals.
6. Compel the insurance industry to supply all necessary financial evidence including premiums, claims, and deductible limit changes which support its, and municipal arguments as to the fiscal impact of joint and several liability.
7. Establish a provincial and municipal working group to consider the above and put forward recommendations to the Attorney General.

And Further That a copy of this resolution be forwarded to The Honourable Doug Downey, Attorney General of Ontario and the Association of Municipalities of Ontario (AMO).

157 - 160 c) **2019-120**
Corporate Services
Authorization of the Use of Reserves for the Eastern Ontario Regional Network improvements of cellular coverage in Eastern Ontario

Recommendation:

Be It Resolved That the Council of the County of Frontenac receive for information the Corporate Services – Authorization of the Use of Reserves for the Eastern Ontario Regional Network improvements of cellular coverage in Eastern Ontario report;

And Further That County Council authorize staff to expense the County of Frontenac's remaining share amount of $139,750 for the EORN improvements of cellular coverage project from reserves (with $250,000 already authorized from the use of the Municipal Modernization Fund);

161 - 163 d) **2019-122**
Frontenac Paramedic Services
2020 Legislated Response Time Performance Plan

Recommendation:

Resolved That the Council of the County of Frontenac receive the

Emergency and Transportation Services –2020Legislated Response Time Performance Plan report for information;

And Further That Council direct the Clerk to introduce a by-law later in the meeting adopting the response time standards as outlined in this report.

164 - 189 e) **2019-123**
Fairmount Home
Bruce County's Long-Term Care Home

Recommendation:

Resolved That the Council of the County of Frontenac ("County Council") received the Fairmount Home –Bruce County's Long-Term Care Home report for approval;

And Further That County Council, as the licensee for Fairmount Home for the Aged ("Fairmount"), shall ensure compliance with the *Long-Term Care Homes Act,* 2007 ("LTCHA") that requires homes meet the staffing and care standards provided for in *Ontario Regulation 79/10* ("Regulations");

And Further That County Council shall ensure compliance with the Regulations that includes the requirement for a nursing and personal support services staffing plan that provides for a staffing mix that is consistent with the residents' assessed care and safety needs;

And Further That County Council, as the licensee for Fairmount, support Fairmount's five-year business plan that includes the plan for service level changes towards a minimum four hours of care per resident per day to ensure that residents' assessed care and safety needs are met.

190 - 197 f) **2019-121**
Office of the Chief Administrative Officer
Transportation Services – Reporting Document

Recommendation:

Be It Resolved That the Council of the County of Frontenac receive for information the Office of the Chief Administrative Officer – Transportation Services – Reporting Document report;

And Further That County Council approve the Transportation Reporting Document, to be used by Southern Frontenac Community Services and Rural Frontenac Community Services when submitting quarterly reports

on the use of the County grant funding in support of their respective Transportation Services.

Information Reports from the Chief Administrative Officer

198 - 500 a) **2019-117**
Corporate Services
County of Frontenac Asset Condition Assessment - Building Condition Assessment Report and the Ontario Structure Inspection Manual (OSIM) K&P Trail Bridge Report

501 - 504 b) **2019-124**
Planning and Economic Development
Bill 108 – Changes to the Planning Act and Local Planning Appeal Tribunal Act

505 - 507 c) **2019-125**
Office of the Chief Administrative Officer
Cataraqui Region Conservation Authority (CRCA) authorization to proceed with a Shared Administrative Facility and Work Plan update report

508 - 566 d) **2019-128**
Office of the Chief Administrative Officer
Canadian Infrastructure Report Card 2019

Reports from Council Liaison Appointees

a) Emergency and Transportation Services - Councillor Higgs

b) Long Term Care (Fairmount Home) - Councillor Martin

c) Corporate Services - Councillor MacDonald

d) Planning and Economic Development - Councillor Revill

Reports from External Boards and Committees

a) Kingston Frontenac Library Board Update - Councillor Revill

b) KFL&A Public Health Board Update - Councillor Doyle

c) Housing and Homelessness Committee Update - Deputy Warden Smith

d) Food Policy Council of Kingston, Frontenac, Lennox and Addington - Councillor Higgs

Reports from Advisory Committees of County Council

Return to Council

a) **That** Council revert from Committee of the Whole Council, to Council.

Adoption of the Report of the Committee of the Whole Council

a) **That** the report of the Committee of the Whole Council be adopted and that the necessary actions or by-laws be enacted.

Motions, Notice of Which has Been Given

a) **Future Format of the Annual Warden's Reception**

Moved by: Deputy Warden Smith
Seconded by: Councillor MacDonald

Whereas municipalities across Ontario, including the County of Frontenac are faced with provincial funding cuts and budget constraints;

And Whereas other important and Continuing County Priorities noted in the County of Frontenac Strategic Priorities include Respect the taxpayer and keep tax increases close to the rate of inflation;

And Whereas the County of Frontenac is facing annual budget increases beyond the rate of inflation:

Now Therefore Be It Resolved That the format of the annual Warden's Reception be changed from a banquet to less formal wine and cheese reception more in line with budget constraints

b) **Reducing Litter and Waste in our Communities**

Moved by: Councillor Doyle
Seconded by: Deputy Warden Smith

That the Corporation of the County of Frontenac endorse and supports the resolution of the Town of Halton Hills calling upon the Province of Ontario, through the discussion paper entitled "Reducing Litter and Waste in our Communities", to review and implement a deposit/return program for all single use plastic, aluminum and metal drink containers;

And Further That the Province of Ontario review current producer requirements and look for extended producer responsibility for all packaging;

And Further That the Province of Ontario request producers to prioritize the implementation of their new requirements in Rural Ontario as five years is too long to wait;

And Further That a copy of this motion be sent to the Honourable Doug Ford, Premier of Ontario; the Honourable Jeff Yurek, Minister of the Environment, Conservation, and Parks; the Honourable Steve Clark, Minister of Municipal Affairs; the Association of Municipalities of Ontario; and the Town of Halton Hills.

Giving Notice of Motion

Communications

That Council consent to the following communications of interest to Council listed below be received and filed:

a) Letter from the Town of Newmarket Regarding Bill 108 – More Homes, More Choice Act, 2019.
[Distributed to Members of County Council September 20, 2019]

b) Letter from Kingston Frontenac Public Library Regarding Minutes of Regular Meeting – June 19, 2019
[Distributed to Members of County Council September 20, 2019]

c) Letter from the Municipality of Mississippi Mills Regarding Reducing Litter & Waste in Our Communities
[Distributed to Members of County Council September 20, 2019]

d) Correspondence from Dawne Marshall regarding road safety and speed limits.
[Distributed to Members of County Council September 27, 2019]

e) Correspondence from AMHS-KFLA Partner providing Transformation Update #10.
[Distributed to Members of County Council September 27, 2019]

f) From Frontenac Transportation Services providing additional statistical data requested County Council during its budget presentation.
[Distributed to Members of County Council September 27, 2019]

g) From Minister Steve Clark regarding Building Code Services Transformation.
[Distributed to Members of County Council September 27, 2019]

h) From the Township of North Glengarry regarding Pupil Accommodation Review Guideline.
[Distributed to Members of County Council September 27, 2019]

i) From the Township of Springwater regarding Joint and Several Liability.
[Distributed to Members of County Council September 27, 2019]

j) Thank you card from Wayne Orr for gifts received on the occasion of his retirement as CAO of South Frontenac.
[Distributed to Members of County Council September 27, 2019]

k) From the City of St. Catharines regarding resolution providing for free menstrual products in City Facilities.
[Distributed to Members of County Council October 11, 2019

l) From the Town of Penetanguishene regarding resolution concerning Municipal Amalgamation.
[Distributed to Members of County Council October 4, 2019]

m) News release - EOLC launches 2019 Refresh of Regional Economic Strategy.
[Distributed to Members of County Council October 4, 2019]

n) From the City of St. Catharines regarding resolution providing for free menstrual products in City Facilities.
[Distributed to Members of County Council October 11, 2019]

o) From the Town of Blue Mountains regarding resolution asking Minister Clark to create searchable database of Integrity Commissioner matters.
[Distributed to Members of County Council October 11, 2019]

p) Invitation from the Friends of Salmon River regarding a Phragmites Workshop.
[Distributed to Members of County Council October 11, 2019]

q) From the Municipality of East Ferris regarding the provision of child care at conferences.
[Distributed to Members of County Council October 11, 2019]

r) From the Municipality of Grey Highlands regarding resolution in support of Conservation Authority.
[Distributed to Members of County Council October 11, 2019]

Other Business

Public Question Period

By-Laws – General By-laws and Confirmatory By-law

a) First and Second Reading

Resolved That leave be given the mover to introduce by-laws a) through d) that have been circulated to all Members of County Council and that by-laws a) through d) be read a first and second time.

b) Third Reading

Resolved That by-laws a) through d) be read a third time, signed, sealed and finally passed.

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By-Laws

567 - 568	a)	To amend By-law No. 2013-0020 (to govern the proceedings of the Council and its Committees, the Conduct of Members and the Calling of Meetings) as it relates to the reading of motions at Council meetings. [Proposed By-law No. 2019-0034]
569 - 571	b)	To Establish 2020 Howe Islander Ferry Fees and Fares [Proposed By-law No. 2019-0035]
572 - 573	c)	To Adopt a 2020 Legislative Response Time Performance Plan. [Proposed By-law No. 2019-0036]
574 - 575	d)	Confirmatory By-law [Proposed By-law No. 2019-0037]

Adjournment

FRONTENAC

Minutes of the Regular Meeting of Council
September 18, 2019

A regular meeting of the Council of the County of Frontenac was held in the Kingston Frontenac Rotary Auditorium at the County Administrative Office, 2069 Battersea Road, Glenburnie on Wednesday, September 18, 2019 and was called to order at 9:00 a.m. Regular business commenced at 9:30 a.m.

There was a "Closed Meeting" of the Committee of the Whole from 9:00 am to 9:20 am.

Present:	Warden Ron Higgins, Deputy Warden Fran Smith, Councillors Ron Vandewal, Denis Doyle, Bruce Higgs, Bill MacDonald, Gerry Martin and Alan Revill
Also Present:	**County:** Kelly Pender, Chief Administrative Officer Gale Chevalier, Chief/Director of Emergency & Transportation Services Joe Gallivan, Director of Planning and Economic Development Susan Brant, Director of Corporate Services/Treasurer Lisa Hirvi, Administrator-Fairmount Home Jannette Amini, Manager of Legislative Services/Clerk Richard Allen, Manager of Economic Development Marco Smits, Communications Officer

Closed Session

Motion #: 140-19	Moved By:	Councillor MacDonald
	Seconded By:	Councillor Revill

Resolved That Council resolve itself into Committee of the Whole closed session as authorized under Section 239 of The Municipal Act, to consider:

1. Adoption of Closed Minutes of Meetings held July 17, 2019;
2. labour relations or employee negotiations - as it relates to the contract with the Ministry of Transportation (MTO) for the Howe Island Ferry.

Carried

Motion #: 141-19	Moved By:	Councillor Higgs
	Seconded By:	Councillor Martin

Resolved That Council rise from Committee of the Whole closed session, that Procedural By-law 2013-0020 be waived and that the Warden report.

Carried
(a 2/3 vote was received)

Motion #: 142-19 Moved By: Councillor Revill
Seconded By: Councillor McDonald

Be It Resolved That the County of Frontenac provide formal notice to the Ministry of Transportation (MTO) that it will be terminating the agreement for the operation of the Howe Island Ferry.

Carried

Public Meeting

The following was a public meeting to permit members of the public to make presentations and/or funding requests to County Council for consideration in the 2020 budget.

a) **Mr. David Townsend,** Executive Director for Southern Frontenac Community Services Corporation addressed County Council regarding the funding request for the Southern Frontenac Community Services Corporation.

b) **Ms. Gail Young,** Frontenac Transportation Services addressed County Council regarding the funding request for the Frontenac Transportation Services.

c) **Mr. Matt Trousdale** addressed County Council regarding the opportunity to secure train sections from Upper Canada Village.

Motion #: 143-19 Moved By: Councillor Doyle
Seconded By: Deputy Warden Smith

Be It Resolved That procedural By-law 2013-0020 be waived;

And Further That the County of Frontenac provide a letter of support to Mr. Matt Trousdale, for the potential acquisition, of the steam locomotives from the St. Lawrence Parks Commission.

Carried
(a 2/3 vote was received)

Approval of Addendum

Disclosure of Pecuniary Interest and General Nature Thereof

There were none.

Adoption of Minutes

a) Minutes of Meeting held July 17, 2019.

Motion #: 144-19 Moved By: Councillor Vandewal
Seconded By: Deputy Warden Smith

Resolved That the minutes of the regular Council meeting held July 17, 2019 be adopted.

Carried

Deputations and/or Presentations

Proclamations

a) Canadian Library Month October 2019
Ontario Public Library Week October 20-26, 2019
A visit will get you thinking
[See Communications y)]

Motion #: 145-19 Moved By: Councillor Revill
Seconded By: Councillor Doyle

Whereas the public library offers access to information; and,

Whereas the public library supports personal growth, economic renewal and quality of life; and,

Whereas we recognize that the Kingston Frontenac Public Library provides a vital service to our communities;

Therefore Be It Resolved That the Council of the County of Frontenac hereby proclaims the month of October, 2019 as Canadian Library Month and the week of October 20 - 26, 2019 as Ontario Public Library Week in Frontenac County;

And Further That the residents of Frontenac County be encouraged to use the public library this week and throughout the year.

Carried

Move into Committee of the Whole

Motion #: 146-19 Moved By: Councillor Martin
Seconded By: Councillor MacDonald

That Council adjourn and meet as Committee of the Whole Council, with the Deputy Warden in the Chair.

Carried

Briefings

a) **Mr. Kelly Pender**, Chief Administrative Officer, provided Council with his monthly CAO briefing.

Unfinished Business

Recommend Reports from the Chief Administrative Officer

a) **Consultant Briefing:** Ms. Hannah Mayes, ORH Consulting briefed County Council on the Ten Year Paramedic Human Resources and Facilities Master Plan.

[See Recommend Reports from the Chief Administrative Officer, clause b)]

Councillor Doyle exited the meeting at 10:50 a.m.

Councillor Doyle re-entered the meeting at 10:58 a.m.

b) **2019-104**
Emergency and Transportation Services
ORH Final Report

Motion #: 147-19 Moved By: Councillor Vandewal
Seconded By: Councillor Higgs

Be it Resolved That the Council of the County of Frontenac receive for information the final report for the Ten Year Paramedic Human Resources and Facilities Master Plan;

And Further That the Council of the County of Frontenac direct staff to incorporate recommendations into the Frontenac Paramedics' Business Plan and Project Proposals for future consideration by Council.

Carried

c) **2019-101**
Corporate Services
Amendments to Procedural By-law 2013-0020 resulting from Bill 68 as it relates to Disclosure of Pecuniary Interest

Motion #: 148-19 Moved By: Councillor Doyle
Seconded By: Warden Higgins

Resolved That the Council of the County of Frontenac receive the Corporate Services – Amendments to Procedural By-law 2013-0020 resulting from Bill 68 as it relates to Disclosure of Pecuniary Interest report;

And Further That Procedural By-law 2013-0020, as amended, be further amended as follows:

1. **That** Section 16 – Disclosures of Pecuniary Interest, subsection 16.1 – Method of Disclosure be amended by adding the word “and” at the end of c), and further adding:

d) Shall file a written statement of the interest and its general nature with the Clerk.

2. **That** a new 16.5 and 16.6 be added as follows:

Registry of Disclosures of Pecuniary Interest	16.5	The Clerk shall establish and maintain a registry in which shall be kept, (a) a copy of each statement filed under section 16.1; and (b) a copy of each declaration recorded under section 16.1
Access to registry	16.6	The registry shall be available for public inspection upon 48 hours written notice to the Clerk’s Office

Carried

d) 2019-102
Corporate Services
Reading of Resolutions at Council Meetings

Motion #: 149-19 Moved By: Councillor MacDonald
Seconded By: Councillor Higgs

Be It Resolved That the Council of the County of Frontenac receive the Corporate Services – Reading of Resolutions at Council Meetings report for information;

And Further That Council support Option 3 of the report, that being that Section 19 – Motions, of the County’s Procedural By-law be amended to add the following:

Motion Considered to be read	19.11	Motions contained in the published agenda will only be read if requested by a member of Council or under the following conditions: a. A member requests a recorded vote on the motion b. Where an amendment to a main motion is made, both the amendment, and the motion as amended Any member of Council may request that a motion be summarized by its author. Motions not contained in the published agenda shall be read.

Carried As Amended
(See Motion to Amend below which was Carried)

Motion to Amend

Motion #: 150-19	Moved By:	Councillor Vandewal
	Seconded By:	Councillor Revill

Be it Resolved That Council supports Option 3 of the report, that being Section 19 – Motions, of the County's Procedural By-law be amended to add the following:

Motion Considered to be read	19.11	Motions contained in the published agenda will only be read if requested by a member of Council or under the following conditions: a. A member requests a recorded vote on the motion b. Where an amendment to a main motion is made, both the amendment, and the motion as amended Any member of Council may request that a motion be summarized by its author. Motions not contained in the published agenda shall be read.

Carried

e) 2019-103
Corporate Services
Authorization to enter into an Agreement with the Cataraqui Region Conservation Authority (CRCA) for the provision of Information Services

Motion #: 151-19	Moved By:	Councillor Doyle
	Seconded By:	Warden Higgins

Be It Resolved That the Council of the County of Frontenac receive for information the Corporate Services – Authorization to enter into an Agreement with the Cataraqui Region Conservation Authority (CRCA) for the provision of Information Services report;

And Further That County Council direct staff to enter into a shared services agreement attached as Schedule A, through which the County of Frontenac will provide information technology services to the Cataraqui Region Conservation Authority (CRCA);

Carried

f) 2019-105
Office of the Chief Administrative Officer
Regional Roads - Option Analysis and Business Plan

Motion #: 152-19	Moved By:	Councillor Martin
	Seconded By:	Councillor Vandewal

Be It Resolved That Office of the CAO Report 2019-105, Regional Roads – Option Analysis and Business Plan be received;

And Further That County Council direct staff to:

1. Engage KPMG Canada to complete an option analysis and business plan for consideration by County Council as part of the 2020 County Budget.

Carried As Amended
(See Motion to Amend below which was Carried)

Motion to Amend

Motion #: 153-19	Moved By:	Councillor Vandewal
	Seconded By:	Councillor Doyle

Be it Resolved That the motion be amended to delete bullet point 2, Commence the process of petitioning the Province of Ontario to delete Section 6.2 from the County restructuring order dated February 15, 1997.

Carried

g) 2019-106
Corporate Services
Approval of the County of Frontenac Recruitment and Selection Policy

Motion #: 154-19	Moved By:	Councillor Revill
	Seconded By:	Councillor MacDonald

Be It Resolved That the Council of the County of Frontenac receive the Corporate Services - Approval of the County of Frontenac Recruitment and Selection Policy report for information;

And Further That the Clerk be authorized to bring forward a By-law later in the meeting adopting the Recruitment and Selection Policy attached to this report as Appendix A.

Carried

h) 2019-107
Corporate Services
2019 Tax Ratios and Tax Rate Reductions Amendment

Motion #: 155-19	Moved By:	Councillor Higgs
	Seconded By:	Councillor Doyle

Resolved That the Council of the County of Frontenac accept this Corporate Services – 2019 Tax Ratios and Tax Rate Reductions Amendment report;

And Further That Council consider a by-law, introduced later in the meeting, to confirm the 2019 tax ratios and tax rate.

Carried

i) 2019-110
Fairmount Home
Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System

Motion #: 156-19 Moved By: Councillor Martin
Seconded By: Councillor Vandewal

Resolved That Council of the County of Frontenac received the Fairmount Home - Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System report for approval;

And Further That the Council of the County of Frontenac support the Consolidated Recommendations regarding the Role of Long-Term Care Homes and other recommendations specific to licensees of long-term care homes, which are presented in the Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System Report ("Report");

And Further That the Council of the County of Frontenac support staff in implementing the Consolidated Recommendations and other recommendations specific to long-term care home licensees presented in the Report, as well as, Fairmount Home's plan for service level changes for a minimum four hours of care per resident per day to ensure a safe and secure environment for residents;

And Further That the Council of the County of Frontenac, as the licensee for Fairmount Home for the Aged ("Fairmount"), encourage the Ministry of Health and Long-Term Care to take the steps to promptly implement the recommendations in the Report and release a public report on the first anniversary of the release of the Report.

Carried

j) 2019-111
Emergency and Transportation Services
Howe Islander Ferry Safety Announcements

Motion #: 157-19 Moved By: Councillor Higgs
Seconded By: Councillor MacDonald

Be it Resolved That the Council of the County of Frontenac receive for information the report on Ferry Safety Announcements;

And Further That the Council of the County of Frontenac direct staff to implement Option 2 as outlined, that being to direct staff to cease the current practice of audible safety announcements and re-institute information safety notice placards.

Carried As Amended
(See Motion to Amend below which was Carried)

Motion to Amend

Motion #: 158-19	Moved By:	Councillor Doyle
	Seconded By:	Councillor Higgs

Be It Resolved That the motion be amended to insert Option 2, that being to direct staff to cease the current practice of audible safety announcements and re-institute information safety notice placards.

Carried

k) 2019-113
Planning & Economic Development
Authorization for staff to enter into agreements with local snowmobile clubs for use of the Frontenac K&P Trail during winter months

Motion #: 159-19	Moved By:	Councillor Revill
	Seconded By:	Councillor Doyle

Be it Resolved That Council authorize staff to enter into a License Agreement and Memorandum of Understand with the local OFSC snowmobile clubs for use of the Frontenac K&P Trail and to complete annual renewals of these agreements.

Carried

Information Reports from the Chief Administrative Officer

a) 2019-108
Emergency and Transportation Services
Investigation of Options to Ensure Howe Island Ferry Staffing

b) 2019-109
Fairmount Home
Quarterly Update Activity Report

c) 2019-112
Corporate Services
2019 Second Quarter Financial Summary

d) 2019-114
Office of the Chief Administrative Officer
Resolution from the City of Kingston regarding the 2019 Budget Update-County of Frontenac Services

Reports from Council Liaison Appointees

a) Emergency and Transportation Services - Councillor Higgs

Councillor Higgs provided an overview of the Emergency and Transportation Services liaison activities since the last Council Meeting.

b) Long Term Care (Fairmount Home) - Councillor Martin

Councillor Martin provided an overview of Long Term Care (Fairmount Home) liaison activities since the last Council Meeting.

c) Corporate Services - Councillor MacDonald

Councillor MacDonald provided an overview of the Corporate Services liaison activities since the last Council meeting.

d) Planning and Economic Development - Councillor Revill

Councillor Revill provided an overview of the Planning and Economic Development liaison activities since the last Council meeting.

Reports from External Boards and Committees

a) Kingston Frontenac Library Board Update - Councillor Revill

Councillor Revill provided an overview of the Kingston Frontenac Library Board activities since the last Council meeting.

b) KFL&A Public Health Board Update - Councillor Doyle

Councillor Doyle provided an overview of the Kingston, Frontenac Lennox and Addington Board of Health activities since the last Council meeting.

c) Housing and Homelessness Committee Update - Deputy Warden Smith

Deputy Warden Smith provided an overview of the Housing and Homelessness Committee activities since the last Council meeting.

d) Food Policy Council of Kingston, Frontenac, Lennox and Addington - Councillor Higgs

No report.

e) AMO Report - Warden Higgins

Warden Higgins provided an overview of his AMO Update.

Reports from Advisory Committees of County Council

a) Report of the Administrative Building Design Task Force

Motion #: 160-19 Moved By: Councillor Vandewal
Seconded By: Councillor Martin

That the Report received from the Administrative Building Design Task Force be received and adopted.

Report of the Administrative Building Design Task Force

The Administrative Building Design Task Force reports and recommends as follows:

1. 2019-092
Administrative Building Design Task Force
Authorization to Move Forward with a Shared Facility

Be It Resolved That the Council of the County of Frontenac authorize staff to proceed with negotiations with the Cataraqui Region Conservation Authority (CRCA) for joint tenancy and subsequently, detailed designs for 2069 Battersea Road for Option 2, that being a joint administrative facility for the County of Frontenac and the Cataraqui Region Conservation Authority (CRCA) to an upset of $100,000 to be expensed from the County's Municipal Modernization Funds;

And Further That should the CRCA advise the County of Frontenac that it does not wish to proceed with a joint administrative facility, that staff be authorized to proceed with detailed designs for Option 1.

Carried

b) Report of the Planning Advisory Committee

Motion #: 161-19 Moved By: Councillor MacDonald
Seconded By: Councillor Revill

That the Report received from the Planning Advisory Committee be received and adopted.

Report of the Planning Advisory Committee

The Planning Advisory Committee reports and recommends as follows:

1. 2019-098
Planning and Economic Development
Response to Provincial Policy Statement (PPS) Review

Be It Resolved That the Council of the County of Frontenac direct staff to submit the comments as set out in Appendix 1 of this report to the Ministry of Municipal Affairs and Housing prior to the deadline of October 21st, 2019;

And Further That a copy of this resolution and Appendix 1 be forwarded to the County's member municipalities.

Carried

c) Report of the Community Development Advisory Committee

Motion #: 162-19 Moved By: Councillor Doyle
Seconded By: Councillor Higgs

That the Report received from the Community Development Advisory Committee be received and adopted.

Report of the Community Development Advisory Committee

The Community Development Advisory Committee reports and recommends as follows:

1. 2019-096
Community Development Advisory Committee
Temporary Access Agreement with Verona ATV Club / OFATV

Be It Resolved That the Council of the County of Frontenac authorize the Warden and Clerk to enter into a temporary agreement with the Verona ATV Club allow motorized vehicles to access the K& P Trail from Craig Road to Sharbot Lake for 2019 and 2020;

And Further That County staff report back on the status of the partnership with the Verona ATV Club/OFATV prior to any future renewal.

2. 2019-093
Community Development Advisory Committee
Development of a Frontenac Arts Strategy

Be It Resolved That the County of Frontenac pursue the development of an arts strategy in 2021;

And Further That the foundational work to recruit project partners, attract project funding and improve operational capacity be undertaken in 2020 to achieve this end.

3. **2019-095**
Community Development Advisory Committee
Royal Winter Fair's Spotlight on Local

Be it Resolved that the Council of the County of Frontenac authorize staff to enter into a contract with The Royal Winter Fair to participate in the 2019 Spotlight on Local feature;

And Further that up to $5,000 from the Community Development Reserve be allocated to offset the costs associated with participating in the Royal Winter Fair's Spotlight on Local;

And Further that staff report back to the Community Development Advisory Committee on the outcomes of event participation.

Carried

Return to Council

Motion #: 163-19 Moved By: Warden Higgins
Seconded By: Councillor Vandewal

That Council revert from Committee of the Whole Council, to Council.

Carried

Adoption of the Report of the Committee of the Whole Council

Motion #: 164-19 Moved By: Deputy Warden Smith
Seconded By: Councillor Martin

That the report of the Committee of the Whole Council be adopted and that the necessary actions or by-laws be enacted.

Carried

Motions, Notice of Which has Been Given

Giving Notice of Motion

a) Deputy Warden Smith advised that she will be bringing forward a Notice of Motion to the October 16, 2019 Council meeting regarding the future of the annual Warden's reception.

b) Councillor Doyle advised that he will be bringing forward a Notice of Motion to the October 16, 2019 Council meeting regarding a motion of support for the Ministry of the Environment, Conservation and Parks posted discussion paper titled "Reducing Litter and Waste in our Communities".

Communications

That Council consent to the following communications of interest to Council listed below be received and filed:

a) From Southern Frontenac Community Services providing its Mid-July Bulleting
[Distributed to Members of County Council July 19, 2019]

b) From the City of Stratford regarding Resolution opposing changes in 2019 Provincial Budget and Planning Act
[Distributed to Members of County Council July 19, 2019]

c) From the College of Physicians and Surgeons of Ontario regarding the 2020 Council Award
[Distributed to Members of County Council July 19, 2019]

d) From the Municipality of Neebing regarding Response to Lake of Bays
[Distributed to Members of County Council July 19, 2019]

e) From the Town of Plympton-Wyoming regarding resolution on Enforcement for Safety on Family Farms
[Distributed to Members of County Council July 19, 2019]

f) From the Township of Prince regarding resolution in support of dedicated annual ROMA Conference
[Distributed to Members of County Council July 19, 2019]

g) From the Village of Oil Springs supporting resolution of the Township of Warwick regarding stronger enforcement of By-laws
[Distributed to Members of County Council July 19, 2019]

h) Letter from Kingston Frontenac Public Library Regarding the Retirement of Patricia Enright as of August 31, 2019
[Distributed to Members of County Council July 26, 2019]

i) Letter from the Town of Halton Hills Regarding Resolution Number. 2019-0141
[Distributed to Members of County Council July 26, 2019]

j) Letter from the Corporation of the Municipality of South Huron Regarding Motion Number 382-2019.
[Distributed to Members of County Council July 26, 2019]

k) Letter from Morrison Hershfield Regarding the Detail Design Study
[Distributed to Members of County Council July 26, 2019]

l) Letter from The Municipality of McDougall Regarding Enforcement for Safety on Family Farms
[Distributed to Members of County Council August 2, 2019]

m) Letter from the Township of McKellar Regarding Municipal Amalgamation
[Distributed to Members of County Council August 2, 2019]

n) Letter from the City of Kingston Regarding the Housing and Homelessness Report
[Distributed to Members of County Council August 2, 2019]

o) Letter from ROMA Regarding the Rural Ontario Institute's Focus on Rural Ontario 2018 Fact Sheet Series
[Distributed to Members of County Council August 2, 2019]

p) Letter from Norfolk County Regarding Request for Provincial Response to Address Gas Well Issues
[Distributed to Members of County Council August 16, 2019]

q) Letter from the Municipality of Bluewater Regarding Reducing Litter and Waste in Our Communities
[Distributed to Members of County Council August 16, 2019]

r) Letter from the Township of North Frontenac Regarding the Request for Support for VIA Rail's High Frequency Train Proposal
[Distributed to Members of County Council August 16, 2019]

s) Letter from the Corporation of the Municipality of Thames Centre Regarding the Enforcement for Safety on Family Farms Resolution
[Distributed to Members of County Council August 16, 2019]

t) Letter from the Town of Bradford West Gwillimbury Regarding the Motion with Respect to the Never Forgotten National Memorial
[Distributed to Members of County Council August 16, 2019]

u) Letter from the Municipality of Chatham-Kent Regarding the Enforcement for Safety on Family Farms Resolution
[Distributed to Members of County Council August 16, 2019]

v) Letter from Central Frontenac Regarding the Resolution 2019-046 Requiring the Lower Tier Municipalities to Review and Consider the Regional Roads Report
[Distributed to Members of County Council August 16, 2019]

w) Letter from The Municipality of Hastings Highlands Regarding Reducing Litter and Waste in Our Communities
[Distributed to Members of County Council August 23, 2019]

x) Letter from The Municipality of Hastings Highlands Regarding Municipal Amalgamation
[Distributed to Members of County Council August 23, 2019]

y) Letter from Kingston Public Library Regarding Canadian Library Month and Ontario Library Week
[Distributed to Members of County Council August 23, 2019]

z) Letter from the Corporation of the Township of Papineau-Cameron Regarding Amalgamation
[Distributed to Members of County Council August 23, 2019]

aa) Letter from Canadian Union of Postal Workers Regarding the Future of Canada Post
[Distributed to Members of County Council August 23, 2019]

ab) Fall Schedule from Early ON Child and Family Centre
[Distributed to Members of County Council August 23, 2019]

ac) Birthday Invitation from Sydenham Early ON Child and Family Centre
[Distributed to Members of County Council August 23, 2019]

ad) Birthday Invitation from Sharbot Lake Early ON Child and Family Centre
[Distributed to Members of County Council August 23, 2019]

ae) Birthday Invitation from Storrington Early ON Child and Family Centre
[Distributed to Members of County Council August 23, 2019]

af) Notice from the Township of Central Frontenac Concerning By-Law Amendment 2019-36 (Brown and Smail)
[Distributed to Members of County Council August 30, 2019]

ag) Letter from the Corporation of the Township of Lake of Bays Regarding Municipal Amalgamation
[Distributed to Members of County Council August 30, 2019]

ah) Letter from the Municipality of Mississippi Mills Regarding the Resolution to Ensure Enforcement for Safety on Family Farms
[Distributed to Members of County Council September 6, 2019]

ai) Letter from the Town of Wasaga Beach Regarding the Township of McKellar Municipal Amalgamation
[Distributed to Members of County Council September 6, 2019]

aj) Letter from Hamilton City Council Regarding Maintaining the Voters' List from Municipal Elections
[Distributed to Members of County Council September 6, 2019]

ak) Letter from the City of Kitchener Regarding Single-Use Disposable Wipes
[Distributed to Members of County Council September 6, 2019]

al) Letter from the City of Kitchener Regarding Producer Requirements for Packaging in Ontario
[Distributed to Members of County Council September 13, 2019]

am) Letter from the Corporation of the Township of Larder Lake Regarding Lobbying the Provincial Ministers to allow for Electronic Delegation
[Distributed to Members of County Council September 13, 2019]

an) Letter from the City of Kingston Regarding the Notice of a Regular Meeting
[Distributed to Members of County Council September 13, 2019]

ao) Letter from The Municipality of Hasting Highlands Regarding Mandatory Septic System Reports
[Distributed to Members of County Council September 13, 2019]

ap) Letter from the Municipality of Chatham-Kent Regarding Provincial Funding Cuts to Legal Aid Ontario
[Distributed to Members of County Council September 13, 2019]

aq) Email from the Township of Zorra Regarding Upper Thames River Conservation Authority (UTRCA)
[Distributed to Members of County Council September 13, 2019]

Other Business

a) Warden Higgins stated that he will be approaching the Eastern Ontario Warden's Caucus (EOWC) to look at an Ontario wide trails maintenance and licensing program, including options and studies.

Public Question Period

By-Laws – General By-laws and Confirmatory By-law

a) First and Second Reading

Motion #: 165-19 Moved By: Councillor Revill
Seconded By: Councillor MacDonald

Resolved That leave be given the mover to introduce by-laws a) through f) that have been circulated to all Members of County Council and that by-laws a) through f) be read a first and second time.

Carried

b) Third Reading

Motion #: 166-19 Moved By: Councillor Revill
Seconded By: Councillor MacDonald

Resolved That by-laws a) through f) be read a third time, signed, sealed and finally passed.

Carried

By-Laws

a) To Adopt a Policy to Govern the Hiring of Employees by the Corporation of the County of Frontenac.
[Proposed By-law No. 2019-0029]

b) To Authorize the Execution of an Agreement with the Cataraqui Region Conservation Authority (CRCA) for Information Services.
[Proposed By-law No. 2019-0028]

c) To Set Tax Ratios and Tax Rate Reductions for Prescribed Property Sub-Classes for County of Frontenac Purposes and Local Municipal Purposes for the Taxation year 2019.
[Proposed By-law No. 2019-0030]

d) To Authorize the Execution of an Agreement with the Ontario Federation of Snowmobile Clubs (OFSC) for the use of the K&P Trails during Winter Months.
[Proposed By-law No. 2019-0031]

e) To Amend By-law No.2013-0020 (to govern the proceedings of the Council and its Committees, the Conduct of Members and the Calling of Meetings) regarding Disclosures of Pecuniary Interest (resulting from Bill 68).
[Proposed By-law No. 2019-0032]

f) To Confirm all Actions and Proceedings of County Council on September 18, 2019.
[Proposed By-law No. 2019-0033]

Adjournment

Motion #: 167-19	Moved By:	Councillor Higgs
	Seconded By:	Deputy Warden Smith

That the meeting hereby adjourn at 12:14 p.m.

Carried

_____ _____

Ron Higgins, Warden Jannette Amini, Clerk

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

KFL&A Public Health Cost-Shared Budget (Mandatory Programs)

County of Frontenac

Dr. Kieran Moore

MD, CCFP(EM), FCFP, FRCP(C)

Medical Officer of Health
KFL&A Public Health

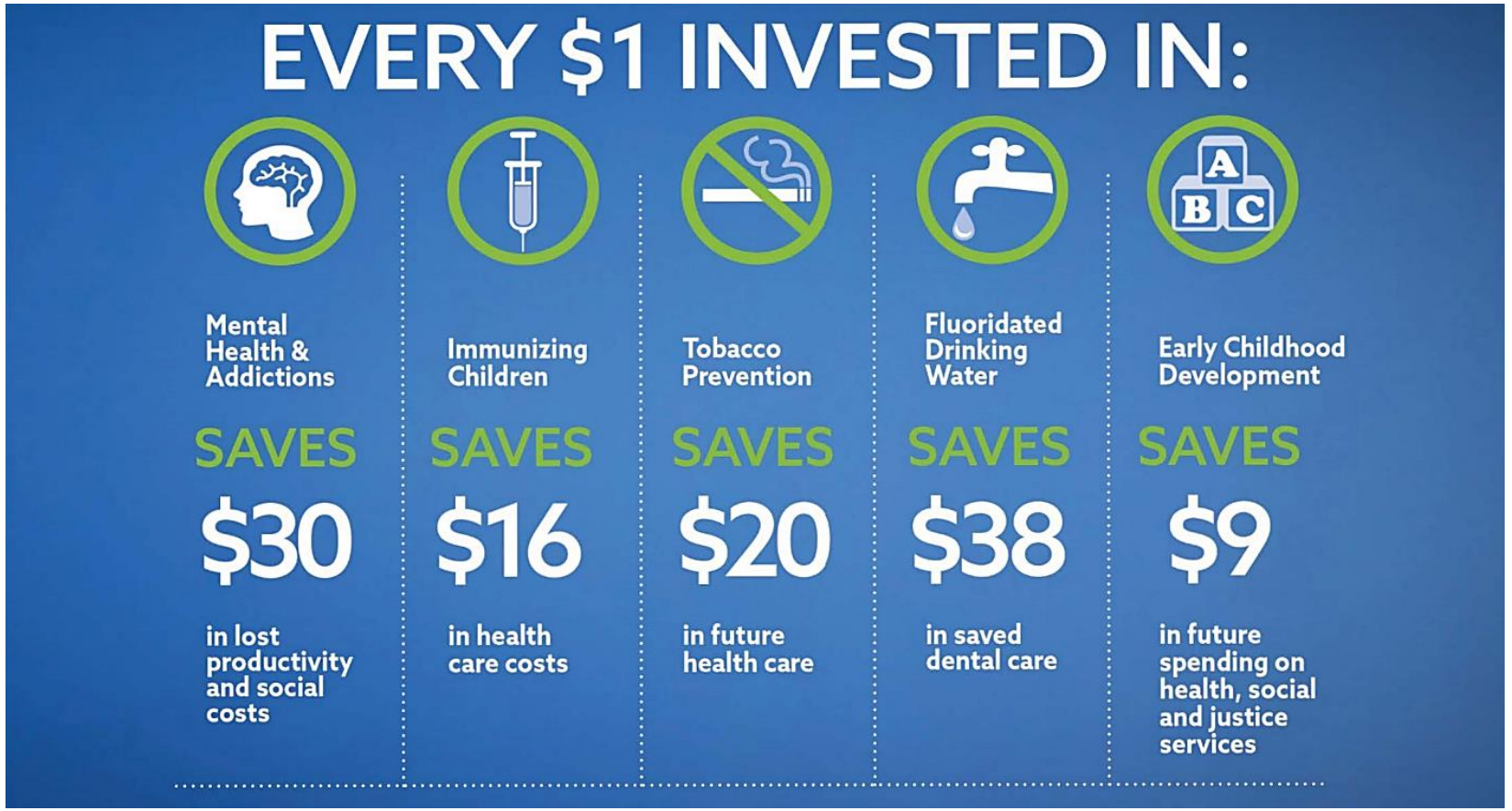
October 16, 2019

Healthy People, Healthy Places

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...



Canadian Public Health Association, April 29, 2015

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

What is Public Health?

- **Ontario Public Health Standards**
- ***Health Protection and Promotion Act***
- **Board of Health**
  - 5 municipal
  - 4 provincial

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Director of KFL&A Public Health, will present...

Public Health Over the Life Course



KFL&A Public Health

AGENDA ITEM #b)

What We Do

On average, each month:

Restaurant inspections	190
Personal service settings inspections	20
Pool and spas inspections	30
Animal bite investigations	30
Lyme disease investigations	15
Sexual health and HIV pre-exposure prophylaxis clients	210
Vaccines administered	390

Our work in the community also includes:

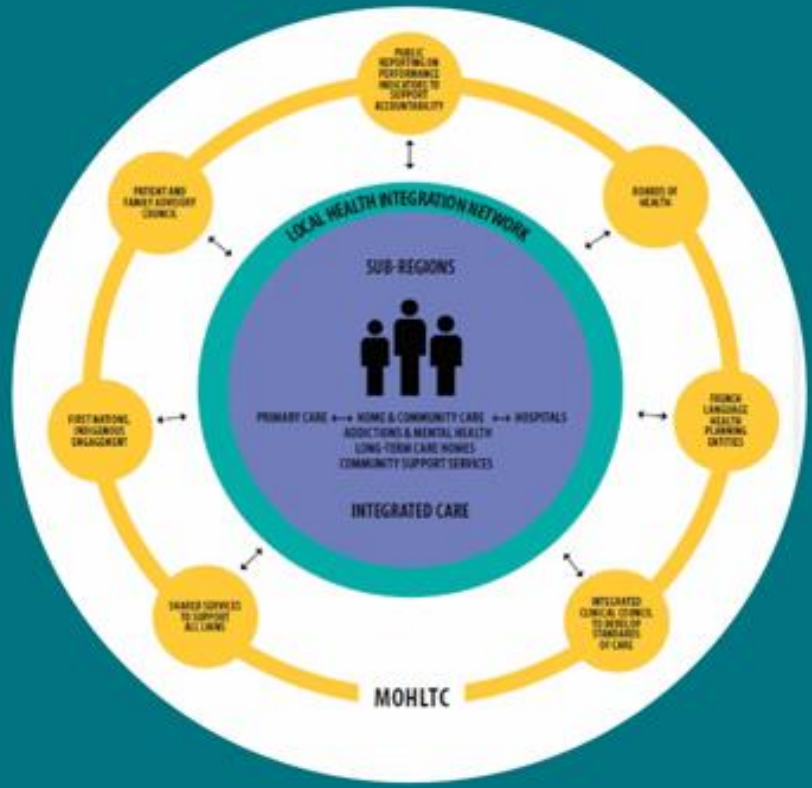
- Healthy built environments
- Jingle Bell Run
- Community/Opioid Drug Strategy
- Many, many collaborative groups and tables

KFL&A Public Health

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

Patients First: Public Health

Goal: Patients receive integrated, accessible care of consistently high quality



KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

Public Health Transformation



Public health work stream

Expert panel on public health

Standards modernization

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

OPHS Changes

OPHS, 2008	Modernized standards
13 Program Standards and 1 Foundational Standard	12 Standards
Societal and Board of Health outcomes	Program outcomes
All requirements mandatory and prescriptive	Some requirements allow for variability to ensure programs and services address local needs

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

Modernized Standards

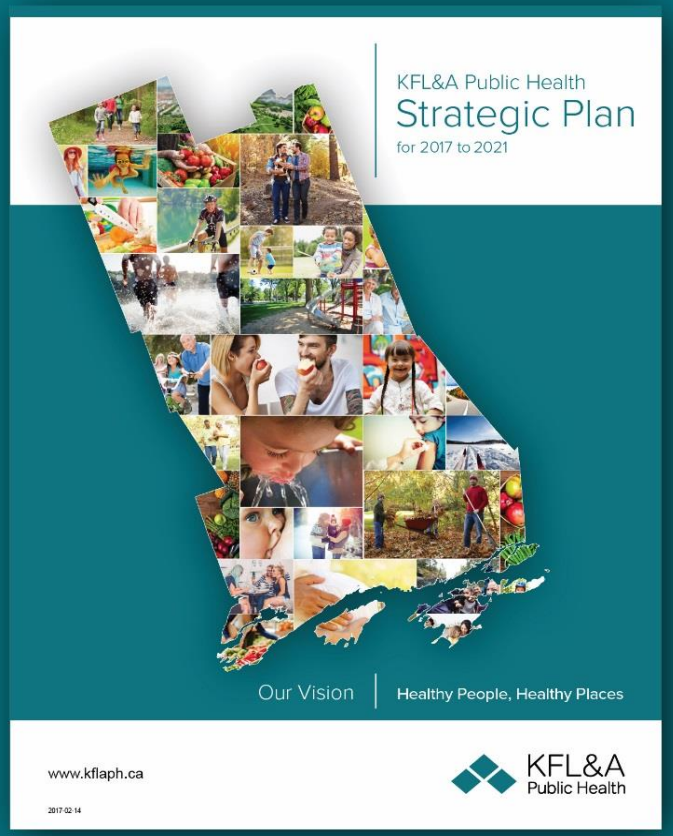
- Population Health Assessment
- Health Equity
- Effective Public Health Practice
- Emergency Prepardness, Response and Recovery
- Chronic Disease and Injury Prevention, Wellness and Substance Misuse
- Food Safety
- Healthy Environments
- Healthy Growth and Development
- Immunization
- Infectious and Communicable Diseases
- Safe Water
- School Health

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, will present...

KFL&A Public Health Strategic Plan



KFL&A Public Health

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

Strategic Directions

Over the course of the next five years, KFL&A Public Health will:

1. Provide programs and services of high quality that are supported by the best evidence.
2. Champion, support, and deliver strategies and initiatives to address health disparities, and priority and emerging health issues.
3. Strengthen and enhance our collaboration with communities and partners.
4. Invest in a healthy and supportive work environment where everyone lives our values.
5. Foster efficiency and innovation to maximize the impact of our resources.

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

KFL&A Public Health Cost-Shared Budget

2020 Budget Planning Assumptions

KFL&A Public Health

AGENDA ITEM #b)

KFLA 2020 Budget Planning Assumptions

- No change to base funding provided by the Ministry for 2019 based on a teleconference with the Ministry this month
- 1.5% increase to municipal contribution (if Board agrees based on Kingston's letter), no input from other municipal partners
- Budgetary deficit estimated at about $168K to be covered by available Board of Health Reserve Fund (see next slide)
- As directed by the Province, excludes 100% funded Ontario Seniors Dental Care program (new for 2019) and 100% MOH Compensation initiative (had been included in 2019 % calculation
- Mitigation funding for municipal partners is not available because it is not required
- RISK – the Province will reduce funding based on 75:25 and 100% ratios to reach 70:30 ratio across the Board – but that is not what we have been led to understand in two separate conversations

KFL&A Public Health

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

KFLA 2020 Planning Assumptions

	2019		Original	Revised		2020	
Expenses							
Total cost-shared budget	**15,683,881**					**15,802,360**	
100% Funded Cost Shared related	269,600					269,600	
100% Funded Base	2,426,800					2,567,448	
Total expenses	**$18,380,281**					**$18,639,408**	
Funding							
MOHLTC - PROVINCIAL CONTRIBUTION	$9,633,900		61.43%		1	$9,633,900	
100% Funded Cost Shared related	269,600				1	269,600	
100% Funded Base	2,426,800				2	2,426,800	
	12,330,300			67.08%		**12,330,300**	66.75%
MUNICIPAL FUNDING	**6,049,981**		38.57%	32.92%	3	**6,140,731**	33.25%
Total funding	**18,380,281**			100.00%		**18,471,031**	100.00%
(Deficit)	**$0**					**($168,377)**	
		1	no change to 2019				
		2	excludes MOH compensation incl. in 2019				
		3	1.5% inc. over 2019				

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

SCHEDULE "A"
GRANTS AND BUDGET

Board of Health for the Kingston, Frontenac and Lennox & Addington Health Unit

DETAILED BUDGET - MAXIMUM BASE FUNDS (FOR THE PERIOD OF JANUARY 1, 2019 TO DECEMBER 31, 2019, UNLESS OTHERWISE NOTED)					
Programs/Sources of Funding			**2018 Approved Allocation ($)**	**Increase / (Decrease) ($)**	**2019 Approved Allocation ($)**
Mandatory Programs (Cost-Shared)			9,633,900	-	9,633,900
Enhanced Food Safety - Haines Initiative (100%)			32,700	-	32,700
Enhanced Safe Water Initiative (100%)			15,500	-	15,500
Harm Reduction Program Enhancement (100%)			150,000	-	150,000
Healthy Smiles Ontario Program (100%)			694,800	-	694,800
Infectious Diseases Control Initiative (100%)	# of FTEs	4.00	444,500	-	444,500
MOH / AMOH Compensation Initiative (100%)[1]			266,000	-	266,000
Needle Exchange Program Initiative (100%)			99,900	-	99,900
Nursing Initiatives (100%)			392,100	-	392,100
Ontario Seniors Dental Care Program (100%)[2]			-	800,200	800,200
Smoke-Free Ontario Strategy (100%)			866,900	-	866,900
Total Maximum Base Funds[3]			**12,596,300**	**800,200**	**13,396,500**

DETAILED BUDGET - MAXIMUM ONE-TIME FUNDS (FOR THE PERIOD OF APRIL 1, 2019 TO MARCH 31, 2020, UNLESS OTHERWISE NOTED)	
Projects / Initiatives	**2019-20 Approved Allocation ($)**
Acute Care Enhanced Surveillance System (100%)	249,700
New Purpose-Built Vaccine Refrigerators (100%)	26,900
Total Maximum One-Time Funds[3]	**276,600**

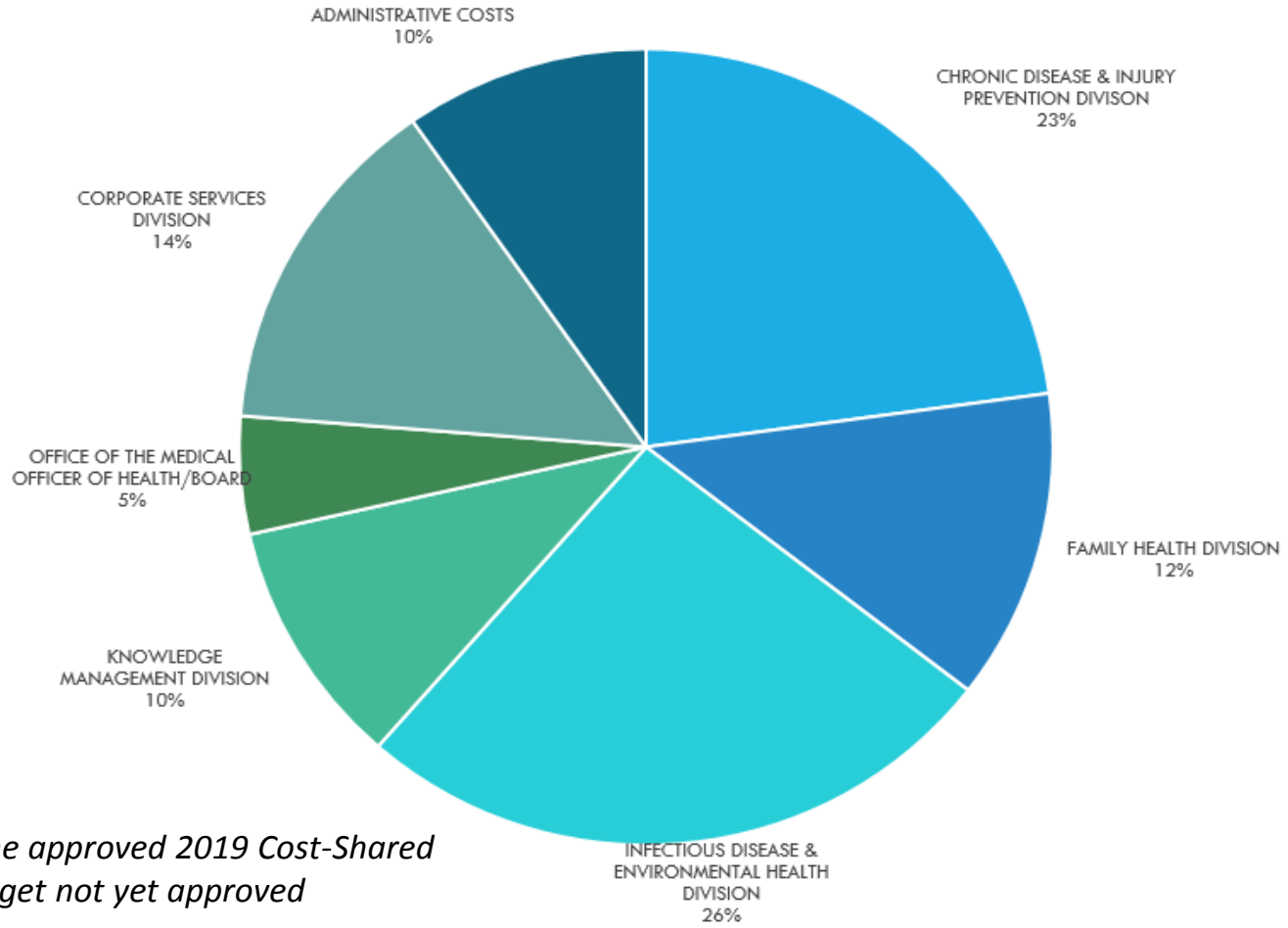
(1) Cash flow will be adjusted to reflect the actual status of current MOH and AMOH positions.
(2) Base funding for the Ontario Seniors Dental Care Program is pro-rated at $600,150 for the period of April 1, 2019 to December 31, 2019.

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

Cost-Shared Budget *



* *% are based on the approved 2019 Cost-Shared Budget, 2020 Budget not yet approved*

KFL&A Public Health

AGENDA ITEM #b)

Other funded programs

typically April to March fiscal year

Shared Library Services Partnership $125,074 (Provincial funding 2019-20 Amount*)

- KFLAPH acts as a hub to provide provide 4 area public health units without an in-house library with access to up-to-date information and scientific resources, and to preserve the existing library infrastructure across the province.

Food for You Food for Two $90,000 (Federal funding 2018-19 Amount*)

- free prenatal education and nutrition program for pregnant women, teens, and their support persons. Each week participants will meet new people, prepare food, and eat together.

Health Links $433,420 (SE LHIN funding 2019-20 Amount*)

- Portal-based technology solution that enhances individual patient care by facilitating the sharing of information to enable person-centered care coordination

- Other smaller grants and one-time funding vary by year

KFL&A Public Health

Ministry of Children, Community and Social Services (MCCSS) 100% Funding

April to March fiscal year $2,875,626

(based on 2019-2020 amounts approved by the Board in 2019)

Healthy Babies Healthy Children $1,206,332 (requirement under the OPHS)

- Home visiting program intended to optimize newborn and child healthy growth and development

Pre-School Speech and Language $873,171

- System of partner agencies in KFL&A that provides speech and language services to children and their families from birth up to the end of junior kindergarten

Infant Hearing $658,608

- Program designed to identify babies with permanent hearing loss and to provide services to help children with communication and language development

Blind-Low Vision $137,515

- Program designed to give children who are born blind or with low vision the best possible start in life by providing education and support for parents

KFL&A Public Health

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

Part VIII Budget

Part VIII (Building Code Act):

- Septic system inspection program
- A cost recovery program

KFL&A Public Health

AGENDA ITEM #b)

Dr. Moore , Medical Officer of Health, KFL&A Public Health, will present...

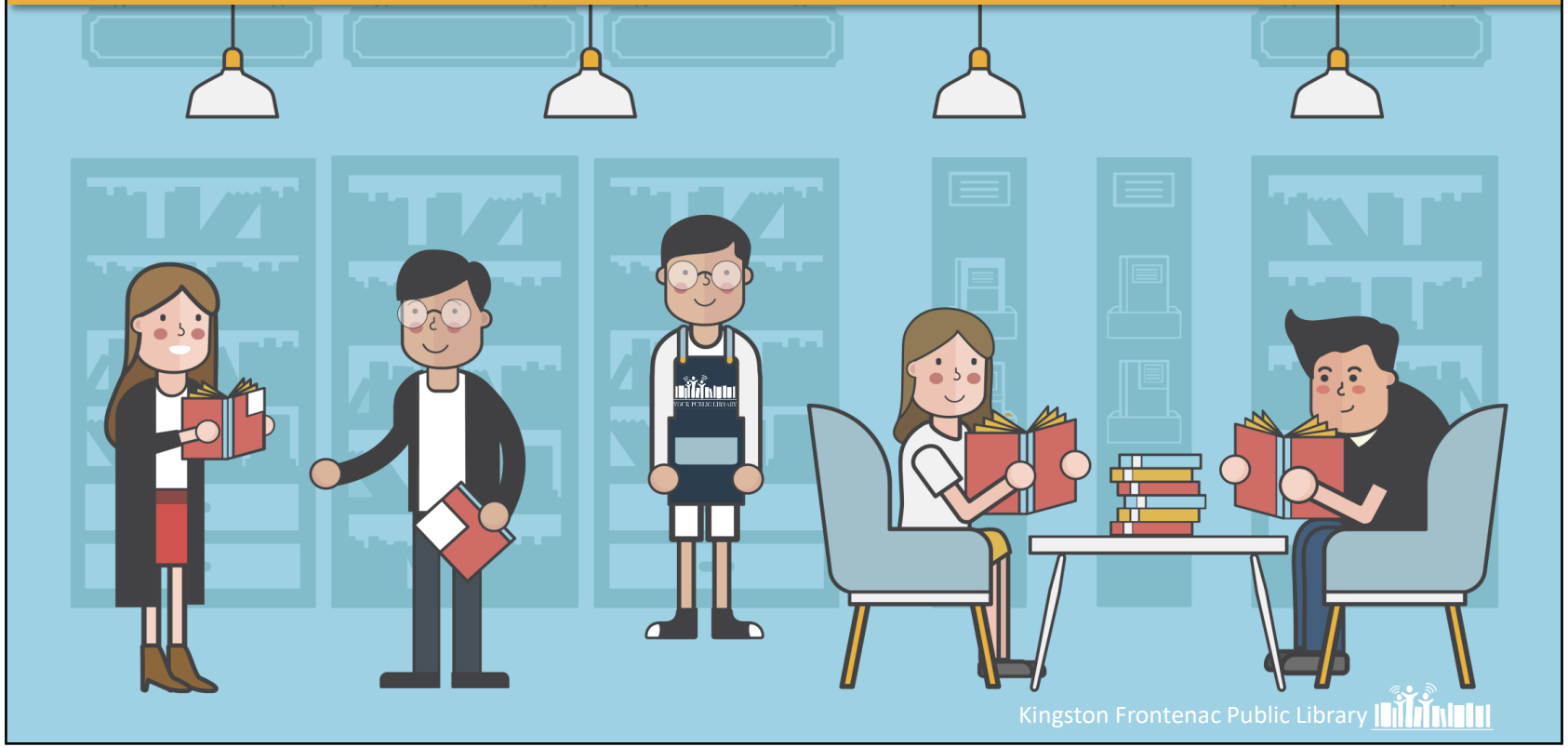
Questions?

KFL&A Public Health

AGENDA ITEM #b)

Thank you!

Library Service in Frontenac County – 2020 Draft Budgets



Lester Webb , Chief Librarian, Kingston Frontenac Public Library, wi...

Diverse . Strong . Resilient

Building Community Vitality

- **Literacy** – early years programming and technological support
- **Life long Learning** – collections and programming in support of rural lifestyles
- **Enriching Spaces and Services** –provide communities with safe and accessible supports during times of growth and change.
- **Build Relationships** – pursue collaborative opportunities to provide more efficient and effective programming.

Lester Webb , Chief Executive Officer, Kingston Frontenac Public Library, wi...

Facility Highlights

Arden Branch



- Installation of new flooring
- Interior walls will be painted
- Installation of new shelving
- New furniture will be purchased early in 2020

AGENDA ITEM #c)

Lester Webb , Chief Librarian, Kingston Frontenac Public Library, wi...

Technology Highlights

Access and Support

- Free Wi-Fi (24/7)
- Technology Tutors
- Tech Drop-in Sessions
- Tech Workshops



Lester Webb , Chief Executive Officer, Kingston Frontenac Public Library, wi...

Programming & Outreach

2019 Highlights – In the Community







- Park Passes
- Farmers' Markets
- Lakes and Trails Festival
- Visits to schools and EarlyOn centres
- StoryWalk® - Bon Echo Provincial Park and Sharbot Lake

AGENDA ITEM #c)

Programming & Outreach

2019 Highlights – Rural Branches



- KFPL Live Speaker Series
- Grown up Story Time
- Summer Reading Challenge
- Puppet Show Tour
- Telling Your Story







Lester Webb , Chief Librarian, Kingston Frontenac Public Library, wi...

Frontenac County Statistics

2019 to Date



11
Branches



5,000+
Cardholders Registered in Frontenac County Branches



82,000+
Items Borrowed

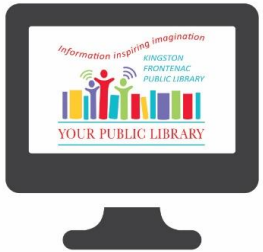


10,000+
Internet/WiFi



15,000+
Questions Answered

Online Services



900,000+
KFPL Website Visits

13,000+
Ancestry Library



160,000+
Press Display



100,000+
Ebooks



38,000+
E-audiobooks

Lester Webb , Chief Executive Officer, Kingston Frontenac Public Library, wi...

Lester Webb , Chief Librarian/CEO, Kingston Frontenac Public Library, wi...

Operating & Capital Budgets

City / County Agreement

87%

City of Kingston

13%

County of Frontenac

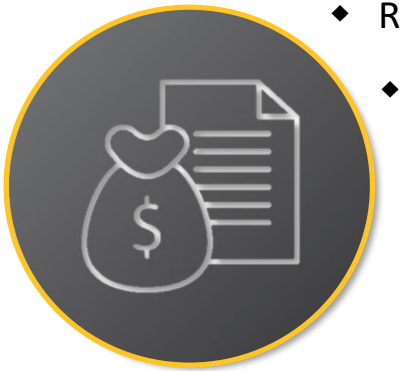
Facility costs are not part of the above formula.
Frontenac County funds the 11 branches in the Townships of Frontenac.

AGENDA ITEM #c)

Lester Webb , Chief Librarian, Kingston Frontenac Public Library, wi...

Operating & Capital Budgets

Context



- Increasing demand for e-content
  - Rising cost of e-books, e-audiobooks
  - Average cost of library materials in 2019 has risen 1.4% over 2018
    - Purchasing power - impact of the value of the Canadian dollar
      - Rising costs for service agreements.

AGENDA ITEM #c)

Lester Webb , Chief Librarian, Kingston Frontenac Public Library, wi...

Operating & Capital Budgets

Facility Costs

- City of Kingston provides funding to the Library Board to operate and maintain the five branches in the City
- Townships operate and maintain facilities for the branches in the County
- These costs are not part of the 87/13 funding formula
- County is responsible for a percentage of operating costs for Administration and Technical Services at Central



Draft Operating Budget 2020

Revenues

	2020	2019	Variance	Percentage
County of Frontenac	$863,489	$850,282	$13,207	**1.55%**
City of Kingston	$6,631,582	$6,509,613	$121,969	**1.87%**
Province of Ontario	$297,138	$297,138	$0	**0%**
Self-generated*	$279,963	$286,530	$6,567	**-2.29%**
Total	$8,072,172	$7,943,563	$128,609	**1.62%**

***Self-generated revenue: grants, facility rentals, fines/damages, printing, donations, etc.**

Lester Webb , Chief Executive Officer, Kingston Frontenac Public Library, wi...

Draft Operating Budget 2020

Expenditures

	2020	2019	Variance	Percentage
Staffing Costs (salaries, wages, benefits)	$5,981,767	$5,882,295	$99,472	1.69%
Collection Material	$890,230	$876,117	$14,113	1.61%
System-Wide	$708,508	$706,598	$1,910	0.27%
Facilities (City of Kingston)	$491,667	$478,552	$128,609	2.74%

AGENDA ITEM #c)

Draft Capital Budget 2020

Shared Costs

	Total Amount	City of Kingston (87%)	County & Townships (13%)
Technology	$246,000	$214,020	$31,980
Branch Revitalization	$150,000	$130,500	$19,500
Total	$396,000	$344,520	$51,480

Lester Webb , Chief Executive Officer, Kingston Frontenac Public Library, wi...

Draft Operating Budget 2020

Looking to the Future



	2021	2022	2023
Overall Increase	2.20%	2.27%	1.91%
County of Frontenac	2.13%	2.65%	2.12%
City of Kingston	2.35%	2.43%	2.04%

Thank you for your support.

Ms. Ruth Noordegraaf to provide County Council with a presentation of...

10-Year Municipal Housing and Homelessness Plan for the City of Kingston and County of Frontenac

Five-Year Review

Update for County of Frontenac

October 16th 2019

Ms. Ruth Noordegraaf-Eagan presenting to Council on Tuesday, June 25, 2019 at 6:00 p.m. Page 66 of 575
Ms. Ruth Noordegraaf-Eagan presenting to County Council with a presentation of...

10-Year Housing and Homelessness Plan

Five-Year Update - Background

- *Housing Services Act, 2011* requires Service Managers to develop housing and homelessness plans.
- In late 2013 City and County adopted the 10-Year Housing and Homelessness Plan for the City of Kingston and County of Frontenac.
- In 2016 the Province released policy statement requiring Service Managers to update 10-Year Plans – deadline of December 31, 2019 established for submission to Ministry.
- Housing staff have compiled background data, experience from implementing first five years of the plan, and retained professional housing data and policy analysis expertise.

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AGENDA ITEM #d)

Ms. Ruth Noordegraaf-Eagan presenting to City Council with a presentation of...

10-Year Housing and Homelessness Plan

Review and Update - Background

- Review process to be comprised of three main phases:
  1. **Environmental Scan and Needs Assessment**
  2. **Stakeholder Engagement**
  3. **Compilation, update, and approval of updated 10-Year Plan**
- Current status: completion of phase 1 and initial component of phase 2
- Consultation processes to-date have included:

Community housing providers (i.e. social and affordable housing), supportive and transitional housing providers, housing support service providers, emergency housing (i.e. homeless) providers, Mayor's Task Force on Housing, internal City and County staff, and Indigenous housing and support service providers and community members

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AGENDA ITEM #d)

Ms. Ruth Noordegraaf, Page 68 of 575 County Council with a presentation of...

10-Year Housing and Homelessness Plan

Consultant Team

Michel Frojmovic – Director and owner, Acacia Consulting

Urban & Community Planner and Project Manager who has directed and managed numerous projects in the areas of strategic planning, monitoring & evaluation and policy research & analysis.

Steve Pomeroy – Head of Focus Consulting Inc.

Specializes in housing policy research, housing strategy, financial feasibility and market analysis.

Consultant team is supported by Housing and Social Services staff in partnership with funded and unfunded sector organizations.

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AGENDA ITEM #d)

Ms. Ruth Noordegraaf-Eagle presenting to Frontenac County Council with a presentation of...

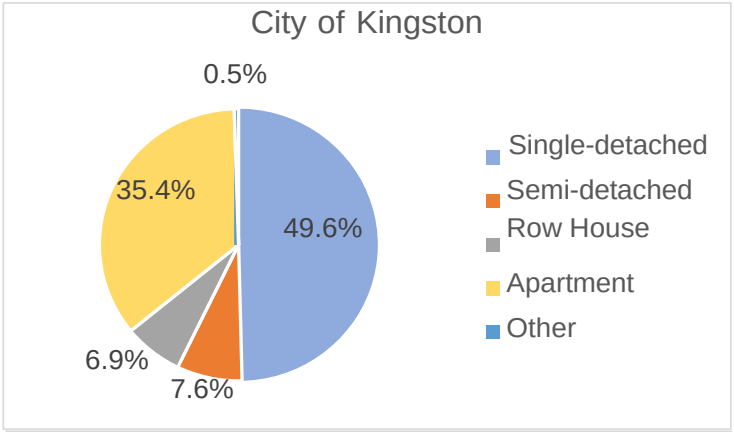
Market performing well…

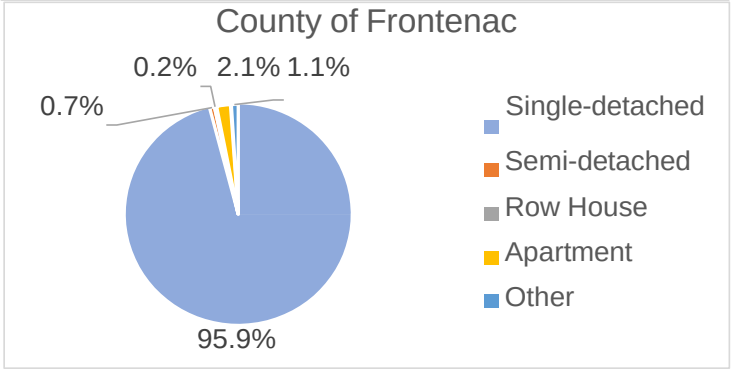
- In general, new housing construction starts match population and household growth.
- Home prices are relatively reasonable.
- Market open to first time buyers.
- Census Metropolitan Area expected to grow to 176,000 by 2026, 87% of growth expected to occur in City of Kingston; majority of growth expected to occur in the County will be focussed in South Frontenac.

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AGENDA ITEM #d)

Dwelling Type – Composition





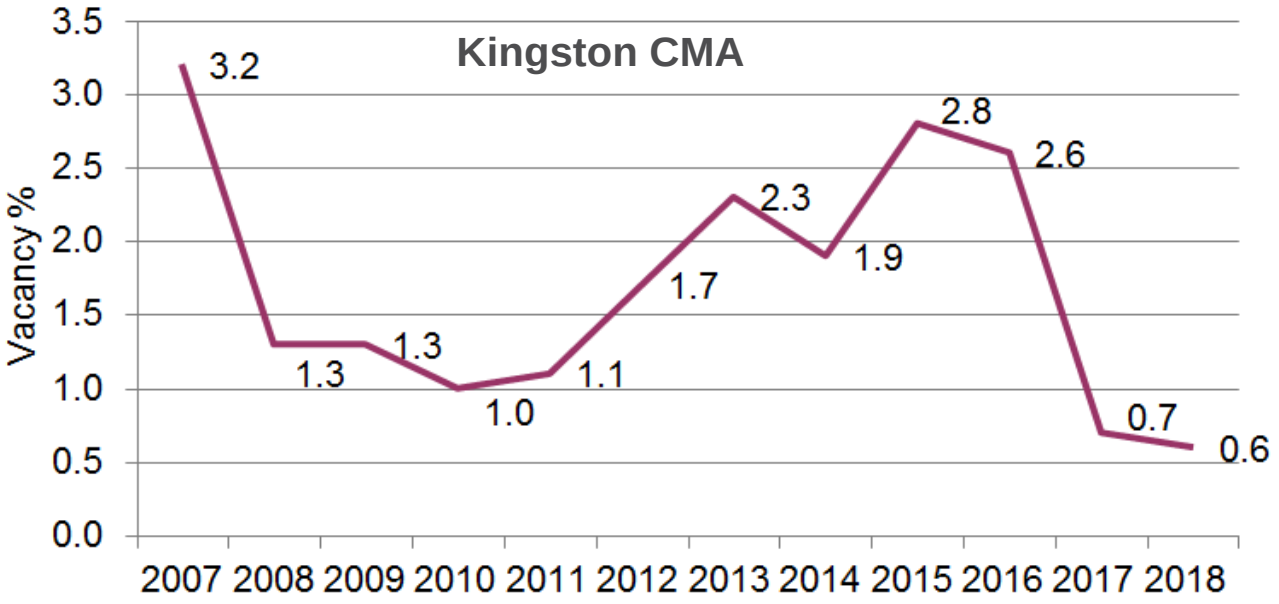
- 96% of dwellings in County are single-detached homes.
- 90% of County households are owners.
- Rental housing formats are limited in the County.

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Ms. Ruth Noordegraaf-Eagan, Director of Housing, County Council with a presentation of...

Rental Vacancies

- Rental market experiencing very low vacancy rate.
- Low vacancy rate creates pressure in rental market and pushes rents higher.
- In the County 10% rent housing versus the City where 40% rent housing.



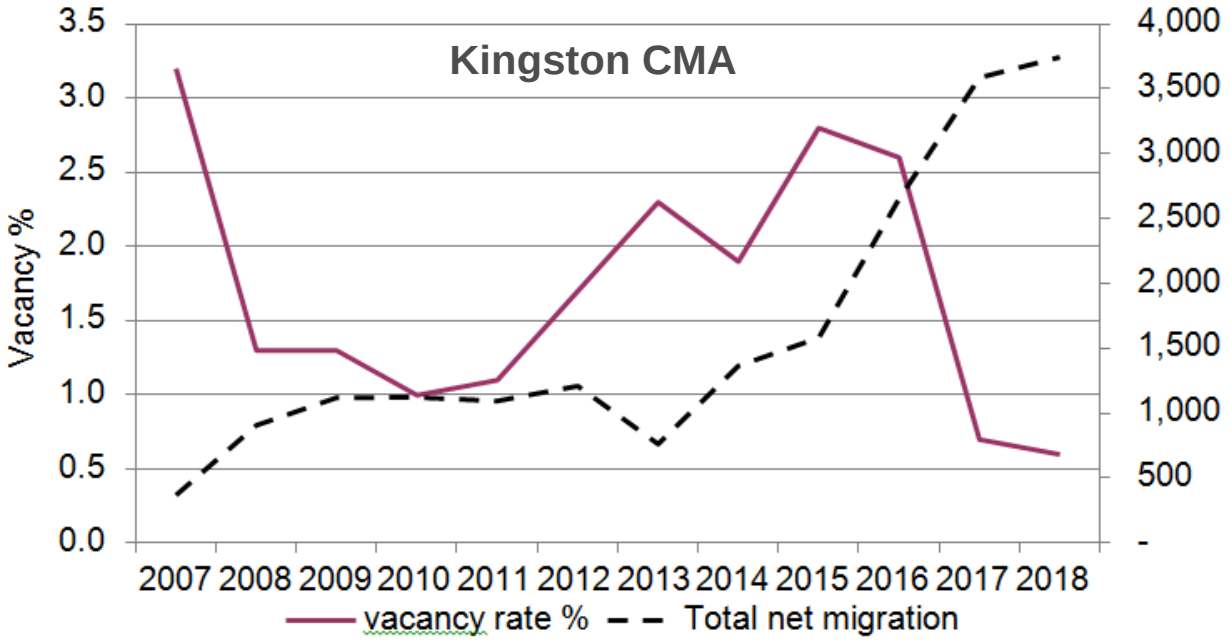
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AGENDA ITEM #d)

Ms. Ruth Noordegraaf-Eagle presenting to Council on behalf of the County Council with a presentation of...

Rental Vacancies

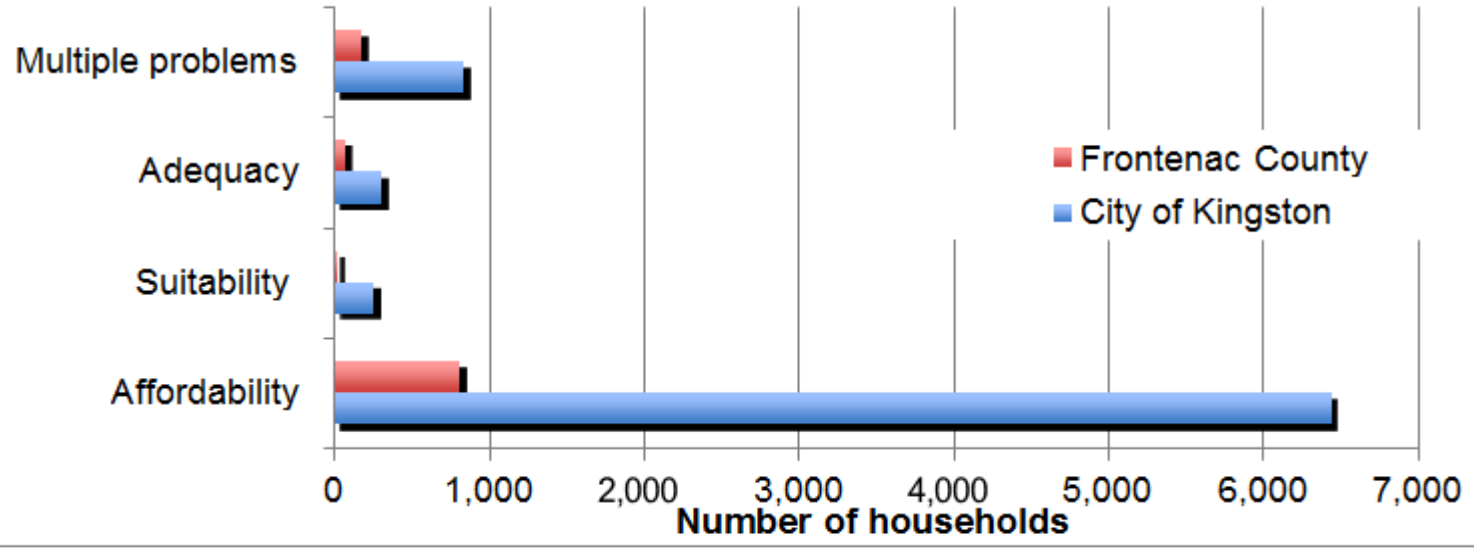
- Vacancy rate has recently been impacted by increased rates of in-migration.
- In-migration primarily comprised of intraprovincial migration (people moving to Kingston from elsewhere in the province – possibly downsizers from GTA) and non-permanent residents (primarily international students).



Copyrigh

Core Housing Need

- Core Housing Need measures housing needs by affordability (paying over 30% of before-tax income), adequacy (dwelling in need of major repair), and suitability (sufficient number of bedrooms for household).
- In the County, adequacy either alone or in combination with affordability, is a more of a challenge reflecting homes in a state of disrepair.

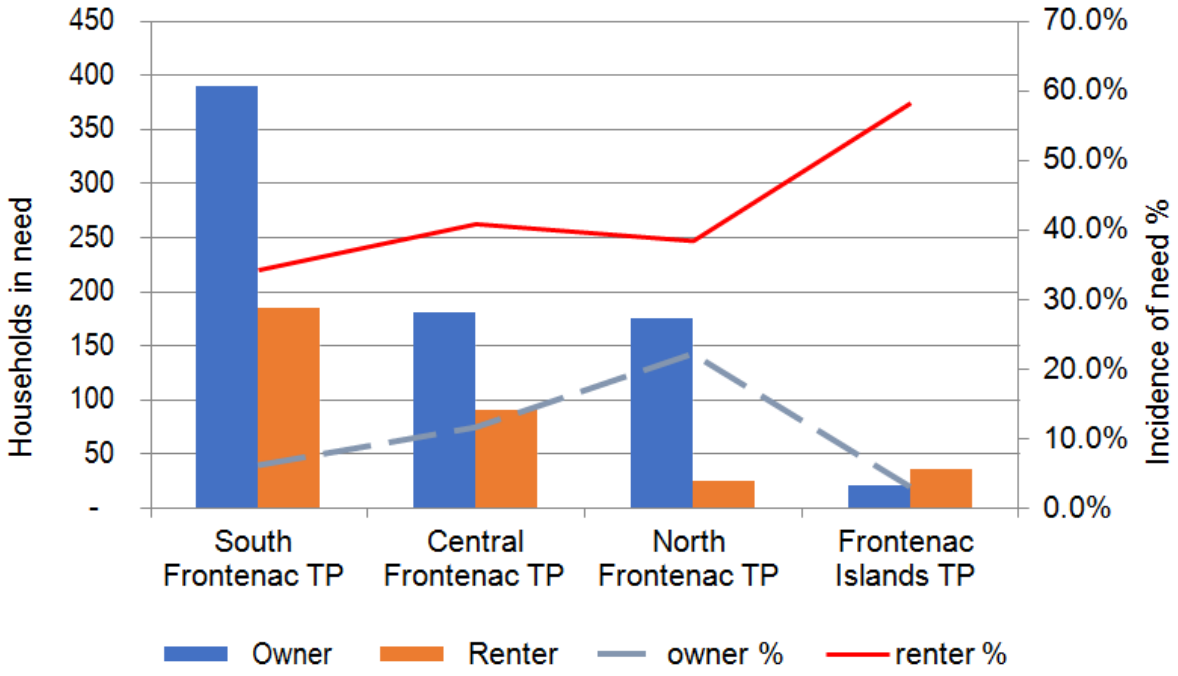


Ms. Ruth Noordegraaf-Eagleson to attend the County Council with a presentation of...

Core Housing Need

Who is in need?

- While the incidence of need appears to be very high among renter households in the County, this is based on a small number of renters in these areas.



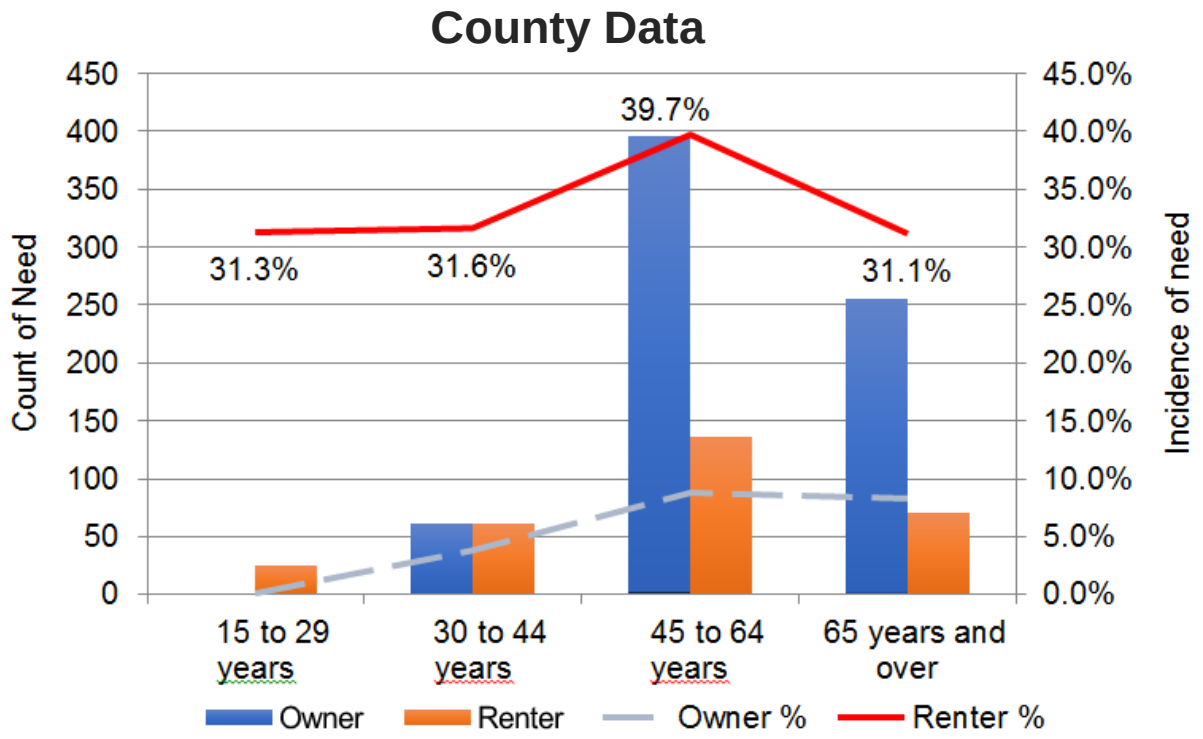
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AGENDA ITEM #d)

Core Housing Need

Who is in need?

- In the City need is spread across all age groups; in the County, however, it is more evident among older (over 45 age groups).



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Rural Homelessness

- Urban and rural homelessness enumeration processes completed in April 2018.
- Survey was completed by 37 households representing 61 individuals.
- 75% of respondents were staying with a friend or family.
- 19% of respondents, or 7 households, were sleeping in some form of shelter unfit for long-term accommodation (e.g. hunt camp, seasonal dwelling, recreational vehicle, etc.).
- 16% of respondents were youth (age 16 to 24).
- 46% of households self-identified as Indigenous.
- Numbers of homeless individuals in the County appear to be increasing modestly relative to 2013 and 2016 enumeration projects.

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Service Provider Consultation

- Housing First program is hindered by limited rental housing availability in the rural area. Homeless households may not want to relocate to Kingston.
- Lack of transportation in the rural area is a significant barrier to homeless individuals accessing available services.
- Service Providers recommended that the City and County continue to partner to complete a needs assessment survey to understand the scope and depth of rural need in relation to housing and homelessness.
- Continue to complete urban and rural homelessness enumeration every two years.
- Enhance prevention and diversion programs in both the urban and rural areas (i.e. it can be easier to prevent homelessness rather than trying to find housing for someone that has become homeless).

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Ms. Ruth Noordegraaf Page 78 of 575 County Council with a presentation of...

Next Steps

- Circulate draft 10-Year Plan actions to key stakeholders (including County)
- Consider feedback and adjust as appropriate
- Present draft update 10-Year Plan to Housing and Homelessness Advisory Committee, community, and key stakeholders
- Submit update 10-Year Plan to Ministry of Municipal Affairs and Housing (MMAH) for review and comment
- Respond to comments from MMAH
- Present final updated 10-Year Plan to City and County Councils

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AGENDA ITEM #d)

Ms. Ruth Noordegraaf to attend Frontenac County Council with a presentation of...



Early Years and Child Care System Service Plan
County of Frontenac

Update & Summary of Findings

October, 2019

FRONTENAC
COUNTY OF FRONTENAC • ONTARIO

KINGSTON

Ms. Ruth Noordegraaf to speak to Frontenac County Council with a presentation of...

Highlights for Today

- Early Years & Child Care Service Plan - Background
- Invest Early for a Strong Start
- Early Learning in the County of Frontenac
- Emerging Trends & Next Steps

Ms. Ruth Noordegraaf to provide County Council with a presentation of...

Background on the Early Years & Child Care Service System Plan

Project Mission

Development of a Child Care and Early Years System Plan to guide child care and early years services in Kingston and Frontenac.

This will include work to develop a vision for early years and child care in Kingston & Frontenac that is aligned with Ontario's vision and provincial interest, as well as the establishment of clear priorities and actions for moving forward.

Project Outline

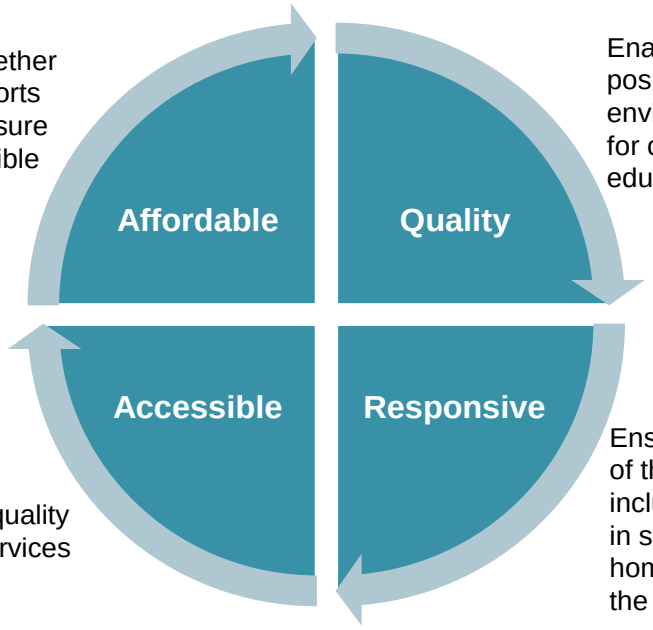
- An Environmental Scan assessing current and future child care and early years' service gaps (April)
- A public engagement process consulting parents and caregivers and community partners in Kingston and Frontenac (May-June)
- Develop strategic priorities & draft plan (June-October)
- Community follow up & finalize plan (October-December)

Ms. Ruth Noordegraaf, Page 82 of 575 County Council with a presentation of...

Early Years & Child Care Plan

The service plan is built on the foundation of **4 Primary Pillars**

Early years partners come together collaborate and enhance supports and improve affordability to ensure all children have the best possible start in life



Enabling safe and reliable programs built on positive, responsive relationships, engaging environments, and meaningful experiences for children and families, delivered by educated and well-supported staff

Increasing access to early years programs to give families more opportunity to benefit from high-quality early childhood programs and services

Ensure programs reflect the diverse needs of the community through spaces that are inclusive and culturally appropriate, located in schools, communities, workplaces and home settings so that families can choose the options that work best for them

AGENDA ITEM #d)

Ms. Ruth Noordegraaf will be presenting to Council with a presentation of...

Invest Early for a Strong Start

The science of early years has proven the **first six years of life** are the most critical for brain development. Experiences, both positive and negative, in these earliest years form the foundation for overall health & wellbeing.

Investing in young children through high quality early learning opportunities sets them up for a lifetime of success and creates stronger social and economic outcomes for all communities.

A strong child care system will also create an improved **economic environment** by allowing parents to enter the workforce, increase earnings while their children gain foundational skills they need to be productive in the workforce later in life.

This plan will provide **perspective** on early years trends that will help inform the best investment for the critical years of early childhood development and help enhance positive early life experiences that lay a strong foundation for better health outcomes and social engagement across an individual's lifespan.

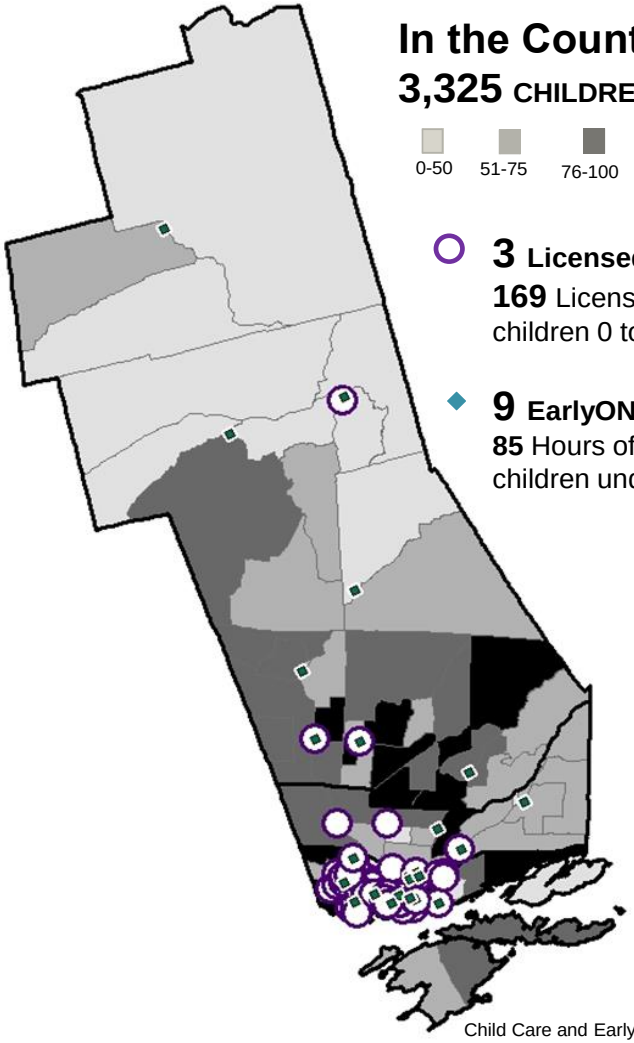


Early Years & Child Care in the County of Frontenac

Current picture of the early years services available in the County of Frontenac.

Services available to those;

- Living & working in the county
- An increase use by those visiting the county



In the County….

3,325 CHILDREN 0-12 YEARS

0-50 | 51-75 | 76-100 | 101-1000

3 Licensed Child Care Programs
169 Licensed Child Care spaces for children 0 to 12 years

9 EarlyON Child & Family Program sites
85 Hours of programming per week for children under 6 and their families

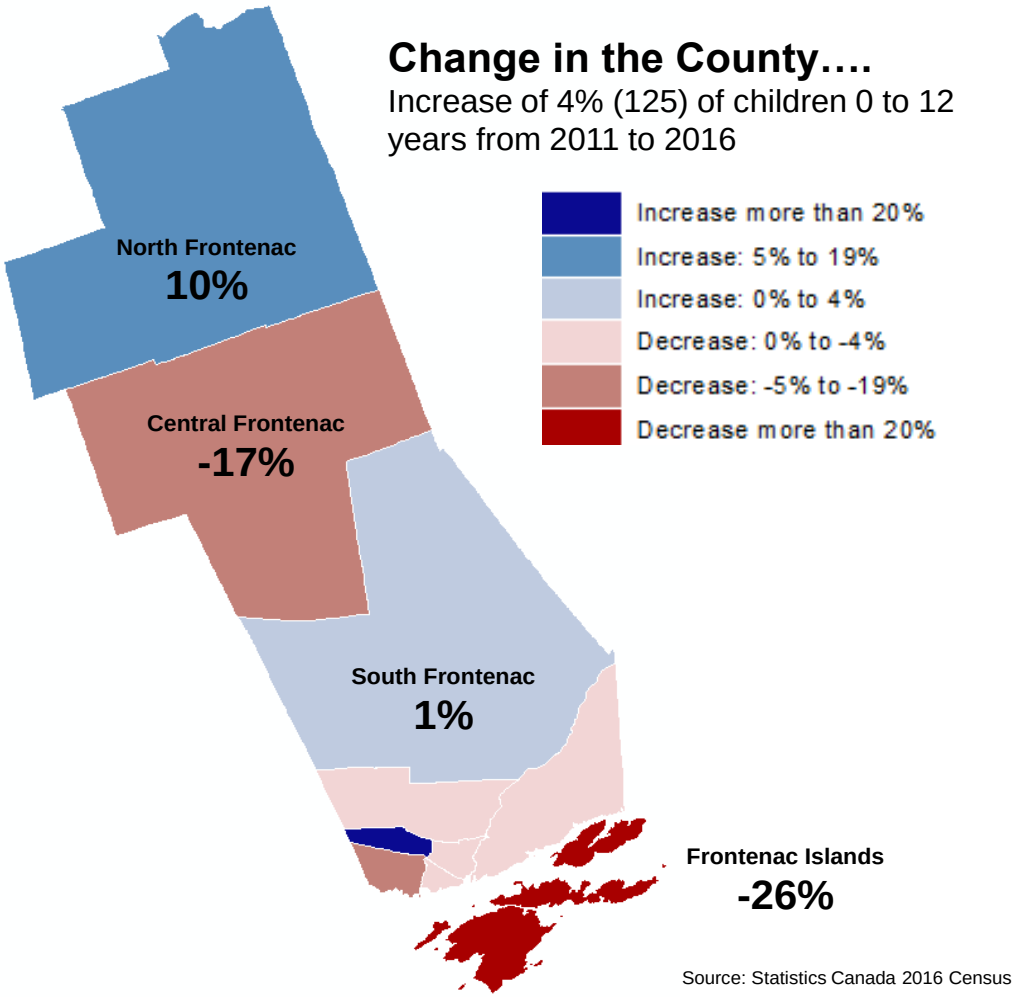
Source: Statistics Canada 2016 Census
Child Care and Early Years location data, City of Kingston 2019

Ms. Ruth Noordegraaf Page 85 of 575 County Council with a presentation of...

Early Years & Child Care in the County of Frontenac

How has the population of families with children 0 to 12 years of age changed?

- **10%** increase in North Frontenac– In 2016 there were 160 children 0 to 12, with majority of growth in children under 4, with very few program options
- South Frontenac has the largest population of children aged 0 to 12 at **2,555** (growth of 1%) with only 2 licensed child care centres with capacity of 145 spaces – which could only serve 6% of this population



AGENDA ITEM #d)

Ms. Ruth Noordegraaf Page 86 of 575 County Council with a presentation of...

EYCC Service Plan Engagement

Who we talked to…

- County of Frontenac CAO
- Frontenac Township CAO's
- County Residents
- Child Care Centre Operators
- School Boards
- Public Health
- Library
- Indigenous Communities
- And many others….

How we reached out…

- Interviews
- Surveys
- Pop up events
- Focus groups

AGENDA ITEM #d)

Ms. Ruth Noordegraaf to provide County Council with a presentation of...

What we Heard in the County

- **Transportation** is a major barrier to access early years services
- **Greater access** to early years & child care programs in the county to reduce waitlist and availability that is close to home
- Families feel **isolated** from early years system
- **Affordability** – less availability to subsidy with lack of licensed child care capacity in parts of the County
- Increase emphasizes for the ongoing **need to consult** with county residents on child care and early years needs for the rural community

Ms. Ruth Noordegraaf brought to Council with a presentation of...

Emerging Trends & Next Steps

- Support **improve access** to high quality licensed early years programs and supports across the Kingston & Frontenac geographic areas
- Support positive parenting practices in the community through **partnerships and collaborations**
- Increase the communication of early years resources on the city and county websites through an **updated marketing campaign**
- Respond to community interests & needs for early years services by continuously improving processes and ensure they are **responsive, effective & measurable**
- Strengthen **economic development** supports in our communities through a strong and stable early years & child care service system

J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS





Building Condition Assessment
County of Frontenac

October 16th, 2019

BEST MANAGED COMPANIES CANADA'S

www.jlrichards.ca

AGENDA ITEM #a)

J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS





Table of Contents

Who We Are

Our Presence & Practice in Ontario

Our Team

Frontenac County Building Condition Assessment

Methodology / Quality Assurance / Quality Control

CANADA'S BEST MANAGED COMPANIES

Who We Are

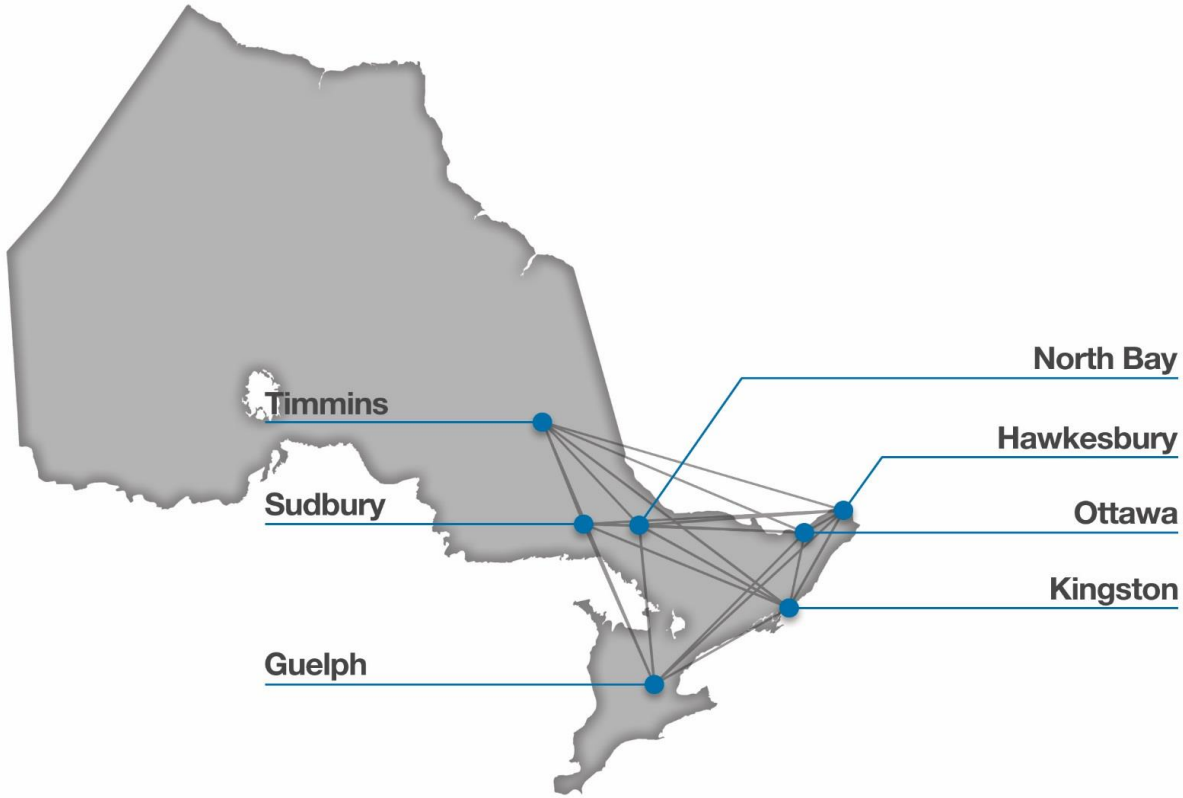
- Founded in 1955
- Architectural, Engineering and Planning firm offering integrated, multidisciplinary services across a broad range of sectors and geographic regions
- 100% employee-owned



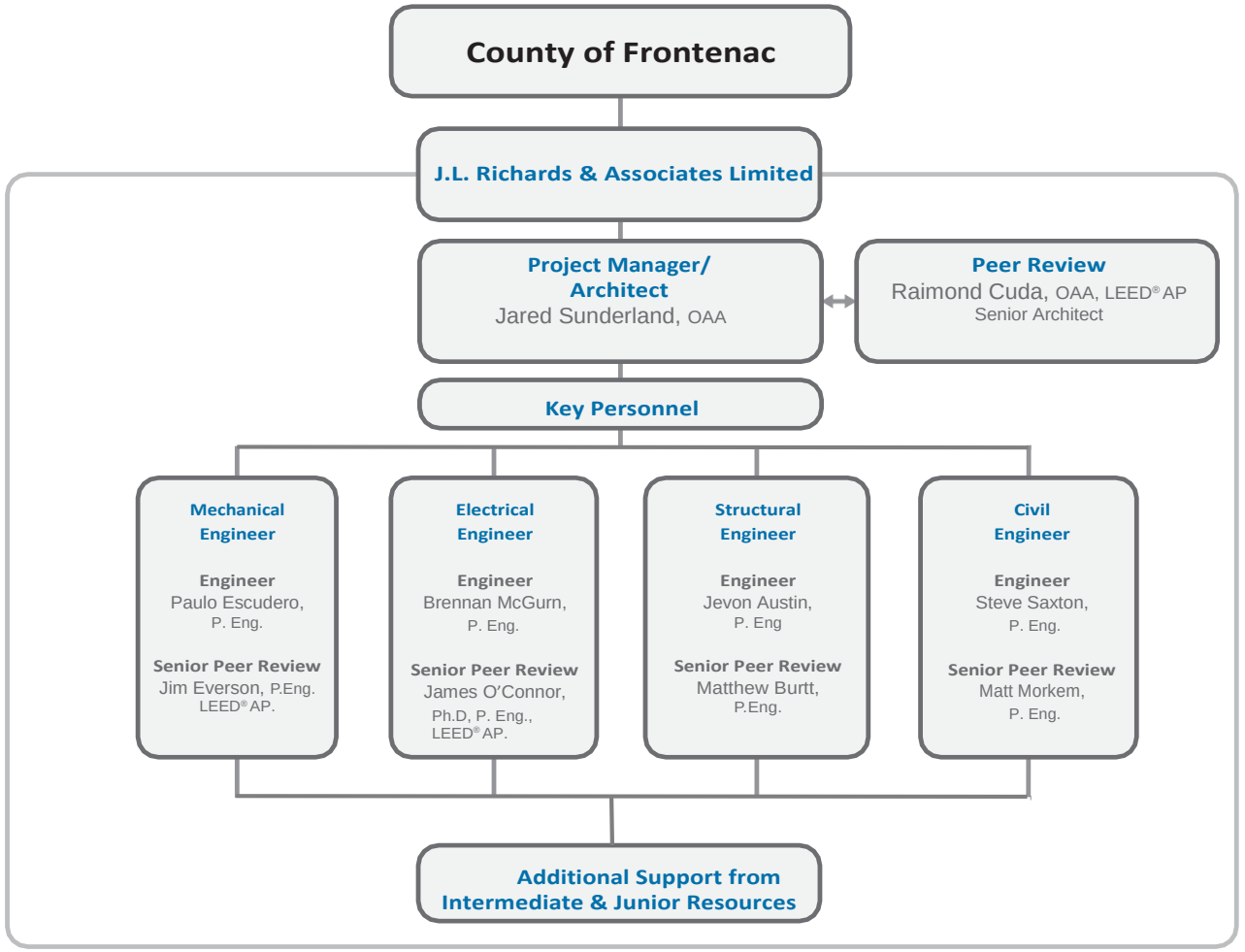
Consultant Briefing: Page 91 of 175, J. L. Richards & Associates Limit...

Our Presence & Practice in Ontario

- 60+ years of experience
- Community impact based practice
- 7 offices
- 300+ employees
- Over $100M annual construction value



Our Team


County of Frontenac
J.L. Richards & Associates Limited
Project Manager/ Architect
Jared Sunderland, OAA
Peer Review
Raimond Cuda, OAA, LEED® AP
Senior Architect
Key Personnel
Mechanical Engineer
Engineer
Paulo Escudero, P. Eng.
Senior Peer Review
Jim Everson, P.Eng. LEED® AP.
Electrical Engineer
Engineer
Brennan McGurn, P. Eng.
Senior Peer Review
James O'Connor, Ph.D, P. Eng., LEED® AP.
Structural Engineer
Engineer
Jevon Austin, P. Eng
Senior Peer Review
Matthew Burtt, P.Eng.
Civil Engineer
Engineer
Steve Saxton, P. Eng.
Senior Peer Review
Matt Morkem, P. Eng.
Additional Support from Intermediate & Junior Resources

Frontenac County Building Condition Assessment

- Fairmont Home
- County of Frontenac Administrative Building

- Sydenham Road Ambulance Base
- Palace Road Ambulance Base
- Robertsville Ambulance Base
- Parham Ambulance Base
- Wolfe Island Ambulance Base
- Fairmont Home Paramedic Offices

- Howe Island Ferry Building

- K&P Trail Bridges (x5)

Consultant Briefing: Page 94 of 175, J. L. Richards & Associates Limit...

AGENDA ITEM #a)

Methodology/Quality Assurance/Quality Control

- Background Information & Document Review
- Preparation of Investigation Templates
- Detailed BCA/ Field Work
- Draft Report Review
- Final Reporting

Consultant Briefing: Page 95 of 175, J. L. Richards & Associates Limit...

AGENDA ITEM #a)

Methodology/Quality Assurance/Quality Control

- Background Information & Document Review
- Preparation of Investigation Templates
- Detailed BCA/ Field Work
- Draft Report Review
- Final Reporting
    - A summary of the various building systems;
    - Methodology employed;
    - A summary of the findings;
    - A recommendation for repair and upgrade;
    - Photos of the existing facility;
    - A conclusion to the report with recommendations;
    - Class ‘D’ opinions of probable construction cost;
    - Asset Inventory Summary Tables

Consultant Briefing: Page 96 of 175, J. L. Richards & Associates Limit...

The County of Frontenac Asset Condition Assessment
Building Condition Assessment Report

September 2019

Prepared for:

THE COUNTY OF FRONTENAC
2069 Battersea Road
Glenburnie, ON
K0H 1S0

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED
203-863 Princess Street
Kingston, ON
K7L 5N4
Tel: 613-544-1424 Fax: 613-544-5679

JLR No.: 28833-000.1

Example Categories in Hierarchical Structure

Level 1: Facility	Level 2: Class
• Fairmount Home • County of Frontenac Administration Office Building • Palace Road Ambulance Base • Sydenham Ambulance Base • Etc.	• Architectural and Structural • HVAC • Plumbing • Elevators • Parking Lots/Lane Ways • Etc.
Level 3: Asset	**Level 4: Attribute**
• Building Structure • Building Envelope • Roof • Building Interior • Emergency Power System • Etc.	• Exterior Walls • Roof Assembly • Slab on Grade • Transformers • Generator • Etc.

Consultant Briefing: Page 98 of 175, J. L. Richards & Associates Limit...

Condition Rating System

Grade	Condition	Replacement Time Frame	Description
1	Unacceptable	Immediate	• Failed or failure imminent. Immediate need to replace most or all of attribute. Hazards exist or attribute cannot be serviced or operated without risk to personnel/public/environment.
2	Poor	0-5 Years	• Poor physical condition – heavy wear and tear, failure is likely in short term. Likely need to replace most or all of attribute within 5 years. No immediate risk, but work required within 5 years to ensure attribute remains operational.
3	Acceptable	5-10 Years	• Acceptable physical condition – moderate wear and tear, moderate risk of physical failure. Failure unlikely within next 5 years but further deterioration likely and major rehabilitation/replacement required within next 10 years. Minor components or isolated sections of the attribute may need replacement or repair now, but attribute still functions safely at adequate level of service.
4	Fair	10-20 Years	• Acceptable physical condition – minor wear and tear, minimum risk of physical failure. No substantial deterioration anticipated over the next 5-10 years.
5	Good	20+ Years	• Acceptable physical condition – minor wear and tear, low risk of physical failure. No substantial deterioration anticipated over the next 10-15 years

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Building Condition Assessment
County of Frontenac

Asset Inventory Summary Table

Asset Hierarchy					Identification			Sustainability Data (Asset Life)						Valuation
Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)	Condition Rating	Comments/ Identified Need	Estimated Replacement Cost
Facility	Class	Asset		Attribute										
Fairmont Home														**$1,349,586.80**
1.1	Architectural & Structural													$1,207,911.80
	1.1.1	Building Structure												$10,000.00
			1.1.1.1	Foundation	Perimeter	N/A		1968	60	51	9	3	Generally good (only some was observable), localized area @ auditorium was rusting Fair/poor near garbage loading area, localized major rust/deterioration, some repairs required	$10,000.00
			1.1.1.2	Slab on Grade	Mechanical Room	N/A	Concrete Slab					4	Fair condition; minor wear and cracking observed	
			1.1.1.3	Building Structure	Various	N/A	Steel deck, OWSJ's, beams, and columns					5	Only observed in select locations. Generally good condition. Fireproofing of steel beams in mechanical room has been locally compromised.	
			1.1.1.4		Various	N/A	Concrete and CMU Walls					5	Generally good condition	
			1.1.1.6	Railings and Columns	Garbage Loading Area, Generator Retaining Wall Structure	N/A	Steel	2003	60	16	44	4	Good condition, minor rusting	
			1.1.1.7.1	Retaining Wall (1)	Generator, Behind (west) of Building	N/A	Concrete walls, 3 sides, steel railing, slab on grade	2003	60	16	44	4	Wall: Good/fair - minor wear Railing: Fair - minor rusting	
			1.1.1.7.2	Retaining Wall (2)	North side of building	N/A	Separating sidewalk and grassed area					4	Good condition	
			1.1.1.9	Bollards	Various	N/A	Steel with concrete fill		30		30	4	Generally good	
			1.1.1.10	Pole Bases	Various	N/A	For light poles, flag poles, etc.		30		30	4	Generally fair/good, light/moderate wear	
	1.1.2	Building Envelope												$73,900.00
			1.1.2.1	Exterior Walls	Exterior / 2004 Addition	N/A	Brick Masonry	2004	60	15	45	5	Good - Overall good condition with localized areas of deterioration.	
												1	Flashing at base of Greenhouse glazing only covers half of sill resulting in masonry staining and damage at sill joints. Stone Sill requires new flashing to provide complete coverage and repointing of the brick masonry.	$3,000.00
												1	Investigate, clean, and repair balcony drainage at west balcony. Lack of appropriate flashing at scupper appears to be the cause of deteriorated masonry joints. Reflashing, masonry repairs and cleaning of debris from underneath patio stones recommended pending investigation.	$8,000.00

Table 9: Summary of Palace Road Ambulance Base Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Foundation – Below Grade / Full Structure - Isolated deterioration at NE corner of building			$5,000
Columns – Interior / Between Overhead Doors - Acceptable - moderate rusting at bases (exposed to salt)			$10,000
Guardrail – Exterior / Office Roof - Poor - several connection bolts missing at post feet, light to moderate rust, weld on ladder brace has let go.		$20,000	
Exterior Walls – Exterior - Localized Masonry Repairs required at various areas of south façade.	$2,000		
Exterior Doors – Exterior / Corridor Ends - Acceptable - showing signs of wear, painting recommended as part of routine maintenance. Though at their expected service life there have been no reported concerns. The County may want to consider replacement to bring entrance glazing up to current performance standards. Caulking - Fair - showing signs of wear			$23,000
Exterior Overhead Doors – Exterior Garage - Acceptable - Noted that ongoing maintenance required due to frequency of use. Replacement should be anticipated within 10 year window.			$10,000
Roof Assembly – Exterior/Flat Roof - Acceptable - Moderate wear shown for age. No concerns reported from user group. Anticipated Replacement within ten years due to age.			$18,000
HVAC			
DHW Pump – Utility Room			$1,000
DHWT – Utility Room			$7,000
Plumbing			
Not Applicable			
Electrical (includes generator)			
Not Applicable			
Parking Lot / Lane Ways			
Not Applicable			
TOTAL	$2,000	$20,000	$74,000

[1] Class D Level Estimate Opinion of Probable Costs

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Building Condition Assessment
County of Frontenac

4.0 FAIRMOUNT HOME CONDITION ASSESSMENT

4.2 Architectural / Structural



Photo 4.2.1: Foundation wall deterioration at the garbage loading bays.



Photo 4.2.2: Foundation wall deterioration and rusting of reinforcing steel at auditorium wall.



Photo 4.2.3: Staining and deterioration of masonry at Green house.



Photo 4.2.4: Staining and deterioration of masonry at Green house.



Photo 4.2.5: Exterior Brick of the 2004 Addition



Photo 4.2.6: Exterior Brick of the 2004 Addition

JLR No.: 28833-000
Revision: 00

October 2, 2019

Prepared for:

COUNTY OF FRONTENAC
2069 Battersea Road
Glenburnie, ON
K0H 1S0

Prepared by:

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203-863 Princess Street
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Fax: 613-544-5679

2019 OSIM Report

Structures:
Millhaven Creek Bridge
Hardwood Creek Bridge
White Creek Bridge
Elbow Creek Bridge
Fish Creek Bridge



J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

Table 23: Summary of Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Fairmount Home	$18,950	$1,208,075	$2,363,100
Administration Building (Old House)	$5,000	$110,200	$149,750
Palace Road Ambulance Base	$2,000	$20,000	$74,000
Sydenham Ambulance Base		$1,648	$15,000
Robertsville Ambulance Base			$2,200
Wolfe Island Ambulance Base	$2,750		$5,600
Parham Ambulance Base	$3,500	$10,000	$17,700
Fairmount Home – Paramedic Offices		$34,307	
Howe Island Ferry	$3,500	$10,300	$3,300
K & P Trail Bridges	$3,300	$50,000	$15,000
TOTAL	$39,000	$1,444,530	$2,645,650

[1] Class D Level Estimate Opinion of Probable Costs





Thank you!

October 16th, 2019

Consultant Briefing: Page 105 of 575. J. L. Richards & Associates Limit...

Mr. Kelly Pender , Chief Building Official, will provide Council wi...

Administrative Report

October 16, 2019
Report 2019-9



FRONTENAC

AGENDA ITEM #b)

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

CAO Schedule

- Eastern Ontario Leadership Council meeting, September 26, County of Frontenac
- CUPE, September 30, Kingston
- MTO meeting, October 1, MTO
- Union Grievance Hearing October 10, Toronto OPSEU
- Frontenac CAO's, October 11, County of Frontenac
- EOWC Meeting, October 18, Lindsay
- EOWC Meeting, October 21, Kingston
- Council Budget Presentations, October 23, 24 and 29, County of Frontenac

FRONTENAC

Ontario Names Advisor on Public Health and Emergency Health Services Consultations

Jim Pine, Chief Administrative Officer of County of Hastings and former Board of Directors of AMO to serve as advisor.

- Better consistency and equity of service delivery across the province;
- Improved clarity and alignment of roles and responsibilities between the province, Public Health Ontario and local public health;
- Better and deeper relationships with primary care and the broader health care system to support the goal of ending hallway health care through improved health promotion and prevention;
- Unlocking and promoting leading innovative practices and key strengths from across the province; and
- Improved public health delivery and the sustainability of the system.
- The government has been working with the Association of Municipalities of Ontario, the City of Toronto, and with the Association of Local Public Health Agencies at technical tables since May 2019 to discuss public health modernization.
- The government has maintained current cost-sharing arrangements for public health and emergency health services this year. In addition, the government has increased funding by an average of nearly four per cent for land ambulance services for 2019.

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

EOWC Updates

- EOWC Meeting – October 17/18 – City of Kawartha Lakes
  - » Review of the regional paramedic Eastern Ontario Situational Overview report
  - » First discussion of the 2020 EOWC budget
  - » Preparation for ROMA conference
  - » Affordable housing update
  - » EORN Update
  - » EOLC Update

AGENDA ITEM #b)

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

EOLC launches 2019 Refresh of Regional Economic Strategy

The Eastern Ontario Leadership Council (EOLC) officially launched the "refreshed" version and the implementation plans for the Eastern Ontario Economic Development Strategy.

The implementation plans unveiled at the OEMC Conference represent the three foundational pillars and priorities of the Strategy – Workforce Development and Deployment; Technology Integration and Innovation; and Integrated, Intelligent Transportation Systems – as well as a new, fourth priority, Digital Infrastructure.

These implementations plans will guide the EOLC's work through 2024 and allow for project development funding to the three working groups.

FRONTENAC

AGENDA ITEM #b)

Ministry Surveying Municipalities on Gas Tax Fund

The Association of Municipalities Ontario (AMO) reported that the Ontario Ministry of Transportation (MTO) is surveying local governments to help determine how well the Ontario Gas Tax is meeting the needs of expanding and improving municipal transit.

The Ministry is seeking feedback on:

- The municipal own source funding cap
- The allocation formula
- Baseline funding requirements
- Local/Regional Gas Tax funding allocations

Funding for Ontario's Gas Tax Program is determined by the number of litres of gasoline sold in the province and provides municipalities with two cents per litre of provincial gas tax revenues. This funding must be used towards public transit capital and/or operating expenditures at their discretion.

The provincial government earlier this year also announced that the Ontario Community Infrastructure Fund (OCIF) will be reviewed and redesigned. OCIF currently provides funding to support core infrastructure projects, such as roads and bridges, to rural and northern municipalities, as well as municipalities with 100,000 or fewer residents.

http://www.amo.on.ca/AMO-PDFs/Reports/2019/Ontario-Dedicated-Gas-Tax-Funds-for-Public-Transpo.aspx

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

AMO

- AMO provided a submission to the Ministry of Health about proposed regulation changes to enable new models of care for select 9-1-1 patients which will affect municipal Paramedic Services.

- AMO and the Continuous Improvement Fund (CIF) is hosting a series of in-person meetings in October and November on Blue Box.

Mr. Kelly Pender , Chief Building Official, will provide Council wi...
Page 113 of 575

AMO Provincial Matters

- MNRF announced a consultation on changes to the *Aggregates Resources Act* which ends November 4, 2019
- Changes to the *Construction Act* are in force as of October 1, 2019
- Ministry of Long-Term Care extended the timelines for funding changes while exploring alternatives, the government is also opening up an application process for new long-term care bed expansion. The deadline for applications is January 17, 2020.
- Ontario's Job Site Challenge is coming - Canada's first mega site program specifically created to attract large scale advanced manufacturing investment projects to the province.

AMCTO Policy Updates

Regulations Passed Amending Schedule 12 of Bill 108: Regulations amending Schedule 12 of Bill 108, *More Homes, More Choice Act, 2019*, came into effect after 30 days of open consultations and review by the Ministry of Municipal Affairs and Housing

Committee Proposes Changes to AODA Standards: The Information and Communications Standards Development Committee is proposing changes to accessibility standards under the *Accessibility for Ontarians with Disabilities Act (AODA), 2005*.

Minister Clark Receives Regional Government Review Report: Minister of Municipal Affairs and Housing Steve Clark received the regional governance review report but reiterated that the report will be treated as confidential advice to Cabinet.

Government Launches P3 Infrastructure Investment: Ontario's Minister of Infrastructure, Laurie Scott, announced the Ministry's annual Market Update, which confirms the Government's plan to invest in public-private partnership (P3) infrastructure projects

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

FRONTENAC PARAMEDICS

Congratulations Deputy Chief Heather Edward



Deputy Chief Heather Edward received the
Richard J. Armstrong Leadership Award at the Ontario Association of Paramedic Chiefs
annual gala in Windsor on September 26, 2019

FRONTENAC

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

Page 116 of 575

Fairmount Home

15th Annual Christmas Sale at Fairmount Home
November 26, 2019, 9:30 a.m. to 3:00 p.m. in Auditorium

FRONTENAC

AGENDA ITEM #b)

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

Communications Update

Highlights

- Media relations during stabbing/shooting down town. Calls from local media and CBC, CTV
- Assisted Ontario Association of Paramedic Chiefs (OAPC) with their social media during its fall education summit
- 2019 Open Farms Instagram posts reached 9,194 users and tweets had 23,684 impressions
- Reached 1,000 followers on Instagram

Website traffic August

www.frontenaccounty.ca	17,863 page views
www.infrontenac.ca	13,384 page views
www.frontenacmaps.ca	5,383 page views



Social media audience on September 30

County Facebook	3,802
County Twitter	2,420
County Instagram	1,040
FPS Twitter	4,495
Fairmount Home Facebook	544
Howe Island Ferry Twitter	937
	13,238
Increase since Aug 31	200 followers

Top media Tweet earned 1,590 impressions

Yes we won!! 🏆🏆🏆
National @E_D_A_C marketing award for Open Farms in Frontenac
Details: tinyurl.com/y53t2zsg
#EDAC2019 #MarketingCanadaAwards
pic.twitter.com/rwVVxePdWj



8 3 36

Top Tweet earned 7,366 impressions

Frontenac paramedics responding to call down town #ygk with multiple patients.
pic.twitter.com/bk0rH13QMd



4 10 33

FRONTENAC

AGENDA ITEM #b)

FRONTENAC
ECONOMIC DEVELOPMENT

TASTE OF WOLFE ISLAND





Taste of Wolfe Island Farm to Table Dinner & Tour

Saturday, October 5



Nearly 50 people participated in the event:

3 farm tours: de Ruiter Beef, Pykeview Meadows, Henderson Farm

Locally-sourced meal at the General Wolfe included 20+ local producers from the island, Frontenac and Kingston.

Very successful collaboration involving many stakeholders

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

FRONTENAC
ECONOMIC DEVELOPMENT

The final stretch of the Frontenac K&P Trail between Tichborne and Sharbot Lake is now complete.

Trail users are delighted!



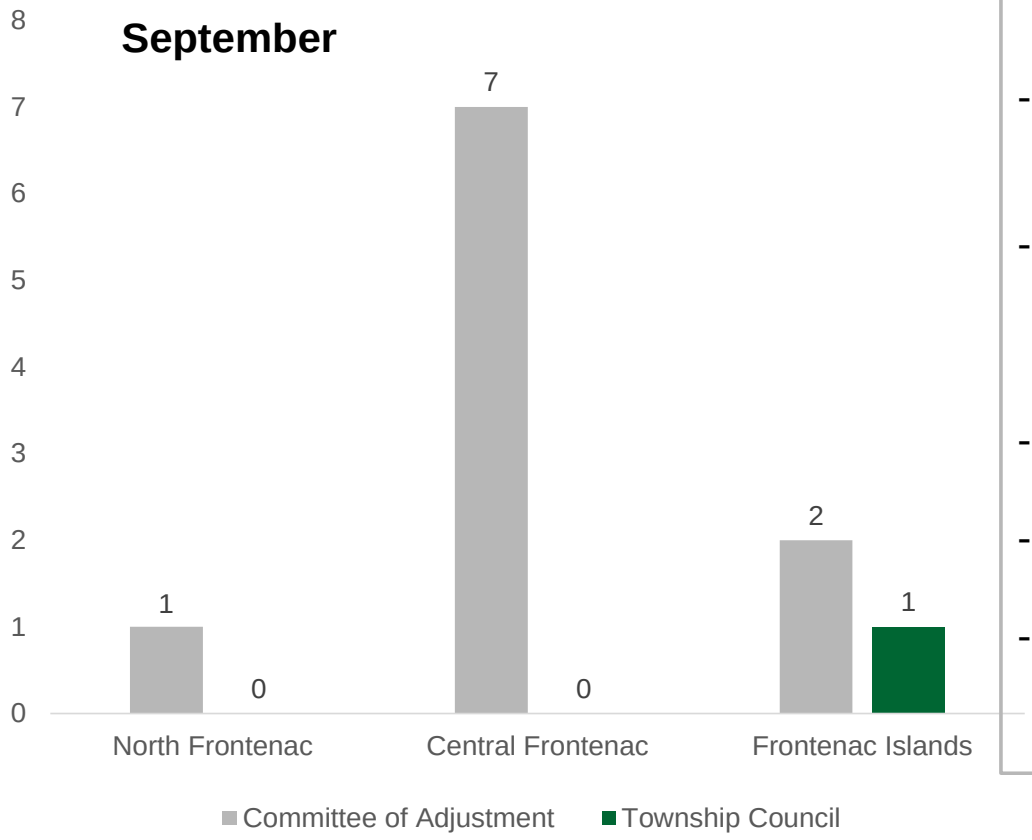
K&P trail

FRONTENAC

AGENDA ITEM #b)

Mr. Kelly Pender , Chief Building Official, will provide Council wi...

Planning Update



Department Highlights

- Nicole Goodbrand joined the planning team to implement LEAN!
- Presentation and attendance at Ontario Association of Committee of Adjustments
- Manager attended OPPI in Toronto
- Population projection and allocations draft received
- Successful LPAT decision for Township of Central Frontenac

FRONTENAC

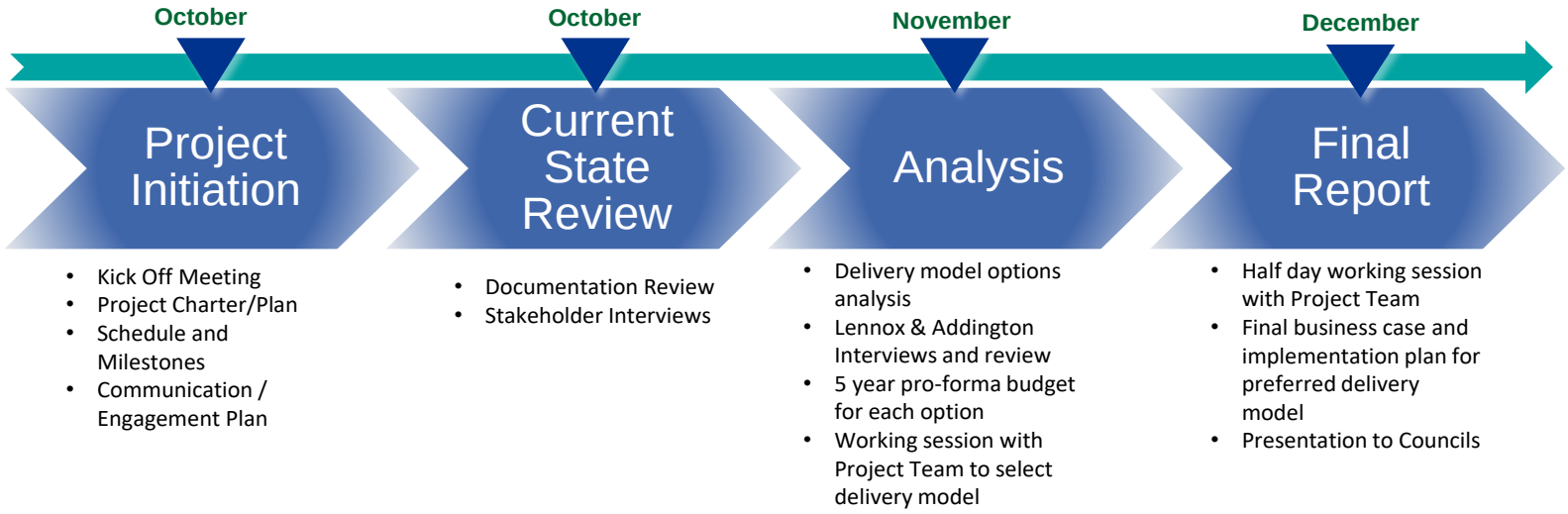
AGENDA ITEM #b)

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

Regional Roads Update

Regional Roads Network

Project Charter Project Phases



FRONTENAC

AGENDA ITEM #b)

Mr. Kelly Pender , Chief Administrative Officer, will provide Council wi...

Staff Updates

- United Way 2019 Workplace Campaign –
  County of Frontenac Goal is $7000
- Lean Yellow Belt Training December 2, 3 and 4. at the County of Frontenac

FRONTENAC

Mr. Kelly Pender , Chief Financial Officer, will provide Council wi...

Budget 2020

Budget Presentations
October 23, 24 and 29, 2019
County of Frontenac
Frontenac Room

FRONTENAC

Ms. Megan Rueckwald, Program Lead, Community Planning, will brief Council ...

Bill 108 – Planning Act and Local Planning Appeal Tribunal Act Amendments

October 16, 2019

Report 2019-124



FRONTENAC

AGENDA ITEM #c)

Ms. Megan Rueckwald, Manager, Community Planning, will brief Council ...
Page 125 of 575

Background

- May 2, 2019 – Ministry of Municipal Affairs and Housing released “More Homes, More Choice: Ontario’s Housing Supply Action Plan”. As part of this, Bill 108 – More Homes, More Choice Act was tabled.

- June 6, 2019 – Bill 108 received Royal Assent with only minor amendments. Introduced 13 statues with the intention of cutting red tape, reducing costs, and increasing the supply of housing.

- September 3, 2019 – the Province proclaimed key amendments to the *Planning Act* and *Local Planning Appeal Tribunal Act, 2017.*

AGENDA ITEM #c)

Planning Act Amendments

- Reducing decision **timelines**:
  - **Official Plans** from 7 months (210 days) to 4 months (120 days)
  - **Zoning Bylaw Amendments** from 5 months (150 days) to 3 months (90 days)
  - **Plan of Subdivision/Condominium** from 6 months (180 days) to 4 months (120 days)

- Authorizing **additional residential units** for detached, semi-detached and row housing in both the primary dwelling and the ancillary structure.

- Enabling the Minister to require the **community planning permit system** to be used in specified areas (e.g. major transit station areas or employment zones)

Local Planning Appeal Tribunal Act Amendments

- Empowering LPAT to make its decision based on **best planning outcome**, rather than limiting to the consistency or conformity with higher order planning documents.
- Enabling LPAT to make **final determination on appeals** rather than a recommendation back to Council.
- **Limiting the examination** of a witness if the Tribunal is satisfied that all relevant matters have been addressed.
- **Limiting their party appeals** of Plans of Subdivision/Condominium and approval authority non-decisions Official Plans and Official Plan Amendments

Restricting Third Party Appeals, Section 39

- Subject to subsection (43), not later than 20 days after the day that the giving of notice under subsection (37) is completed, any of the following may appeal the decision, the lapsing provision or any of the conditions to the Tribunal by filing with the approval authority a notice of appeal that must set out the reasons for the appeal, accompanied by the fee charged under the *Local Planning Appeal Tribunal Act, 2017*:
  - 1. The **applicant**.
  - 2. A **public body** that, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority.
  - 2.1 **A person listed in subsection (48.3)** who, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority.
  - 3. **The Minister**.
  - 4. The **municipality** in which the land is located or the planning board in whose planning area the land is located.

Ms. Megan Rueckwardt, Manager of Community Planning, will brief Council ...
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Restricting Third Party Appeals

- **“Public Body”** means a municipality, a local board, a ministry, department, board, commission, agency or official of a provincial or federal government or a First Nation

FRONTENAC

AGENDA ITEM #c)

Restricting Third Party Appeals, Section 48.3

- 1. A corporation operating an **electric utility** in the local municipality or planning area to which the plan of subdivision would apply.
- 2. **Ontario Power Generation Inc**.
- 3. **Hydro One Inc**.
- 4. A company operating a **natural gas utility** in the local municipality or planning area to which the plan of subdivision would apply.
- 5. A company operating an **oil or natural gas pipeline** in the local municipality or planning area to which the plan of subdivision would apply.
- 6. A person required to prepare a risk and safety management plan in respect of an operation under **Ontario Regulation 211/01 (Propane Storage and Handling)** made under the *Technical Standards and Safety Act, 2000*, if any part of the distance established as the hazard distance applicable to the operation and referenced in the risk and safety management plan is within the area to which the plan of subdivision would apply.
- 7. A company operating a **railway line** any part of which is located within 300 metres of any part of the area to which the plan of subdivision would apply.
- 8. A company operating as **a telecommunication infrastructure provider** in the area to which the plan of subdivision would apply. 2019, c. 9, Sched. 12, s. 14 (8).

Transition for Planning Act Appeals

Local Planning Appeal Tribunal Act, 2017

ONTARIO REGULATION 303/19

TRANSITION FOR PLANNING ACT APPEALS

Consolidation Period: From September 3, 2019 to the e-Laws currency date.

No amendments.

This is the English version of a bilingual regulation.

Continuation of existing appeals

1. (1) An appeal to the Tribunal that was commenced under subsection 17 (24), (36) or (40), 22 (7), 34 (11) or (19) or 51 (34) of the *Planning Act* before the effective date but not disposed of before that date shall be continued and disposed of as follows:

1. If the appeal was commenced before April 3, 2018 and continued under the *Ontario Municipal Board Act*, the appeal shall be continued and disposed of under the *Local Planning Appeal Tribunal Act, 2017* as it reads on and after the effective date, other than section 33.1 of the Act.
2. If the appeal was commenced before April 3, 2018 and continued under the *Local Planning Appeal Tribunal Act, 2017* as it read immediately before the effective date, and a hearing on the merits of the appeal was scheduled before the effective date, the

Ontario Regulation 303/19

Ms. Megan Rueckwald, Planner, will brief Council ...

Implications for Frontenac

- LEAN Process Improvement Exercise – Spread beyond Committee of Adjustment processes once control phase has been implemented
- Implications to staff capacity will be monitored
- Removal of requirement for Councils to “make a new decision”
- Community Benefits Charge – Implications for parkland dedication regime and development charges

AGENDA ITEM #c)

FRONTENAC

Report 2019-118

Recommend Report to Council

To: Warden and Council Members of the County of Frontenac

From: Kelly J. Pender, Chief Administrative Officer

Prepared by: Susan Brant, Director of Corporate Services/Treasurer

Date of meeting: October 16, 2019

Re: Corporate Services – Frontenac-Howe Islander Ferry Fees and Fares Schedule

Recommendation

Resolved That Council of the County of Frontenac receive the Corporate Services – Frontenac-Howe Islander Ferry Fees and Fares Schedule report;

And Further That a by-law be introduced later in the meeting to adopt the 2020 Frontenac-Howe Islander Ferry Fees and Fares Schedule.

Background

The County of Frontenac establishes its fees and fares schedule for the Frontenac-Howe Islander Ferry operation annually. The ferry links the west end of Howe Island with the mainland at Kingston.

The County has, in past discussions, indicated that the operation of the ferry should not be a financial burden to the County. Within this philosophical framework, there are a number of ways to realize the municipal funding through different fees and fares scenarios.

The agreement between the County of Frontenac and the Ministry of Transportation allows for a ferry revenue reserve to be maintained up to 5% of the current operating expenditures.

A structure for fees and fares was instated beginning in 2005 which standardized the rates charged for both the Township Ferry and the Frontenac-Howe Islander Ferry and created a common revenue account. At that time, the pass price was reduced and the

ticket price increased. Having utilized this formula since 2005, it appears to meet the required contributions of both the Township and the County to the ferry operations.

Comment

The 2020 pass is again proposed to provide access to both the County and the Township ferries and the common fee structure for the Township and the County ferries is also proposed to continue.

2020 Fees and Fares

Staff propose that fees should only be collected when vehicles are coming on to Howe Island from either ferry.

In 2013 an exemption was provided for all vehicles identified as undertaking business for the Township of Frontenac Islands. No other major change is suggested in the overall principles currently in place for the fees and fares.

The County and the Township will continue to make available temporary passes to provide for short term requirements, which can be arranged at the Frontenac-Howe Islander Ferry office or the Township of Frontenac Islands' municipal office on Howe Island.

The discounted tickets to provide to visiting friends and family will be continued in 2020. One book of 10 tickets will be sold per pass holder for a price of $45.00 to accommodate this requirement.

It is proposed that the pass price increase by $5 for a total cost of $265 and the one additional annual pass for a single vehicle per household increase by $4 for a total cost of $70, so the cost of the pass and the fees are as follows:

Annual pass for a single vehicle	* $265.00
One additional annual pass for a single vehicle per household **	* $70.00
Two way trip for single vehicle	$6.00
Two way trip for single vehicle with trailer in tow	$15.00
Additional charges for annual pass holder with trailer in tow	$6.00
Two way trip for any heavy vehicle	$15.00
Replacement fee per annual pass (Charged for every replacement)	$25.00

Definitions

Single Vehicle

Single vehicle will include a car, motorcycle, van, SUV, or pickup truck.

Heavy Vehicle

Any vehicle greater than 6,000 kgs and/or 7 metres (23 feet).

* These fees will be discounted by 10% for applicants who can show documentation indicating they are 65 years of age or older during 2020.

** A second pass for $70.00 will only be available if the second vehicle involved is registered to:

- The same individual who purchased the first full-price 2020 annual pass;
- An individual who is married to or is in a common-law relationship with the full-price 2020 annual pass purchaser;
- The dependent child of a full-price 2020 annual pass purchaser or the full-price pass purchaser's married or common-law spouse who is under the age of 18;
- The dependent child of a full-price 2020 annual pass purchaser or the full-price pass purchaser's married or common-law spouse who is over the age of 18, only if the dependent child has both the same permanent address as the full-price 2020 annual pass purchaser and is attending school full-time.

Documentation must be provided that satisfies the staff person issuing the passes.

A third pass at a reduced rate is not available.

- Township of Frontenac Islands' vehicles and vehicles which, through previous notification, the Township of Frontenac Islands identifies as undertaking Township business are exempted.

A memorandum of understanding addressing the details of this arrangement has been executed to address the sharing of revenues between the County and the Township.

The Council of the Township of Frontenac Islands will also consider this schedule of fees and fares at its meeting on October 15, 2019 and staff will advise if the recommended direction was approved.

Financial Implications

Under its agreement with the Ministry of Transportation, the County can reserve up to 5% of operating expense in a reserve to mitigate ferry revenue fluctuations. The proposed increase is in line with the increased costs anticipated for the service in 2020.

Organizations, Departments and Individuals Consulted and/or Affected

D. Plumley, CAO, Township of Frontenac Islands
S. Kerr, Deputy Treasurer, Township of Frontenac Islands

FRONTENAC

Report 2019-119

Recommend Report to Council

To:	Warden and Members of County Council
From:	Kelly J. Pender, Chief Administrative Officer
Prepared by:	Susan Brant, Director of Corporate Services/Treasurer
Date of meeting:	October 16, 2019
Re:	**Corporate Services – Support of the Association of Municipalities of Ontario (AMO) Submission to the Attorney General on Liability and Insurance Cost Reforms**

Recommendation

Be It Resolved That the Council of the County of Frontenac receive for information the Corporate Services – Support of the Association of Municipalities of Ontario (AMO) Submission to the Attorney General on Liability and Insurance Cost Reforms report;

And Further That the Council of the County of Frontenac endorse the report and its recommendations, those being:

1. The provincial government adopt a model of full proportionate liability to replace joint and several liability.
2. Implement enhancements to the existing limitations period including the continued applicability of the existing 10-day rule on slip and fall cases given recent judicial interpretations, and whether a 1-year limitation period may be beneficial.
3. Implement a cap for economic loss awards.
4. Increase the catastrophic impairment default benefit limit to $2 million and increase the third-party liability coverage to $2 million in government regulated automobile insurance plans.
5. Assess and implement additional measures which would support lower premiums or alternatives to the provision of insurance services by other entities such as non-profit insurance reciprocals.
6. Compel the insurance industry to supply all necessary financial evidence including premiums, claims, and deductible limit changes which support its, and municipal arguments as to the fiscal impact of joint and several liability.
7. Establish a provincial and municipal working group to consider the above and put forward recommendations to the Attorney General.

And Further That a copy of this resolution be forwarded to The Honourable Doug Downey, Attorney General of Ontario and the Association of Municipalities of Ontario (AMO).

Background

On July 12, 2019 following an initial announcement made at the annual Rural Ontario Municipalities Association (ROMA), Attorney General Doug Downey wrote to the province's municipalities regarding joint and several liability consultations. The consultations were open until September 27, 2019 with the Attorney General welcoming delegations and written submissions.

Comment

On September 27, 2019 the AMO Board approved a submission on joint and several liability entitled, "A Reasonable Balance: Addressing growing municipal liability and insurance costs." AMO President Jamie McGarvey forwarded the report to the Attorney General, The Honourable Doug Downey for consideration.

AMO is encouraging municipal councils to endorse the report and its recommendations. The Ministry of the Attorney General has agreed to accept municipal resolutions up until November 1, 2019. A copy of the AMO submission is attached to this report as Appendix A.

The report includes seven key recommendations on actions which the government could take to reduce the negative impact of joint and several liability on municipalities. It builds on previous reports and reasserts key issues from AMO's 2010 paper, AMO's 2011 insurance cost survey, provides more recent examples, and details some possible solutions of which there are many options.

The paper in no way intends for aggrieved parties to be denied justice or damages through the courts. Rather it seeks to highlight the inequity of how much "deep pocket" defendants like municipalities are forced to pay, for both in and out of court settlements, how unfair it is to ask property taxpayers to carry the lion's share of a damage award when a municipality is found at minimal fault or to assume responsibility for someone else's mistake. It points out how municipal governments cannot afford to be the insurer of last resort.

In addition, the report notes that the principle of joint and several liability is costing municipalities and taxpayers dearly, in the form of rising insurance premiums, service reductions and fewer choices. The *Negligence Act* was never intended to place the burden of being an insurer of last resort on municipalities; however joint and several liability ensures just that.

In August, 2019, AMCTO President Dean Sauriol discussed the issue of Joint and Several Liability with the Attorney General in a delegation at the annual AMO Conference, as well noting that litigation against local governments has increased significantly and that

municipalities have had to divert public money to support these costs, even when the municipal share of liability is as low as 1%.

President Sauriol called the Attorney General's attention to AMCTO's support for reform in each of the last three pre-budget submissions - including in 2019, when AMCTO committed to "engage in coalition-building efforts with peer associations to pursue a remedy" and advocate in favour of a more appropriate system for assigning liability.

AMCTO has written to the Attorney General expressing its support for the Task Force's recommendations and on October 4, 2019, issued an Advocacy Update on Joint and Several Liability to its membership, that it is lending its support to AMO's Task Force Report on reforming Ontario's joint and several liability system.

Strategic Priority Implications

Priority 3 - Champion and coordinate collaborative efforts with partners to resolve complex problems otherwise beyond the reach of their individual mandates and jurisdictions.

The County will provide leadership in coordinating joint action with townships, the City of Kingston and other partners to develop solutions to complex problems otherwise beyond the reach of their individual formal mandates and jurisdictions.

Specific Objectives in support of this strategy:
3.3 Continue to pursue collaborative opportunities to achieve service and cost efficiencies and other economies through cost-sharing and shared services.

Financial Implications

There are no financial implications associated with this report.

Organizations, Departments and Individuals Consulted and/or Affected

Association of Municipalities of Ontario
Association of Municipal Managers, Clerks and Treasurers of Ontario

Towards a Reasonable Balance:

Addressing growing municipal liability and insurance costs

Submission to the Attorney General of Ontario

October 1, 2019

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Association of Municipalities Ontario

Office of the President

Sent via email to: doug.downeyco@pc.ola.org
magpolicy@ontario.ca

October 1, 2019

The Honourable Doug Downey
Attorney General of Ontario
McMurtry-Scott Building, 11th Floor
720 Bay Street
Toronto, Ontario
M7A 2S9

Dear Attorney General Downey,

Municipal governments accept the responsibility to pay their fair share of a loss. Always. Making it right and paying a fair share are the cornerstones of our legal system. Citizens expect nothing less of their local governments.

But what is a challenge for municipalities and property taxpayers alike, is being asked to assume someone else's responsibility for someone else's mistake. Municipal governments should not be the insurer of last resort. For municipalities in Ontario, however, the principle of joint and several liability ensures that they are just that.

Joint and several liability means higher insurance costs. It diverts property tax dollars from delivering public services. It has transformed municipalities into litigation targets while others escape responsibility. It forces municipal government to settle out-of-court for excessive amounts when responsibility is as low as 1%.

There must be a better way. There must be a better way to help ensure those who suffer losses are made whole again without asking municipalities to bear that burden alone. There must be a better way to be fair, reasonable, and responsible.

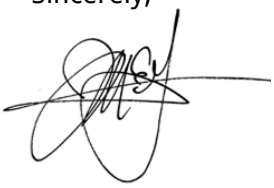
AMO welcomes the government's commitment to review joint and several liability. It is a complex issue that has many dimensions. Issues of fairness, legal principles, "liability chill", insurance failures and high insurance costs are all intertwined. Many other jurisdictions have offered additional protection for municipalities and AMO calls on the Ontario government to do the same.

What follows is a starting point for that discussion. Our paper reasserts key issues from AMO's 2010 paper, AMO's 2011 insurance cost survey, provides more recent examples, and details some possible solutions of which there are many options.

Municipalities are in the business of delivering public services. Municipal governments exist to connect people and to advance the development of a community. It is time to find a reasonable balance to prevent the further scaling back of public services owing to joint and several liability, "liability chill", or excessive insurance costs.

Together with the provincial government, I am confident we can find a better way.

Sincerely,



Jamie McGarvey
AMO President

Executive Summary

AMO's advocacy efforts on joint and several liability in no way intends for aggrieved parties to be denied justice or damages through the courts. Rather, municipal governments seek to highlight the inequity of how much "deep pocket" defendants like municipalities are forced to pay, for both in and out of court settlements.

It is entirely unfair to ask property taxpayers to carry the lion's share of a damage award when a municipality is found at minimal fault or to assume responsibility for someone else's mistake.

Municipal governments cannot afford to be the insurer of last resort. The principle of joint and several liability is costing municipalities and taxpayers dearly, in the form of rising insurance premiums, service reductions and fewer choices. The *Negligence Act* was never intended to place the burden of insurer of last resort on municipalities.

As public organizations with taxation power and "deep pockets," municipalities have become focal points for litigation when other defendants do not have the means to pay. At the same time, catastrophic claim awards in Ontario have increased considerably. In part, joint and several liability is fueling exorbitant increases in municipal insurance premiums.

The heavy insurance burden and legal environment is unsustainable for Ontario's communities. Despite enormous improvements to safety, including new standards for playgrounds, pool safety, and better risk management practices, municipal insurance premiums and liability claims continue to increase. All municipalities have risk management policies to one degree or another and most large municipalities now employ risk managers precisely to increase health and safety and limit liability exposure in the design of facilities, programs, and insurance coverage. Liability is a top of mind consideration for all municipal councils.

Joint and several liability is problematic not only because of the disproportioned burden on municipalities that are awarded by courts. It is also the immeasurable impact of propelling municipalities to settle out of court to avoid protracted and expensive litigation for amounts that may be excessive, or certainly represent a greater percentage than their degree of fault.

Various forms of proportionate liability have now been enacted by all of Ontario's competing Great Lakes states. In total, 38 other states south of the border have adopted proportionate liability in specific circumstances to the benefit of municipalities. Many common law jurisdictions around the world have adopted legal reforms to limit the exposure and restore balance. With other Commonwealth jurisdictions and the majority of state governments in the United States having modified the rule of joint and several liability in favour of some form of proportionate liability, it is time for Ontario to consider various options.

There is precedence in Ontario for joint and several liability reform. The car leasing lobby highlighted a particularly expensive court award made in November of 2004 against a car leasing company by the victim of a drunk driver. The August 1997 accident occurred when the car skidded off a county road near Peterborough, Ontario. It exposed the inequity of joint and several liability for car leasing companies. The leasing companies argued to the government that the settlement had put them at a competitive disadvantage to lenders. They also warned that such liability conditions would likely drive some leasing and rental companies to reduce their business in Ontario. As a result, Bill 18 amended the *Compulsory Automobile Insurance Act*, the *Highway Traffic*

Act and the Ontario *Insurance Act* to make renters and lessees vicariously liable for the negligence of automobile drivers and capped the maximum liability of owners of rental and leased cars at $1 million. While Bill 18 has eliminated the owners of leased and rented cars as "deep pocket" defendants, no such restrictions have been enacted to assist municipalities.

A 2011 survey conducted by AMO reveals that since 2007, liability premiums have increased by 22.2% and are among the fastest growing municipal costs. Total 2011 Ontario municipal insurance costs were $155.2 million. Liability premiums made up the majority of these expenses at $85.5 million. Property taxpayers are paying this price.

These trends are continuing. In August of 2019, it was reported the Town of Bradford West Gwillimbury faces a 59% insurance cost increase for 2019. This is just one example. AMO encourages the municipal insurance industry to provide the government with more recent data and trends to support the industry's own arguments regarding the impact joint and several has on premiums.

Insurance costs disproportionately affect small municipalities. For 2011, the per capita insurance costs for communities with populations under 10,000 were $37.56. By comparison, per capita costs in large communities with populations over 75,000 were $7.71. Property taxpayers in one northern community are spending more on insurance than their library. In one southern county, for every $2 spent on snowplowing roads, another $1 is spent on insurance.

In 2016, the Ontario Municipal Insurance Exchange (OMEX), a not-for-profit insurer, announced that it was suspending reciprocal underwriting operations. The organization cited, a "low pricing environment, combined with the impact of joint and several liability on municipal claim settlements" as reasons for the decision. Fewer choices fuels premium increases.

Learning from other jurisdictions is important for Ontario. The Province of Saskatchewan has implemented liability reforms to support its municipalities. As a municipal lawyer at the time, Neil Robertson, QC was instrumental in laying out the arguments in support of these changes. Now a Justice of the Court of Queen's Bench for Saskatchewan, AMO was pleased to have Neil Robertson prepare a paper and address AMO conference delegates in 2013. Much of the Saskatchewan municipal experience (which led to reforms) is applicable to the Ontario and the Canadian municipal context. Summarised below and throughout this paper are some of Robertson's key findings.

Robertson found that, regardless of the cause, over the years municipalities in Canada have experienced an accelerating rate of litigation and an increase in amounts of damage awards. He noted these developments challenge municipalities and raise financial, operational and policy issues in the provision of public services.

Robertson describes the current Canadian legal climate as having placed municipalities in the role of involuntary insurer. Courts have assigned municipal liability where liability was traditionally denied and apportioned fault to municipal defendants out of proportion to municipal involvement in the actual wrong.

This increased exposure to liability has had serious ramifications for municipalities, both as a deterrent to providing public services which may give rise to claims and in raising the cost and reducing the availability of insurance. The cost of claims has caused insurers to reconsider not only

what to charge for premiums, but whether to continue offering insurance coverage to municipal clients.

Robertson also makes the key point that it reasonable for municipal leaders to seek appropriate statutory protections. He wrote:

> "Since municipalities exist to improve the quality of life for their citizens, the possibility of causing harm to those same citizens is contrary to its fundamental mission. Careful management and wise stewardship of public resources by municipal leaders will reduce the likelihood of such harm, including adherence to good risk management practices in municipal operations. But wise stewardship also involves avoiding the risk of unwarranted costs arising from inevitable claims."

And, of course, a key consideration is the reality that insurance premiums, self-insurance costs, and legal fees divert municipal funds from other essential municipal services and responsibilities.

It is in this context that AMO appreciated the commitments made by the Premier and the Attorney General to review the principle of joint and several liability, the impact it has on insurance costs, and the influence "liability chill" has on the delivery of public services. Now is the time to deliver provincial public policy solutions which address these issues.

Recommendations

AMO recommends the following measures to address these issues:

1. The provincial government adopt a model of full proportionate liability to replace joint and several liability.
2. Implement enhancements to the existing limitations period including the continued applicability of the existing 10-day rule on slip and fall cases given recent judicial interpretations, and whether a 1-year limitation period may be beneficial.
3. Implement a cap for economic loss awards.
4. Increase the catastrophic impairment default benefit limit to $2 million and increase the third-party liability coverage to $2 million in government regulated automobile insurance plans.
5. Assess and implement additional measures which would support lower premiums or alternatives to the provision of insurance services by other entities such as non-profit insurance reciprocals.
6. Compel the insurance industry to supply all necessary financial evidence including premiums, claims, and deductible limit changes which support its, and municipal arguments as to the fiscal impact of joint and several liability.
7. Establish a provincial and municipal working group to consider the above and put forward recommendations to the Attorney General.

Insurance Cost Examples

The government has requested detailed information from municipalities regarding their insurance costs, coverage, deductibles, claims history, and out-of-court settlements. Municipalities have been busy responding to a long list of provincial consultations on a wide range of topics. Some of the information being sought is more easily supplied by the insurance industry. AMO's 2011 survey of insurance costs produced a sample size of 122 municipalities and assessed insurance cost increases over a five-year period. The survey revealed an average premium increase which exceeded 20% over that period.

All of the same forces remain at play in 2019 just as they were in 2011. Below are some key examples.

Ear Falls - The Township of Ear Falls reports that its insurance premiums have increased 30% over five years to $81,686. With a population of only 995 residents (2016), this represents a per capita cost of $82.09. This amount is a significant increase from AMO's 2011 Insurance Survey result. At that time, the average per capita insurance cost for a community with a population under 10,000 was $37.56. While the Township has not been the subject of a liability claim, a claim in a community of this size could have significant and long-lasting financial and service implications. The Township has also had to impose stricter insurance requirements on groups that rent municipal facilities. This has had a negative impact on the clubs and volunteers' groups and as a consequence, many have cut back on the service these groups provide to the community.

Central Huron – For many years the municipality of Central Huron had a deductible of $5,000. In 2014, the deductible was increased to $15,000 to help reduce insurance costs. The municipality also increased its liability coverage in 2014 and added cyber security coverage in 2018. The combined impact of these changes represents a premium cost of $224,774 in 2019, up from $141,331 in 2010. Per capita costs for insurance alone are now $29.67.

Huntsville – Since 2010, the Town of Huntsville reports an insurance premium increase of 67%. In 2019 this represented about 3.75% of the town's property tax levy. At the same time, Huntsville's deductible has increased from $10,000 to $25,000. The town also reports a reluctance to hold its own events for fear of any claims which may affect its main policy. Additional coverage is purchased for these events and these costs are not included above.

Ottawa - In August 2018, the City began working with its insurance broker, Aon Risk Solutions ("Aon"), to prepare for the anticipated renewal of the Integrated Insurance Program in April 2019. As the cost of the City's insurance premiums had risen by approximately 25% between 2017 and 2018, this early work was intended to ensure that any further increase could be properly accounted for through the 2019 budget process. Early indications of a possible further 10% premium increase prompted the City and Aon in late 2018 to explore options for a revised Program, and to approach alternative markets for the supply of insurance.

On January 11, 2019, an OC Transpo bus collided with a section of the Westboro Station transit shelter, resulting in three fatalities and numerous serious injuries. This was the second major incident involving the City's bus fleet, following approximately five years after the OC Transpo – VIA train collision in September 2013.

The January 2019 incident prompted insurance providers to re-evaluate their willingness to participate in the City Program. Despite Aon's work to secure an alternative provider, only Frank Cowan Company ("Cowan"), the City's existing insurer, was prepared to offer the City an Integrated Insurance Program. Cowan's offer to renew the City's Program was conditional on revised terms and limits and at a significant premium increase of approximately 84%, or nearly $2.1 million per year. According to Cowan, these changes and increases were attributable to seven principle factors, including Joint and Several Liability:

1. Escalating Costs of Natural Global Disasters;
2. Joint and Several Liability;
3. Claims Trends (in the municipal sector);
4. Increasing Damage Awards;
5. Class Action Lawsuits;
6. New and/or Adverse Claims Development; and,
7. Transit Exposure.

Cowan also indicated that the primary policy limits for the 2019-2020 renewal would be lowered from $25 million to $10 million per occurrence, thereby raising the likelihood of increased costs for the City's excess liability policies.

Joint and Several in Action - Recent Examples

The following examples highlight joint and several in action. The following examples have occurred in recent years.

GTA Municipality – A homeowner rented out three separate apartments in a home despite being zoned as a single-family dwelling. After a complaint was received, bylaw inspectors and Fire Prevention Officers visited the property. The landlord was cautioned to undertake renovations to restore the building into a single-family dwelling. After several months of non-compliance, charges under the fire code were laid. The owner was convicted and fined. A subsequent visit by Fire Prevention Officers noted that the required renovations had not taken place. Tragically, a fire occurred which resulted in three fatalities. Despite having undertaken corrective action against the homeowner, joint and several liability loomed large. It compelled the municipality to make a payment of $504,000 given the 1% rule.

City of Ottawa - A serious motor vehicle accident occurred between one of the City's buses and an SUV. The collision occurred at an intersection when the inebriated driver of the SUV failed to stop at a red light and was struck by the City bus. This collision resulted in the deaths of the SUV driver and two other occupants, and also seriously injured the primary Plaintiff, the third passenger in the SUV. The secondary action was brought by the family of one of the deceased passengers.

The Court ultimately concluded that the City was 20% liable for the collision, while the SUV driver was 80% at fault. Despite the 80/20 allocation of fault, the City was required to pay all of the approximately $2.1 million in damages awarded in the primary case and the $200,000 awarded in the secondary case, bringing the amount paid by the City to a total that was not proportionate to its actual liability. This was due to the application of the principle of joint and several liability, as well as the interplay between the various automobile insurance policies held by the SUV owner and

passengers, which is further explained below. Although the City appealed this case, the Ontario Court of Appeal agreed with the findings of the trial judge and dismissed it.

This case was notable for the implications of various factors on the insurance policies held by the respective parties. While most automobile insurance policies in Ontario provide for $1 million in third party liability coverage, the insurance for the SUV was reduced to the statutory minimum of $200,000 by virtue of the fact that the driver at the time of the collision had a blood alcohol level nearly three times the legal limit for a fully licensed driver. This was contrary to the requirements of his G2 license, which prohibit driving after the consumption of any alcohol. Further, while the Plaintiff passengers' own respective insurance provided $1 million in coverage for underinsured motorists (as the SUV driver was at the time), this type of coverage is triggered only where no other party is in any way liable for the accident. As a result, the primary Plaintiff could only effectively recover the full $2.1 million in damages if the Court attributed even a small measure of fault to another party with sufficient resources to pay the claim.

In determining that the City was at least partially responsible for the collision, the Court held that the speed of the bus – which according to GPS recordings was approximately 6.5 km/h over the posted limit of 60 kilometres an hour – and momentary inattention were contributing factors to the collision.

To shorten the length of the trial by approximately one week and accordingly reduce the legal costs involved, the parties had earlier reached an agreement on damages and that the findings regarding the primary Plaintiff would apply equally to the other. The amount of the agreement-upon damages took into account any contributory negligence on the part of the respective Plaintiffs, attributable to such things as not wearing a seat belt.

City of Ottawa, 2nd example – A Plaintiff was catastrophically injured when, after disembarking a City bus, he was struck by a third-party motor vehicle. The Plaintiff's injuries included a brain injury while his impairments included incomplete quadriplegia.

As a result of his accident, the Plaintiff brought a claim for damages for an amount in excess of $7 million against the City and against the owner and driver of the third-party vehicle that struck him. Against the City, the Plaintiff alleged that the roadway was not properly designed and that the bus stop was placed at an unsafe location as it required passengers to cross the road mid-block and not at a controlled intersection.

Following the completion of examinations for discovery, the Plaintiff's claim against the Co-Defendant (the driver of the vehicle which struck the plaintiff) was resolved for $1,120,000 comprising $970,000 for damages and $120,000 for costs. The Co-Defendant's policy limit was $1 million. The claim against the City was in effect, a "1% rule" case where the City had been added to the case largely because the Co-Defendant's insurance was capped at $1 million, which was well below the value of the Plaintiff's claim.

On the issue of liability, the pre-trial judge was of the view that the City was exposed to a finding of some liability against it on the theory that, because of the proximity of the bus stop to a home for adults with mental health issues, the City knew or should have known that bus passengers with cognitive and/or physical disabilities would be crossing mid-block at an unmarked crossing. This, according to the judge, could have resulted in a finding being made at trial that the City should

either have removed the bus stop or alternatively, should have installed a pedestrian crossing at this location.

The judge assessed the Plaintiff's damages at $7,241,000 exclusive of costs and disbursements which he then reduced to $4,602,930 exclusive of costs and disbursements after applying a reduction of 27.5% for contributory negligence and subtracting the $970,000 payment made by the Co-Defendant's insurer.

Settlement discussions took place and the judge recommended that the matter be resolved for $3,825,000 plus costs of $554,750 plus HST plus disbursements.

Joint and Several Liability in Action - Other notable cases

Deering v Scugog - A 19-year-old driver was driving at night in a hurry to make the start time of a movie. She was travelling on a Class 4 rural road that had no centerline markings. The Ontario Traffic Manual does not require this type of road to have such a marking. The driver thought that a vehicle travelling in the opposite direction was headed directly at her. She swerved, over-corrected and ended up in a rock culvert. The Court found the Township of Scugog 66.7% liable. The at-fault driver only carried a $1M auto insurance policy.

Ferguson v County of Brant - An inexperienced 17-year-old male driver was speeding on a road when he failed to navigate a curve which resulted in him crossing the lane into oncoming traffic, leaving the roadway, and striking a tree. The municipality was found to have posted a winding road sign rather than a sharp curve sign. The municipality was found 55% liable.

Safranyos et al v City of Hamilton - The plaintiff was leaving a drive-in movie theatre with four children in her vehicle at approximately 1 AM. She approached a stop sign with the intention of turning right onto a highway. Although she saw oncoming headlights she entered the intersection where she was struck by a vehicle driven 15 km/h over the posted speed limit by a man who had just left a party and was determined by toxicologists to be impaired. The children in the plaintiff's vehicle suffered significant injuries. The City was determined to be 25% liable because a stop line had not been painted on the road at the intersection.

Mortimer v Cameron - Two men were engaged in horseplay on a stairway and one of them fell backward through an open door at the bottom of a landing. The other man attempted to break the first man's fall and together they fell into an exterior wall that gave way. Both men fell 10 feet onto the ground below, one of whom was left quadriplegic. The trial judge determined both men were negligent, but that their conduct did not correspond to the extent of the plaintiff's injuries. No liability was attached to either man. The building owner was determined to be 20% and the City of London was found to be 80% liable. The Court awarded the plaintiff $5 M in damages. On appeal, the City's liability was reduced to 40% and building owner was determined to be 60% liable. The City still ended up paying 80% of the overall claim.

2011 Review of Joint and Several Liability – Law Commission of Ontario

In February 2011 the Law Commission of Ontario released a report entitled, *"Joint and Several Liability Under the Ontario Business Corporations Act"*. This review examined the application of

joint and several liability to corporate law and more specifically the relationship between the corporation and its directors, officers, shareholders and stakeholders.

Prior to the report's release, AMO made a submission to the Law Commission of Ontario to seek to expand its review to include municipal implications. The Law Commission did not proceed with a broader review at that time, but the context of its narrower scope remains applicable to municipalities. In fact, many of the same arguments which support reform in the realm of the *Business Corporations Act*, are the same arguments which apply to municipal governments.

Of note, the Law Commission's[1] report highlighted the following in favour of reforms:

Fairness: "it is argued that it is unfair for a defendant, whose degree of fault is minor when compared to that of other defendants, to have to fully compensate a plaintiff should the other defendants be insolvent or unavailable."

Deep Pocket Syndrome: "Joint and several liability encourages plaintiffs to unfairly target defendants who are known or perceived to be insured or solvent."

Rising Costs of Litigation, Insurance, and Damage Awards: "Opponents of the joint and several liability regime are concerned about the rising costs of litigation, insurance, and damage awards."

Provision of Services: "The Association of Municipalities of Ontario identifies another negative externality of joint and several liability: municipalities are having to delay or otherwise cut back services to limit exposure to liability."

The Law Commission found that the principle of joint and several liability should remain in place although it did not explicitly review the municipal situation.

2014 Resolution by the Ontario Legislature and Review by the Attorney General

Over 200 municipalities supported a motion introduced by Randy Pettapiece, MPP for Perth-Wellington which called for the implementation a comprehensive, long-term solution in 2014. That year, MPPs from all parties supported the Pettapiece motion calling for a reform joint and several liability.

Later that year the Ministry of the Attorney General consulted on three options of possible reform:

1. **The Saskatchewan Model of Modified Proportionate Liability**

Saskatchewan has adopted a modified version of proportionate liability that applies in cases where a plaintiff is contributorily negligent. Under the Saskatchewan rule, where a plaintiff is contributorily negligent and there is an unfunded liability, the cost of the unfunded liability is split among the remaining defendants and the plaintiff in proportion to their fault.

[1] Law Commission of Ontario. "Joint and Several Liability Under the Ontario *Business Corporations Act.*" Final Report, February 2011 Pages 22-25.

2. **Peripheral Wrongdoer Rule for Road Authorities**

Under this rule, a municipality would never be liable for more than two times its proportion of damages, even if it results in the plaintiff being unable to recover full damages.

3. **A combination of both of the above**

Ultimately, the government decided not to pursue any of the incremental policy options ostensibly because of uncertainty that insurance cost reductions would result. This was a disappointing result for municipalities.

While these reviews did not produce results in Ontario, many other common law jurisdictions have enacted protections for municipalities. What follows are some of the options for a different legal framework.

Options for Reform – The Legal Framework

To gain a full appreciation of the various liability frameworks that could be considered, for comparison, below is a description of the current joint and several liability framework here in Ontario. This description will help to reader to understand the further options which follow.

This description and the alternatives that follow are taken from the Law Commission of Ontario's February 2011 Report entitled, *"Joint and Several Liability Under the Ontario Business Corporations Act"* as referenced above.[2]

Understanding the Status Quo and Comparing it to the Alternatives

Where three different defendants are found to have caused a plaintiff's loss, the plaintiff is entitled to seek full payment (100%) from any one of the defendants. The defendant who fully satisfies the judgment has a right of contribution from the other liable parties based on the extent of their responsibility for the plaintiff's loss.

For example, a court may find defendants 1 (D1), 2 (D2) and 3 (D3) responsible for 70%, 20%, and 10% of the plaintiff's $100,000 loss, respectively. The plaintiff may seek to recover 100% of the loss from D2, who may then seek contribution from D1 and D3 for their 70% and 10% shares of the loss. If D1 and/or D3 is unable to compensate D2 for the amount each owes for whatever reason, such as insolvency or unavailability, D2 will bear the full $100,000 loss. The plaintiff will be fully compensated for $100,000, and it is the responsibility of the defendants to apportion the loss fairly between them.

The descriptions that follow are abridged from pages 9-11 of the Law Commission of Ontario's report. These are some of the key alternatives to the status quo.

[2] Ibid. Page 7.

1. **Proportionate Liability**

a) Full Proportionate Liability

A system of full proportionate liability limits the liability of each co-defendant to the proportion of the loss for which he or she was found to be responsible. Per the above example, (in which Defendant 1 (D1) is responsible for 70% of loss, Defendant 2 (D2) for 20% and Defendant 3 (D3) for 10%), under this system, D2 will only be responsible for $20,000 of the $100,000 total judgement: equal to 20% of their share of the liability. Likewise, D1 and D3 will be responsible for $70,000 and $10,000. If D1 and D3 are unable to pay, the plaintiff will only recover $20,000 from D2.

b) Proportionate Liability where Plaintiff is Contributorily Negligent

This option retains joint and several liability when a blameless plaintiff is involved. This option would cancel or adjust the rule where the plaintiff contributed to their loss. As in the first example, suppose the plaintiff (P) contributed to 20% of their $100,000 loss. D1, D2 and D3 were responsible for 50%, 20% and 10% of the $100,000. If D1 and D3 are unavailable, P and D2 will each be responsible for their $20,000 shares. The plaintiff will remain responsible for the $60,000 shortfall as a result of the absent co-defendants' non-payment (D1 and D3).

c) Proportionate Liability where Plaintiff is Contributorily Negligent with a Proportionate Reallocation of an Insolvent, Financially Limited or Unavailable Defendant's Share

In this option of proportionate liability, the plaintiff and remaining co-defendants share the risk of a defendant's non-payment. The plaintiff (P) and co-defendants are responsible for any shortfall in proportion to their respective degrees of fault.

Using the above example of the $100,000 total judgement, with a shortfall payment of $50,000 from D1 and a shortfall payment $10,000 from D3, P and D2 must pay for the missing $60,000. P and D2 have equally-apportioned liability, which causes them to be responsible for half of each shortfall - $25,000 and $5,000 from each non-paying defendant. The burden is shared between the plaintiff (if determined to be responsible) and the remaining defendants.

d) Proportionate Liability with a Peripheral Wrongdoer

Under this option, a defendant will be proportionately liable only if their share of the liability falls below a specified percentage, meaning that liability would be joint and several. Using the above example, if the threshold amount of liability is set at 25%, D2 and D3 would only be responsible for 20% and 10%, regardless of whether they are the only available or named defendants. However, D1 may be liable for 100% if it is the only available or named defendant. This system tends to favour defendants responsible for a small portion of the loss, but the determination of the threshold amount between joint and several liability and proportionate liability is arbitrary.

e) Proportionate Liability with a Reallocation of Some or All of an Insolvent or Unavailable Defendant's Share

This option reallocates the liability of a non-paying defendant among the remaining defendants in proportion to their respective degrees of fault. The plaintiff's contributory negligence does not

impact the application of this reallocation. Joint and several liability would continue to apply in cases of fraud or where laws were knowingly violated.

f) Court Discretion

Similar to the fraud exception in the option above, this option includes giving the courts discretion to apply different forms of liability depending on the case.

For example, if a particular co-defendant's share of the fault was relatively minor the court would have discretion to limit that defendant's liability to an appropriate portion.

2. Legislative Cap on Liability

Liability concerns could be addressed by introducing a cap on the amount of damages available for claims for economic loss.

3. Hybrid

A number of jurisdictions provide a hybrid system of proportionate liability and caps on damages. Co-defendants are liable for their portion of the damages, but the maximum total amount payable by each co-defendant is capped to a certain limit.

The Saskatchewan Experience

As referenced earlier in this paper, the Province of Saskatchewan responded with a variety of legislative actions to assist municipalities in the early 2000s. Some of those key developments are listed below which are abridged from *"A Question of Balance: Legislative Responses to Judicial Expansion of Municipal Liability – the Saskatchewan Experience."* The paper was written by Neil Robertson, QC and was presented to the annual conference of the Association of Municipalities of Ontario in 2013. Two key reforms are noted below.

1. Reforming joint and several liability by introducing modified proportionate liability: "The Contributory Negligence Act" amendments

The *Contributory Negligence Act* retained joint and several liability, but made adjustments in cases where one or more of the defendants is unable to pay its share of the total amount (judgement). Each of the parties at fault, including the plaintiff if contributorily negligent, will still have to pay a share of the judgement based on their degree of fault. However, if one of the defendants is unable to pay, the other defendants who are able to pay are required to pay only their original share and an additional equivalent share of the defaulting party's share.

The change in law allows municipalities to reach out-of-court settlements, based on an estimate of their degree of fault. This allows municipalities to avoid the cost of protracted litigation.

Neil Robertson provided the following example to illustrate how this works in practise:

"…If the owner of a house sues the builder for negligent construction and the municipality, as building authority, for negligent inspection, and all three are found equally at fault, they would each be apportioned 1/3 or 33.3%. Assume the damages are $100,000. If the builder has no funds, then the municipality would pay only its share ($33,333) and a 1/3 share of the builder's defaulting share

(1/3 of $33,333 or $11,111) for a total of $44,444 ($33,333 + $11,111), instead of the $66,666 ($33,333 + $33,333) it would pay under pure joint and several liability."

This model will be familiar to municipal leaders in Ontario. In 2014, Ontario's Attorney General presented this option (called the Saskatchewan Model of Modified Proportionate Liability) for consideration. At the time, over 200 municipal councils supported the adoption of this option along with the "Peripheral Wrongdoer Rule for Road Authorities" which would have seen a municipality never be liable for more than two times its proportion of damages, even if it results in the plaintiff being unable to recover full damages. These two measures, if enacted, would have represented a significant incremental step to address the impact of joint and several to Ontario municipalities.

2. **Providing for uniform limitation periods while maintaining a separate limitation period for municipalities: "The Limitations Act"**

This act established uniform limitation periods replacing many of the pre-existing limitation periods that had different time periods. The Municipal Acts in Saskatchewan provide a uniform one-year limitation period "from time when the damages were sustained" in absolute terms without a discovery principle which can prolong this period. This helps municipalities to resist "legacy" claims from many years beforehand. This act exempts municipalities from the uniform two-year discoverability limitation period.

Limitation periods set deadlines after which claims cannot be brought as lawsuits in the courts. The legislation intends to balance the opportunity for potential claimants to identify their claims and, if possible, negotiate a settlement out of court before starting legal action with the need for potential defendants to "close the books" on claims from the past.

The reasoning behind these limitations is that public authorities, including municipalities, should not to be punished by the passage of time. Timely notice will promote the timely investigation and disposition of claims in the public interest. After the expiry of a limitation period, municipalities can consider themselves free of the threat of legal action, and continue with financial planning without hurting "the public taxpayer purse". Municipalities are mandated to balance their budgets and must be able to plan accordingly. Thus, legacy claims can have a very adverse affect on municipal operations.

Here in Ontario, there is a uniform limitations period of two years. Municipalities also benefit from a 10-day notice period which is required for slip and fall cases. More recently, the applicability of this limitation deadline has become variable and subject to judicial discretion. Robertson's paper notes that in Saskatchewan, courts have accepted the one-year limitations period. A further examination of limitations in Ontario may yield additional benefits and could include the one-year example in Saskatchewan and/or the applicability of the 10-day notice period for slip and fall cases.

Other Saskatchewan reforms

Saskatchewan has also implemented other reforms which include greater protections for building inspections, good faith immunity, duty of repair, no fault insurance, permitting class actions, and limiting nuisance actions. Some of these reforms are specific to Saskatchewan and some of these currently apply in Ontario.

Insurance Related Reforms

Government Regulated Insurance Limits

The April 2019 provincial budget included a commitment to increase the catastrophic impairment default benefit limit to $2 million. Public consultations were led by the Ministry of Finance in September 2019. AMO wrote to the Ministry in support of increasing the limit to $2 million to ensure more adequate support those who suffer catastrophic impairment.

In 2016, the government lowered this limit as well as third-party liability coverage to $200,000 from $1 million. This minimum should also be also be increased to $2 million to reflect current actual costs. This significant deficiency needs to be addressed.

Insurance Industry Changes

In 1989 the Ontario Municipal Insurance Exchange (OMEX) was established as a non-profit reciprocal insurance provider for Ontario's municipalities. It ceased operations in 2016 citing, "[a] low pricing environment, combined with the impact of joint & several liability on municipal claim settlements has made it difficult to offer sustainable pricing while still addressing the municipalities' concern about retro assessments."[3] (Retro assessments meant paying additional premiums for retroactive coverage for "long-tail claims" which made municipal budgeting more challenging.)

The demise of OMEX has changed the municipal insurance landscape in Ontario. That joint and several liability is one of the key reasons listed for the collapse of a key municipal insurer should be a cause for significant concern. Fewer choices fuels cost. While there are other successful municipal insurance pools in Ontario, the bulk of the insurance market is dominated by for-profit insurance companies.

Reciprocal non-profit insurers are well represented in other areas across Canada. Municipalities in Saskatchewan, Alberta, British Columbia are all insured by non-profit reciprocals.

The questions for policy makers in Ontario:

Are there any provincial requirements or regulations which could better support the non-profit reciprocal municipal insurance market?

What actions could be taken to better protect municipalities in Ontario in sourcing their insurance needs?

How can we drive down insurance costs to better serve the needs of municipal property taxpayers?

[3] Canadian Underwriter, August 11, 2016 https://www.canadianunderwriter.ca/insurance/ontario-municipal-insurance-exchange-suspends-underwriting-operations-1004098148/

Conclusion

This AMO paper has endeavoured to refresh municipal arguments on the need to find a balance to the issues and challenges presented by joint and several liability. It has endeavoured to illustrate that options exist and offer the reassurance that they can be successfully implemented as other jurisdictions have done.

Finding solutions that work will require provincial and municipal commitment. Working together, we can find a better way that is fair, reasonable, and responsible. It is time to find a reasonable balance.

FRONTENAC

Report 2019-120

Recommend Report to Council

To: Warden and Members of County Council

From: Kelly J. Pender, Chief Administrative Officer

Prepared by: Susan Brant, Director of Corporate Services/Treasurer

Date of meeting: October 16, 2019

Re: **Corporate Services – Authorization of the Use of Reserves for the Eastern Ontario Regional Network (EORN) improvements of cellular coverage in Eastern Ontario**

Recommendation

Be It Resolved That the Council of the County of Frontenac receive for information the Corporate Services – Authorization of the Use of Reserves for the Eastern Ontario Regional Network improvements of cellular coverage in Eastern Ontario report;

And Further That County Council authorize staff to expense the County of Frontenac's remaining share amount of $139,750 for the EORN improvements of cellular coverage project from reserves (with $250,000 already authorized from the use of the Municipal Modernization Fund);

Background

At its regular meeting held May 16, 2018, Council, through consideration of Report 2018-076, passed the following resolution, being Recommend Reports from the Chief Administrative Officer, clause k)

k) 2018-076
Office of the Chief Administrative Officer
EORN Cell Gap Capacity Expansion Project - Request for Funding

Motion #: 94-18 Moved By: Councillor Dewey
Seconded By: Councillor Vandewal

Whereas at the April 19-20, 2018 meeting of the Eastern Ontario Wardens' Caucus (EOWC) a motion was passed recommending a funding for the distribution of costs related to the Eastern Ontario Regional Network's cell gap project;

Therefore Be It Resolved That the Council of the County of Frontenac accept the Eastern Ontario Regional Network (EORN) Cell Gap Capacity Expansion Project report; and,

Further That Council support the funding request in the 2019 County budget in the amount of $400,000, with final funding to be determined as part of the 2019 budget process; and,

Further That Council express their sincere appreciation to EORN and the EOWC for their efforts to improve cellular coverage and capacity in Frontenac County and Eastern Ontario.

Carried

In terms of the commitment by the County of $400,000, as noted in the resolution, final funding was to be determined as part of the 2019 budget process.

Comment

During the 2019 Budget deliberations in February, staff had not yet been advised by EORN of the County's final contribution amount and as a result, no recommendations on the use of reserves to cover this amount was made by staff.

EORN received the formal Letter of Approval for Provincial and Federal funding of the EORN Cell Project from Minister Laurie Scott on September 9, 2019 and are now working with the Ministry of Infrastructure (MOI) to formalize a Contribution Agreement (CA) so that the project can move forward with implementation in 2020.

EORN has advised that all thirteen members of the EOWC, and nine members of the Eastern Ontario Mayors' Caucus (EOMC) have agreed to financially support the Cell Gap project. The Municipal contribution calculations have now been finalized with the County of Frontenac's total contribution being $389,750.

EORN has provided members with two options for making their contribution, those being:

- **Prepayment Option:** To assist EORN with the cash flow for the project, Municipalities have the option of prepaying to EORN the Member Contribution and receiving an interest payment on the declining balance for a period of three years (3). The investment portion not yet due shall earn interest at the rate of 5% per annum from the date of the investment to the date that the payment would otherwise be due. Interest earned on the investment shall be paid by EORN to the Municipality on an annual basis. For example, if the entire payment is made in advance, three quarters of the payment shall be considered to be an investment, and that amount shall earn interest on the anniversary of the initial payment. However, after the first year when the first installment payment is due to be made in the second year, only two thirds of the amount will earn interest, and then after the second year, one third will earn interest until the final payment is due.

- **Annual Payment Option over Four Years:** The Municipality shall make a payment on an annual basis of a one quarter share of its contribution, with the first payment due and payable upon execution of this Municipal Agreement and the balance of payments due in equal installments on the anniversary date of the date of this Agreement, in three equal annual installments. No interest is earned in this Option.

Pending a response from members on their preferred option, EORN will then invoice accordingly and send a draft Municipal Contribution Agreement outlining the terms and conditions of the payment:

Staff are recommending that the County proceed with the **Prepayment Option**, providing EORN with the full $389,750 upfront. The 5% return offered by EORN exceeds the return available to the County through the LAS High Interest Savings Account (2.415% as of August 31, 2019) or a comparable 4-year bank bond issue (2.6% as of September 19, 2019).

At its regular meeting held July 17, 2019, Council, through the consideration of Report 2019-089, passed resolution 131-19 which, among other things, approved $250,000 in 2019 to the EORN Cell Gap Project from the Municipal Modernization Fund. Staff are recommending that the additional one-time cost of $139,750 be funded from the Stabilization reserve. Council approval is required before staff are able to take the remaining $139,750 from the Stabilization reserve.

Staff are bringing this report to Council prior to the October budget deliberations as resolution 94-18 noted above directs the EORN Cell Gap Capacity Expansion Project to be funded as part of the 2019 budget. In addition, in order to take advantage of the 5% interest rate being offered by EORN, payment must be received by the end of 2019.

Strategic Priority Implications

1.1 Provide committed leadership and continuing support to the long-term regional plan to enhance broadband and cell service.
1.2 Refine and invest in efforts to accelerate economic development – to grow businesses, attract more visits and expand the tax base.

Financial Implications

By the County going with the prepayment option, the County would earn $29,231 through 2022.

Year	Prepayment Amount	Interest Rate	Interest Earned
2020	$292,312.50	5%	$14,615.63
2021	$194,875.00	5%	$9,743.75
2022	$97,437.50	5%	$4,871.88
Total		**5%**	**$29,231.25**

The next best option available, which would be to invest in a 2.6% bank bond while foregoing bank interest on the annual payments (2.2% as of August 31, 2019) as they become due to EORN, would be estimated to return $17,460.

Organizations, Departments and Individuals Consulted and/or Affected

David Fell, CEO, Eastern Ontario Regional Network (EORN)
Alex Lemieux, Deputy Treasurer

FRONTENAC

Report 2019-122

Council Recommend Report

To:	Warden and Council
From:	Kelly Pender, Chief Administrative Officer
Prepared by:	Gale Chevalier, Chief/Director Emergency and Transportation Services
Date of meeting:	October 16, 2020
Re:	**Frontenac Paramedic Services – 2020 Legislated Response Time Performance Plan**

Recommendation

Resolved That the Council of the County of Frontenac receive the Emergency and Transportation Services – 2020 Legislated Response Time Performance Plan report for information;

And Further That Council direct the Clerk to introduce a by-law later in the meeting adopting the response time standards as outlined in this report.

Background

At its meeting on September 19, 2018, County Council passed the following resolution:

> **Resolved That** the Council of the County of Frontenac accept this Emergency and Transportation Services – 2019 Legislated Response Time Performance Plan report;
>
> **And Further That** Council direct the Clerk to introduce a by-law later in the meeting adopting the response time standards as outlined in this report.

Carried

The County of Frontenac set the following criteria under Regulation 257/00, as amended, for its response time targets for 2019:

> For the calendar year of **2019**, from January 1 to December 31,

i. Designated Delivery Agent (DDA) - **Sudden Cardiac Arrest**
48% percent of the time, within 6 minutes from the time ambulance dispatch conveys the call information to the paramedic, the **County of Frontenac** will endeavour to have a person equipped and ready to use an AED at the location of a patient determined to be in sudden cardiac arrest.

ii. EMS Designated Delivery Agent - CTAS 1
70% percent of the time, within 8 minutes from the time ambulance dispatch conveys the call information to the paramedic, the **County of Frontenac** will endeavour to have a PARAMEDIC as defined by the *Ambulance Act* and duly equipped at the location of a patient determined to be CTAS 1.

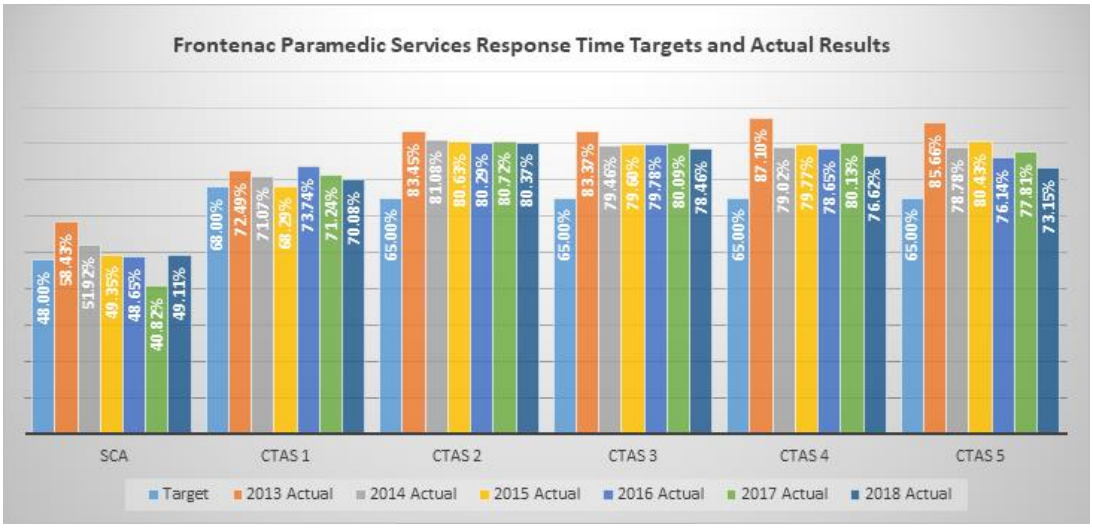
iii. EMS Designated Delivery Agent - CTAS 2, 3, 4, 5
The **County of Frontenac** will endeavour to have a **Paramedic** as defined by the *Ambulance Act* and duly equipped at the location of a patient determined to be CTAS 2, 3, 4, 5 within a period of time determined appropriate by the DDA and noted below in Table 1, or as resources permit (level of effort):

Table 1, CTAS 2, 3, 4, 5 EMS Delivery Agent Commitment

CTAS	Target Time from Paramedic Received Until on Scene	% Target
2	10 minutes	75%
3	10 minutes	75%
4	10 minutes	75%
5	10 minutes	75%

Comment

Since the inception of RTS in 2013, the County of Frontenac has met and/or exceeded its stated RTS as illustrated in the graph below.



It is recommended that the County of Frontenac maintain the same criteria under Regulation 257/100, as amended, for its response time targets for 2020.

For the calendar year of **2020**, from January 1 to December 31,

i. Designated Delivery Agent (DDA) - **Sudden Cardiac Arrest**
48% percent of the time, within 6 minutes from the time ambulance dispatch conveys the call information to the paramedic, the **County of Frontenac** will endeavour to have a person equipped and ready to use an AED at the location of a patient determined to be in sudden cardiac arrest.

ii. EMS Designated Delivery Agent - CTAS 1
70% percent of the time, within 8 minutes from the time ambulance dispatch conveys the call information to the paramedic, the **County of Frontenac** will endeavour to have a PARAMEDIC as defined by the *Ambulance Act* and duly equipped at the location of a patient determined to be CTAS 1.

iii. EMS Designated Delivery Agent - CTAS 2, 3, 4, 5
The **County of Frontenac** will endeavour to have a **Paramedic** as defined by the *Ambulance Act* and duly equipped at the location of a patient determined to be CTAS 2, 3, 4, 5 within a period of time determined appropriate by the DDA and noted below in Table 1, or as resources permit (level of effort):

Table 1, CTAS 2, 3, 4, 5 EMS Delivery Agent Commitment

CTAS	Target Time from Paramedic Received Until on Scene	% Target
2	10 minutes	75%
3	10 minutes	75%
4	10 minutes	75%
5	10 minutes	75%

Strategic Priorities Implications

Other Important and Continuing County Priorities:
- Implement strategic plans for **Fairmount Home** and **Frontenac Paramedics.**

Financial Implications

None at this time.

Organizations, Departments and Individuals Consulted and/or Affected

FRONTENAC

Report 2019-123

Council Recommend Report

To: Warden and Council

From: Kelly Pender, Chief Administrative Officer

Prepared by: Lisa Hirvi, Fairmount Home Administrator

Date of meeting: October 16, 2019

Re: **Fairmount Home – Bruce County's Long-Term Care Home**

Recommendation

Resolved That the Council of the County of Frontenac ("County Council") received the Fairmount Home – Bruce County's Long-Term Care Home report for approval;

And Further That County Council, as the licensee for Fairmount Home for the Aged ("Fairmount"), shall ensure compliance with the *Long-Term Care Homes Act,* 2007 ("LTCHA") that requires homes meet the staffing and care standards provided for in *Ontario Regulation 79/10* ("Regulations");

And Further That County Council shall ensure compliance with the Regulations that includes the requirement for a nursing and personal support services staffing plan that provides for a staffing mix that is consistent with the residents' assessed care and safety needs;

And Further That County Council, as the licensee for Fairmount, support Fairmount's five-year business plan that includes the plan for service level changes towards a minimum four hours of care per resident per day to ensure that residents' assessed care and safety needs are met.

Background

The Ministry of Health and Long-Term Care (MOHLTC) released the public report amended on July 24, 2019 regarding the Corporation of the County of Bruce ("Bruce County") as the licensee for the municipally operated long-term care home, Brucelea Haven Long Term Care Home ("Brucelea Haven"). The Orders of the Director (Amendment) is attached and includes compliance orders ("CO") under section 153(1)

of the LTCHA after follow-up inspections concluding in May 2019. The inspectors determined that Bruce County, as the licensee, failed to comply with the requirements under the LTCHA including Regulation 31(3), as it failed to have a staffing plan that provided for a staffing mix that was consistent with residents' assessed care and safety needs and failed to promote continuity of care. Also, Bruce County was non-compliant with subsection 18(1) of the LTCHA, as it failed to ensure that the programs required under sections 8 to 16 (includes nursing and personal care, restorative care, recreational and social activities, dietary services and hydration, medical services, information and referral assistance, religious and spiritual practices, accommodation services, volunteer program), the services provided under those programs complied with any standards or requirements, were provided for in the Regulations. As such, Bruce County's non-compliance with these sections of the LTCHA and Regulations resulted in their residents being at risk for receiving insufficient nursing and personal care to ensure that their residents' assessed needs and safety were being met.

Staffing shortages impacted resident care not being completed based on assessed needs and/or plans of care in the following areas: transfers, bathing, toileting/continence care, repositioning and monitoring, oral care, assistance at all meals, timely medication administration, completion of Minimum Data Set (MDS) assessments, assessments for altered skin integrity and authorization for admission. The home's staffing mix and staffing shortages did not promote continuity of care and did not ensure that there were enough direct care staff/hours to meet the residents' assessed care and safety needs.

In addition to staffing shortages, Brucelea Haven experienced management issues including vacant key positions, staff who lacked support, experience and training in their roles and staff being reassigned to the floor to address staffing shortages.

In addition to compromised resident care and safety, there were other impacts noted in the ministry report, for example, staff safety was compromised, staff resignations including turnover of newly hired staff, frustration due to lack of support, exhaustion due to workload, overtime, double shifts, part-time staff working full-time hours (no staff available for call-ins) and Registered Nurse (RN) coverage 24/7 not fulfilled.

Comment

Fairmount's Recommend Report (2019-110) regarding the Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System (the "Inquiry") was shared with County Council on September 18, 2019. Although the Inquiry was not tasked with conducting a general review of the long-term care (LTC) system nor to make recommendations on how LTC homes or the LTC system might be improved more generally, the Inquiry's report highlighted three principal findings, two of which are as follows: the offences were the result of systemic vulnerabilities…and the LTC system is strained but not broken. Furthermore, the Inquiry's report stated that systemic issues require a systemic response of which there are four: 1) prevention, 2) awareness, 3) deterrence, and 4) detection. LTC homes are called to take a leadership role in deterrence, with appropriate funding from the ministry.

The state of Bruce County's LTC home along with the Inquiry's recommendations highlight the importance of strategic planning and action to minimize the risks to resident

care, safety and security. Fairmount's strategic plan and key action items are the basis for the 5-year business plan, which includes service level changes, identifying risks and mitigation strategies. Service level changes in the business plan are based on the industry standard of a minimum four (4) hours of direct care per resident per day, which will be achieved over a seven (7) year period ending in 2023. County Council's commitment to Fairmount's strategic plan supports staff in addressing the systemic issues and responding accordingly with prevention, awareness, deterrence and detection.

The service level changes approved since 2017 have helped to address the increasing care and service needs of Fairmount's resident population. However, additional staff are required to respond to increasing and changing resident care and service needs, as well as, maintaining a strong organization and positive work culture for staff and volunteers. Staff will continue to actively plan in order to maintain staffing levels to provide resident care and services and to minimize the impact of the health human resource (HHR) crisis affecting health care organizations across Ontario and Canada.

In 2020, Fairmount will undergo an operational review, which will provide County Council and staff with further direction in meeting the legislative requirements, as well as, fulfilling Fairmount's vision to be the home of choice for our residents, staff and volunteers.

Strategic Priority Implications

Council's Continuing Priorities relevant to this recommend report are as follows:

- Implement strategic plan for Fairmount
- Continually improve customer and financial services
- Maintain a strong organization and positive work culture through leadership, human resources, training and development, physical and IT infrastructure and partnerships

Financial Implications

Fairmount's business plan details the seven (7) year plan for the service level changes. The budget provides the financial costs for the upcoming year with projections for future years. Annual project proposals provide the details of and rationale for service level changes.

Municipal contributions are used to supplement shortfalls in ministry funding, which allows Fairmount to provide the assessed care and services to residents. With recent ministry funding announcements, Fairmount's funding is less than budgeted. However, the municipal contributions for Fairmount are reasonable when compared to other LTC homes in eastern Ontario and the province. The details will be presented in the upcoming budget presentations, so County Council can make informed decisions about

meeting its obligations as licensee under the LTCHA and in implementing Fairmount's strategic plan.

Organizations, Departments and Individuals Consulted and/or Affected

Organizations – Bruce County, Ministry of Long-Term Care

Departments – Fairmount Home, Corporate Services

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Long-Term Care Homes Division
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Order(s) of the Director (Amendment)

under the *Long-Term Care Homes Act, 2007*, S.O. 2007, c.8

	☐ Licensee Copy/Copie du Titulaire ☒ Public Copy/Copie Public
Name of Director:	
Order Type:	☐ Amend or Impose Conditions on Licence Order, section 104 ☐ Renovation of Municipal Home Order, section 135 X Compliance Order, section 153 ☐ Work and Activity Order, section 154 ☐ Return of Funding Order, section 155 ☐ Mandatory Management Order, section 156 ☐ Revocation of Licence Order, section 157 ☐ Interim Manager Order, section 157
Intake Log # of original inspection (if applicable):	
Original Inspection #:	2019_610633_0005
Licensee:	Corporation of the County of Bruce 30 Park Street, Walkerton, ON
LTC Home:	Brucelea Haven Long Term Care Home 41 McGivern Street West, Walkerton, ON
Name of Administrator:	Willy Van Klooster

Background:
Ministry of Health and Long-Term Care (MOHLTC) Inspectors conducted a follow-up inspection (2019_610633_0005) at Brucelea Haven Long-Term Care Home (LTC Home) on the following dates: March 26-29, April 1-5, 15-18, 23-26, 29-30 and May 1-3, 2019. During this inspection, the inspectors determined that the Licensee, Corporation of the County of Bruce, failed (Licensee) to comply with requirements under the *Long-Term Care Homes Act, 2007* (LTCHA or Act).

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In accordance with paragraph 4 of s. 152(1) of the LTCHA, a referral to the Director was made following a written notification and compliance order being issued for the licensee's non-compliance under s. 31(3) of Ontario Regulation 79/10 (Regulation) under the LTCHA. The written notification and compliance order specifically relate to the staffing plan and the failure of the Licensee to provide for a staffing mix that is consistent with residents' assessed care and safety needs and that meets the requirements set out in the Act and the Regulation. This is the third consecutive time that a compliance order has been issued related to the staffing plan. Previously, a written notification, compliance order and Director's referral were issued on October 26, 2018 during the Resident Quality Inspection (2018_580568_0014) and a written notification and compliance order was also issued on January 9, 2018 (2017_610633_0023) following an inspection.

As a result, and as set out in the grounds below, the Director is issuing a compliance order pursuant to s.153(1) of the LTCHA as the Licensee was not in compliance with subsection 31(3) of the Regulation, as it failed to have a staffing plan that provided for a staffing mix that was consistent with resident's assessed care and safety needs and failed to promote continuity of care. In addition, the licensee was also not in compliance with subsection 18(1) of the LTCHA, as it failed to ensure that the programs required under sections 8 to 16, the services provided under those programs complied with any standards or requirements, provided for in the regulations. The Licensee's non-compliance with these requirements has resulted in residents at the LTC home currently being at risk for receiving insufficient nursing and personal care to ensure that the assessed needs and safety of residents are being met.

The Licensee's compliance history identifies that over the past twenty months from the date of this order, three written notifications and compliance orders related to subsection 31(3) of the Regulation have been issued. In addition, five written notifications, five voluntary plans of correction and one compliance order were issued in relation to services provided under the required programs under sections 8 to 16 of the LTCHA. During this time the Licensee additionally had 67 written notifications, 30 voluntary plans of correction, 30 compliance orders and 6 Director referrals.

Order: #001	Corporation of the County of Bruce

To Corporation of the County of Bruce, you are hereby required to comply with the following order(s) by the date(s) set out below:

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Pursuant to:
The Licensee failed to comply with subsection 31(3) of the Ontario Regulation 79/10. Subsection 31(3) states:

The staffing plan must,
(a) Provide for a staffing mix that is consistent with residents' assessed care and safety needs and that meets the requirements set out in the Act and this Regulation;
(b) Set out the organization and scheduling of staff shifts;
(c) Promote continuity of care by minimizing the number of different staff members who provide nursing and personal support services to each resident;
(d) Include a back-up plan for nursing and personal care staffing that addresses situations when staff, including the staff who must provide the nursing coverage required under subsection 8(3) of the Act, cannot come to work; and
(e) Be evaluated and updated at least annually in accordance with evidence-based practices and, if there are none, in accordance with prevailing practices.

The Licensee failed to comply with subsection 18(1) of the LTCHA. Subsection 18 (1) states:

Every Licensee shall ensure that the programs required under sections 8 to 16, the services provided under those programs and anything else required under those sections comply with any standards or requirements, including outcome measures, provided for in the regulations.

Order:

The licensee must be compliant with s. 31(3) of O. Reg 79/10 and s. 18 (1) of the LTCHA.

Specifically, the Licensee shall,

1) Ensure that the staffing plan meets the requirements set out in the Act and the regulation, including providing for a staffing mix that is consistent with residents' assessed care and safety needs, and promotes the continuity of care by minimizing the number of different staff members who provide nursing and personal support services to each resident, and that there is sufficient staff to implement the home's staffing plan.

2) Bring in a consultant from an external company with extensive experience in managing or operating LTC homes to:

   a) Conduct a review of the following areas and make recommendations for improvement regarding the following:

      - The staffing plan for the organized program of nursing services and personal support services. The review shall include, but not limited to an evaluation of the staffing mix identified in each home area to ensure that the staffing mix is consistent with the assessed care and safety needs of residents' in that home area,

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recommendations to promote continuity of care, how to attract and retain personal support workers and registered staff and evaluation of the back up plan for when nursing and personal support staff cannot come into work.

- required programs and policies as set out in the Long-Term Care Homes Act, 2007 (LTCHA), s. 8 - 16 and O. Reg 79/10, s. 48. The review shall include, but not limited to, an evaluation of the LTC home's required programs and make recommendations for improvements to the programs including its education component.

- Upon completion of the review, the consultant will provide both the licensee and the Director under the Act, a report that sets out how the review was conducted, the findings and recommendations for the required programs. This review, findings and recommendations must be finalized no later than **November 15, 2019.**

- Within two weeks of receiving the report from the consultant, the licensee will submit a plan to the Director identifying the recommendations that will be implemented and the timelines for implementation. That plan will be reviewed by the Director and may require changes based on the Director's review of the report and the plan submitted by the licensee. Upon approval of the plan by the Director, the licensee will implement the actions identified.

b) To provide coaching and mentoring support to the Administrator and Director of Care(s) at Brucelea Haven Nursing Home:

- The Licensee will submit a plan to provide coaching and mentoring support to the Administrator and Directors of Care at Brucelea Haven Nursing Home related to staffing, including how to retain staff, planning for staffing issues and ensuring and sustaining compliance with the standards and requirements for the programs required under sections 8-16 of the LTCHA. This coaching and mentoring will support the Administrator and Director of Care to achieve compliance with the specific areas of non-compliance identified and ensure that they have the knowledge and skills to sustain that compliance.

- The plan will include the areas to be covered in the coaching and mentoring, timelines for the coaching and mentoring, and a report at the end of the mentoring period confirming the areas identified have been covered. The areas covered are to include at a minimum, a detailed overview of the LTCHA and Regulation 79/10, with a focus on the current non-compliance identified in this Order, the requirements of outstanding Inspector and Director's Orders and areas of non-compliance identified in recent inspections.

The plan is to be submitted to Stacey Colameco, Director, by fax to 1-416-327-7603 or courier to 1075 Bay Street, 11th Floor, Toronto, Ontario M5S 2 B1 by **November 15, 2019.**

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Grounds:

This Order is being issued to ensure that the licensee achieves compliance with the serious and on-going non-compliance identified below by taking the actions identified by the Director in this Order, in addition to the actions identified by inspectors in the compliance orders issued in Inspection #2019_610633_0005.

Specific evidence of the non-compliance identified, and that is relied on by the Director, is contained within the follow-up inspection report noted below as well as in other inspections listed in the compliance history described below in this Order.

June 11, 2019 (2019_610633_0005): A follow up inspection was conducted on March 26-29, April 1-5, 15-18, 23-26, 29-30, May 1-3, 2019. The Licensee failed to comply with CO #003 from Inspection 2018_580568_0014 served on the licensee on October 26, 2018, with a compliance due date of February 22, 2019. CO #006 and Director Referral #003 was issued in relation to O.Reg. 79/10, s. 31 (3). It was determined that the licensee failed to ensure that a staffing plan provided for a staffing mix that is consistent with the residents' assessed care and safety needs and that met the requirements set out in the Act and Regulation as the Licensee consistently had a staffing shortage at the LTC home.

The document, County of Bruce HR Indicators-Nursing Hours Overtime by date and employee from January 25 to March 27, 2019 (60 days), showed that 80 employees (nursing staff) worked 2512.30 hours of overtime (equivalent to 314 eight-hour shifts). Despite the overtime by all disciplines, which included staying late and double shifts, the home was unable to maintain their staffing plan levels for RNs, RPNs and PSWs. Three RPNs and three PSWs said that there was a strain on staff, and that overtime and double shifts were worked constantly.

Human resource specialist #154 said that there should be 288 hours of PSW work completed daily. The "County of Bruce HR Indicators-All nursing hours worked" dated from January 25 to March 27, 2019 (60 days) showed that on 57/60 days (95 percent), the home did not have the full complement of PSW staff despite the overtime worked by PSWs daily.

The Nursing Staff Vacancy Status Report as of April 5, 2019 stated that three permanent part time (PT) PSW positions and eight temporary PT non-permanent positions were not filled including three PSWs, one RPN and four RNs. There were no full-time positions being recruited. Human resource generalist #124 stated there were no applicants however, review of the job postings online and related documentation provided by human resources showed that advertising was not completed as outlined in the home's recruitment plan. The Administrator agreed that the home was short PSWs on 57/60 days (95 percent) during the identified time period and they acknowledged that staff were working overtime to compensate.

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The staffing shortages impacted resident care in the following areas:

A) Transfers:
Instead of the assessed two-person assist requirement for transfers, residents are being transferred by one person. Three improper transfers resulted in significant injuries to one resident. A short time later the resident passed, and it was noted on the death certificate that falls with injury were a contributing factor. During the inspection, staff were observed transferring independently and staff interviewed stated that there were times they were the only PSW on the unit of 24 residents which impacted the assessed care provided to residents related to transfers. The A-DOC said one-person transfers occurred because of the lack of staff at the home.

B) Twice weekly bathing according to assessed preference;
Record review of the plan of care for four current resident's and staff interviews were completed related to bathing. Four of four residents did not receive their baths twice weekly. The general staffing plan was two PSWs plus a bath person. If the home was short, the PSW struggled to get all the residents up or back into bed and there was no time for bathing. RPN #142 said while they tried to make bathing a priority, it required pulling staff from the floor to do the baths which left only one PSW to provide care to all 24 residents. The DOC acknowledged that bathing was missed and agreed that bathing was not the priority when working short staffed. The County of Bruce Daily Schedule Listings dated from January 25 to March 27, 2019, stated that on 34/60 days (57%), the home did not have the PSW shifts filled that were dedicated to bathing.

C) Toileting routines;
Record review of the plan of care for three resident's and staff interviews were completed related to toileting. Three of three residents did not receive toileting/continence care per their assessed needs and plan of care. Staff said the impact to residents for toileting when the home was short of staff was residents were left sitting in a soaked brief and/or had to wait longer for assistance to be toileted. They said that some residents were put to bed early and they were not checked again for changing briefs and repositioning when they worked short staffed.

D) Repositioning and monitoring;
Record review of the plan of care for three resident's and staff interviews were completed related to repositioning. Three of three residents were not repositioned as per their assessed needs and care plan. Staff all said that when there was only one PSW staff and a resident required two staff to reposition their repositioning was sometimes not completed. They also said that residents would have to wait while staff sought help from another staff member. At times this staff member had to come from another RHA. Registered staff also said the impact of working short related to repositioning was that residents would sit or lie longer in one spot which would increase the potential for skin breakdown.

E) Oral care;
Observations and interviews showed that four of four residents did not receive oral care twice

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daily before breakfast and before their bed time as required. Three PSWs all said that oral care should be completed twice daily before breakfast and bed time and this was not done because of the staffing shortages at the home.

F) Assistance at all meals;
Observations and staff interviews showed that seven residents did not receive the assistance they required for meals. A staff member said that when the home was short an RPN and they had to work both sides (one to 48 residents), the RPN was unable to assist in the dining room for meals. When asked what the impact of working short had on feeding, the PSW said that residents did not get a full meal. Residents got what they could, enough time was not given, and some residents waited to eat. The staff member explained that residents that were not cognitively aware were impacted the most. They did not receive the assistance and time they required to eat. The meal was often cold by the time it was served. The staff member explained that residents fell asleep waiting and therefore did not eat or drink as well. Staffing was the biggest issue at the home and they relied on family for feeding residents at meals.

G) Timely medication administration;
Observations, record review of the plan of care for three resident's, and staff interviews were completed related to timely medication administration. Three of three residents received their time sensitive medications late and not as prescribed. Registered staff said that when working short they had 48 residents to give medications to, residents had to wait, and medications were late. They also said that the risk of medication errors increased when working short staffed. The RAI Coordinator said there were times where there was only one PSW and one RPN on the unit. They said they were pulled from their RAI-Coordinator role to fill the RPN spot and the RPN would fill the PSW role.

H) Completion of Minimum Data Set (MDS) assessments;
Staff interviews, RAI-MDS assessments for three identified residents and the home's related MDS reports showed that the RAI-MDS assessments were not completed per the Long-Term Care Home Service Accountability Agreement (LSSA) with the Local Health Integration Network (LHIN). The completion of RAI-MDS assessments was impacted by inconsistent staffing, RPN staff working one to 48 residents, clinical care coordinator and RN support role vacancies, and the RAI-Coordinator, and RN support role staff being pulled to work the floor due to insufficient staffing. Resident assessment protocols and resident care plans were not up to date.

I)Assessments for altered skin integrity;
Record review of the plan of care for three resident's and staff interviews were completed related to the completion of weekly skin and wound assessments. Three of three residents did not receive weekly skin and wound assessments as required. Registered staff said that wound treatments, wound care and dressings were missed when working short.

J) Authorization for admission;
Two residents were denied admission to the home and one resident was denied returning to the

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home. The reason provided was related to the lack of staff at the home that was required to provide the care the resident's needed.

In addition, the licensee failed to ensure that the home's staffing plan mix promoted continuity of care by minimizing the number of different staff members who provided nursing and personal support services to an identified resident. This became evident with a situation where a resident was cared for by registered staff that were not familiar with the resident, had not completed their orientation to the home, and had never worked on the unit the resident resided on. When there was change in condition, the registered staff did not consider the resident's previous history and diagnoses resulting in the incorrect processing of orders. It was not until the regular scheduled registered staff came back on duty a few days later that the resident was assessed, and an alternate diagnoses and treatment implemented. This registered staff was familiar with providing care to the resident and recognized that the resident was exhibiting signs of a different diagnoses.

The centralized scheduling system and staff shortages did not promote the continuity of care by minimizing the number of different staff members who provided nursing and personal support services to each resident. Call outs for shifts were by designation and did not include the home area. Staff said when they worked, and there were call ins to another home area, they pulled them to work that area. A registered staff said that RPNs were placed wherever there was a hole, and this may not be their home area. An RPN and the RAI-Coordinator said that staffing at the home was not good, there was not enough staff and nights and weekends were "brutal". Staff said they were called constantly to pick up shifts and staff were switched around on the home areas last minute. A number of staff said that the home's staffing system lacked continuity in providing resident care as staff were not familiar with the residents.

Management Issues:

Observations, staff interviews, and human resource reports at the time of the inspection showed that the previous DOC and Nurse Consultant were no longer at the home. One DOC position was filled on an interim basis by the ADOC however, they had been removed from their Clinical Care Coordinator (CCC) role. The CCC role was vacant. The Nurse Consultant returned to assume one DOC role on May 3, 2019. The second DOC position was vacant. The A-DOC lacked support, experience and training in the role. Observations and staff interviews showed that one RN support role was unfilled. The current RN support staff was pulled to the floor to cover shifts in addition to their role on a regular basis. A RN said that the RN support role was intended to float throughout the home to buffer days and evenings however, due to staff shortages they were pulled to work the floor on a regular basis in addition to trying to fulfil the responsibilities of their position. HR reports and staff interviews showed that the A-DOC was not always present at the home in their capacity as A-DOC. They also worked floor shifts to ensure that there was 24/7 RN coverage. There was not always a RN working at the home. Initially, the Administrator said they were not aware of any time where there was no registered nurse in the building but later said that they may have recalled a few times. The A-DOC shared that they were placed in this role on a temporary basis without training and support. The Administrator said that the primary concern

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was that there were no senior staff at the home. There should be two DOCs and there were not. The Administrator also said that the CCC role was not getting done and they agreed that the RAI-Coordinator and RN support role were being pulled to work the floor when the home was short staffed. The Administrator stated that staff did not have the senior nursing support.

The home's annual evaluation of the staffing plan dated December 2018 stated that the PSW staffing plan would address five care areas; bathing, toileting, repositioning, oral care and assistance at meals, however, this was not implemented. The annual staffing plan evaluation stated that the registered staffing plan would address two care areas; timely administration of medication and skin audits for new residents however, neither of which were implemented. The plan of care for identified residents, the home's related documentation, multiple staff of all disciplines at the home, the supervisor scheduling, the A-DOC and the Administrator all said that the home's current staffing mix and staffing shortages did not promote continuity of care and did not ensure that there were enough direct care staff/hours to meet the residents assessed care and safety needs. This included leadership supports, transfers, twice weekly bathing, toileting routines, repositioning and monitoring, oral care, assistance at all meals, timely medication administration, completion of MDS assessments and weekly assessments for altered skin integrity, documentation, admissions/discharge, orientation and palliative care.

Programs:

The licensee has failed to ensure that the services provided within the programs required under sections 8 to 16 of the Act complied with the standards and requirements provided for in the Regulation. During a two-month period from January 25, 2019 to March 27, 2019 there were five full shifts and two partial shifts where there was no registered nurse in the home. Support for front line care staff was not present which posed a potential risk to all residents in the home.

The organized program of nursing services for the home did not meet the assessed needs of residents. Residents identified with altered skin integrity did not receive weekly skin assessments by a registered staff member as directed by the Regulations and the residents were not repositioned as directed by their plan of care. Residents that were to be administered time sensitive medications for pain, responsive behaviours and Parkinsons Disease received their medications late. Where there should have been one RPN to administer medication to 24 residents on each of two home areas, there was just one RPN to administer medication to 48 residents. The RPN was unable to administer medication as prescribed.

The organized program of personal support services in the areas of oral care, bathing and transfers did not meet the assessed needs of the residents. Four of four residents reviewed were identified as not having received their oral care as per their assessed care needs and according to the regulations s. 34. (1) which states that each resident of the home is to receive oral care to maintain the integrity of the oral tissue that includes mouth care in the morning and evening, including the cleaning of dentures. Four of four residents reviewed were identified as not having been bathed according to their assessed needs and according to the regulations s. 33. (1) which

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states that residents are to be bathed at a minimum twice a week according to their preference. For one resident it was documented that over a 30-day period the resident was only bathed on one occasion, for another resident they went seven days without being bathed. It was identified that residents were not being transferred according to their assessed care and safety needs. One particular resident was transferred on three separate occasions with just one staff when their plan of care identified that they were two-person extensive assistance. The resident sustained injuries on each of the three occasions and died within a short time of their last injury.

The organized program of nutrition care and dietary services did not meet the daily needs of the residents. Observations conducted by inspectors during a meal identified seven residents that did not receive their required assistance with eating. In some cases, the residents waited long periods for assistance at which point their food was cold and in other cases meals were removed before the assistance was provided.

The evidence gathered in this inspection demonstrates that despite the Orders issued on October 26, 2018 and detailed below, the licensee had failed to act on the Orders of the Inspector and there were repeated areas of non-compliance related to the staffing plan providing for a staffing mix that is consistent with residents assessed care and safety needs, and services within programs required under section 8 to 16, meeting the requirements set out in the Act and Regulation.

Compliance History: Previous inspections where s 31(3) the staffing plan was issued.

October 26, 2018 (2018_580568_0014): A resident quality inspection was conducted on August 28, 29, 30, 31, 2018; September 4, 5, 6, 7, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 24, 25, 2018. The Licensee failed to comply with CO #003 from inspection #2018_580568_0014, served on the licensee October 26, 2018, with a compliance due date of February 22, 2019. CO#006 and Director Referral #003 was issued in relation to the Regulation, s. 31 (3) The licensee failed to ensure that a staffing plan provided for a staffing mix that is consistent with residents assessed care and safety needs that meets the requirements set out in the Act and Regulation.

Several complaints/concerns were received by the MOHLTC in relation to staffing shortages:

- Complaint IL-57691d-CW submitted July 3, 2018, in relation to shortage of staff affecting residents' care and the Residents' Bill of Rights.
- Complaint IL-58324-CW submitted July 23, 2018, related to significant staffing shortages that were negatively impacting resident care such, as falls and call bells not being answered.
- Complaint IL-58328-CW submitted July 23, 2018, related to dining and snack service, short staffing, bathing and falls prevention.
- Complaint IL-58551-CW submitted July 30, 2018, related to a resident not receiving baths as scheduled.
- Concern received by the Patient Ombudsman on August 1, 2018 and forwarded to the

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MOHLTC, related to bathing, short staffing and infection control.

On September 4, 2018, a staff member told Inspector #137 that staffing shortages in the home were critical and had been since January 2018. Resident care had been affected as residents did not always receive baths, mouth care, and toileting consistent with their assessed care needs. Between August 31 and September 3, 2018, there were no baths completed. Several staff have quit, including long-term employees due to the heavy workload from working short, and newly hired staff did not stay. Part-time staff were being maximized to full-time leaving no part-time staff to draw from. A staff member said there was no support or assistance from the Administrator or Director of Care which was very frustrating as staff were exhausted.

In interviews with multiple staff they shared that residents were not always receiving baths, oral care, toileting, food served hot, nourishments, and staff were using lifts independently during transfers. If residents or family members complained to management, those residents received their bath. The part-time staff were working full-time hours so there were no staff available for call-ins. Many staff were working double shifts and were exhausted. There was no support from the management in the home and they were not visible on the units. The Ward Clerk and Inspector #137 reviewed the daily assignment sheets from July 1 to August 31, 2018. There was documented evidence that on 58 of 62 (93.5 per cent) days the home was without the full complement of PSW's, with one or more PSW shifts not filled on those days, as well as some registered staff vacancies. There was a RN Support Role position, but the individual had been off on Medical Leave and had not been replaced. The Assistant Director of Care and Clinical Care Coordinator positions were vacant.

On September 10, 2018, the Ward Clerk said staffing had not been so "critical" as it was now. Many staff work overtime and double shifts to ensure coverage, but they were exhausted and worn out. They tried to "catch up" on missed baths but, for the most part, it did not happen. Inspector #137 reviewed bathing records which showed 14 of 141 (9.9 per cent) residents received all nine of their scheduled baths in July and 11 of 138 (7.9 per cent) residents received all nine of their scheduled baths in August 2018.

A RN expressed their concern that chronic staff shortages was having an impact on resident care. On three south there were at least five residents with wounds now where there used to be none. This was in part because there was not sufficient staff to turn/reposition residents as often as needed. Falls in the home have increased because staff were not able to monitor residents as closely. They stated they tend to be reactive and not proactive in preventing falls. The RAI-Coordinator provided the falls list for July and August 2018, which indicated there had been 111 falls over the two-month period.

A PSW shared that there were two incidents in one month, where they were working short on the secure unit during the night shift. A resident, who exhibited responsive behaviours including physical aggression and wandering, was observed going into other resident rooms. The plan of care for the resident recommended that two staff provide care for the resident, or one staff with

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another just outside of the room.

On both nights in question they were the only staff on the unit and were cornered in another resident's room by the identified resident. They had difficulty accessing their phone to request help from the staff member on the adjacent unit, which posed a potential risk to the residents in the rooms and the PSW.

During an interview with a RN they shared that on a specified date during the night shift they were alerted to an intruder in the home. Another registered staff said they received a call to their phone that it was the police and they were at the front door. They explained that they were looking for an individual who they thought might be on the premises. The staff said they were short two PSWs that night.

On this shift two registered staff were pulled to work the floor because of the PSW shortage. In an interview with one PSW they shared that they were working a double shift because of staff shortages. Originally, they were going to leave early but they did not want to leave another PSW on their own to provide care for 48 residents, as it was their first shift on their own after completing their orientation and they had not done any orientation on the floor they were currently assigned.

During an interview with another staff they said they worked nights on a specified floor on the night the intruder was in the building. They were the only PSW on the floor for 48 residents and the RN had told them they would help with rounds. When they went to start rounds the RN was not around, so they started on their own and assumed that RN was busy. The PSW shared that there were many residents on third floor that required two staff to change and reposition in bed. One resident was a heavy wetter and usually needed to be changed two to three times on nights with assistance of two staff, however they only got them changed once on this night shift. The same resident was also to be turned and repositioned every two hours and the PSW said that was not done. The staff member said that they barely had time to do basic cares and answer call bells. The RN shared that they did not check all of the doors that night because they were so busy due to staffing shortages. If they would have had time to check all the doors in the home, which was their normal practice, the intruder may have been prevented from entering the home.

In an interview with the Administrator the Inspectors asked if they were aware of the staffing shortages for the upcoming weekend. The Administrator said they were using Centralized Scheduling and would receive an alert on Thursdays. The Inspector said the Ward Clerk was off on Thursday and Centralized Scheduling only replaced one half RPN shift. The Inspector explained to the Administrator that combined, there were fourteen unscheduled shifts for Saturday and Sunday. The Administrator did not respond when asked by the Inspector what the staffing plan was for the weekend.

An Inspector spoke with a resident who indicated that they had been left in pain on a specified date. When staff came to assist the resident with dressing around 1000 hours the resident asked them for their medication to keep pain under control. The resident said that the medication was

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not brought until 1045 hours and by that time they were going crazy with pain. In an interview with the registered staff working that shift, they recalled being short an RPN on the floor. They also remembered the resident being very upset because the staff member was more than thirty minutes late with their medication. The resident was shaking and expressed that they were in a lot of pain. The RPN apologized for being late and explained that they had to give medications on ends of the unit, 48 residents, because of staff shortages. In these situations, it is almost impossible to give all medications at their scheduled times. Review of the employee schedule listing for the identified date showed that there was only one registered staff working on the specified floor that day.

The licensee had failed to provide for a staffing mix that was consistent with residents assessed care needs and that met the requirements set out in the Act and this Regulation.

January 9, 2018 (2017_610633_0023): A resident quality inspection was conducted on November 6-10, 14-17, 20-24, 2017. CO #003 was issued with a compliance due date of March 30, 2018, in relation to the Regulation, s. 31 (3) The licensee failed to ensure that a staffing plan provided for a staffing mix that is consistent with residents assessed care and safety needs that meets the requirements set out in the Act and Regulation.

An anonymous complaint IL-52279-LO/Log #018374-17 was submitted to the MOHLTC on August 8, 2017. The complainant stated that the home was short staffed and that residents did not receive their baths. A Resident stated that "when there is a shortage of staff, I will miss my bath, I missed it about two weeks ago." In another interview a resident stated they "had to fight to get their bath on a Friday". The resident explained that they go home on the weekends and it stressed them out when the bath person does not come to work that day as they worried about getting a bath before they go home. The resident also said related to bathing that it was bad for those residents that can't speak for themselves. A third resident said that they had concerns about missing their baths. The resident stated that they often missed their Saturday bath and in October 2017 there were three occasions that they were not offered another bath. If the floor was short, it was the bath PSW that was pulled to work the floor rather than to administer the resident baths. In an interview with a registered staff they stated that this particular resident writes their missed baths down and they had missed five out of seven of their baths recently.

The Ward Clerks explained that when staff call in they tried to call a staff to work for the same day or the next day in order to cover the missed baths. A Ward Clerk stated that the floors would call them to let them know who missed their baths and that there was no official documentation for tracking missed baths. Both Ward Clerks stated that the weekends were the worst for staffing and agreed that there have been residents lately that have missed their baths.

A registered staff said that the residents that have baths scheduled on the weekends would often miss their baths and that this was a real issue. They also said that missed baths were not documented and that many residents have missed their baths for days. When asked how the shortage of PSW staff impacted resident care, the registered staff replied that it impacts in every

way. Everybody does their hardest, residents wait longer, eight out of my last ten shifts we were short staff and it is not possible to get everything done. The registered staff also stated that residents that were able to complain would get their baths before residents that can't speak for themselves.

The staffing schedules from August 1 to 31 and 2017, and September 1 to 15, 2017, that were provided and calculated by Ward Clerk #123, documented that on 22/46 days the home was without full complement of PSW staff (48 percent) with one or more PSW shifts not filled on those days. Administrator #101 said that baths have been an issue lately and they had thought they were doing better but in the last three months they had slid back. The Administrator explained that they currently had 15 PSW lines not filled with some coverage from casual staff.

The licensee has failed to provide for a staffing mix that is consistent with residents assessed care needs and that met the requirements set out in the Act and this Regulation including that each resident of the home was bathed, at a minimum, twice a week by the method of his or her choice.

In the last five inspections dating back to November 2017, Ministry Inspectors have issued multiple findings of repeated non-compliance including 39 written notifications, 21 voluntary plans of correction and 15 compliance orders prior to the latest follow up inspection initiated on March 26, 2019, which resulted in 31 written notifications, 9 voluntary plans of correction, 18 compliance orders, and 5 Director referrals.

Additional compliance orders issued June 11, 2019 (2019_610633_0005):
The Licensee failed to comply with CO #007 from inspection #2018_580568_0014, served on the licensee October 26, 2018, with a compliance due date of January 3, 2019. CO #008 and Director Referral #001 was issued in relation to LTCHA, s. 23. (2) The licensee failed to report to the Director the results of every investigation undertaken under clause (1) (a), and every action taken under clause (1) (b). The outcome of an investigation related to the alleged verbal abuse of a resident by a staff member was not reported to the Director and the critical incident system was not amended.

The Licensee failed to comply with CO #001 from inspection #2018_580568_0014, served on the licensee October 26, 2018, with a compliance due date of January 3, 2019. CO #007 and Director Referral #001 was issued in relation to LTCHA, s. 23. (1) The licensee failed to ensure that, every alleged, suspected or witnessed incident of the following that the licensee knows of, or that is reported to the licensee, is immediately investigated: (i) abuse of a resident by anyone, (ii) neglect of a resident by the licensee or staff, or (iii) anything else provided for in the regulations. Three allegations of abuse/improper care that the licensee knew of were not immediately investigated as required.

The Licensee failed to comply with CO #002 from inspection #2018_580568_0014, served on the licensee October 26, 2018, with a compliance due date of January 3, 2019. CO #002 and

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Director Referral #002 was issued in relation to LTCHA, s. 24. (1) The licensee failed to ensure that when a person had reasonable grounds to suspect that improper care of a resident that resulted in harm or risk or harm to a resident occurred, suspicion and the information it was based upon was reported to the Director immediately. One incident of alleged sexual abuse and one incident of alleged improper care were not immediately reported to the Director.

CO#012 and Director referral #004 was issued in relation to the Regulation, s. 36. The licensee failed to ensure that staff use safe transferring and positioning devices or techniques when assisting residents. Observations and interviews with staff showed that staff were transferring a resident who required two person transfers independently. The resident requiring two- person transfer was transferred by one person on three separate occasions sustaining injuries after each transfer.

The Licensee failed to comply with CO #004 from inspection #2018_580568_0014, served on the licensee October 26, 2018, with a compliance due date of, January 3, 2019. CO #013 and Director Referral #005 was issued in relation to the Regulation, s. 50. (2) The licensee failed to ensure that, a resident exhibiting altered skin integrity, including skin breakdown, pressure ulcers, skin tears or wounds, is assessed by a registered dietitian who is a member of the staff of the home, and any changes made to the resident's plan of care relating to nutrition and hydration are implemented; is reassessed at least weekly by a member of the registered nursing staff, if clinically indicated; and any resident who is dependent on staff for repositioning is repositioned every two hours or more frequently as required depending upon the resident's condition and tolerance of tissue load, except that a resident shall only be repositioned while asleep if clinically indicated.

A resident, who exhibited pressure ulcers, was not assessed by the RD and reassessed at least weekly by a member of the registered nursing staff. The resident was not repositioned every two hours when asleep as clinically indicated. A resident, who exhibited multiple skin tears and a pressure ulcer, was not reassessed at least weekly by a member of the registered nursing staff. The resident was not repositioned every two hours as required to relieve pressure. The skin and wound assessments showed that the pressure ulcer had worsened during the specified time period.

CO #001 was issued in relation to LTCHA, s. 8. (3) The licensee failed to ensure that at least one registered nurse who is both an employee of the licensee and a member of the regular nursing staff of the home is on duty and present in the home at all times, except as provided for in the regulations. Schedules showed that there was no RN for the full shift for seven shifts identified in a 60-day period. In combination with the lack of nursing leadership (two vacant DOC positions at the time) and reduced staffing levels this contributes to the care concerns identified in sufficient staffing.

CO #003 was issued in relation to LTCHA, s. 101. (3), The licensee failed to ensure that as a

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condition of their licence that the licensee comply with the Act, the Local Health System Integration Act, 2006, the regulations, and every directive issued, order made or agreement entered into under this Act and those Acts. The licensee has failed to comply with the Long-Term Care Home Service Accountability Agreement (LSSA) with the Local Health Integration Network (LHIN). The LSSA stated that the licensee was required to meet the practice requirements of the Resident Assessment Instrument - Minimum Data Set (RAI-MDS) system however, the Long-Term Care Home failed to meet the practice requirements.

CO #004 was issued in relation to the Regulation, s. 8. (1) Where the Act or this Regulation requires the licensee of a long-term care home to have, institute or otherwise put in place any plan, policy, protocol, procedure, strategy or system, the licensee failed to ensure that the plan, policy, protocol, procedure, strategy or system was in compliance with and was implemented in accordance with applicable requirements under the Act; and was complied with. The licensee failed to ensure that their skin and wound policy was compliant with legislation in relation to completing assessment for all areas of altered skin integrity including bruises, skin tears and stage I pressure ulcers and that the medication policy included a process to review quarterly medication incidents. The licensee also failed to comply with the medication policy in relation to investigating, documenting and analyzing medication incidents; and complying with the falls policy in relation to completing head injury assessments for specified falls.

The Licensee failed to comply with CO #005 from inspection #2018_580568_0014, served on the licensee October 26, 2018, with a compliance due date of January 3, 2019. CO #005 and was issued in relation to LTCHA, s. 19 (1), The licensee failed to protect residents from abuse by anyone and that residents were not neglected by the licensee or staff.

A resident requiring two-person transfer was transferred by one person on three separate occasions and each time sustained an injury. A short time after the last injury the resident passed, and it was noted on the death certificate that falls with injury were a contributing factor.
A resident crying out in significant pain was left unattended with no interventions initiated to relieve the pain, the resident fell and sustained an injury as a result. The licensee failed to provide the resident with treatment, care or assistance for their health, safety and well-being.

CO#008 was issued in relation to LTCHA, s. 44. (7) The licensee failed to review the assessments and information that were required to have been taken into account under subsection 43(6) and approve the applicant's admission to the home unless the home lacks the physical facilities necessary to meet the applicant's care requirements; the staff of the home lack the nursing expertise necessary to meet the applicant's care requirements; or circumstances exist which are provided for in the regulations as being a ground for withholding approval.

The licensee did not lack the physical facilities necessary to meet the resident's care requirements and staff of the home did not lack the nursing expertise necessary to meet the residents care needs. There were no circumstances which were provided for in the regulations for withholding approval for their admissions to the home.

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CO#010 was issued in relation to the Regulation, s. 33. (1) The licensee failed to ensure that each resident of the home is bathed, at a minimum, twice a week by the method of his or her choice and more frequently as determined by the resident's hygiene requirements, unless contraindicated by a medical condition. Sample of four residents for a one-month period showed that the residents did not receive two baths per week and they missed anywhere from 12 and 88 per cent of their baths that were scheduled.

CO#011 was issued in relation to the Regulation, s. 34. (1) The licensee failed to ensure that each resident of the home receives oral care to maintain the integrity of the oral tissue that includes, mouth care in the morning and evening, including the cleaning of dentures. Sample of four residents where oral care for each of the resident was not being provided as per the resident's assessed care needs. For two of the residents this occurred between 80 and 90 per cent of the time. Staff stated that they are lucky to complete oral care once a day and rarely twice as required.

CO #014 was issued in relation to the Regulation, s. 73. (2) The licensee failed to ensure that, no person simultaneously assists more than two residents who need total assistance with eating or drinking; and no resident who requires assistance with eating or drinking is served a meal until someone is available to provide the assistance required by the resident.
Observation of meal service showed that seven residents requiring total assistance with eating or drinking did not receive the required assistance for their meals and that staff assisted more than two residents at a time. Observations also showed that residents who required assistance were served a meal prior to someone being available to provide assistance.

CO #015 was issued in relation to the Regulations. 148. (2) Before discharging a resident under subsection 145 (1), the licensee failed to ensure that alternatives to discharge have been considered and, where appropriate, tried; in collaboration with the appropriate placement coordinator and other health service organizations, make alternative arrangements for the accommodation, care and secure environment required by the resident; and provide a written notice to the resident, the resident's substitute decisionmaker, if any, and any person either of them may direct, setting out a detailed explanation of the supporting facts, as they relate both to the home and to the resident's condition and requirements for care, that justify the licensee's decision to discharge the resident.

The licensee failed to ensure that before discharging an identified resident, alternatives to their discharge had been considered and tried in collaboration with the appropriate placement coordinator and other health service organizations. A written notice to the resident and/or the resident's substitute decision-maker (SDM) that outlined the supporting facts as they related to the resident's condition and justified the licensee's decision was not provided.

CO #016 was issued in relation to the Regulation, s. 131. (2) The licensee failed to ensure that drugs are administered to residents in accordance with the directions for use specified by the

prescriber.

The licensee failed to ensure that a drug for two identified residents was administered in accordance with the directions for use by the prescriber and that drugs, including time sensitive medications to treat pain, behaviours and Parkinson's related symptoms, were administered to residents in accordance with the directions for use specified by the prescriber.

The Licensee failed to comply with CO #006 from inspection #2018_580568_0014, served on the licensee October 26, 2018, with a compliance due date of, February 22, 2019. CO #017 was issued in relation to LTCHA, s. 6 (1)(c), s. 6 (10) (b) and s. 6 (7). The licensee failed to ensure that there was a written plan of care that set out clear directions to staff and others who provided direct care to the resident; that the plan of care was reviewed and revised when the resident's care needs changed, and that care set out in the plan of care was provided to the resident as specified in their plan of care.

The licensee has failed to ensure that the written plan of care for an identified resident sets out clear directions to staff who provided direct care to the resident related to the resident's transfer status.

The licensee has failed to ensure that a resident's plan of care was revised with respect to continence care management when the resident's care needs changed. The licensee failed to ensure that interventions related to continence for four residents was provided to the residents as specified in their plans of care.

CO #018 was issued in relation to LTCHA, s. 76. (2) The licensee failed to ensure that no person mentioned in subsection (1) performs their responsibilities before receiving training in the areas mentioned below:

1. The Residents Bill of Rights.
2. The long-term care home's mission statement.
3. The long-term care home's policy to promote zero tolerance of abuse and neglect of residents.
4. The duty under section 24 to make mandatory reports.
5. The protections afforded by section 26.
6. The long-term care home's policy to minimize the restraining of residents.
7. Fire prevention and safety.
8. Emergency and evacuation procedures.
9. Infection prevention and control.
10. All Acts, regulations, policies of the Ministry and similar documents, including policies of the licensee, that are relevant to the person's responsibilities.
11. Any other areas provided for in the regulations.

The licensee failed to ensure that all registered staff had received orientation training before performing their responsibilities, including policies of the licensee that were relevant to the staff's

responsibilities, and any other areas provided for in the regulations.

The inspectors' analysis of the compliance history associated with the non-compliance identified along with the evidence gathered in the follow up inspection, I have determined that a Director's Order is warranted given the Licensee's non-compliance with s.31 (3) of the Regulation related to the staffing plan failing to provide for a staffing mix that is consistent with residents' assessed care and safety needs and that meets the requirements set out in the Act and Regulation and the licensee's compliance with s. 18(1) of the LTCHA.

The Licensee's history of repeated and ongoing non-compliance with the requirement under the regulations continues to occur at Brucelea Haven Long Term Care Home. The decision to issue this Director's Order was based on the LTC home's compliance history over the past 18 months.

The home had a level 5 history as they had on-going non-compliance with this section of the LTCHA that included:
Compliance Order #003 issued January 9, 2018 with a compliance due date of March 30, 2018 (2019_781729_0005)
Compliance Order #006 issued October 26, 2018 with a compliance due date of February 22, 2019. (2018_580568_0014)

At the request of the Director, Brucelea Haven submitted a plan of corrective action from inspection 2018_580568_0014 to the Director January 4, 2019 that outlined steps to come into compliance with outstanding compliance orders however, the LTC home failed to implement the corrective action plan. Given the repeated non-compliance with Orders and Director's Referrals at this home, the lack of understanding exhibited to ministry inspectors with respect to requirements under the LTCHA and the actions needed to address the non-compliance, it is necessary to ensure the leadership team at the home is well positioned to ensure the care and safety of residents in the home. The Executive Director does not have a clinical background and at the time of the follow up inspection both DOC positions were vacant as were several of the nursing support positions. The leadership team has not been effective in bringing the home into compliance and with the onboarding of new nursing leadership in the home, it is the Director's belief that the licensee needs help to determine how to achieve and sustain under the LTCHA and Regulation with respect to the non-compliance identified in this Order.

The Licensee has failed to ensure that the home's staffing plan provided for a staffing mix that is consistent with residents' assessed care and safety needs and meets the requirements set out in the LTCHA and Regulation and have not put strategies in place to effectively comply with the requirements of the LTCHA and Regulations.

The decision to issue this Director's Order was based on the scope and severity of non-compliance, and the LTC home's compliance history over the past 36 months. The scope is identified as widespread in the LTC home and represents systemic failure that affects or has the potential to negatively affect a large number of the LTC home's residents. The severity is

Ontario

Ministry of Health and Long-Term Care
Long-Term Care Homes Division
Long-Term Inspections Branch

Ministère de la Santé et des Soins de longue durée
Inspection de soins de longue durée
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determined to be actual harm or risk of actual harm. The Licensee's history of repeated non-compliance; despite Written Notifications and Compliance Orders, repeated and ongoing non-compliance with requirements under the LTCHA continue to occur at Brucelea Haven Nursing Home.

This order must be complied with by:	February 15, 2020

REVIEW/APPEAL INFORMATION

TAKE NOTICE:

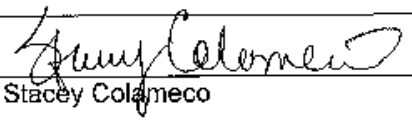
The Licensee has the right to appeal this Order(s) to the Health Services Appeal and Review Board (HSARB) in accordance with section 164 of the *Long-Term Care Homes Act, 2007*. If the Licensee decides to request a hearing, the Licensee must, with 28 days of being served with this Order, mail or deliver a written notice of appeal to both:

Health Services Appeal and Review Board
Attention Registrar
151 Bloor Street West
9th Floor
Toronto, ON
M6S 2T5

and the

Director
c/o Appeals Clerk
Long-Term Care Inspections Branch
1075 Bay St., 11th Floor, Suite 1100
Toronto ON M5S 2B1
Fax: 416-327-7603

Upon receipt, the HSARB will acknowledge your notice of appeal and will provide instructions regarding the appeal process. The Licensee may learn more about the HSARB on the website.

Issued on this 12th day of July, 2019, amended on July 24, 2019.	
Signature of Director:	
Name of Director:	Stacey Colameco

Ontario

Ministry of Health and Long-Term Care
Long-Term Care Homes Division
Long-Term Inspections Branch

Ministère de la Santé et des Soins de longue durée
Inspection de soins de longue durée
Division des foyers de soins de longue durée

Version date: 2017/02/15

FRONTENAC

Report 2019-121

Council Information Report

To:	Warden and Council
From:	Kelly Pender, Chief Administrative Officer
Prepared by:	Kelly Pender, Chief Administrative Officer
Date of meeting:	October 16, 2019
Re:	**Office of the Chief Administrative Officer – Transportation Services – Reporting Document**

Recommendation

Be It Resolved That the Council of the County of Frontenac receive for information the Office of the Chief Administrative Officer – Transportation Services – Reporting Document report;

And Further That County Council approve the Transportation Reporting Document, to be used by Southern Frontenac Community Services and Rural Frontenac Community Services when submitting quarterly reports on the use of the County grant funding in support of their respective Transportation Services.

Background

In 2019, the County of Frontenac provided a grant of $96,000 to support senior transportation services in the County. The grant was in support of the prior Council's strategic priority namely:

> "Addressing the existing gap in Seniors Affordable Housing stock by leveraging and/or funding the construction of a project in each of the four Frontenac townships – to be accomplished by the end of the 2015-18 term of Council."

The funding was split equally between Rural Frontenac Community Services (RFCS) and Southern Frontenac Community Services (SFCS).

In late 2016 and early 2017, the County supported both agencies in an effort to improve access to transportation services through the Big Data for Small Places program.

Prior to the approval of the 2015 County Strategic Plan direction noted above, the transportation imperative of the County and the Frontenac Transportation Service (FTS) was broad in scope and did not specify a priority for the delivery of services to seniors.

As part of the 2007 budget, Council approved $10,000 for the development of a business plan which would review transportation service options within the County. On August 1, 2007 Council authorized the Request for Proposals for a consultant to complete the business plan. In September 2007, the RFP was released and Cynthia Johnston & Associates was the successful consultant. The RFP was divided into 2 phases – Phase I – Needs & Resources Analysis and Phase II – recommended courses of action if need was identified as a result of Phase I.

In 2011 a presentation was made to Council on the history of Norther and Southern FCS and their collaborative for the Transportation Service. Within the presentation it noted that the following outcomes and goals for FTS, namely:

1. Support of both Boards and the South East LHIN
2. Maintain over 90% of current volunteers
3. Recruit a minimum of 5% new volunteers
4. Operate at a break even basis
5. Meet at least 80% of rider requests
6. Purchase 5,000 fridge magnets with the FTS 1-800 phone number
7. Return to the County in 2012 with the success stories

In 2010, the County of Frontenac provided $80,000 to FTS to support drives totaling over 500,000 kms. In 2011, FTS sought County of Frontenac support in the amount of $86,000. In 2014, this was increased by $10,000 to $96,000

Comment

This year is the first year that the grant was split between the two organizations. In prior years, the entire grant was provided to Frontenac Transportation Services (FTS) who in turn supported transportation services provided by SFCS.

With both services now reporting to Council and annually requesting a supporting grant, there is a need to standardize reporting in order for Council to be able to evaluate performance against stated objectives.

Attached, **Schedule A** is a proposed reporting form that staff recommend be compiled quarterly by each agency and submitted within 15 days of the end of each quarter.

At the first Council meeting after submission, Council will receive three reports, a completed report from each agency (2), plus a covering page roll up (1).

Staff recognize that the service delivery of both agencies is different, with RFSC providing services beyond Council's mandate with respect to senior's transportation and SFSC employing a means test for subsidy.

Neither group provides dedicated services to Frontenac Islands residents, but will assist where requested and feasible.

Strategic Priorities

3.2 Play a leadership role on communications to promote shared messaging for all regional initiatives such as economic development, tourism and lifestyle opportunities, and broadband and cell services.

4.1 Respect the taxpayer and keep tax increases close to the rate of inflation.

Financial Implications

There are no financial considerations associated with this report; however the information provided will improve transparency and future decision making by Council.

Organizations, Departments and Individuals Consulted and/or Affected

Susan Brant, Director of Corporate Services/Treasurer
Jannette Amini, Manager of Legislative Services/Clerk
Treasurers, RFSC and SFSC

AGENCY LOGO

XXXX Frontenac Community Services

Transportation Reporting - 2019

8-Oct-19

DATA Reporting

CFCS Funding County Funding (Annual) $ 48,000 Indicates -> Input Cells

Row #		Q1	Q2	Q3	Q4	Total	Comment
	Base Informtation						
1	# of Drives					0	All Drives Provided by the Agency
2	# of KMs Driven					0	All Drives Provided by the Agency
3	# of Unique Clients					0	Cumulative Total
4	% of Seniors						
5	# of Unique Seniors	0	0	0	0	0	Row 3 x Row 4
6	Total # Subsidized					0	
7	% Subsidized	0.0%	0.0%	0.0%	0.0%	#DIV/0!	Row 3/Row 6
8	# of KMs Driven/Client	0	0	0	0	#DIV/0!	Row 2/Row 3
9	$'s/KM Charged to Client					0	
10	$'s/KM Paid to Drivers					0	
11	# of Drivers					0	
12							
13	***Destination Information***						
14	Hospital					0	
15	GSAC Programs					0	
16	Adult Day Programs					0	
17	Medical					0	
18	Shopping					0	
19	Miscellaneous					0	
20							
21							
22							
23	**Total**	**0**	**0**	**0**	**0**	**0**	
24	**Check**	Good	Good	Good	Good	Good	Good if Row 1 - Row 23 = 0, Otherwise ERR

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XXXX Frontenac Community Services

Transportation Reporting - 2019 8-Oct-19

Row #		Q1	Q2	Q3	Q4	Total	Comment
	Revenue Summary						
25	County of Frontenac Grant	12,000	12,000	12,000	12,000	48,000	County Grant/4
26	Total Fees Collected					0	
27	Subsidy from LHIN					0	
28	Subsidy from 3rd Party					0	
29						0	
30						0	
31	**Revenue Total**	**12,000**	**12,000**	**12,000**	**12,000**	**48,000**	
						0	
	Expense Summary						
32	Salaries, Wages & Benefits (SWB)					0	Insert Salary Allocated to the Program
33	Paid to Volunteers					0	All Expenses Paid to Volunteers
34	Allocation of Overhead					0	In Accordance with Your Budget Policy
35	Advertising					0	
36						0	
37						0	
38	**Expenditure Total**	**0**	**0**	**0**	**0**	**0**	
39							
40							
41	***Net (Cost) or Profit***	**$12,000**	**$12,000**	**$12,000**	**$12,000**	**$48,000**	Row 31 - Row 38

Attestation:

I, _____, representing Southern Frontenac Community Services (SFCS), hereby attest the above submission is a true representation of the transportation services provided by SFCS during the reporting period. I understand the information is subject to audit by the County of Frontenac.

_____ _____

Date **Signature**

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XXXX Frontenac Community Services

Transportation Reporting - 2019

8-Oct-19

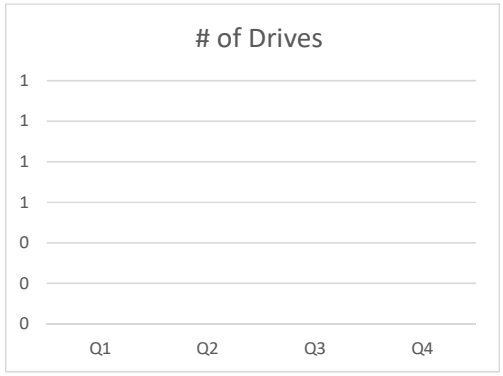
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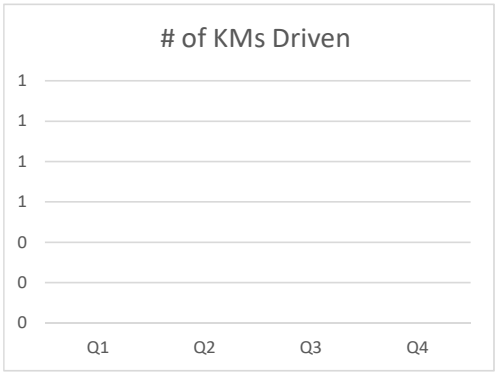
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Transportation Reporting - 2019

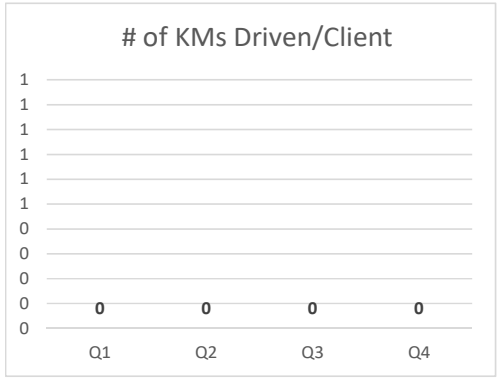
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GRAPHS (To Date)











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XXXX Frontenac Community Services

Transportation Reporting - 2019

8-Oct-19

FRONTENAC

Report 2019-117

Council Information Report

To: Warden and Council

From: Kelly J. Pender, Chief Administrative Officer

Prepared by: Kathie Shaw, Senior Financial Analyst

Date of meeting: October 16, 2019

Re: Corporate Services – Asset Condition Assessment

Recommendation

This report is for information purposes only.

Background

During the 2015 budget deliberations, Council approved an annual allocation of $5,000 to the County Operations Reserve to fund asset condition assessments every 5 years for the County of Frontenac.

In 2018, the Federation of Canadian Municipalities (FCM) offered funding through the Municipal Asset Management Program (MAMP) to assist with the development of asset management plans and infrastructure investment decisions. In Report 2018-086, Corporate Services – Federation of Canadian Municipalities Municipal Asset Management Program Funding, Council approved the application to the FCM MAMP for the maximum funding of $50,000. FCM provides funding for up to 80% of eligible costs with remaining funds to come from the County Operations Reserve. The County was successful in this application for the full amount of $50,000 as notified in late 2018.

The funds have been used to assess the condition of the following facilities:

- Fairmount Home building
- Old House building
- Ambulance stations in Sydenham, Robertsville, Parham, Palace Road, and Wolfe Island
- Howe Island Ferry building
- Parking lots and laneways for all sites
- The bridges on the K&P Trail

Request for Proposal 2019-010 for Asset Condition Assessment was issued in April 2019. Candidates were evaluated on their written proposal and in-person interviews with the successful candidate being J. L. Richards & Associates Limited (JLR).

In addition to their expertise, JLR used on-site inspections and discussions with relevant staff to document the present condition, recommend corrective actions for observed deficiencies in the next ten years, and provided high level cost estimates for corrective actions.

The JLR assessment, presented in Appendix A, B, and C to this Council report, include a written report, detailed inventory tables, and photographs to evaluate the components of the County facilities in regards to condition, life expectancy, life remaining, and estimated repair and replacement costs. The categories reviewed for each facility, as presented in the final table in Appendix B, are as follows.

Class

- Architectural and Structural
- HVAC
- Plumbing
- Elevators
- Parking Lots/Lane Ways

Asset

- Building Structure
- Building Envelope
- Roof
- Building Interior
- Emergency Power System

Attribute

- Exterior Walls
- Roof Assembly
- Slab on Grade
- Transformers
- Generator

Bridge Assessment

- The K&P Bridge assessment is presented in Appendix D as a separate report in a format to meet Ontario Structure Inspection Manual (OSIM) biennial reporting requirements. The objective of these bridge assessments was to determine the general condition of each structure's elements, and to make general recommendations for repair, maintenance and/or rehabilitation, for any observed deficiencies and to provide estimated costs for repairs.

Comment

The following table summarizes the estimated costs for each facility. Detailed information can be found in the report and tables in the Appendix.

Facility	Estimated Repair or Replacement Cost & Associated Timeframe			
	Immediate	0 to 5 Years	5 to 10 Years	Total Cost
Fairmount Home	$ 18,950	$ 1,208,075	$ 2,363,100	$ 3,590,125
Administration Building (Old House)	$ 5,000	$ 110,200	$ 149,750	$ 264,950
Palace Road Ambulance Base	$ 2,000	$ 20,000	$ 74,000	$ 96,000
Sydenham Ambulance Base		$ 1,648	$ 15,000	$ 16,648
Robertsville Ambulance Base			$ 2,200	$ 2,200
Wolfe Island Ambulance Base	$ 2,750		$ 5,600	$ 8,350
Parham Ambulance Base	$ 3,500	$ 10,000	$ 17,700	$ 31,200
Fairmount Home - Paramedic Offices		$ 34,307		$ 34,307
Howe Island Ferry	$ 3,500	$ 10,300	$ 3,300	$ 17,100
K & P Trail Bridges	$ 3,300	$ 50,000	$ 15,000	$ 68,300
Totals	$ 39,000	$ 1,444,530	$ 2,645,650	$ 4,129,180

Strategic Priorities Implications

Priority 2 – Explore new funding and invest in infrastructure.

The 2019 Asset Condition Assessment report will be a foundation to “finalize plans and financing to replace/construct/renovate aging County buildings”, including the Administration building (Old House), Fairmount Home and the Paramedics’ facilities. Economic Development strategic priorities include attracting more visits to the County and the evaluation of the K&P Trail bridges will focus repairs/rehabilitation, where they are needed to maintain the Trail as a viable tourist route.

Organizations, Departments and Individuals Consulted and/or Affected

Susan Brant, Director of Corporate Services/Treasurer
Alex Lemieux, Deputy Treasurer
Chris McBain, Superintendent Logistics, Frontenac Paramedics
Tom Mercer, Manager of Environmental Services, Fairmount Home

The County of Frontenac Asset Condition Assessment

Building Condition Assessment Report

September 2019

Prepared for:

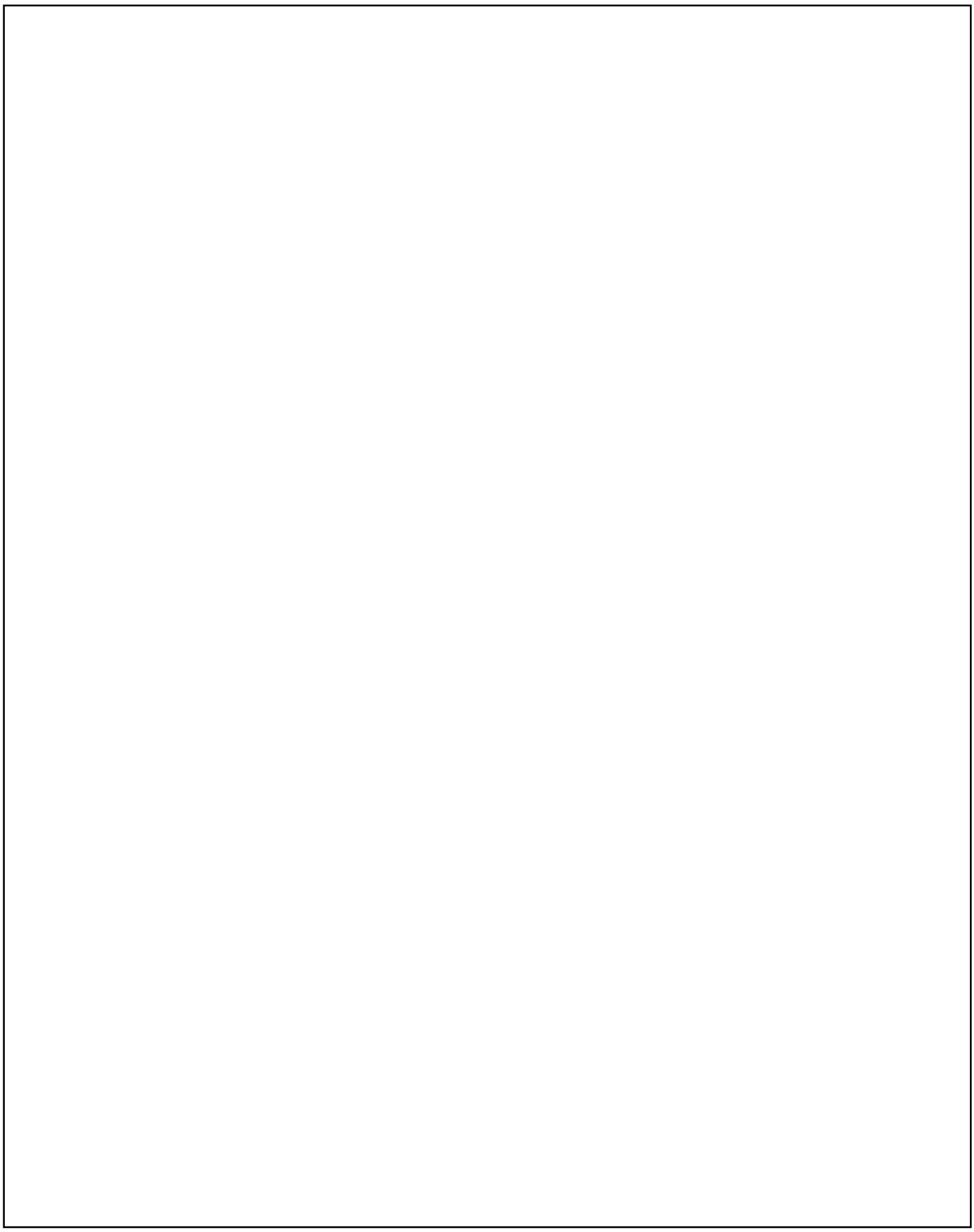
THE COUNTY OF FRONTENAC
2069 Battersea Rod
Glenburnie, ON
K0H 1S0

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED
203-863 Princess Street
Kingston, ON
K7L 5N4
Tel: 613-544-1424
Fax: 613-544-5679

JLR No.: 28833-000.1

J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS



Revision History

Rev. #	Date	Description	Distribution
01	10-03-2019	Corrections to Math and correction of minor typographical errors.	Kathie Shaw CPA, CGA Senior Financial Analyst Corporate Services County of Frontenac

JLR Review

Prepared by:



Jared Sunderland, M.Arch., OAA
Architect

Prepared by:



Paulo Escudero, P.Eng.
Mechanical Engineer

Prepared by:



Steve Saxon, P.Eng.
Senior Civil Engineer

Prepared by:



Brennan McGurn, P.Eng.
Electrical Engineer

Prepared by:



Cory Dyer, P.Eng.
Structural Engineer

Client Review

Reviewed by:

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Appendix B Reference Photographs

1.0 INTRODUCTION

The County of Frontenac (The County) initiated an RFP in May 2019 to procure consultant services to carry out a Building Condition Assessment (BCA) of various county owned buildings and foot bridges with the intent to refine their long term asset management plan that manages the life cycle and performance of the County's assets. J.L. Richards & Associates Limited (JLR) was retained by The County in June, 2019 to provide professional architectural and engineering services to complete a BCA of buildings and bridges identified in their RFP.

The County is a rural upper tier municipality located in Eastern Ontario extending from the islands south of the City of Kingston to north of Highway 7. The total population of the County is approximately 26,677 with an area of approximately 4,000 square kilometres, including the Townships of North Frontenac, Central Frontenac, South Frontenac, and Frontenac Islands.

The County manages the operations of the Fairmount Home (long term care facility), Frontenac Paramedic Services, the Frontenac-Howe Islander Ferry and is involved in recreational trail development. The following is a list of the County facilities related to these operations that were assessed:

- Fairmount Home (Long term care facility)
- County of Frontenac Administrative Office Building (Old House)
- Paramedic Bases – 5 Bases
    - Palace Rd Ambulance Base
    - Sydenham Ambulance Base
    - Wolfe Island Ambulance Base
    - Robertsville Ambulance Base
    - Parham Ambulance Base
- Howe Island Ferry Building
- K&P Trail – 5 Bridges
    - Millhaven Creek Bridge
    - Hardwood Creek Bridge
    - White Creek Bridge
    - Elbow Creek Bridge
    - Fish Creek Bridge

Refer to Figure 1, 2 and 3 for general location plans of assessed buildings.

As part of the BCA process, key members of the JLR project team undertook a condition assessment of the listed buildings and bridges over the months of July and August 2019 in order to establish the bridges' and facilities' existing conditions and identify replacement and/or repair needs. The purpose of this Report is to summarize key findings from the condition assessment, which will be used to inform The County's long term asset management plan.

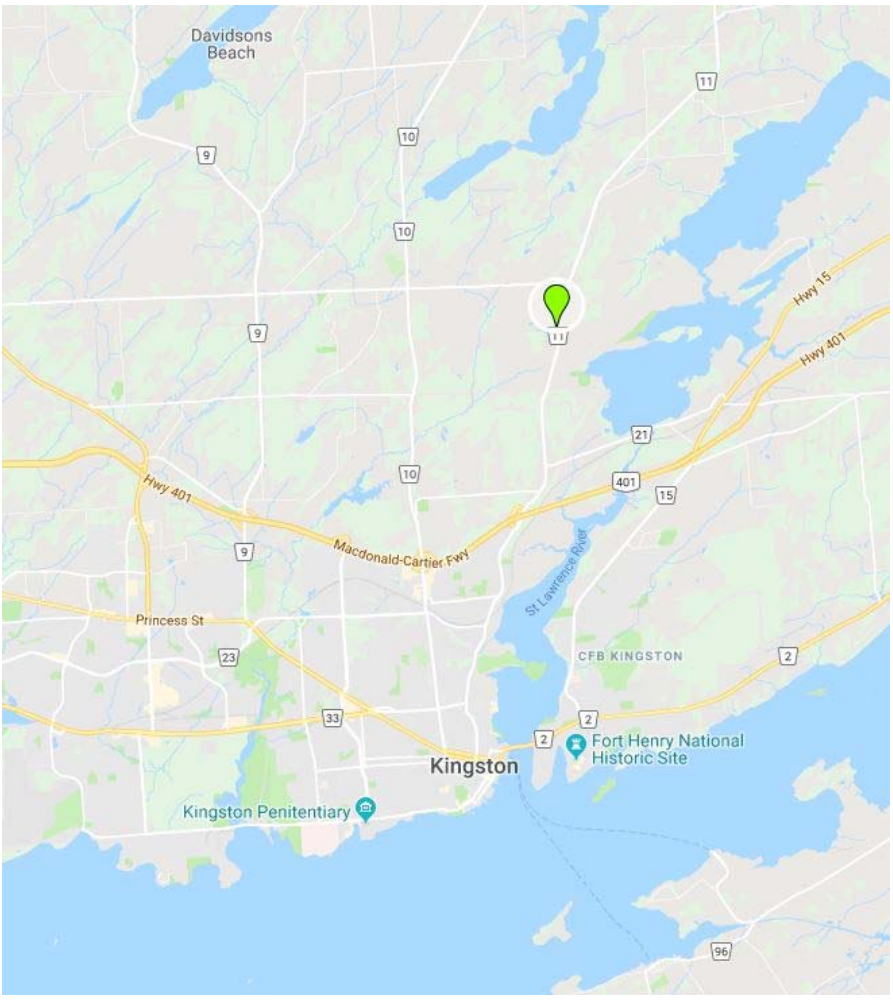


Figure 1: Location Plan – Location of Fairmount Home and County of Frontenac Administrative Office Building (Old House)

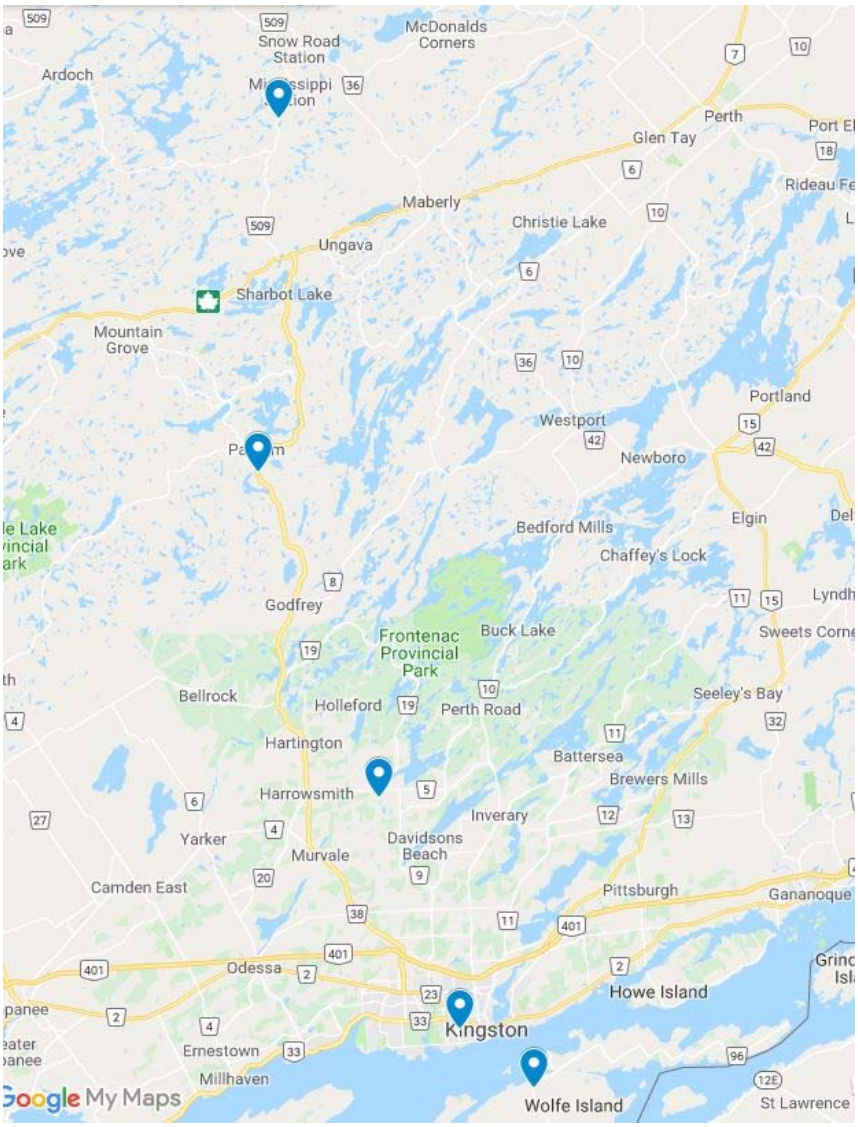


Figure 2: Location Plan – General Locations of Listed Paramedic Bases

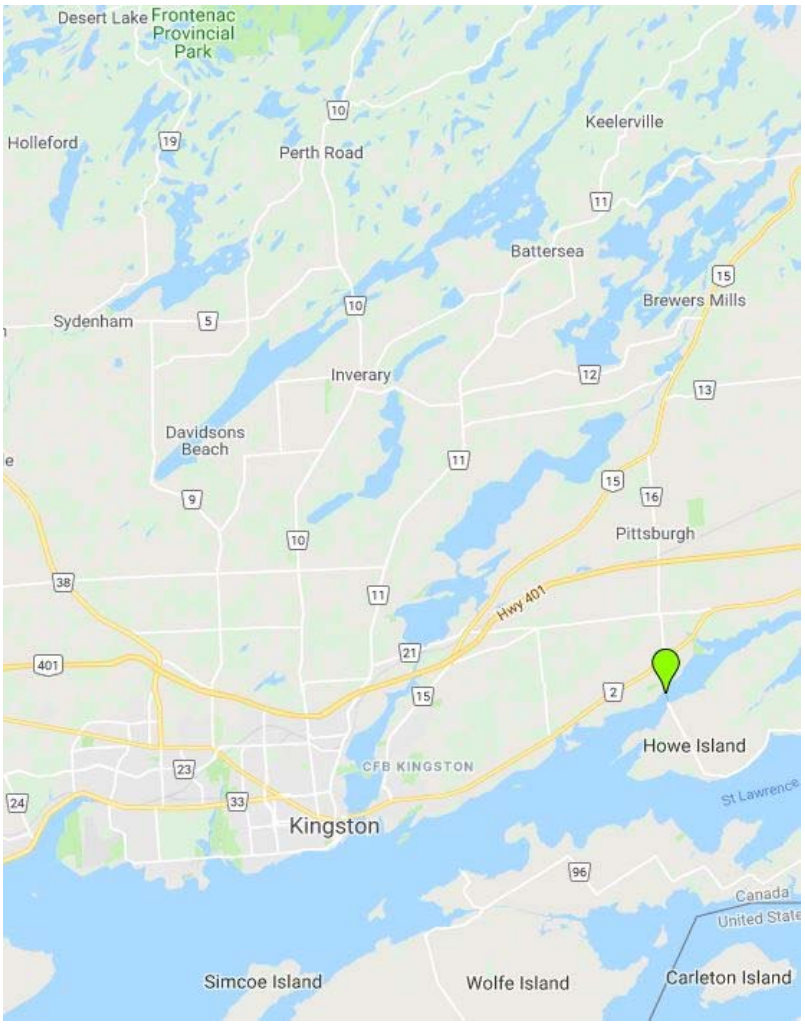


Figure 3: Location Plan - General Location of Howe Island Ferry Building

2.0 GENERAL METHODOLOGY, LIMITATIONS, AND ASSUMPTIONS

2.1 Report Objectives

The objectives of this Report are to:

- Summarize the condition assessment methodology;
- Report on significant findings from the condition assessment;
- Identify possible methods of rehabilitations, upgrades, replacement, and/or maintenance.

It is important to note that this Report is only intended as a general summary based on site observations and that a full building and electrical code review has not been included.

2.2 Review of Background Information

Available background documents, including previous 2015 BCA for Fairmount Home, and select as built drawings, were reviewed. It is noted that existing drawings for the 5 Paramedic stations were unavailable for review at the time of this Report. The following is a summary of background documents reviewed:

- Fairmount Home – Electrical/Mechanical/Architectural as-built drawings (2004) and previous 2015 BCA.
- Administration Building (Old House) – Previous 2015 BCA.
- K&P Trial Bridges – Construction Drawings and 2017 OSIM Reports.
- Palace Road Paramedic Station - 2015 BCA

2.3 Preparation of Inspection Materials

Before conducting the site visits, the JLR Team developed an inspection and assessment data collection system which included working forms for each team member to complete while on-site. Inspection methodology and assessment criteria were also established and a brief team meeting was held before the site visit to ensure each team member thoroughly understood data collection requirements.

2.4 Site Inspection

Detailed visual on-site multi-discipline inspections were undertaken (various locations) on July 29th 2019 and August 1st 2019 at the Paramedic Stations and Howe Island Ferry Building, and August 12th 2019 and August 19th 2019 at the Fairmount Home and County Administration Building, located at 2069 Battersea Rd, Glenburnie. Access to the sites and guidance was provided by Chris McBain from Frontenac Paramedics and Tom Mercer from the County of Frontenac. The inspections completed and data obtained were limited to visual observations and discussion with staff. No special lift devices or ladders were mobilized during the assignment and no destructive or exploratory testing or inspection was carried out.

Detailed visual on-site structural inspections were undertaken on August 7th and August 8th of listed K&P Trial Bridges. The inspections completed and data obtained were limited to visual observations.

2.5 Review of Collected Data

Following the site inspections, a review and analysis of the gathered data was undertaken. Each engineering discipline summarized the condition of each major building/equipment component and identified potential options and opinions of probable costs to renew and/or replace certain items.

2.6 Limitations

The information provided in this Report is based primarily on visual inspections with non-destructive testing.

The conclusions and recommendations in this Report are based on information determined and collected at the time that the inspections were carried out. Additional deficiencies that were not detected or anticipated at the time of the investigation may be encountered during future modifications and/or upgrades. Should conditions change in any aspect at any of the facilities assessed, the conclusions and recommendations in this Report may require modifications.

The information contained in this Report reflects the project team's judgment and interpretation in light of the information available at the time of preparation. Any use that a third party makes of this document, or any reliance on decisions that a third party may make based on this document, is the sole responsibility of the third party.

2.7 Assumptions

Due to the nature of the site and the systems and engineering disciplines involved, assumptions were made when undertaking the condition assessment. Some of the assumptions made include:

- Background information provided is assumed to accurately depict the physical attributes of the site;
- The assessments were based strictly on visual examinations of readily accessible components and assemblies. No finishes were removed and no destructive or other specialty testing techniques were used;
- In some cases where the age of older equipment or assets were unknown, it was assumed to be original to the facility construction or otherwise determined based on discussions with The County;
- The assessment of the condition rating of a system is not exact. It is based on limited information and influenced by factors that may occur at some future date. Certain replacements may be advanced or deferred by the County subject to other considerations (i.e. financial, coordination with related work, incorporation into facility-wide upgrades, etc.);
- The assessment of the condition of the facility does not include review or identification of potential Ontario Building Code non-compliances or general health and safety issues that may fall under the applicable Ontario Regulations and County of Frontenac policies and practices (e.g., working at heights requirements, rooftop fall arrest anchors, minimum guard heights);
- The Opinions of Probable Costs for replacement of the various items are order-of-magnitude only and are based on a Class ‘D’ estimate, generally defined as follows:
    - Work Definition: A description of the intended solutions with such supporting documentation as is available (definition of project typically in the order of 1% to 5%).
    - Intended Purpose: Preliminary planning and budgeting
    - Level of Effort: Limited and expected accuracy could range from -30% to +30%.
    - Opinion of Probable Costs: Completed using 2019-dollar value; and

- All costs, including those for future years, are expressed in 2019 dollars. If these costs are to be used for long-range cash-flow projections, the implications for potential future trends of inflation and interest must be applied accordingly.

For this type of infrastructure, it is typically recommended that a condition assessment be undertaken approximately every five years in order to ensure that information presented is updated accordingly and to account for continually changing conditions.

3.0 EVALUATION METHODOLOGY

3.1 Quality Assurance/Quality Control Approach

The project team developed an overall evaluation approach to establish consistency in reporting and to provide the County with a tool that could be used for inventory management and prioritization of identified needs in the future. The template used for this project divides the components of the assessed County facilities into asset classifications as generally illustrated in Table 1. This table demonstrates the hierarchical structure and does not include all components of the system. The full and completed table, found in Appendix A, provides a description, location, manufacturer, year of installation, estimated remaining life, replacement cost, and condition for each attribute of each asset throughout the facility.

By utilizing this organizational hierarchy, the County can easily view asset classification within each facility, to a specific asset and attribute within the facility. Additionally, it addresses the condition, any identified need, the cost of implementation of the identified needs, and the proposed year of implementation for each attribute of each asset throughout each facility. The data collected is intended to provide a summary of inventory and valuation at the facility as well as act to aid the County's ongoing asset management procedures.

Table 1: Example Categories in Hierarchical Structure

Level 1: Facility	Level 2: Class
• Fairmount Home • County of Frontenac Administration Office Building • Palace Road Ambulance Base • Sydenham Ambulance Base • Etc.	• Architectural and Structural • HVAC • Plumbing • Elevators • Parking Lots/Lane Ways • Etc.
Level 3: Asset	**Level 4: Attribute**
• Building Structure • Building Envelope • Roof • Building Interior • Emergency Power System • Etc.	• Exterior Walls • Roof Assembly • Slab on Grade • Transformers • Generator • Etc.

3.2 Condition Rating System

Clear asset evaluation criteria are essential for developing assessment data, as several inspection staff work to collect a single comprehensive and consistent set of information for each asset. The on-site assessment of the facility includes a confirmation of asset/attribute inventory and an assignment of a "condition rating" based on the visually observed physical condition. The physical condition rate scale is shown with definition in Table 2: Condition Rating Criteria, below.

Table 2: Condition Rating System

Grade	Condition	Replacement Time Frame	Description
1	Unacceptable	Immediate	• Failed or failure imminent. Immediate need to replace most or all of attribute. Hazards exist or attribute cannot be serviced or operated without risk to personnel/public/environment.
2	Poor	0-5 Years	• Poor physical condition – heavy wear and tear, failure is likely in short term. Likely need to replace most or all of attribute within 5 years. No immediate risk, but work required within 5 years to ensure attribute remains operational.
3	Acceptable	5-10 Years	• Acceptable physical condition – moderate wear and tear, moderate risk of physical failure. Failure unlikely within next 5 years but further deterioration likely and major rehabilitation/replacement required within next 10 years. Minor components or isolated sections of the attribute may need replacement or repair now, but attribute still functions safely at adequate level of service.
4	Fair	10-20 Years	• Acceptable physical condition – minor wear and tear, minimum risk of physical failure. No substantial deterioration anticipated over the next 5-10 years.
5	Good	20+ Years	• Acceptable physical condition – minor wear and tear, low risk of physical failure. No substantial deterioration anticipated over the next 10-15 years

3.3 Estimated Remaining Life

The Estimated Remaining Life (ERL) of an attribute is the period from the observed point in time to the time that the attribute may require replacement based on its age.

The ERL is strongly correlated with the attribute's condition rating. Table 3 below outlines the expected or theoretical design life of each asset class used to calculate the ERL. The life expectancies shown are 'typical' expectancy for the reviewed facilities. This table and corresponding ERL is used only as a guideline in establishing the condition rating since the function of an attribute in the overall system, the initial system quality, and maintenance attention given to an attribute over its life cycle plays an important role in establishing its condition. In some instances, the actual life cycle of an attribute will greatly exceed

its predicted life cycle at the time of initial construction/installation. In other instances, the actual remaining life of an attribute may be less than was initially predicted due to changes in operational parameters, lack of regular preventative maintenance, or faulty components. The final condition rating is based primarily on a review of the attribute condition from visual observations, discussions with operations staff regarding the maintenance program, and a review of background information with consideration to current condition, performance, and expected future use. The ERL is not to be used in isolation to determine the timing for repair and/or replacement of a particular attribute; however, if the attribute could not be fully reviewed (e.g., below grade structures), the attribute was assigned a predicted condition rating based on its age.

Table 3: Expected Useful Life Estimations for Each Asset Class

Asset Class	Expected Life (years)	General Description
Architectural and Structural	60	Large scale structural components, concrete works.
Building Electrical	25-40	Conduit, cabling, cable trays, step down transformers, junction boxes, receptacles, lighting, electrical appurtenances, etc.
Building Mechanical	20-35	Building systems for heating, ventilating, and air conditioning including hot water systems and boilers, plumbing systems, and fixtures.

4.0 FAIRMOUNT HOME CONDITION ASSESSMENT

4.1 Overview

The "Fairmount Home" is a long-term care home with 128 suites located at 2069 Battersea Road in Glenburnie, Ontario. The building is part of the larger Fairmount complex that includes the "Old House", "Garage and Out Buildings": a residential home converted into an office and two smaller buildings currently used as an equipment garage and storage shed.

The Fairmount Home consists of multiple wings connected in a rectangular fashion forming an inner courtyard with additional wings extending to the north and northwest corners. There is an Auditorium building connected to the northeast corner. The Old House is connected to the east of the south wing.

Table 4 provides a brief summary of historical upgrades undertaken at the Fairmount Home since its original construction in 1968.

Table 4: Summary of Historical Fairmount Home Upgrades

Year	Description of Upgrade
1968	Original building construction
1972	Original auditorium construction
2004	Renovation and expansion to the original building
2014	Auditorium rebuilt

The following sections summarize the findings of the condition assessment review for the above-referenced facility, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

4.2 Structural / Architectural

- The structures are a combination steel and concrete framing. The foundations are cast-in-place concrete. There are three balconies: one off each elevation of the east wing, and one off the west elevation of the west wing. There is also a terrace off the north end of the north wing.

- The exterior walls are primarily clad with brick masonry and shingled mansards. The Auditorium is clad with prefabricated fiberglass panels. Windows are typically punched, vinyl framed windows with double-glazed vision glass. The building is protected by a combination of flat and sloped roofing assemblies.

- The Fairmount Home building has a unique layout and consists of a variety of structural systems. The following is a brief summary of the structural systems taken from past reports and existing drawings:

- 1968 South Wing
    - Exterior foundation walls with reinforced concrete strip footings, and interior reinforced concrete piers with spread footings
    - Reinforced concrete slab-on-grade with concrete topping
    - Reinforced concrete stairwells
    - Reinforced concrete slabs supported by metal deck pans and open web steel joists (OWSJ's) supported by either steel beams and columns, or exterior concrete block walls.

- 2004 Addition
  - Reinforced concrete strip footings supporting foundation walls, and reinforced concrete spread footings supporting piers
  - Reinforced concrete slab-on-grade
  - Reinforced concrete stairwells and elevator shafts
  - Ground floor slab (not on grade) consists of hollow core precast slabs supported on steel beams and columns or reinforced concrete walls
  - Second floor and roof levels consist of steel deck on OWSJ's supported by steel beams and columns. Additionally, the second-floor slab has a concrete topping.

- 2014 Auditorium Addition
  - Reinforced concrete strip footings supporting foundation walls
  - Reinforced concrete ground floor slab on grade
  - The superstructure for the 2014 addition consists of steel roof decking on OWSJ's supported by steel beams and columns. The structure of the existing auditorium appears to be of similar construction to the new addition however structural drawings of the original structure were not provided.

- No evidence of building settlement or other poor foundation performance was observed or reported by regular building occupants. The foundation is mostly below grade or covered, however what is observable appears to be in generally good condition. Localized areas at the auditorium and garbage loading bays are in fair to poor condition due to major rusting and deterioration (refer to Photo 4.2.1 and 4.2.2). Repair work is required to restore these areas to an acceptable condition.

- The structure is a two-storey building divided into multiple wings with an additional "level 0" below the south section of the building. The level 0 walls are mainly composed of load bearing concrete masonry units which are generally in good condition. The floors, walls and ceilings throughout the rest of building are finished, however select areas such as mechanical and electrical rooms were exposed and allowed for observation of the condition of the structure. In general, the building structure appeared to be in good condition where observable; this is assumed to be representative of the balance. Some minor exceptions are detailed in the Structural Inventory spreadsheet.

- Various exterior concrete slabs on grade are generally in good to fair condition. A concrete retaining wall structure is located west of the building around a large generator unit. These walls are in good to fair condition with minor wear. The steel railing around the top of the walls is in fair condition with minor rusting. Concrete bollards with steel covers are located around the generator unit and at either end of a driveway and are in good condition. Concrete pole bases are located throughout the property supporting flag poles and light posts. These concrete bases are in good to fair condition with minor to moderate wear.

- The brick masonry at the greenhouse room on the east side of the building is in poor condition as flashing at base of Greenhouse glazing only covers half of precast concrete sill resulting in staining and deterioration of the brick masonry base wall and deterioration at sill joints. It is recommended that the masonry be repaired/repointed and that new flashing be installed that will provide complete coverage of the sill. It is recommended these repairs occur in the immediate future. (Refer to Photo 4.2.3 and Photo 4.2.4).

- The exterior brick masonry of the 2004 addition appears to be in good condition overall but has some localized deterioration at the porch on the west side of the building likely due to inadequate

flashing at the drainage scuppers. It is recommended that the deteriorating masonry and scupper be investigated, cleaned, repaired/repointed and flashing be properly installed to ensure water runoff does not travel down the face or cavity of the masonry. It is also recommended the sloped concrete drainage plane below the patio stones be cleaned as part of regular maintenance to ensure proper drainage. (Refer to Photo 4.2.5 and Photo 4.2.6).

- The exterior vinyl windows throughout the residence floor units appear to be in good condition with no obvious issues. It is recommended replacement of all vinyl windows be budgeted for within the next ten years base on age. (Refer to Photo 4.2.7 and Photo 4.2.8)

- The full height wood framed window located at Stairwell S2 at the south elevation of the south wing is over 50 years old and show wear though no failures were reported or observed. Generally, paint is peeling and frame is showing general wear on the exterior. It is anticipated window replacement will be desired within the next ten years for aesthetics and improved performance so it is recommended this replacement be budgeted for. (Refer to Photo 4.2.9, Photo 4.2.10 and Photo 4.2.11)

- The metal shingles at the mansard of the 1968 Wing appears to be in acceptable condition but does have localized areas of peeling paint and fading of colour. It is recommended the Metal Shingles on the Mansard Roof be repainted for preventative maintenance. (Refer to Photo 4.2.12)

- The asphalt shingles at the mansard roof of the 2004 wing appear to be in acceptable condition on the main steeper plane but the shingles on the dormer windows are showing degranulation and curling likely due the low slope of these areas and resulting increase exposure to sun. It is recommended that shingles be replaced at all dormers in the immediate future. It is also recommended that replacement of shingles on main steeper plane be budgeted for within the next ten years due to age. (Refer to Photo 4.2.13, Photo 4.2.14 and Photo 4.2.15)

- The asphalt shingles on the sloped roof over the central portion of the east wind appears to be in acceptable condition for their age. Some degranulation was present. It is recommended shingles will require replacement within ten years based on condition and effective life expectancy. The South facing slope of this central portion shows more advanced aging which is to be expected with the south exposure. It is recommended this south side be monitored and repaired locally as part of general maintenance until replacement of all shingles occurs. (Refer to Photo 4.2.16).

- The flat roof areas at the 1968 wing and 2004 addition appear to be in acceptable condition with localized areas of mild degranulation and localized bubbling observed at west side of 1968 wing. It is recommended that flat roofing be replaced within 5-10 years based on life expectancy. Areas included in this replacement would include the 1968 wing, 2004 addition, and the link to the Auditorium (Refer to Photo 4.2.17 and Photo 4.2.18).

- Overall the sheet vinyl flooring within residence suites is in fair condition. It was noted sheet vinyl flooring in ground floor suite rooms over slab on grade have over time started to shrink and pull away at the seams, and the appropriate backing supports have not been installed at the floor bases resulting in the potential for holes to be punched through. It was reported that replacement of the floors in these suites is being carried out on a room by room basis with approximately 20 rooms remaining. It is recommended the sheet flooring in the remaining ground suites continue to be replaced over the next 10 years. It is also recommended replacement of sheet flooring within suites other than ground floor slab on grade suites be budgeted for due to age.

- The carpet flooring in the residence corridors and shared spaces is in generally acceptable condition, but showing signs of wear and generally at the end of its life expectancy. It is recommended carpet flooring be replaced with LVT flooring within the next 5 years to be in keeping with current healthcare facility standards that are tending to move away from the use of carpeted surfaces.

- The vinyl tile in the basement corridor appears in good condition with no obvious issues beyond regular wear. It is recommended basement vinyl tile be replaced within 10 years based on effective life remaining and existing condition.

- Select location throughout the building have safety slip resistant sheet vinyl flooring that appears in poor to acceptable condition. It is recommended this flooring be replaced within 5 years due to age and associated wear. Basement level: Kitchen and kitchen support areas, various utility rooms. Residence levels: Kitchens and dining service areas.

- The carpet in the Paramedic Office at the basement level appears in poor condition showing wear and staining due to age. It is recommended this carpet be replaced within 5 years base on condition and age.

4.3 HVAC

- The main heating plant is located in the basement mechanical room and consists of three hot water boilers, expansion tanks, air separators, one set of duplex inline hydronic pumps serving the old house and south wing, another set of duplex inline pumps serving the remainder of the facility, and a chemical treatment system. The boilers have been replaced within the last 5 years and all components including the venting are in good condition. Maintenance staff have reported good operation of these boilers with the exception of a design issue with the burner support. Regular maintenance on pump seals have been performed and the pumps are operating well. A spare of each type of pump is kept in storage which reduces the implications if a pump were to fail. There was appreciable rust on some of the pump flanges which may be due to the high humidity levels in the room. The remainder of the hydronic components including the expansion tank and air separator are in good condition. Surface rust was noted on several other surfaces and equipment in the mechanical room which typically suggests elevated humidity levels. Condensation on cold surfaces should be prevented through additional pipe insulation. Additional ventilation or dehumidification could also be provided in the mechanical room to address this issue.

- Two steam boilers in the mechanical room generate humidification steam for the rooftop units. These units have not been in use due to insufficient humidity control and leaking distribution steam traps. It is recommended to decommission these units if not in use and implement alternative solutions for winter humidification to maintain occupant comfort (Refer to Photo 4.3.1).

- Four Trane rooftop air handling units provide tempered air (heated or cooled) to the corridors and common spaces in the occupant areas. The return air from the patient rooms is returned to one part of the unit with a heat recovery section which recovers heating or cooling from these air streams to partially temper the outdoor air. The remainder of the heating and cooling is provided through a glycol loop which is heated through a heat exchanger using boiler water or cooled through a DX refrigerant system. The refrigerant system utilizes R-22 refrigerant which will be effectively phased out in Canada under the Montreal protocol by 2020. This will make future repairs and recharging prohibitively costly and eventually unachievable. Regular maintenance activities have been performed on the unit including belt, sheave, and bearing replacements.

Maintenance staff have indicated that the units are operating acceptably but have issues with the damper controls which are disconnected and should be serviced. The temperature control for these units is also not adjustable from the building automation system which should be addressed to promote better occupant comfort measures. The rooftop units deliver a constant supply of air to the common spaces which is exhausted through each occupant room. Occupants have the option to enable additional exhaust in their rooms through a timed pushbutton on the thermostat. Several of these exhaust dampers have malfunctioning actuators and should be repaired. It was noted the additional exhaust function is not used frequently by occupants. The typical life expectancy of these units can vary from 15 to 25 years. Due to the good condition of the units, replacement should be expected within the next 10 years. Note additional costs will be incurred if units require recharging with R-22 refrigerant before replacement. There are also the environmental implications for an R-22 leak which should be considered (Refer to Photos 4.3.2, 4.3.3, 4.3.4.

- RTU-6 serves the paramedic office area and is heated through a gas fired heating section and cooled through an integral DX refrigeration system. The unit has an economizer section to utilize free cooling during shoulder seasons. The unit is in good condition and has been reported to be operating well. The refrigerant used is R-22 which shares the same concerns as the other rooftop units. The unit was installed in 2007 and the typical life expectancy of these units can vary from 15 to 25 years. Due to the good condition of the units, replacement should be expected within 10 years however additional costs will be incurred if units require recharging with R-22 refrigerant before replacement. There are also the environmental implications for an R-22 leak which should be considered.

- AHU-5 serves the kitchen and laundry areas as a makeup air unit complete with a gas fired heating section and DX cooling. The refrigerant used is R-22 which shares the same concerns as the other rooftop units. The condition is similar to the other rooftop units and shares the same recommendation to defer unit replacement to within 10 years based on condition.

- All rooftop units are provided with p-traps to drain the condensate from the cooling coil. At the time of the review, all traps were all open upstream of the trap which no longer provides a trap seal. Since the drains are located on the suction side of the supply fan, the fan will draw in outdoor air and reduce the effectiveness of the cooling. Furthermore, as air is drawn in through the pipe, it reduces the amount of condensate that can be discharged which was observed to be backing up in the drain pan. This can cause condensate carry over in the airstream and potential drain pan overflow which can have similar implications as a roof water leak. These p traps should all be restored by capping the upstream “tee” to ensure a trap seal (Refer to Photo 4.3.5).

- There are four centrifugal up blast fans located on the roof which exhaust the dishwashers and kitchen exhaust hood. The kitchen exhaust fan was noted to be vibrating excessively which may be due to a damaged shaft. The unit appeared to be in good condition however, the internals of the fan were not accessible. Given the environment the fan is subject to, a reduced service life can be expected. The fan is 15 years old and should be considered for replacement (Refer to Photo 4.3.6).

- The rooftop natural gas piping is corroded in spots and should be repainted. There is a gas shut off valve on the roof which has an excessively corroded handle and should be replaced (Refer to Photo 4.3.7).

- The Auditorium is ventilated through an interior Trane multizone air handling unit. The unit has a hydronic heating section and DX cooling through a remote condenser. Maintenance staff have

indicated issues with leaking zone dampers however generally the unit is operating well after 16 years of service. These multizone units have higher service lives than rooftop units in the range of 30 years. It is recommended to keep the unit in service with regular maintenance activities (Refer to Photo 4.3.8).

- Various split system air conditioning units are provided throughout the facility for space cooling. The general condition of these units is good however these units generally have expected service lives in the range of 15-20 years. Considering these units are maintainable with replaceable components it is recommended to retain and service the units until a significant failure arises. Some of the condenser fins were dirty and plugged which should be cleaned to promote better condenser efficiency and operation (Refer to Photo 4.3.9).

- Four dedicated split system cooling systems are provided for the two walk in fridges, freezer, and garbage room air conditioning system. The condensers for these systems are located outdoors at grade. The equipment is approaching the end of it's expected service life and will likely require replacement within the next 5 years (Refer to Photo 4.3.10).

- Heating in the building is provided through either perimeter baseboard radiators on Levels 0 and 1, cabinet unit heaters at entrances, or radiant ceiling panels on Level 2. No issues were indicated with these systems and typically operate with a service life in excess of 25 years.

- Wall propeller fans are provided in electrical rooms for heat exhaust and are in good condition. There did not appear to be cooling or ventilation for communications rooms which could be added to improve equipment performance and life expectancy if high room temperatures are encountered.

- Two oxygen cylinder filling and storage rooms are located on Levels 1 and 2. The Ontario building code has specific requirements for ventilation and fire separations for these rooms in care facilities. It is recommended the County engage a qualified party to review and implement these requirements.

4.4 Plumbing

- Domestic cold water is fed from onsite wells into one water reservoir for domestic water use and another for fire water. The domestic water is treated through a chlorinated water treatment system and water softener. A Bell & Gossett water booster skid distributes and boosts the water pressure throughout the facility. One primary water softener supplies softened water to the building, kitchen & laundry, and the reverse osmosis systems. Maintenance staff have indicated the operation of the water softener is no longer satisfactory and should be replaced. The water softener system serving the kitchen and laundry is also no longer satisfactory and is undergoing replacement. The water booster system has 1 offline pump which has priming issues due to the design of the skid system. There is surface rust on both pump casing likely due to the room humidity levels. The facility is reported to operate well without the third pump. A replacement pump could be considered to be added as a backup in case one of the other two pumps requires replacement. Maintenance staff have indicated there have been pinhole leaks in the piping system in the past but have significantly improved with the water source from the new well (Refer to Photo 4.4.1).

- Domestic hot water is generated through two 49ºC boilers serving the building fixtures and two 60ºC boilers serving the kitchens and laundry. Each system has two 200-gallon storage tanks, circulating pumps, and miscellaneous components. Two of the 49ºC boilers and one 60ºC boiler have been replaced in the last 5 years and are in good condition. The 4th boiler is reported to be

operating in a reasonable condition with a replaced heat exchanger section however is approaching the end of it's service life and should be replaced. The storage tanks appear in good condition and can have an extended service life in excess of 25 years if maintained well (yearly sediment draining, anode rod replacement etc.). A Bell & Gossett domestic hot water recirculation pump in the basement shows signs of a previous leak and substantial corrosion at the pump casing mating flange and should be replaced. Each domestic hot water boiler has an individual fractional horsepower circulating pump which appear to have been replaced with the domestic hot water boiler replacements. It is recommended to replace the fourth circulating pump when the 4th boiler is replaced due to its age and condition (Refer to Photo 4.4.2, Photo 4.4.3, Photo 4.4.4, Photo 4.4.5).

- A fire pump system is located in the basement to provide water to sprinklers and fire hose cabinets. All fire hose cabinets in the facility appear to be in good condition. The fire pumps are tested weekly and are in good condition. Due to the low run time and routine testing, these pumps are expected to last much longer than a typical 20-year service life for an inline centrifugal pump.

4.5 Electrical

- Overall, the electrical systems are generally in good condition. Much of the electrical infrastructure was replaced during a renovation in 2004 for the main building and 2014 for the auditorium.

- A pad-mounted 27.6 kV-600/347V 1000 kVA transformer, located at the rear of the facility supplies electricity to the building's main switchboard, Switchboard AAA (refer to Photo 4.5.1).

- The main switchboard, Switchboard AAA, is a Siemens 1200A, 347/600V rated switchboard located in the electrical room S-014 (refer to Photo 4.5.2). Switchboard AAA supplies power to local distribution panels, via dry type transformers, located in the Mechanical Room E-000, Kitchen and electrical closets throughout the building.

- Building electrical power distribution is separated into Normal and Emergency Power. Normal power is supplied from Distribution Panel DP-BEAA1. Emergency Power earmarked loads are supplied from Switchboard AAA under normal circumstances, in the event of a loss of utility power Emergency power is supplied from a 250kW Generac Power Systems generator via an Automatic Transfer Switch, ATS-01 (refer to Photo 4.5.3). A separate transfer switch is utilized specifically for an on-site facility fire pump.

- A 600-120/208V transformer is located in each electrical closet to step the 600V, supplied from Switchboard AAA, down to 120/208V for local distribution panel boards which then distribute power to local devices (refer to Photos 4.5.4 and 4.5.5).

- A Photo Voltaic system was installed in 2013 and appears to be in good condition (refer to Photo 4.5.6). The system supplies power to the electrical grid, but it is not used as a supplemental power source for the facility.

- Lighting fixtures appear to be in fair condition, some fixtures require replacement or repaired. The majority of lighting fixtures were installed during renovations in 2004 for the main building and 2014 for the auditorium. Individual bulbs should be replaced as required. Some fluorescent light fixtures are yellowing, to rectify this bulbs and lens should be replaced. An effort to swap out existing fluorescent tubes with LED equivalents has already been initiated by the owner for the majority of 2x4 fixtures.

- During the 2014 renovation two (2) pieces of equipment were installed on the roof top. According to the Ontario Electrical Safety Code (OESC) requires rooftop receptacles to be installed within 7.5m of the rooftop equipment. Currently the receptacles installed for these pieces of equipment are installed are 15A receptacles (refer to Photo 4.5.7). Receptacles and upstream infrastructure should be modified to 20A GFCI equivalent to meet the OESC standards.

- Receptacles in Activity Room S-137 and Maintenance Shop S-010 are within 1.5m of a sink (refer to Photo 4.5.8). According to the Ontario Electrical Safety Code (OESC) receptacles within 1.5m of sinks shall be protected by a ground fault circuit interrupter (GFCI). Receptacles are to be changed to a GFCI receptacle. Cost of changing receptacles is minimal.

- Multiple electrical boxes do not have covers installed. The installation of box covers could be accomplished for a minimal cost (refer to Photo 4.5.9).

- Exit signs appear to be aged and are showing signs of wear. As of January 1, 2014, all new buildings and major renovations are required to install the new “Running Man” Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the “Running Man” signs will be required.

4.6 Elevators

- There are two elevators serving the Fairmount Home; the service elevator in the west wing and the main lobby elevator in the east wing, both understood to have been installed with the 2004 addition. The main lobby elevator was retrofitted in 2013 and the service elevator was retrofitted in 2014. The scope of the retrofit included replacement of control panels and interior/exterior call buttons. Hydraulics were not included in these upgrades. It is understood the elevators are maintained by the manufacturer. Based on age replacement is not expected within a ten-year window. Assessment is based on age alone as specialist review was not requested as part of the scope of work for this assessment.

4.7 Parking Lots / Lane Ways

- Asphalt driveways and parking lots are located around the east, north and west sides of the building. The asphalt is generally in acceptable condition showing moderate to severe cracking in locations. The entrance lane ways and main parking lot have areas in poor condition due to heavier use. A detailed pavement condition assessment of the driveways and parking areas should be undertaken to determine the extent of necessary pavement rehabilitation or replacement. Certain areas appear to require full depth asphalt replacement due to extreme deterioration while other areas may require milling and patching. Other pavement rehabilitation techniques that may be considered include crack sealing or localized patching.

- Concrete sidewalks and curbs are located around the building perimeter and along the edges of the parking lots and driveways. The concrete is generally in good condition with localized areas of cracking and delamination (refer to Photo 4.7.1). Localized repairs should be made to the sidewalks and curbs within the next 10 years.

4.8 Life Safety

- The fire alarm system control panel is a Siemens FireFinder XLS System located in the auditorium. The fire alarm control panel monitors smoke and heat detectors throughout the building. Manual

pull stations are installed near building exits and stairwells. The fire alarm system is in good condition. Siemens regular inspects fire alarm system and will flag issues that must be addressed.

Table 5: Summary of Fairmount Home Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Foundation – Perimeter - Generally good (only some was observable), localized area @ auditorium was rusting. Fair/poor near garbage loading area, localized major rust/deterioration, some repairs required.			$10,000
Exterior Walls – Exterior/2004 Addition - Flashing at base of Greenhouse glazing only covers half of sill resulting in masonry staining and damage at sill joints. Stone Sill requires new flashing to provide complete coverage and repointing of the brick masonry.	$3,000		
Exterior Walls – Exterior/2004 Addition - Investigate, clean, and repair balcony drainage at west balcony. Lack of appropriate flashing at scupper appears to be the cause of deteriorated masonry joints. Re-flashing, masonry repairs and cleaning of debris from underneath patio stones recommended pending investigation.	$8,000		
Exterior Windows – Exterior / Residence Floors - Acceptable - No Obvious Issues. Recommend Budgeting for Replacement due to age.			$400,000
Exterior Windows – Stairwell S2 - Acceptable - Recommend Budgeting for Replacement to improve performance and aesthetics.			$32,400
Roof Assembly – Exterior/1968 Wing - Paint showing wear - Recommend Re-Painting			$25,000
Roof Assembly – Exterior/2004 Addition Mansard Roof - Acceptable - showing acceptable wear for age - Recommend budgeting for replacement based on effective life expectancy.			$180,000
Roof Assembly – Exterior/2004 Addition Mansard Roof - Shingles at dormer windows showing degranulation and curling. Recommend replacement of shingles at all dormers.	$7,000		
Roof Assembly – Exterior/2004 Addition/Sloped Roof - Fair - no obvious issues - Recommend budgeting for replacement based on effective life expectancy.			$44,200

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Roof Assembly - Exterior/Flat Roof/1968 Wing/2004 Addition - Acceptable condition - Recommend replacement due to age.			$
Roof Assembly - Exterior/Flat Roof/1968 Wing/2004 Addition - Roofing is "bubbling" at West Side of Renovated Wing (gridlines 1x to 4x)		$10,000	
Roof Assembly - Exterior/Flat Roof/1968 Wing/2004 Addition - Budgeting for replacement based on age recommended.			$680,000
Water damage at gypsum wall board base at Auditorium rear exit vestibule. Recommend repairs as part of general maintenance with investigation of source of water at time of repair.	$		
Interior Floors – Ground Suite Floors - It was noted sheet vinyl flooring in these rooms have started to shrink and pull away at the seams, and the appropriate supports have not been installed at the floor bases. It is noted that replacement of the floors in these suites is being carried out on a room by room basis with approximately 20 rooms remaining.			$100,000
Interior Floors – Basement - Acceptable condition - Recommend replacement due to age			$18,500
Interior Floors - Ground Floor/Second Floor Corridors/Shared Spaces - Poor condition - Recommend replacement due to age.		$275,000	
Interior Floors - Basement Floor / Paramedic Offices - Poor condition - Recommend replacement due to age.		$35,000	
Interior Floors – Basement/Ground Floor/Second Floor - Condition ranges from poor to acceptable. Acceptable condition - Recommend replacement due to age.		$28,000	
Interior Floors – Ground Floor / Second Floor (Residents rooms) - Condition appears acceptable. Recommend replacement within 10 years based on age.			$410,000
Interior Ceiling - Basement/Ground Floor/Second Floor - Poor - Generally functional condition - Recommend replacement due to age and condition.		$152,600	
Interior Ceiling - Basement/Ground Floor/Second Floor - Poor - Ceiling tiles at all kitchens generally		$16,975	

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
stained from cooking activities. Recommend Replacement.			
HVAC			
Fridge A/C Unit – Basement Fridge A-015B		$12,000	
Fridge A/C Unit – Basement Fridge A-015C		$12,000	
Freezer A/C Unit – Basement Freezer		$16,000	
A/C Unit - Basement Garbage Room S-022		$14,000	
Unit Heater - Basement Garbage Room S-023 - Poor visual condition.		$4,000	
Condenser Unit – Basement Exterior - Costs included with indoor unit		$	
A/C Unit - W-106 & W-206			$4,000
Condenser – Exterior N-142A			$6,000
60C Domestic Boiler #2 – Mechanical Room - Some rust on pump discharge.		$20,000	
Mixing Valve – Mechanical Room			$
Rooftop N G Piping – Rooftop - Noticeable rust in locations. Valves & Handles rusted and could be an issue to operate. Paint recommended as part of regular maintenance.			$
P1 – Mechanical Room - Rust on pump casing			$2,500
P2 – Mechanical Room			$2,500
P3 – Mechanical Room			$2,500
P4 – Mechanical Room			$2,500
Kitchen Exhaust Fan - Rooftop		$2,500	
EF-2 - Rooftop			$1,500
Dryer Vents - Basement Laundry S-023A - Worn, lint should be cleaned.			$
Exterior Louvre – Corridor E-200 - Galvanized with paint which is chipping.			$500
EF-3 - Rooftop			$1,500
EF-4 - Rooftop			$1,500
EF-1 - Rooftop			$1,500
Plumbing			
Soft Water Filter – Mechanical Room - Poor operation & reliability, currently under contract to replace.		$8,000	

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Domestic Booster Expansion Tank – Basement Mechanical Room - Rust through paint.			$6,000
Domestic Hot Water Recirculation pump - Basement Mechanical Room - Rusted with previous leak.		$2,000	
Electrical			
Cooler #1 Disconnect – Exterior - Generally appear to be in fair condition. Replace within 10 years based on condition rating.			$500
Garbage Cooler Disconnect – Exterior - Generally appear to be in fair condition. Replace within 10 years based on condition rating.			$500
Cooler #2 Disconnect – Exterior - Generally appear to be in fair condition. Replace within 10 years based on condition rating.			$500
Freezer Cooler Disconnect – Exterior - Generally appear to be in fair condition. Replace within 10 years based on condition rating.			$500
Conduit and Wiring – Various - Replace 15A rooftop receptacles with 20A GFCI receptacles.	$450		
Conduit and Wiring – Various - Install GFCI receptacles at receptacle locations within 1.5m of sinks.	$500		
Elevators			
Not Applicable			
Parking Lot / Lane Ways			
Parking / Driveway – Entrance Lane and Main Parking Lot – Asphalt in generally poor condition - moderate to severe cracking in places. Perform detailed asphalt condition assessment followed by rehabilitation and replacement strategies. .		$600,000	$400,000
Concrete Sidewalks / Curbs – Various - Generally good, localized cracking/delamination requiring repair work			$10,000
Life Safety (includes generator)			
Fire Alarm System – Smoke / Heat Detector - Generally appear to be in fair condition. Replace within 10 years based on condition rating.			$3,500
Emergency Lighting System – Exit Signs - Appear to have some wear and tear.			$15,000

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Replacement in the future will be to upgrade to green "Running Man" signage.			
TOTAL	$18,950	$1,208,075	$2,363,100

(1) Class D Level Estimate Opinion of Probable Costs

Note: A $ sign with no value is used to indicate associated time frame for recommendations with a low dollar value and/or recommendations to be carried out as part of regular maintenance.

5.0 ADMINISTRATION BUILDING CONDITION ASSESSMENT

5.1 Overview

The "Old House" is the former country home of Colonel Fair located at 2069 Battersea Road in Glenburnie, Ontario. The building is part of the larger Fairmount complex that includes the "Fairmount Home", "Garage and Out Buildings": a long-term care home, equipment garage and storage building, respectively. The home was converted into an office building in about 1968, when the "Fairmount Home" long-term care home was constructed. The Old House is connected to the east end of the south wing of the Fairmount Home via a link structure constructed in 1968.

The Old House is believed to have been constructed in about 1925.

Table 6 provides a brief summary of historical upgrades undertaken at the Administration Building since its original construction in 1925.

Table 6: Summary of Historical Administration Building Upgrades

Year	Description of Upgrade
1925	Original construction
1968	Converted to an office building; structure linked to Fairmount Home
2010	EIFS installed; asphalt singles replaced; 2 (two) basement windows replaced
2011	Windows in link replaced; reception area finishes replaced

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

5.2 Structural / Architectural

- The structure has a wood-framed superstructure on a combination of concrete and stone foundations.

- The exterior walls are clad with an Exterior Insulation Finishing System. Windows are primarily punched, vinyl framed with double-glazed vision glass. The building is covered by a combination of flat and sloped roofing assemblies.

- The foundation walls are composed primarily of stone masonry with some areas of brick and concrete block and are in fair to poor condition. Moderate deterioration of the stone masonry and mortar is present, and localized areas show signs of major deterioration of the mortar (Refer to Photos 5.2.1 and 5.2.2). Rehabilitation efforts may need to be undertaken in the near future to maintain the existing foundation of the building.

- The basement concrete floor slab is approximately 100 mm thick and is in fair to poor condition due to moderate to severe wear throughout, moderate cracking, and a rough and uneven surface. Concrete piers in the basement are supporting steel columns. Of the five piers, one is in good condition, one is in fair condition and three are in poor condition due to moderate to severe concrete deterioration (Refer to Photo 5.2.3). The steel columns and baseplates supporting the interior of the building are in good condition with no apparent issues.

- The floors, walls and ceilings on the first and second floors are all finished however there are no apparent issues with the structural elements. The railing on the second-floor roof is only 600 mm high (refer to Photo 5.2.4) and should be replaced with a railing system that conforms to Ontario Building Code requirements. The top floor is used as attic space only and the floor structure is exposed. The floor structure consists of 2x12 timber joists and is generally in poor condition. However, this space is currently not being used as working or storage space.

- The exterior foundation walls consist of stone masonry around the perimeter of the building and is in generally fair condition with an isolated poor area at a concrete lintel above one of the basement windows which has experienced concrete spalling and corrosion of reinforcing steel and thus requires repair (Refer to Photo 5.2.5). At the front entrance, the stone masonry pillar pedestals are in poor condition due to significant deterioration of mortar and will require rebuilding (Refer to Photo 5.2.6). The concrete pillar pedestals at the back of the building are in good condition. In front of the building, the masonry retaining wall along the driveway is in fair condition with some cracking and delamination at the top of the wall, typically located at the cast-in railing posts. The railing along the top of the retaining wall is in good condition with some minor rusting. The concrete sidewalks around the property are generally in fair condition. The exterior concrete pads located around the property are in good to fair condition with minor wear. One pad on the east side of the building is in poor condition and requires remedial work (Refer to Photo 5.2.7). The concrete light post supports are generally in good condition.

- The West exterior door from the Boardroom appears to be in poor condition as it has sidelights and transom windows that show signs of failing window seals. The paint finish at wood jambs is also failing. It is recommended this door with sidelights and transom be replaced based on condition, age, and for improved performance. (Refer to Photo 5.2.8 and Photo 5.2.9).

- The North and South residential style entrance doors with sidelight and transom windows are in acceptable condition. Though the doors are at the end of their expected service life, it is understood they experience very low traffic. It is recommended replacement of the doors be budgeted for within 10 years. (Refer to Photo 5.2.10).

- The exterior wood door on east elevation is in poor condition showing extensive wear to paint finish. Due to low traffic/use it is recommended this door be re-painted as part of regular maintenance to extend the life of the door. (Refer to Photo 5.2.11).

- Interior flooring is a mix of carpeting in office and corridor areas and vinyl plank flooring in the kitchenette area and appears to be in acceptable to good condition. Carpet to the rear of the building on the ground floor appears to be older that the rest of the carpeting and shows wear from age but still in acceptable condition. It is anticipated all carpeting will require replacing within ten years for aesthetic reasons.

- Exterior vinyl windows appear in acceptable condition with no obvious issues and show appropriate wear for age. Recommend replacement within 10 years based on age.

- Paint at aluminum clad wood single pane/storm pane windows in the board room showing wear from age. It is recommended windows be repainted in the short term as part of general maintenance. It is recommended these windows be replaced within 5 years based on probable age and low performance of single pane. (Refer to Photo 5.2.12).

- The sills and base walls at aluminum clad wood single pane/storm pane windows in the board room (South Wall) have localized water damage likely due to failing exterior caulking at the

windows. It is recommended repairs to exterior window caulking and to interior finishes be carried out in the immediate future. (Refer to Photo 5.2.12, Photo 5.2.13, Photo 5.2.14, and Photo 5.2.15).

- The interior ceilings (potentially Gypsum Wall Board or Lath and Plaster) appear in good condition though there is localized water damage in the East office at the corner of the chimney. It is recommended localized ceiling be repaired and flat roof detailing above be inspected to identify source of leak. This area of the building is one storey with a flat roof above. (Refer to Photo 5.2.16).

5.3 HVAC

- The ground floor and second floor are heated through hydronic hot water radiators located along the perimeter of the building. These radiators are essentially pipes with fin sections and covers and are not expected to require replacement in the near future. All radiators could benefit from a coil cleaning to increase heating performance. The radiators are controlled through a mix of pneumatic thermostats and thermostatic valves which appear to be in good condition however as the valves actuate regularly, they can be more prone to failure and may require replacement as a part of regular maintenance. Servicing for pneumatic control valves is becoming more specialized and scarcer. It was noted there are several uninsulated hot water pipe risers on the ground floor which can have surface temperatures in excess of 76ºC which can pose a burning hazard. These risers should be insulated to protect occupants from accidental contact (Refer to Photo 5.3.1).

- A 3/4 hp reciprocating air compressor and refrigerated dryer located in the basement provide compressed dry air for use in the pneumatic control system. This system was indicated as recently replaced and is in good condition. Generally pneumatic control systems are energy intensive, prone to failure, harder to service, and less responsive. These valves could be optimized by replacement with a direct digital control system (DDC) or replaced with thermostatic radiator valves (Refer to Photo 5.3.2).

- The ground floor is air conditioned through an indoor Unico fan coil unit with a high velocity duct distribution system. The fan was in good condition and did not have any significant issues reported by maintenance staff. The unit delivers a constant supply of conditioned air to each ground floor space and is controlled by a single thermostat in the ground floor corridor. This does not provide individual control of space temperature for offices which may result in comfort issues for occupants during the cooling season. It was noted the basement duct mains are not insulated which will result in increased air temperatures delivered to each space. It was also noted there was a branch duct leaking in the basement storage room which should be patched. Additional split system air conditioners with outdoor condensers are provided throughout the building which are reported to not be in use after the installation of the high velocity air conditioning duct system. During the time of the assessment, the meeting room air conditioner was in use which should be retained due to the high shift in space occupancies and the number of windows and skylights in the space. The remainder of the AC units should be decommissioned properly if not required to prevent any potential refrigerant leaks.

- The second floor is air conditioned through a fan coil unit located in the attic space. A remote condenser is located on the roof adjacent to the link between the old house and Fairmount home. The unit uses R-22 refrigerant which will be effectively phased out in Canada under the Montreal protocol by 2020. This will make future repairs and recharging prohibitively costly and eventually unachievable. This unit was also noted to be approximately 21 years old and in fair to poor condition. Due to the age of the unit, the space comfort complaints, and the refrigerant issue we would recommend replacing this unit (Refer to Photo 5.3.3 & Photo 5.3.4).

5.4 Plumbing

- The building plumbing system is serviced by the domestic water plant located in the basement of Fairmount home. All copper plumbing piping is concealed by insulation containing asbestos and could not be assessed. Based on discussions with maintenance staff there have not been significant issues with pipe leaks in this building. A 6000W electric hot water tank is located in the basement of the old house to boost the domestic water temperature. This appeared to be installed recently and is in good condition.

- The drainage piping in the building is generally cast iron or copper and appeared to be in good condition. During the assessment, portions of the basement slab was excavated to repair the building drain.

5.5 Electrical

- Overall, the electrical systems are generally in good condition. Originally built in the early 1900s, the Old House has undergone multiple electrical renovations.

- Electricity is delivered to the Old House building via Switchboard DP-2P located in Fairmount Home. Multiple electrical panels in the Old House's basement distribute power throughout the building (refer to Photo 5.5.1).

- In 2004, a 45kW Generac Power systems standby generator was installed to supply emergency power, in the event of utility power loss, to the Old House via an automatic transfer switch (refer to Photo 5.5.2).

- In general interior and exterior lighting systems are in fair condition and should be replaced as required, some individual bulb replacement is required. Some fluorescent light fixtures are yellowing, to rectify this bulbs and lens should be replaced. Many of the lighting fixtures were replaced during a renovation in 2004.

- On the building exterior a cable chase for condensing units is damaged and requires repair (refer to Photo 5.5.3). Condenser Unit flex conduit is damaged, it is recommended to have this repaired (refer to Photo 5.5.4). Condenser Unit disconnects, conduit and wiring is weathered and it is recommended to be replaced within 10 years.

- A receptacle in the lobby trips the circuit breaker when the window mounted air conditioning unit is running (refer to Photo 5.5.5). It is recommended that air conditioners are supplied with a dedicated circuit to prevent additional loads tripping circuit breakers.

- As of January 1, 2014, all new buildings and major renovations are required to install the new "Running Man" Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the "Running Man" signs will be required.

Table 7: Summary of Administration Building Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Foundation – Basement - Fair-poor condition. Some moderate deterioration of stone mortar. Some major deterioration of mortar in isolated locations.		$50,000	
Slab-on-grade – Basement - Fair-poor condition. Moderate to heavy wear throughout, moderate cracking, and rough/uneven surface.			$15,000
Exterior Foundation Walls – Perimeter - Generally fair condition. Isolated poor location - concrete lintel @ window sill requires repair.			$3,000
Concrete Piers – Basement/Back Entrance - Concrete piers supporting steel columns in basement. 1 good, 1 fair, 3 poor. Moderate to heavy deterioration of concrete. Concrete piers supporting back entrance canopy. 2 fair - minor to moderate.			$5,000
Ceiling / Floor Joists – Floor of Attic - Generally poor condition. Space is being used for M&E routing only.		$	
Exterior Pads – Various - 1 pad @ east of building is in poor condition, needs replacing		$3,000	
Pillar Supports - Front Entrance - Poor condition - significant deterioration, needs replacing or repair		$15,000	
Exterior Doors – Exterior/North and South - Acceptable - Doors are at the end of their expected service life but experience very low traffic. Recommend budgeting for replacement within 10 years.			$2,500
Exterior Doors – Exterior/Boardroom - Paint failing and seals of sidelights and transom windows showing signs of failing. Recommend budgeting for replacement of entire door unit for improved performance.			$2,000
Exterior Doors – Exterior/east Small Room - Repainting as part of regular maintenance is recommended to extend the life of the door.	$		
Exterior Windows – Exterior / Ground Floor / Second Floor - Acceptable - No obvious issues - Showing appropriate wear for age. Recommend replacement within 10 years based on age.			$41,000

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Exterior Windows – Exterior/Boardroom - Acceptable - showing wear - Recommend replacement within 5 years based on probable age and low performance single pane.		$20,600	
Exterior Windows – Exterior/Boardroom - Caulking failing at exterior, Paint Chipping, interior GWB sills showing water damage. Repairs recommended.	$3,000		
Roof Assemblies - Exterior / Flat Roofs / Various - Acceptable - Replacement recommendation based on age of installations.			$30,000
Rooftop Railing – Flat Roofs / Balconies – Railings only 600 mm high. Do not meet code as guardrails.		$20,000	
Interior Ceilings – First Floor - East Office - Water damage at ceiling at chimney. Localized ceiling repairs required. Indicator of potential roof leak at flat roof above. Recommend investigation and repairs of underlying issue.	$2,000		
Interior Floors – First Floor - Finished surface - no obvious issues - Older Carpet to rear of building showing some wear (aesthetic). Carpets in generally fair condition. Recommend replacement of all carpet within 10 years based on age.			$40,000
HVAC			
Split A/C Unit – Meeting Room – Functional.			$3,000
Fan Coil Unit – Attic - Condenser not accessible.			$6,000
Plumbing			
Not Applicable			
Electrical			
Conduit and Wiring – Various – Exterior cable chase and cables are damaged to the Condenser Units. Replace within 5 years based on condition rating		$1,600	
Distribution System – Exterior A/C Disconnect Generally appear to be in fair condition. Replace within 10 years based on condition rating.			$750
Fire Alarm System – Smoke Detector - Generally appear to be in fair condition. Replace within 10 years based on condition rating.			$1,500
Elevators			

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Not Applicable			
Parking Lot / Lane Ways			
Not Applicable			
TOTAL	$5,000	$110,200	$149,750

[1] Class D Level Estimate Opinion of Probable Costs

Note: A $ sign with no value is used to indicate associated time frame for recommendations with a low dollar value and/or recommendations to be carried out as part of regular maintenance.

6.0 PALACE ROAD AMBULANCE BASE CONDITION ASSESSMENT

6.1 Overview

The property at 250 Palace Road in Kingston, Ontario includes a single-storey Ambulance Station with four garage-bays for ambulance vehicles and common interior spaces for the ambulance staff. According to the County of Frontenac, the building has a gross floor area of about 3,800ft² and was constructed in about 1988.

Table 8 provides a brief summary of historical upgrades undertaken at the Palace Road Ambulance Station since its original construction in 1989.

Table 8: Summary of Historical Palace Road Ambulance Base Upgrades

Year	Description of Upgrade
1988	Original construction
2009	Extensive Renovation: - Structural modifications (beams and columns) to accommodate the installation of four new garage bay doors and a new concrete slab-on-grade in the garage - Localized brick masonry repairs - Installation of new concrete window sills - Replacement of all windows, excluding the windows at the ends of the corridor - Replaced the south side flat roof - Installed an emergency generator - Installed new HVAC equipment including a rooftop unit, heat recovery ventilator and radiant tube heaters in the garage - Installed a new domestic hot water tank heater - Replaced most domestic water plumbing - Replaced above-grade sanitary drainage piping - Installed a new trench drain in the garage - Replaced all electrical wiring in the garage and 50% elsewhere - Replaced all light fixtures
2010	Construction of new sloped roof structure above Garage and Corridor.
2010	Installation of Solar Power Generation System including roof top solar Panels.

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

6.2 Structural / Architectural

- The structure is a combination of steel and wood-framed roof structures on a combination of steel beams and columns and concrete block supporting walls. The foundation walls are concrete block.

- The exterior walls are primarily clad with brick masonry. Windows are typically punched, aluminum-clad wood framed windows with double-glazed vision glass. The building is protected by a combination of flat and sloped roofing assemblies. The roof structure is a combination of OWSJ, engineered wood truss, plywood sheathing and shingles above the Garage and Corridor.

Above the common areas the roof structure is understood to consist of wood joists, roof decking (type unknown) and roofing assembly.

- No evidence of building settlement or other poor foundation performance was observed or reported by regular building occupants. The building foundation is below grade and generally could not be observed. A crack in the asphalt at the North East corner of the building where the concrete apron slab abuts the foundation has resulted in isolated deterioration of the concrete foundation (refer to Photo 6.2.1). A cavity has formed that can hold water which will result in expedited deterioration over time. Repair work in this area is recommended.

- The building consists of a one-storey office space and a high ceiling, four-vehicle ambulance garage. Exterior wall construction for both the office space and garage is load bearing concrete block with a brick veneer. The roof structure in the garage is open web steel joists (OWSJ) and steel deck; the ceiling in the remainder of the building is finished with drywall or acoustic ceiling tiles so the roof structure could not be observed in these areas. The flooring in the garage and adjacent storage and utility rooms is exposed concrete slab on grade. These areas have experienced minor cracking and show signs of previous repair work. The floors in the office space have been finished with tile so the underlying floor slab could not be observed.

- Structural columns with steel flashing are located between the overhead doors in the garage. The flashing around the columns is in acceptable condition and is showing signs of moderate rusting around the bases, likely due to exposure to de-icing salts (Refer to Photo 6.2.2). Bollards located outside of the garage between the overhead doors are in fair condition and show light to moderate rusting. The steel lintels above the window frames in the exterior walls of the office space are in fair condition and show light to moderate rusting.

- A steel guardrail is located on the roof of the office space and is in poor condition. The steel has experienced light to moderate rusting, several of the support posts are not connected to the roof due to missing anchor bolts, and a weld on the ladder brace has broken (Refer to Photos 6.2.3 and 6.2.4). It is recommended that this guardrail be repaired or replaced immediately as its current condition does not meet the standards of the Ontario Building Code.

- The exterior brick masonry appears to be in good condition generally but localized deterioration of mortar joints is present at various locations on the south side of the building. Two areas on the main south façade show minor deterioration and it is recommended this wall be assessed and repointed as part of regular maintenance. (Refer to Photo 6.2.5, Photo 6.2.6, and Photo 6.2.7). The masonry around the window located at the south east corner of the building (Crew Room) shows advanced deterioration and it is recommended the masonry be assessed and repaired in as required in the immediate future. (Refer to Photo 6.2.8, Photo 6.2.9). Frontenac Paramedics Logistics Superintendent noted other localized brick repairs have recently been carried out on the south elevation above the utility room due to spalling of brick at this location.

- The four exterior overhead doors appear in fair condition. The Superintendent of Logistics Frontenac Paramedics noted that frequent ongoing maintenance is required due to frequency of use. It is recommended replacement be budgeted for within 10-year window due to age and frequency of use.

- The original wood-framed fixed windows set around the east and west entrance doors at either end of the corridor are in fair condition but it is anticipated replacement will be desired within 10 years due to age and for improved performance. Caulking and Painting is recommended as part of ongoing maintenance. (Refer to Photo 6.2.10).

- The flat roofing at south side of building appears to be in fair condition showing appropriate wear for its age. No leakage has been reported. Based on age it is recommended replacement be budgeted for within 10-year window. (Refer to Photo 6.2.11).

6.3 HVAC

- The south portion of the building is served by a rooftop Carrier Weather-Master air handling unit which provides gas heating, and direct expansion (DX) cooling through a ducted air system. The unit is equipped with an economizer which allows for free cooling during periods of cool outdoor air temperatures. The interior components of the unit were inaccessible however the unit generally appeared to be in good condition. The cooling capacity of the unit is likely reduced due to the plugged condenser coils which should be cleaned. Occupants indicate the building is generally uncomfortable which may be due to the fundamental design of the ventilation system or a control/balancing issue which should be investigated in the future to increase occupant comfort (Refer to Photo 6.3.1).

- The ambulance bays are ventilated when required though a CO sensor and wall mounted exhaust fan. Makeup air is provided through an exterior louver ducted into the bays. The bays are heated through two infrared gas heaters controlled by a local thermostat. Ceiling fans are also installed in the bays to promote air mixing and reduce stratification. All noted systems appear to be in good condition (Refer to Photo 6.3.2).

- The utility room is ventilated through a small exhaust fan and contains the water heater and plumbing equipment. An electrical cabinet unit heater is provided in the medical storage room and is in good working order. It was noted the medical storage room contains oxygen cylinder storage which may require additional ventilation to conform to the Ontario Fire Code. It is recommended the County have a qualified party review the requirements for oxygen storage within the facility.

- Washrooms are provided with an exhaust fan ducted to the exterior. These fans are concealed however appear to be functioning adequately.

6.4 Plumbing

- The ambulance bays are drained through trench drains which occupants have indicated frequently backs up during wash downs. It is recommended to rod/flush these lines to determine if they are restricted or if the issue is a result of undersized or improperly vented drainage. The condition of the trench drain grating is good with minor surface rust.

- A cabinet within the ambulance bays contains a backflow preventer on the incoming municipal water system with a pressure tank which are both in good condition. A flange connecting to the water meter was rusted and may be leaking. Two manual mixing valves and hose reel stations are located within the ambulance bays and are in good condition (Refer to Photo 6.4.1).

- Domestic hot water is heated through an A.O Smith Cyclone gas water heater located in the utility room in good condition. It was noted the tank storage temperature was set to 120ºF. Good design practice involved storing domestic hot water at a higher temperature to mitigate the risk of Legionella. A mixing valve is then incorporated on the discharge to cool the domestic hot water to a safer temperature to prevent scalding (Refer to Photo 6.4.2).

- Exterior gas piping at the gas meter and exterior generator is rusting and should be repainted. A local reverse osmosis & water purification system is provided in the kitchen and is in good condition.

- Eye washes are provided in the ambulance bay and utility room and are in good condition however are both missing sections of insulation.

6.5 Electrical

- Generally all electrical elements of this building appear to be in good condition. The garage and 50% of the corridor, kitchen and lounge were re-wired in 2009.

- The main disconnect is a Square D 200A Heavy Duty Safety Switch with a Square D 200A, 120/240V main panel board (refer to Photo 6.5.1). A Generac QuietSource series standby generator, installed in 2009, provides emergency backup power, in the event of utility power loss, via an automatic transfer switch (refer to Photo 6.5.2).

- Electrical service conduit and weather head are not properly secured to hydro pole (refer to Photo 6.5.3). Additional strapping should be considered.

- Photo-voltaic (PV) array is located on the roof. The PV generation system was installed at the Palace Rd. site in 2010 and appears to be in good condition (refer to Photo 6.5.4). The system supplies power to the electrical grid, but is not utilized as a supplement power source for the building.

- Interior lighting is a variety of wall sconces, T8 fluorescent lamps and recessed pot lights. Exterior lighting fixtures are a mixture of pot lights and LED wall packs. Light fixtures appear to be in fair condition and should be replace/repaired as required. Some fixtures require bulb replacement (refer to Photo 6.5.5).

- A while-in-use weatherproof cover is missing for a receptacle on the building's exterior (refer to Photo 6.5.6). It is recommended that this cover is replaced.

- As of January 1, 2014, all new buildings and major renovations are required to install the new "Running Man" Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the "Running Man" signs will be required.

6.6 Parking Lots / Lane Ways

- The asphalt parking lot and concrete apron/walkway are in fair condition and have experienced minor cracking. The parking lot shows signs of light wear and the walkway has localized areas of deterioration.

Table 9: Summary of Palace Road Ambulance Base Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Foundation – Below Grade / Full Structure - Isolated deterioration at NE corner of building			$5,000
Columns – Interior / Between Overhead Doors - Acceptable - moderate rusting at bases (exposed to salt)			$10,000
Guardrail – Exterior / Office Roof - Poor - several connection bolts missing at post feet, light to moderate rust, weld on ladder brace has let go.		$20,000	
Exterior Walls – Exterior - Localized Masonry Repairs required at various areas of south façade.	$2,000		
Exterior Doors – Exterior / Corridor Ends - Acceptable - showing signs of wear, painting recommended as part of routine maintenance. Though at their expected service life there have been no reported concerns. The County may want to consider replacement to bring entrance glazing up to current performance standards. Caulking - Fair - showing signs of wear			$23,000
Exterior Overhead Doors – Exterior Garage - Acceptable - Noted that ongoing maintenance required due to frequency of use. Replacement should be anticipated within 10 year window.			$10,000
Roof Assembly – Exterior/Flat Roof - Acceptable - Moderate wear shown for age. No concerns reported from user group. Anticipated Replacement within ten years due to age.			$18,000
HVAC			
DHW Pump – Utility Room			$1,000
DHWT – Utility Room			$7,000
Plumbing			
Not Applicable			
Electrical (includes generator)			
Not Applicable			
Parking Lot / Lane Ways			
Not Applicable			
TOTAL	$2,000	$20,000	$74,000

[1] Class D Level Estimate Opinion of Probable Costs

7.0 SYDENHAM AMBULANCE BASE CONDITION ASSESSMENT

7.1 Overview

The property at 4264 Stage Coach Road in Sydenham, Ontario includes a single-storey Ambulance Station with two garage-bays for ambulance vehicles and common interior spaces for the ambulance staff. According to the County of Frontenac, the building has a gross floor area of about 3,000ft² and was constructed in about 1981.

Table 10 provides a brief summary of historical upgrades undertaken at the Sydenham Ambulance Base since its original construction in 2011.

Table 10: Summary of Historical Sydenham Ambulance Base Upgrades

Year	Description of Upgrade
2011	Original building construction
	(No additional upgrades reported)

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

7.2 Structural / Architectural

- The structure is wood-framed structure on poured concrete foundation walls.
- The exterior walls are primarily clad with vinyl siding with a stone base on the front and sides. Windows are typically punched, vinyl frame windows with double-glazed vision glass. The building is protected by sloped roofing assemblies with metal roofing. The two garage bays have two front overhead metal panel doors and two rear overhead metal panel doors.
- No evidence of building settlement or other poor foundation performance was observed or reported by regular building occupants. The concrete foundation is mostly below grade, however what is observable appears to be in good condition.
- The building consists of a single storey living/office space and a two-vehicle ambulance garage. The wall structure is not exposed so could not be observed. The exterior walls and the inside of the garage are finished with corrugated sheet metal and masonry veneer. The roof structure is timber framing and is in good condition with no signs of deterioration. The exterior of the roof is cladded with corrugated sheet metal. The floors in the garage, storage room and utility room are exposed concrete slab-on-grade. The floors in the remainder of the building are slab-on-grade finished with tile. In-slab heating is provided throughout the building. The exposed concrete slab is in fair condition with minor cracking. Cracks have previously been repaired. The tile floors are in good to fair condition with minor cracking.
- Bollards are present on either side of each overhead door and around the septic tank at the side of the building. They are in fair condition and show light to moderate rusting. The steel bike rack at the front of the building is in acceptable condition with moderate rusting around the base (Refer to Photo 7.2.1). Various exterior concrete items including sidewalks, equipment pads, and light pole bases were in good to fair condition.

- The exterior metal roofing, soffits and facia appear to be in good condition with no obvious concerns. (Refer to Photo 7.2.2).

- The exterior metal siding and masonry base appear to be in good condition but caulking is required to seal gaps between window jambs and masonry base as water is able to penetrate into the wall assembly. It is recommended these gaps be sealed with caulking as part of general maintenance. (Refer to Photo 7.2.3).

- The main entrance doors appear to be in good condition though mortar at base of sidelight has cracked and is failing. It is recommended base of sidelights be sealed with caulking as part of general maintenance. It wall also commented that the original door seals and latch were replaced after original install due to air leakage, and the replacement seals continue to require ongoing maintenance. (Refer to Photo 7.2.4 and Photo 7.2.5).

- The four exterior overhead doors appear in fair condition. The Superintendent of Logistics Frontenac Paramedics noted that frequent ongoing maintenance is required due to frequency of use. It is recommended replacement be budgeted for within 10-year window due to age and frequency of use.

- Exterior metal doors at appear to be in good condition though the exterior door from the garage is showing surface rust. It is recommended this door be painted as part of general maintenance. (Refer to Photo 7.2.6).

- The interior floor wall and ceiling finishes are in generally good condition, but minor localized damage observed at men's washroom at urinal. It is recommended this damage be repaired as part of general maintenance.

- Frontenac Paramedics Logistics Superintendent noted a drainage issue had recently been addressed at North West Corner of building. Evidence of the issue can be seen though no further action is expected to be required.

7.3 HVAC

- The ventilation for the ambulance bays is interlocked with a CO detector which opens a makeup air damper and enables a wall exhauster to ventilate the space on high CO levels. This functionality could not be verified however the visual condition of these systems was good. A local switch could be added to ventilate the bays manually.

- The bays are heated through an infloor hydronic hot water system generated through a boiler in the utility room and controlled by a local thermostat. A hydronic unit heater is also provided to supplement heating which was in good condition however an air vent was located on a low spot of the piping system which should be relocated to a local high spot to promote better air venting (Refer to Photo 7.3.1 & Photo 7.3.2).

- The occupied areas of the building are air conditioned through an indoor Lifebreath air handling unit. The DX cooling is accomplished through an exterior condenser which was generally in good condition with the exception of some surface rust on the condenser fan, missing sections of insulation on the refrigerant piping, and a dirty condenser coil. The occupied areas are heated through the infloor hydronic heating system controlled by a remote thermostat. It was noted the

staff lounge and occupied areas did not appear to have provisions for outdoor air which should be reviewed by a qualified party (Refer to Photo 7.3.3).

- The utility rooms houses the domestic hot water tanks, boiler system and associated appurtenances including an expansion tank, circulation pumps, an air separator, venting, and control system. All heating components were in good condition. The boiler system was missing a chemical treatment system which can treat the boiler water with corrosion inhibitors and neutralize p.. The additional of a chemical treatment system is strongly encouraged to prevent premature failure of equipment.

- The washrooms and storage rooms are provided with local washroom style exhaust fans which were operating well. It was noted the storage room contains oxygen cylinder storage which may require additional ventilation to conform to the Ontario Fire Code. It is recommended the County have a qualified party review the requirements for oxygen storage within the facility.

7.4 Plumbing

- Sections of exterior propane piping are rusted and should be repainted. The generator propane relief pipe is currently installed too close to an operable window and should be extended to maintain a 1m clearance. The relief for the building propane regulator is currently not protected from rainwater ingress and should be fitted with a gooseneck (Refer to Photo 7.4.1).

- Hose reels in the ambulance bays are supplied with hot and cold water for wash downs and are in good condition.

- Eye washes are provided in the ambulance bays and storage room with functioning mixing valves and are in good condition. Testing records were not found which should be kept to promote regular testing in accordance with Ministry of Labour regulations.

- It was noted a previous stormwater reclaim system had been decommissioned due to odour and maintenance issues.

7.5 Electrical

- Overall, the electrical systems appear to generally be in good condition. The majority of electrical equipment was installed during building construction in 2011.

- The main panelboard/disconnect is a Siemens 200A, 120/240V panelboard and appears to be in good condition (refer to Photo 7.5.1). A Generac QuietSource series standby generator provides emergency backup power, in the event of utility power loss, via an automatic transfer switch (refer to Photo 7.5.2).

- The PV generation system is installed the ambulance base and appears to be in fair condition (refer to Photo 7.5.3). The electrical panel mounted at the solar array is exhibiting signs of rust (refer to Photo 7.5.4). The system supplies power to the electrical grid, but is not utilized as a supplement power source for the building.

- Interior lighting systems is a mixture of fluorescent and LED troffers, and pot light fixtures. Exterior lighting systems are LED down light fixtures and area lighting. Generally light fixtures appear to be in fair condition, some interior fixtures require repair or replacement. The utility room and hallway light fixtures require bulb replacement or fixture repair, ambulance bay and hallway

lighting are yellowing and require cleaning or replacement. The IT room pot light requires repair and the men's washroom light switch is not operational.

- Electric vehicle charger cable reel next to the parking area has been damaged but appears to remain operational (refer to Photo 7.5.5).

- Exit signs appear to be in good condition. As of January 1, 2014, all new buildings and major renovations are required to install the new "Running Man" Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the "Running Man" signs will be required.

7.6 Parking Lots / Lane Ways

- The asphalt parking lot and driveway are in fair condition with minor to moderate cracking. The concrete sidewalk/walkway at the front of the building is in good to fair condition with minor cracking around the base of one of the canopy columns.

Table 11: Summary of Sydenham Ambulance Base Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Bike Rack - Acceptable - moderate rust.			$1,000
Exterior Overhead Door – Exterior - Acceptable - Noted that ongoing maintenance required due to frequency of use. Replacement should be budgeted for within 10 year window.			$10,000
Exterior Doors – Exterior - Recommend painting exterior door from garage as part of general maintenance.		$	
Exterior Windows – Exterior - Caulking required to seal gaps between window jambs and stone base. Recommend repairs as part of regular maintenance program.	$		
Interior Floors – Interior - Localized repairs recommended in men's bathroom at water closet.	$		
HVAC			
Condenser – Exterior - Some motor rust.			$2,000
Plumbing			
Not Applicable			

Electrical			
Distribution System – Interior Lighting - Generally appear to be in fair condition. Some fixtures require repair or replacement. Clean light fixtures as necessary.			$1,500
Distribution System – Cable Reel - Cable reel is damaged and requires replacement.		$1,648	
Fire Alarm System – Smoke & Carbon Monoxide Alarm - Generally in good condition. Replace on or before unit expiration.			$500
Parking Lot / Lane Ways			
Not Applicable			
TOTAL	$0	$1,648	$15,000

(1) Class D Level Estimate Opinion of Probable Costs

Note: A $ sign with no value is used to indicate associated time frame for recommendations with a low dollar value and/or recommendations to be carried out as part of regular maintenance.

8.0 ROBERTSVILLE AMBULANCE BASE CONDITION ASSESSMENT

8.1 Overview

The property at 15405 Road 509 in Robertsville, Ontario includes a single-storey Ambulance Station with one garage-bay for an ambulance vehicle and common interior spaces for the ambulance staff. According to the County of Frontenac, the building has a gross floor area of about 4,000ft² and was constructed in about 2013.

Table 12 provides a brief summary of historical upgrades undertaken at the Robertsville Ambulance Base since its original construction in 2013.

Table 12: Summary of Historical Robertsville Ambulance Base Upgrades

Year	Description of Upgrade
2013	Original building construction
	(No additional upgrades reported)

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

8.2 Structural / Architectural

- The structure is wood-framed structure on poured concrete foundation walls.
- The exterior walls are primarily clad with vinyl siding with a stone base on the front and sides. Windows are typically punched, aluminum-clad wood framed windows with double-glazed vision glass. The building is protected by sloped roofing assemblies.
- No evidence of building settlement or other poor foundation performance was observed or reported by regular building occupants. The concrete foundation is mostly below grade, however what is observable appears to be in good condition.
- The building consists of a single storey living/office space and a one-vehicle ambulance garage. The wall structure is not exposed and could not be observed. The exterior walls and the inside of the garage are finished with corrugated sheet metal and masonry veneer. The roof structure is not exposed and could not be observed. The exterior of the roof is cladded with corrugated sheet metal. The floors in the garage, supply room and utility room are exposed concrete slab-on-grade. The floors in the remainder of the building are slab-on-grade finished with tile. In-slab heating is provided throughout the building. The exposed concrete slab is in good condition with minor cracking.
- Bollards present on either side of the overhead door are in good condition with light rusting.
- The metal roofing appears to be in good condition with no major issues. Some localized staining from water runoff was noted at garage facia overhanging lower roof apparently due to mis-installed drip edges. It is anticipated periodic cleaning as part of regular maintenance or repair of drip edges at these locations would be desired for aesthetic reasons. (Refer to Photo 8.2.1 and Photo 8.2.2).

- The caulking at windows, exterior overhead doors and front entrance columns are showing signs of deterioration. It is recommended caulking be replaced at these locations as part of general maintenance plan. (Refer to Photo 8.2.3 and Photo 8.2.4).

- The exterior metal door from the garage is reported to potentially not be insulated as the frame and door experience freezing of interior condensate to the point that the door is inoperable during the winter months. It is recommended this door be replaced with an insulated door.

- Interior Walls appear in good condition but there is localized water damage above exterior metal door to patio. It is recommended drywall be repaired and, during repair, that the source of damage be investigated. Source of damage not evident at time of inspection. (Refer to Photo 8.2.5).

8.3 HVAC

- The ventilation for the ambulance bays is interlocked with a CO detector which opens a makeup air damper and enables an exterior wall mounted upblast fan to ventilate the space on high CO levels. This functionality could not be verified however the visual condition of these systems was good. A local switch could be added to ventilate the bays manually. Occupants indicated the ambulance bay is susceptible to high humidity conditions during washdowns which has frozen openings shut in winter conditions. A ceiling fan is also located in the ambulance bay to promote mixing and reduce stratification.

- The ambulance bay is heated through an infloor hydronic hot water system generated through a boiler in the utility room and controlled by a local thermostat. The occupied areas of the building are also heated through the same in floor system.

- The utility room houses the indirect domestic hot water heater, in floor manifolds, controls, a boiler, circulation pumps, chemical treatment system, well water tank and treatment system, and a low loss header. All equipment was in good condition (Refer to Photo 8.3.1 & Photo 8.3.2).

- A split system Mitsubishi air conditioner is located in the crew area to provide local cooling. The rejected heat from this system is piped to an outdoor condenser which was in good condition however the condenser fins were significantly clogged with debris which will reduce the service life of the equipment (Refer to Photo 8.3.3).

- A Venmar Heat Recovery Ventilator (HRV) is located within the ceiling space of the crew area which recovers heat from exhaust systems to heat outdoor air and deliver it to the space. This unit is controlled from a local controller in the kitchen and is in good condition (Refer to Photo 8.4.1).

- It was noted the oxygen room contains oxygen cylinder storage which may require additional ventilation to conform to the Ontario Fire Code. It is recommended the County have a qualified party review the requirements for oxygen storage within the facility.

8.4 Plumbing

- A trench drain and local sump is provided in the ambulance bay which has raised operational concerns due to odours generated from the local sump. Based on the complaints, this should be investigated and corrected. The condition of the trench drain cover is good.

- Sections of exterior propane piping are rusted and should be repainted. It was noted the flexible propane line from the outdoor tank is susceptible to damage and should be protected.

- A hose reel in the ambulance bay is supplied with cold water for wash downs and is in good condition.
- Eye washes are provided in the ambulance bay with functioning mixing valves and are in good condition. Testing records were not found which should be kept to promote regular testing in accordance with Ministry of Labour regulations.
- A new Reverse Osmosis (RO) system was installed for the kitchen sink and is in good condition.

8.5 Electrical

- Overall, the electrical systems appear to generally be in good condition. Electrical equipment was installed during construction of the ambulance base in 2013.
- The main panelboard/disconnect is an Eaton 100A, 120/240V panelboard and appears to be in good condition (refer to Photo 8.5.1). A Honeywell standby generator provides emergency power, in the event of utility power loss, via an automatic transfer switch (refer to Photo 8.5.2).
- The majority of light fixtures are LED and are good condition.
- Exit signs appear to be in good condition. As of January 1, 2014, all new buildings and major renovations are required to install the new “Running Man” Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the “Running Man” signs will be required.

8.6 Parking Lots / Lane Ways

- Exterior concrete pads are located at the entrance and side patio of the building, as well as under a utility box and a petroleum gas tank. All concrete pads are in good condition with no obvious issues. Asphalt parking areas also appear in good condition.

Table 13: Summary of Robertsville Ambulance Base Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[(1)]		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Exterior Walls – Exterior - Caulking at exterior doors, front entrance columns, window bases and overhead doors showing signs of wear. Recommend replacement as part of general maintenance plan.		$	
Exterior Overhead Door – Exterior/Garage - Acceptable - Noted that ongoing maintenance required due to frequency of use. Replacement should be budgeted for within 10 year window.			$2,200

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Exterior Doors – Exterior - Door Frame Uninsulated at door from Garage. Recommend replacing door with insulated door.	$		
Roof Assembly – Exterior - Staining at facia due to drip edge not functioning. The county may want to consider cleaning of facia as part of regular maintenance for aesthetic appearance.	$		
Interior Walls – Interior - Recommended drywall repair above exterior metal door to out door patio. Drywall showing signs of moisture damage. Cause unknown.	$		
HVAC			
Not Applicable			
Plumbing			
Not Applicable			
Electrical			
Not Applicable			
Parking Lot / Lane Ways			
Not Applicable			
TOTAL	$0	$0	$2,200

[1] Class D Level Estimate Opinion of Probable Costs

Note: A $ sign with no value is used to indicate associated time frame for recommendations with a low dollar value and/or recommendations to be carried out as part of regular maintenance.

9.0 WOLFE ISLAND AMBULANCE BASE CONDITION ASSESSMENT

9.1 Overview

The property at 108 Road 95 in Wolfe Island, Ontario includes a single-storey Ambulance Station with four garage-bays for ambulance vehicles (which will not be covered in this assessment) and a second smaller building used as common interior spaces for the ambulance staff. According to the County of Frontenac, the building has a gross floor area of about 1,540ft² and was constructed in about 2011.

Table 14 provides a brief summary of historical upgrades undertaken at the Wolfe Island Ambulance Base since its original construction in 2011.

Table 14: Summary of Historical Wolfe Island Ambulance Base Upgrades

Year	Description of Upgrade
2011	Original building construction
	(No additional upgrades reported)

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

9.2 Structural / Architectural

- The structure is wood-framed structure on poured concrete foundation walls.
- The exterior walls are primarily clad with metal panel siding. Windows are typically punched, vinyl-framed windows with double-glazed vision glass. The building is protected by sloped roofing assemblies.
- No evidence of building settlement or other poor foundation performance was observed or reported by regular building occupants. The concrete foundation is mostly below grade, however what is observable appears to be in good condition.
- The building consists of a single storey living space only. The wall structure is not exposed and could not be observed. The exterior walls are finished with corrugated sheet metal. The roof structure is not exposed and could not be observed, however space between the drop ceiling and a layer of drywall revealed timber frame joists in generally good condition. The exterior of the roof is cladded with corrugated sheet metal. The floor in the furnace room is exposed concrete slab-on-grade and is in fair condition. The floors in the remainder of the building are slab-on-grade finished with tile and no obvious issues were observed.
- The exterior metal roofing, soffits and facia appear to be in good condition with no obvious concerns. Some fading of roof colour apparent. (Refer to Photo 9.2.1).
- The exterior metal panel siding appears to be in good condition but detailing at door and window penetrations require review and repairs as currently siding does not provide full coverage around these openings. Gaps between the siding and existing window trim detail allow for water to penetrate behind metal panel siding. Appropriate counter flashing at door and window jambs is

required and flashing details at window and doors headers need to be corrected to allow for positive drainage of rain water. (Refer to Photo 9.2.2 and 9.2.3).

- The Building interior finishes appear to be in good condition with some wear showing on walls from general use. It is anticipated painting of interior walls will be desired as part of regular maintenance. (Refer to Photo 9.2.4).

- The vinyl tile throughout the building appears to be in good condition but some localized delamination was noted at the north bedroom along the north wall potentially due to moisture at slab. It is anticipated localized repair of the tile will be desired as part of regular maintenance. (Refer to Photo 9.2.5).

9.3 HVAC

- The building is heated and cooled through an indoor furnace system equipped with a propane burner and refrigerant based cooling system. The furnace appeared to have an interior water leak which could be due to a loose condensate connection or leaking venting connection. A maintenance record for correcting this work was not found. It is encouraged to have the furnace serviced to confirm the leak has been resolved. The furnace is directly vented to the outdoors and also has a dedicated combustion air supply. Both exterior pipe terminations should be equipped with bird screens to deter birds from nesting. The furnace appears to be operating adequately and was in good condition. The exterior propane tanks and piping are also in good condition. The exterior condenser for the air conditioning system has slight surface rust on the condenser motor. It was also noted the exterior refrigerant piping insulation is deteriorating from UV exposure (Refer to Photo 9.3.1 & Photo 9.3.2.

- Local washroom style exhaust fans are located in the washroom and kitchen areas and were both functional and in good condition.

- A dryer located in one of the bedrooms vents to the outdoors. There was an appreciable amount of lint on the discharge of the dryer vent which should be cleaned to mitigate a fire hazard.

- It was noted the living area did not appear to have provisions for outdoor air which should be reviewed by a qualified party.

9.4 Plumbing

- A small 3000W GSW electric hot water heater is located in the furnace room to provide hot water to the washroom & bathroom fixtures.

- A new Reverse Osmosis (RO) system was installed for the kitchen sink and is in good condition.

9.5 Electrical

- Overall, the electrical systems appear to generally be in good condition. Electrical equipment was installed during building construction in 2011.

- The main panelboard/disconnect is a Siemens 100A, 120/240V panelboard and appears to be in good condition. The main electrical equipment should have one (1) meter of clearance in front, it is recommended that the shelf housing communication equipment be relocated to allow for clearance around electrical panel (refer to Photo 9.5.1). A Generac Guardian series 10kW standby

generator provides emergency power, in the event of utility power loss, via an automatic transfer switch (refer to Photo 9.5.2)

- Exit signs appear to be aged and are showing signs of wear, replace in the near future. As of January 1, 2014, all new buildings and major renovations are required to install the new “Running Man” Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the “Running Man” signs will be required.

9.6 Parking Lots / Lane Ways

- The asphalt parking lot and lane way are in good condition with no observable deterioration. The concrete sidewalk is in acceptable condition with moderate cracking, some settlement and a rough finish around the edge of the building (Refer to Photo 9.6.1). The asphalt helicopter landing pad beside the building is in poor condition due to major cracking, overgrown grass, a lack of marking paint, and an unlevel surface (Refer to Photo 9.6.2). If this area is expected to be in use it is recommended that remedial work be undertaken as soon as possible.

Table 15: Summary of Wolfe Island Ambulance Base Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Exterior Walls – Exterior - Door and window penetrations require counter flashing at jambs where siding meets windows and doors (all). Currently siding does not provide full coverage around these openings. Flashing details at window and doors headers to be corrected to allow for positive drainage of rain water.	$2,250		
Interior Walls – Interior - Recommend budgeting for interior painting as part of general maintenance.		$	
Interior Floors – Interior - Localized delamination of tile at north bedroom along north wall potentially due to moisture at slab. Localized repairs recommended.	$		
HVAC			
Condenser – Exterior - Insulation showing signs of weather damage, will deteriorate. Coils clean, some signs of motor rust.			$
Plumbing			
Not Applicable			
Electrical			
Interior Lighting – Various – Faulty Bathroom and Bedroom Light Switches to be replaced.	$500		

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Emergency Lighting System - Exit Signs - An exit sign is in poor condition and could use replacement. Other exit signs appear to be in fair condition. Replacement in the future will be to upgrade to green "Running Man" signage.			$600
Parking Lot / Lane Ways			
Concrete Sidewalk – Along Front and Side of Building - Acceptable - moderate cracking, some settlement, rough finish along building edge. Should continue to be monitored.			$5,000
HeliPad – East of Building - Poor - major cracking, not level, overgrown with grass, paint barely visible. (HeliPad is not actively in use. Rehabilitation should be expected if it were to be put back in use.)		see comment	
TOTAL	$2,750	$	$5,600

(1) Class D Level Estimate Opinion of Probable Costs

Note: A $ sign with no value is used to indicate associated time frame for recommendations with a low dollar value and/or recommendations to be carried out as part of regular maintenance.

10.0 PARHAM AMBULANCE BASE CONDITION ASSESSMENT

10.1 Overview

The property at 10579 Road 38 Parham in Ontario includes a single-storey Ambulance Station with three garage-bays for ambulance vehicles and common interior spaces for the ambulance staff. According to the County of Frontenac, the building has a gross floor area of about 2,800ft² with the original building being constructed in about 1981.

Table 16 provides a brief summary of historical upgrades undertaken at the Parham Ambulance Base since its original construction in 1981.

Table 16: Summary of Historical Parham Ambulance Base Upgrades

Year	Description of Upgrade
1981	Original building construction
1994	Addition of living room to North end of structure
2003	2-bay garage addition

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

10.2 Structural / Architectural

- The structure is wood-framed. The foundation walls are concrete block.
- The exterior walls are primarily clad with vinyl siding. Windows are typically punched, vinyl with double-glazed vision glass. The building is protected by a sloped roofing assemblies.
- The building consists of a one-storey crew space, a basement area and a three-vehicle ambulance garage. The wall and roof structures are not exposed and could not be observed. The exterior walls are finished with siding, the garage is finished with corrugated sheet metal, and the inside walls are finished with drywall. The overall building structure is generally in acceptable condition.
- The foundation/basement walls are concrete blocks covered with parging, some of which is cracking. Leaks are present at various locations in the foundation walls, however a new waterproofing membrane and a new sump pit were being installed at the time of the site visit. Cracking and spalling of the blocks is present in some areas. It is assumed the current construction on site will rectify the leakage issue through the foundation walls.
- Excavation for the new waterproofing membrane exposed exterior wooden floor joints for the entrance hall in acceptable to poor condition. The basement level allowed for access to view the ground floor structure from below. A floor joist near the basement stairs is failing near the railing post and is in poor condition (Refer to Photo 10.2.1). Repairs to this joist are recommended. The rest of the floor joists are generally in fair condition with minor wear.
- The concrete slab-on-grade in the garage is in fair condition with moderate cracking and delamination that has previously been repaired. The joint between the exterior apron slab and the

garage slab has severe cracking despite being previously repaired (Refer to Photo 10.2.2). The basement slab-on-grade is in acceptable condition with moderate wear.

- The building roof is finished with asphalt shingles and appears to be in good condition showing no obvious issues. It is understood shingles were installed in approximately 2016. (Refer to Photo 10.2.3).

- The three exterior overhead doors appear in acceptable condition with moderate rusting at track bases, and minor wear. The Superintendent of Logistics Frontenac Paramedics noted that frequent ongoing maintenance is required due to frequency of use. It is recommended replacement be budgeted for within 10 year window due to age and frequency of use. (Refer to Photo 10.2.4 and 10.2.5).

- The exterior windows appear to be in fair condition. It is anticipated windows will be replaced within 10 years.

- Ceramic tile is installed throughout the interior living spaces and appears to be in good condition overall. The tile has been installed at various times over the life of the building. It was noted that the grout is failing in the hallway area installation. It is recommended the tile in the hallway be replaced. (Refer to Photo 10.2.6)

- The fixtures in bathroom are assumed to be original and the associated caulking is failing. Recommend re-caulking as part of general maintenance.

- Kitchen cabinetry is assumed to be original and is in good operational condition though dated in style. The County may want to consider replacement for aesthetic reasons.

- The main exterior door and rear exterior door appear to both be in fair condition but hardware is showing wear. It is recommended hardware be replaced as part of general maintenance. The County may consider replacement of both doors for improved performance.

- The perforated aluminum soffits, aluminum Fascia appear to be in good condition with no obvious issues. Soffit panels note to be misaligned at south west corner of building resulting in a gap providing potential access of wildlife. Recommend repairing soffit as part of regular maintenance. (Refer to Photo 10.2.7)

10.3 HVAC

- The ventilation for the ambulance bays is controlled through a local timer manually which enables a wall exhauster equipped with a backdraft damper. The exhaust fan is in good condition. A makeup air source is not provided which will lower the amount exhausted when the overhead doors are closed. It is also not equipped with a CO detector which should be added for safety considerations. Three ceiling fans are located within the bays to promote mixing and reduce stratification. The ceiling fan serving the original bay is wobbling and should be tightened to prevent future equipment failure.

- The heating for the ambulance bays is provided through an oil fired furnace located in the furnace room which is generally in good condition. The oil tank serving the furnace is located in the same room and appears to have been recently replaced and in good condition however it is missing a drain pan to contain spills. The room did not appear to be fire rated and there are concerns with other fuel oil code compliance. A combustion air duct is provided for the furnace however it is

installed as a flexible duct which is not code compliant. It is recommended a qualified party review the fuel oil system for code conformance. The furnace is connected to an overhead duct system which is in good condition with the exception of the return grille which was damaged and should be repaired. Two duct branches serving the old bay are not provided with grilles which should be added to prevent birds from nesting. A recirculation unit is also installed in the bays however it was indicated as decommissioned (Refer to Photo 10.3.1 & Photo 10.3.2).

- It was noted the oxygen room contains oxygen cylinder storage which may require additional ventilation to conform to the Ontario Fire Code. It is recommended the County have a qualified party review the requirements for oxygen storage within the facility.

- The remainder of the station is ventilated with a basement oil fired furnace and air conditioning system. At the time of the assessment, the air conditioning was disconnected to facilitate exterior foundation repairs. The condenser was noted to be significantly plugged and should be cleaned. A combustion air duct is provided for the basement appliances however it was installed as flexible ducting which is not code compliant. Similar to the garage oil fired furnace, a code review should be completed to determine code compliancy.

- A Heat Recovery Ventilator installed in the basement provides tempered outdoor air ducted to the furnace system. The filter for this unit was significantly plugged and should be replaced. The condition of the HRV is good (Refer to Photo 10.3.3).

10.4 Plumbing

- The water supply for the building is provided through a well pump and filtration system which was brand new.

- A new Reverse Osmosis (RO) system was installed for the kitchen sink and is in good condition.

- The garage is equipped with a cold water hose reel and drained through a trench drain which are in good condition. The occupants have indicated the drain frequently backs up during wash downs. It is recommended to rod/flush these lines to determine if they are restricted or if the issue is a result of undersized or improperly vented drainage.

- Hot water is generated through an oil fired water heater in the basement which appeared to be in good condition. The relief valve was noted to be leaking and should be replaced. A basement oil tank supplies oil to the water heater and furnace and appeared to be new and in good condition (Refer to Photo 10.4.1).

- It was noted there are no eye washes provided in the bays which should be added similar to the other ambulance stations.

- A local pedestal style sump pump is installed in the basement and was in good condition. The discharge flexible hose should be replaced with rigid piping as it appeared to be leaking significantly when the pump was on.

- A new Reverse Osmosis (RO) system was installed for the kitchen sink and is in good condition.

10.5 Electrical

- Overall, the electrical systems appear to generally be in fair condition. Multiple renovations with electrical work have been completed since the buildings construction in 1981.

- The main panelboard/disconnect is an Eaton 200A, 120/240V main panelboard located in the basement with a Square D 100A, 120/240V sub panel in the garage (refer to Photos 10.5.1 and 10.5.2). The main panelboard is showing signs of rust and wear, and should be considered for replacement in the future. There is a Generac 17kW Guardian series standby generator located outside of the building, the standby generator was not connected due to work being done on the buildings foundation (refer to Photo 10.5.3). It is recommended that the generator be relocated during construction to protect damage and dust from construction activities.

- We recommend the integrity of old braided wiring be assessed by a certified electrician. The insulation integrity of aged braided wiring may be compromised due to its age (refer to Photo 10.5.4). Older braided wiring originally did not consist of a ground wire which is required by the current Ontario Electrical Code. A detailed inspection by an electrician would confirm the presence of a ground wire. In general it is recommended that all aged braided wire be replaced.

- Some interior light fixtures are aging and should be considered for replacement. The light fixture above the kitchen sink is showing signs of rusting and should be considered for replacement. Switch cover in basement is cracked and should be replaced.

- LED light on exterior of garage is always on. Investigation and implementation of lighting control should be considered.

- Old generator connection located in the garage should be considered for removal.

- Air conditioner was not connected at the time of observation due to renovation (refer to Photo 10.5.5). The A/C disconnect is getting old and should be considered for replacement.

- Phone connection in the Crew Room is not operational.

- Exit signs appear to be aged and are showing signs of wear. As of January 1, 2014, all new buildings and major renovations are required to install the new “Running Man” Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the “Running Man” signs will be required.

10.6 Parking Lots / Lane Ways

- The asphalt parking lot and driveway are in fair condition with minor to moderate cracking.

Table 17: Summary of Parham Ambulance Base Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Foundation - Poor - leaking in multiple locations, being repaired at time of site visit.		$	
Slab-on-grade – Vehicle Bays - Generally fair - moderate cracking and delamination that has previously been repaired, localized poor condition at joint between SOG and apron slab.			$2,000
Interior Floors - Main Floor - Generally fair condition with minor wear. Joist at post by stairs is failing - Poor condition.		$2,000	
Interior Floors - Basement - Acceptable - moderate wear.			$
Exterior Doors – Exterior - Fair - No Obvious Issues with doors themselves - Recommend replacement of hardware and hinges as they are showing wear - The County may consider replacement of doors for performance.	$2,500		
Exterior Overhead Doors - Acceptable - moderate rusting at track bases. Noted that ongoing maintenance required due to frequency of use. Replacement should be budgeted for within 10 year window.		$8,000	
Exterior Windows – Exterior - Fair Condition - Recommend budgeting for replacement within 10 years based on age.			$2,000
Exterior Windows – Exterior/1994 Addition - Fair Condition - Recommend budgeting for replacement within 5 years based on age.			$1,000
Interior Floors – Main Floor - Grout failing at tile throughout hallway. Recommend repairing grout or replacing tile through hallway.	$1,000		
HVAC			
Garage Furnace Ductwork - Return grille to furnace should be replaced.			$200
Plumbing			
Not Applicable			

Electrical			
Incoming Services – Main Panelboard Disconnect Switch - Showing some signs of wear. Replace around 5 years based on condition rating.			$5,000
Distribution System – Interior Lighting - Showing some signs of wear but appear operational. Replace within 10 years based on condition rating. Replace bulbs as required. Clean insects from fixtures as necessary. Cracked switch cover in basement should be replaced. Light above sink requires replacement.			$1,500
Distribution System – Conduit and Lighting - All old braided wiring should be considered for replacement within 5 years based on condition rating.			$5,000
Distribution System – Conduit and Lighting - Old generator hook-up in the garage should be removed.			$500
Distribution System – A/C Disconnect - Showing some signs of wear but appear operational. Replace within 10 years based on condition rating.			$500
Parking Lot / Lane Ways			
Not Applicable			
TOTAL	$3,500	$10,000	$17,700

(1) Class D Level Estimate Opinion of Probable Costs

Note: A $ sign with no value is used to indicate associated time frame for recommendations with a low dollar value and/or recommendations to be carried out as part of regular maintenance.

11.0 FAIRMOUNT HOME PARAMEDIC OFFICES CONDITION ASSESSMENT

11.1 Overview

The Paramedic Offices are located in the basement of the "Fairmount Home" located at 2069 Battersea Road in Glenburnie, Ontario. According to the County of Frontenac, this area of the building has a gross floor area of about 6,200ft².

Table 18 provides a brief summary of historical upgrades undertaken at the Fairmount Home since its original construction in 2006.

Table 18: Summary of Historical Fairmount Home Paramedic Offices Building Upgrades

Year	Description of Upgrade
1968	Original building construction
1972	Original auditorium construction
2004	Renovation and expansion to the original building
2014	Auditorium rebuilt

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

11.2 Structural / Architectural

- The carpet in the Paramedic Office at the basement level appears in poor condition showing wear and staining due to age. It is recommended this carpet be replaced within 5 years base on condition and age.

11.3 HVAC

- RTU-6 serves the paramedic office area and is heated through a gas fired heating section and cooled through an integral DX refrigeration system. The unit has an economizer section to utilize free cooling during shoulder seasons. The unit is in good condition and has been reported to be operating well. The refrigerant used is R-22 which shares the same concerns as the other rooftop units. The unit was installed in 2007 and the typical life expectancy of these units can vary from 15 to 25 years. Due to the good condition of the units, replacement should be expected within 10 years however additional costs will be incurred if units require recharging with R-22 refrigerant before replacement. There are also the environmental implications for an R-22 leak which should be considered.

Table 19: Summary of Fairmount Home Paramedic Offices Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Building Interior – Interior Floors - Poor condition, Recommend replacement due to age		$34,307	
HVAC			
Not Applicable			
TOTAL	$0	$34,307	$0

(1) Class D Level Estimate Opinion of Probable Costs

12.0 HOWE ISLAND FERRY CONDITION ASSESSMENT

12.1 Overview

The property at 2 Howe Island Ferry Road in Kingston, Ontario includes a single-storey space for the ferry staff and the public. According to the County of Frontenac, the building has a gross floor area of about 300ft² and was constructed in 2006.

Table 20 provides a brief summary of historical upgrades undertaken at the Howe Island Ferry Building since its original construction in 2006.

Table 20: Summary of Historical Howe Island Ferry Building Upgrades

Year	Description of Upgrade
2006	Original building construction
	(No additional upgrades reported)

The following sections summarize the findings of the condition assessment review for the above-referenced facilities, which should be reviewed in conjunction with Appendix A (detailed inventory of assets/attributes and condition ratings) and Appendix B (photographs).

12.2 Structural / Architectural

- The structure is wood-framed. The building is built on a poured concrete slab.
- The exterior walls are primarily clad with metal panel siding. Windows are punched, vinyl frame windows with double-glazed vision glass. The building is protected by a low sloped pitch roofing assembly (metal panel).
- No evidence of building settlement or other poor foundation performance was observed or reported by regular building occupants. The foundation slab appears to be in fair condition with minor wear and select areas of moderate wear.
- The building structure consists of wood framing finished with corrugated sheet metal for the walls and roof. The framing was not exposed and could not be observed, however no obvious issues were apparent. The interior floor is damaged at the main door, likely due to moisture, and has been temporarily patched.
- Concrete stairs lead up to both doors at the front of the building. These stairs are in fair condition with minor wear. Bollards located around the electrical panel are in fair condition with minor wear and rust. The guiderail in front of the building is in acceptable condition with minor damage at the north end (Refer to Photo 12.2.1).
- The asphalt parking space in front of the building is in fair condition with minor cracking.
- Caulking at vertical joint of base flashing on west side of building noted to be failing. It is recommend this joint be repaired and joints be monitored/repaired as part of regular maintenance. (Refer to Photo 12.2.2).

- The interior ceiling finish is suspended acoustical tile and is generally in fair condition. The ceiling grid is showing minor rust around perimeter of the main office space and moderate rusting within the bathroom. It is expected the repair/replacement of the ceiling tile system will be desired for aesthetic reasons within 5-10 years.

- The seals of the insulated glass units of the vinyl windows throughout the building show signs of wear. It is recommending windows be replaced within 5 years for performance. (Refer to Photo 12.2.3).

- Interior vinyl plank flooring throughout the building is generally in good condition. Localized damage due to moisture at main door temporarily patched/covered with plywood panel at time of visit. It is recommended source of damage be investigated, patched and repaired. (Refer to Photo 12.2.4).

- It was noted that office cabinets are showing signs of wear. The County may want to consider replacement for aesthetic reasons.

- Interior metal bathroom door and frame in generally good condition though showing advanced surface wear. The County may want to consider repainting door and frame for aesthetic reasons as part regular maintenance. (Refer to Photo 12.2.5).

- Grab bars in washroom are noted to have minor rusting. The County may want to consider replacement for aesthetic reasons.

12.3 HVAC

- The ferry terminal is heated and cooled through an exterior mounted unit ventilator equipped with a refrigeration circuit and electrical heating coil. It was noted the refrigeration circuit utilizes R-22 refrigerant which will be effectively phased out in Canada under the Montreal protocol by 2020. This will make future repairs and recharging prohibitively costly and eventually unachievable. Otherwise, the condition of the ventilator was good (Refer to Photo 12.3.1).

12.4 Plumbing

- A small under cabinet electric domestic hot water tank is located under the sink which provides hot water to the washroom and office sink and is in good condition (Refer to Photo 12.4.1).

- The washroom is provided with an electric baseboard heater and ceiling washroom fan however the fan is not vented to the exterior of the building. Several equipment and finishes in the washroom are rusting prematurely which is likely due to the high humidity and lack of ventilation. It is recommended to vent the exhaust fan and replace the rusted washroom plumbing escutcheons (Refer to Photo 12.4.2 & Photo 12.4.3).

12.5 Electrical

- Overall, the electrical systems appear to generally be in good condition.

- The main panelboard/disconnect is a Siemens 100A, 120/240V panelboard and appears to be in good condition (refer to Photo 12.5.1). The main panelboard appears to be fed from MTO owned stainless steel electrical enclosure located near the ferry building.

- Meter base cabinet is starting to exhibit signs of rust. The service conduit and weather head are severely rusted, it is recommended that the conduit and weather head are replaced (refer to Photo 12.5.2).

- It is not recommended to chain equipment to electrical cables for security (refer to Photo 12.5.3). Cable is not intended or designed for this purpose, the cable could potentially be damaged and pose a safety hazard.

- Interior and exterior lighting is showing signs of wear but is operational (refer to Photo 12.5.4). Replace fixture bulbs and lens as necessary. It is recommend that light fixtures are considered for replacement.

- It is recommended that the non-illuminated exit signage be replaced with new illuminated “Running Man” exit signage. . As of January 1, 2014, all new buildings and major renovations are required to install the new “Running Man” Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the “Running Man” signs will be required.

- The sump pump alarm panel is exhibiting signs of wear and rusting. The warning light is lit and should be investigated (refer to Photo 12.5.5). Wiring located at the tank access point appears to have been damaged and splice together as a fix (refer to Photo 11.5.6). It is strongly recommended that this system is replaced to prevent failure. All cabling installed above ground should have mechanical protection to prevent damage.

Table 21: Summary of Howe Island Ferry Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Structural/Architectural			
Exterior Walls - Caulking at vertical joint of base flashing failing. Recommend repairing.	$		
Exterior Windows - Poor - Windows seals beginning to fail. Recommend replacement within 5 years.			$2,500
Interior Walls - Door casing at exterior doors showing staining and water damage. Recommend painting.	$		
Interior Doors – Washroom - Good functional condition though showing surface wear. Recommend painting for aesthetic reasons.		$	
Interior Floor - Generally Good Condition. Damage at main door (likely due to moisture) to be repaired, temporary patch in now. Recommend replacement of flooring.	$3,500		
Interior Ceiling - Generally fair condition. Showing minor rust around perimeter. Showing		$1,800	

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
moderate rusting of support grid in bathroom. Recommend budgeting for Replacement within 5 years			
HVAC			
Sump Level Alarm – Washroom - Used for septic holding tank.			$500
Electric Radiator – Washroom - Some surface rust, should be painted.			$300
Plumbing			
Not Applicable			
Electrical			
Distribution Systems – Interior Lighting - Showing some signs of wear but appear operational. Replace within 5 years based on condition rating. Clean insects and replace bulbs/lens as required.		$750	
Distribution Systems – Exterior Lighting - Replacement of Wall Pack within 5 years based on condition rating.		$250	
Distribution Systems – Conduit and Wiring - Conduit for service connection is heavily rusted. It is recommended to replace this conduit.		$2,500	
Miscellaneous – Baseboard Heating - Replace within 10 years based on condition rating.			$500
Miscellaneous – Sump Pump Alarm - Showing some signs of wear but appear operational. Exposed wire at the tank should be replaced and mechanically protected. Replace within 5 years based on condition rating.		$2,500	
Parking Lot / Lane Ways			
Guiderail – North of Building - Acceptable - minor damage on North end			$2,000
TOTAL	$3,500	$10,300	$3,300

(1) Class D Level Estimate Opinion of Probable Costs

Note: A $ sign with no value is used to indicate associated time frame for recommendations with a low dollar value and/or recommendations to be carried out as part of regular maintenance.

13.0 K & P TRAIL BRIDGES CONDITION ASSESSMENT

13.1 Overview

The detailed Ontario Structure Inspection Manual (OSIM) report for the five (5) K&P trail bridges has been submitted separately. The following table provides an overview summary of costs required for recommended maintenance and rehabilitation work for the bridges.

Table 22: Summary of K&P Trail Bridges Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe[1]		
	Immediate	0 to 5 Years	5 to 10 Years
Millhaven Creek Bridge	$1,000	$1,500	
Hardwood Creek Bridge	$800	$27,500	$15,000
White Creek Bridge			
Elbow Creek Bridge	$1,500	$5,000	
Fish Creek Bridge		$16,000	
TOTAL	$3,300	$50,000	$15,000

[1] Class D Level Estimate Opinion of Probable Costs

Refer to the complete OSIM Report titled “County of Frontenac K&P Trail Bridges – 2019 OSIM Report” for all details.

14.0 COST SUMMARY OF RECOMMENDED CAPITAL UPGRADES

A summary of estimated costs and associated recommendations made within this Memorandum are provided in Table 23, organized by class and timeframe. The following is noted:

- No estimated costs are included for any potential upgrades or improvements regarding potential non-compliance with current Ontario Building Code requirements (including life-safety, egress, fire-ratings, seismic performance of buildings and process structures and equipment).
- The estimated costs for the various items are order-of-magnitude only (Class 'D' Estimate) and are based on the experience and current (2019) unit prices in the construction industry.
- All costs, including those for future years, are expressed in 2019 dollars. If these costs are to be used for long-range cash-flow projections, the implications for potential future trends of inflation and interest must be applied accordingly.

Table 23: Summary of Short to Medium Term Recommendations and Costs

Discipline/Activity	Estimated Repair or Replacement Cost & Associated Timeframe(1)		
	Immediate	0 to 5 Years	5 to 10 Years
Fairmount Home	$18,950	$1,208,075	$2,363,100
Administration Building (Old House)	$5,000	$110,200	$149,750
Palace Road Ambulance Base	$2,000	$20,000	$74,000
Sydenham Ambulance Base		$1,648	$15,000
Robertsville Ambulance Base			$2,200
Wolfe Island Ambulance Base	$2,750		$5,600
Parham Ambulance Base	$3,500	$10,000	$17,700
Fairmount Home – Paramedic Offices		$34,307	
Howe Island Ferry	$3,500	$10,300	$3,300
K & P Trail Bridges	$3,300	$50,000	$15,000
TOTAL	$39,000	$1,444,530	$2,645,650

(1) Class D Level Estimate Opinion of Probable Costs

This report has been prepared for the exclusive use of The County of Frontenac, for the stated purpose, for the named facilities. Its discussions and conclusions are summary in nature and cannot be properly used, interpreted or extended to other purposes without a detailed understanding and discussions with the client as to its mandated purpose, scope and limitations. This report was prepared for the sole benefit and use of The County of Frontenac and may not be used or relied on by any other party without the express written consent of J.L. Richards & Associates Limited.

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The County of Frontenac - Building Condition Assessment Report

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JLR No. 28333

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County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
Fairmount Home														**$3,590,125.00**
1.1	Architectural & Structural													$2,435,675.00
	1.1.1	Building Structure												$10,000.00
			1.1.1.1	Foundation	Perimeter	N/A		1968	60	51	9	3	Generally good (only some was observable), localized area @ auditorium was rusting Fair/poor near garbage loading area, localized major rust/deterioration, some repairs required	$10,000.00
			1.1.1.2	Slab on Grade	Mechanical Room	N/A	Concrete Slab					4	Fair condition; minor wear and cracking observed	
			1.1.1.3	Building Structure	Various	N/A	Steel deck, OWSJ's, beams, and columns					5	Only observed in select locations. Generally good condition. Fireproofing of steel beams in mechanical room has been locally compromised.	
			1.1.1.4		Various	N/A	Concrete and CMU Walls					5	Generally good condition	
			1.1.1.6	Railings and Columns	Garbage Loading Area, Generator Retaining Wall Structure	N/A	Steel	2003	60	16	44	4	Good condition, minor rusting	
			1.1.1.7.1	Retaining Wall (1)	Generator, Behind (west) of Building	N/A	Concrete walls, 3 sides, steel railing, slab on grade	2003	60	16	44	4	Wall: Good/fair - minor wear Railing: Fair - minor rusting	
			1.1.1.7.2	Retaining Wall (2)	North side of building	N/A	Separating sidewalk and grassed area					4	Good condition	
			1.1.1.9	Bollards	Various	N/A	Steel with concrete fill		30		30	4	Generally good	
			1.1.1.10	Pole Bases	Various	N/A	For light poles, flag poles, etc.		30		30	4	Generally fair/good, light/moderate wear	
	1.1.2	Building Envelope												$443,400.00
			1.1.2.1	Exterior Walls	Exterior / 2004 Addition	N/A	Brick Masonry	2004	60	15	45	5	Good - Overall good condition with localized areas of deterioration.	
												1	Flashing at base of Greenhouse glazing only covers half of sill resulting in masonry staining and damage at sill joints. Stone Sill requires new flashing to provide complete coverage and repointing of the brick masonry.	$3,000.00
												1	Investigate, clean, and repair balcony drainage at west balcony. Lack of appropriate flashing at scupper appears to be the cause of deteriorated masonry joints. Reflashing, masonry repairs and cleaning of debris from underneath patio stones recommended pending investigation.	$8,000.00
			1.1.2.1	Exterior Walls	Exterior / 1968 Wing	N/A	Brick Masonry, Stucco/metal lath	1968	60	51	9	5	Good - No obvious issues	
			1.1.2.2	Exterior Walls	Exterior / Auditorium	N/A	Aggregate Coated Fibreglass Panels	2014	40	5	35	5	Good - No obvious issues	
			1.1.2.3	Exterior Doors	Exterior/Main Entrance and Courtyard	N/A	Glazed Aluminum Doors	2004	30	15	15	5	Good - No Obvious Issues	
			1.1.2.4	Exterior Doors	Main Auditorium Doors / Auditorium Rear Exit	N/A	Glazed Aluminum Doors	2014	30	5	25	5	Good - No Obvious Issues	
			1.1.2.5	Exterior Doors	Loading Dock Doors / Exit Doors / Misc.	N/A	Metal Doors with Metal Frame	2004	30	15	15	6	Good - No Obvious Issues	

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Facility	Class	Asset		Attribute										
			1.1.2.6	Exterior Windows	Exterior / Residence Floors	N/A	Vinyl Windows	2004	25	15	10	3	Acceptable - No Obvious Issues. Recommend Budgeting for Replacement due to age.	$400,000.00
			1.1.2.7		Exterior / 4 Locations adjacent 1968 wing	N/A	Curtain Wall Windows	2004	40	15	25	5	Good - No Obvious Issues	
			1.1.2.8		Exterior / Auditorium	N/A	Vinyl Windows	2014	25	5	20	5	Good - No Obvious Issues	
			1.1.2.9	Exterior Windows	Stairwell S2	N/A	Wood framed stairwell windows	1968	30	51	-21	3	Acceptable - Recommend Budgeting for Replacement to improve performance and aesthetics.	$32,400.00
		1.1.3	Roof											$946,200.00
			1.1.3.1	Roof Assembly	Exterior/1968 Wing	N/A	Metal Shingles on Mansard Roof		30			3	Paint showing wear - Recommend Re-Painting	$25,000.00
			1.1.3.2	Roof Assembly	Exterior/2004 Addition Mansard Roof	N/A	Asphalt Shingles on Mansard Roof	2004	25	15	10	3	Acceptable - showing acceptable wear for age - Recommend budgeting for replacement based on effective life expectancy.	$180,000.00
												1	Shingles at dormer windows showing degranulation and curling. Recommend replacement of shingles at all dormers.	$7,000.00
			1.1.3.3	Roof Assembly	Exterior/2004 Addition/Sloped Roof	N/A	Asphalt Shingles on Sloped Roof (Entrance Wing)	2004	25	15	10	3	Fair - no obvious issues - Recommend budgeting for replacement based on effective life expectancy.	$44,200.00
			1.1.3.4	Soffit & Fascia	Exterior/1969 wing/2004 addition	N/A	Prevented Aluminum Soffits (2004), Plywood Soffits (1968)					5	Good - No obvious issues	
			1.1.3.5	Roof Assembly	Exterior/Flat Roof/1968 Wing/2004 Addition	N/A	Two Ply Modified Bit Roofing Membrane	2004	20	15	5	3	Acceptable condition - Recommend replacement due to age	
												2	Roofing is "bubbling" at West Side of Renovated Wing (gridlines 1x to 4x)	$10,000.00
												3	Budgeting for replacement based on age recommended.	$680,000.00
			1.1.3.6	Roof Assembly	Exterior/Auditorium	N/A		2014	25	5	20	5	Good - No obvious issues	
		1.1.4	Building Interior											$1,036,075.00
			1.1.4.1	Interior Walls	Interior / Various/ Throughout	N/A	Gypsum Wall Board	1968, 2004, 2014				5	Generally good condition	
												1	Water damage at gypsum wall board base at Auditorium rear exit vestibule. Recommend investigating source of water at time of repair.	
			1.1.4.2	Interior Doors	Interior/multiple floors	N/A	Metal Doors with Metal Frame, Wood Solid Core with Wood Frame	2004	30	15	15	5	Generally good condition	
			1.1.4.3	Interior Floors	Garbage/Mechanical Rooms	N/A	Concrete floor slabs	1968	60	51	9	4	Garbage room: Fair - wear Mechanical room: Good/fair - wear and minor cracking	

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1.1	Facility													
		1.1.4		Interior Floors										
			1.1.4.4	Interior Floors	Ground Suite Floors	N/A	Suite Vinyl Flooring at Slab-on-grade - 2004 addition	2004	20	15	5	3	It was noted sheet vinyl flooring in these rooms have started to shrink and pull away at the seams, and the appropriate supports have not been installed at the floor bases. It is noted that replacement of the floors in these suites is being carried out on a room by room basis with approximately 20 rooms remaining.	$100,000.00
			1.1.4.5	Interior Floors	Basement	N/A	Replace Vinyl Tiles in Basement	2004	15	15	0	3	Acceptable condition - Recommend replacement due to age	$18,500.00
			1.1.4.6	Interior Floors	Ground Floor/Second Floor Corridors/Shared Spaces	N/A	Carpet Flooring	2004	15	15	0	2	Poor condition - Recommend replacement due to age	$275,000.00
			1.1.4.7	Interior Floors	Basement Floor / Paramedic Offices	N/A	Carpet Flooring	2004	15	15	0	2	Poor condition - Recommend replacement due to age	$35,000.00
			1.1.4.8	Interior Floors	Basement (Kitchen and Kitchen support rooms, Various utility rooms) Ground Floor / Second Floor (Kitchen and Service Corridor)	N/A	Replace remaining sheet vinyl flooring	2004	20	15	5	2	Condition ranges from poor to acceptable. Acceptable condition - Recommend replacement due to age	$28,000.00
			1.1.4.9	Interior Floors	Ground Floor / Second Floor (Residence Rooms not covered in 1.1.4.6)	N/A	Replace remining sheet vinyl flooring	2004	20	15	5	3	Condition appears acceptable. Recommend replacement within 10 years based on age.	$410,000.00
			1.1.4.10	Interior Ceilings	Mechanical Room	N/A	Hollow core Slab / Steel Deck and OWSJ	1968	60	51	9	5	No issues	
			1.1.4.11	Interior Ceilings	Basement / Ground Floor / Second Floor	N/A	Suspended Acoustical Tile	2004	15	15	0	2	Poor - Generally functional condition - Recommend replacement due to age and condition.	$152,600.00
												2	Poor - Ceiling tiles at all kitchens generally stained from cooking activities. Recommend Replacement.	$16,975.00
			1.1.4.12	Interior Equipment Pads	Mechanical Room	N/A	Concrete	1968	60	51	9	4	Fair - minor wear and cracking	
1.2	HVAC													$107,000.00
	1.2.1	Heating & Cooling.												$88,000.00
			1.2.1.1	Radiator	Basement Maintenance Room	Unknown	Hot Water Radiators	2004	25	15	10	4	Fins good, could be cleaned	
			1.2.1.2	Fridge AC Unit	Basement Fridge A-015B	Ref Plus	Ref Plus Model OCS-015-1M4-5	2004	20	15	5	2		$12,000.00
			1.2.1.3	Fridge AC Unit	Basement Fridge A-015C	Ref Plus	Ref Plus Model OCS-015-1M4-5	2004	20	15	5	2		$12,000.00
			1.2.1.4	Freezer AC Unit	Basement Freezer	Ref Plus	Ref Plus Model OCS-040-1L4-5	2004	20	15	5	2		$16,000.00
			1.2.1.5	CUH	Basement Vestibule S-019	Unknown	Vestibule CUH	2004	20	15	5	4		
			1.2.1.6	AC Unit	Basement Garbage Room S-022	Unknown	Garbage Room AC Unit	2004	20	15	5	2		$14,000.00
			1.2.1.7	Unit Heater	Basement Garbage Room S-023	Unknown	Garbage Room Unit Heater	2004	20	15	5	2	Poor visual condition	$4,000.00
			1.2.1.8	Condenser Unit	Basement Exterior	Unknown	Garbage Room 3 Ton Condenser Unit - Ref Plus Model OCS-020-1M4-5	2004	20	15	5	2	Costs included with indoor unit	
			1.2.1.9	Ceiling CUH	First Floor E-118	Unknown	Trane Model UHWA051A2AT	2004	20	15	5	4		
			1.2.1.10	Condenser Unit	E-109	Daikin	Daikin Condenser Unit	2004	20	15	5	4		

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Facility	Class	Asset		Attribute										
			1.2.1.11	AC Unit	W-106 & W-206	Mitsubishi	Mitsubishi AC Unit	2004	15	15	0	3		$4,000.00
			1.2.1.12	Condenser	Exterior N-142A	Mitsubishi	2 Stacked Condenser Units	2004	20	15	5	3		$6,000.00
			1.2.1.13	Radiant Panel	Corridor E-200	Unknown	Radiant Panel	2004	25	15	10	4		
			1.2.1.15	Steam Boilers	Basement	Unknown	Steam Boilers (x2)	2004	25	15	10	4	Not used in 11 years, have been maintained. Should be decommissioned and replaced with alternate humidification	
			1.2.1.16	Hydronic Boilers	Mechanical Room	Unknown	Hydronic Boilers	2015	25	4	21	5		
			1.2.1.17	Unit Heater	Mechanical Room	Trane	Trane Unit Heater	2004	20	15	5	4		
			1.2.1.18	Hydronic Expansion Tank	Mechanical Room	Amtrol	Amtrol X-Trol Tank 5T451	2013	16	6	10	5		
			1.2.1.19	Air Separator	Mechanical Room	Unknown	Air Separator	2004	20	15	5	4	Insulation ripping, air vent piping corroded but okay, previous leak	
			1.2.1.20	49C Domestic Boiler #1	Mechanical Room	Lochnivar	Lochnivar Copper-Fin Model CWN0647PM	2015	20	4	16	5		
			1.2.1.21	49C Domestic Boiler #2	Mechanical Room	Lochnivar	Lochnivar Copper-Fin Model CWN0647PM	2015	20	4	16	5		
			1.2.1.22	60C Domestic Boiler #1	Mechanical Room	Lochnivar	Lochnivar Copper-Fin Model CWN0647PM	2015	20	4	16	5		
			1.2.1.23	60C Domestic Boiler #2	Mechanical Room	Lochnivar	Lochnivar Copper-Fin Model CWN0647PM	2004	20	15	5	2	Some rust on pump discharge	$20,000.00
			1.2.1.24	Mixing Valve	Mechanical Room	Symmons	Hot Water Mixing Valve	2004	15	15	0	3		
			1.2.1.25	Hot Water Storage Tank	Mechanical Room	Lochinvar	Hot Water Storage Tank (x4)	2004	25	15	10	4		
		1.2.2	Natural Gas Piping											$0.00
			1.2.2.1	Rooftop N.G. Piping	Rooftop	Unknown	Various N.G. Piping to Rooftop HVAC Units	2004	30	15	15	4	Noticeable rust in locations. Valves & Handles rusted and could be an issue to operate. Paint recommended as part of regular maintenance.	
			1.2.2.2	Gas Meter	Exterior	Union Gas	Union Gas Meter	2004	30	15	15	5		
			1.2.2.3	Boiler Stacks	Various	Unknown	Boiler Stacks	2004	30	15	15	5		
		1.2.3	Circulating Pumps											$10,000.00
			1.2.3.1	Domestic Water Booster Skid	Mechanical Room	Bell & Gosset	Bell & Gossett Model70M-3	2004	20	15	5	4	One pump disconnected, recommended 1 replacement pump on hand	
			1.2.3.2	P1	Mechanical Room	Bell & Gosset	Bell & Gossett Pump Model 80SC-BF	2004	20	15	5	3	Rust on pump casing	$2,500.00
			1.2.3.3	P2	Mechanical Room	Bell & Gosset	Bell & Gossett Pump Model 80SC-BF	2004	20	15	5	3		$2,500.00
			1.2.3.4	P3	Mechanical Room	Bell & Gosset	Bell & Gossett Pump Model 80SC-B	2004	20	15	5	3		$2,500.00
			1.2.3.5	P4	Mechanical Room	Bell & Gosset	Bell & Gossett Pump Model 80SC-B	2004	20	15	5	3		$2,500.00
		1.2.4	Ventilation											$9,000.00
			1.2.3.1	Kitchen Exhaust Fan	Rooftop	Loren Cook	Kitchen Exhaust Fan Model 245VH10B	2004	16	15	1	2		$2,500.00
			1.2.3.2	EF-2	Rooftop	Loren Cook	Dishwasher Exhaust Fan Model 100R3B	2004	16	15	1	3		$1,500.00
			1.2.3.3	ACU-1	Rooftop	Trane	Air Cooled Condensing Unit Model TTA240BW00EA	2004	20	15	5	4	Motor condenser fan is good. Moderate fin damage, should recombine. NE Condenser section should be cleaned, Refrigerant piping insulation is brittle.	
			1.2.3.4	AHU-5	Rooftop	Trane	Trane Odyssyey MUA serving the Kitchen and Laundry	2004	25	15	10	4	P-Trap rusted, Leaking from frame, should clear drain pan.	
			1.2.3.5	AHU-6	Auditorium Mechanical Room	Trane	Trane Multi-Zone M-Series Climate Changer	2003	30	16	14	4		
			1.2.3.6	RTU's 1-4	Rooftop	Trane	Trane RTU Model Unknown	2004	30	15	15	4	P-Trap open on bottom tee, some heating coils were dirty and should be cleaned	
			1.2.3.7	Louvre	Basement Laundry S-023A	Unknown	Basement Laundry Room Aluminium Louvre	2004	20	15	5	4		

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Facility	Class	Asset		Attribute										
			1.2.3.8	Dryer Vents	Basement Laundry S-023A	Unknown	Basement Laundry Dryer Vents	2004	30	15	15	3	Worn, lint should be cleaned	
			1.2.3.9	Wall Prop Fan	First Floor Janitor Closet	Unknown	Wall Exhaust Fan	2004	16	15	1	4	Room likely needs more exhaust air as Mop sink is showing signs of rust	
			1.2.3.10	Dishwasher Hood	W-106 & W-206	Unknown	Dishwasher Hood	2004	30	15	15	4		
			1.2.3.11	Wall Prop Fan	N-103	Unknown	Wall Prop Fan	2004	16	15	1	5	Runs Well	
			1.2.3.12	Grilles	Various Locations	Unknown	Duct Grilles	2004	27	15	12	5	Could be cleaned	
			1.2.3.13	Wall Prop Fan	Second Floor Common Room	Unknown	Wall Prop Exhaust Fan	2004	16	15	1	5		
			1.2.3.14	Exterior Louvre	Corridor E-200	Unknown	Exterior Louvre	2004	20	15	5	3	Galvanized with paint which is chipping	$500.00
			1.2.3.15	AHU-3A	Rooftop	Trane	RTU Unit Model Unknown	2004	20	15	5	4	Squeaky bearing, glycol good, heating coil dirty,	
			1.2.3.16	EF-3	Rooftop	Unknown	Dishwasher Exhaust	2004	16	15	1	3		$1,500.00
			1.2.3.17	EF-4	Rooftop	Unknown	Dishwasher Exhaust	2004	16	15	1	3		$1,500.00
			1.2.3.18	EF-1	Rooftop	Greenheck	Rooftop Exhaust Fan Greenheck Model CUBE-098-4-X	2004	15	15	0	3		$1,500.00
1.3	Plumbing													$16,000.00
	1.3.1	Fixtures												$8,000.00
			1.3.1.1	Double Sink	Basement Maintenance Room	Unknown	Double Sink	2004	30	15	15	5		
			1.3.1.2	Eye Wash	Basement Maintenance Room	Unknown	Eyewash Station	2004	30	15	15	5	No paddle switch, just ball valve	
			1.3.1.3	Sink	Basement Lounge	Unknown	Basement Lounge Sink	2004	30	15	15	5		
			1.3.1.4	RO System	Basement	Unknown	Basement RO System	2010	30	9	21	5		
			1.3.1.5	Hand Sink	Basement Kitchen	Unknown	Basement Kitchen Hand Sink (x3)	2004	30	15	15	5		
			1.3.1.6	Double Sink	Basement Kitchen	Unknown	Basement Kitchen Double Sink	2004	30	15	15	5		
			1.3.1.7	Hand Sink	Basement S-020	Unknown	Basement Hand Sink	2004	30	15	15	5		
			1.3.1.8	Double Sink	Basement Laundry S-023	Unknown	Basement Kitchen Double Sink	2004	30	15	15	5		
			1.3.1.9	Mop Sink	Basement Laundry S-023A	Unknown	Basement Laundry Mop Sink	2004	30	15	15	5		
			1.3.1.10	Mop Sink	First Floor Janitor Closet	Unknown	Janitor Closet Mop Sink	2004	30	15	15	4	Surface rust	
			1.3.1.11	Shower	First Floor	Unknown	Located b/w GL 6X & 3	2004	30	15	15	5		
			1.3.1.12	Hand Sink	First Floor	Unknown	Located b/w GL F & 4	2004	30	15	15	4	Some corrosion on supports	
			1.3.1.13	Double Sink	Activity S-137 & Activity S-2337	Unknown	Double Sink	2004	30	15	15	5		
			1.3.1.14	Washer / Dryer	Activity S-138 & Activity S-237	Unknown	Washer / Dryer in Activity Room	2004	30	15	15	4	Washer piping in good shape	
			1.3.1.15	Hose Bibbs	Exterior	Unknown	Exterior Hose Bibbs	2004	30	15	15	4	All Exterior hose bibs appear to be in good condition	
			1.3.1.16	Sink	W-105 & W-205	Unknown	Sink (x3)	2004	30	15	15	5	Flex supplies corroded	
			1.3.1.17	Hand Sink	W-106A & W-206A	Unknown	Hand Sink	2004	30	15	15	5		
			1.3.1.18	Mop Sink	W-106A & W-206A	Unknown	Mop Sink	2004	30	15	15	5		
			1.3.1.19	Yard Hydrant	Exterior Stair N-2	Unknown	Yard Hydrant	2004	30	15	15	5		
			1.3.1.20	Mop Sink & Hand Sink	Janitor N-106	Unknown	Mop Sink & Hand Sink	2004	30	15	15	5		
			1.3.1.21	Hose Bibb	Exterior Stair S-3	Unknown	Exterior Hose Bibb	2004	30	15	15	4		
			1.3.1.22	Sink	Basement Servery	Unknown	Basement Servery Sink	2004	30	15	15	5		

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			1.3.1.23	Raw Water Filters	Mechanical Room	Unknown	Raw Water Filters	2004	30	15	15	5		
			1.3.1.24	Soft Water Filter	Mechanical Room	Culligan	Culligan Hi-Floze	2004	20	15	5	2	Poor operation & reliability, currently under contract to replace	$8,000.00
		1.3.2	Piping & Equipment											$8,000.00
			1.3.2.1	Domestic Piping	Various	Copper	Domestic Piping	2004	30	15	15	5		
			1.3.2.2	HWS & HWR Piping	Various	Steel	Hot Water Piping	2004	30	15	15	5		
			1.3.2.3	Sanitary Piping	Various	Cast & PVC	Sanitary Piping	2004	30	15	15	5		
			1.3.2.4	Storm Piping	Various	Cast	PVC Storm Piping	2004	30	15	15	5	Except discharge elbow cracks	
			1.3.2.6	Domestic Booster Expansion Tank	Basement Mechanical Room	Amtrol	Therm-X-Trol Expansion tank	2004	20	15	5	3	Rust through paint	$6,000.00
			1.3.2.7	Domestic Hot Water Recirculation pump	Basement Mechanical Room	Bell & Gossett	B*G booster pump 1BL068 G90	2004	10	15	-5	2	Rusted with previous leak	$2,000.00
			1.3.2.10	RO System	Basement RO Closet	Culligan	RO System Piping	2004	25	15	10	5		
1.4	Electrical													$2,950.00
	1.4.1	Incoming Services												$0.00
			1.4.1.1	Distribution Transformer	Exterior	CAMTRAN	Utility owned 1000KVA 27600/1600V 3PH Pad Mounted Transformer	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			1.4.1.2	Switchboard AAA	Electrical Room S-014	Siemens	347/600V 3PH 4W, 1200A	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.1.5	Meter Base	Exterior	General Electric	Building Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			1.4.1.6	Solar Meter Base	Electrical Room S-014	General Electric	Solar Meter Base	2013	25	6	19	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.1.7	Solar Disconnect Switch	Electrical Room S-014	Eaton	Heavy Duty Safety Switch, 60A, 600VAC	2013	25	6	19	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.1.8	Main Solar Disconnect	Electrical Room S-014	Square D	Heavy Duty Safety Switch, 60A, 600VAC	2013	25	6	19	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.1.9	Solar DC Inverters	Roof	Aurora	PV DC + AC Disconnect	2013	25	6	19	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.1.10	Solar Panels	Roof	Unknown	Roof mounted solar array.	2013	25	6	19	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	1.4.2	Distribution System												$2,950.00
			1.4.2.1	Main Disconnect Switch	Mechanical Room	Siemens	Heavy Duty Safety Switch, 100A, 240VAC	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.2	DP-BEAA2 Panelboard	Mechanical Room E-000	Siemens	600V, Max 225A	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.3	TX-BEB2 Transformer	Mechanical Room	BEMAG	30KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

AGENDA ITEM #a)

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility	Class	Asset		Attribute	Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
			1.4.2.4	RP-BEB2 Panelboard	Mechanical Room E-000	Siemens	120/208V, Max 225A	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.5	DP-BAA2 Panelboard	Mechanical Room E-000	Siemens	600V, Max 225A	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.6	TX-BB5 Transformer	Mechanical Room E-000	Siemens	15KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.7	RP-BB5 Panelboard	Mechanical Room E-000	Siemens	120/208V, Max 225A	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.8	DP-BEAA1 Panelboard	Electrical Room S-014	Siemens	347/600V 3PH 4W, 600A	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.9	TX-BEBB1 Transformer	Electrical Room S-014	Siemens	112.5KVA ,600V-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.10	DP-BEBB1 Panelboard	Electrical Room S-014	Siemens	120/208V 3PH 4W, 600A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.11	RP-BEB1 Panelboard	Electrical Room S-014	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.12	TX-BBB1 Transformer	Electrical Room S-014	Siemens	225KVA, 600V-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.13	DP-BBB1 Panelboard	Electrical Room S-014	Siemens	120/208V 3PH 4W, 1200A	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.14	LP-BB1 Panelboard	Electrical Room S-014	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.15	RP-BB2 Panelboard	Electrical Room S-014	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.16	RP-BB3 Panelboard	Electrical Room S-014	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.17	RP-BB4 Panelboard	Electrical Room S-014	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.18	LP-BA1 Panelboard	Electrical Room S-014	Siemens	347/600V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.19	Lighting Contactor LP-BA1	Electrical Room S-014	Siemens	347/600V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.20	DP-BAA1 Panelboard	Electrical Room S-014	Siemens	347/600V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility	Class	Asset		Attribute	Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
			1.4.2.21	TX-1B3 Transformer	Electrical Room S-014	Siemens	75KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.22	TX-1B3 Transformer	Electrical Room S-014	Siemens	75KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.23	TX-2P Transformer	Electrical Room S-014	Siemens	300KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.24	DP-2P Panelboard	Electrical Room S-005	Unknown	120/208V, 3PH 4W, 1600A	1968	30	51	-21	3	Appears Original and should be replaced in 5 years based on condition rating	
			1.4.2.25	Panel E Panelboard	Room A-108A	Square D	120/208V 3PH 4W, 100A	2014	30	5	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.26	Panel G Panelboard	Room A-108A	Square D	120/208V 3PH 3W, 200A	2014	30	5	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.27	Panel 1N6201 Panelboard	Room A-201	Square D	347/600V 3PH 4W, 225A	2014	30	5	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.28	TX-1G Transformer	Room A-201	Square D	45KVA, 600-120/208V 3PH 4W	2014	30	5	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.29	DP-1BB2 Panelboard	Electrical Closet N-103	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.30	RP-1B6 Panelboard	Electrical Closet N-103	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.31	RP-1B7 Panelboard	Electrical Closet N-103	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.32	RP-1EB2 Panelboard	Electrical Closet N-103	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.33	TX-1BB2 Transformer	Electrical Closet N-103	Unknown	75 KVA, 600-120/208V, 3PH	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.34	TX-1EB2 Transformer	Electrical Closet N-103	Unknown	30KVA, 600-120/208V, 3PH	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.35	DP-1BB1 Panelboard	Electrical Closet W-104	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.36	RP-1B1 Panelboard	Electrical Closet W-104	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.37	RP-1B2 Panelboard	Electrical Closet W-104	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

AGENDA ITEM #a)

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility	Class	Asset		Attribute	Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
			1.4.2.38	RP-1B3 Panelboard	Electrical Closet W-104	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.39	RP-1EB1 Panelboard	Electrical Closet W-104	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.40	TX-1EB1 Transformer	Electrical Closet W-104	Siemens	30KVA 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.41	TX-1BB1 Transformer	Electrical Closet W-104	Siemens	75KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.42	RP-1EB3 Panelboard	Electrical Closet S-112	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.43	RP-1B10 Panelboard	Electrical Closet S-112	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.44	RP-1B11 Panelboard	Electrical Closet S-112	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.45	DP-1BB3 Panelboard	Electrical Closet S-112	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.46	TX-1EB3 Transformer	Electrical Closet S-112	Siemens	30KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.47	TX-1BB3 Transformer	Electrical Closet S-112	Siemens	75KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.48	DP-2BB2 Panelboard	Electrical Closet N-211	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.49	RP-2B6 Panelboard	Electrical Closet N-211	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.50	RP-2B7 Panelboard	Electrical Closet N-211	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.51	TX-2BB2 Transformer	Electrical Closet N-211	Siemens	75KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.52	DP-2BB1 Panelboard	Electrical Closet W-204	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.53	RP-2B1 Panelboard	Electrical Closet W-204	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.54	RP-2B2 Panelboard	Electrical Closet W-204	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

AGENDA ITEM #a)

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
			1.4.2.55	RP-2B3 Panelboard	Electrical Closet W-204	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.56	TX-2BB1 Transformer	Electrical Closet W-204	Siemens	75KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.57	DP-2BB3 Panelboard	Electrical Closet S-212	Siemens	120/208V 3PH 4W, 400A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.58	RP-2B11 Panelboard	Electrical Closet S-212	Siemens	120/208V 3PH 4W, 250A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.59	RP-2B10 Panelboard	Electrical Closet S-212	Siemens	120/208V 3PH 4W, 225A Max	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.60	TX-2BB3 Transformer	Electrical Closet S-212	Siemens	75KVA, 600-120/208V 3PH 4W	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.61	Cooler #1 Disconnect	Exterior	RefPlus	240V 11.4A, Motor 1/4HP 1.7A	2004	30	15	15	3	Generally appear to be in fair condition. Replace within 10 years based on condition rating.	$500.00
			1.4.2.62	Garbage Cooler Disconnect	Exterior	RefPlus	240V 13.9A, Motor 1/2HP 2.9A	2004	30	15	15	3	Generally appear to be in fair condition. Replace within 10 years based on condition rating.	$500.00
			1.4.2.63	Cooler #2 Disconnect	Exterior	RefPlus	240V 11.4A, Motor 1/4HP 1.7A	2004	30	15	15	3	Generally appear to be in fair condition. Replace within 10 years based on condition rating.	$500.00
			1.4.2.64	Freezer Cooler Disconnect	Exterior	RefPlus	240V 23.9A, Motor 1/2HP 2.9A	2004	30	15	15	3	Generally appear to be in fair condition. Replace within 10 years based on condition rating.	$500.00
			1.4.2.65	A/C Disconnects	Exterior	Midwest	Non-fused disconnect	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.66	Well Pump Disconnect	Exterior	Square D	General Purpose Enclosed Switch	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.67	Vertical Lift Disconnect	Foyer A-101	Square D	General Duty Safety Switch	2014	30	5	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.68	Supply Fan Main Electrical Room Disconnect	Room A-201	Square D	Fan Disconnect and Control Panel	2014	30	5	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.69	Return Fan Main Electrical Room Disconnect	Room A-201	Square D	Fan Disconnect and Control Panel	2014	30	5	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.70	F-1 Exhaust Fan	Room A-201	Square D	Exhaust Fan Disconnect and Control Panel	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.71	Dishwasher Exhaust Fan #3 Disconnect	Kitchen S-015	Cutler Hammer	Exhaust Fan Disconnect and Control Panel	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

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County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility	Class	Asset		Attribute	Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
			1.4.2.72	Pump Control Panel	Mechanical Room E-000	Torna Tech	Pump No. 1, No.2 and No. 3 Control Panel. 600V - Line, 120V - Control, 24.5A pump FLA	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.73	Pump Control Panel	Mechanical Room E-000	Torna Tech	Pump No. 1, No.2 and No. 3 Control Panel. 600V - Line, 120V - Control	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.74	Well Pump Controller	Mechanical Room E-000	Cutler-Hammer	Pump controller with low water alarm, 2 pumps	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.75	HTG. Pump Controllers	Mechanical Room E-000	Cutler-Hammer	HTG. Pumps 1 to 4, disconnect and HOA	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.76	49 C Dom. Recirc Pump On/Off	Mechanical Room E-000	Cutler-Hammer	Pump On/Off Switches	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.77	60 C Dom. Recirc Pump On/Off	Mechanical Room E-000	Cutler-Hammer	Pump On/Off Switches	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.78	Kitchen Exhaust Fan #1 Control Panel	Kitchen S-015	Cutler-Hammer	Fusible Disconnect Combination Fan Panel	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.4.2.79	Interior Lighting	Various	Various	Mixture of fixtures including wall sconces, troffers, fluorescent/LED strip fixtures, pot lights, ceiling fans and keyless fixtures, occupancy sensors in new areas of building.	Various	30	Various	Various	4	Generally appear to be in fair condition. Some ballast and bulb replacement necessary.	
			1.4.2.80	Exterior Lighting	Exterior	Various	Mixture of area lighting, pot lights, Pole mounted lighting,	Various	30	Various	Various	4	Generally appear to be in fair condition. Recommend to replace in 10-15 years based on condition rating.	
			1.4.2.81	Conduit and Wiring	Various	Various	Mixture of conduit, wire and box cable. Varying Installation Date.	Various	40	Various	Various	4	Conduit and wire observed appeared to be in good condition. Providing covers for boxes without covers should be considered.	
												1	Replace 15A rooftop receptacles with 20A GFCI receptacles.	$450.00
												1	Install GFCI receptacles at receptacle locations within 1.5m of sinks.	$500.00
1.5	Elevators													$0.00
	1.5.1	Elevator												$0.00
			1.5.1.1	Elevator	East Elevator	N/A	Service Elevator	2004	30	15	15	5	No reported issues. Rating based on life expectancy	
			1.5.1.2	Elevator	West Elevator	N/A	Resident Elevator	2004	30	15	15	5	No reported issues. Rating based on life expectancy	
	1.5.2	Lift Systems												$0.00
			1.5.2.1	Lift System	Auditorium	N/A	Wheelchair Lift System	2014	25	5	20	5	No reported issues. Rating based on life expectancy	
1.6	Parking Lots/Lane Ways													$1,010,000.00
	1.6.1													$1,010,000.00
			1.6.1.1	Parking / Driveway	Entrance Lane and Main Parking Lot		Asphalt					2	Generally poor - moderate to severe cracking	$600,000.00
			1.6.1.2	Parking / Driveway	Secondary Lanes and Parking Areas		Asphalt					3	Generally acceptable - moderate wear and cracking	$400,000.00

AGENDA ITEM #a)

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility	Class	Asset		Attribute	Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
			1.6.1.3	Sidewalks / Curbs	Various		Concrete					3	Generally good, localized cracking/ delamination requiring repair work	$10,000.00
			1.6.1.4	Patio Area			Concrete					5	Good condition	
1.7	Life Safety (includes generator)													$18,500.00
	1.7.1	Emergency Power System												$0.00
			1.7.1.1	Automatic Transfer Switch ATS-01	Electrical Room S-014	ASCO	600A 347/600V 3PH 4W	Unknown	40	Unknown	Unknown	4	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.7.1.2	Generator	Exterior	Generac	Generac Power Systems. 250kW, 600V	Unknown	30	Unknown	Unknown	4	Generally appears to be in fair condition. This unit shall be monitored, evaluated and replaced as necessary.	
	1.7.2	Fire Alarm System												$3,500.00
			1.7.2.1	Jockey Pump Controller	Mechanical Room	Torna Tech	600V - Line, 120V - Control	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.7.2.2	Fire Pump Controller	Mechanical Room	Torna Tech	600V - Line, 600V/120V/24V - Control	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.7.2.3	Fire Pump Power Transfer Switch	Mechanical Room	Torna Tech	600V - Line, 24V - Control	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.7.2.4	Smoke/ Heat Detector	Various	Various	Ceiling mounted smoke/ heat detector.	Unknown	10	Unknown	Unknown	3	Generally appear to be in fair condition. Replace within 10 years based on condition rating.	$3,500.00
			1.7.2.5	Fire Alarm	Various	Cerberus Pyrotronics	Wall mounted annunciators. Ringer style.	Unknown	25	Unknown	Unknown	4	Generally appears to be in fair condition. These units shall be monitored, evaluated and replaced as necessary.	
			1.7.2.6	Fire Pull Stations	Various	Various	Wall mounted fire alarm pull stations	Unknown	40	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.7.2.7	Fire Alarm Panel	Foyer A-101	Siemens	FireFinder Fire Alarm Panel	2014	25	5	20	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	1.7.3	Emergency Lighting System												$15,000.00
			1.7.3.1	Emergency Lighting	Various	Various	Standard light fixtures powered by the emergency power system.	Various	40	Various	Various	4	Generally appear to be in good condition. Recommend Replace in 10-20 years based on condition rating.	
			1.7.3.2	Exit Signs	Various	Unknown	Exit Signs c/w Internal Illumination	Various	40	Various	Various	3	Appear to have some wear and tear. Replacement in the future will be to upgrade to green "Running Man" signage.	$15,000.00
	1.7.4	Barrier Free												$0.00
			1.7.4.1	Barrier Free Door Entry	Various	Various	Barrier Free Access	Various	40	Various	Various	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			1.7.4.2	Vertical Lift	Foyer	Garaventa	Genesis Enclosure Model Vertical Platform Lift	2014	20	6	14	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	1.7.5	Misc.												$0.00

AGENDA ITEM #a)

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)						Valuation
Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)	Condition Rating	Comments/ Identified Need	Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
			1.7.5.1	Heaters	Various	Various	Mixture of heaters including baseboard and wall mounted heaters.	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
	1.7.6													$0.00
			1.7.6.1	Propane Tank	Exterior	Levac LTD	Propane Tank	2004	30	15	15	5	Some rust, rented	
			1.7.6.2	Dry Pipe Sprinklers	Basement	Unknown	Dry Pipe Sprinklers	2004	30	15	15	5		
			1.7.6.3	Sprinkler Zone Valve	W-106A	Unknown	Sprinkler Zone Valve	2004	30	15	15	5		
			1.7.6.4	Fire Hose Cabinet	Various Locations	Unknown	Fire Hose Cabinets	2004	30	15	15	5		
			1.7.6.5	Fire Pump Skid	Mechanical Room	ITT Fluid	ITT Fluid Products Model 5X5X7	2004	25	15	10	5		
County of Frontenac Administration Office Building (Old House)														**$264,950.00**
2.1	Architectural & Structural													$252,100.00
	2.1.1	Building Structure												$91,000.00
			2.1.1.1	Foundation	Basement	N/A	Stone masonry foundation walls with local brick and block fill-ins	1925	60	94	-34	2	Fair to poor condition. Some moderate deterioration of stone mortar. Some major deterioration of mortar in isolated locations	$50,000.00
			2.1.1.2	Slab on Grade	Basement	N/A	Concrete, +/- 100 mm thick	1925	60	94	-34	3	Fair-poor condition. Moderate to heavy wear throughout, moderate cracking, rough/uneven surface	$15,000.00
			2.1.1.3	Building Structure	Interior / Office Space	N/A	CMU walls	1925	60	94	-34	4	No obvious issues	
			2.1.1.4	Exterior Foundation Walls	Perimeter	N/A	Stone masonry	1925	60	94	-34	3	Generally fair condition. Isolated poor location - concrete lintel @ window sill requires repair	$3,000.00
			2.1.1.5	Piers	Basement / Back Entrance		Concrete					3	Concrete piers supporting steel columns in basement. 1 good, 1 fair, 3 poor. Moderate to heavy deterioration of concrete. Concrete piers supporting back entrance canopy. 2 fair - minor to moderate deterioration	$5,000.00
			2.1.1.6	Columns & Baseplates	Basement		Steel	1925	60	94	-34	5	Good condition	
			2.1.1.7	Ceiling/Floor Joists	Floor of Attic		2x12 wood joists	1925	60	94	-34	2	Generally poor condition. Space is being used for M&E routing only.	
			2.1.1.8	Windows				1925						
			2.1.1.9	Light Pole Supports	Various							5	Good condition	
			2.1.1.10	Exterior Pads	Various			1925	30	94	-64	4	Generally good/fair with minor wear.	
												2	1 pad @ east of building is in poor condition, needs replacing	$3,000.00
			2.1.1.11	Retaining Wall	Front side of building		Retaining wall along driveway					4	Fair - some cracking and delamination @ top of wall. Typically at locations of cast-in posts	
			2.1.1.12	Retaining Wall Railing	Front side of building		On top of retaining wall along driveway					4	Generally good condition. Light rusting	
			2.1.1.13	Pillar Supports	Front Entrance		Stone masonry	1925				2	Poor condition - significant deterioration, needs replacing or repair	$15,000.00
			2.1.1.14		Back Entrance		Concrete	1925				5	Good condition	
	2.1.2	Building Envelope												$69,100.00

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Facility	Class	Asset		Attribute										
			2.1.2.1	Exterior Walls	Exterior	N/A	Exterior Insulation Finishing System (EIFS) on stucco, CMU structure	2010	30	9	21	5	Good - Year of installation for EIFS System. Minor patching recommended at north door of boardroom as part of general maintenance	
			2.1.2.2	Exterior Doors	Exterior / Main Entrance / Ground Floor / Link	N/A	Glazed aluminum entrance doors	2003	30	16	14	4	Fair - No obvious issues	
			2.1.2.3	Exterior Doors	Exterior / North and South	N/A	North/South Entrance Doors, Painted Metal Residential doors	2000	20	19	1	3	Acceptable - Doors are at the end of their expected service life but experience very low traffic. Recommend budgeting for replacement within 10 years.	$2,500.00
			2.1.2.4	Exterior Doors	Exterior / Board Room	N/A	West Door, Painted metal residential door and wood frame	Varies	Varies	Varies	Varies	3	Paint failing and seals of sidelights and transom windows showing signs of failing. Recommend budgeting for replacement of entire door unit for improved performance.	$2,000.00
			2.1.2.5	Exterior Doors	Exterior / East Small Room	N/A	Wood Door, Wood Frame	2003	20	16	4	1	Repainting as part of regular maintenance is recommended to extend the life of the door.	Not Applicable
			2.1.2.6	Exterior Windows	Exterior / Ground Floor / Second Floor	N/A	Vinyl Windows Throughout Building	2004	25	15	10	3	Acceptable - No obvious issues - Showing appropriate wear for age. Recommend replacement within 10 years based on age.	$41,000.00
			2.1.2.6	Exterior Windows	Exterior / Board Room	N/A	Aluminum clad single pane Wood Windows in Board Room: pairs of casement windows with semicircular transoms	1989	25	30	-5	2	Acceptable - showing wear - Recommend replacement within 5 years based on probable age and low performance single pane.	$20,600.00
												1	Caulking failing at exterior, Paint Chipping, interior GWB sills showing water damage. Repairs recommended.	$3,000.00
		2.1.3	Roof											$50,000.00
			2.1.3.1	Roof Assembly	Exterior / Sloped Roof	N/A	Asphalt Shingles, Engineered Wood Rafters, OWSJ Deck	2010	25	9	16	5	Good - no major issues uncharacteristic for age observed - localized degranulation at dormer runoff observed.	
			2.1.3.2	Soffit & Fascia	Exterior / Sloped Roof	N/A	Perforated Aluminum Soffits, Aluminum Fascia	2010	30	9	21	5	Good - no obvious issues	
			2.1.3.3	Roof Assembly	Exterior / Front Porch	N/A	Copper Roof					5	Good - no obvious issues	
			2.1.3.4	Roof Assembly	Exterior / Flat Roofs / Various (Link, North West Roof, South West Bay, South East Roof)	N/A	Flat Roof Membranes (Modified Bitumen, EPDM Membrane) - Various locations	2004	20	15	5	3	Acceptable - Replacement recommendation based on age of installations	$30,000.00
			2.1.3.5	Rooftop Railing	Flatroofs/Balconies	N/A	Metal railings around flat roof areas					2	Railings only 600 mm high. Do not meet code as guardrails.	$20,000.00
		2.1.4	Building Interior											$42,000.00
			2.1.2.4	Interior Walls	First Floor	N/A	Gypsum Wall Board, Lath and Plaster	varies				5	Finished surfaces - no obvious issues	
			2.1.2.5		Second Floor	N/A	Gypsum Wall Board or Lath and Plaster	varies				5	Finished surfaces - no obvious issues	

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Facility	Class	Asset		Attribute										
			2.1.2.6	Interior Doors	Interior/Through Out	N/A	Wood Solid with wood frame	1925				5	Good - no obvious issues	
			2.1.2.7	Interior Ceilings	First Floor	N/A	Gypsum wall board, lath and plaster, suspended acoustic tile	varies				5	Finished surfaces - no obvious issues	
								varies				1	East Office - Water damage at ceiling at chimney. Localized ceiling repairs required. Indicator of potential roof leak at flat roof above. Recommend investigation and repairs of underlying issue.	$2,000.00
			2.1.2.8		Second Floor	N/A	Gypsum wall board, lath and plaster, suspended acoustic tile	varies				5	Finished surface - no obvious issues	
			2.1.2.9	Interior Floors	First Floor	N/A	Carpeting, Vinyl Plank	2004	20	15	5	3	Finished surface - no obvious issues - Older Carpet to rear of building showing some wear (aesthetic). Carpets in generally fair condition. Recommend replacement of all carpet within 10 years based on age.	$40,000.00
			2.1.2.10		Second Floor	N/A	Carpeting, Vinyl Plank	2004	21	15	6	4	Finished surface - no obvious issues	
2.2	HVAC													$9,000.00
	2.2.1	Heating & Cooling.												$3,000.00
			2.2.1.1	Electric Hot Water Tank	Basement	John Wood	John Wood Proline Model E50TE-30240 250	2018	12	1	11	5		
			2.2.1.2	Radiator	Basement	Unknown	Radiator near stairs	2004	25	15	10	4	Some rust , fins could be cleaned	
			2.2.1.3	Radiator	Basement	Markhot	Radiator near Air Compressor	2004	25	15	10	4	Some rust @ elbows	
			2.2.1.4	Air Compressor	Basement	Omega	Air Compressor for HVAC Controls, Omega Model CC-07530-115M	2009	16	10	6	5	Runs well	
			2.2.1.5	Air Dryer	Basement	Hankison	Air Dryer for HVAC Controls, Hankison Model HPR5-10	2009	16	10	6	5	Runs well	
			2.2.1.6	Thermostat	First Floor Office	Honeywell	Honeywell T-Stat	2004	16	15	1	5		
			2.2.1.7	Split AC Unit	First Floor Office	Goodman	Office Split AC Unit	2004	15	15	0	4	Not used	
			2.2.1.8	Radiators	First Floor	Unknown	Hot Water Radiators	2004	25	15	10	5	Fins dirty, could be cleaned	
			2.2.1.9	Split AC Unit	First Floor Breakroom	Goodman	Goodman 1 Ton Split AC Unit Model WMC-12-1-KF AC	2004	15	15	0	5	Not used, missing one neoprene pad. Pipe insulation is damaged. Condenser fan shaft is rusty.	
			2.2.1.10	Split AC Unit	Meeting Room	Eubank	Goodman Split AC unit	2004	15	15	0	3	Functional	$3,000.00
			2.2.1.11	Radiators	Second Floor	Unknown	Hot Water Radiators	2004	25	15	10	4	Fins dirty, could be cleaned	
			2.2.1.12	AC Unit Condenser	Second Floor Balcony	Eubank	AC Unit Condenser	2004	20	15	5	4	Some rust, fins are good & clean.	
	2.2.4	Ventilation												$6,000.00
			2.2.4.1	Fan Coil Unit	Basement IT Storage	Unico	Unico Green Series	2004	25	15	10	4	Blower Module M4860BL1-EC1, Cooling Module Model M4860CL1-E	
			2.2.4.2	Ductwork	Basement	Unknown	High Pressure Ductwork	2004	30	15	15	5		
			2.2.4.3	Diffusers	Second Floor	Unknown	Ceiling Diffusers	2004	27	15	12	4	Could be cleaned.	
			2.2.4.4	Fan Coil Unit	Attic	Goodman	Goodman FC Unit in Attic	2004	20	15	5	3	Condenser not accessible.	$6,000.00
2.3	Plumbing													$0.00
	2.3.1	Fixtures												$0.00
			2.3.1.2	Sink	Kitchen	Unknown	Kitchen Sink	2004	30	15	15	4		
	2.3.2	Piping												$0.00

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Facility	Class	Asset		Attribute										
			2.3.2.1	Domestic Piping	Basement	Unknown	Basement Domestic Piping	2004	30	15	15	4	Some sections need insulation, some asbestos insulation indicated.	
			2.3.2.2	HWS & HWR	First Floor	Unknown	First Floor Radiator Piping	2004	30	15	15	5	Requires insulation	
			2.3.2.3	HWS & HWR	Second Floor	Unknown	First Floor Radiator Piping	2004	30	15	15	5	Requires insulation	
2.4	Electrical													$3,850.00
	2.4.1	Incoming Services												$0.00
			2.4.1.1	Disconnect Switch	Basement	Square D	Heavy Duty Safety Switch, 200A, 240VAC	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	2.4.2	Distribution System												$2,350.00
			2.4.2.1	Panel 1E Disconnect Switch	Basement	Square D	Heavy Duty Safety Switch, 100A, 240VAC	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			2.4.2.2	Splitter	Basement	Hydel	125A, Max 600V, 3PH 3 W	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			2.4.2.3	Splitter A House Power	Basement	Hydel	125A, Max 600V, 3PH 3 W	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			2.4.2.4	Panel A Panelboard	Basement	Square D	Max 225A, 120/208 VAC, 3PH	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			2.4.2.5	Panel B Panelboard	Basement	Square D	Max 225A, 120/208 VAC, 3PH	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			2.4.2.6	Interior Lighting	Various	Various	Mixture of fixtures including wall sconces, troffers, fluorescent/LED strip fixtures, pot lights, ceiling fans and keyless fixtures,	2004	30	15	15	5	Generally appear to be in good condition. Some ballast, bulb and lens replacement necessary.	
			2.4.2.7	Exterior Lighting	Various	Various	Mixture of area lighting, pole-mounted and hanging light fixtures. Photocell Operated	2004	30	15	15	4	Generally appear to be in fair condition. Replace bulbs and replace/repair fixtures as required.	
			2.4.2.8	Conduit and Wiring	Various	Various	Mixture of conduit, wire and box cable.	Unknown	40	Unknown	Unknown	2	Generally appears to be in fair condition. Building exterior cable chase and flex conduit have been damaged and require repair.	$1,600.00
			2.4.2.10	A/C Disconnect	Basement	Square D	General Duty Safety Switch 100A, 240VAC, 2nd Floor A/C Disconnect	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
			2.4.2.11	A/C Disconnect	Exterior	Midwest	60A 1PH Non-Fused AC Disconnect	Unknown	30	Unknown	Unknown	3	Generally appear to be in fair condition. Replace within 10 years based on condition rating.	$750.00
			2.4.2.12	Compressor Controls	Basement	Square D	Definite purpose Controls Compressor Controller	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	2.4.3	Emergency Power System												$0.00
			2.4.3.1	Generator	Exterior	Generac	Generac Power Systems, 45kW	2004	30	15	15	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

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Facility	Class	Asset		Attribute										
			2.4.3.2	Automatic Transfer Switch	Basement	ASCO	200A, 120/208V	2004	40	15	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			2.4.3.3	Transfer Switch Disconnect	Basement	Cutler-Hammer	Heavy Duty Safety Switch, 200A, 250V	2004	40	15	25	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
		2.4.4	Barrier Free											$0.00
			2.4.4.1	Barrier Free	Various		Barrier Free Access	Unknown	40	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
		2.4.5	Fire Alarm System											$1,500.00
			2.4.5.1	Smoke Detector	Various	Various	Ceiling mounted smoke detector.	Unknown	10	Unknown	Unknown	3	Generally appear to be in fair condition. Replace within 10 years based on condition rating.	$1,500.00
			2.4.5.2	Fire Alarm	Various	Unknown	Wall mounted annunciators. Ringer style.	Unknown	40	Unknown	Unknown	4	Generally appears to be in fair condition. These units shall be monitored, evaluated and replaced as necessary.	
			2.4.5.3	Fire Pull Stations	Various	Various	Wall mounted fire alarm pull stations	Unknown	40	Unknown	Unknown	4	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
		2.4.6	Emergency Lighting System											$0.00
			2.4.6.1	Emergency Lighting	Various	Lumacell	Emergency Battery Units c/w remote lamps. Remote heads.	Unknown	40	Unknown	Unknown	4	Generally appears to be in fair condition. These units shall be monitored, evaluated and replaced as necessary.	
			2.4.6.2	Exit Signs	Various	Unknown	Exit Signs c/w Internal Illumination	Unknown	40	Unknown	Unknown	5	Generally appear to be in good condition. Replacement in future will be to upgrade to green "Running Man" signage.	
		2.4.7	Misc.											$0.00
			2.4.7.1	Baseboard Heating	Various	Unknown	Electric Baseboard Heater	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
2.5	Parking Lots/Lane Ways													$0.00
	2.5.1													$0.00
			2.5.1.1	Garden Retaining Wall	Front Entrance		Retaining wall for garden					5	Good condition	
			2.5.1.2	Interlocking Brick Walkway	Front of Building		Walkway to approach building from road					5	Good condition	
			2.5.1.3	Sidewalk	East of Building		Walkway to patio area					4	Fair condition	
Palace Road Ambulance Base														**$96,000.00**
3.1	Architectural & Structural													$88,000.00
	3.1.1	Building Structure												$35,000.00
			3.1.1.1	Foundation	Below Grade / Full Structure	N/A	Concrete	1988	60	31	29	3	Isolated deterioration at NE corner of building	$5,000.00
			3.1.1.2	Slab on Grade	Interior / Vehicle Bays	N/A	Concrete slab	2009	60	10	50	4	Fair - minor cracking, has been repaired	
			3.1.1.3	Building Structure	Interior / Vehicle Bays	N/A	290 mm and 190 mm CMU walls, OWSJ and steel deck roof structure	1988	60	31	29	4	Fair - minor wear	
			3.1.1.4		Interior / Office Space	N/A	CMU walls	1988	60	31	29	4	No obvious issues	

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Facility	Class	Asset		Attribute										
			3.1.1.5	Exterior Walls	Perimeter of Vehicle Bays, 3 Sides of Office Space	N/A	290 mm and 190 mm CMU walls, full height of building	1988	60	31	29	4	No obvious issues	
			3.1.1.6	Columns	Interior / Between Overhead Doors	N/A	Steel flashing around columns	1988	60	31	29	3	Acceptable - moderate rusting at bases (exposed to salt)	$10,000.00
			3.1.1.7	Guardrail	Exterior / Office Roof	N/A	Non-penetrating guardrail system	2009	60	10	50	2	Poor - several connection bolts missing at post feet, light to moderate rust, weld on ladder brace has let go	$20,000.00
			3.1.1.8	Windows	Exterior	N/A	Steel Lintels-Office Space	1988	30	31	-1	4	Fair - light to moderate rust	
			3.1.1.9	Bollards	Exterior / Between Overhead Doors	N/A	Steel with concrete fill	2009	30	10	20	4	Fair - light-moderate rusting	
		3.1.2	Building Envelope											$35,000.00
			3.1.2.1	Exterior Walls	Exterior	N/A	90mm brick masonry; 25mm air space; 50mm rigid insulation; and 290mm concrete block.	1988	60	31	29	5	Appears to be in good condition but requires localized repairs at south facing façade.	
												1	Localized Masonry Repairs required at various areas of south façade.	$2,000.00
			3.1.2.2	Exterior Doors	Exterior	N/A	Painted Steel Doors (2 locations)	2009	30	10	20	4	Fair - light-moderate rusting at frame bases, paint chipping.	
			3.1.2.4	Exterior Doors	Exterior/Corridor Ends	N/A	Metal Doors with original wood framed fixed windows set at the east and west entrance doors of main corridor.	1988	30	31	-1	3	Acceptable - showing signs of wear, painting recommended as part of routine maintenance. Though at their expected service life there have been no reported concerns. The County may want to consider replacement to bring entrance glazing up to current performance standards. Caulking - Fair - showing signs of wear	$23,000.00
			3.1.2.3	Exterior Overhead Doors	Exterior/Garage	N/A	Insulated Metal Overhead Doors (x4)	2009	20	10	10	3	Acceptable - Noted that ongoing maintenance required due to frequency of use. Replacement should be anticipated within 10 year window.	$10,000.00
			3.1.2.5	Exterior Windows	Exterior	N/A	Vinyl Windows Throughout Building	2009	25	10	15	4	Fair - No obvious issues - Showing appropriate wear for age.	
		3.1.3	Roof											$18,000.00
			3.1.3.1	Roof Assembly	Exterior / Sloped Roof	N/A	Asphalt Shingles, Engineered Wood Rafters, OWSJ Deck	2010	25	9	16	4	Fair - no obvious issues. Life expectancy for Asphalt Shingles.	
			3.1.3.2	Soffit & Fascia	Exterior / Sloped Roof	N/A	Perforated Aluminum Soffits, Aluminum Fascia	2010	30	9	21	5	Good - no obvious issues	
			3.1.3.3	Roof Assembly	Exterior / Flat Roof	N/A	Built-up felt and asphalt membrane with pea-gravel surfacing	2009	20	10	10	3	Acceptable - Moderate wear shown for age. No concerns reported from user group. Anticipated Replacement within ten years due to age.	$18,000.00
		3.1.4	Building Interior											$0.00
			3.1.4.1	Interior Walls	Interior / Various	N/A	Gypsum Wallboard	2009	30	10	20	4	Fair - Typical wear from daily use. Painting recommended as part of regular maintenance.	
			3.1.4.2	Interior Doors	Interior / Various	N/A	Metal Doors/Metal Frame	2009	30	10	20	4	Fair - No obvious issues	
			3.1.4.3	Interior Floors	Corridor / Kitchen / Washrooms / Office Space	N/A	Resilient Tile Floors, Resilient Sheet Floors	2009	30	10	20	4	Fair - No obvious issues	

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County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

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Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
			3.1.4.4	Interior Ceilings	Interior / Various	N/A	Gypsum Wallboard Ceilings/Suspended Acoustic Tile	2009	30	10	20	4	Fair - No obvious issues	
3.2	HVAC													$8,000.00
	3.2.1	Heating & Cooling.												$8,000.00
			3.2.1.1	Radiant Heater #1	Ambulance Bay	Infrasave	Radiant Heater	2009	25	10	15	5		
			3.2.1.2	Radiant Heater #2	Ambulance Bay	Infrasave	Radiant Heater	2009	25	10	15	5		
			3.2.1.3	Wall Prop Fan	Ambulance Bay	Canarm	Ambulance Bay Wall Prop Fan	2009	20	10	10	5		
			3.2.1.4	Thermostat	Ambulance Bay	Honeywell	Ambulance Bay T-Stat	2009	20	10	10	5		
			3.2.1.5	C0 Detector	Ambulance Bay	Honeywell	Ambulance Bay CO Detector	2009	20	10	10	5		
			3.2.1.6	Fan Switch	Ambulance Bay	Canarm	Wall Prop Fan Switch	2009	20	10	10	5		
			3.2.1.7	Exhaust Fan	Utility Room	Unknown	Utility Room EF	2009	20	10	10	5		
			3.2.1.8	DHW Pump	Utility Room	Grundfos	DHW Distribution Pump	2009	15	10	5	3		$1,000.00
			3.2.1.9	DHWT	Utility Room	A.O. Smith	A.O. Smith Cyclone 120K BTU	2009	20	10	10	3		$7,000.00
			3.2.1.10	RTU	Rooftop	Carrier	Carrier Weathermaster Model 48HJE004-351HQ	2009	25	10	15	4	Interior condenser fins were dirty,	
			3.2.1.11	CUH	Medical Storage	Outlett	Electric CUH	2009	10	10	0	4		
			3.2.1.14	Generator Piping	Exterior	Unknown	Generator Piping	2009	30	10	20	4	Rust on piping, could be painted	
			3.2.1.15	Grille	Medical Storage	Unknown	Unknown	2009	27	10	17	5		
			3.2.1.16	Door Grille	Kitchen	Unknown	Unknown	2009	27	10	17	4	Showing some signs of rust	
			3.2.1.17	Grille	Kitchen	Unknown	RA Grille	2009	27	10	17	5		
			3.2.1.18	Exhaust Fan	Women's Washroom	Unknown	Unknown	2009	20	10	10	4	Grille can be cleaned	
			3.2.1.19	Louvre	Women's Washroom	Unknown	Unknown	2009	20	10	10	5		
			3.2.1.20	Supply Diffuser	Men's Washroom	Unknown	Unknown	2009	27	10	17	5		
			3.2.1.21	Door Grille	Men's Washroom	Unknown	Unknown	2009	27	10	17	5		
			3.2.1.22	Louvre	Men's Washroom	Unknown	Unknown	2009	20	10	10	5		
			3.2.1.23	Louvre	Men's Washroom	Unknown	Unknown	2009	20	10	10	5		
			3.2.1.24	Grille	Men's Washroom	Unknown	Transfer b/w Men's Washroom & Office (x2)	2009	27	10	17	5		
			3.2.1.25	Grille	Men's Washroom	Unknown	RA Grille	2009	27	10	17	5		
			3.2.1.26	Grille	Crew Room	Unknown	SA Grille (x3)	2009	27	10	17	5		
3.3	Plumbing													$0.00
	3.3.1	Fixtures												$0.00
			3.3.1.1	Hand Sink	Utility Room	Unknown	Unknown	2009	30	10	20	5		
			3.3.1.2	Hose Reel	Ambulance Bay	Unknown	Manual Hose Reel w/ mixing valve	2009	30	10	20	5		
			3.3.1.3	Eyewash Station	Ambulance Bay	Guardian	Eyewash Station	2009	30	10	20	5		
			3.3.1.4	TSP	Ambulance Bay	Mifab	Trap Seal Primer	2009	30	10	20	5		
			3.3.1.5	Water Entry Backflow Preventer	Radio Cabinet	Zurn	Backflow Preventer	2009	30	10	20	5		
			3.3.1.6	Water Entry Expansion Tank	Radio Cabinet	Pro Flex	Pro Flex 2 PH-5	2009	30	10	20	5		
			3.3.1.7	Manual Mixing Valve Hose Reel	Ambulance Bay	Unknown	Unknown	2009	30	10	20	5		
			3.3.1.8	Sink c/w R0 System	Kitchen	Unknown	R0 System - Vectapure 360	2009	30	10	20	5		
			3.3.1.9	Sink c/w R0 System	Men's Washroom	Unknown	Unknown	2009	30	10	20	5		
	3.3.2	Piping												$0.00

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Facility	Class	Asset		Attribute										
			3.3.2.1	Roof Drain Piping	Ambulance Bay	Unknown	Unknown	2009	30	10	20	5		
			3.3.2.2	Water Entry	Radio Cabinet	Unknown	Unknown	2009	30	10	20	5	Uninsulated	
3.4	Electrical (includes generator)													$0.00
	3.4.1	Incoming Services												$0.00
			3.4.1.1	Main Panelboard / Disconnect Switch	Electrical Closet	Square D	200A, 120/208V, 1PH	2009	30	10	20	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			3.4.1.2	Disconnect Switch	Electrical Closet	Square D	200A Heavy Duty Safety Switch	2009	30	10	20	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			3.4.1.3	Meter Base	Exterior	FlexNet	Building Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			3.4.1.4	Solar Disconnect Switch	Electrical Closet	Cutler-Hammer	125A, 120/240V Sub Panel, 60A Main Disconnect	2010	25	9	16	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			3.4.1.5	Solar Panel Array	Roof	Evergreen	Roof mounted solar array.	2010	25	9	16	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			3.4.1.6	Solar Meter Base	Exterior	FlexNet	Solar Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			3.4.1.7	Main Solar Disconnect	Exterior	Eaton	General Duty Safety Switch 60A, 240VAC	2010	25	9	16	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			3.4.1.8	Solar DC Inverters	Ambulance Bay	Aurora	PVI 5kW, 240 VAC 1PH	2010	25	9	16	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	3.4.2	Distribution System												$0.00
			3.4.2.1	Interior Lighting	Various	Various	Mixture of wall sconce, pot lights, troffers, and fluorescent/LED strip fixtures	2009	30	10	20	4	Generally appear to be in fair condition. Some fixtures require bulb replacement or fixture repair. Replace bulbs as required. Clean insects from fixtures.	
			3.4.2.2	Exterior Lighting	Various	Square L	Mixture of soffit pot lights, area lighting. Photocell Operated	2009	30	10	20	4	Generally appear to be in fair condition. Replace bulbs and replace/repair fixtures as required.	
			3.4.2.3	Conduit and Wiring	Various	Various	Mixture of conduit, wire and cable.	Various	40	Various	Various	5	Conduit and wire observed appeared to be in good condition.	
	3.4.3	Emergency Power System												$0.00
			3.4.3.1	Generator	Exterior	Generac	QuietSource Series, wireless generator monitoring system	2009	30	10	20	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			3.4.3.2	Automatic Transfer Switch	Electrical Closet	Unknown	200A Transfer Switch	2009	30	10	20	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	3.4.4	Fire Alarm System												$0.00
			3.4.4.1	Smoke & Carbon Monoxide Alarm	Various	Various	Ceiling mounted Smoke alarms. Receptacle/ wall mounted Carbon Monoxide Alarms.	Unknown	10	Unknown	Unknown	4	Generally in good condition. Replace on or before unit expiration.	
	3.4.5	Emergency Lighting System												$0.00
			3.4.5.1	Emergency Lighting	Various	Various	Emergency Battery Units c/w remote lamps. Remote heads.	2009	40	10	30	5	Generally appear to be in good condition.	

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Facility	Class	Asset		Attribute										
			3.4.5.2	Exit Signs	Various	Lumacell	Exit Signs c/w Internal Illumination	2009	40	10	30	5	Generally appear to be in good condition. Replacement in future will be to upgrade to green "Running Man" signage.	
	3.4.6	Misc.												$0.00
			3.4.6.1	Electric Heaters	Various	Ouellet	Wall-mounted electric heater.	2009	30	10	20	4	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
3.5	Parking Lots/Lane Ways													$0.00
	3.5.1													$0.00
			3.5.1.1	Parking Lot	Outside of Vehicle Bays		Asphalt					4	Fair - minor wear and cracking	
			3.5.1.2	Sidewalk	Main Entrance, Rear Entrance		Concrete					4	Fair - minor cracking and rust	
Sydenham Ambulance Base														**$16,648.00**
4.1	Architectural & Structural													$11,000.00
	4.1.1	Building Structure												$1,000.00
			4.1.1.1	Foundation		N/A	Concrete	2011				5	No obvious issues	
			4.1.1.2	Slab on Grade	Vehicle Bays		Concrete, in-slab heating throughout	2011				4	Fair - minor cracking, crack repair product present (applied by contractor)	
			4.1.1.3	Building Structure		N/A		2011	60	8	52	4	Mostly not observable - no obvious issues	
			4.1.1.4	Exterior Walls		N/A		2011	60	8	52			
			4.1.1.5	Columns		N/A		2011	60	8	52			
			4.1.1.6	Bike Rack			Single steel bike post	2011				3	Acceptable - moderate rust	$1,000.00
			4.1.1.7	Windows		N/A		2011	30	8	22			
			4.1.1.8	Bollards	Around Vehicle Bay Section		Steel with concrete fill	2011				4	Fair - light to moderate rusting	
	4.1.2	Building Envelope												$10,000.00
			4.1.2.1	Exterior Walls	Exterior	N/A	Metal siding with manufactured stone veneer base	2011	60	8	52	5	Good - No obvious issues	
			4.1.2.2	Exterior Doors	Exterior	N/A	Main Entrance Doors - Aluminum	2011	30	8	22	4	Minor Repairs - Mortar is failing at sidelight base to be sealed with Caulking. Door seals at main entrance require ongoing maintenance. Original seal replaced after original install but reported to not be functioning at an acceptable level. Recommend assessment.	Not Applicable
			4.1.2.3	Exterior Overhead Doors	Exterior	N/A	Insulated Metal Overhead Doors (x4)	2011	15	8	7	3	Acceptable - Noted that ongoing maintenance required due to frequency of use. Replacement should be budgeted for within 10 year window.	$10,000.00
			4.1.2.4	Exterior Doors	Exterior	N/A	Metal Door from garage, Metal door to patio	2011	30	8	22	4	Fair - Door from Garage showing wear	
												2	Recommend painting exterior door from garage as part of general maintenance	Not Applicable
			4.1.2.5	Exterior Windows	Exterior	N/A	Vinyl Windows throughout building	2011	25	8	17	5	Good - No obvious issues	
												1	Caulking required to seal gaps between window jambs and stone base. Recommend repairs as part of regular maintenance program.	Not Applicable
	4.1.3	Roof												$0.00

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Facility	Class	Asset		Attribute										
			4.1.3.1	Roof Assembly		N/A	Metal Roof	2011	40	8	32	5	Good - No obvious issues	
			4.1.3.2	Soffit & Fascia		N/A	Perforated Aluminum Soffits, Aluminum Fascia	2011	30	8	22	5	Good - No obvious issues	
			4.1.3.3	Roof Trusses	Inside Roof	N/A	Viewed through hatch upstairs	2011	60	8	52	5	Good - no signs of deterioration	
	4.1.4	Building Interior												$0.00
			4.1.4.1	Interior Walls	Interior	N/A	Gypsum Wallboard	2011	60	8	52	5	Good - No obvious issues	
			4.1.4.2	Interior Doors	Interior	N/A	Metal Doors	2011	30	8	22	5	Good - No obvious issues	
			4.1.4.3	Interior Floors	Interior (Garage)	N/A	Exposed concrete	2011	30	8	22	4	Good/fair - minor cracking	
			4.1.4.4	Interior Floors	Interior		Vinyl Tile	2011	30	8	22	4	Good/fair	
												1	Localized repairs recommended in men's bathroom at water closet	Not Applicable
			4.1.4.5	Interior Ceilings	Interior	N/A	Gypsum Wallboard Ceilings/Suspended Acoustic Tile	2011	30	8	22	4	Good - No obvious issues	
4.2	HVAC													$2,000.00
	4.2.1	Heating & Cooling.												$2,000.00
			4.2.1.1	Boiler	Utility Room	Lochnivar	Locnivar Knight	2011	25	8	17	5	No chemical treatment, could use cleaning	
			4.2.1.2	DHWT & Mixing Valves	Utility Room	Amtrol	Amtrol Boilermate Champion 40 Gal	2011	23	8	15	5		
			4.2.1.3	Expansion Tank	Utility Room	Unknown	Unknown	2011	20	8	12	5		
			4.2.1.4	Air Separator	Utility Room	Unknown	Unknown	2011	20	8	12	5		
			4.2.1.5	Unit Heater	Bay #1	Modine	Modine	2011	20	8	12	5		
			4.2.1.6	Furnace	Utility Room	Lifebreath	Lifebreath Air Handler, 1180 CFM, 1/2 hp, 3 ton	2011	20	8	12	4		
			4.2.1.7	Condenser	Exterior	Luxaire	Luxaire	2011	15	8	7	3	Some motor rust	$2,000.00
			4.2.1.8	Propane Tank	Exterior	Levac	Levac Propane Inc.	2011	23	8	15	5	Rented	
	4.2.2	Natural Gas Piping												$0.00
			4.2.2.1	Propane Piping	Exterior	Unknown	Unknown	2011	30	8	22	4	Paint Missing	
			4.2.2.2	Propane PRV's	Exterior	Unknown	Unknown	2011	30	8	22	4	Too close to windows (26"), discharge should be gooseneck to avoid rain entering	
	4.2.3	Circulating Pumps												$0.00
			4.2.3.1	Main Interior Pump	Bay #1	Heatlink	Heatlink	2011	20	8	12	5		
			4.2.3.2	Bay Infloor Pump	Utility Room	Heatlink	Heatlink	2011	20	8	12	5		
	4.2.4	Garage Ventilation												$0.00
			4.2.4.1	Wall Exhauster	Bay #1	Unknown	14x14	2011	20	8	12	5		
			4.2.4.2	Intake MD	Bay #2	Unknown	Unknown	2011	20	8	12	5		
			4.2.4.3	Prop Fan	Bay #2	Canarm	Canarm	2011	20	8	12	5		
	4.2.6	General Exhaust												$0.00
			4.2.6.1	Washroom EF	Male Locker Room	Unknown	Unknown	2011	20	8	12	5		
			4.2.6.2	Washroom EF	Female Locker Room	Unknown	Unknown	2011	20	8	12	5		
			4.2.6.3	Janitor EF	Storage Room	Unknown	Unknown	2011	20	8	12	5		
	4.2.7	HVAC Controls												$0.00
			4.2.7.1	CO Detector	Bay #1	Unknown	Unknown	2011	20	8	12	5		
4.3	Plumbing													$0.00
	4.3.1	Sanitary / Storm												$0.00

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Facility	Class	Asset		Attribute										
			4.3.1.1	Drains	Bay # 1 & 2	Unknown	Unknown	2011	30	8	22	5		
			4.3.1.2	Stormwater Drain	Exterior Bay # 2	Unknown	Unknown	2011	30	8	22	5		
	4.3.2	Piping												$0.00
			4.3.2.1	Hose Reel	Bay #1	Unknown	Unknown	2011	30	8	22	5		
			4.3.2.2	Domestic Piping	Utility Room	Unknown	Unknown	2011	30	8	22	5		
			4.3.2.3	Hydronic Piping	Utility Room	Unknown	Unknown	2011	30	8	22	5		
			4.3.2.4	Refrigerant Piping	Exterior	Unknown	Unknown	2011	30	8	22	4	Some missing insulation	
			4.3.2.5	Boiler Venting	Utility Room	Unknown	636 PVC	2011	30	8	22	5		
	4.3.5	Eyewash Stations												$0.00
			4.3.5.1	Eyewash	Bay #1	Guardian	Guardian	2011	30	8	22	5		
			4.3.5.2	Eyewash	Storage Room	Guardian	Guardian	2011	30	8	22	5		
4.4	Electrical													$3,648.00
	4.4.1	Incoming Services												$0.00
			4.4.1.1	Main Panelboard / Disconnect Switch	Utility Room	Siemens	200A, 120/240V, 1PH	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			4.4.1.3	Meter Base	Exterior	Landis+Gyr	Building Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			4.4.1.4	Splitter	Utility Room	BEL	BEL B203 225A, 600V, 3W Splitter Box	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			4.4.1.5	Solar Disconnect Switch	Exterior	Square D	General Duty Safety Switch 60A, 240VAC	2011	25	8	17	4	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			4.4.1.6	Solar Panels	Exterior	Microfit	9.88 KW/240 VAC at 40A, Sharp NDL230Q1 Solar Modules	2011	25	8	17	4	Panel is showing signs of rust.	
			4.4.1.7	Solar Panel Meter Base	Exterior	Landis+Gyr	Solar Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
	4.4.2	Distribution System												$3,148.00
			4.4.2.1	Interior Lighting	Various	Various	Mixture of Fluorescent, LED troffer, and pot Light fixtures	2011	30	8	22	3	Generally appear to be in fair condition. Some fixtures require repair or replacement. Clean light fixtures as necessary.	$1,500.00
			4.4.2.2	Exterior Lighting	Exterior	Various	Mixture of down lighting and area lighting. Photocell operated.	2011	30	8	22	4	Generally appear to be in fair condition. Replace bulbs and replace/repair fixtures as required.	
			4.4.2.3	Conduit and Wiring	Various	Various	Mixture of conduit, wire and cable.	2011	40	8	32	5	Conduit and wire observed appeared to be in good condition.	
			4.4.2.4	Cable Reel	Exterior	Unknown	Reel mounted cable.	2011	25	8	17	2	Cable reel is damaged and requires replacement.	$1,648.00
	4.4.3	Emergency Power System												$0.00
			4.4.3.1	Generator	Exterior	Generac	QuietSource Series, wireless generator monitoring system	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			4.4.3.2	Transfer Switches	Utility Room	Generac	Generac RTS Series, Bonded to ground	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	4.4.4	Fire Alarm System												$500.00

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Facility	Class	Asset		Attribute										
			4.4.4.1	Smoke & Carbon Monoxide Alarm	Various	Various	Ceiling mounted Smoke alarms. Receptacle/ wall mounted Carbon Monoxide Alarms.	2011	10	8	2	3	Generally in good condition. Replace on or before unit expiration.	$500.00
	4.4.5	Emergency Lighting System												$0.00
			4.4.5.1	Emergency Lighting	Various	Stanpro	Emergency Battery Units c/w remote lamps	2011	40	8	32	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
			4.4.5.2	Exit Signs	Various	Lumacell	Exit Signs c/w Internal Illumination	2011	40	8	32	5	Generally appear to be in good condition. Replacement in future will be to upgrade to green "Running Man" signage.	
	4.4.6	Barrier Free												$0.00
			8.4.6.1	Barrier Free	Main Entrance	Hunter	Barrier Free Access	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
4.5	Parking Lots/Lane Ways													$0.00
	4.5.1													$0.00
			4.5.1.1	Parking Lot/Lane Way			Asphalt					4	Fair - minor to moderate cracking	
			4.5.1.2	Sidewalk	Main Entrance		Concrete					4	Good/fair - minor cracking	
Robertsville Ambulance Base														**$2,200.00**
5.1	Architectural & Structural													$2,200.00
	5.1.1	Building Structure												$0.00
			5.1.1.1	Foundation	Below Grade / Full Structure	N/A	Concrete	2013	60	6	54	4	No obvious issues	
			5.1.1.2	Slab on Grade	Interior / Vehicle Bays	N/A	Exposed in garage and utility rooms	2013	60	6	54	4	Good - minor cracking	
			5.1.1.3	Building Structure	Interior / Vehicle Bays	N/A		2013	60	6	54			
			5.1.1.4		Interior / Office Space	N/A		2013	60	6	54			
			5.1.1.5	Exterior Walls	Perimeter of Vehicle Bays, 3 Sides of Office Space	N/A		2013	60	6	54			
			5.1.1.6	Columns	Entrance Canopy	N/A	Covered with steel flashing	2013	60	6	54	4	No obvious issues	
			5.1.1.8	Exterior Pads	Beside / Behind Building	N/A	Equipment pads, patio	2013	60	6	54	5	Good - no issues	
			5.1.1.9	Bollards	Exterior / Between Overhead Doors	N/A	Steel with concrete fill	2013	60	6	54	4	Good - minor rusting	
	5.1.2	Building Envelope												$2,200.00
			5.1.2.1	Exterior Walls	Exterior	N/A	Metal siding with manufactured stone veneer base	2013	60	6	54	5	Good - No obvious issues	
												2	Caulking at exterior doors, front entrance columns, window bases and overhead doors showing signs of wear. Recommend replacement as part of general maintenance plan.	Not Applicable
			5.1.2.2	Exterior Doors	Exterior	N/A	Main Entrance Doors - Aluminum	2013	30	6	24	5	Good - No obvious issues	
			5.1.2.3	Exterior Overhead Door	Exterior/Garage	N/A	Insulated Metal Overhead Doors (x1)	2013	15	6	9	3	Acceptable - Noted that ongoing maintenance required due to frequency of use. Replacement should be budgeted for within 10 year window.	$2,200.00
												5	Good - No obvious issues	

AGENDA ITEM #a)

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)						Valuation
Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)	Condition Rating	Comments/ Identified Need	Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
			5.1.2.4	Exterior Doors	Exterior	N/A	Metal Doors (x2)	2013	30	6	24	1	Door Frame Uninsulated at door from Garage. Recommend replacing door with insulated door.	Not Applicable
			5.1.2.5	Exterior Windows	Exterior	N/A	Vinyl Windows throughout building	2013	25	6	19	5	Good - No obvious issues	
	5.1.3	Roof												$0.00
												5	Good - No obvious issues	
			5.1.3.1	Roof Assembly	Exterior	N/A	Metal Roofing	2013	40	6	34	1	Staining at facia due to drip edge not functioning. The county may want to consider cleaning of facia as part of regular maintenance for aesthetic appearance.	Not Applicable
			5.1.3.2	Soffit & Fascia	Exterior	N/A	Perforated Aluminum Soffits, Aluminum Fascia	2013	30	6	24	5	Good - No obvious issues	
	5.1.4	Building Interior												$0.00
												5	Good - Generally no obvious issues	
			5.1.4.1	Interior Walls	Interior / Various	N/A	Gypsum Wallboard	2013	30	6	24	1	Recommended drywall repair above exterior metal door to out door patio. Drywall showing signs of moisture damage. Cause unknown.	Not Applicable
			5.1.4.2	Interior Doors	Interior / Various	N/A	Wood Doors with Metal Frames	2013	30	6	24	5	Good - No obvious issues	
			5.1.4.3	Interior Floors	Interior / Various	N/A	Ceramic Tile throughout	2013	30	6	24	5	Good - No obvious issues	
			5.1.4.4	Interior Ceilings	Interior / Various	N/A	Gypsum Wallboard Ceilings/Suspended Acoustic Tile	2013	30	6	24	5	Good - No obvious issues	
5.2	HVAC													$0.00
	5.2.1	Heating & Cooling.												$0.00
			5.2.1.1	AC Unit	Crew Area	Mitsubishi	Mr. Slim Series c/w Cond Pump	2014	15	5	10	4	Condenser coils need cleaning	
			5.2.1.2	Indirect Fired WH	Utility Room	Triangle Tube	Triangle Tube Smart 50	2014	15	5	10	5		
			5.2.1.3	Expansion Tank	Utility Room	Pro Flex	Pro Flex 2 HTX-30	2014	16	5	11	5		
			5.2.1.4	Boiler	Utility Room	Triangle Tube	Triangle Tube Challenger	2014	25	5	20	5		
			5.2.1.5	HRV	Crew Area	Venmar	Venmar 41500	2014	20	5	15	5		
	5.2.2	Natural Gas Piping												$0.00
			5.2.2.1	Propane Piping	Exterior	Unknown	Unknown	2014	30	5	25	5	Piping not protected, paint patching	
			5.2.2.2	Propane Tank	Exterior	Unknown	Unknown	2014	30	5	25	5		
	5.2.3	Circulating Pumps												$0.00
			5.2.3.1	WH Pump	Utility Room	Grundfos	Grundfos	2014	20	5	15	4		
			5.2.3.2	Boiler Pump	Utility Room	Grundfos	Grundfos	2014	20	5	15	4		
			5.2.3.3	In-Floor Pump	Utility Room	Grundfos	Grundfos	2014	20	5	15	4		
	5.2.4	Garage Ventilation												$0.00
			5.2.4.1	Upblast Fan (Wall) & Actuator	Exterior Garage	Unknown	Unknown	2014	20	5	15	5		
			5.2.4.2	Ceiling Prop Fan	Garage	Unknown	Unknown	2014	20	5	15	5		
	5.2.6	General Exhaust												$0.00
			5.2.6.1	O/A Opening & Actuator	Garage	Tamco	Tamco	2014	16	5	11	4		
			5.2.6.2	Ceiling EF	Men's Washroom	Unknown	Unknown	2014	20	5	15	5		
			5.2.6.2	Ceiling EF	Women's Washroom	Unknown	Unknown	2014	20	5	15	5		

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Facility	Class	Asset		Attribute										
	5.2.7	HVAC Controls												$0.00
			5.2.7.1	CO2 Sensor	Garage	QEL	QEL	2014	20	5	15	5		
			5.2.7.2	AC Unit T-Stat	Garage	Mitsubishi	Mitsubishi	2014	20	5	15	5		
			5.2.7.3	Floor T-Stat	Garage	Tekman	Tekman	2014	20	5	15	5		
			5.2.7.4	Taco Controller	Utility Room	Taco	Taco Valve Controller	2014	20	5	15	5		
			5.2.7.5	Chemical Treatment	Utility Room	Unknown	Unknown	2014	20	6	14	5		
5.3	Plumbing													$0.00
	5.3.1	Sanitary Exhaust												$0.00
			5.3.1.1	Garage Drains	Garage	Unknown	Unknown	2014	30	5	25	4	Standing Water, Odours	
	5.3.2	Domestic Hot / Cold water												$0.00
			5.3.2.1	Reverse Osmosis Filter	Kitchen	Reverse Osmosis	Reverse Osmosis RO-132	2014	30	5	25	5		
			5.3.2.2	Hose Reel	Garage	Unknown	Unknown	2014	30	5	25	5		
	5.3.3	Sump Pumps												$0.00
			5.3.3.1	Well Tank & Pump	Utility Room	Well-Rite	Well-Rite 33 Gal Tank	2014	20	5	15	5		
	5.3.4	Fixtures												$0.00
			5.3.4.1	Washroom Fixtures	Men's & Women's Washroom	Unknown	Unknown	2014	30	5	25	5		
			5.3.4.2	U/V Filter & Softener	Utility Room		Viqua	2014	30	5	25	5		
	5.3.5	Piping												$0.00
			5.3.5.1	Infloor Piping	Utility Room	Unknown	Unknown	2014	30	5	25	5	Leaks & Corrosion noticed on pipes	
5.4	Electrical (includes generator)													$0.00
	5.4.1	Incoming Services												$0.00
			5.4.1.1	Main Panelboard / Disconnect Switch	Utility Room	Eaton	100A, 120/240V, 1PH	2013	30	6	24	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			5.4.1.2	Transformers	Pole Mounted	Unknown	Utility owned pole mounted transformer.	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			5.4.1.3	Meter Base	Exterior	Landis+Gyr	Building Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
	5.4.2	Distribution System												$0.00
			5.4.2.1	Interior Lighting	Various	Various	Mixture of Fluorescent, LED, and pot Light fixtures	2013	30	6	24	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
			5.4.2.2	Exterior Lighting	Exterior	Various	Mixture of down lighting and area lighting. Photocell operated.	2013	30	6	24	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
			5.4.2.3	Conduit and Wiring	Various	Various	Mixture of conduit, wire and cable. Varying age of Conduit and Wiring.	2013	40	6	34	5	Conduit and wire observed appeared to be in good condition.	
	5.4.3	Emergency Power System												$0.00
			5.4.3.1	Generator	Exterior	Honeywell	Honeywell Home Generator	2013	30	6	24	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			5.4.3.2	Transfer Switches	Utility Room	Generac	Generac RTS Series, Bonded to ground	2013	30	6	24	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

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Facility	Class	Asset		Attribute										
	5.4.4	Fire Alarm System												$0.00
			5.4.4.1	Smoke & Carbon Monoxide Alarm	Various	Various	Ceiling/wall mounted Smoke alarms.	2013	10	6	4	4	Generally in good condition. Replace on or before unit expiration.	
	5.4.5	Emergency Lighting System												$0.00
			5.4.5.1	Exit Signs/ Emergency Lighting	Various	Stanpro	Exit Signs c/w Internal Illumination & Emergency Lamp Heads	2013	40	6	34	5	Generally appear to be in good condition. Replacement in future will be to upgrade to green "Running Man" signage.	
5.5	Parking Lots/Lane Ways													$0.00
	5.5.1													$0.00
			5.5.1.1	Parking lot, lane way	Front of Building		Asphalt					4	Good - no issues	
Wolfe Island Ambulance Base														**$8,350.00**
6.1	Architectural & Structural													$2,250.00
	6.1.1	Building Structure												$0.00
			6.1.1.1	Foundation	Below Grade / Full Structure			2011				4	Mostly not observable - good condition	
			6.1.1.2	Slab on Grade	Utility Room		Only visible in utility room	2011				4	Fair condition	
			6.1.1.3	Building Structure	Structural Framing		Wood studs	2011				4	Generally good condition (observed through 1 ceiling tile)	
			6.1.1.4	Exterior Walls		N/A		2011	60	8	52			
			6.1.1.5	Columns	Canopy Framing	N/A		2011	60	8	52	4	Good condition	
			6.1.1.6	Windows		N/A		2011	30	8	22			
	6.1.2	Building Envelope												$2,250.00
			6.1.2.1	Exterior Walls	Exterior	N/A	Metal cladding, Wood frame construction	2011	60	8	52	5	Generally good condition	
												1	Door and window penetrations require counter flashing at jambs where siding meets windows and doors (all). Currently siding does not provide full coverage around these openings. Flashing details at window and doors headers to be corrected to allow for positive drainage of rain water.	$2,250.00
			6.1.2.2	Exterior Doors	Exterior	N/A	Metal Door - main entrance door	2011	30	8	22	4	Generally Good - Minor damage noted at threshold of main doors (general maintenance).	
			6.1.2.5	Exterior Windows	Exterior	N/A	Vinyl Windows Throughout Building	2011	25	8	17	5	Generally good condition.	
	6.1.3	Roof												$0.00
			6.1.3.1	Roof Assembly		N/A	Metal standing seam roofing, wood frame construction	2011	40	8	32	5	Generally Good - Some fading of color apparent	
			6.1.3.2	Soffit & Fascia		N/A	Perforated Aluminum Soffits, Aluminum Fascia	2011	30	8	22	5	Good - No obvious concerns	
	6.1.4	Building Interior												$0.00
			6.1.4.1	Interior Walls	Interior	N/A	Gypsum Wall Board	2011	30	8	22	5	Good Condition - Showing surface wear from day to day use.	
												2	Recommend budgeting for interior painting as part of general maintenance	Not Applicable
			6.1.4.2	Interior Doors	Interior	N/A	Wood Doors, Metal Frames	2011	30	8	22	5	Good	
												5	Good	

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Facility	Class	Asset		Attribute										
			6.1.4.3	Interior Floors	Interior	N/A	Vinyl Tile Throughout	2011	30	8	22	1	Localized delamination of tile at north bedroom along north wall potentially due to moisture at slab. Localized repairs recommended.	Not Applicable
			6.1.4.4	Interior Ceilings	Interior	N/A	Suspended Acoustical Tile	2011	15	8	7	4	Generally Fair Condition	
6.2	HVAC													$0.00
	6.2.1	Heating & Cooling.												$0.00
			6.2.1.1	Furnace	Furnace Room	Luxaire	Luxair TG9s040A08MP11A	2011	18	8	10	5	Some rust inside from leaks, Heating & Cooling both work. Furnace vents missing birdscreens, No service logs.	
			6.2.1.2	DHWT	Furnace Room	Space Saver	Space Saver Model SS30LSEB	2011	15	8	7	5		
			6.2.1.3	Condenser	Exterior	Luxaire	Luxaire Model TCGD18S$41S3A	2011	15	8	7	3	Insulation showing signs of weather damage, will deteriorate. coils clean, some signs of motor rust	
			6.2.1.6	Thermostat	Kitchen	Honeywell	Honeywell T-Stat	2011	20	8	12	5		
	6.2.2	Natural Gas Piping												$0.00
			6.2.2.1	Propane Tanks	Exterior	Levac	Levac Propane Inc.	2011	30	8	22	5		
	6.2.4	Ventilation												$0.00
			6.2.2.1	Exhaust Fan	Water Closet	Unknown	Unknown	2011	20	8	12	5		
			6.2.2.2	Exhaust Fan	Kitchen	Unknown	Unknown	2011	20	8	12	5		
			6.2.2.3	Supply Diffuser	Various	Unknown	Unknown	2011	20	8	12	5	Diffuser's could be cleaned	
6.3	Plumbing													$0.00
	6.3.1	Sanitary Exhaust												$0.00
			6.3.1.1	Sanitary Piping	Kitchen	Unknown	Unknown	2011	30	8	22	5		
	6.3.2	Domestic Hot / Cold water												$0.00
			6.3.2.1	DHW Piping	Furnace Room	Unknown	Unknown	2011	30	8	22	5	Uninsulated Piping	
			6.3.2.2	DCW Piping	Furnace Room	Unknown	Unknown	2011	30	8	22	5	Uninsulated Piping	
6.4	Electrical (includes generator)													$1,100.00
	6.4.1	Incoming Services												$0.00
			6.4.1.1	Main Panelboard / Disconnect Switch	Utility Room	Siemens	100A, 120/240V	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary. It is recommended to relocated shelf housing communications equipment.	
			6.4.1.2	Meter Base	Exterior	Landis+Gyr	Building Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
	6.4.2	Distribution System												$500.00
			6.4.2.1	Interior Lighting	Various	Various	Mixture of ceiling mounted fixtures and pot lights, LED bulbs	2011	30	8	22	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
												1	Faulty Bathroom and Bedroom Light Switches to be replaced.	$500.00
			6.4.2.2	Exterior Lighting	Exterior	Unknown	LED Area lighting.	2011	30	8	22	5	Generally appears to be in good condition. These units shall be monitored, evaluated and replaced as necessary.	
			6.4.2.3	Conduit and Wiring	Various	Various	Mixture of conduit, wire and cable.	2011	40	8	32	5	Conduit and wire observed appeared to be in good condition.	

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Facility	Class	Asset		Attribute										
	6.4.3	Emergency Power System												$0.00
			6.4.3.1	Generator	Exterior	Generac	Guardian Series, 10kW, 240V 45A Generator Disconnect, Wireless Generator Monitoring System	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			6.4.3.2	Transfer Switches	Exterior	Generac	Generac RTS Series, Bonded to ground	2011	30	8	22	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
	6.4.4	Fire Alarm System												$0.00
			6.4.4.1	Smoke & Carbon Monoxide Alarm	Various	Kidde	Ceiling mounted smoke alarm.	2011	10	8	2	4	Generally in good condition. Replace on or before unit expiration.	
	6.4.5	Emergency Lighting System												$600.00
			6.4.5.1	Emergency Lighting	Various	Lumacell	Emergency Battery Units c/w remote lamps	2011	40	8	32	4	Generally appears to be in fair condition. These units shall be monitored, evaluated and replaced as necessary.	
			6.4.5.2	Exit Signs	Various	Lumacell	Exit Signs c/w Internal Illumination	2011	40	8	2	3	An exit sign is in poor condition and could use replacement. Other exit signs appear to be in fair condition. Replacement in the future will be to upgrade to green "Running Man" signage.	$600.00
6.5	Parking Lots/Lane Ways													$5,000.00
	6.5.1													$5,000.00
			6.5.1.1	Parking / Lane Way	Front of Buildings		Asphalt					4	Good - no observable deterioration	
			6.5.1.2	Sidewalk	Along Front and Side of Building		Concrete					3	Acceptable - moderate cracking, some settlement, rough finish along building edge. Should continue to be monitored.	$5,000.00
			6.5.1.3	Heli Pad	East of Buildings		Asphalt					2	Poor - major cracking, not level, overgrown with grass, paint barely visible	
Parham Ambulance Base														**$31,200.00**
7.1	Architectural & Structural													$18,500.00
	7.1.1	Building Structure												$4,000.00
			7.1.1.1	Foundation	Above and Below Grade, Building Perimeter		Parging over concrete block	1981				4	Some cracking in parging	
			7.1.4.6	Foundation			Concrete block walls	1981				2	Poor - leaking in multiple locations, being repaired at time of site visit	
			7.1.1.2	Slab on Grade	Vehicle Bays		Concrete	1981				3	Generally fair - moderate cracking and delamination that has previously been repaired, localized poor condition at joint between SOG and apron slab	$2,000.00
			7.1.1.3	Building Structure		N/A	Wood Framing	1981	60	38	22	4	Generally acceptable	
			7.1.4.3	Interior Floors	Main Floor		Main floor structure viewed from basement - Wood floor joists	1981				2	Generally fair condition with minor wear. Joist at post by stairs is failing - Poor condition	$2,000.00
			7.1.4.4		Basement		Basement slab-on-grade	1981				3	Acceptable - moderate wear	
	7.1.2	Building Envelope												$13,500.00
			7.1.2.1	Exterior Walls	Exterior	N/A	Vinyl siding	2003	60	16	44	5	Good - No obvious issues	

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Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
				Exterior Doors	Exterior	N/A	Metal Clad Wood (x2),	2003	30	16	14	1	Fair - No Obvious Issues with doors themselves - Recommend replacement of hardware and hinges as they are showing wear - The County may consider replacement of doors for performance.	$2,500.00
			7.1.2.2	Exterior Doors	Exterior (Garage)	N/A	Metal Door (x1)	2003	30	16	14	4	Fair - No Obvious Issues	
			7.1.2.3	Exterior Overhead Doors	Exterior	N/A	Insulated Metal Overhead Doors (x3)	2003	15	16	-	2	Acceptable - moderate rusting at track bases. Noted that ongoing maintenance required due to frequency of use. Replacement should be budgeted for within 5 year window.	$8,000.00
			7.1.2.5	Exterior Windows	Exterior (Garage and main station areas)	N/A	Vinyl frame, Wood frame	2003	25	16	9	3	Fair Condition - Recommend budgeting for replacement within 10 years based on age	$2,000.00
			7.1.2.5	Exterior Windows	Exterior - 1994 addition (Crew Room)	N/A	Vinyl Casement and Horizontal Slider	1994	25	25	0	3	Acceptable - Recommend budgeting for replacement within 5 years based on age.	$1,000.00
		7.1.3	Roof											$0.00
			7.1.3.1	Roof Assembly	Exterior	N/A	Shingles	2016	25	3	22	4	Fair - no obvious issues with shingle roofing. Some warping of structure noted.	
			7.1.3.2	Soffit & Fascia	Exterior	N/A	Perforated Aluminum Soffits, Aluminum Fascia	2001	30	18	12	4	Fair - No obvious issues - minor localized repairs recommended as part of regular maintenance.	Not Applicable
		7.1.4	Building Interior											$1,000.00
			7.1.4.1	Interior Walls	Interior - Main Floor	N/A	Gypsum Wall Board	1981	60	38	22	5	Good - No obvious issues	
			7.1.4.1	Interior Walls	Interior - Garage	N/A	Metal cladding and CMU Base	1981	60	38	22	5	Good - No obvious issues	
			7.1.4.2	Interior Doors	Interior - Main Floor	N/A	Hollow core wood	1981	60	38	22	5	Generally Good	
			7.1.4.3	Interior Floors	Interior - Main Floor	N/A	Ceramic tile, various installations	2003	30	16	22	4	Fair - Generally no obvious issues except	
												1	Grout failing at tile throughout hallway. Recommend repairing grout or replacing tile through hallway.	$1,000.00
			7.1.4.5	Interior Ceilings	Interior - Main Floor	N/A	Gypsum Wall Board	1981	60	38	22	5	Good - No major issues	
7.2	HVAC													$200.00
	7.2.1	Heating & Cooling.												$0.00
			7.2.1.1	Oil Tank	Furnace Room	Vilco	Vilco 909 L Oil Tank	2011	20	8	12	5	No containment	
			7.2.1.2	Oil Furnace	Furnace Room	Unknown	OHB5-F097-130-5/BHF-4	2011	18	8	10	4		
			7.2.1.3	Oil Furnace Venting	Furnace Room	Unknown	Galvanized	2011	30	8	22	5	Some rust, holes to be plugged, Combustion makeup is flex duct	
			7.2.1.4	Chimney	Exterior	Unknown	Galvanized	2011	30	8	22	4		
			7.2.1.5	Furnace Thermostat	Garage	Unknown	Unknown	2011	20	8	12	5		
			7.2.1.6	Basement Oil Furnace	Basement	Unknown	OLB5-F059-085-3/BLF-5	2011	18	8	10	4		
			7.2.1.7	HRV	Basement	VanEE	VanEE Model 1601606	2011	20	8	12	5	Filter plugged, needs cleaning	
			7.2.1.8	Refrigerant Piping	Basement	Unknown	Unknown	2011	30	8	22	5		
			7.2.1.9	Basement Furnace Venting	Basement	Unknown	Unknown	2011	30	8	22	5	Combustion air ductwork is flexible duct	

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			7.2.1.10	Chimney	Exterior	Unknown	Unknown	2011	30	8	22	5		
	7.2.2	Natural Gas Piping												$0.00
			7.2.2.1	Generator Gas Piping	Exterior	Unknown	Unknown	2011	30	8	22	4	Natural gas piping showing signs of rust.	
	7.2.4	Garage Ventilation												$200.00
			7.2.4.1	Prop Ceiling Fan	Garage	Unknown	Unknown	2011	20	8	12	5		
			7.2.4.2	Prop Ceiling Fan	Garage	Unknown	Unknown	2011	20	8	12	5		
			7.2.4.3	Prop Ceiling Fan	Garage	Unknown	Unknown	2011	20	8	12	5	Wobbly, needs tightening	
			7.2.4.4	Wall Exhauster	Garage	Unknown	Unknown	2011	20	8	12	5	No makeup air	
			7.2.4.5	Industrial Air Cleaner	Garage	Unknown	Unknown	2011	20	8	12	4	Decommissioned	
			7.2.4.6	Garage Ductwork	Garage	Unknown	Unknown	2011	30	8	22	5	2 ducts into old garage have no grilles	
			7.2.4.7	Garage Furnace Ductwork	Garage	Unknown	Unknown	2011	30	8	22	3	Return grille to furnace should be replaced	$200.00
7.3	Plumbing													$0.00
	7.3.1	Sanitary Exhaust												$0.00
			7.3.1.1	Garage Drainage	Garage	Unknown	Unknown	2011	30	8	22	4	Drains backup	
	7.3.2	Domestic Hot / Cold water												$0.00
			7.3.2.1	Hose Reel	Garage	Unknown	Unknown	2011	30	8	22	5		
			7.3.2.2	R0 System	Kitchen	TankPro	TankPro R0 System	2011	30	8	22	5		
			7.3.2.3	Copper Piping	Various	Unknown	Unknown	2011	30	8	22	5	Needs insulation	
			7.3.2.4	Soft water, UV & Filter	Basement	Viqua	Soft Water, UV & Filter System	2011	30	8	22	5		
			7.3.2.5	Basement Oil Fired Water Heater	Basement	Brock	Brock CWD32-I	2011	20	8	12	4	Replace relief valve	
	7.3.3	Sump Pumps												$0.00
			7.3.3.1	Sump Pump	Basement	Unknown	Rigid	2011	30	8	22	5		
			7.3.2.2	Sump Pump Piping	Basement	Unknown		2011	30	8	22	5	Leaking flex, should be rigid	
	7.3.5	Pressure Tank												$0.00
			7.3.5.1	Pressure Tank & Pump	Basement Furnace	Unknown	Unknown	2011	20	8	12	5		
7.4	Electrical (includes generator)													$12,500.00
	7.4.1	Incoming Services												$5,000.00
			7.4.1.1	Main Panelboard / Disconnect Switch	Basement	Square D	200A, 120/240V, 1PH	Unknown	30	Unknown	Unknown	3	Showing some signs of wear. Replace in 5-10 years based on condition rating.	$5,000.00
			7.4.1.2	Meter Base	Exterior	Unknown	Building Meter Base	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			7.4.1.3	Transformers	Pole Mounted	Unknown	Utility owned pole mounted transformer.	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
	7.4.2	Distribution System												$7,500.00
			7.4.2.1	Panelboards	Utility Room	Square D	100A, 120/240V 1PH sub panel	2003	30	16	14	4	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	

AGENDA ITEM #a)

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
			7.4.2.2	Interior Lighting	Various	Various	Mixture of Fluorescent, LED, and Incandescent fixtures	Various	30	Various	Various	3	Showing some signs of wear but appear operational. Replace within 10 years based on condition rating. Replace bulbs as required. Clean insects from fixtures as necessary. Cracked switch cover in basement should be replaced. Light above sink requires replacement.	$1,500.00
												4	Garage Lighting appears to be in fair condition.	
			7.4.2.3	Exterior Lighting	Exterior	Various	Mixture of	Various	30	Various	Various	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			7.4.2.4	Conduit and Wiring	Various	Various	Mixture of conduit, wire and cable. Varying age of Conduit and Wiring.	Various	40	Various	Various	3	All old braided wiring should be considered for replacement within 5 years based on condition rating.	$5,000.00
												3	Old generator hook-up in the garage should be removed.	$500.00
			7.4.2.4	A/C Disconnect	Exterior	Unknown	Non-Fused Disconnect	Unknown	30	Unknown	Unknown	3	Showing some signs of wear but appear operational. Replace within 10 years based on condition rating.	$500.00
		7.4.3	Emergency Power System											$0.00
			7.4.3.1	Generator	Exterior	Generac	Generac Guardian Series, 17kW, 120/208V	Unknown	30	Unknown	Unknown	4	Generally appears to be in fair condition. Generator was not connected due to building renovation.	
			7.4.3.2	Transfer Switches	Basement	Generac	Generac RTS Series, Bonded to ground	Unknown	30	Unknown	Unknown	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
		7.4.4	Fire Alarm System											$0.00
			7.4.4.1	Smoke & Carbon Monoxide Alarm	Various	Various	Ceiling mounted Smoke alarms.	Unknown	10	Unknown	Unknown	4	Generally in good condition. Replace on or before unit expiration date.	
		7.4.5	Emergency Lighting System											$0.00
			7.4.5.1	Emergency Lighting	Various	Lumacell	Emergency Battery Units c/w remote lamps	Unknown	40	Unknown	Unknown	5	Generally appears to be in good condition. Replace in 10 years based on condition rating	
			7.4.5.2	Exit Signs	Various	Emergi-Lite	Exit Signs c/w Internal Illumination	Unknown	40	Unknown	Unknown	4	Generally appear to be in fair condition. Replacement in the future will be to upgrade to green "Running Man" signage.	
7.5	Parking Lots/Lane Ways													$0.00
	7.5.1													$0.00
			7.5.1.1	Lane Way	Front of Building		Asphalt					4	Fair - minor to moderate cracking	
Fairmount Home - Paramedic Offices														**$34,306.80**
8.1	Architectural & Structural													$34,306.80
	8.1.1	Building Interior												$34,306.80
			8.1.1.1	Interior Floors	Basement Floor / Paramedic Offices	N/A	Carpet Flooring	2004	15	15	0	2	Poor condition - Recommend replacement due to age	$34,306.80
8.2	HVAC													$0.00
	8.2.1	Building Interior												$0.00
			8.2.1.1											

AGENDA ITEM #a)

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility	Class	Asset	Attribute		Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Howe Island Ferry Building														**$17,100.00**
9.1	Architectural & Structural													$7,800.00
	9.1.1	Building Structure												$0.00
			9.1.1.1	Foundation	Above and Below Grade, Building Perimeter		Concrete	2006				4	Fair - minor wear, some areas with moderate wear	
			9.1.1.2	Building Structure	Envelope		Wood studs	2006				4	Not observable - no obvious issues	
	9.1.2	Building Envelope												$2,500.00
			9.1.2.1	Exterior Walls	Exterior	N/A	Metal Panel Siding	2006	60	13	47	5	Generally Good - Some wear apparent	
												1	Caulking at vertical joint of base flashing failing. Recommend repairing.	Not Applicable
			9.1.2.2	Exterior Doors	Exterior	N/A	Metal Clad Wood (x2)	2006	30	13	17	5	Generally Good - Some wear apparent	
			9.1.2.5	Exterior Windows	Exterior	N/A	Vinyl Windows	2006	25	13	12	2	Poor - Windows seals beginning to fail. Recommend replacement within 5 years.	$2,500.00
	9.1.3	Roof												$0.00
			9.1.3.1	Roof Assembly	Exterior	N/A	Metal Panel	2006	35	13	22	5	Difficult to view. No issues of leaking reported. Condition assumed to be Good per Age	
			9.1.3.2	Fascia	Exterior	N/A	Metal Facia	2006	30	13	17	5	Good - No Obvious Issues	
	9.1.4	Building Interior												$5,300.00
			9.1.4.1	Interior Walls	Interior	N/A	Finished panels throughout	2006	15	13	2	4	Fair Condition. General cleaning recommended as part of regular maintenance.	
												1	Door casing at exterior doors showing staining and water damage. Recommend painting/replacement	Not Applicable
			9.1.4.2	Interior Doors	Interior (Washroom)	N/A	Metal Door with Metal Frame	2006	60	13	47	2	Good functional condition though showing surface wear. Recommend painting for aesthetic reasons.	
			9.1.4.3	Interior Floors	Interior		Vinyl Plank	2006	15	13	2	1	Generally Good Condition. Damage at main door (likely due to moisture) to be repaired, temporary patch in now. Recommend replacement of flooring.	$3,500.00
			9.1.4.4	Interior Ceilings	Interior	N/A	Suspended Acoustical Tile	2006	25	13	12	2	Generally fair condition. Showing minor rust around perimeter. Showing moderate rusting of support grid in bathroom. Recommend budgeting for Replacement within 5 years	$1,800.00
9.2	HVAC													$800.00
	9.2.1													$800.00
			9.2.1.1	Unit Ventilator	Office	Bard	Bard Serial # 139F062188607-02	2011	20	8	12	4	R-22 Refrigerant, Elec heating coil, DX cooling coil	
			9.2.1.2	Thermostat	Office	Bard	Bard T-Stat	2011	20	8	12	5		
			9.2.1.3	Sump Level Alarm	Washroom	Sump Guard	Sumpguard Model P-500	2011	20	8	12	3	Used for septic holding tank	$500.00
			9.2.1.4	Electric Radiator	Washroom	Unknown	Unknown	2011	10	8	2	3	Some surface rust, should be painted	$300.00
9.3	Plumbing													$0.00
	9.3.1													$0.00
			9.3.1.1	Sink	Kitchen	Unknown	Unknown	2011	30	8	22	5		

AGENDA ITEM #a)

County of Frontenac - Facility Condition Assessment
Appendix A - Asset Inventory Tables

Asset Hierarchy					Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Valuation
Facility / Class / Asset / Attribute					Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Estimated Repair or Replacement Cost
Facility	Class	Asset		Attribute										
			9.3.1.2	Electric DHWT	Under Kitchen Sink	Rheem	Rheemglas Fury Model # RE2	2011	15	8	7	4		
			9.3.1.3	Rainwater Downspout	Exterior	Unknown	Unknown	2011	30	8	22	5	Downspout should be extended	
			9.3.1.4	Lav	Washroom	Unknown	Unknown	2011	30	8	22	5	Some rust stains, rusted. Washroom metal is rusting, could look at increasing ventilation	
9.4	Electrical (includes generator)													$6,500.00
	9.4.1	Incoming Services												$0.00
			9.4.1.1	Main Panelboard / Disconnect Switch	Office	Siemens	100A, 120/240V	2006	30	13	17	5	Generally appears to be in good condition. This unit shall be monitored, evaluated and replaced as necessary.	
			9.4.1.2	Transformers	Pole Mounted	Unknown	Utility owned pole mounted transformer.	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			8.4.1.3	Meter Base	Exterior	Landis+Gyr	Pole mounted meter base, locked in cabinet. Appears to be utility owned.	Unknown	30	Unknown	Unknown	N/A	Appears to be Utility Owned.	
			9.4.1.4	Electrical Cabinet	Exterior	Unknown	Stainless Steel Electrical Enclosure. Appears to be MTO owned. Appears to feed How Island Ferry Building.	Unknown	30	Unknown	Unknown	N/A	Understood to be MTO Owned.	
	9.4.2	Distribution System												$3,500.00
			8.4.2.1	Interior Lighting	Interior	Unknown	Fluorescent 1x4 surface mounted strip lighting,	2006	30	13	17	2	Showing some signs of wear but appear operational. Replace within 5 years based on condition rating. Clean insects and replace bulbs/lens as required.	$750.00
			9.4.2.2	Exterior Lighting	Exterior	Unknown	Wall mounted area light, photo-cell operated	2006	30	13	17	2	Replacement of Wall Pack within 5 years based on condition rating	$250.00
			9.4.2.3	Conduit and Wiring	Various	Various	Mixture of conduit, wire and cable. Varying age of Conduit and Wiring.	2006	40	13	27	5	Observed cable and wiring appears to be in good condition.	
												2	Conduit for service connection is heavily rusted. It is recommended to replace this conduit.	$2,500.00
	9.4.3	Emergency Lighting System												$0.00
			9.4.3.1	Exit Signs	Interior	Unknown	Non-illuminated, wall mounted, plastic exit sign	2006	60	13	47	4	Plastic exit sign is in good condition. Replacement in the future will be to upgrade to illuminated green "Running Man" signage.	
	9.4.4	Misc.												$3,000.00
			9.4.4.2	Base Board Heating	Washroom	Unknown	Electric Baseboard Heater	2006	20	13	7	3	Replace within 10 years based on condition rating.	$500.00
			9.4.4.3	Sump Pump Alarm	Various	MPC	Liquid Level Alarm System	2006	20	13	7	2	Showing some signs of wear but appear operational. Exposed wire at the tank should be replaced and mechanically protected. Replace within 5 years based on condition rating	$2,500.00
9.5	Parking Lots/Lane Ways													$2,000.00
	9.5.1													$2,000.00
			9.5.1.1	Parking	Front of Building		Asphalt					4	Fair - minor cracking	
			9.5.1.2	Guiderail	North of Building		Steel with wooden posts					3	Acceptable - minor damage on North end	$2,000.00
			9.5.1.3	Bollards	Around Electrical Panel/Equipment							4	Fair - minor wear, rust	

AGENDA ITEM #a)

4.0 FAIRMOUNT HOME CONDITION ASSESSMENT

4.2 Architectural / Structural



Photo 4.2.1: Foundation wall deterioration at the garbage loading bays.



Photo 4.2.2: Foundation wall deterioration and rusting of reinforcing steel at auditorium wall.



Photo 4.2.3: Staining and deterioration of masonry at Green house.



Photo 4.2.4: Staining and deterioration of masonry at Green house.



Photo 4.2.5: Exterior Brick of the 2004 Addition



Photo 4.2.6: Exterior Brick of the 2004 Addition



Photo 4.2.7: Ground floor vinyl window



Photo 4.2.8: Second floor vinyl window



Photo 4.2.9: Full Height Wood Windows at South Stairwell S2.



Photo 4.2.10: Full Height Wood Windows at South Stairwell S2 – view from interior.



Photo 4.2.11: Full Height Wood Windows at South Stairwell S2 – painted frame.



Photo 4.2.12: Metal Shingles at Mansard of 1968 wing.



Photo 4.2.13: Asphalt shingles at Mansard of 2004 wing.



Photo 4.2.14: Dormers at 2004 wing



Photo 4.2.15: Dormers at 2004 wing: cupping and degranulation



Photo 4.2.16: Sloped roof over central portion of East wing.



Photo 4.2.17: 2-ply mod bit roofing at 1968 wing.



Photo 4.2.18: Example of localized "bubbling" of 2-ply mod bit roofing at 1968 wing.

4.3 HVAC



Photo 4.3.1 - Fairmount Mechanical Room Steam Boiler # 2



Photo 4.3.2 - Fairmount RTU-4



Photo 4.3.3 – Fairmount RTU-4A



Photo 4.3.4 - Fairmount RTU-6



Photo 4.3.5 - Fairmount rooftop open p-traps



Photo 4.3.6 - Fairmount Kitchen Exhaust fan



Photo 4.3.7 - Fairmount rooftop natural gas valve



Photo 4.3.8 - Fairmount Auditorium Multizone air handling unit



Photo 4.3.9 - Fairmount Rooftop Dirty Condenser fins



Photo 4.3.10 - Fairmount Fridge/Freezer/Garbage Room Condensers

4.4 Plumbing



Photo 4.4.1 - Fairmount Mechanical Room Soft Water and Treatment System



Photo 4.4.2 - Fairmount Mechanical Room 60° Boiler



Photo 4.4.3 - Fairmount Mechanical Room Hydronic Pump



Photo 4.4.4 - Fairmount uninsulated sweating pipes in mechanical room



Photo 4.4.5 - Fairmount domestic hot water recirculation pump leak

4.5 Electrical



Photo 4.5.1: Fairmount 1000KVA Transformer.



Photo 4.5.2: Fairmount Main Switchboard, Switchboard AAA.



Photo 4.5.3: Fairmount 250kW Standby Generator.



Photo 4.5.4: Typical Fairmount Electrical Closet 600-120/208V Transformer.



Photo 4.5.5: Typical Fairmount Electrical Closet Panelboards.



Photo 4.5.6: Fairmount Rooftop Solar Array.



Photo 4.5.7: 15A Rooftop Receptacle to be Replaced With 20A Receptacle.



Photo 4.5.8: Receptacle To Be Replace With GFCI Receptacle.



Photo 4.5.9: Boxes Requiring Covers.

4.6 Life Safety



Photo 4.7.1: Localized concrete cracking and delamination of sidewalks.

5.0 ADMINISTRATION BUILDING CONDITION ASSESSMENT

5.2 Architectural / Structural



Photo 5.2.1: Foundation wall deterioration.



Photo 5.2.2: Foundation wall deterioration.



Photo 5.2.3: Deteriorated concrete pier supporting steel column.



Photo 5.2.4: Existing roof guardrail system that does not meet building code requirements.



Photo 5.2.5: Concrete spalling and rebar corrosion at lintel over window frame.



Photo 5.2.6: Mortar erosion at the masonry pillar pedestals at the front building entrance.



Photo 5.2.7: Deteriorated landing pad on east side of building.



Photo 5.2.8: The West exterior door from the Boardroom



Photo 5.2.9: The West exterior door from the Boardroom: sidelights and transom windows show signs of failing window seals



Photo 5.2.10: The North residential style entrance door with sidelight and transom windows



Photo 5.2.11: exterior wood door on east elevation



Photo 5.2.12: Exterior windows at boardroom



Photo 5.2.13: Exterior windows at boardroom: Interior water damage



Photo 5.2.14: Exterior windows at boardroom: Failed Cauking



Photo 5.2.15: Exterior windows at boardroom: Failed cauking at sill



Photo 5.2.16: Localized water damage at ceiling in the ground floor East office

5.3 HVAC

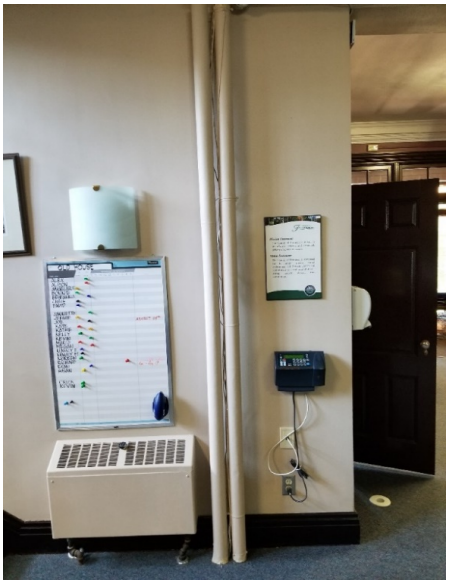


Photo 5.3.1 - Fairmount Old House Uninsulated pipe riser



Photo 5.3.2 Fairmount Old House Air Compressor



Photo 5.3.3 - Fairmount Old House Attic Fan Coil Unit



Photo 5.3.4 - Fairmount Old House Rooftop Condenser Unit

5.4 Electrical



Photo 5.5.1: Old House Electrical Distribution System.



Photo 5.5.2: Old House Standby Generator.



Photo 5.5.3: Damaged Cable Chase.



Photo 5.5.4: Damaged Flex Conduit.



Photo 5.5.5: Receptacle On Circuit With Air Conditioner.

6.0 PALACE ROAD AMBULANCE BASE CONDITION ASSESSMENT

6.2 Architectural / Structural



Photo 6.2.1: Deteriorated concrete foundation wall at location of asphalt cavity.



Photo: 6.2.2: Rusting on column flashing at overhead doors.



Photo 6.2.3: Roof guardrail with missing anchor bolts.



Photo 6.2.4: Weld on the roof access ladder bracing has let go.



Photo 6.2.5: South Elevation



Photo 6.2.6: South Façade - deteriorating mortar joints at west end.



Photo 6.2.7: South Façade - deteriorating mortar joints at east end.



Photo 6.2.8: South East Window with deteriorating mortar joints.



Photo 6.2.9: South East Window deteriorating mortar joints.



Photo 6.2.10: Corridor entrance at West end.



Photo 6.2.11: Flat roofing on South side of building.

6.3 HVAC



Photo 6.3.1 - Palace Road Ambulance Base Rooftop Unit



Photo 6.3.2 - Palace Road Ambulance Base Radiant Heaters

6.4 Plumbing



Photo 6.4.1 - Palace Road Ambulance Base Water Entry BFP & Expansion Tank



Photo 6.4.2 - Palace Road Ambulance Base Domestic Water Heater

6.5 Electrical



Photo 6.5.1: Palace Road Ambulance Base Main Disconnect and Panelboard.



Photo 6.5.2: Palace Road Ambulance Base Standby Generator.



Photo 6.5.3: Service Conduit Requiring Strapping.



Photo 6.5.4: Palace Road Ambulance Base Solar Array.



Photo 6.5.5: Light Fixtures Requiring Maintenance Or Cleaning.



Photo 6.5.6: Receptacle Missing While-in-use Cover.

7.0 SYDENHAM AMBULANCE BASE CONDITION ASSESSMENT

7.2 Architectural / Structural



Photo 7.2.1: Rusted bike rack.



Photo 7.2.2: Exterior metal roofing, metal panel siding, and masonry base.



Photo 7.2.3: Example of gap between window jambs and masonry base (typical).



Photo 7.2.4: Main entrance doors.



Photo 7.2.5: Failed mortar at base of main entrance door sidelights.



Photo 7.2.6: Exterior metal door at garage showing rusting

7.3 HVAC



Photo 7.3.1 - Sydenham Ambulance Base Hot Water Boiler



Photo 7.3.2 - Sydenham Ambulance Base Garage Unit Heater



Photo 7.3.3 - Sydenham Ambulance Base Condenser Unit

7.4 Plumbing



Photo 7.4.1 - Sydenham Ambulance Base Propane Tank

7.5 Electrical



Photo 7.5.1: Sydenham Ambulance Base Main Panelboard.



Photo 7.5.2: Sydenham Ambulance Base Standby Generator.



Photo 7.5.3: Sydenham Ambulance Base Solar Array.



Photo 7.5.4: Sydenham Solar Array Panel.

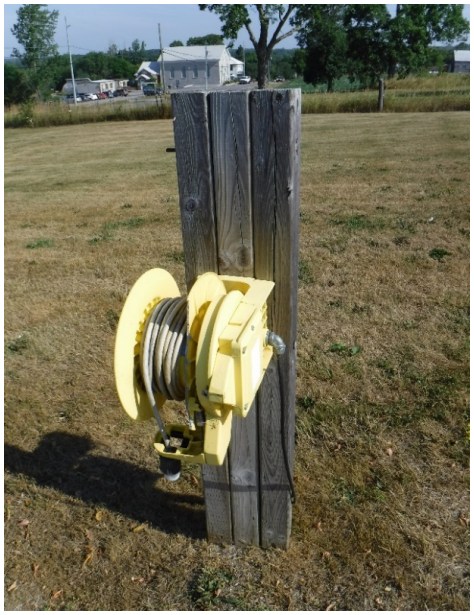


Photo 7.5.5: Damaged Cable Reel.

8.0 ROBERTSVILLE AMBULANCE BASE CONDITION ASSESSMENT

8.2 Architectural / Structural



Photo 8.2.1: Localized staining at garage facia overhanging lower roof



Photo 8.2.2: Close up of Localized Staining from East side of building. Similar staining also visible from west side (not shown



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Photo 8.2.3: Caulking at garage doors has gaps to be filled.



Photo 8.2.4: Caulking at porch column bases showing deterioration.



Photo 8.2.5: localized water damage above exterior metal door to patio..

8.3 HVAC



Photo 8.3.1 - Robertsville Ambulance Base Well Tank



Photo 8.3.2 - Robertsville Ambulance Base Hot Water Tank



Photo 8.3.3 - Robertsville Ambulance Base Condenser Unit

8.4 Plumbing

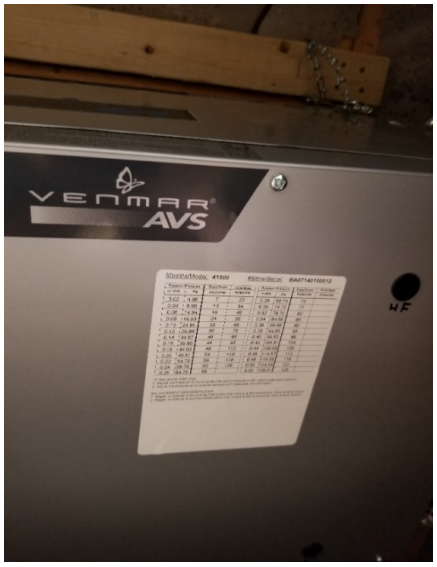


Photo 8.4.1 - Robertsville Ambulance Base HRV

8.5 Electrical



Photo 8.5.1: Robertsville Ambulance Base Main Panelboard.



Photo 8.5.2: Robertsville Ambulance Base Standby Generator.

9.0 WOLFE ISLAND AMBULANCE BASE CONDITION ASSESSMENT

9.2 Architectural / Structural



Photo 9.2.1: Building Exterior Metal Roof and Panel Siding



Photo 9.2.2: Typical window. No positive drainage at top.



Photo 9.2.3: Typical gap between metal siding and window opening.

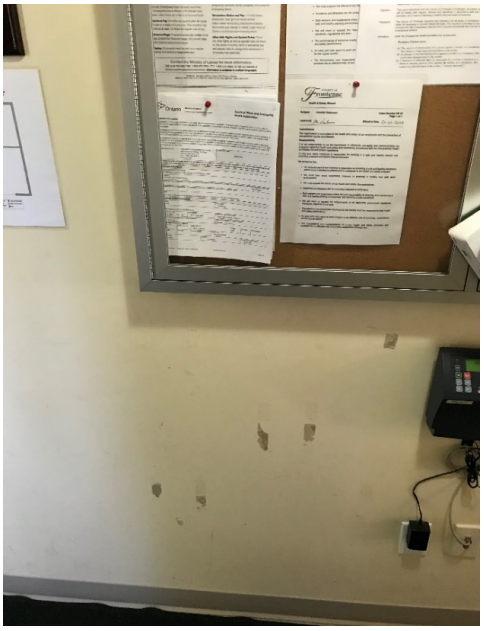


Photo 9.2.4: General wear of interior walls



Photo 9.2.5: Delamination of vinyl tile at North Bedroom

9.3 HVAC



Photo 9.4.1 – Wolfe Island Ambulance Base Furnace



Photo 9.4.2 – Wolfe Island Ambulance Base Condenser Unit Piping Insulation

9.5 Electrical

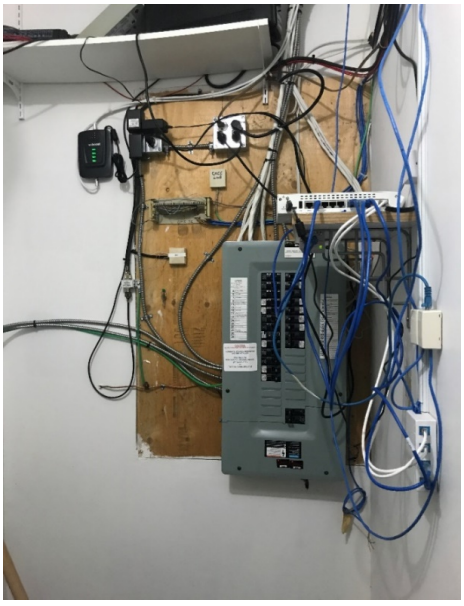


Photo 9.5.1: Wolfe Island Ambulance Base Main Panelboard.



Photo 9.5.2: Wolfe Island Ambulance Base Standby Generator.

9.6 Parking Lots / Lane Ways



Photo 9.6.1: Cracking in concrete sidewalk.



Photo: 9.6.2: Existing helicopter landing pad.

10.0 PARHAM AMBULANCE BASE CONDITION ASSESSMENT

10.2 Architectural / Structural



Photo 10.2.1: Failure of floor joist at stair post.



Photo 10.2.2: Crack in concrete at overhead door.



Photo 10.2.3: Building roof is finished with asphalt shingles



Photo 10.2.4: One of three exterior overhead garages



Photo 10.2.5: Moderate rusting at track bases



Photo 10.2.6: Failing Grout at hallway tile.



Photo 10.2.7: Misaligned soffit at South West Corner.

10.3 HVAC



Photo 10.3.1 – Parham Ambulance Base Basement Furnace Venting



Photo 10.3.2 – Parham Ambulance Base Oil Tank



Photo 10.3.3 – Parham Ambulance Base ERV

10.4 Plumbing



Photo 10.4.1 – Parham Ambulance Base Basement Water Heater

10.5 Electrical



Photo 10.5.1: Parham Ambulance Base Main Panelboard.



Photo 10.5.2: Parham Ambulance Base Garage Sub Panelboard.



Photo 10.5.3: Parham Ambulance Base Standby Generator.



Photo 10.5.4: Aged Braided Wiring.



Photo 10.5.5: Air Conditioner Disconnect.

12.0 HOWE ISLAND FERRY CONDITION ASSESSMENT

12.2 Architectural / Structural



Photo 12.2.1: Damaged guiderail at approach to building.



Photo 12.2.2: Failure of caulking at base flashing.



Photo 12.2.3: Window seals showing wear



Photo 12.2.4: Localized flooring damage covered.



Photo 12.2.5: Interior metal bathroom door and frame showing surface wear.

12.3 HVAC



Photo 12.3.1 – Howe Island Ferry Building Unit Ventilator

12.4 Plumbing



Photo 12.4.1 – Howe Island Ferry Building Hot Water Heater



Photo 12.4.2 – Howe Island Ferry Building Bathroom Radiator



Photo 12.4.3 – Howe Island Ferry Building Sump Alarm

12.5 Electrical



Photo 12.5.1: Howe Island Ferry Building Main Panelboard.



Photo 12.5.2: Meter Base Cabinet and Service Conduit Rusting.



Photo 12.5.3: Snow Plow Chained to Cable.



Photo 12.5.4: Interior Lighting Requires Bulb Replacement.



Photo 12.5.5: Sump Pump Alarm.



Photo 12.5.6: Holding Tank Access.

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2019 OSIM Report

Structures:

Millhaven Creek Bridge
Hardwood Creek Bridge
White Creek Bridge
Elbow Creek Bridge
Fish Creek Bridge



J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

County of Frontenac K&P Trail Bridges
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1.0 Introduction

J.L. Richards & Associates Limited (JLR) was retained by the County of Frontenac (the County) to complete the 2019 biennial Ontario Structure Inspection Manual (OSIM) visual condition assessments of five recreational bridges located along the K&P Trail as part of a larger Asset Condition Assessment project. The objective of these bridge assessments was to determine the general condition of each structure's elements, and to make general recommendations for repair (maintenance and/or rehabilitation) for any observed deficiencies. Opinions of probable construction costs (OPCC) for the recommended maintenance and/or repairs were requested, and are therefore provided as part of this report.

Structure-specific OSIM information and forms are provided in Appendix A of this report. Refer to Appendix B for photographs of each structure, and Appendix C for a breakdown of Bridge Condition Index (BCI) information.

2.0 Site Review

The site review was completed in accordance with the requirements of the Public Transportation and Highway Improvement Act, Ontario Regulation 104/97, and under the guidance of the OSIM 2000, rev. 2003, 2008. The last known OSIM reviews of these structures were completed in 2017.

The 2019 reviews of these five bridges were completed on August 7-8, 2019 by Cory Dyer, P.Eng, of JLR.

3.0 Structure Information Summary

The following is a summary of relevant structure information. Refer to the OSIM Forms in Appendix A for more information.

It should be noted that the Total Current Value, Total Replacement Value, and Total Rehabilitative Needs for each bridge are based on the BCI unit rates and condition of each bridge at the time of review and are intended for comparison purposes only. The presented values are not a prediction of actual costs and current valuation, and do not consider labour, equipment and administrative costs or other market factors. Do not use the presented values for project budgeting.

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Structure: Millhaven Creek Bridge

General Structure Information			
Year Built:	2010	**Type:**	Modular Pre-Eng. Steel
Last Rehabilitation Work:	Unknown	**Total Deck Length:**	11.8 m
Road Name:	K&P Trail	**Total Deck Width:**	3.65 m
No. of Lanes:	1	**No. of Spans:**	1
Crossing Over:	Millhaven Creek	**Total Current Value:**	$65,300.00
Type of Traffic:	Pedestrian, Bicycle, Snowmobile, Maintenance Vehicles	**Total Replacement Value:**	$93,700.00
Avg. Annual Daily Traffic (AADT):	Unknown	**Total Rehabilitative Needs:**	$0.00
Posted Speed:	N/A	**Bridge Condition Index:**	70

Structure: Hardwood Creek Bridge

General Structure Information			
Year Built:	Unknown	**Type:**	Steel Truss
Last Rehabilitation Work:	2012	**Total Deck Length:**	13.1 m
Road Name:	K&P Trail	**Total Deck Width:**	4.15 m
No. of Lanes:	1	**No. of Spans:**	1
Crossing Over:	Hardwood Creek	**Total Current Value:**	$73,700.00
Type of Traffic:	Pedestrian, Bicycle, Snowmobile, Maintenance Vehicles	**Total Replacement Value:**	$119,700.00
Avg. Annual Daily Traffic (AADT):	Unknown	**Total Rehabilitative Needs:**	$40,000.00
Posted Speed:	N/A	**Bridge Condition Index:**	61

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Structure: White Creek Bridge

General Structure Information			
Year Built:	2014	**Type:**	Steel Girder
Last Rehabilitation Work:	Unknown	**Total Deck Length:**	5.8 m
Road Name:	K&P Trail	**Total Deck Width:**	3.8 m
No. of Lanes:	1	**No. of Spans:**	1
Crossing Over:	White Creek	**Total Current Value:**	$74,600.00
Type of Traffic:	Pedestrian, Bicycle, Snowmobile, Maintenance Vehicles	**Total Replacement Value:**	$109,700.00
Avg. Annual Daily Traffic (AADT):	Unknown	**Total Rehabilitative Needs:**	$0.00
Posted Speed:	N/A	**Bridge Condition Index:**	68

Structure: Elbow Creek Bridge

General Structure Information			
Year Built:	2015	**Type:**	Solid Slab
Last Rehabilitation Work:	Unknown	**Total Deck Length:**	14.6 m
Road Name:	K&P Trail	**Total Deck Width:**	3.8 m
No. of Lanes:	1	**No. of Spans:**	3
Crossing Over:	Millhaven Creek	**Total Current Value:**	$29,900.00
Type of Traffic:	Pedestrian, Bicycle, Snowmobile, Maintenance Vehicles	**Total Replacement Value:**	$44,200.00
Avg. Annual Daily Traffic (AADT):	Unknown	**Total Rehabilitative Needs:**	$5,000.00
Posted Speed:	N/A	**Bridge Condition Index:**	68

Structure: Fish Creek Bridge

General Structure Information			
Year Built:	2015	**Type:**	Longitudinal Timber Deck
Last Rehabilitation Work:	Unknown	**Total Deck Length:**	5.5 m
Road Name:	K&P Trail	**Total Deck Width:**	4 m
No. of Lanes:	1	**No. of Spans:**	1
Crossing Over:	Millhaven Creek	**Total Current Value:**	$61,400.00
Type of Traffic:	Pedestrian, Bicycle, Snowmobile, Maintenance Vehicles	**Total Replacement Value:**	$87,600.00
Avg. Annual Daily Traffic (AADT):	Unknown	**Total Rehabilitative Needs:**	$15,000.00
Posted Speed:	N/A	**Bridge Condition Index:**	70

The Total Current Values, Total Replacement Values, and Bridge Condition Index values were determined in accordance with the guidelines set forth by the OSIM's BCI document entitled "Bridge Condition Index (BCI) – An Overall Measure of Bridge Condition". Refer to Appendix C for a breakdown of the BCI information.

4.0 Observations

The observations made by Cory Dyer, P.Eng, during the on site assessment are detailed in the OSIM – Inspection Forms and can be found in Appendix A. Reference photographs for each bridge are included in Appendix B. The condition of each of the bridge elements was assessed according to OSIM standards and a BCI calculation was completed for each bridge. Refer to Appendix C for the detailed BCI calculations.

5.0 Discussion and Recommendations

The calculated BCI values were determined by following the guidelines set forth by the OSIM's BCI document entitled "Bridge Condition Index (BCI) – An Overall Measure of Bridge Condition". For the purpose of qualifying the overall condition of the structures, JLR has categorized the structures based on the following table. This table was developed by referencing the Ministry of Transportation of Ontario (MTO) rating table provided on the MTO's Bridge Repairs webpage.

Calculated BCI	Condition Rating
90 – 100	Excellent
75 – 89	Good
55 – 74	Fair
40 – 54	Poor
<40	Very Poor

*Values are inclusive.

Overall, the structures (in order or ID number) have **Bridge Condition Index values (BCIs) of 70, 61, 68, 68, and 70**, indicating that, in general, the structures are in **fair condition**. Refer to Appendix C for a breakdown of the BCI calculations.

Opinions of probable construction costs (OPCC) are provided in the tables below for the recommended maintenance and rehabilitation work. Please note that in providing OPCCs, it should be understood that JLR has no control over the cost availability of labour, equipment or materials, or market conditions or Contractor's method of pricing, and that our OPCCs are made on the basis of our professional judgement and experience. JLR makes no warranty, express or implied, that the bids or the negotiated cost of Work will not vary from our OPCC.

Please note that OPCC values provided in this report are based on the unit costs presented in Table 2.1 – Unit Costs of Bridge Elements, provided in the OSIM's BCI document entitled "Bridge Condition Index (BCI) – An Overall Measure of Bridge Condition". It should be noted that the unit costs from Table 2.1 were developed by the Province of Ontario in 2013, and therefore do not reflect current dollar values and/or today's market prices. It is recommended that the County accounts for inflation and current markets when developing their budget for maintenance and rehabilitation or replacement.

The OPCC values provided in this report should be considered a general baseline for structure element maintenance and rehabilitative needs, and therefore do not include the following:

- Any cost associated with the detailed design and/or engineering pertaining to any repairs.
- Mobilization and demobilization costs.
- Construction challenges and site constraints for the particular bridge.
- Detours.
- Demolition costs.
- Temporary shoring work.
- Costs associated with the disposal of removed/demolition materials.
- Harmonized sales tax.
- Costs associated with building permits.
- Construction contingency values.

OPCCs for any additional investigation work are not provided in this report.

5.1 Recommended Maintenance Work

The following tables summarize the recommended maintenance work for each structure as of the time of review.

5.1.1 Millhaven Creek Bridge

Element	Location	Maintenance Needs	Urgency	OPCC ($)
Approach Slabs	Approaches	Regrade granular wearing surfaces	1 year	$1,500.00
Barriers	Approaches	Remove vegetation around guiderails	Urgent	$500.00
Stream	Below Bridge	Clear sticks and debris	Urgent	$500.00
Total recommended maintenance work:				**$2,500.00**

5.1.2 Hardwood Creek Bridge

Element	Location	Maintenance Needs	Urgency	OPCC ($)
Approach Slabs	Approaches	Regrade granular wearing surfaces.	1 year	$1,500.00
Approach Barriers	4 Corners	Properly fasten bolts for guardrail posts	Urgent	$500.00
Signs	4 Corners	Replace knocked-over sign	Urgent	$300.00
Access Gate	North end of approach	Repaint rusting steel	1 year	$1,000.00
Total recommended maintenance work:				**$3,300.00**

5.1.3 White Creek Bridge

Element	Location	Maintenance Needs	Urgency	OPCC ($)
None				
Total recommended maintenance work:				**$0.00**

5.1.4 Elbow Creek Bridge

Element	Location	Maintenance Needs	Urgency	OPCC ($)
Barriers	Approaches	Remove overgrown vegetation around guiderails	Urgent	$500.00
Signs	4 Corners of approaches	Replace missing sign	Urgent	$500.00
Joint Seals	Joints	Refasten loose seal to bridge deck	Urgent	$500.00
Total recommended maintenance work:				**$1,500.00**

5.1.5 Fish Creek Bridge

Element	Location	Maintenance Needs	Urgency	OPCC ($)
Access Gate	North end of approach	Repaint, replace reflective stickers	2 years	$1,000.00
Total recommended maintenance work:				**$1,000.00**

5.2 Recommended Rehabilitation/Replacement Work

The following table summarizes the recommended rehabilitative and replacement needs of each structure as of the time of review.

5.2.1 Millhaven Creek Bridge

Element	Location	Rehabilitation Needs	Urgency	OPCC ($)
None				
Total recommended rehabilitation work:				**$0.00**

5.2.2 Hardwood Creek Bridge

Element	Location	Rehabilitation Needs	Urgency	OPCC ($)
Abutment Walls	Each end of bridge	Rehab masonry around water level	6-10 years	$15,000.00
Railing System	Each side of bridge	Replace railing system	1-5 years	$15,000.00
Deck Wearing Surface	Deck	Replace timber wearing surface	1-5 years	$10,000.00
Total recommended rehabilitation work:				**$40,000.00**

5.2.3 White Creek Bridge

Element	Location	Rehabilitation Needs	Urgency	OPCC ($)
None				
Total recommended rehabilitation work:				**$0.00**

5.2.4 Elbow Creek Bridge

Element	Location	Rehabilitation Needs	Urgency	OPCC ($)
Deck Top	Deck	Scheduled to be replaced this year	N/A	N/A
Deck Wearing Surface	Deck	Scheduled to be replaced this year	N/A	N/A
Approach Barriers	Each side of approaches	Rehab damaged section	1-5 years	$5,000.00
Total recommended rehabilitation work:				**$5,000.00**

5.2.5 Fish Creek Bridge

Element	Location	Rehabilitation Needs	Urgency	OPCC ($)
North Abutment Wall	North abutment	Rehab eroded mortar at bottom of wall	1-5 years	$15,000.00
Total recommended rehabilitation work:				**$15,000.00**

5.3 Recommended Additional Investigations

The next biennial inspections should be scheduled no later than August 2021.

6.0 Conclusion

In conclusion, the bridges are currently all in fair condition, with BCI values between 61 and 70.

The total costs for the maintenance needs for each bridge are summarized in the following table, and should be completed within the timeframes noted in Section 5.1.

Bridge	Cost
Millhaven Creek	$2,500.00
Hardwood Creek	$3,300.00
White Creek	$0.00
Elbow Creek	$1,500.00
Fish Creek	$1,000.00

The total costs for the rehabilitation/replacement needs for each bridge are summarized in the following table, and should be completed within the timeframes noted in Section 5.2.

Bridge	Cost
Millhaven Creek	$0.00
Hardwood Creek	$40,000.00
White Creek	$0.00
Elbow Creek	$5,000.00
Fish Creek	$15,000.00

There are no recommended additional investigations for any of the bridges at this time.

7.0 Limitations on Use

This report has been prepared for the exclusive use of the County of Frontenac, for the stated purpose, for the named facility. Its discussions and conclusions are summary in nature and cannot be properly used, interpreted or extended to other purposes without a detailed understanding and discussions with the client as to its mandated purpose, scope and limitations. This report was prepared for the sole benefit and use of The County of Frontenac and may not be used or relied on by any other party without the express written consent of J.L. Richards & Associates Limited.

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County of Frontenac K&P Trail Bridges
2019 OSIM Report

J.L. RICHARDS & ASSOCIATES LIMITED

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Appendix A

OSIM Forms

County of Frontenac K&P Trail Bridges
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Millhaven Creek Bridge

STRUCTURE INSPECTION FORM

Structure Name: Millhaven Creek Bridge

INVENTORY DATA

Main Hwy/Road #	☒ On ☐ Under	Crossing Type	☐ Navig. Water ☒ Non-Navig. Water ☐ Road ☐ Ped. ☐ Other ☐ Rail
Hwy/Road Name	K&P Trail		
Structure Location	600 m north of Quinn Rd. East		
Latitude	44.38684	Longitude	-76.64158
Owner(s)	County of Frontenac	Heritage Designation	☐ Not Cons. ☐ Cons/not App. ☐ List/not Desig. ☐ Desig./not List ☐ Desig. & List
MTO Region	Eastern	Road Class	☐ Freeway ☐ Arterial ☐ Collector ☐ Local
MTO District	Kingston	Posted Speed	No. of Lanes
Old County	Frontenac	AADT	% Trucks
Geographic Twp.		Inspection Route Sequence	
Structure Type	Modular Pre-Eng Steel	Interchange Number	
Total Deck Length	11.8 (m)	Interchange Structure Number	
Overall Str. Width	3.655 (m)	Min. Vertical Clearance	(m)
Total Deck Area	43.1 (sq.m)	Special Routes	☐ Transit ☐ Truck ☐ School ☐ Bicycle
Roadway Width	3 (m)	Detour Length Around Bridge	(km)
Skew Angle	(Degrees)	Direction of Structure	NW/SE
No. of Spans	1	Fill on Structures	(m)
Span Lengths	11.8		

HISTORICAL DATA

Year Built	2010	Year of Last Major Rehab	
Last OSIM Inspection	06/10/2017	Last Evaluation	
Last Enhanced OSIM Inspection		Current Load Limit	12140 lb/section
Enhanced Access Equipment (ladder, boat, lift, etc.)		Load Limit By-Law #	
Last Underwater Inspection		By-Law Expiry Date	
Last Condition Survey			
Rehab History (Date/description)			
Unknown			

STRUCTURE INSPECTION FORM

FIELD INSPECTION INFORMATION

Date of Inspections:	August 8, 2019	Type of Inspection:	☒ OSIM ☐ Enhanced OSIM
Inspector:	Cory Dyer, P.Eng.		
Others in Party:			
Access Equipment Used:	None		
Weather:	Sunny		
Temperature:	16 °C		

ADDITIONAL INVESTIGATIONS REQUIRED

	Priority		
	None	Normal	Urgent
Material Condition Survey	X		
Detailed Deck Condition Survey	X		
Non destructive Delamination Survey of Asphalt-Covered Deck	X		
Concrete Substructure Condition Survey	X		
Detailed Coating Condition Survey	X		
Detailed Timber Investigation	X		
Post-Tensioned Strand Investigation	X		
Underwater Investigation	X		
Fatigue Investigation	X		
Seismic Investigation	X		
Structure Evaluation	X		
Monitoring			
Monitoring of Deformation, Settlements and Movements	X		
Monitoring Crack Widths	X		

Investigation Notes:

OVERALL STRUCTURE NOTES

Recommended Work on Structure ☐ None ☐ Minor Rehab. ☐ Major Rehab. ☐ Replace

Timing of Recommended Work ☐ 1 to 5 years ☐ 6 to 10 years

Overall comments

Date of Next Inspection

Suspected Performance Deficiencies

01	Load carrying capacity	06	Bearing not uniformly loaded/unstable	12	Slippery surfaces
02	Excessive deformations (deflections & rotations)	07	Jammed expansion joint	13	Flooding/channel blockage
03	Continuing settlement	08	Pedestrian/vehicular hazard	14	Undermining of foundation
04	Continuing movements	09	Rough riding surface	15	Unstable embankments
05	Seized bearings	10	Surface ponding	16	Other
		11	Deck drainage		

Maintenance Needs

01	Lift and Swing Bridge Maintenance	07	Repair to Structural Steel	13	Erosion Control at Bridges
02	Bridge Cleaning	08	Repair of Bridge Concrete	14	Concrete Sealing
03	Bridge Handrail Maintenance	09	Repair of Bridge Timber	15	Rout and Seal
04	Painting Steel Bridge Structures	10	Bailey bridges - Maintenance	16	Bridge Deck Drainage
05	Bridge Deck Joint Repair	11	Animal/Pest Control	17	Scaling (Loose Concrete or ACR Steel)
06	Bridge Bearing Maintenance	12	Bridge Surface Repair	18	Other

STRUCTURE INSPECTION FORM

ELEMENT DATA			
Element Group:	Abutments	**Length:**	m
Element Name:	Abutment Walls	**Width:** 6.78	m
Location:	Each end of bridge	**Height:** 1.7	m
Material:	Concrete	**Count:** 2	
Element Type:		**Total Quantity:** 23.1	m2
Environment:	Moderate	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		15.7	7.4		

Comments:
- Minor-moderate cracking and wear
- Continue to monitor

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Abutments	**Length:**	m
Element Name:	Bearings	**Width:**	m
Location:	Each end of bridge	**Height:**	m
Material:		**Count:** 2	
Element Type:		**Total Quantity:** 2	each
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**

Comments:
Not observable

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Accessories	**Length:**	m
Element Name:	Signs	**Width:**	m
Location:	4 Corners of bridge	**Height:**	m
Material:		**Count:**	4
Element Type:		**Total Quantity:**	4 each
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		4			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:**	5.4 m
Element Name:	Approach Slabs	**Width:**	3.25 m
Location:	North West end of bridge	**Height:**	m
Material:	Granular	**Count:**	
Element Type:		**Total Quantity:**	17.55 m2
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		6.75	10.8		

Comments:
North West side need regrading
Vegetation becoming overgrown at approaches

Maintenance Needs: ☐ Urgent ☒ 1 year ☐ 2 years
Regrade
Clear vegetation around approach guiderails

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:** 7	m
Element Name:	Approach Slabs	**Width:** 3.25	m
Location:	South East end of bridge	**Height:**	m
Material:	Granular	**Count:**	
Element Type:		**Total Quantity:** 22.75	m2
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		8.75	4	10	

Comments:
South East side need regrading
South East side has significant erosion/washout at edges

Maintenance Needs: ☐ Urgent ☒ 1 year ☐ 2 years
Regrade
Repair areas of erosion/washout

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:**	m
Element Name:	Posts	**Width:**	m
Location:	Each side of bridge	**Height:**	m
Material:	Lumber	**Count:**	
Element Type:		**Total Quantity:** 26	each
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		26			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:** 24	m
Element Name:	Railing Systems	**Width:**	m
Location:	Each side	**Height:**	m
Material:	Steel	**Count:** 2	
Element Type:	Guardrail	**Total Quantity:** 48	m
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		38	10		

Comments:
Some minor damage (due to collision) causing dents and scratches

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Beams/Main Long. Elements	**Length:** 3.655	m
Element Name:	Floor Beams	**Width:**	m
Location:	Underside of deck	**Height:**	m
Material:	Steel C channels	**Count:** 40	
Element Type:		**Total Quantity:** 146.2	m
Environment:	Benign	**Limited Inspection:** ☒	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		146.2			

Comments:
Underside was not reviewed due to high water level. No sag or other deficiencies observed from the top.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Beams/Main Long. Elements	**Length:**	12.4 m
Element Name:	Girders	**Width:**	m
Location:	Underside of floor beams	**Height:**	m
Material:	Steel	**Count:**	6
Element Type:		**Total Quantity:**	74.4 m
Environment:	Benign	**Limited Inspection:**	☒

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		74.4			

Comments:
Light corrosion along bottom of outside girders
Inside girders were not reviewed due to high water level.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Decks	**Length:**	11.8 m
Element Name:	Deck Top	**Width:**	3.655 m
Location:		**Height:**	m
Material:	Steel	**Count:**	1
Element Type:		**Total Quantity:**	43.1 m2
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		43.1			

Comments:
Minor wear

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Embankments & Streams	**Length:**	m
Element Name:	Stream	**Width:**	m
Location:	Stream	**Height:**	m
Material:		**Count:**	
Element Type:		**Total Quantity:**	All
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**

Comments:
Sticks and debris below bridge may be used for beaver dam construction

Maintenance Needs: ☒ Urgent ☐ 1 year ☐ 2 years
Remove sticks and debris from below bridge

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Hardwood Creek Bridge

STRUCTURE INSPECTION FORM

Structure Name: Hardwood Creek Bridge

INVENTORY DATA

Main Hwy/Road #	☒ On ☐ Under		Crossing Type	☐ Navig. Water ☒ Non-Navig. Water ☐ Road ☐ Ped. ☐ Other ☐ Rail	
Hwy/Road Name	K&P Trail				
Structure Location	70 m S of Bellrock Rd.				
Latitude	44.47076		Longitude	-76.69659	
Owner(s)	County of Frontenac		Heritage Designation	☐ Not Cons. ☐ Cons/not App. ☐ List/not Desig. ☐ Desig./not List ☐ Desig. & List	
MTO Region	Eastern		Road Class	☐ Freeway ☐ Arterial ☐ Collector ☐ Local	
MTO District	Kingston		Posted Speed	No. of Lanes	
Old County	Frontenac		AADT	% Trucks	
Geographic Twp.			Inspection Route Sequence		
Structure Type	Truss		Interchange Number		
Total Deck Length	13.1	(m)	Interchange Structure Number		
Overall Str. Width	4.8	(m)	Min. Vertical Clearance		(m)
Total Deck Area	62.9	(sq.m)	Special Routes	☐ Transit ☐ Truck ☐ School ☐ Bicycle	
Roadway Width	3.5	(m)	Detour Length Around Bridge		(km)
Skew Angle		(Degrees)	Direction of Structure	N / S	
No. of Spans	1		Fill on Structures		(m)
Span Lengths	13.1				

HISTORICAL DATA

Year Built		Year of Last Major Rehab	
Last OSIM Inspection	28/09/2017	Last Evaluation	
Last Enhanced OSIM Inspection		Current Load Limit	(tonnes)
Enhanced Access Equipment (ladder, boat, lift, etc.)		Load Limit By-Law #	
Last Underwater Inspection		By-Law Expiry Date	
Last Condition Survey			

Rehab History (Date/description)

2012 – New guardrail; repairs to masonry abutments.

STRUCTURE INSPECTION FORM

FIELD INSPECTION INFORMATION

Date of Inspections:	August 7, 2019	Type of Inspection:	☒ OSIM ☐ Enhanced OSIM
Inspector:	Cory Dyer, P.Eng.		
Others in Party:			
Access Equipment Used:			
Weather:	Overcast		
Temperature:	20 °C		

ADDITIONAL INVESTIGATIONS REQUIRED

	Priority		
	None	Normal	Urgent
Material Condition Survey	X		
Detailed Deck Condition Survey	X		
Non destructive Delamination Survey of Asphalt-Covered Deck	X		
Concrete Substructure Condition Survey	X		
Detailed Coating Condition Survey	X		
Detailed Timber Investigation	X		
Post-Tensioned Strand Investigation	X		
Underwater Investigation	X		
Fatigue Investigation	X		
Seismic Investigation	X		
Structure Evaluation	X		
Monitoring			
Monitoring of Deformation, Settlements and Movements	X		
Monitoring Crack Widths	X		

Investigation Notes:

OVERALL STRUCTURE NOTES

Recommended Work on Structure ☐ None ☒ Minor Rehab. ☐ Major Rehab. ☐ Replace

Timing of Recommended Work ☒ 1 to 5 years ☐ 6 to 10 years

Overall comments Replace guardrail railings with a code-compliant alternative, rehab masonry abutment walls, multiple maintenance items

Date of Next Inspection

Suspected Performance Deficiencies

01	Load carrying capacity	06	Bearing not uniformly loaded/unstable	12	Slippery surfaces
02	Excessive deformations (deflections & rotations)	07	Jammed expansion joint	13	Flooding/channel blockage
03	Continuing settlement	08	Pedestrian/vehicular hazard	14	Undermining of foundation
04	Continuing movements	09	Rough riding surface	15	Unstable embankments
05	Seized bearings	10	Surface ponding	16	Other
		11	Deck drainage		

Maintenance Needs

01	Lift and Swing Bridge Maintenance	07	Repair to Structural Steel	13	Erosion Control at Bridges
02	Bridge Cleaning	08	Repair of Bridge Concrete	14	Concrete Sealing
03	Bridge Handrail Maintenance	09	Repair of Bridge Timber	15	Rout and Seal
04	Painting Steel Bridge Structures	10	Bailey bridges - Maintenance	16	Bridge Deck Drainage
05	Bridge Deck Joint Repair	11	Animal/Pest Control	17	Scaling (Loose Concrete or ACR Steel)
06	Bridge Bearing Maintenance	12	Bridge Surface Repair	18	Other

STRUCTURE INSPECTION FORM

ELEMENT DATA

Element Group:	Abutments	**Length:**		m
Element Name:	Abutment Wall - Masonry	**Width:**	6.8	m
Location:	Each end of bridge	**Height:**	2.0	m
Material:	Masonry	**Count:**	2	
Element Type:		**Total Quantity:**	27.2	m2
Environment:	Moderate	**Limited Inspection:**	☐	
Protection System:				

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		17.1	10.1		

Comments:
Bottom 1 m in fair condition

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: Repoint masonry at creek level ☒ Rehab. ☐ Replace ☐ 1 – 5 years ☒ 6 – 10 years

ELEMENT DATA

Element Group:	Abutments	**Length:**		m
Element Name:	Abutment Wall - Concrete	**Width:**	5.9	m
Location:	Each end of bridge (shorter portion)	**Height:**	1.2	m
Material:	Concrete	**Count:**	2	
Element Type:		**Total Quantity:**	14.2	m2
Environment:	Benign	**Limited Inspection:**	☐	
Protection System:				

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		14.2			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Abutments	**Length:**		m
Element Name:	Ballast Wall	**Width:**	5.9	m
Location:	Each end of bridge (taller portion)	**Height:**	1.2	m
Material:	Concrete	**Count:**	2	
Element Type:		**Total Quantity:**	14.2	m2
Environment:	Benign	**Limited Inspection:**	☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		14.2			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Abutments	**Length:**		m
Element Name:	Bearings	**Width:**		m
Location:	4 corners of trusses	**Height:**		m
Material:	Rubber mats on concrete ballast walls	**Count:**	4	
Element Type:		**Total Quantity:**	4	each
Environment:	Benign	**Limited Inspection:**	☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		4			

Comments:
Bearing plate separating from bearing pad in one corner.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Accessories	**Length:**	m
Element Name:	Signs	**Width:**	m
Location:	4 corners (approaches)	**Height:**	m
Material:		**Count:**	4
Element Type:		**Total Quantity:**	4 each
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		3		1	

Comments:
1 sign (NW) has been knocked over

Maintenance Needs: ☒ Urgent ☐ 1 year ☐ 2 years
Replace sign

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Accessories	**Length:**	m
Element Name:	Access gate	**Width:**	m
Location:	North end of approach	**Height:**	m
Material:	Steel	**Count:**	1
Element Type:		**Total Quantity:**	1 each
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each			1		

Comments:
Mild rusting throughout

Maintenance Needs: ☐ Urgent ☒ 1 year ☐ 2 years
Repaint

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:**	13.3	m	
Element Name:	Approach slabs	**Width:**	3.6	m	
Location:	Each end of bridge	**Height:**		m	
Material:	Granular	**Count:**	2		
Element Type:		**Total Quantity:**	95.8	m2	
Environment:	Benign	**Limited Inspection:**	☐		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2			42.6	53.2	

Comments:
Needs regrading
Many large potholes and washouts

Maintenance Needs: ☐ Urgent ☒ 1 year ☐ 2 years
Regrade approaches

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:**	26.65	m	
Element Name:	Barriers	**Width:**		m	
Location:	4 corners	**Height:**		m	
Material:	Steel with steel posts	**Count:**	2		
Element Type:		**Total Quantity:**	53.3	m	
Environment:	Benign	**Limited Inspection:**	☐		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		43.3		10	

Comments:
Bolts are missing or not tightened in all 4 corners where posts fasten to concrete ballast wall

Maintenance Needs: ☒ Urgent ☐ 1 year ☐ 2 years
Properly fasten bolts for guardrail posts

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:** 11.1	m
Element Name:	Railing System	**Width:**	m
Location:	Each side	**Height:**	m
Material:	Weathered steel	**Count:** 2	
Element Type:		**Total Quantity:** 22.2	m
Environment:	Benign	**Limited Inspection:** ☐	
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m				22.2	

Comments:
Poor connection to structure, no connection to approach guardrails
Does not meet code for guardrails

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☒ Replace ☒ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Beams/Main Long. Elements	**Length:** 4.15	m
Element Name:	Floor beams	**Width:**	m
Location:	Underside of deck	**Height:**	m
Material:	Steel W beams	**Count:** 4	
Element Type:		**Total Quantity:** 16.6	m
Environment:	Benign	**Limited Inspection:** ☐	
Protection System:	Paint		

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		16.6			

Comments:
Minor rusting

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Beams/Main Long. Elements	**Length:**	13 m
Element Name:	Stringers	**Width:**	m
Location:	Underside of deck	**Height:**	m
Material:	Steel W beams	**Count:**	5
Element Type:		**Total Quantity:**	65 m
Environment:	Moderate	**Limited Inspection:**	☐
Protection System:	Paint		

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		65			

Comments:
Minor rusting

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Beams/Main Long. Elements	**Length:**	4.55 m
Element Name:	Diaphragms	**Width:**	m
Location:	Underside of Deck	**Height:**	m
Material:	Steel C beams and cable	**Count:**	10
Element Type:		**Total Quantity:**	45.5 m
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Decks	**Length:**	13.1	m	
Element Name:	Deck top	**Width:**	4.15	m	
Location:	Under surface wearing layer	**Height:**		m	
Material:	Lumber	**Count:**			
Element Type:		**Total Quantity:**	54.4	m2	
Environment:	Benign	**Limited Inspection:**	☒		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		54.4			

Comments:
Only edges were observable
No obvious issues

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Decks	**Length:**	13.1	m	
Element Name:	Wearing Surface	**Width:**	3.5	m	
Location:	Deck top	**Height:**		m	
Material:	Lumber	**Count:**	1		
Element Type:		**Total Quantity:**	45.9	m2	
Environment:	Benign	**Limited Inspection:**	☐		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2			35.9	10	

Comments:
Heavy wear (abrasion, checks, splits, etc.)
Moisture damage
Lumber is rotting in select locations

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☒ Replace ☒ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Decks	**Length:**	13.1 m
Element Name:	Deck Soffit	**Width:**	3.5 m
Location:	Deck soffit	**Height:**	m
Material:	Lumber	**Count:**	1
Element Type:		**Total Quantity:**	45.9 m2
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	Units	Excellent	Good	Fair	Poor	Performance Deficiencies:

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☒ Replace ☒ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Retaining Walls	**Length:**	4.3 m
Element Name:	Walls – approaches	**Width:**	1.0 m
Location:	4 corners	**Height:**	m
Material:	Gabion baskets	**Count:**	4
Element Type:		**Total Quantity:**	17.2 m
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	Units	Excellent	Good	Fair	Poor	Performance Deficiencies:
	m		17.2			

Comments:
Generally in good condition

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Sidewalks/curbs	**Length:**	13.1	m	
Element Name:	Curbs	**Width:**		m	
Location:	Both sides	**Height:**		m	
Material:	Lumber	**Count:**	2		
Element Type:		**Total Quantity:**	26.2	m	
Environment:	Benign	**Limited Inspection:**	☐		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m			26.2		

Comments:
Fair condition; will likely need to be replaced with new guardrail system

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Trusses/Arches	**Length:**	21.8	m	
Element Name:	Top & Bottom Chords	**Width:**	0.15	m	
Location:	Each side of bridge	**Height:**	0.075	m	
Material:	Steel	**Count:**	2		
Element Type:		**Total Quantity:**	19.62	m2	
Environment:	Benign	**Limited Inspection:**	☐		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		17.82	1.8		

Comments:
Minor rusting throughout
Deformed (bending) bottom chord in one corner

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Trusses/Arches	**Length:**	21.8 m
Element Name:	Verticals / Diagonals	**Width:**	0.15 m
Location:	Each side of bridge	**Height:**	0.075 m
Material:	Steel	**Count:**	2
Element Type:		**Total Quantity:**	19.62 m2
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		18.62	1		

Comments:
Minor rusting throughout
Deformed (twisting) minor diagonal chord at one corner

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

County of Frontenac K&P Trail Bridges
2019 OSIM Report

White Creek Bridge

STRUCTURE INSPECTION FORM

Structure Name: White Creek Bridge

INVENTORY DATA

Main Hwy/Road #	☒ On ☐ Under		Crossing Type	☐ Navig. Water ☒ Non-Navig. Water ☐ Road ☐ Ped. ☐ Other ☐ Rail	
Hwy/Road Name	K&P Trail				
Structure Location	400 m N of Westport Rd.				
Latitude	44.545919		Longitude	-76.678083	
Owner(s)	County of Frontenac		Heritage Designation	☐ Not Cons. ☐ Cons/not App. ☐ List/not Desig. ☐ Desig./not List ☐ Desig. & List	
MTO Region	Eastern		Road Class	☐ Freeway ☐ Arterial ☐ Collector ☐ Local	
MTO District	Kingston		Posted Speed	No. of Lanes	1
Old County	Frontenac		AADT	% Trucks	
Geographic Twp.			Inspection Route Sequence		
Structure Type	Steel Girder		Interchange Number		
Total Deck Length	5.8	(m)	Interchange Structure Number		
Overall Str. Width	3.8	(m)	Min. Vertical Clearance		(m)
Total Deck Area	22.0	(sq.m)	Special Routes	☐ Transit ☐ Truck ☐ School ☐ Bicycle	
Roadway Width	3.5	(m)	Detour Length Around Bridge		(km)
Skew Angle		(Degrees)	Direction of Structure	N / S	
No. of Spans	1		Fill on Structures		(m)
Span Lengths	5.9				

HISTORICAL DATA

Year Built	2014	Year of Last Major Rehab	
Last OSIM Inspection	28/09/2017	Last Evaluation	
Last Enhanced OSIM Inspection		Current Load Limit	(tonnes)
Enhanced Access Equipment (ladder, boat, lift, etc.)		Load Limit By-Law #	
Last Underwater Inspection		By-Law Expiry Date	
Last Condition Survey			
Rehab History (Date/description)			

STRUCTURE INSPECTION FORM

FIELD INSPECTION INFORMATION

Date of Inspections:	August 7, 2019	Type of Inspection:	☒ OSIM ☐ Enhanced OSIM
Inspector:	Cory Dyer, P.Eng.		
Others in Party:			
Access Equipment Used:			
Weather:	Overcast		
Temperature:	20 °C		

ADDITIONAL INVESTIGATIONS REQUIRED

	Priority		
	None	Normal	Urgent
Material Condition Survey	X		
Detailed Deck Condition Survey	X		
Non destructive Delamination Survey of Asphalt-Covered Deck	X		
Concrete Substructure Condition Survey	X		
Detailed Coating Condition Survey	X		
Detailed Timber Investigation	X		
Post-Tensioned Strand Investigation	X		
Underwater Investigation	X		
Fatigue Investigation	X		
Seismic Investigation	X		
Structure Evaluation	X		
Monitoring			
Monitoring of Deformation, Settlements and Movements	X		
Monitoring Crack Widths	X		

Investigation Notes:

OVERALL STRUCTURE NOTES

Recommended Work on Structure ☐ None ☐ Minor Rehab. ☐ Major Rehab. ☐ Replace

Timing of Recommended Work ☐ 1 to 5 years ☐ 6 to 10 years

Overall comments

Date of Next Inspection

Suspected Performance Deficiencies

01	Load carrying capacity	06	Bearing not uniformly loaded/unstable	12	Slippery surfaces
02	Excessive deformations (deflections & rotations)	07	Jammed expansion joint	13	Flooding/channel blockage
03	Continuing settlement	08	Pedestrian/vehicular hazard	14	Undermining of foundation
04	Continuing movements	09	Rough riding surface	15	Unstable embankments
05	Seized bearings	10	Surface ponding	16	Other
		11	Deck drainage		

Maintenance Needs

01	Lift and Swing Bridge Maintenance	07	Repair to Structural Steel	13	Erosion Control at Bridges
02	Bridge Cleaning	08	Repair of Bridge Concrete	14	Concrete Sealing
03	Bridge Handrail Maintenance	09	Repair of Bridge Timber	15	Rout and Seal
04	Painting Steel Bridge Structures	10	Bailey bridges - Maintenance	16	Bridge Deck Drainage
05	Bridge Deck Joint Repair	11	Animal/Pest Control	17	Scaling (Loose Concrete or ACR Steel)
06	Bridge Bearing Maintenance	12	Bridge Surface Repair	18	Other

STRUCTURE INSPECTION FORM

ELEMENT DATA

Element Group:	Abutments	**Length:** 4.8	m
Element Name:	Abutment Wall	**Width:**	m
Location:	Each side of bridge	**Height:** 4.5	m
Material:	Masonry	**Count:** 2	
Element Type:		**Total Quantity:** 43.2	m2
Environment:	Moderate	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		31.2	12		

Comments:
Bottom 1.5 m is deteriorated at water level and is showing erosion of mortar

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☒ Rehab. ☐ Replace ☐ 1 – 5 years ☒ 6 – 10 years

ELEMENT DATA

Element Group:	Abutments	**Length:** 4.8	m
Element Name:	Abutment Walls	**Width:**	m
Location:	Each side of bridge	**Height:** 1	m
Material:	Concrete	**Count:** 2	
Element Type:		**Total Quantity:** 9.6	m2
Environment:	Moderate	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		9.6			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☒ Rehab. ☐ Replace ☐ 1 – 5 years ☒ 6 – 10 years

ELEMENT DATA

Element Group:	Abutments	**Length:**	m
Element Name:	Bearings	**Width:**	m
Location:	Each end	**Height:**	m
Material:	Neoprene pad	**Count:**	
Element Type:		**Total Quantity:**	All
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	All		1			

Comments:
Unable to observe number of pads, assume 2 each side

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Abutments	**Length:** 4	m
Element Name:	Wing Walls	**Width:**	m
Location:	Sides of abutment walls	**Height:** 4	m
Material:	Masonry	**Count:** 4	
Element Type:		**Total Quantity:** 64	m2
Environment:	Moderate	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		46	18		

Comments:
Bottom 1.0 m is deteriorated at water level and is showing erosion of mortar

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☒ Rehab. ☐ Replace ☐ 1 – 5 years ☒ 6 – 10 years

ELEMENT DATA

Element Group:	Accessories	**Length:**	m
Element Name:	Signs	**Width:**	m
Location:	4 corners of approaches	**Height:**	m
Material:		**Count:**	4
Element Type:		**Total Quantity:**	4 each
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		4			

Comments:
3 signs are getting overgrowth with brush

Maintenance Needs: Trim brush ☐ Urgent ☒ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:**	24.1 m
Element Name:	Approach Slabs	**Width:**	3.7 m
Location:		**Height:**	m
Material:	Granular	**Count:**	
Element Type:		**Total Quantity:**	89.2 m2
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		41	48.2		

Comments:
Regrade adjacent to guardrail

Maintenance Needs: Re-grade ☐ Urgent ☒ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:**	12	m
Element Name:	Barriers	**Width:**		m
Location:	4 corners	**Height:**		m
Material:	Steel with wood/steel posts	**Count:**	4	
Element Type:		**Total Quantity:**	48	m
Environment:	Benign	**Limited Inspection:**	☐	
Protection System:				

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		46	2		

Comments:
Minor dent (NW side)
Broken support at post near dent

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:**	6.65	m
Element Name:	Hand Railings	**Width:**		m
Location:	Each side	**Height:**		m
Material:	Steel	**Count:**	2	
Element Type:		**Total Quantity:**	13.3	m
Environment:	Benign	**Limited Inspection:**	☐	
Protection System:				

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m	13.3				

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:**	m
Element Name:	Posts	**Width:**	m
Location:	Each side	**Height:**	m
Material:	Steel	**Count:**	10
Element Type:		**Total Quantity:**	10 each
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each	10				

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:**	5.9 m
Element Name:	Railing System	**Width:**	m
Location:	Each side	**Height:**	m
Material:	Steel guard	**Count:**	2
Element Type:		**Total Quantity:**	11.8 m
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		11.8			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Beams/Main Long. Elements	**Length:**	3.5 m
Element Name:	Floor Beams	**Width:**	m
Location:	Underside of deck	**Height:**	m
Material:	Steel	**Count:**	1
Element Type:		**Total Quantity:**	3.5 m
Environment:	Benign	**Limited Inspection:**	☒
Protection System:			

Condition Data:	Units	Excellent	Good	Fair	Poor	Performance Deficiencies:
	m		3.5			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Beams/Main Long. Elements	**Length:**	5.8 m
Element Name:	Girders	**Width:**	m
Location:	Underside of deck, sides of bridge	**Height:**	0.53 m
Material:		**Count:**	2
Element Type:		**Total Quantity:**	6.15 m2
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	Units	Excellent	Good	Fair	Poor	Performance Deficiencies:
	m2		6.15			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Beams/Main Long. Elements	**Length:** 5.8	m
Element Name:	Stringers	**Width:**	m
Location:	Underside of deck	**Height:**	m
Material:	Steel	**Count:**	
Element Type:		**Total Quantity:**	
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**

Comments:
Not observable due to water level

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Decks	**Length:** 5.8	m
Element Name:	Deck Top	**Width:** 3.5	m
Location:	Underside of wearing surface	**Height:**	m
Material:	Lumber	**Count:** 1	
Element Type:		**Total Quantity:** 20.3	m2
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		20.3			

Comments:
Minor wear

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Decks	**Length:**	5.8 m
Element Name:	Wearing Surface	**Width:**	3.5 m
Location:	Top	**Height:**	m
Material:	Lumber	**Count:**	1
Element Type:		**Total Quantity:**	20.3 m2
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		20.3			

Comments:
Minor wear

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Elbow Creek Bridge

STRUCTURE INSPECTION FORM

Structure Name: Elbow Creek Bridge

INVENTORY DATA

Main Hwy/Road #	N/A	☒ On ☐ Under	Crossing Type	☐ Navig. Water ☒ Non-Navig. Water ☐ Road ☐ Ped. ☐ Other ☐ Rail	
Hwy/Road Name	K&P Trail				
Structure Location	2.6 km north of Ball Rd.				
Latitude	44.62968		Longitude	-76.67876	
Owner(s)	County of Frontenac		Heritage Designation	☐ Not Cons. ☐ Cons/not App. ☐ List/not Desig. ☐ Desig./not List ☐ Desig. & List	
MTO Region	Eastern		Road Class	☐ Freeway ☐ Arterial ☐ Collector ☐ Local	
MTO District	Kingston		Posted Speed	No. of Lanes	1
Old County	Frontenac		AADT	% Trucks	
Geographic Twp.			Inspection Route Sequence		
Structure Type	Solid Slab		Interchange Number		
Total Deck Length	14.6	(m)	Interchange Structure Number		
Overall Str. Width	3.8	(m)	Min. Vertical Clearance		(m)
Total Deck Area	55.5	(sq.m)	Special Routes	☐ Transit ☐ Truck ☐ School ☐ Bicycle	
Roadway Width		(m)	Detour Length Around Bridge		(km)
Skew Angle		(Degrees)	Direction of Structure	N - S	
No. of Spans	3		Fill on Structures		(m)
Span Lengths	5, 4.6, 5				

HISTORICAL DATA

Year Built	2015	Year of Last Major Rehab	
Last OSIM Inspection	28/09/2017	Last Evaluation	
Last Enhanced OSIM Inspection		Current Load Limit	(tonnes)
Enhanced Access Equipment (ladder, boat, lift, etc.)		Load Limit By-Law #	
Last Underwater Inspection		By-Law Expiry Date	
Last Condition Survey			
Rehab History (Date/description)			

STRUCTURE INSPECTION FORM

FIELD INSPECTION INFORMATION

Date of Inspections:	August 7, 2019	Type of Inspection:	☒ OSIM ☐ Enhanced OSIM
Inspector:	Cory Dyer, P.Eng.		
Others in Party:	None.		
Access Equipment Used:			
Weather:	Rain		
Temperature:	20 °C		

ADDITIONAL INVESTIGATIONS REQUIRED

	Priority		
	None	Normal	Urgent
Material Condition Survey	X		
Detailed Deck Condition Survey	X		
Non destructive Delamination Survey of Asphalt-Covered Deck	X		
Concrete Substructure Condition Survey	X		
Detailed Coating Condition Survey	X		
Detailed Timber Investigation	X		
Post-Tensioned Strand Investigation	X		
Underwater Investigation	X		
Fatigue Investigation	X		
Seismic Investigation	X		
Structure Evaluation	X		
Monitoring			
Monitoring of Deformation, Settlements and Movements	X		
Monitoring Crack Widths	X		

Investigation Notes:

OVERALL STRUCTURE NOTES

Recommended Work on Structure ☒ None ☐ Minor Rehab. ☐ Major Rehab. ☐ Replace

Timing of Recommended Work ☐ 1 to 5 years ☐ 6 to 10 years

Overall comments

Date of Next Inspection

Suspected Performance Deficiencies

01	Load carrying capacity	06	Bearing not uniformly loaded/unstable	12	Slippery surfaces
02	Excessive deformations (deflections & rotations)	07	Jammed expansion joint	13	Flooding/channel blockage
03	Continuing settlement	08	Pedestrian/vehicular hazard	14	Undermining of foundation
04	Continuing movements	09	Rough riding surface	15	Unstable embankments
05	Seized bearings	10	Surface ponding	16	Other
		11	Deck drainage		

Maintenance Needs

01	Lift and Swing Bridge Maintenance	07	Repair to Structural Steel	13	Erosion Control at Bridges
02	Bridge Cleaning	08	Repair of Bridge Concrete	14	Concrete Sealing
03	Bridge Handrail Maintenance	09	Repair of Bridge Timber	15	Rout and Seal
04	Painting Steel Bridge Structures	10	Bailey bridges - Maintenance	16	Bridge Deck Drainage
05	Bridge Deck Joint Repair	11	Animal/Pest Control	17	Scaling (Loose Concrete or ACR Steel)
06	Bridge Bearing Maintenance	12	Bridge Surface Repair	18	Other

STRUCTURE INSPECTION FORM

ELEMENT DATA

Element Group:	Abutments	**Length:**	m
Element Name:	Abutment Walls	**Width:**	5.4 m
Location:	Each end	**Height:**	1 m
Material:	Wood	**Count:**	2
Element Type:		**Total Quantity:**	10.8 m2
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		10.8			

Comments:

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Abutments	**Length:**	m
Element Name:	Bearings	**Width:**	3.8 m
Location:	Each end	**Height:**	m
Material:		**Count:**	4
Element Type:		**Total Quantity:**	4 each
Environment:		**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each			4		

Comments:
Some minor wear

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Accessories	**Length:**	m
Element Name:	Signs	**Width:**	m
Location:	Each corner of approaches	**Height:**	m
Material:		**Count:**	4
Element Type:		**Total Quantity:**	4 each
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		3		1	

Comments:
1 sign missing altogether

Maintenance Needs: ☒ Urgent ☐ 1 year ☐ 2 years
Replace missing sign

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:**	50 m
Element Name:	Barriers	**Width:**	m
Location:	4 corners	**Height:**	m
Material:	Steel with wood or steel posts	**Count:**	
Element Type:		**Total Quantity:**	50 m
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		46.5		3.5	

Comments:
Damaged at NE corner. Disconnected from 2 posts.

Maintenance Needs: ☐ Urgent ☒ 1 year ☐ 2 years
Clear vegetation overgrowth around guiderails

Recommended Work: ☒ Rehab. ☐ Replace ☒ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:** 17	m
Element Name:	Hand Railings	**Width:**	m
Location:	Each side	**Height:**	m
Material:	Steel	**Count:** 2	
Element Type:		**Total Quantity:** 34	m
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m	34				

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:**	m
Element Name:	Posts	**Width:**	m
Location:	At guards	**Height:**	m
Material:	Steel	**Count:** 16	
Element Type:		**Total Quantity:** 16	each
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each	16				

Comments:
No concerns

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:** 14.5	m
Element Name:	Railing Systems	**Width:**	m
Location:	Each side of bridge	**Height:**	m
Material:	Steel guards	**Count:** 2	
Element Type:		**Total Quantity:** 29	m
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		29			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Decks	**Length:** 14.6	m
Element Name:	Deck Top	**Width:** 3.8	m
Location:		**Height:**	m
Material:	Wood with FRP wrap	**Count:** 1	
Element Type:		**Total Quantity:** 55.5	m2
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2			50.5	5	

Comments:
FRP top layer is locally damaged.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☒ Rehab. ☐ Replace ☒ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Decks	**Length:**	14.6	m
Element Name:	Soffit – Thin Slab	**Width:**	3.8	m
Location:		**Height:**		m
Material:	Wood with FRP wrap	**Count:**	1	
Element Type:		**Total Quantity:**	55.5	m2
Environment:	Benign	**Limited Inspection:**	☒	
Protection System:				

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**

Comments:
Not observable from below

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Decks	**Length:**	14.6	m
Element Name:	Wearing Surface	**Width:**	3.8	m
Location:		**Height:**		m
Material:	Tar and chip	**Count:**	1	
Element Type:		**Total Quantity:**	55.5	m2
Environment:	Benign	**Limited Inspection:**	☒	
Protection System:				

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		26.5	20	9	

Comments:
Worn a lot in middle span and moderate amount on outside spans.
Remainder is ok.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☒ Rehab. ☐ Replace ☒ 1 – 5 years ☐ 6 – 10 years
Scheduled to be replaced this year

ELEMENT DATA

Element Group:	Embankments & Streams	**Length:**	m
Element Name:	Slope Protection	**Width:**	m
Location:		**Height:**	m
Material:		**Count:**	2 baskets per corner
Element Type:	Gabion baskets	**Total Quantity:**	8 each
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each			8		

Comments:
Some gabion baskets appear to be overturning.
Overgrown with brush

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Joints	**Length:**	3.8 m
Element Name:	Seals (and covers)	**Width:**	m
Location:	Deck Top	**Height:**	m
Material:	Steel	**Count:**	4
Element Type:		**Total Quantity:**	15.2 m
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		15.2			

Comments:

Maintenance Needs: ☒ Urgent ☐ 1 year ☐ 2 years
Refasten one to bridge deck

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Piers	**Length:**	m
Element Name:	Columns	**Width:**	m
Location:	Bridge 1/3 points	**Height:**	m
Material:	Concrete	**Count:**	
Element Type:		**Total Quantity:**	4 each
Environment:	Moderate	**Limited Inspection:**	☒
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**

Comments:
6 piers/supports (bearing seats), concrete-filled corrugated steel pipe.
Rust/corrosion on steel cover at water level.
Not observable at ends of bridge.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Fish Creek Bridge

STRUCTURE INSPECTION FORM

Structure Name: Fish Creek Bridge

INVENTORY DATA

Main Hwy/Road #	☐ On ☐ Under	Crossing Type	☐ Navig. Water ☒ Non-Navig. Water ☐ Road ☐ Ped. ☐ Other ☐ Rail
Hwy/Road Name	K&P Trail		
Structure Location	80 m SW of Fish Creek Rd		
Latitude	44.64549	Longitude	-76.68797
Owner(s)	County of Frontenac	Heritage Designation	☐ Not Cons. ☐ Cons/not App. ☐ List/not Desig. ☐ Desig./not List ☐ Desig. & List
MTO Region	Eastern	Road Class	☐ Freeway ☐ Arterial ☐ Collector ☐ Local
MTO District	Kingston	Posted Speed	No. of Lanes 1
Old County	Frontenac	AADT	% Trucks
Geographic Twp.		Inspection Route Sequence	
Structure Type	Longitudinal Timber Deck	Interchange Number	
Total Deck Length	5.5 (m)	Interchange Structure Number	
Overall Str. Width	4 (m)	Min. Vertical Clearance	(m)
Total Deck Area	22 (sq.m)	Special Routes	☐ Transit ☐ Truck ☐ School ☐ Bicycle
Roadway Width	3.78 (m)	Detour Length Around Bridge	(km)
Skew Angle	(Degrees)	Direction of Structure	N - S
No. of Spans	1	Fill on Structures	(m)
Span Lengths	5.5		

HISTORICAL DATA

Year Built	2015	Year of Last Major Rehab	
Last OSIM Inspection	28/09/2017	Last Evaluation	
Last Enhanced OSIM Inspection		Current Load Limit	(tonnes)
Enhanced Access Equipment (ladder, boat, lift, etc.)		Load Limit By-Law #	
Last Underwater Inspection		By-Law Expiry Date	
Last Condition Survey			
Rehab History (Date/description)			

STRUCTURE INSPECTION FORM

FIELD INSPECTION INFORMATION

Date of Inspections:	August 7, 2019	Type of Inspection:	☒ OSIM ☐ Enhanced OSIM
Inspector:	Cory Dyer, P.Eng.		
Others in Party:			
Access Equipment Used:			
Weather:	Overcast		
Temperature:	20 °C		

ADDITIONAL INVESTIGATIONS REQUIRED

	Priority		
	None	Normal	Urgent
Material Condition Survey	X		
Detailed Deck Condition Survey	X		
Non destructive Delamination Survey of Asphalt-Covered Deck	X		
Concrete Substructure Condition Survey	X		
Detailed Coating Condition Survey	X		
Detailed Timber Investigation	X		
Post-Tensioned Strand Investigation	X		
Underwater Investigation	X		
Fatigue Investigation	X		
Seismic Investigation	X		
Structure Evaluation	X		
Monitoring			
Monitoring of Deformation, Settlements and Movements	X		
Monitoring Crack Widths	X		

Investigation Notes:

OVERALL STRUCTURE NOTES

Recommended Work on Structure ☐ None ☒ Minor Rehab. ☐ Major Rehab. ☐ Replace

Timing of Recommended Work ☒ 1 to 5 years ☐ 6 to 10 years

Overall comments Rehab required at bottom of abutment walls

Date of Next Inspection

Suspected Performance Deficiencies

01	Load carrying capacity	06	Bearing not uniformly loaded/unstable	12	Slippery surfaces
02	Excessive deformations (deflections & rotations)	07	Jammed expansion joint	13	Flooding/channel blockage
03	Continuing settlement	08	Pedestrian/vehicular hazard	14	Undermining of foundation
04	Continuing movements	09	Rough riding surface	15	Unstable embankments
05	Seized bearings	10	Surface ponding	16	Other
		11	Deck drainage		

Maintenance Needs

01	Lift and Swing Bridge Maintenance	07	Repair to Structural Steel	13	Erosion Control at Bridges
02	Bridge Cleaning	08	Repair of Bridge Concrete	14	Concrete Sealing
03	Bridge Handrail Maintenance	09	Repair of Bridge Timber	15	Rout and Seal
04	Painting Steel Bridge Structures	10	Bailey bridges - Maintenance	16	Bridge Deck Drainage
05	Bridge Deck Joint Repair	11	Animal/Pest Control	17	Scaling (Loose Concrete or ACR Steel)
06	Bridge Bearing Maintenance	12	Bridge Surface Repair	18	Other

STRUCTURE INSPECTION FORM

ELEMENT DATA

Element Group:	Abutments	**Length:**	9	m	
Element Name:	Abutment Walls	**Width:**		m	
Location:	Both sides	**Height:**	4	m	
Material:	Stone and mortar	**Count:**	2		
Element Type:		**Total Quantity:**	72	m2	
Environment:	Moderate	**Limited Inspection:**	☐		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		58.5	13.5		

Comments:
Mortar has eroded along the bottom 1.5 m of the north abutment. Rehab recommended.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☒ Rehab. ☐ Replace ☒ 1 – 5 years ☐ 6 – 10 years
Rehab eroded mortar
Repoint masonry

ELEMENT DATA

Element Group:	Abutments	**Length:**	6	m	
Element Name:	Ballast Walls	**Width:**	0.4	m	
Location:	Both sides	**Height:**	1	m	
Material:	Cast-in-place concrete	**Count:**	2		
Element Type:		**Total Quantity:**	12	m2	
Environment:	Benign	**Limited Inspection:**	☐		

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		12			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Abutments	**Length:**	m
Element Name:	Bearings	**Width:**	m
Location:	Both sides	**Height:**	m
Material:	Rubber	**Count:**	2
Element Type:		**Total Quantity:**	2 each
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		2			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Accessories	**Length:**	m
Element Name:	Signs	**Width:**	m
Location:	4 corners of approach	**Height:**	m
Material:	Steel post and rubberized sign	**Count:**	5
Element Type:		**Total Quantity:**	5 each
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		4		1	

Comments:
One sign is missing.

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Accessories	**Length:**	m
Element Name:	Access gate	**Width:**	m
Location:	North side	**Height:**	m
Material:	Steel	**Count:**	1
Element Type:		**Total Quantity:**	1 each
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		1			

Comments:
Minor wear and surface rust, wear of reflective stickers

Maintenance Needs: ☐ Urgent ☐ 1 year ☒ 2 years
Paint, replace stickers

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Approaches	**Length:**	11 m
Element Name:	Barriers	**Width:**	m
Location:	Both sides	**Height:**	m
Material:	Steel guard	**Count:**	4
Element Type:		**Total Quantity:**	44 m
Environment:	Benign	**Limited Inspection:**	☐

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		44			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:** 6	m
Element Name:	Hand Railings	**Width:**	m
Location:	Both sides	**Height:**	m
Material:	Steel	**Count:** 2	
Element Type:		**Total Quantity:** 12	m
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m		12			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA

Element Group:	Barriers	**Length:**	m
Element Name:	Posts	**Width:**	m
Location:	Both sides	**Height:**	m
Material:	Steel	**Count:** 6	
Element Type:		**Total Quantity:** 6	each
Environment:	Benign	**Limited Inspection:** ☐	

Protection System:

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		6			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Barriers	**Length:**	5.5 m
Element Name:	Railing System	**Width:**	m
Location:	Both sides	**Height:**	m
Material:	Steel guard	**Count:**	2
Element Type:		**Total Quantity:**	11 m
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	Units	Excellent	Good	Fair	Poor	Performance Deficiencies:
	m		11			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Decks	**Length:**	5.5 m
Element Name:	Deck Top	**Width:**	4 m
Location:		**Height:**	m
Material:		**Count:**	1
Element Type:		**Total Quantity:**	22 m2
Environment:	Benign	**Limited Inspection:**	☒
Protection System:			

Condition Data:	Units	Excellent	Good	Fair	Poor	Performance Deficiencies:
	m2					

Comments:
Not observable – no obvious issues

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Decks	**Length:**	5.5 m
Element Name:	Soffit – Thin Slab	**Width:**	4 m
Location:	Underside of bridge	**Height:**	m
Material:	Wood with FRP wrap	**Count:**	1
Element Type:		**Total Quantity:**	22 m2
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		22			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Decks	**Length:**	5.5 m
Element Name:	Wearing Surface	**Width:**	4 m
Location:	Bridge Deck Top	**Height:**	m
Material:	Tar and chip asphalt	**Count:**	1
Element Type:		**Total Quantity:**	22 m2
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	m2		22			

Comments:
Some gravel accumulation on top

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

ELEMENT DATA			
Element Group:	Embankments & Streams	**Length:**	m
Element Name:	Streams – Waterways	**Width:**	m
Location:	Underside of bridge	**Height:**	m
Material:		**Count:**	
Element Type:		**Total Quantity:**	1 each
Environment:	Benign	**Limited Inspection:**	☐
Protection System:			

Condition Data:	**Units**	**Excellent**	**Good**	**Fair**	**Poor**	**Performance Deficiencies:**
	each		1			

Comments:
No comments

Maintenance Needs: ☐ Urgent ☐ 1 year ☐ 2 years

Recommended Work: ☐ Rehab. ☐ Replace ☐ 1 – 5 years ☐ 6 – 10 years

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Appendix B

Site Photographs

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Millhaven Creek Bridge

County of Frontenac K&P Trail Bridges
Millhaven Creek Bridge Photos



Photo 1: North-west approach (looking south-east)



Photo 2: North-west approach surface and guardrail

County of Frontenac K&P Trail Bridges
Millhaven Creek Bridge Photos

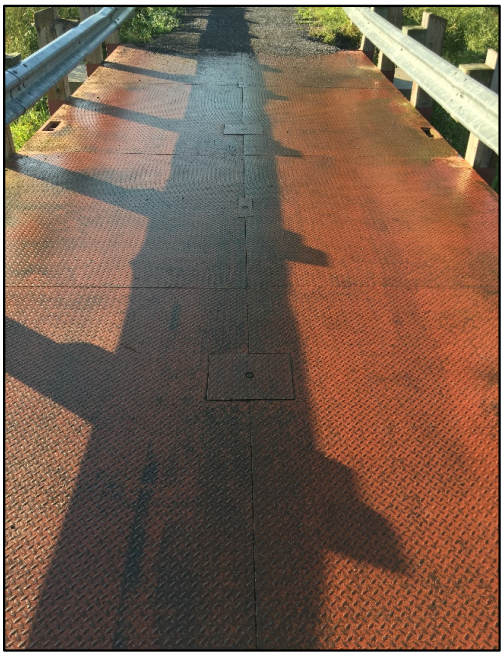


Photo 3: Deck wearing surface / deck top



Photo 4: North-west abutment (west side)

County of Frontenac K&P Trail Bridges
Millhaven Creek Bridge Photos



Photo 5: South-east abutment (west side)



Photo 6: South-east approach

County of Frontenac K&P Trail Bridges
Millhaven Creek Bridge Photos



Photo 7: Damaged railing system (east side)



Photo 8: East elevation and north-west abutment

County of Frontenac K&P Trail Bridges
Millhaven Creek Bridge Photos



Photo 9: South-east abutment

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Hardwood Creek Bridge

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 1: North approach and access gate (looking south)



Photo 2: Sign knocked over at north approach

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 3: Washout at north approach



Photo 4: Minor rusting on access gate

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 5: Gabion basket retaining wall along north approach



Photo 6: Nuts missing at barrier attachment points

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 7: Weathered steel railing (left) and steel truss (right)



Photo 8: Rot and wear of deck wearing surface

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 9: Railing system (left) not connected to approach guardrails (right)



Photo 10: South abutment (east side). Note twisting element at bottom centre.

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 11: South approach (looking north)



Photo 12: Light corrosion on bearing plate and separation from bearing pad.

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 13: Underside of deck at north abutment



Photo 14: Underside of deck (looking south)

County of Frontenac K&P Trail Bridges
Hardwood Creek Bridge Photos



Photo 15: North abutment. Note bending chord member at far end.

County of Frontenac K&P Trail Bridges
2019 OSIM Report

White Creek Bridge

County of Frontenac K&P Trail Bridges
White Creek Bridge Photos



Photo 1: South approach (looking north)



Photo 2: Guardrail along south approach (west side)

County of Frontenac K&P Trail Bridges
White Creek Bridge Photos



Photo 3: Barrier along deck (east side)



Photo 4: Broken barrier support (north approach, west side)

County of Frontenac K&P Trail Bridges
White Creek Bridge Photos



Photo 5: Dent in guardrail beside broken support



Photo 6: North approach (looking south)

County of Frontenac K&P Trail Bridges
White Creek Bridge Photos



Photo 7: South abutment (east side)



Photo 8: East elevation and underside of deck

County of Frontenac K&P Trail Bridges
White Creek Bridge Photos



Photo 9: North abutment (west side)



Photo 10: North abutment

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Elbow Creek Bridge

County of Frontenac K&P Trail Bridges
Elbow Creek Bridge Photos



Photo 1: South approach (looking north)



Photo 2: Deck wearing surface

County of Frontenac K&P Trail Bridges
Elbow Creek Bridge Photos



Photo 3: North abutment (east side)



Photo 4: North approach (looking south)

County of Frontenac K&P Trail Bridges
Elbow Creek Bridge Photos



Photo 5: Barrier damaged at north-east corner



Photo 6: Erosion on east side of north approach

County of Frontenac K&P Trail Bridges
Elbow Creek Bridge Photos



Photo 7: West elevation, piers and columns



Photo 8: Handrail barrier post

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Fish Creek Bridge

County of Frontenac K&P Trail Bridges
Fish Creek Bridge Photos



Photo 1: Access gate at north end



Photo 2: North approach (looking south)

County of Frontenac K&P Trail Bridges
Fish Creek Bridge Photos



Photo 3: Wearing surface



Photo 4: West side guiderail and hand rail

County of Frontenac K&P Trail Bridges
Fish Creek Bridge Photos



Photo 5: South approach



Photo 6: South abutment and bearing pads (east side)

County of Frontenac K&P Trail Bridges
Fish Creek Bridge Photos



Photo 7: North abutment wall (west side)



Photo 8: West elevation (looking east)

County of Frontenac K&P Trail Bridges
Fish Creek Bridge Photos



Photo 9: Bearing pads (north side)



Photo 10: Bearing pads (south side)

County of Frontenac K&P Trail Bridges
Fish Creek Bridge Photos



Photo 11: North abutment wall



Photo 12: Knocked-over DANGER sign

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Appendix C

Bridge Condition Index
Calculation

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Millhaven Creek Bridge

Structure: Millhaven Creek Bridge Assessment **No.** 28833-000

Group	Element	Total Quantity	Unit Replacement Cost (Table 2.1)	Total Replacement Value (TRV)	Excellent (x1.0)	Good (x0.75)	Fair (x0.4)	Poor (x0)	Current Element Value ($)
Abutments	Abutments - Abutment Walls	23.7	900	$21,330.00		15.7	8		$13,477.50
	Abutments - Ballast Walls			$0.00					$0.00
	Abutments - Wingwalls			$0.00					$0.00
	Abutments - Bearings			$0.00					$0.00
Approaches	Approaches - Wearing Surface			$0.00					$0.00
	Approaches - Approach Slabs	40.3	140	$5,642.00		15.5	14.8	10	$2,456.30
	Approaches - Drainage System			$0.00					$0.00
	Approaches - Curb & Gutters			$0.00					$0.00
	Approaches - Sidewalk/Curb			$0.00					$0.00
Barriers	Barriers - Barrier/Parapet Walls			$0.00					$0.00
	Barriers - Railing Systems	48	200	$9,600.00		38	10		$6,500.00
	Barriers - Approach Guardrail			$0.00					$0.00
	Barriers - Posts	26	100	$2,600.00		26			$1,950.00
	Barriers - Handrailings			$0.00					$0.00
MLEs	Beams/MLEs - Girders	74.4	420	$31,248.00		74.4			$23,436.00
	Beams/MLEs - Floor Beams	43.1	420	$18,102.00		43.1			$13,576.50
	Beams/MLEs - Stringers			$0.00					$0.00
	Beams/MLEs - Inside Boxes			$0.00					$0.00
	Beams/MLEs - Diaphragms (Concrete)			$0.00					$0.00
Coatings	Coatings - Structural Steel			$0.00					$0.00
	Coatings - Railing System/Hand Railings			$0.00					$0.00
Deck	Deck - Wearing Surface			$0.00					$0.00
	Deck - Deck top	43.1	120	$5,172.00		43.1			$3,879.00
	Deck - Soffit (thin slab)			$0.00					$0.00
	Deck - Soffit (thick slab)			$0.00					$0.00
	Deck - Soffit (inside boxes)			$0.00					$0.00
	Deck - Drainage System			$0.00					$0.00
Joints	Joints			$0.00					$0.00
	Joints - Armouring			$0.00					$0.00
	Joints - Concrete End Dams			$0.00					$0.00
Piers	Piers - Shafts/Columns/Pile Bents			$0.00					$0.00
	Piers - Caps			$0.00					$0.00
	Piers - Bearings			$0.00					$0.00
Sw/Curbs	Sidewalks/Curbs - Sidewalk and medians			$0.00					$0.00
	Sidewalks/Curbs - Curbs			$0.00					$0.00
Trusses/Arches	Trusses/Arches - Top Chords			$0.00					$0.00
	Trusses/Arches - Bottom Chords			$0.00					$0.00
	Trusses/Arches - Vert./Diagonal			$0.00					$0.00
	Trusses/Arches - Connections			$0.00					$0.00
Ret. Walls	Retaining Walls - Walls			$0.00					$0.00
	Retaining Walls - Barrier Systems on Walls			$0.00					$0.00
Culverts	Culverts - Inlet Components			$0.00					$0.00
	Culverts - Outlet Components			$0.00					$0.00
	Culverts - Barrels			$0.00					$0.00
Bracing	Bracing			$0.00					$0.00

Note: Sections including, foundations, embankments & streams, and accessories were not included as they do not impact the calculation.

SUM **$93,694.00** **SUM** **$65,275.30**

BCI **70**

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Hardwood Creek Bridge

Structure: Hardwood Creek Bridge Assessment **No.** 28833-000

Group	Element	Total Quantity	Unit Replacement Cost (Table 2.1)	Total Replacement Value (TRV)	Excellent (x1.0)	Good (x0.75)	Fair (x0.4)	Poor (x0)	Current Element Value ($)
Abutments	Abutments - Abutment Walls	41.4	500	$20,700.00		31.3	10.1		$13,757.50
	Abutments - Ballast Walls	14.2	350	$4,970.00		14.2			$3,727.50
	Abutments - Wingwalls			$0.00					$0.00
	Abutments - Bearings	4	1000	$4,000.00		4			$3,000.00
Approaches	Approaches - Wearing Surface			$0.00					$0.00
	Approaches - Approach Slabs	95.8	140	$13,412.00			42.6	53.2	$2,385.60
	Approaches - Drainage System			$0.00					$0.00
	Approaches - Curb & Gutters			$0.00					$0.00
	Approaches - Sidewalk/Curb			$0.00					$0.00
Barriers	Barriers - Barrier/Parapet Walls			$0.00					$0.00
	Barriers - Railing Systems	22.2	200	$4,440.00				22.2	$0.00
	Barriers - Approach Guardrail	53.3	150	$7,995.00		43.3		10	$4,871.25
	Barriers - Posts			$0.00					$0.00
	Barriers - Handrailings			$0.00					$0.00
MLEs	Beams/MLEs - Girders			$0.00					$0.00
	Beams/MLEs - Floor Beams	16.6	420	$6,972.00		16.6			$5,229.00
	Beams/MLEs - Stringers	65	420	$27,300.00		65			$20,475.00
	Beams/MLEs - Inside Boxes			$0.00					$0.00
	Beams/MLEs - Diaphragms (Concrete)			$0.00					$0.00
Coatings	Coatings - Structural Steel			$0.00					$0.00
	Coatings - Railing System/Hand Railings			$0.00					$0.00
Deck	Deck - Wearing Surface	45.9	75	$3,442.50			35.9	10	$1,077.00
	Deck - Deck top	54.4	120	$6,528.00		54.4			$4,896.00
	Deck - Soffit (thin slab)			$0.00					$0.00
	Deck - Soffit (thick slab)			$0.00					$0.00
	Deck - Soffit (inside boxes)			$0.00					$0.00
	Deck - Drainage System			$0.00					$0.00
Joints	Joints			$0.00					$0.00
	Joints - Armouring			$0.00					$0.00
	Joints - Concrete End Dams			$0.00					$0.00
Piers	Piers - Shafts/Columns/Pile Bents			$0.00					$0.00
	Piers - Caps			$0.00					$0.00
	Piers - Bearings			$0.00					$0.00
Sw/Curbs	Sidewalks/Curbs - Sidewalk and medians			$0.00					$0.00
	Sidewalks/Curbs - Curbs	26.2	20	$524.00			26.2		$209.60
Trusses/Arches	Trusses/Arches - Top and Bottom Chords	21.8	300	$6,540.00		17.82	1.8		$4,225.50
	Trusses/Arches - Vert./Diagonal	21.8	300	$6,540.00		18.62	1		$4,309.50
	Trusses/Arches - Connections			$0.00					$0.00
Ret. Walls	Retaining Walls - Walls	17.2	350	$6,020.00		17.2			$4,515.00
	Retaining Walls - Barrier Systems on Walls			$0.00					$0.00
Culverts	Culverts - Inlet Components			$0.00					$0.00
	Culverts - Outlet Components			$0.00					$0.00
	Culverts - Barrels			$0.00					$0.00
Bracing	Bracing			$0.00					$0.00

Note: Sections including, foundations, embankments & streams, and accessories were not included as they do not impact the calculation.

SUM **$119,383.50** **SUM** **$72,678.45**

BCI **61**

County of Frontenac K&P Trail Bridges
2019 OSIM Report

White Creek Bridge

Structure: White Creek Bridge Assessment **No.** 28833-000

Group	Element	Total Quantity	Unit Replacement Cost (Table 2.1)	Total Replacement Value (TRV)	Excellent (x1.0)	Good (x0.75)	Fair (x0.4)	Poor (x0)	Current Element Value ($)
Abutments	Abutments - Abutment Walls	52.8	900	$47,520.00		40.8	12		$31,860.00
	Abutments - Ballast Walls			$0.00					$0.00
	Abutments - Wingwalls	64	350	$22,400.00		46	18		$14,595.00
	Abutments - Bearings	4	1000	$4,000.00		4			$3,000.00
Approaches	Approaches - Wearing Surface			$0.00					$0.00
	Approaches - Approach Slabs	89.2	140	$12,488.00		41	48.2		$7,004.20
	Approaches - Drainage System			$0.00					$0.00
	Approaches - Curb & Gutters			$0.00					$0.00
	Approaches - Sidewalk/Curb			$0.00					$0.00
Barriers	Barriers - Barrier/Parapet Walls			$0.00					$0.00
	Barriers - Railing Systems	11.8	200	$2,360.00		11.8			$1,770.00
	Barriers - Approach Guardrail	48	200	$9,600.00		46	2		$7,060.00
	Barriers - Posts	10	200	$2,000.00	10				$2,000.00
	Barriers - Handrailings	13.3	100	$1,330.00	13.3				$1,330.00
MLEs	Beams/MLEs - Girders	6.15	420	$2,583.00		6.15			$1,937.25
	Beams/MLEs - Floor Beams	3.5	420	$1,470.00		3.5			$1,102.50
	Beams/MLEs - Stringers			$0.00					$0.00
	Beams/MLEs - Inside Boxes			$0.00					$0.00
	Beams/MLEs - Diaphragms (Concrete)			$0.00					$0.00
Coatings	Coatings - Structural Steel			$0.00					$0.00
	Coatings - Railing System/Hand Railings			$0.00					$0.00
Deck	Deck - Wearing Surface	20.3	75	$1,522.50		20.3			$1,141.88
	Deck - Deck top	20.3	120	$2,436.00		20.3			$1,827.00
	Deck - Soffit (thin slab)			$0.00					$0.00
	Deck - Soffit (thick slab)			$0.00					$0.00
	Deck - Soffit (inside boxes)			$0.00					$0.00
	Deck - Drainage System			$0.00					$0.00
Joints	Joints			$0.00					$0.00
	Joints - Armouring			$0.00					$0.00
	Joints - Concrete End Dams			$0.00					$0.00
Piers	Piers - Shafts/Columns/Pile Bents			$0.00					$0.00
	Piers - Caps			$0.00					$0.00
	Piers - Bearings			$0.00					$0.00
Sw/Curbs	Sidewalks/Curbs - Sidewalk and medians			$0.00					$0.00
	Sidewalks/Curbs - Curbs			$0.00					$0.00
Trusses/Arches	Trusses/Arches - Top Chords			$0.00					$0.00
	Trusses/Arches - Bottom Chords			$0.00					$0.00
	Trusses/Arches - Vert./Diagonal			$0.00					$0.00
	Trusses/Arches - All			$0.00					$0.00
	Trusses/Arches - Connections			$0.00					$0.00
Ret. Walls	Retaining Walls - Walls			$0.00					$0.00
	Retaining Walls - Barrier Systems on Walls			$0.00					$0.00
Culverts	Culverts - Inlet Components			$0.00					$0.00
	Culverts - Outlet Components			$0.00					$0.00
	Culverts - Barrels			$0.00					$0.00
Bracing	Bracing			$0.00					$0.00

Note: Sections including, foundations, embankments & streams, and accessories were not included as they do not impact the calculation.

SUM **$109,709.50** **SUM** **$74,627.83**

BCI **68**

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Elbow Creek Bridge

Structure: Elbow Creek Bridge Assessment **No.** 28833-000

Group	Element	Total Quantity	Unit Replacement Cost (Table 2.1)	Total Replacement Value (TRV)	Excellent (x1.0)	Good (x0.75)	Fair (x0.4)	Poor (x0)	Current Element Value ($)
Abutments	Abutments - Abutment Walls	10.8	900	$9,720.00		10.8			$7,290.00
	Abutments - Ballast Walls			$0.00					$0.00
	Abutments - Wingwalls			$0.00					$0.00
	Abutments - Bearings	4	1000	$4,000.00			4		$1,600.00
Approaches	Approaches - Wearing Surface			$0.00					$0.00
	Approaches - Approach Slabs			$0.00					$0.00
	Approaches - Drainage System			$0.00					$0.00
	Approaches - Curb & Gutters			$0.00					$0.00
	Approaches - Sidewalk/Curb			$0.00					$0.00
Barriers	Barriers - Barrier/Parapet Walls			$0.00					$0.00
	Barriers - Railing Systems	29	200	$5,800.00		29			$4,350.00
	Barriers - Approach Guardrail	50	200	$10,000.00		46.5		3.5	$6,975.00
	Barriers - Posts	16	200	$3,200.00	16				$3,200.00
	Barriers - Handrailings	34	100	$3,400.00	34				$3,400.00
MLEs	Beams/MLEs - Girders			$0.00					$0.00
	Beams/MLEs - Floor Beams			$0.00					$0.00
	Beams/MLEs - Stringers			$0.00					$0.00
	Beams/MLEs - Inside Boxes			$0.00					$0.00
	Beams/MLEs - Diaphragms (Concrete)			$0.00					$0.00
Coatings	Coatings - Structural Steel			$0.00					$0.00
	Coatings - Railing System/Hand Railings			$0.00					$0.00
Deck	Deck - Wearing Surface	55.5	25	$1,387.50		26.5	20	9	$696.88
	Deck - Deck top	55.5	120	$6,660.00			50.5	5	$2,424.00
	Deck - Soffit (thin slab)			$0.00					$0.00
	Deck - Soffit (thick slab)			$0.00					$0.00
	Deck - Soffit (inside boxes)			$0.00					$0.00
	Deck - Drainage System			$0.00					$0.00
Joints	Joints			$0.00					$0.00
	Joints - Armouring			$0.00					$0.00
	Joints - Concrete End Dams			$0.00					$0.00
Piers	Piers - Shafts/Columns/Pile Bents			$0.00					$0.00
	Piers - Caps			$0.00					$0.00
	Piers - Bearings			$0.00					$0.00
Sw/Curbs	Sidewalks/Curbs - Sidewalk and medians			$0.00					$0.00
	Sidewalks/Curbs - Curbs			$0.00					$0.00
Trusses/Arches	Trusses/Arches - Top Chords			$0.00					$0.00
	Trusses/Arches - Bottom Chords			$0.00					$0.00
	Trusses/Arches - Vert./Diagonal			$0.00					$0.00
	Trusses/Arches - All			$0.00					$0.00
	Trusses/Arches - Connections			$0.00					$0.00
Ret. Walls	Retaining Walls - Walls			$0.00					$0.00
	Retaining Walls - Barrier Systems on Walls			$0.00					$0.00
Culverts	Culverts - Inlet Components			$0.00					$0.00
	Culverts - Outlet Components			$0.00					$0.00
	Culverts - Barrels			$0.00					$0.00
Bracing	Bracing			$0.00					$0.00

Note: Sections including, foundations, embankments & streams, and accessories were not included as they do not impact the calculation.

SUM **$44,167.50** **SUM** **$29,935.88**

BCI **68**

County of Frontenac K&P Trail Bridges
2019 OSIM Report

Fish Creek Bridge

Structure: Fish Creek Bridge Assessment **No.** 28833-000

Group	Element	Total Quantity	Unit Replacement Cost (Table 2.1)	Total Replacement Value (TRV)	Excellent (x1.0)	Good (x0.75)	Fair (x0.4)	Poor (x0)	Current Element Value ($)
Abutments	Abutments - Abutment Walls	72	900	$64,800.00		58.5	13.5		$44,347.50
	Abutments - Ballast Walls	12	350	$4,200.00		12			$3,150.00
	Abutments - Wingwalls			$0.00					$0.00
	Abutments - Bearings	2	1000	$2,000.00		2			$1,500.00
Approaches	Approaches - Wearing Surface			$0.00					$0.00
	Approaches - Approach Slabs			$0.00					$0.00
	Approaches - Drainage System			$0.00					$0.00
	Approaches - Curb & Gutters			$0.00					$0.00
	Approaches - Sidewalk/Curb			$0.00					$0.00
Barriers	Barriers - Barrier/Parapet Walls			$0.00					$0.00
	Barriers - Railing Systems	11	200	$2,200.00		11			$1,650.00
	Barriers - Approach Guardrail	44	200	$8,800.00		44			$6,600.00
	Barriers - Posts	6	200	$1,200.00		6			$900.00
	Barriers - Handrailings	12	100	$1,200.00		12			$900.00
MLEs	Beams/MLEs - Girders			$0.00					$0.00
	Beams/MLEs - Floor Beams			$0.00					$0.00
	Beams/MLEs - Stringers			$0.00					$0.00
	Beams/MLEs - Inside Boxes			$0.00					$0.00
	Beams/MLEs - Diaphragms (Concrete)			$0.00					$0.00
Coatings	Coatings - Structural Steel			$0.00					$0.00
	Coatings - Railing System/Hand Railings			$0.00					$0.00
Deck	Deck - Wearing Surface	22	25	$550.00		22			$412.50
	Deck - Deck top			$0.00					$0.00
	Deck - Soffit (thin slab)	22	120	$2,640.00		22			$1,980.00
	Deck - Soffit (thick slab)			$0.00					$0.00
	Deck - Soffit (inside boxes)			$0.00					$0.00
	Deck - Drainage System			$0.00					$0.00
Joints	Joints			$0.00					$0.00
	Joints - Armouring			$0.00					$0.00
	Joints - Concrete End Dams			$0.00					$0.00
Piers	Piers - Shafts/Columns/Pile Bents			$0.00					$0.00
	Piers - Caps			$0.00					$0.00
	Piers - Bearings			$0.00					$0.00
Sw/Curbs	Sidewalks/Curbs - Sidewalk and medians			$0.00					$0.00
	Sidewalks/Curbs - Curbs			$0.00					$0.00
Trusses/Arches	Trusses/Arches - Top Chords			$0.00					$0.00
	Trusses/Arches - Bottom Chords			$0.00					$0.00
	Trusses/Arches - Vert./Diagonal			$0.00					$0.00
	Trusses/Arches - All			$0.00					$0.00
	Trusses/Arches - Connections			$0.00					$0.00
Ret. Walls	Retaining Walls - Walls			$0.00					$0.00
	Retaining Walls - Barrier Systems on Walls			$0.00					$0.00
Culverts	Culverts - Inlet Components			$0.00					$0.00
	Culverts - Outlet Components			$0.00					$0.00
	Culverts - Barrels			$0.00					$0.00
Bracing	Bracing			$0.00					$0.00

Note: Sections including, foundations, embankments & streams, and accessories were not included as they do not impact the calculation.

SUM **$87,590.00** **SUM** **$61,440.00**

BCI **70**

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FRONTENAC

Report 2019-124

Information Report to Council

To:	Warden and Members of County Council
From:	Kelly J. Pender, Chief Administrative Officer
Prepared by:	Megan Rueckwald, Manager of Community Planning
Date of meeting:	October 16, 2019
Re:	**Planning and Economic Development - Bill 108 - Changes to the *Planning Act* and *Local Planning Appeal Tribunal Act***

Recommendation

This report is for information purposes only.

Background

- On May 2, 2019, the Ministry of Municipal Affairs and Housing released the "More Homes, More Choice: Ontario's Housing Supply Action Plan". As part of the Action Plan, the Province also tabled Bill 108 – More Homes, More Choice Act, 2019.
- Bill 108 received Royal Assent on June 6, 2019 with only minor amendments to the proposed legislation. This introduced sweeping changes across 13 statutes, with the intention of cutting red tape, reducing costs, and increasing the supply of housing in Ontario. The vast majority of the changes proposed with were not put into effect on June 6, 2019.
- On September 3, 2019, the Province proclaimed key amendments to the *Planning Act* and *Local Planning Appeal Tribunal Act, 2017*. These amendment included reduced timelines for processing *Planning Act* applications and restricted appeal rights with implications to Frontenac County.

Planning Act Amendments

The proclamation on September 3, 2019, brought into force key amendments to the *Planning Act* that reform the development process.

Amendments as a result of Bill 108 that are relevant to Frontenac County and the Townships are as follows:

- Reducing **planning decision timelines:**
    - **Official Plans** from 7 months (210 days) to **4 months** (120 days);
    - **Zoning By-laws** from 5 months (150 days) to **3 months** (90 days); and
    - **Plans of Subdivision/Condominium** from 6 months (180 days) to **4 months** (120 days);
    - (Please note that these time periods commence once a municipality deems an application to be complete in accordance with the *Planning Act*).
- Authorizing **additional residential units** for detached, semi-detached, and row houses in both the primary dwelling and ancillary building structure; and
- Enabling the Minister to require the **community planning permit system** (formerly known as development permit system) to be used in specified areas (e.g., major transit station areas and provincially significant employment zones), and **removing appeal rights** related to implementing documents.

***Local Planning Appeal Tribunal Act* Amendments**

The proclamation on September 3, 2019, brought into force key amendments to the *Local Planning Appeal Tribunal Act* that reform the planning appeals regime.

- Empowering the Local Planning Appeal Tribunal ("**LPAT**") to make its decision based on the **best planning outcome**, rather than consistency or conformity with higher order planning instruments including the Provincial Policy Statement;
- Enabling the LPAT to make a **final determination on appeals**, rather than a recommendation back to Council;
- Request for **party status** no longer needs to be made in writing 30 days before the proceeding;
- Participants to a matter will only be able to make **written submissions**;
- **Limiting the examination** or cross-examination of a witness if the Tribunal is satisfied that all matters relevant to the proceeding have been addressed;
- Removing existing restrictions on a party's ability to **introduce evidence** and **call and examine witnesses** at LPAT hearings; and
- **Limiting third party appeals** of Plans of Subdivision/Condominium and approval authority non-decisions on Official Plans and Official Plan Amendments.

Implications for Frontenac

The four member municipalities and the County of Frontenac are jointly undergoing a LEAN continuous improvement exercise for the planning and development review process. In order to increase awareness and understanding of the planning process, while also reducing confusion, frustration and processing delays a number of improvements have been identified and are being implemented. The County of Frontenac allocated funding from the Municipal Modernization Fund to retain an intern to assist with implementing improvements. However, in order to meet reduced timelines and limit appeals from non-decisions, additional resources may be required.

At this time it is too early to know what the implications of the reduced timelines will be on planning staff capacity. However, improvements to the efficiency of the County and Townships planning process are expected as a result Lean Process Improvement Process that is reviewing the current Committee of Adjustment system for the Townships.

With respect to the changes to the Local Planning Appeal Tribunal, third party appeals from members of the public/neighbours/residents with respect to Plans of Subdivisions or Plans of Condominium are no longer permitted. Government agencies and the applicant still have appeal rights for non-decisions (where no decision has been made within the timelines of the *Planning Act*) or to appeal a decision of the approval authority.

Further, a regulation has been removed that required the Tribunal to send back a decision to the Council to review again in instances where the Tribunal found that the application was consistent with the Provincial Policy Statement and conformed to the Official Plan(s). This is tied to the additional removal of the consistency/conformity test for zoning bylaw amendment applications and return to the “good planning” test that had previously been in place. Many of the regulations now in effect return the Local Planning Appeal Tribunal back to regulations that existed for the Ontario Municipal Board.

Certain other amendments introduced through Bill 108 – including the replacement of Section 37 density bonusing with a new “Community Benefits Charge” and changes to the parkland dedication and development charges – have not come into force as of yet. Instead, these remaining amendments will be proclaimed on a future date yet to be determined.

Comment

Through Bill 108, *More Homes, More Choice Act, 2019*, the Province intends to locate efficiencies in the planning and development review process to reduce obstacles for developers and increase overall housing supply. Planning staff strive to educate and inform applicants through the planning process and review applications in a timely manner with provided resource capacity, but may not be able to achieve the timelines proposed with current staff capacity. Planning staff will keep Council apprised of future amendments proposed under Bill 108 including and resource capacity need to meet the objectives of the Province.

County of Frontenac Strategic Priority Implications

Priority 1: **Build community vitality and resilience.**

This priority includes refining and investing in efforts to accelerate economic development – to grow businesses, attract more visits and expand the tax base. Planning staff work closely with economic development staff with business expansion and attraction strategies as there is often a planning component with new and expanding businesses (e.g. rezoning or site plan control). Having staff capacity will ensure that timelines required under Bill 108 are met helping to make Frontenac a positive location to develop.

Financial Implications

There are no direct financial implications associated with this report.

Organizations, Departments and Individuals Consulted and/or Affected

The amendments to Bill 108 impact all municipalities in Ontario.

FRONTENAC

Report 2019-125

Council Information Report

To:	Warden and Council
From:	Kelly Pender, Chief Administrative Officer
Prepared by:	Jannette Amini, Manager of Legislative Services/Clerk
Date of meeting:	October 16, 2019
Re:	**Office of the Chief Administrative Officer – Cataraqui Region Conservation Authority (CRCA) authorization to proceed with a Shared Administrative Facility and Work Plan update report**

Recommendation

This report is for information purposes only.

Background

In 2017 discussions began with the Cataraqui Region Conservation Authority (CRCA) with respect to the construction of a potential joint administrative facility. Following several meetings and discussions by the Administrative Building Design Task Force, Council authorized staff to engage appropriate architectural services to validate initial assessments to enable the partners to make a decision on whether or not to pursue the next stage of a shared development project.

This resulted in County Council, at its meeting held May 15, 2019, being presented with Report 2019-059 after which Council authorized staff to engage appropriate architectural expertise to review and determine the feasibility and costs to redevelop the County Administration Building to accommodate County of Frontenac and Cataraqui Region Conservation Authority (CRCA) Administrative staff to an upset of $10,000 to be expensed from the County's Modernization Fund.

Colbourne & Kembel, Architects Inc. was retained to carry out the facility analysis of the County Administrative Building, commonly referred to as "the old house". The purpose of the analysis was to determine the feasibility and costs to redevelop the County Administration Building to accommodate County of Frontenac and CRCA Administrative staff.

At its regular meeting held September 18, 2019, Council approved the following resolution as recommended by the Administrative Building Design Task Force stemming from its meeting held July 17, 2019, that being Reports from Advisory Committees of Council, clause a):

a) Report of the Administrative Building Design Task Force

Motion #: 160-19 Moved By: Councillor Vandewal
Seconded By: Councillor Martin

That the Report received from the Administrative Building Design Task Force be received and adopted.

Report of the Administrative Building Design Task Force

The Administrative Building Design Task Force reports and recommends as follows:

1. 2019-092
Administrative Building Design Task Force
Authorization to Move Forward with a Shared Facility

Be It Resolved That the Council of the County of Frontenac authorize staff to proceed with negotiations with the Cataraqui Region Conservation Authority (CRCA) for joint tenancy and subsequently, detailed designs for 2069 Battersea Road for Option 2, that being a joint administrative facility for the County of Frontenac and the Cataraqui Region Conservation Authority (CRCA) to an upset of $100,000 to be expensed from the County's Municipal Modernization Funds;

And Further That should the CRCA advise the County of Frontenac that it does not wish to proceed with a joint administrative facility, that staff be authorized to proceed with detailed designs for Option 1.

Carried

Comment

The Administrative Building Design Task Force met on September 18, 2019 following the County Council meeting. At that meeting, the CRCA advised the County that it wished to proceed with a joint administrative facility with the County of Frontenac.

At that meeting, the Task Force directed staff to proceed with Phase #1 and #2 of the Work Plan as identified in Report 2019-116 and report back to the Administrative Building Design Task Force in December. This direction falls within the parameters of resolution No. 160-19 passed by Council at its September 18, 2019 regular meeting.

The purpose of this report is to advise Council that the CRCA continues to proceed with a joint administrative facility with the County of Frontenac.

Strategic Priorities

Priority 3: Champion and coordinate collaborative efforts with partners to resolve complex problems otherwise beyond the reach

Specifically, the objectives that support this strategy states that the County will continue to pursue collaborative opportunities to achieve service and cost efficiencies and other economies through cost-sharing and shared services. This priority identifies the CRCA as a current and potential project partner.

In addition, shared facilities reduce the overall environmental foot print required to occupy two separate facilities. Depending upon outcomes/options in terms of a shared facility, the overall greenhouse gas foot print of the County could be reduced as a result of this project, thereby assisting in meeting our GHG emission requirements as noted in the County's Energy Conservation and Demand Management Plan.

Financial Implications

There are no financial considerations associated with this report.

Organizations, Departments and Individuals Consulted and/or Affected

Susan Brant, Director of Corporate Services/Treasurer
Kevin Farrell, Manager of Continuous Improvement

FRONTENAC

Report 2019-128

Council Information Report

To:	Warden and Council
From:	Kelly Pender, Chief Administrative Officer
Prepared by:	Joe Gallivan, Director of Planning and Economic Development
Date of meeting:	October 16, 2019
Re:	**Office of the Chief Administrative Officer – Canadian Infrastructure Report Card 2019**

Recommendation

This report is for information purposes only.

Background

The 2019 Canadian Infrastructure Report Card (CIRC) was produced by FCM along with seven partner organizations. The CIRC examines the state of Canada's public infrastructure and offers an objective look at the state of core public infrastructure across Canada. This year's report provides a timely update on all core public infrastructure asset categories: roads and bridges; culture, recreation and sports facilities; potable water; wastewater; stormwater; public transit; and solid waste. A copy of the Canadian Infrastructure Report Card 2019 is attached to this report as Appendix A.

Comment

The CIRC report comes in a timely manner as the Frontenac CAO's commence discussions on regional roads. As Council will recall, the County of Frontenac has engaged KPMG Canada to complete an option analysis and business plan for consideration by County Council as part of the 2020 County Budget with respect to Regional Roads. The development of the business plan will include consultation with each Council.

Among the key findings of the CIRC are:

Roads and Bridges

The road networks section of the CIRC survey focused on two-lane equivalent kilometres of highways, arterial roads, collector roads, local roads, lanes, alleys and sidewalks. The survey also included questions about bridges and tunnels, including highway and expressway bridges, arterial bridges, collector bridges, footbridges, local bridges, culverts three metres and greater and tunnels.

The report found that almost 40% of these assets are in fair or worse condition and only 20% of the assets were constructed in the last 20 years. It assessed these assets using a defined scale and their age profile as follows:

- Roads Estimated Service Life (ESL) of 20-40 years.
- Sidewalks ESL of 50 years.
- Bridges and culverts ESL of 50 years.

Culture, Recreation and Sports Facilities

The survey included the following types of culture, recreation and sport facilities:

- Ice arena facilities: Indoor ice arenas with 1-5 pads or more, outdoor ice arenas.
- Pool facilities: Indoor pools of 25 metres or 50 metres or more, leisure pools, outdoor pools, wading pools, splash pads.
- Arts and culture facilities: Galleries, libraries, museums and archives, presentation and performance spaces.
- Other facilities: Indoor and outdoor skate parks, indoor curling rinks, indoor and outdoor stadiums, indoor and outdoor tennis courts, indoor and outdoor sports fields, community centres, multi-purpose facilities

These assets have a consistent condition across this category. Approximately 30-35% of them are in fair condition or worse, and a large proportion of some facility types are more than 50 years old. The asset classes in the worst condition (i.e., more than 30% are in fair, poor or very poor condition) include single pad ice arenas, outdoor pools and wading pools, indoor 25-metre pools, indoor curling rinks and tennis courts.

Potable Water

Approximately 30% of potable water infrastructure is in very good condition, 40% is in good condition and 25% is in fair, poor or very poor condition. Approximately 30-40% of these assets were constructed in the last 20 years.

Wastewater

Approximately 25% of wastewater infrastructure is in very good condition and 30-40% is in good condition. These positive results represent approximately 55-65% of wastewater assets. That said, approximately 15% of linear wastewater assets have an unknown condition, which highlights the challenges in assessing underground assets. A large portion of linear wastewater assets are more than 50 years old.

Stormwater

Approximately 40-60% of stormwater infrastructure is in good or very good condition. Stormwater management assets were largely built in the last 20 years, and there is a growing focus on understanding their future rehabilitation/replacement needs. The state of stormwater infrastructure is particularly critical given the impact of climate change as jurisdictions across Canada are experiencing longer and more intense precipitation events. This has highlighted capacity issues in stormwater infrastructure that go above and beyond the need to rehabilitate existing assets.

Strategic Priorities

Priority 2: Explore new funding sources and invest wisely in critical long-term infrastructure

2.5 .Explore new funding sources and invest wisely in critical long-term infrastructure.

Financial Implications

There are no financial considerations associated with this report.

Organizations, Departments and Individuals Consulted and/or Affected

CANADIAN INFRASTRUCTURE REPORT CARD 2019

Monitoring the State of Canada's Core Public Infrastructure



canadainfrastructure.ca

CANADIAN INFRASTRUCTURE REPORT CARD 2019

ACKNOWLEDGEMENTS

The 2019 Canada Infrastructure Report Card is a collective effort produced by the following organizations: The Association of Consulting Engineering Companies Canada (ACEC), the Canadian Construction Association (CCA), the Canadian Parks and Recreation Association (CPRA), the Canadian Public Works Association (CPWA), the Canadian Society for Civil Engineering (CSCE), the Canadian Urban Transit Association (CUTA), the Canadian Network of Asset Managers (CNAM), and the Federation of Canadian Municipalities (FCM).

BluePlan Engineering was responsible for preparing the technical report. Design and layout was provided by Actual Media.

For more information on this Report Card, or the project,
please contact **infrastructure@fcm.ca**

Monitoring the State of Canada's Core Public Infrastructure:
The Canadian Infrastructure Report Card 2019.

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CANADIAN INFRASTRUCTURE REPORT CARD 2019

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CANADIAN INFRASTRUCTURE REPORT CARD 2019

EXECUTIVE SUMMARY

We are proud to introduce this third iteration of the Canadian Infrastructure Report Card (CIRC) to our national infrastructure conversation. The CIRC offers an objective look at the state of core public infrastructure across Canada.

Public infrastructure gets people and goods moving, provides safe drinking water, handles our waste, creates spaces for sport and recreation, and helps protect our homes against flooding and other natural disasters. It is the foundation that the daily life of Canadians is built upon. The strength of this foundation enables our communities and local businesses to grow, and ensures Canadians have a high quality of life.

This year's report provides a timely **update on the state of Canada's public infrastructure** across all core public infrastructure asset categories: roads and bridges; culture, recreation and sports facilities; potable water; wastewater; stormwater; public transit; and solid waste. It finds that **the state of our infrastructure is at risk**, which should be cause for concern for all Canadians. In order to change course, Canada's public infrastructure will require significant attention in the coming decades.

The evidence for the poor state of Canada's infrastructure comes from the voluntary and federally administered Canadian Core Public Infrastructure Survey (CCPIS). Responses to the CCPIS provide the foundational performance measurement data on the state of Canada's public infrastructure. The questions align with those used to create the 2012 and 2016 CIRC. This facilitates a direct comparison and gives us an exceptional view of the state of our assets over time.

The CIRC partner organizations applaud the federal government, and in particular Infrastructure Canada and Statistics Canada, for initiating the CCPIS and committing to continue to deliver the survey in future years. It is a robust data set, and one that infrastructure professionals across the country can rely on as they make decisions about the assets in their communities.

We were pleased to see a strong response rate for the CCPIS. When the federal government issued the survey to public infrastructure agencies across Canada in 2017, it received responses from **90%** of the approximately 2,000 invited jurisdictions that own and manage public infrastructure. This **doubles the population represented** in the 2016 CIRC survey, with almost 15 times as many municipalities represented.

Given the CIRC's importance to the national infrastructure conversation, we **streamlined this year's report** for ease of use. When we issued the 2016 CIRC, stakeholders were clear about which features they found most helpful. We listened to their feedback and designed this **lean report**, which highlights the most important elements of the state of Canada's infrastructure. Future CIRC publications will use a similar approach.

CANADIAN INFRASTRUCTURE REPORT CARD 2019

EXECUTIVE SUMMARY

In the interest of making the CIRC results more accessible and useful, users can now **benchmark communities** against similar municipalities across the country. We believe that delivering the data in this innovative way helps infrastructure stakeholders meaningfully engage with the CCPIS results.

It has always been important to the organizations involved in the CIRC to root our approach in **reporting only the facts** as provided by survey respondents. This separates the CIRC from other national report cards around the world in which the facts are combined with advocacy positions intended to influence infrastructure policy. This is not our intent. The analysis in this report presents only a summary of the information reported by infrastructure agencies.

CIRC 2019 provides stakeholders across the country with the evidence and analysis they need to have meaningful discussions about the state of Canada's infrastructure.

CANADIAN INFRASTRUCTURE REPORT CARD 2019

METHODOLOGY





Leveraging the CCPIS Survey Data

The Canadian Core Public Infrastructure Survey (CCPIS) was issued in 2017 to municipalities and captured year-end 2016 data. The data was collected and analyzed by Statistics Canada before being released in stages during the second half of 2018. Our CIRC group then compiled the published CCPIS data and analyzed it to produce the graphs and tables contained in this report. We will develop future CIRCs based on subsequent versions of the survey administered by Statistics Canada. There is ongoing dialogue between CIRC representatives and Infrastructure Canada and Statistics Canada to enhance the survey and the resultant data.

Quality of Data

As the CCPIS was the first iteration of what we expect to be many surveys capturing similar or related data from communities, it is important to note that survey questions, categories and measures can change periodically to improve the accuracy and data quality. The facilitation of a pan-Canadian survey of communities is a complex venture and everyone involved recognizes that adjustments to the methodology and survey need to occur as the process evolves.

CANADIAN INFRASTRUCTURE REPORT CARD 2019

METHODOLOGY

Lack of Financial Data

Statistics Canada determined that it was not appropriate to release the financial data collected through the CCPIS due to data integrity issues. This includes the replacement value and the planned investment/expenditure levels for each asset portfolio.

The lack of replacement value data limits our ability to produce some of the analysis found in the 2016 CIRC. For example, the CCPIS data provides the breakdown of the percentage of water treatment facilities, water reservoirs, and water pumping stations in various conditions (i.e., very poor, poor, fair, good, very good, unknown). We would need the total replacement value of these asset portfolios in order to calculate a weighted overall condition for all non-linear potable water assets.

The lack of planned investment/expenditure data prevents us from publishing reinvestment rates. Reinvestment rates are an indicator of how the current state of the infrastructure systems is expected to change in the coming years.

We intend to report on reinvestment rates in future iterations of the CIRC.

Increased Accuracy and Precision of Responses: Data subdivided by population, province and urban/rural municipalities

As a result of the methodology used in the CCPIS, we can now report the results by the population of each municipality, urban or rural classification and by province/territory. This reporting dramatically improves the ability of infrastructure stakeholders in a community to compare themselves against an appropriate peer group from across the country.

The Addition of Publicly Owned and Municipally Owned Infrastructure

The CCPIS includes the results of all publicly owned infrastructure at a national level. Publicly owned infrastructure is a broad classification that includes the assets owned by regional governments, provincial/territorial governments and other infrastructure agencies that are not considered a municipality. The publicly owned infrastructure data is reported at a national level, as well as by province/territory.

Municipally owned infrastructure is a subset of publicly owned infrastructure, being only the infrastructure owned by infrastructure agencies officially classified as a ‘municipality’. This infrastructure is subdivided by municipality size, urban/rural classification and province.

The inclusion of publicly owned infrastructure builds on the CIRC’s momentum and makes it a more comprehensive review of all public infrastructure systems that provide services to our communities.

CANADIAN INFRASTRUCTURE REPORT CARD 2019

METHODOLOGY

A Consistent Condition Rating Scale

The methodology in the CCPIS used a condition rating scale that is consistent with previous CIRC publications. This increases the comparability of the data over time, but as noted above, the 2019 CIRC is based on dramatically higher response rates, which limits the direct comparability to the 2016 or 2012 CIRC. This is the condition rating scale used in the CCPIS:

- **Very poor:** The asset is unfit for sustained service. It is near or beyond its expected service life and shows widespread signs of advanced deterioration. Some assets may be unusable.
- **Poor:** There is an increasing potential for its condition to affect the service it provides. The asset is approaching the end of its service life, the condition is below the standard and a large portion of the system exhibits significant deterioration.
- **Fair:** The asset requires attention. The asset shows signs of deterioration and some elements exhibit deficiencies.
- **Good:** The asset is adequate. It is acceptable and generally within the mid-stage of its expected service life.
- **Very Good:** The asset is fit for the future. It is well maintained, in good condition, new or recently rehabilitated.
- **Unknown:** Not enough data exists to respond.

Although the survey respondents were asked to identify the current state of their assets using this rating scale, it is important to note that the survey did not include subject matter-specific references for the condition rating of each asset category (i.e., Building Condition Index for facilities, pavement Quality Index values for roads). The survey results provided by each jurisdiction represent the perspective of whomever completed the survey against the rating scale provided above.

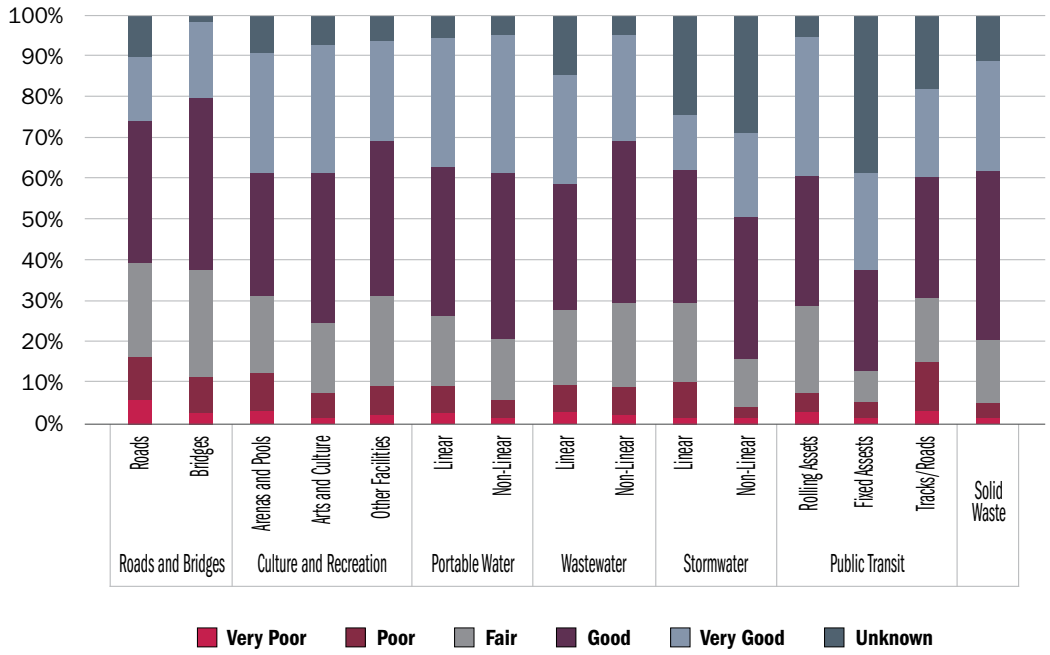
CANADIAN INFRASTRUCTURE REPORT CARD 2019

KEY MESSAGES

A concerning amount of municipal infrastructure is in poor or very poor condition. Infrastructure in this condition represents an immediate need for action, as the rehabilitation or replacement of these assets is required in the next 5-10 years to ensure that the services it provides continue to meet the community's expectations.

An even larger proportion of municipal infrastructure is in fair condition. Infrastructure in this condition represents a view of things to come in the medium to long term. This infrastructure will continue to deteriorate over the next decade, falling into poor and very poor condition if rehabilitation or replacement actions are not taken.

Figure 1: Core Infrastructure Asset Condition Summary



The report also highlights that a majority of the infrastructure that Canadian's rely on every day is more than 20 years old. This finding emphasizes the need for continued reinvestment in existing infrastructure alongside construction of new assets.

CANADIAN INFRASTRUCTURE REPORT CARD 2019

KEY MESSAGES

Roads, Bridges and Tunnels

There are enough Canadian roads in poor condition to build a road almost halfway to the moon.

Asset Category	Subcategory	# And % in Poor/Very Poor Condition	# And % in Fair Condition
Roads, Bridges, and Tunnels	Roads	146,255 km (16.4%)	201,283 km (22.6%)
	Bridges and Tunnels	9,661 Structures (12.4%)	20,502 Structures (26.3%)

Culture and Recreation Facilities

One in three recreational or cultural facilities require investment in the next decade. This does not include the programmatic or functional deficiencies they may need to enhance their relevance and use.

Asset Category	Subcategory	# And % in Poor/Very Poor Condition	# And % in Fair Condition
Culture and Recreation	Ice Arenas/Pools	564 Facilities (12.7%)	883 Facilities (19.8%)
	Arts and Culture Facilities	380 Facilities (8.6%)	721 Facilities (16%)
	Other Facilities	1,886 Facilities (8.6%)	4,972 Facilities (22.7%)

CANADIAN INFRASTRUCTURE REPORT CARD 2019

KEY MESSAGES

Potable Water, Wastewater and Stormwater

- Of our linear assets (e.g., watermains, sewers), 30% are in fair or worse condition.
- Climate change puts an additional strain on these infrastructure systems.

Asset Category	Subcategory	# And % in Poor/Very Poor Condition	# And % in Fair Condition
Potable Water	Linear Infrastructure	17,788 km (9.6%)	32,641 km (17.7%)
	Non-linear Infrastructure	573 Facilities (6.4%)	1,333 Facilities (15%)
Wastewater	Linear Infrastructure	16,350 km (10.8%)	26,211 km (17.3%)
	Non-linear Infrastructure	1,386 Facilities (10%)	2,896 Facilities (20.6%)
Stormwater	Linear Infrastructure	50,251 km (11.3%)	84,614 km (19%)
	Non-linear Infrastructure	700 Facilities (4.4%)	1,866 Facilities (11.8%)

Public Transit

More than 30% of tracks require investment in the next decade.

Asset Category	Subcategory	# And % in Poor/Very Poor Condition	# And % in Fair Condition
Public Transit	Rolling assets	604 Units (2.7%)	6,751 Units (30%)
	Fixed assets	2,298 Facilities (7.8%)	3,207 Facilities (11%)
	Roads/Tracks	1,367 km (15.8%)	1,343 km (15.5%)

CANADIAN INFRASTRUCTURE REPORT CARD 2019

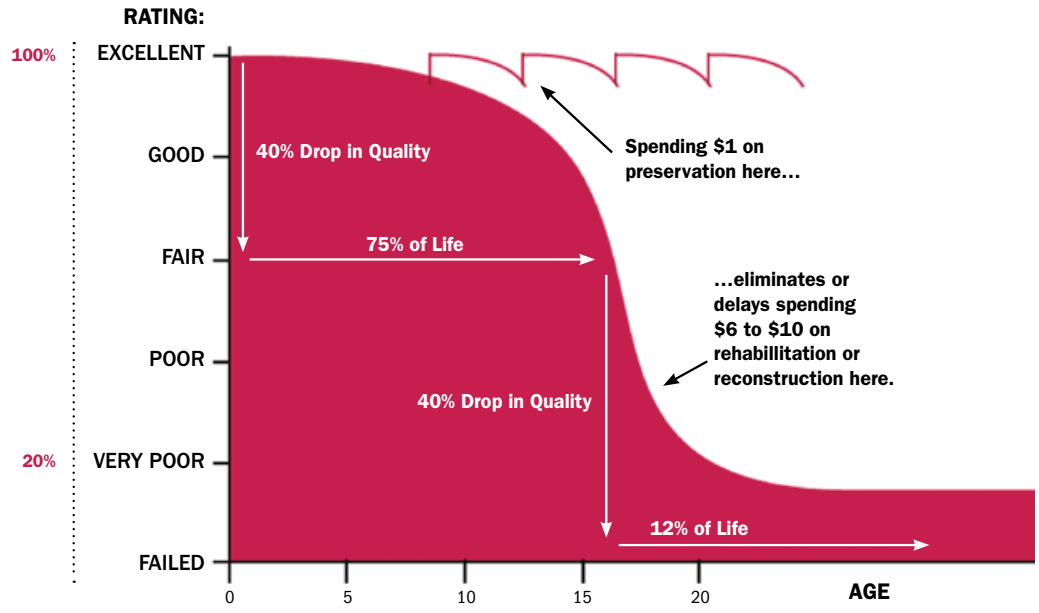
KEY MESSAGES

Solid Waste

One in four transfer stations require investment in the next decade.

Asset Category	Subcategory	# And % in Poor/Very Poor Condition	# And % in Fair Condition
Solid Waste	Transfer Station	89 Facilities (7.5%)	193 Facilities (16%)
	Waste Diversion	27 Facilities (3.7%)	86 Facilities (11.6%)
	Waste Disposal	111 Facilities (7%)	326 Facilities (15.7%)

Figure 2: Example of asset deterioration curve (Roads)



CANADIAN INFRASTRUCTURE REPORT CARD 2019

ASSET MANAGEMENT

Asset management (AM) is a strategic approach to managing infrastructure assets that helps infrastructure owners (e.g. municipalities) maintain and operate infrastructure effectively so that critical services can be provided to the public. Asset Management Plans (AMP) lay out how a group of assets is to be managed over a period of time. The AMP describes the characteristics and condition of infrastructure assets, the level of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.

Similar to previous CIRCs, the CCPIS included questions about the state of asset management practices in each jurisdiction. One of the most revealing questions was whether the infrastructure owner has an Asset Management Plan (AMP). That plan is important because it is the functional report that they use to understand the state of their infrastructure assets and plan the lifecycle expenditures required to sustain those assets.

There is a notable variation in who has a documented AMP, depending on their population size. Only 29% of small municipalities (i.e., less than 5,000 people) reported a documented AMP. Of medium-sized municipalities (i.e., 5,000-30,000 people) 56% reported a documented AMP and 70% of large municipalities (i.e., 30,000 people or more) reported a documented AMP.

Asset management is still relatively new in Canada, and asset management capacity is growing. The survey results highlight the increasing adoption of AM in larger municipalities, while also reminding us of the need to continue supporting smaller municipalities with funding and technical support to adopt AM practices.

AM capacity is in part being enhanced through the Municipal Asset Management Program (MAMP), which is funded by Infrastructure Canada and delivered by the Federation of Canadian Municipalities (FCM). The program's mandate is to increase awareness of AM and develop technical AM expertise at the local level. MAMP programming is delivered through a number of partner organizations including the Canadian Network of Asset Managers (CNAM), the Canadian Urban Transit Association (CUTA), NAMS Canada, Centre d'expertise et de recherche en infrastructures urbaines (CERIU), and the Atlantic Infrastructure Management (AIM) Network. The 2019 federal budget increased funding for the program, extending it to March 2024.

CANADIAN INFRASTRUCTURE REPORT CARD 2019

ASSET MANAGEMENT

Figure 3: Municipal Organizations with Documented Asset Management Plan (Municipalities with up to 5,000 people)

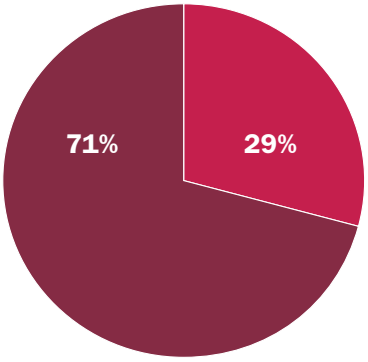


Figure 4: Municipal Organizations with Documented Asset Management Plan (Municipalities with 5,000 to 30,000 people)

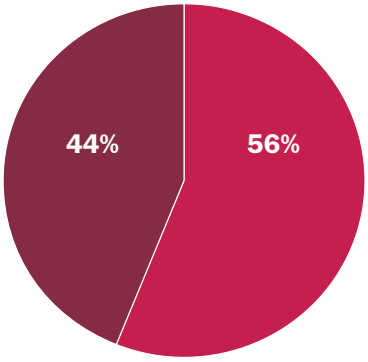


Figure 5: Municipal Organizations with Documented Asset Management Plan (Municipalities with 30,000 or more people)

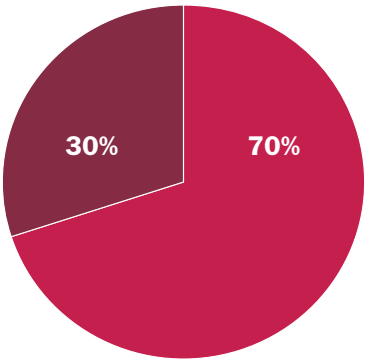
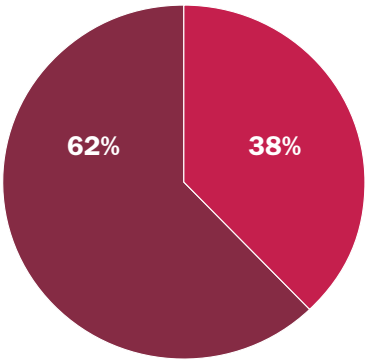


Figure 6: Public Organizations with Documented Asset Management Plan



Organization has a documented asset management plan

Organization does not have a documented asset management plan

CANADIAN INFRASTRUCTURE REPORT CARD 2019

COMPARISON WITH THE 2016 CIRC RESULTS

Each asset category (except solid waste, a new category) has a side-by-side comparison of the condition profile reported in the 2016 CIRC against the 2019 results. Use a degree of caution when drawing conclusions from the comparison, for two reasons:

- We used a significantly larger sample size used to generate the 2019 CIRC.
- It was challenging to calculate the overall condition profiles in each asset category given the lack of replacement value data.

Notwithstanding these considerations, a comparison of the 2016 and 2019 results suggests the following:

- The 2016 CIRC results are generally consistent with the 2019 results. Despite the small 2016 CIRC sample size, the overall condition profile of each asset category is generally consistent with the 2016 CIRC and 2019 CIRC results. We can conclude that the 2016 CIRC presented an accurate overall view of the state of Canada's core infrastructure.
- The CIRC and the CCPIS data give us the ability to compare how the state of infrastructure changes over time. The best policy is informed by an analysis of high-quality data, and the CIRC provides unbiased facts that support these national infrastructure conversations. We noted several trends:
  - The 2019 results indicate that some asset categories have a worse condition profile than what was reported in 2016 (i.e., roads, bridges, wastewater, linear stormwater).
  - The 2019 results indicate that some asset categories have a better condition profile than what was report in 2016 (i.e., water, non-linear stormwater, culture and recreation facilities, transit).
  - In 2019, we included solid waste assets in the CIRC for the first time.

It is too early to draw conclusions about the impact of infrastructure policy or funding on the state of infrastructure systems. Infrastructure is a naturally slow sector as complex infrastructure can require several years to plan, design and construct. Infrastructure agencies can take months to update their infrastructure data to reflect an asset's new condition. For these reasons, we will need additional iterations of the CCPIS and CIRC before we can provide the data points necessary to identify trends and connect them to implemented infrastructure policy.

CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

CANADIAN INFRASTRUCTURE REPORT CARD 2019

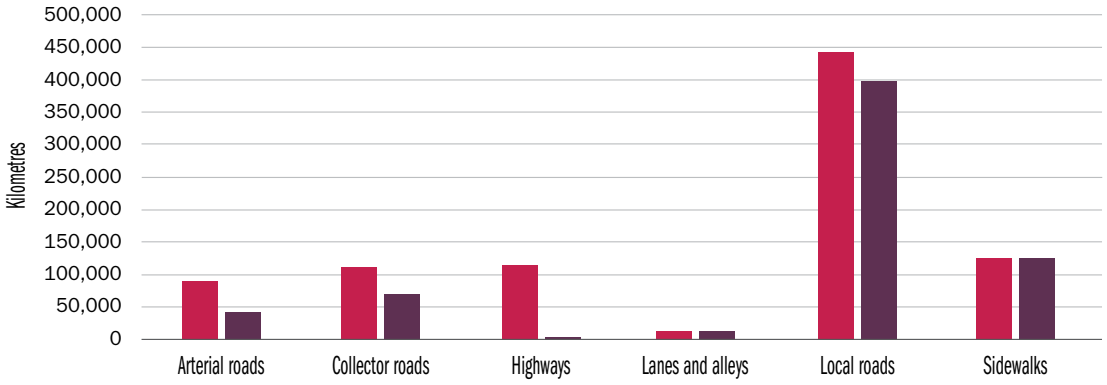
RESULTS BY INFRASTRUCTURE CATEGORY

ROADS AND BRIDGES

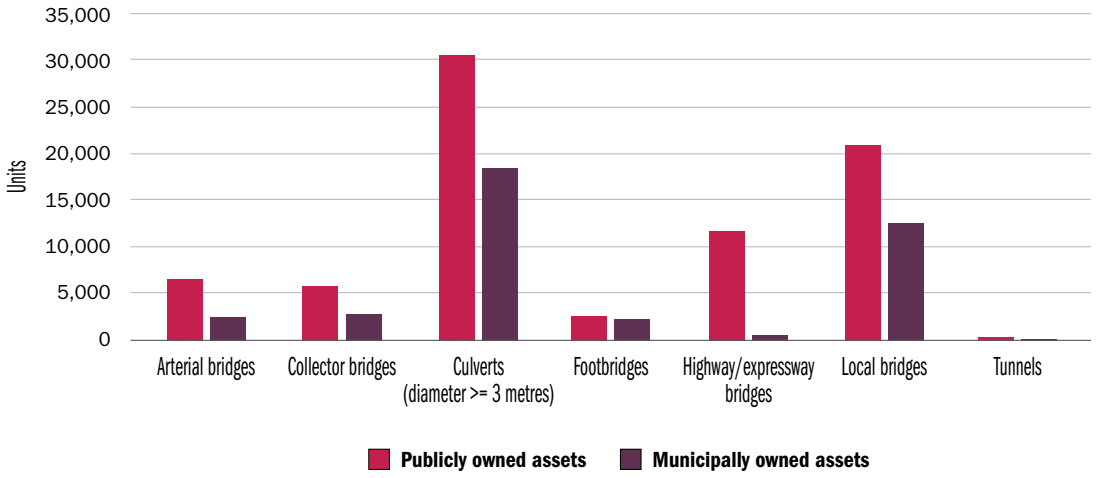
ROADS AND BRIDGES

The road networks section of our survey focused on two-lane equivalent kilometres of highways, arterial roads, collector roads, local roads, lanes, alleys and sidewalks. The survey also included questions about bridges and tunnels, including highway and expressway bridges, arterial bridges, collector bridges, footbridges, local bridges, culverts three metres and greater and tunnels.

Roads and Bridges: Road Asset Inventory



Roads and Bridges: Bridge and Tunnel Assets Inventory



CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

ROADS AND BRIDGES

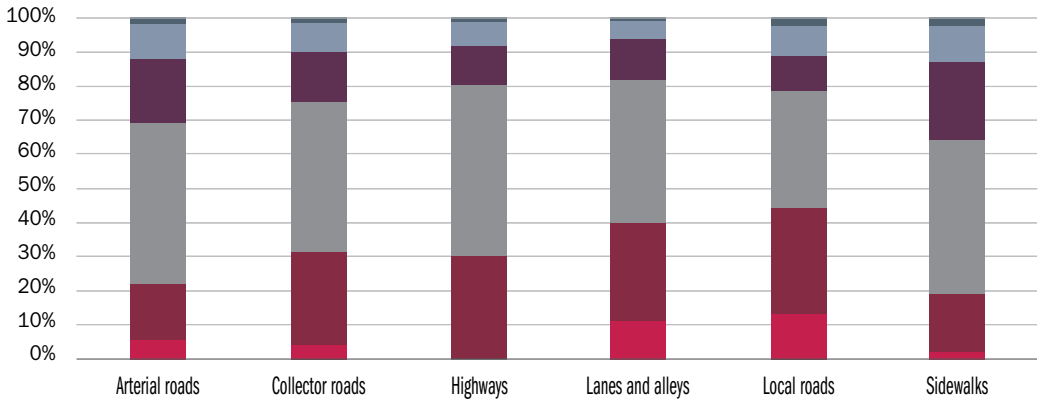
THE CURRENT STATE

Almost 40% of these assets are in fair or worse condition and only 20% of the assets were constructed in the last 20 years.

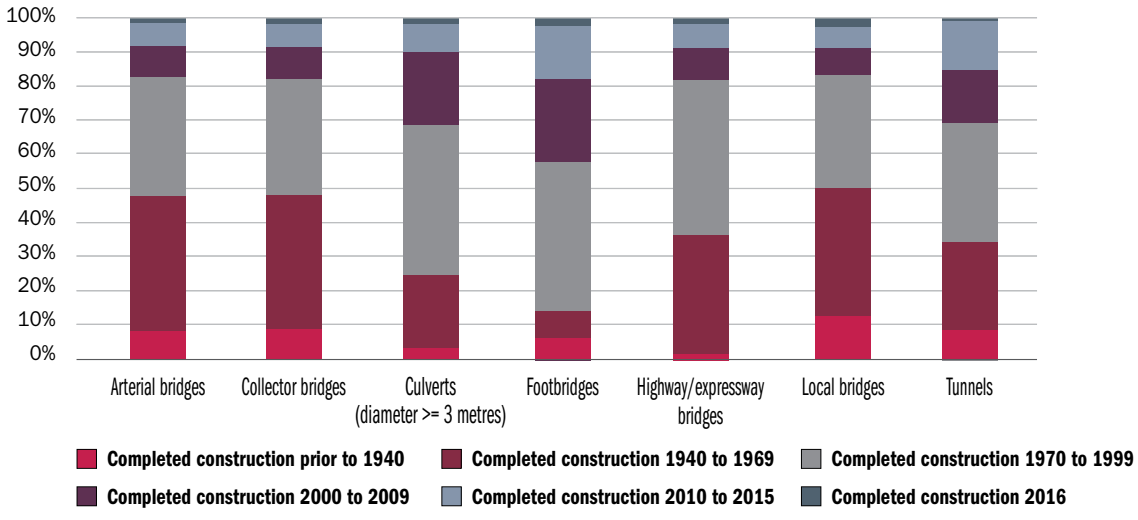
We assessed these assets using a defined scale and their age profile.

- Roads Estimated Service Life (ESL) of 20-40 years.
- Sidewalks ESL of 50 years.
- Bridges and culverts ESL of 50 years.

Roads and Bridges: Publicly Owned Road Asset Inventory (Completed Construction)



Roads and Bridges: Publicly Owned Bridge and Tunnel Assets Inventory (Completed Construction)

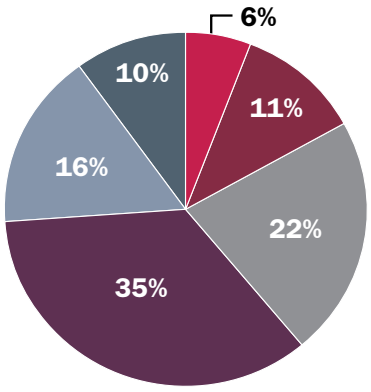


CANADIAN INFRASTRUCTURE REPORT CARD 2019

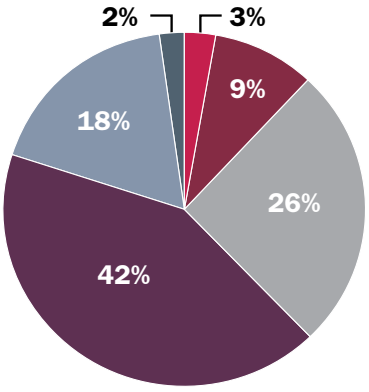
RESULTS BY INFRASTRUCTURE CATEGORY

ROADS AND BRIDGES

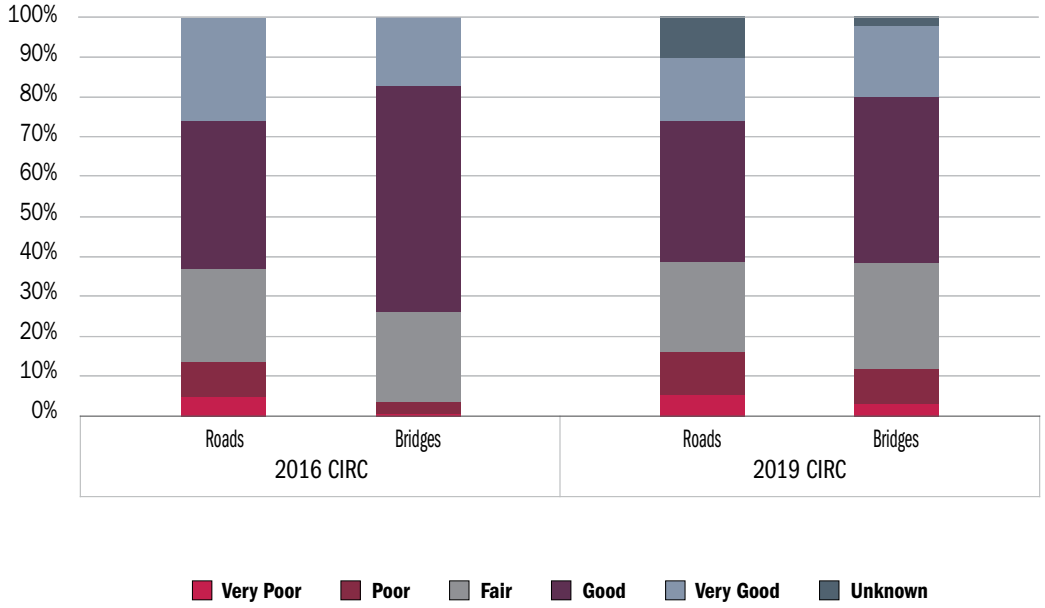
Roads and Bridges:
Overall Asset Condition – Roads



Roads and Bridges:
Overall Asset Condition – Bridges and Tunnels



Roads and Bridges: Comparison with 2016 Results

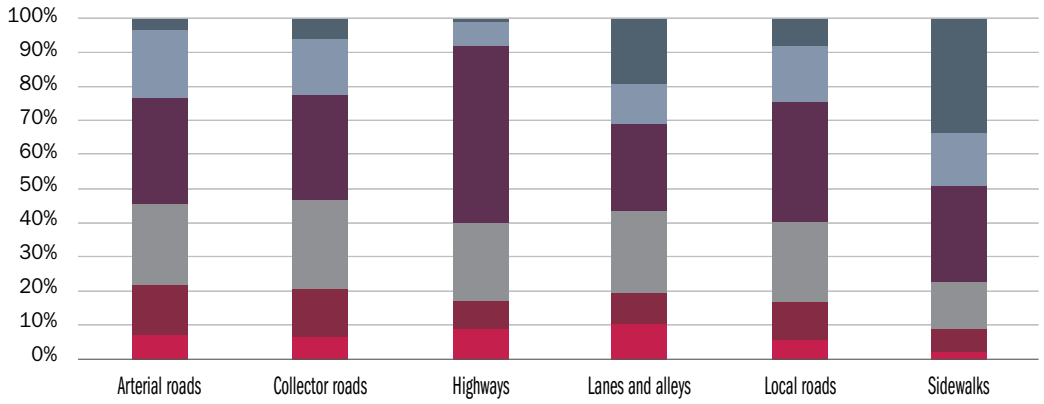


CANADIAN INFRASTRUCTURE REPORT CARD 2019

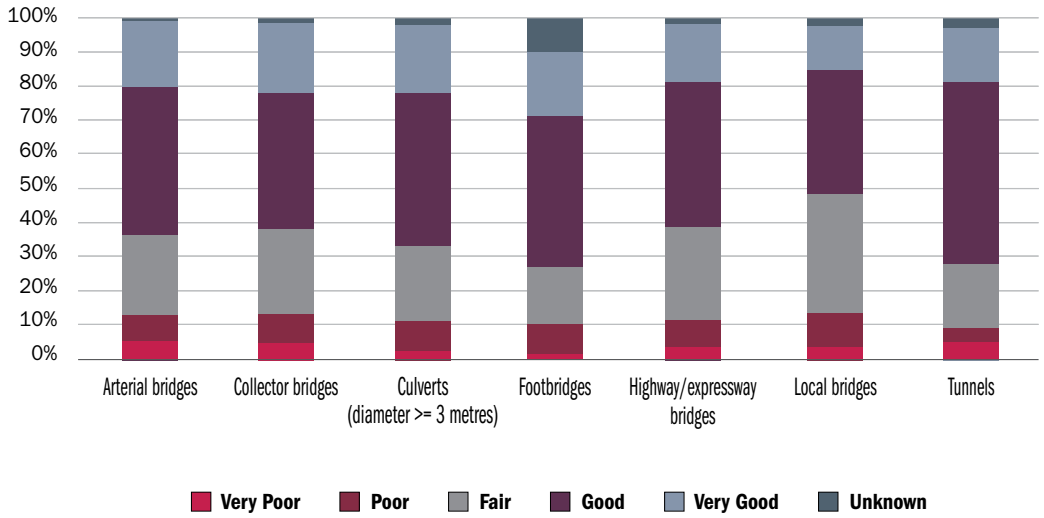
RESULTS BY INFRASTRUCTURE CATEGORY

ROADS AND BRIDGES

Roads and Bridges: Detailed Asset Condition – Publicly Owned Road Asset Condition



Roads and Bridges: Detailed Asset Condition – Publicly Owned Bridge and Tunnel Assets Inventory

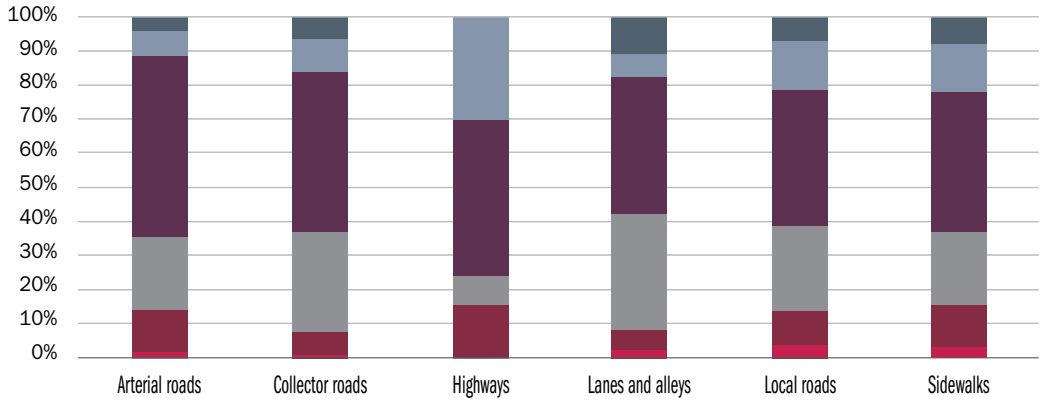


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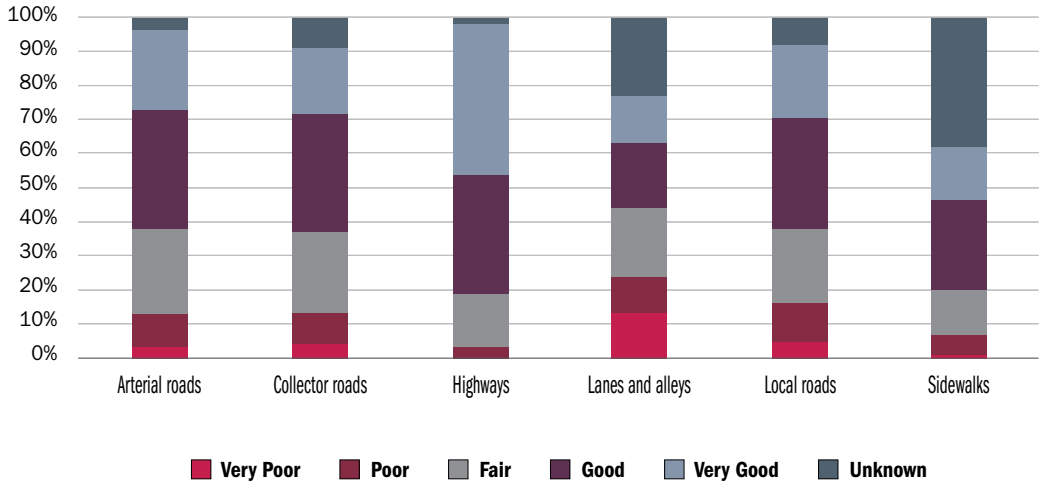
RESULTS BY INFRASTRUCTURE CATEGORY

ROADS AND BRIDGES

Roads and Bridges: Other Relevant Data – Municipally Owned Road Asset Condition (All Rural Municipalities)



Roads and Bridges: Other Relevant Data – Municipally Owned Road Asset Condition (All Urban Municipalities)

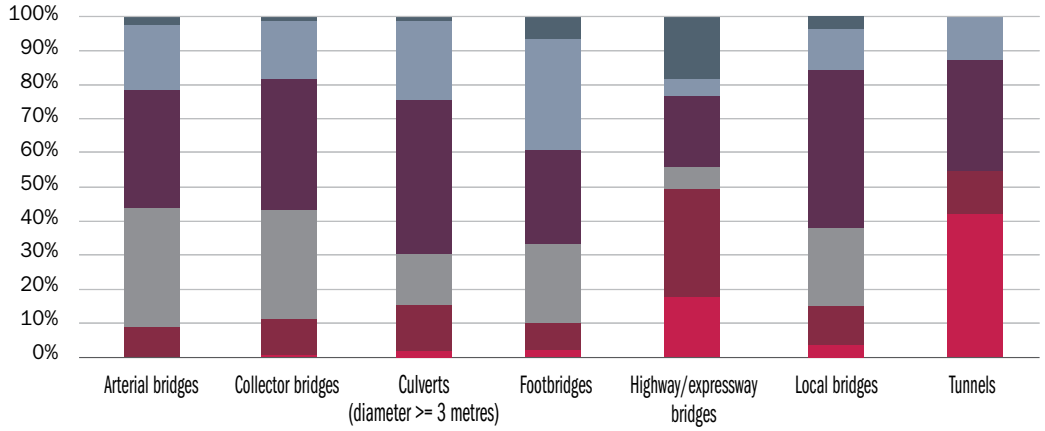


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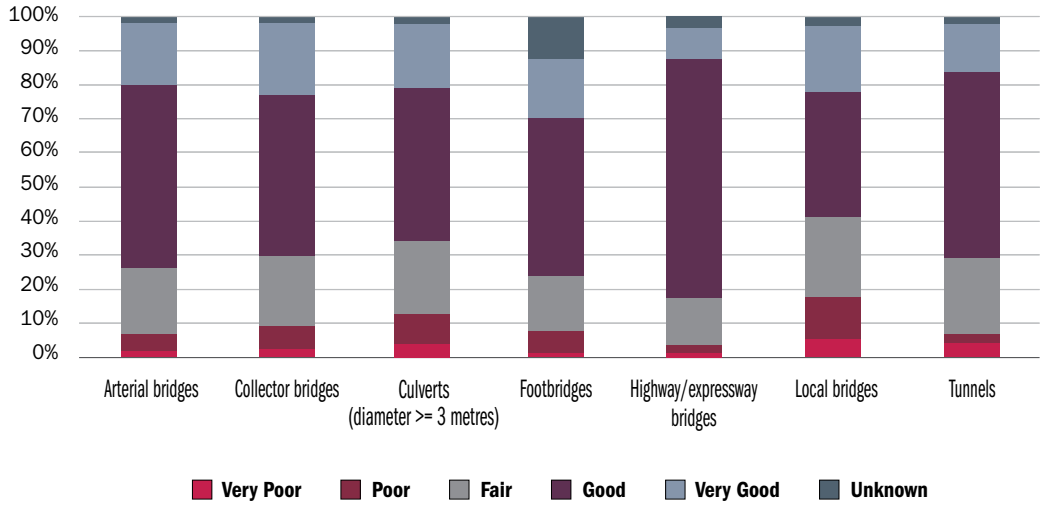
RESULTS BY INFRASTRUCTURE CATEGORY

ROADS AND BRIDGES

Roads and Bridges: Other Relevant Data – Municipally Owned Bridge and Tunnel Assets (All Rural Municipalities)



Roads and Bridges: Other Relevant Data – Municipally Owned Bridge and Tunnel Assets (All Urban Municipalities)



CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

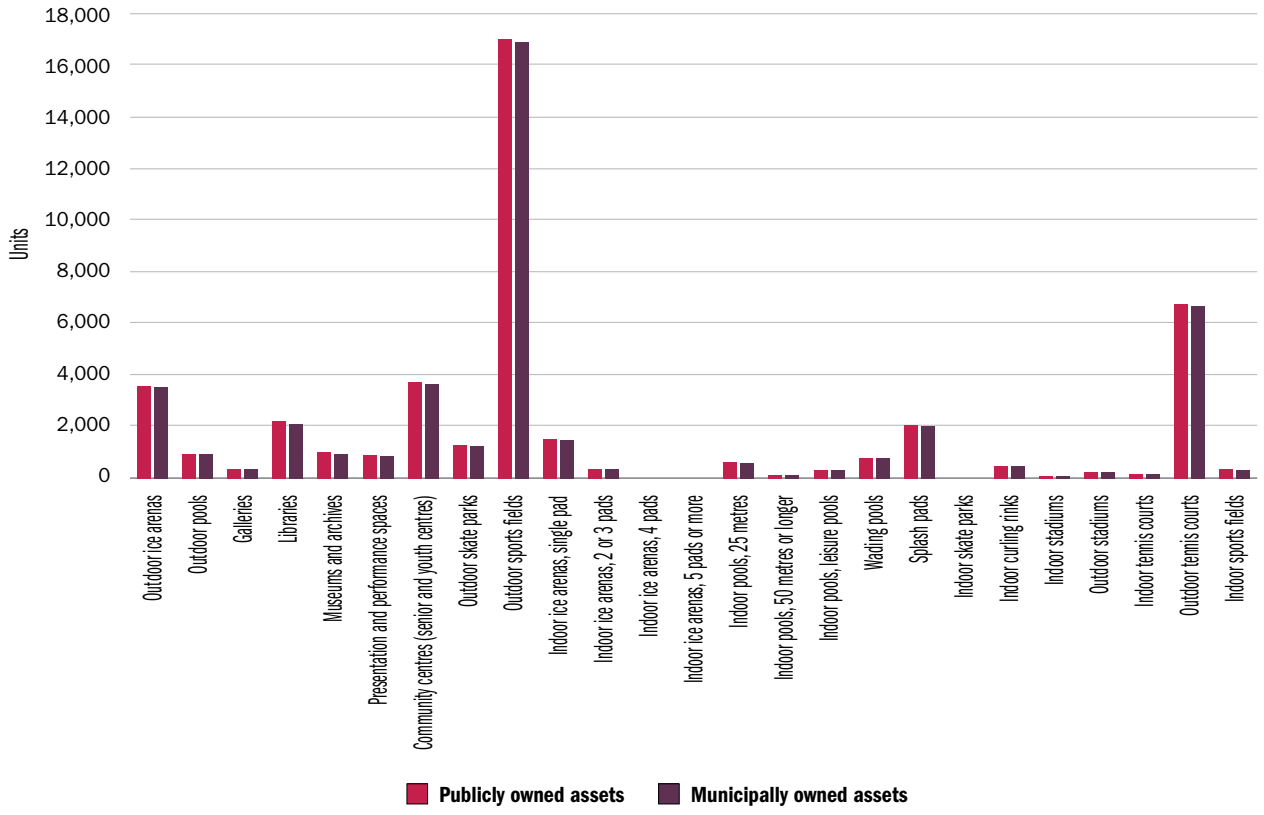
CULTURE, RECREATION AND SPORTS FACILITIES

CULTURE, RECREATION AND SPORTS FACILITIES

Our survey included several types of culture, recreation and sport facilities:

- **Ice arena facilities:** Indoor ice arenas with 1-5 pads or more, outdoor ice arenas.
- **Pool facilities:** Indoor pools of 25 metres or 50 metres or more, leisure pools, outdoor pools, wading pools, splash pads.
- **Arts and culture facilities:** Galleries, libraries, museums and archives, presentation and performance spaces.
- **Other facilities:** Indoor and outdoor skate parks, indoor curling rinks, indoor and outdoor stadiums, indoor and outdoor tennis courts, indoor and outdoor sports fields, community centres, multi-purpose facilities.

Culture, Recreation and Sports Facilities: Asset Inventory



CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

CULTURE, RECREATION AND SPORTS FACILITIES

THE CURRENT STATE

These assets have a consistent condition across this category. Approximately 30-35% of them are in fair condition or worse, and a large proportion of some facility types are more than 50 years old.

The asset classes in the worst condition (i.e., more than 30% are in fair, poor or very poor condition) include single pad ice arenas, outdoor pools and wading pools, indoor 25-metre pools, indoor curling rinks and tennis courts.

We assessed these assets using a defined scale and their age profile.

This asset category is complicated given the public's expectations around criteria unrelated to a facility's physical condition. This includes, for example, revised amenity requirements as demographics shift, and updating facilities for better environmental/energy performance, etc. These are important considerations that are not fully captured in traditional condition assessment data.

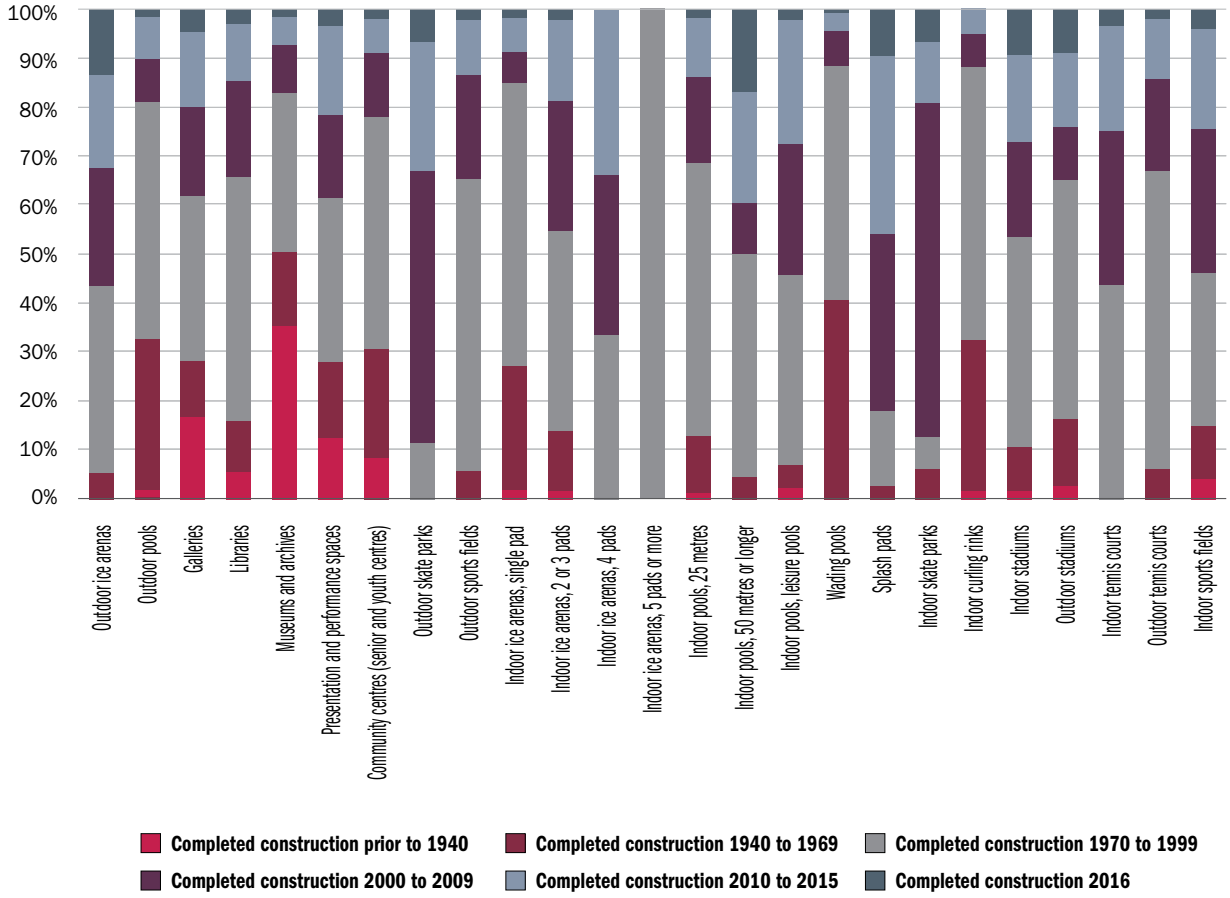
- Sports fields and courts ESL of 25 years.
- Playgrounds and other park equipment ESL of 10-15 years depending on the equipment, and playground structures 25-50 years depending on material.
- Asphalt trails and parking lots ESL of 25 years.
- Buildings and structures ESL of 40 years (before they need some substantial refurbishment).

CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

CULTURE, RECREATION AND SPORTS FACILITIES

Culture, Recreation and Sports Facilities:
Publicly Owned Asset Inventory (Completed Construction)

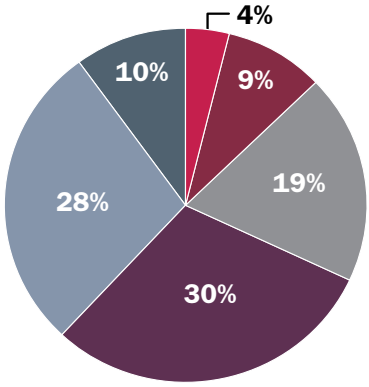


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

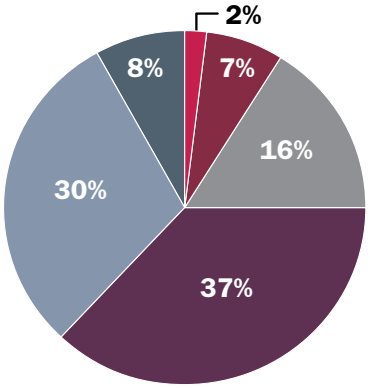
CULTURE, RECREATION AND SPORTS FACILITIES

Culture, Recreation and Sports Facilities:
Overall Asset Condition – Ice Arenas and Pools

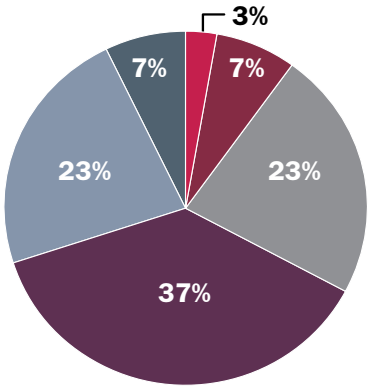




Culture, Recreation and Sports Facilities:
Overall Asset Condition – Arts and Culture Facilities



Culture, Recreation and Sports Facilities:
Overall Asset Condition – Other Facilities

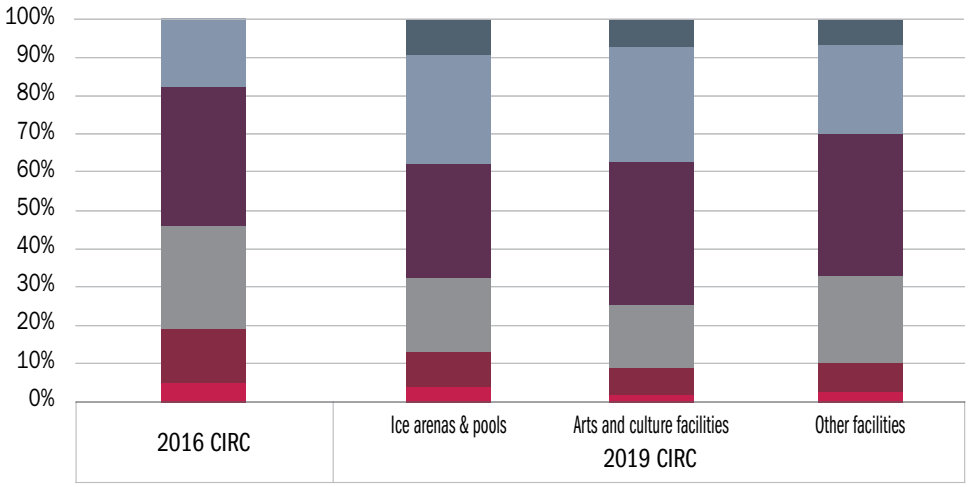


CANADIAN INFRASTRUCTURE REPORT CARD 2019

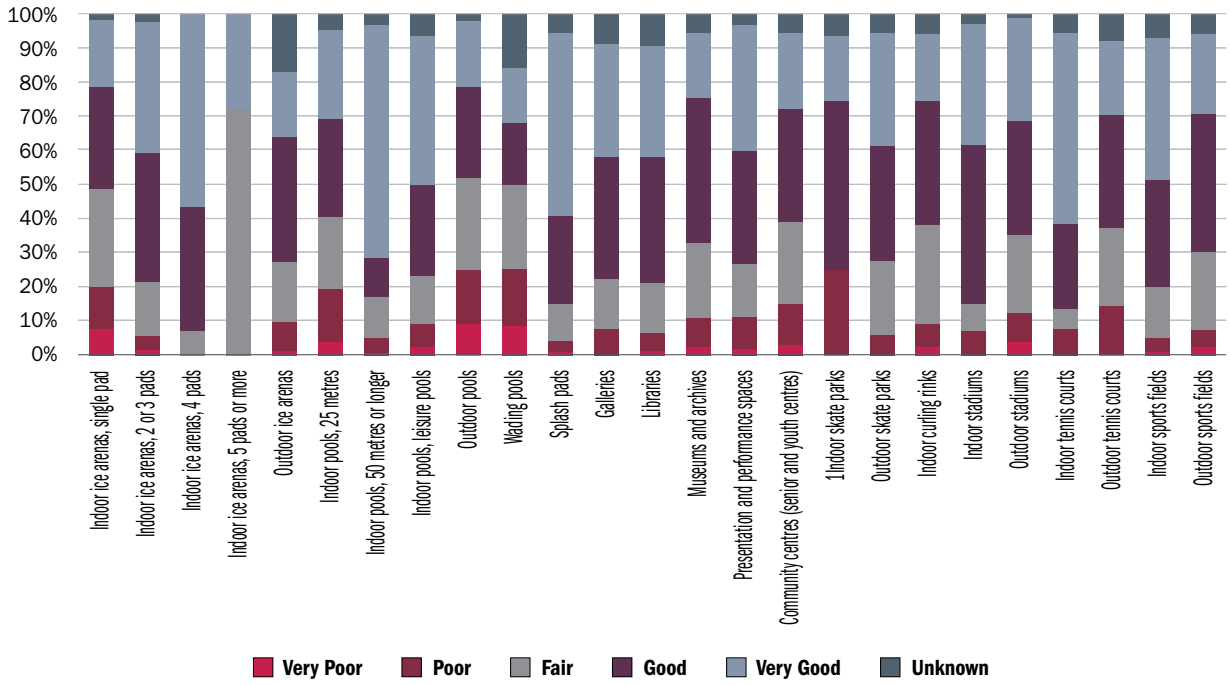
RESULTS BY INFRASTRUCTURE CATEGORY

CULTURE, RECREATION AND SPORTS FACILITIES

Culture, Recreation and Sports Facilities: Comparison with 2016 Results



Culture, Recreation and Sports Facilities: Detailed Asset Condition – Publicly Owned Asset Condition

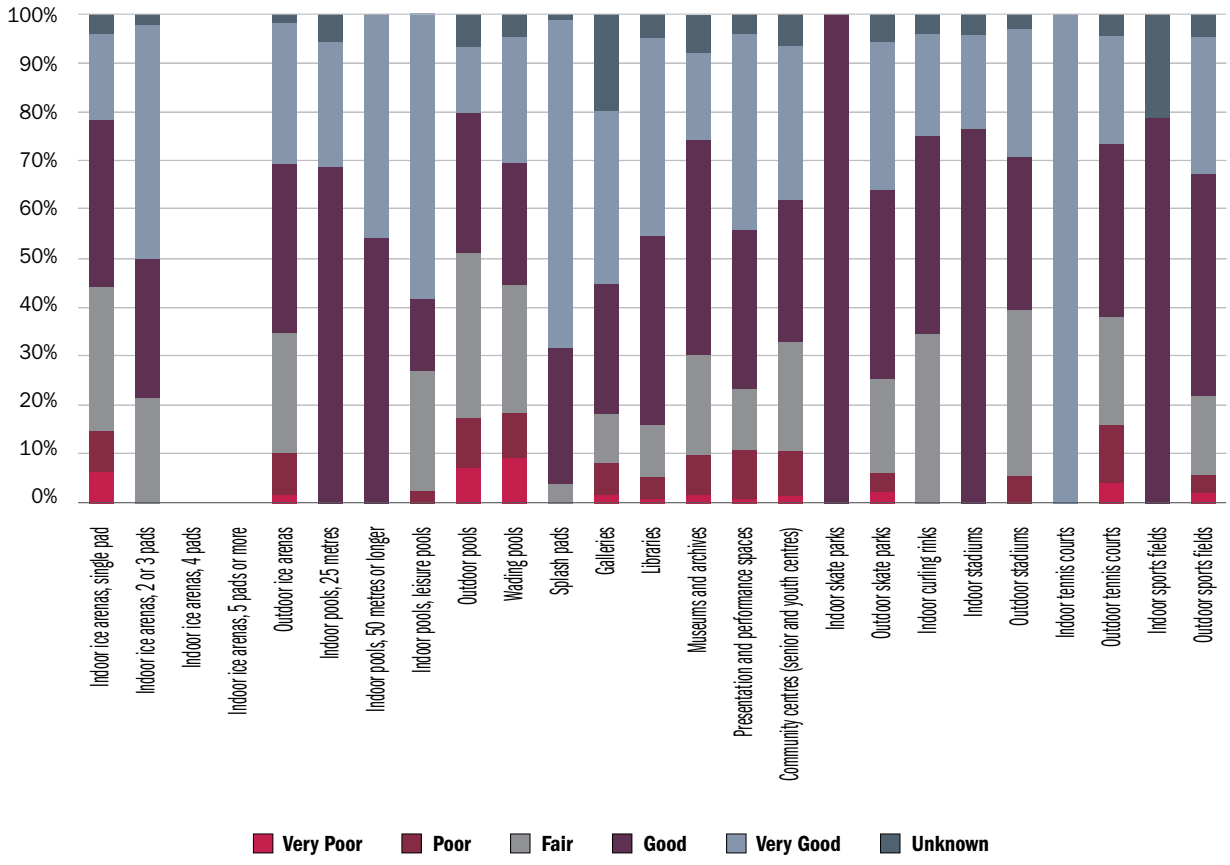


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

CULTURE, RECREATION AND SPORTS FACILITIES

Culture, Recreation and Sports Facilities:
Other Relevant Data – Municipally Owned Asset Condition (All Rural Municipalities)

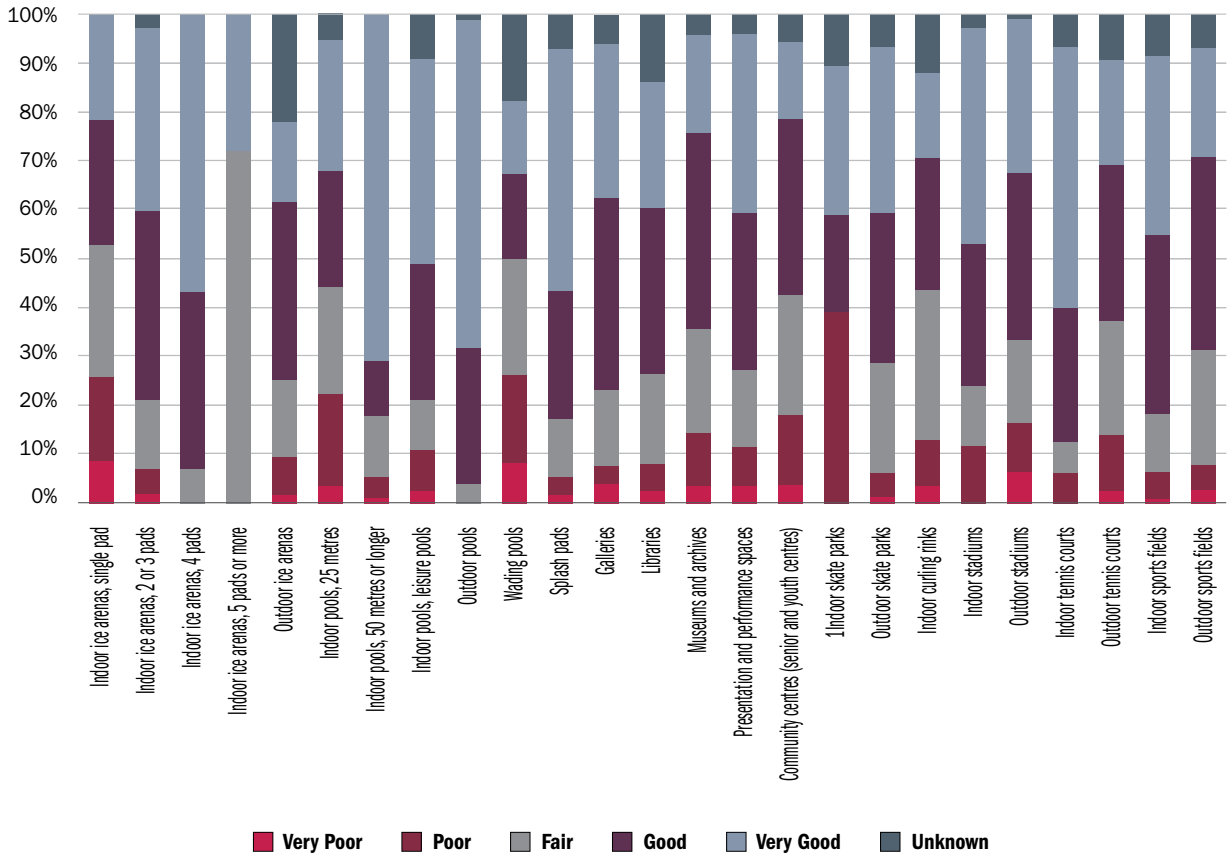


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

CULTURE, RECREATION AND SPORTS FACILITIES

Culture, Recreation and Sports Facilities:
Other Relevant Data – Municipally Owned Asset Condition (All Urban Municipalities)



CANADIAN INFRASTRUCTURE REPORT CARD 2019

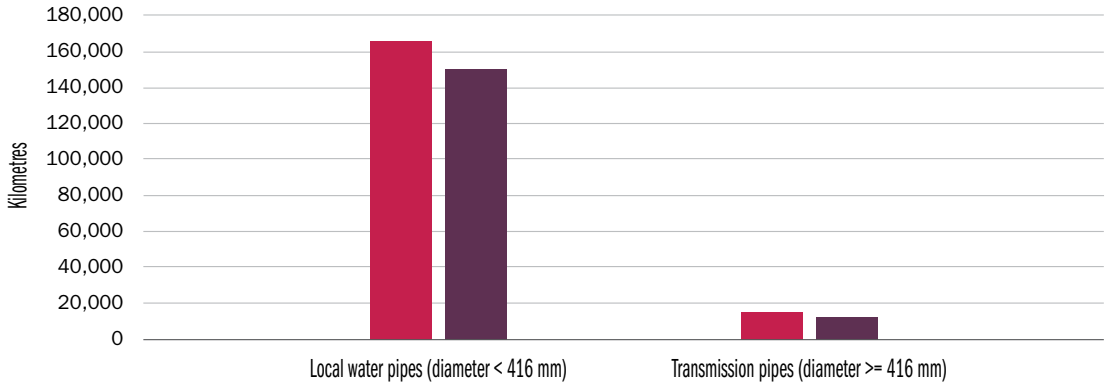
RESULTS BY INFRASTRUCTURE CATEGORY

POTABLE WATER

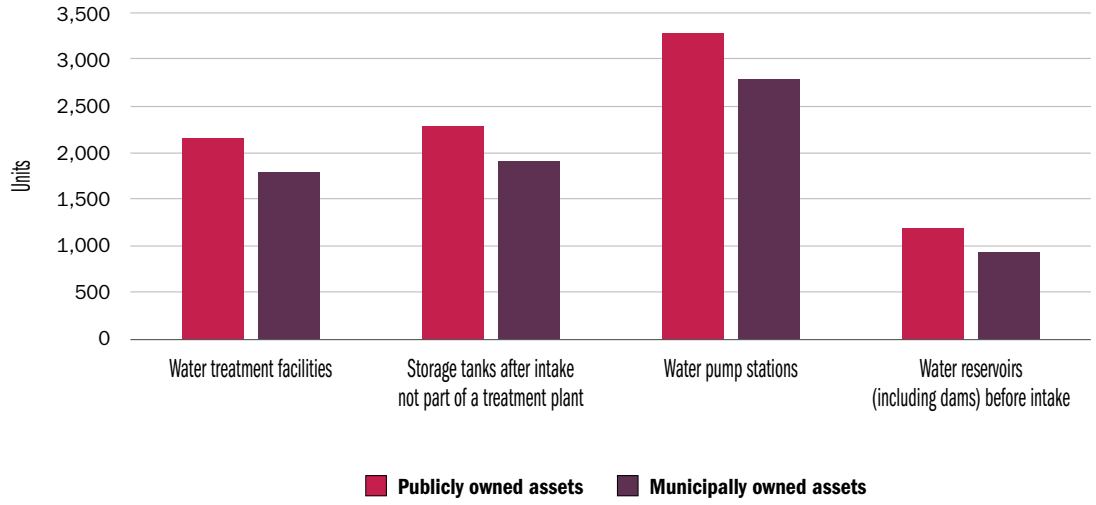
POTABLE WATER

The potable water infrastructure assets in our survey included the linear portion of drinking water systems (i.e., local water and transmission pipes) and non-linear assets (i.e., water treatment facilities, water pumping stations, water reservoirs). Linear water infrastructure is classified into local water pipes—known as distribution pipes—and transmission pipes.

Potable Water: Linear Asset Inventory



Potable Water: Non-linear Asset Inventory



CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

POTABLE WATER

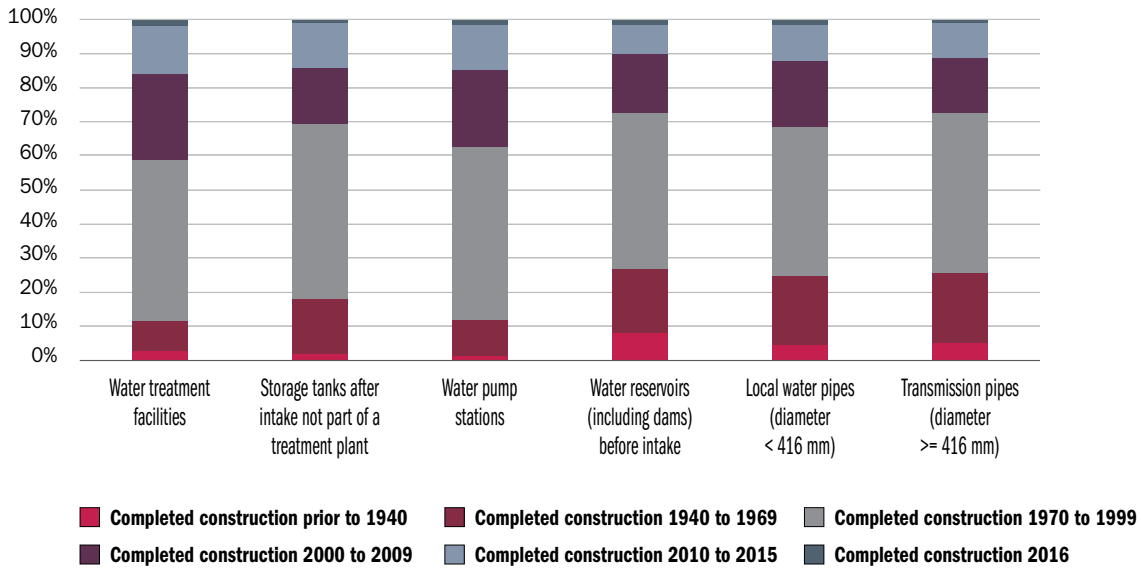
THE CURRENT STATE

Overall, approximately 30% of potable water infrastructure is in very good condition, 40% is in good condition and 25% is in fair, poor or very poor condition. Approximately 30-40% of these assets were constructed in the last 20 years.

We assessed these assets using a defined scale and their age profile.

- Watermains have an ESL of 70-100 years depending on the material.
- Vertical facilities have an ESL of 50-80 years for structural components, 25 years for mechanical and electrical components.

Potable Water: Publicly Owned Asset Inventory (Completed Construction)

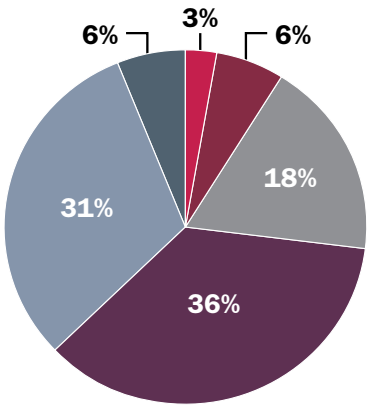


CANADIAN INFRASTRUCTURE REPORT CARD 2019

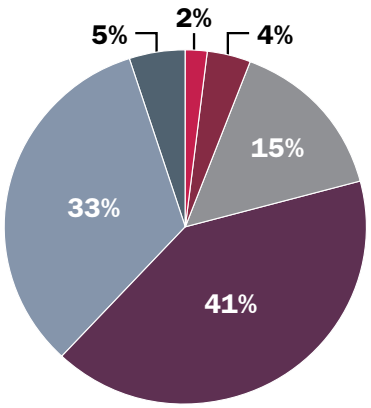
RESULTS BY INFRASTRUCTURE CATEGORY

POTABLE WATER

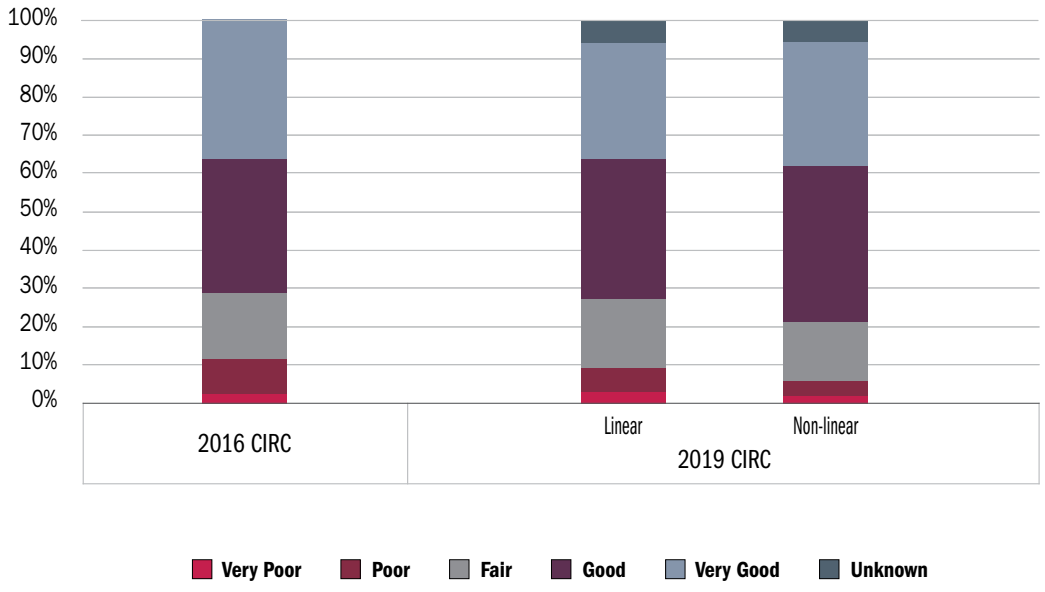
Potable Water:
Overall Asset Condition – Linear



Potable Water:
Overall Asset Condition – Non-linear



Potable Water: Comparison with 2016 Results

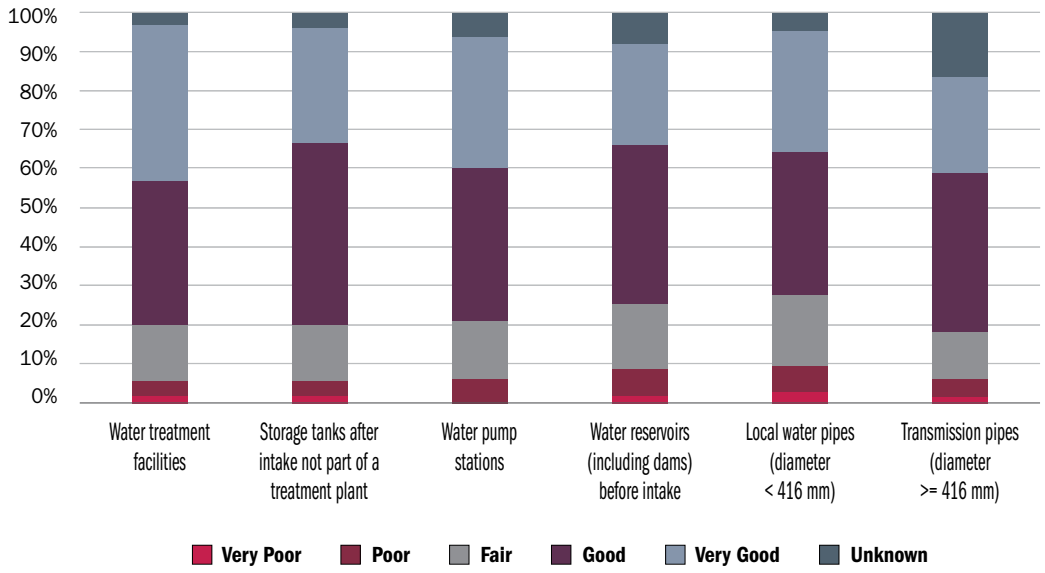


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

POTABLE WATER

Potable Water: Detailed Asset Condition – Publicly Owned Assets

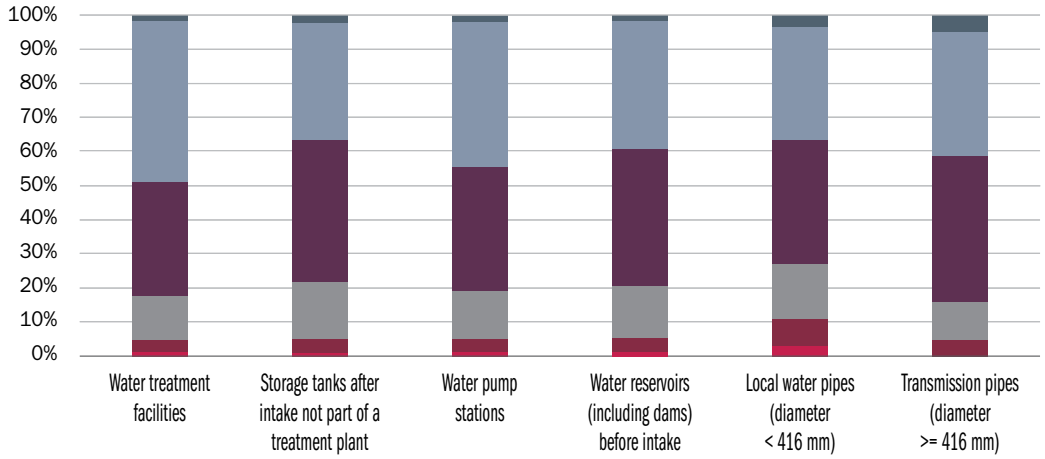


CANADIAN INFRASTRUCTURE REPORT CARD 2019

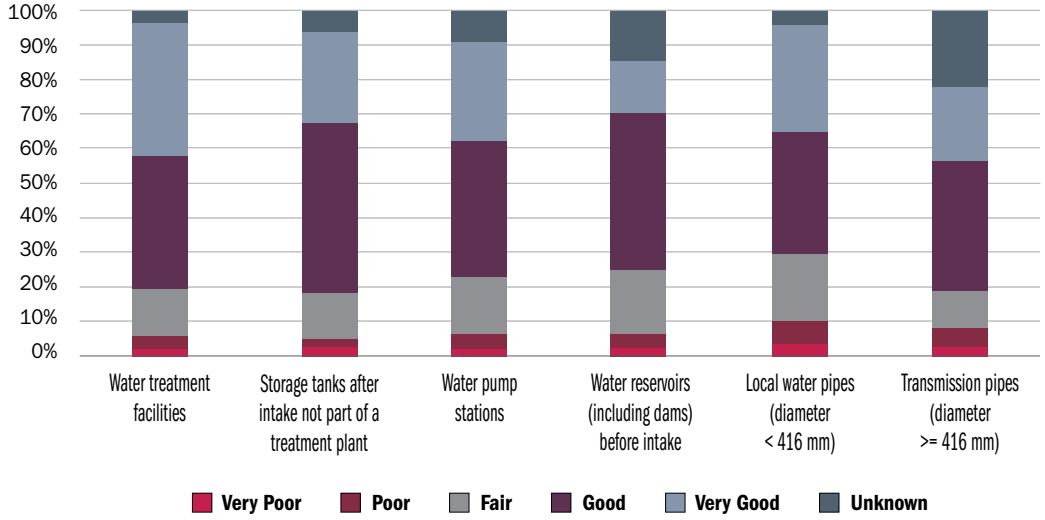
RESULTS BY INFRASTRUCTURE CATEGORY

POTABLE WATER

Potable Water: Other Relevant Data – Municipally Owned Assets (All Rural Municipalities)



Potable Water: Other Relevant Data – Municipally Owned Assets (All Urban Municipalities)



CANADIAN INFRASTRUCTURE REPORT CARD 2019

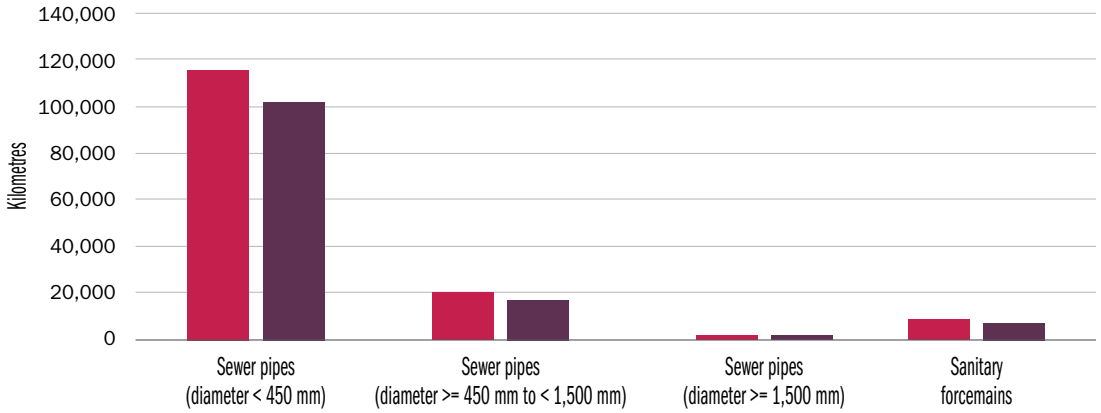
RESULTS BY INFRASTRUCTURE CATEGORY

WASTEWATER

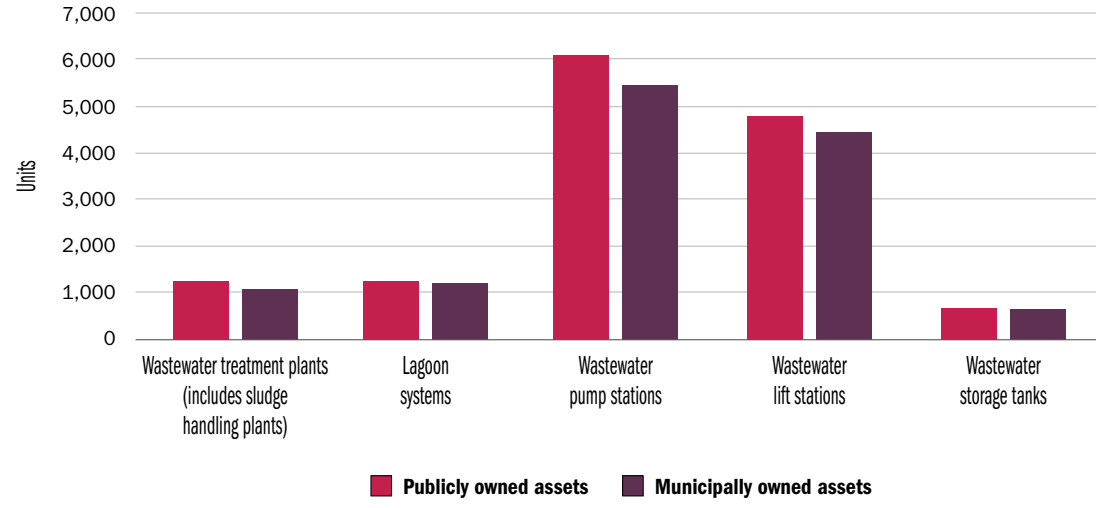
WASTEWATER

The wastewater infrastructure assets in our survey included linear wastewater collection systems (i.e., sewer pipes and sanitary force mains) and non-linear assets (i.e., treatment plants, lagoon systems, pumping stations, lift stations and storage tanks).

Wastewater: Linear Asset Inventory



Wastewater: Non-linear Asset Inventory



CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

WASTEWATER

THE CURRENT STATE

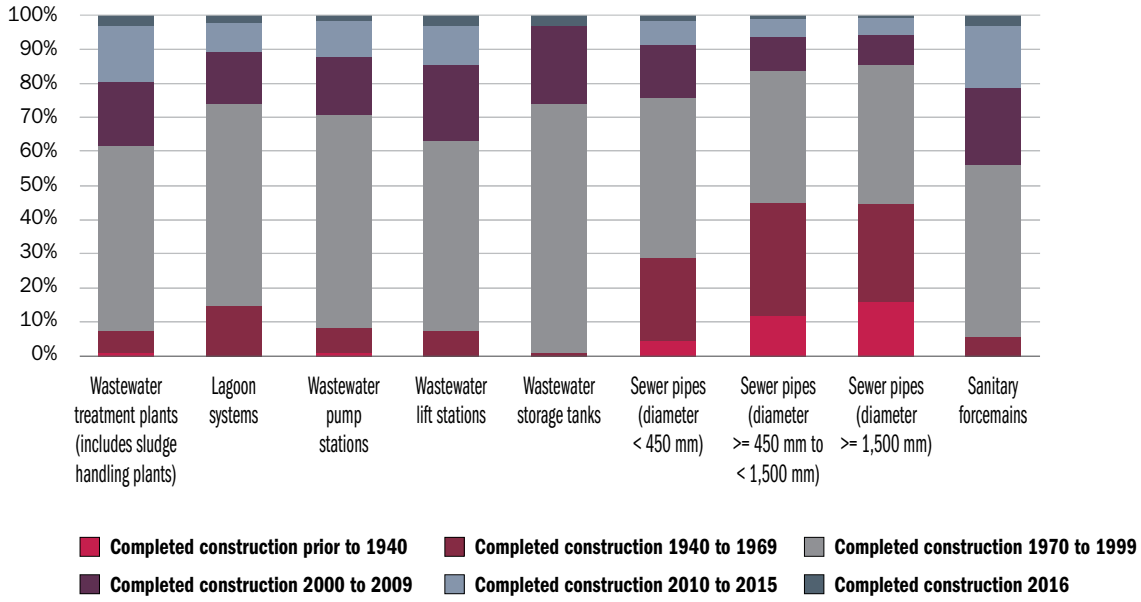
Approximately 25% of wastewater infrastructure is in very good condition and 30-40% is in good condition. These positive results represent approximately 55-65% of wastewater assets.

That said, approximately 15% of linear wastewater assets have an unknown condition, which highlights the challenges in assessing underground assets. A large portion of linear wastewater assets are more than 50 years old.

We assessed these assets using a defined scale and their age profile.

- Sewers have an ESL of 70-100 years depending on the material.
- Vertical facilities have an ESL of 50-80 years for structural components, 25 years for mechanical and electrical components.

Wastewater: Publicly Owned Asset Inventory (Completed Construction)

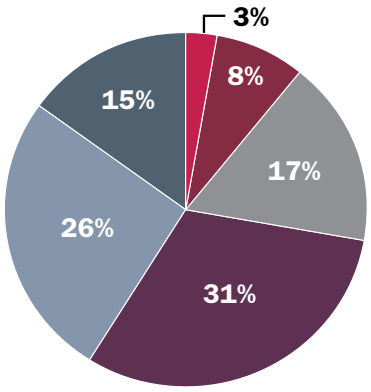


CANADIAN INFRASTRUCTURE REPORT CARD 2019

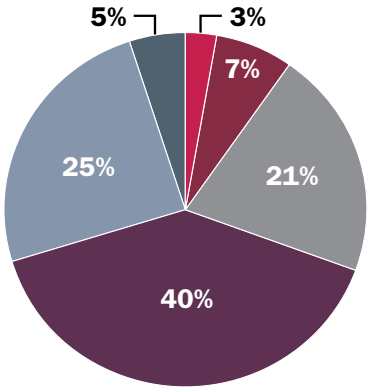
RESULTS BY INFRASTRUCTURE CATEGORY

WASTEWATER

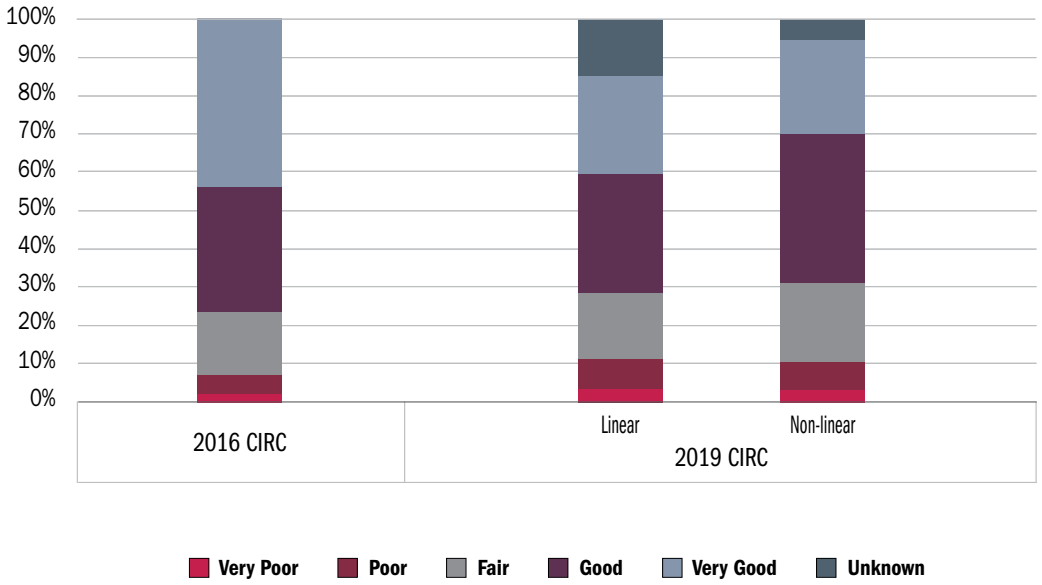
Wastewater:
Overall Asset Condition – Linear



Wastewater:
Overall Asset Condition – Non-linear



Wastewater: Comparison with 2016 Results

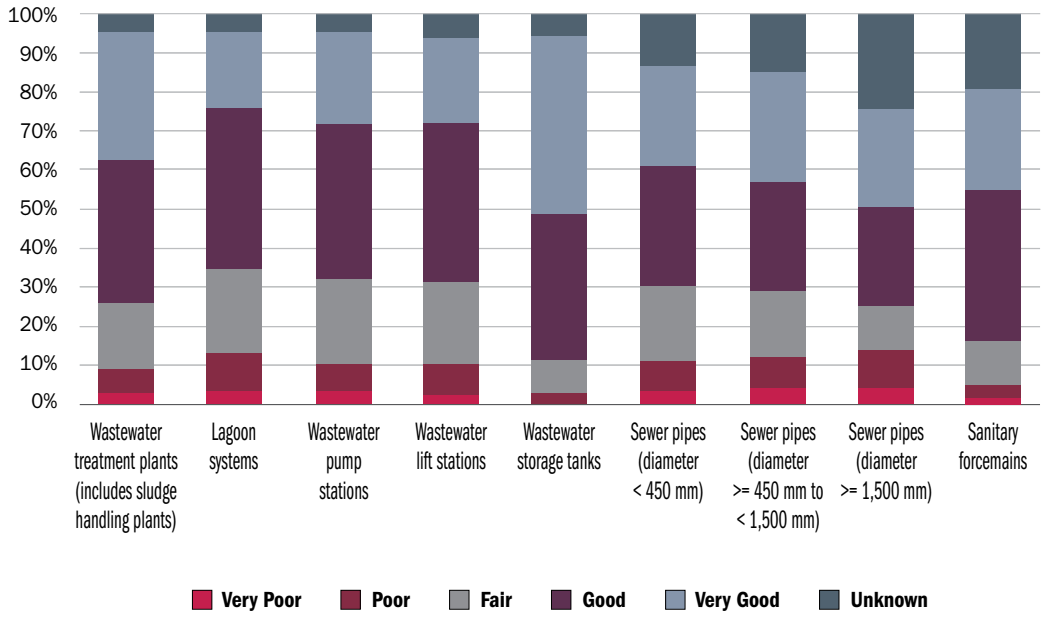


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

WASTEWATER

Wastewater: Detailed Asset Condition – Publicly Owned Asset Condition

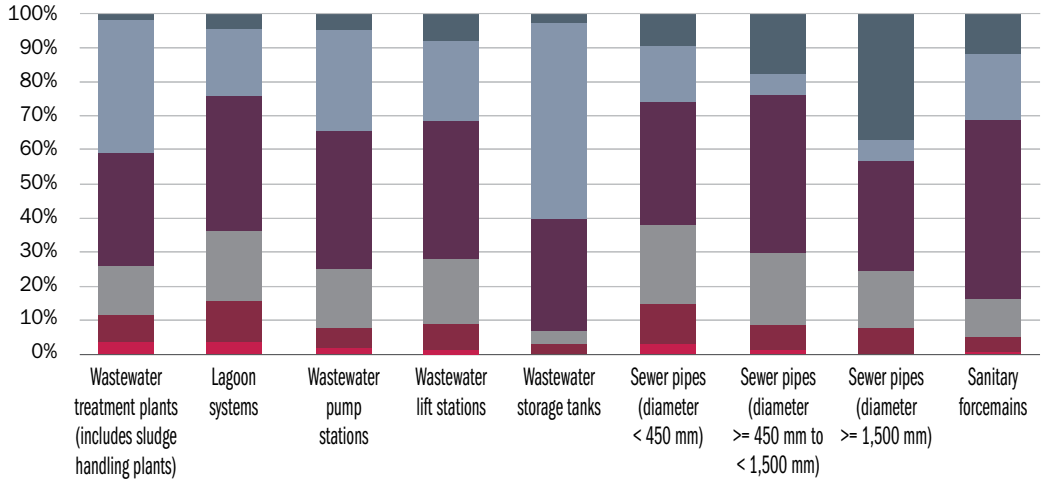


CANADIAN INFRASTRUCTURE REPORT CARD 2019

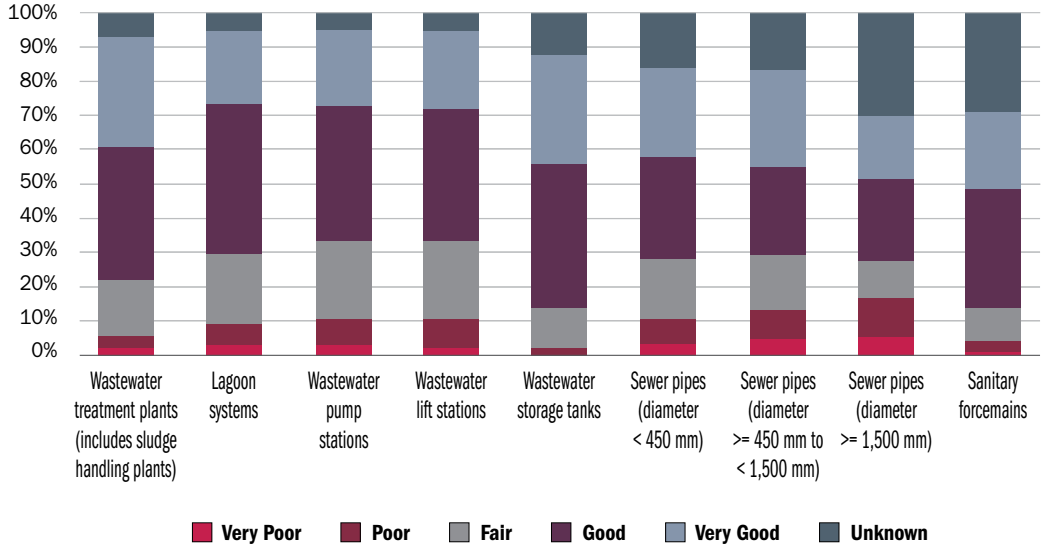
RESULTS BY INFRASTRUCTURE CATEGORY

WASTEWATER

Wastewater: Other Relevant Data – Municipally Owned Asset Condition (All Rural Municipalities)



Wastewater: Other Relevant Data – Municipally Owned Asset Condition (All Urban Municipalities)



CANADIAN INFRASTRUCTURE REPORT CARD 2019

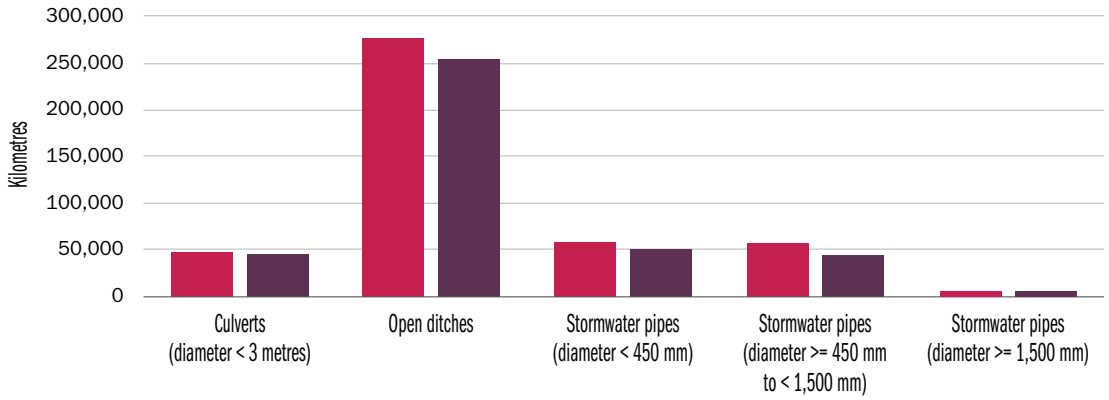
RESULTS BY INFRASTRUCTURE CATEGORY

STORMWATER

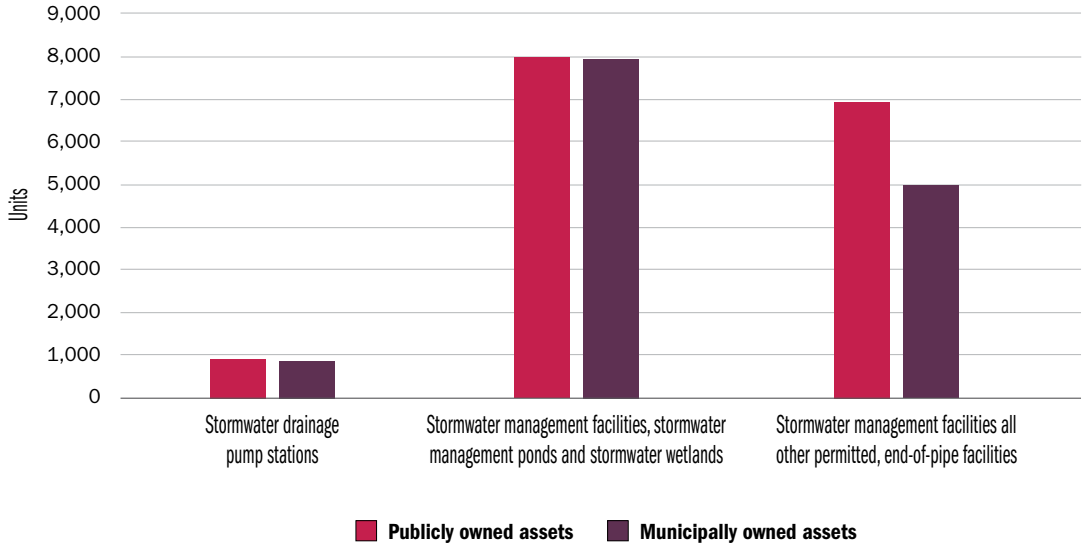
STORMWATER

The stormwater infrastructure assets in our survey included linear stormwater collection systems (i.e., storm water collection pipes, open ditches and culverts less than three meters in diameter) and non-linear assets (i.e., stormwater drainage pump stations; stormwater management facilities, including stormwater management ponds, storm water wetlands and all other permitted end-of-pipe-facilities).

Stormwater: Linear Asset Inventory



Stormwater: Non-linear Asset Inventory



CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

STORMWATER

THE CURRENT STATE

Approximately 40-60% of stormwater infrastructure is in good or very good condition. We don't know the condition of a large portion of stormwater assets because historically, collecting data about their condition was a low-priority activity.

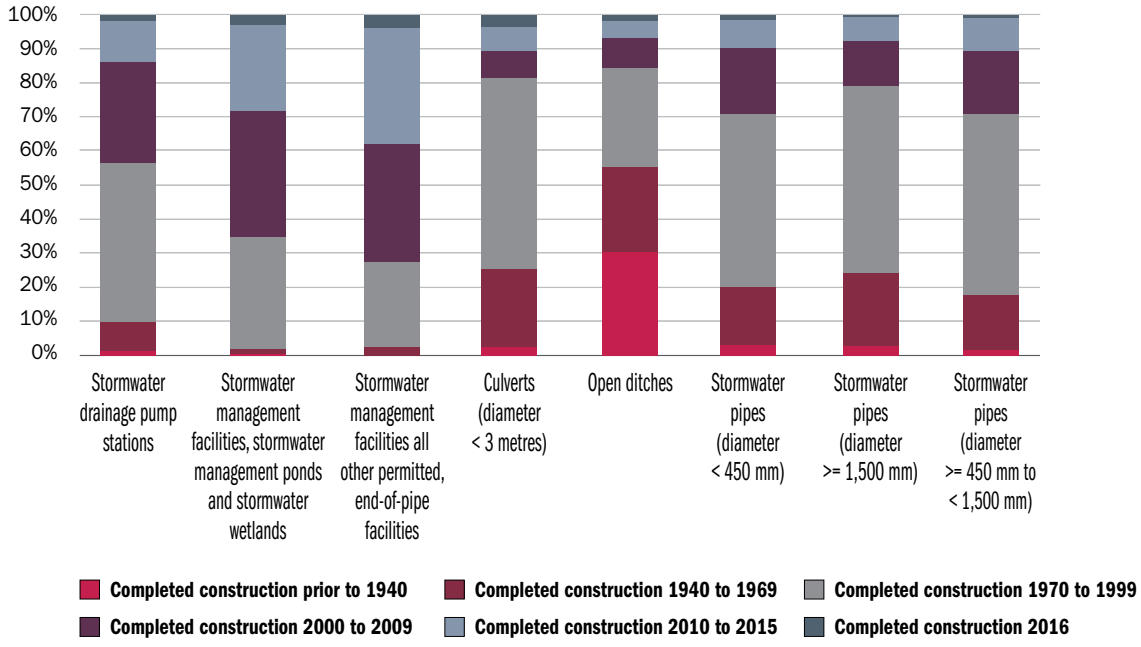
Stormwater management assets were largely built in the last 20 years, and there is a growing focus on understanding their future rehabilitation/replacement needs.

The state of stormwater infrastructure is particularly critical given the impact of climate change. Jurisdictions across Canada are experiencing longer and more intense precipitation events. This has highlighted capacity issues in stormwater infrastructure that go above and beyond the need to rehabilitate existing assets.

We assessed these assets using a defined scale and their age profile.

- Sewers and culverts have an ESL of 70-100 years depending on the material.
- Vertical facilities have an ESL of 50-80 years for structural components, 25 years for mechanical and electrical components.
- ESL of new types of stormwater management facilities is still TBD by the industry.

Stormwater: Publicly Owned Asset Inventory (Completed Construction)

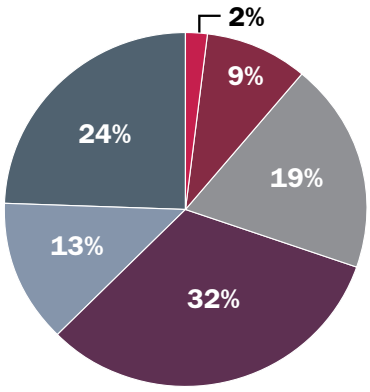


CANADIAN INFRASTRUCTURE REPORT CARD 2019

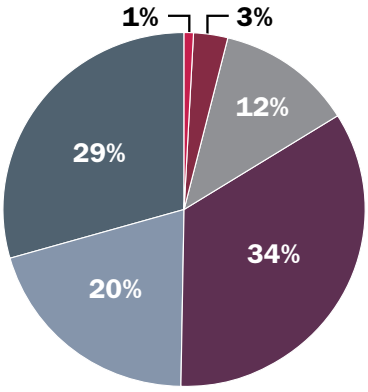
RESULTS BY INFRASTRUCTURE CATEGORY

STORMWATER

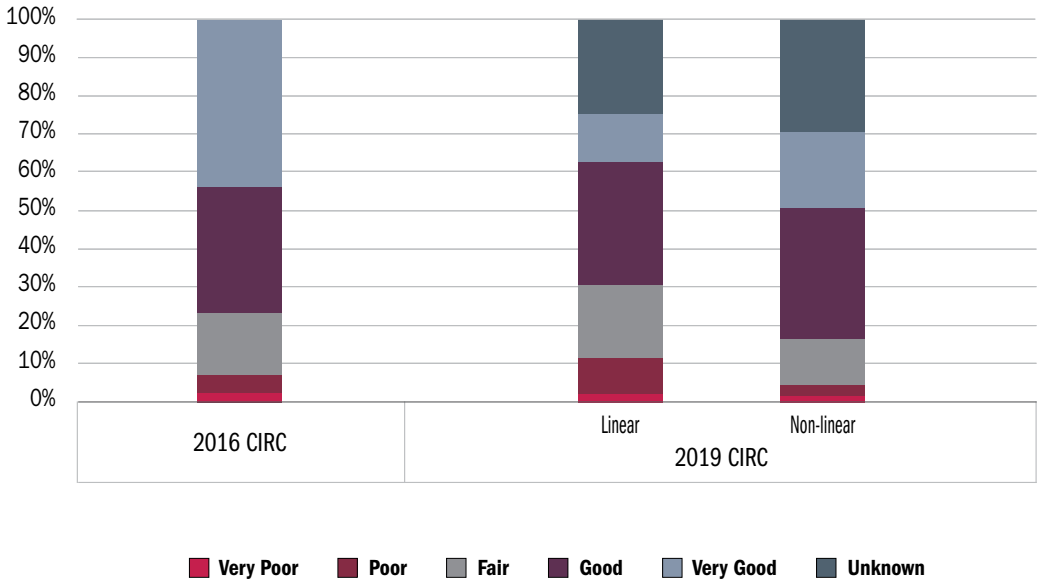
Stormwater:
Overall Asset Condition – Linear



Stormwater:
Overall Asset Condition – Non-linear



Stormwater: Comparison with 2016 Results

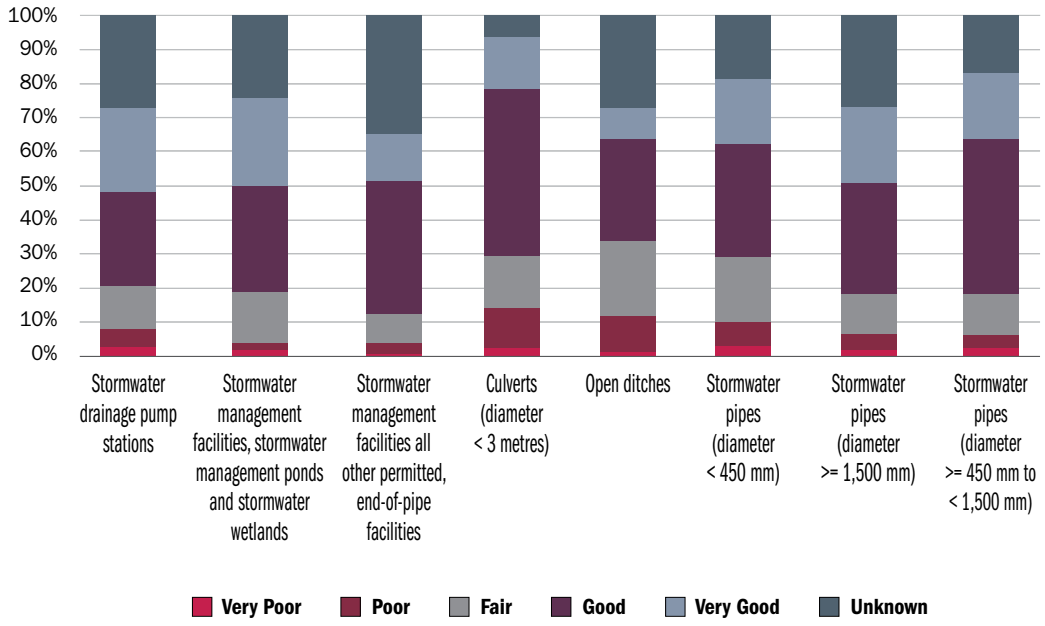


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

STORMWATER

Stormwater: Detailed Asset Condition – Publicly Owned Asset Condition

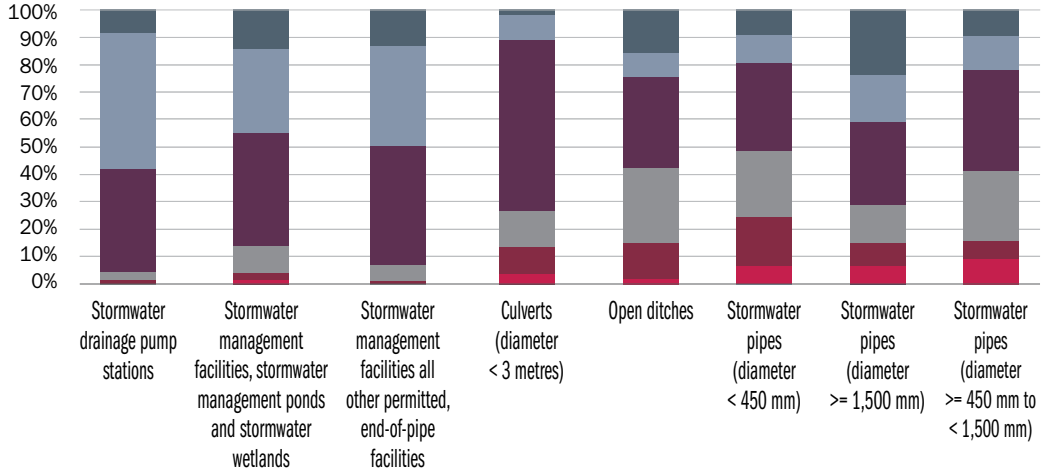


CANADIAN INFRASTRUCTURE REPORT CARD 2019

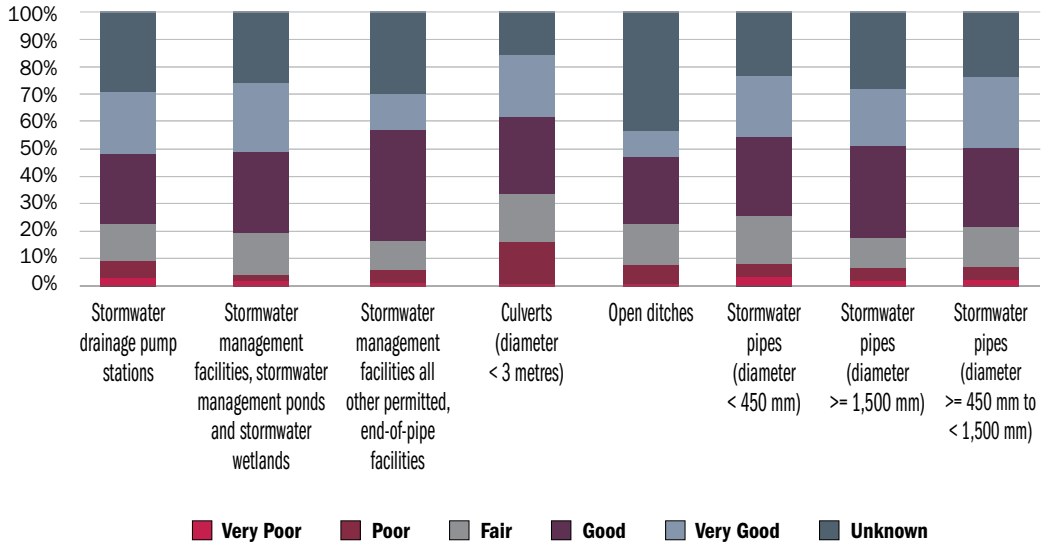
RESULTS BY INFRASTRUCTURE CATEGORY

STORMWATER

Stormwater: Other Relevant Data – Municipally Owned Asset Condition (All Rural Municipalities)



Stormwater: Other Relevant Data – Municipally Owned Asset Condition (All Urban Municipalities)



CANADIAN INFRASTRUCTURE REPORT CARD 2019

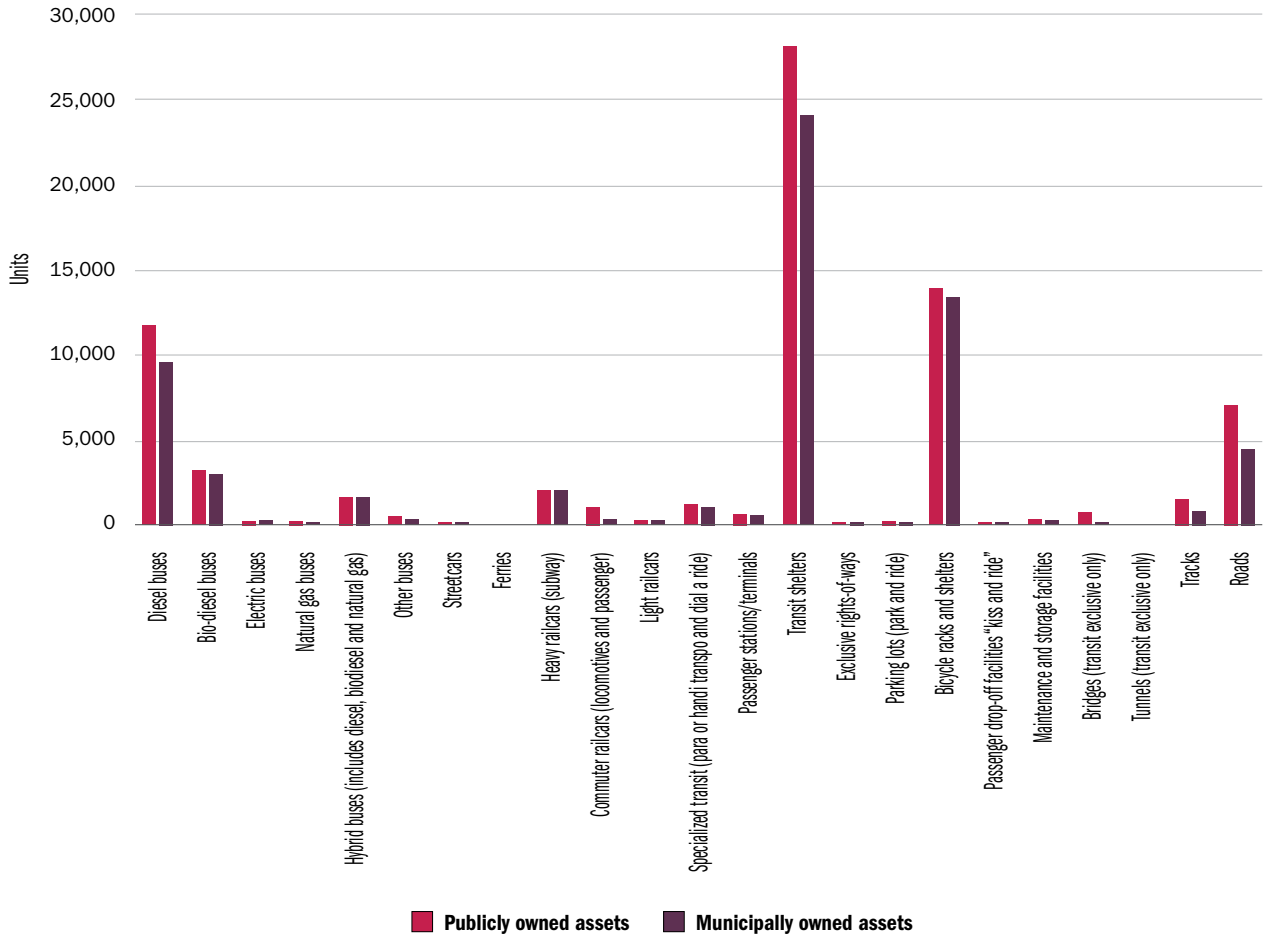
RESULTS BY INFRASTRUCTURE CATEGORY

PUBLIC TRANSIT

PUBLIC TRANSIT

Our survey included rolling stock assets (i.e., buses, streetcars, ferries, heavy railcars, commuter railcars, light railcars, specialized transit) and fixed public transit assets (i.e., passenger stations/terminals, transit shelters, exclusive rights-of-way, parking lots, bicycle racks and shelters, passenger drop-off facilities, maintenance and storage faculties, transit exclusive bridges, tunnels, tracks, roads).

Public Transit: Asset Inventory



CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

PUBLIC TRANSIT

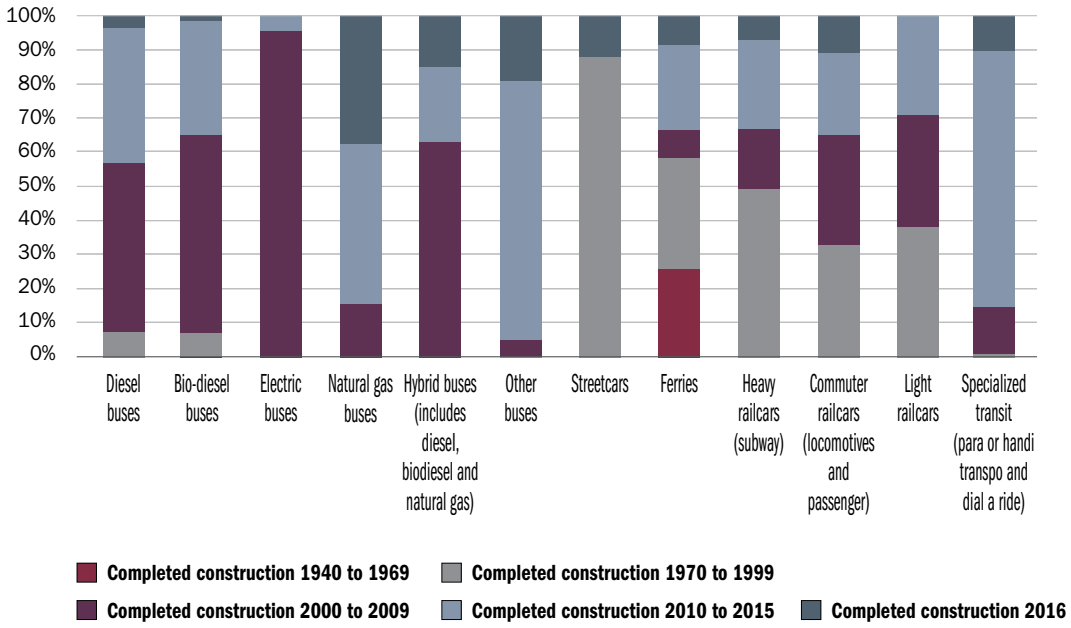
THE CURRENT STATE

The condition of public transit assets varies across this category. Some relatively new types of infrastructure are in good condition and other assets, such as fixed tracks, are in much worse condition.

We assessed these assets using a defined scale and their age profile.

- Public Transit Rolling Stock assets may have a wide range of ESL. For instance buses and other motor vehicles have 7-15 years of ESL, whereas vehicles such as ferries, streetcars, and railcars have 30-40 years of ESL.
- Pubic Transit Fixed Assets may range from 30-75 years of ESL depending on the type of structure and the material they are made of. For instance, a passenger terminal may have 75-100 years of ESL whereas a bus shed may have 30 years of ESL.

Public Transit: Public Owned Rolling Stock Assets (by Purchase Period)

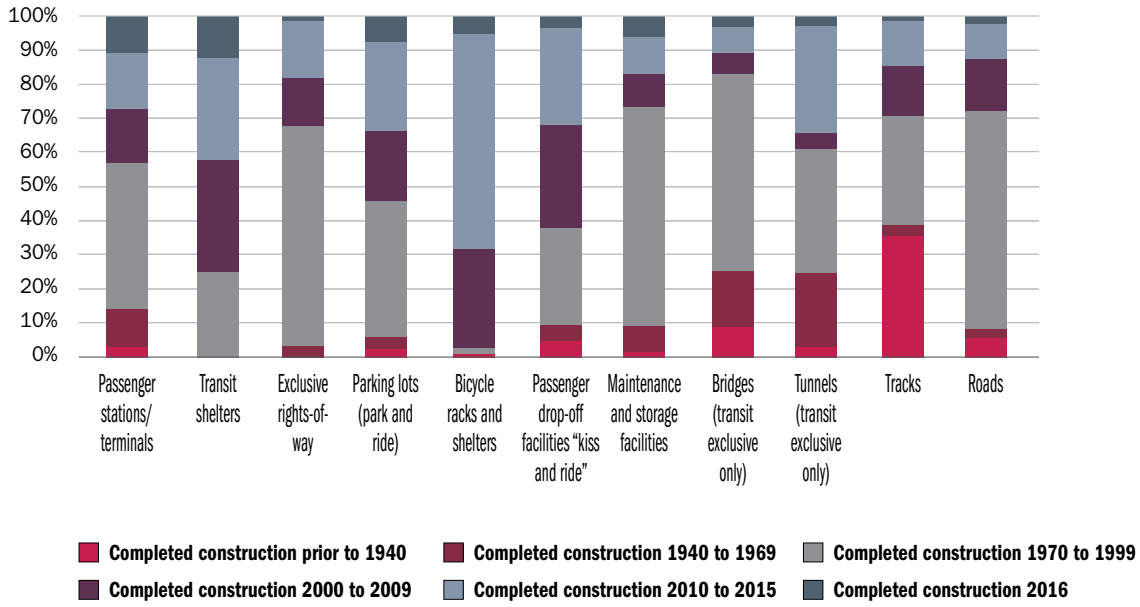


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

PUBLIC TRANSIT

Public Transit: Public Owned Fixed Assets (by Construction/Purchase Period)

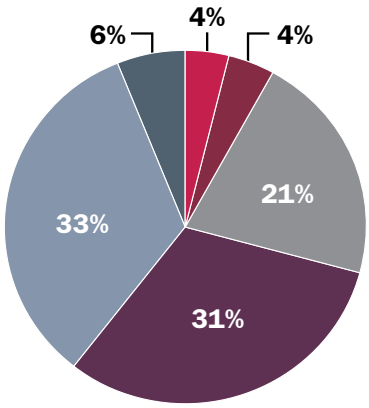


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

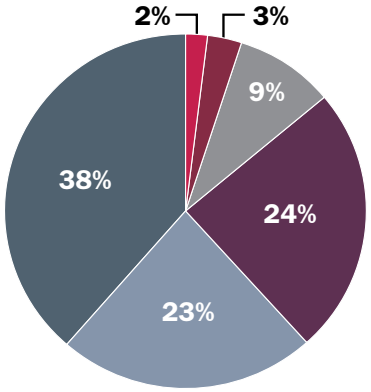
PUBLIC TRANSIT

Public Transit:
Overall Asset Condition – Rolling Assets

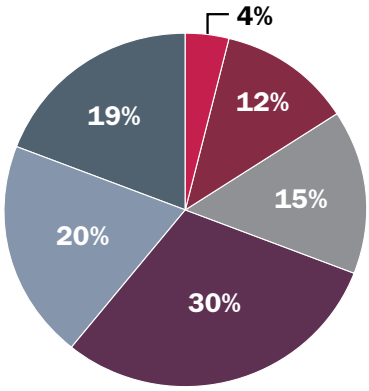




Public Transit:
Overall Asset Condition – Fixed assets



Public Transit:
Overall Asset Condition – Tracks/Roads

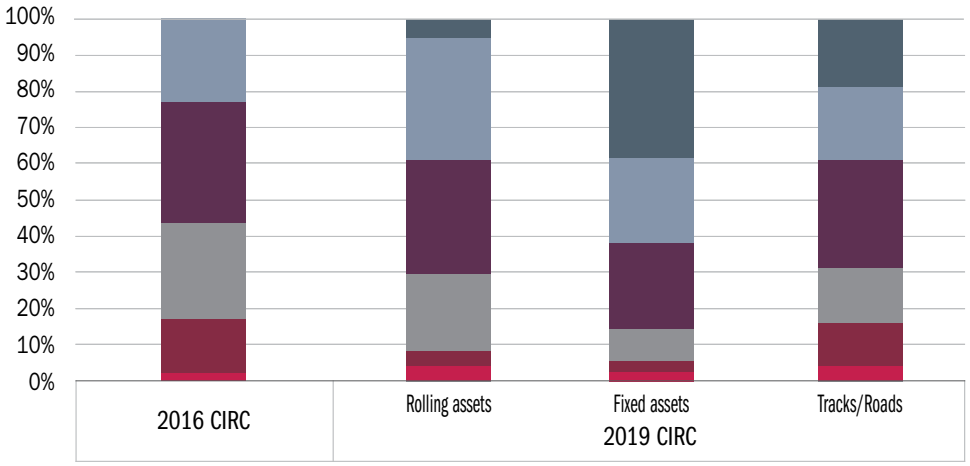


CANADIAN INFRASTRUCTURE REPORT CARD 2019

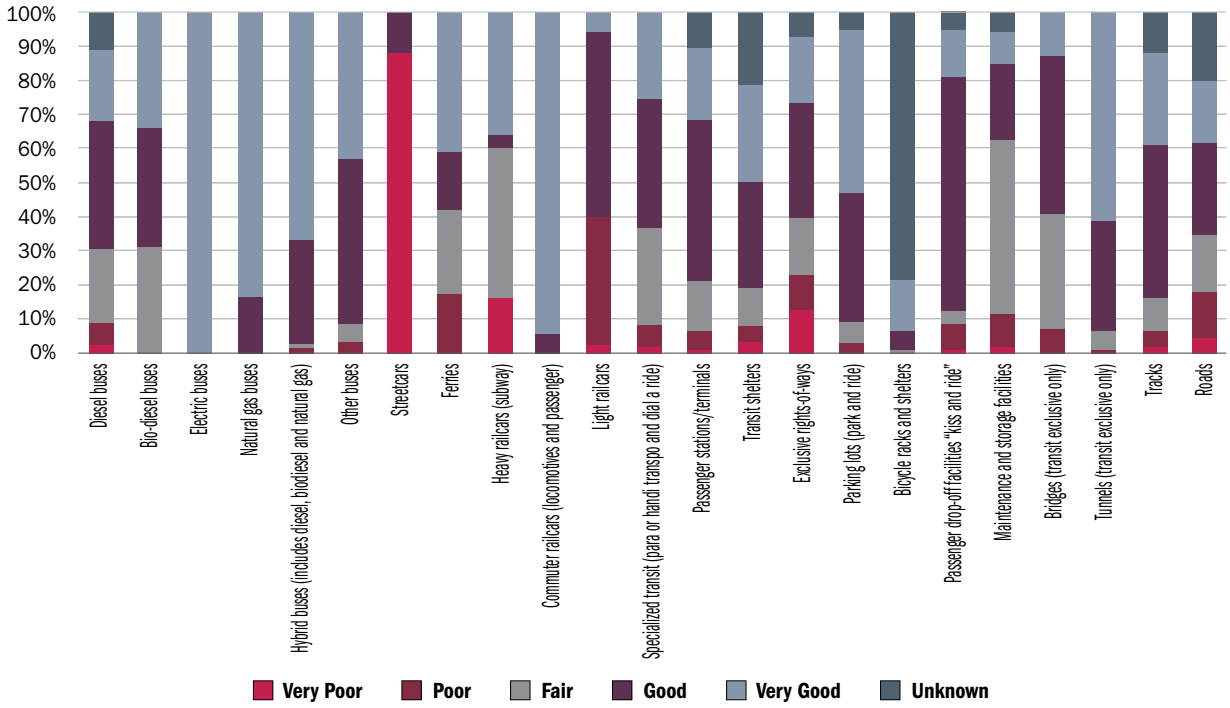
RESULTS BY INFRASTRUCTURE CATEGORY

PUBLIC TRANSIT

Public Transit: Comparison with 2016 Results



Public Transit: Detailed Asset Condition – Publicly Owned Asset Condition

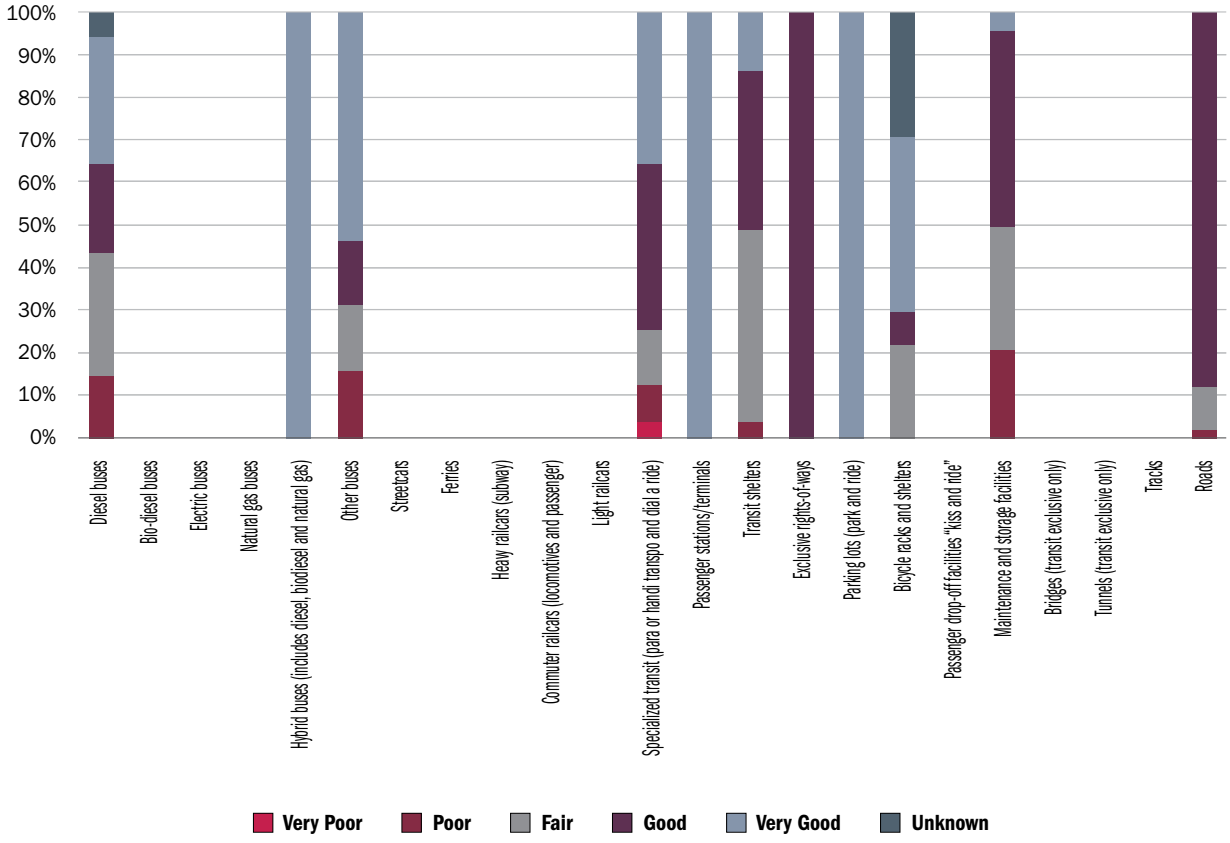


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

PUBLIC TRANSIT

Public Transit: Other Relevant Data – Municipally Owned Asset Condition (All Rural Municipalities)

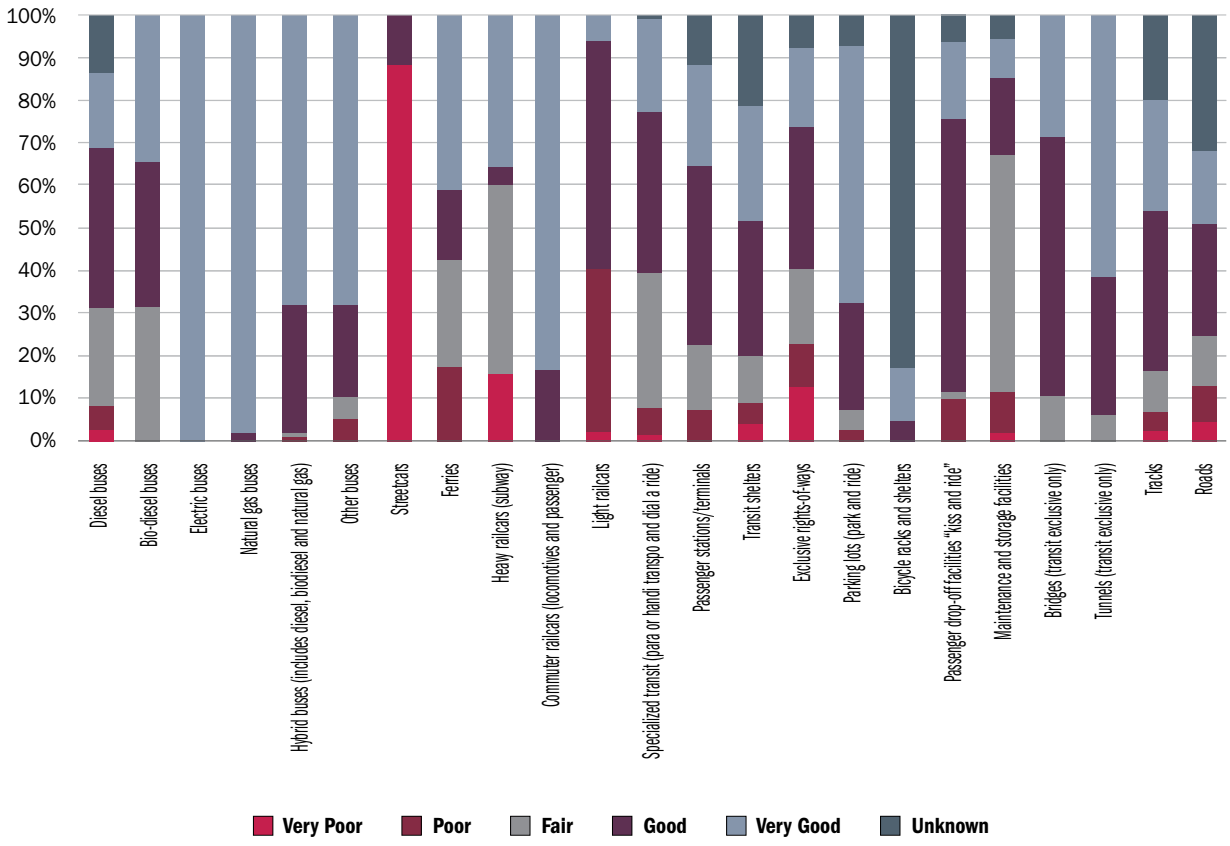


CANADIAN INFRASTRUCTURE REPORT CARD 2019

RESULTS BY INFRASTRUCTURE CATEGORY

PUBLIC TRANSIT

Public Transit: Other Relevant Data – Municipally Owned Asset Condition (All Urban Municipalities)



CANADIAN INFRASTRUCTURE REPORT CARD 2019

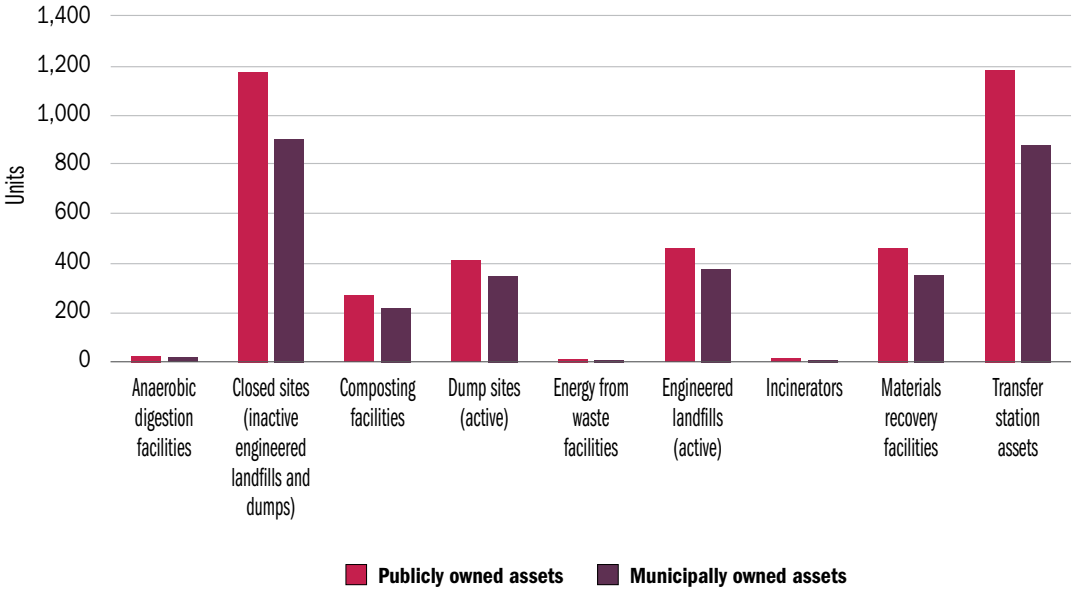
RESULTS BY INFRASTRUCTURE CATEGORY

SOLID WASTE

SOLID WASTE

The solid waste assets in our survey included transfer stations assets, waste diversion assets (i.e., composting facilities, materials recovery facilities, anaerobic digestion facilities) and waste disposal assets (i.e., engineered landfills, dump sites, closed sites, incinerators, energy from waste facilities).

Solid Waste: Asset Inventory



CANADIAN INFRASTRUCTURE REPORT CARD 2019

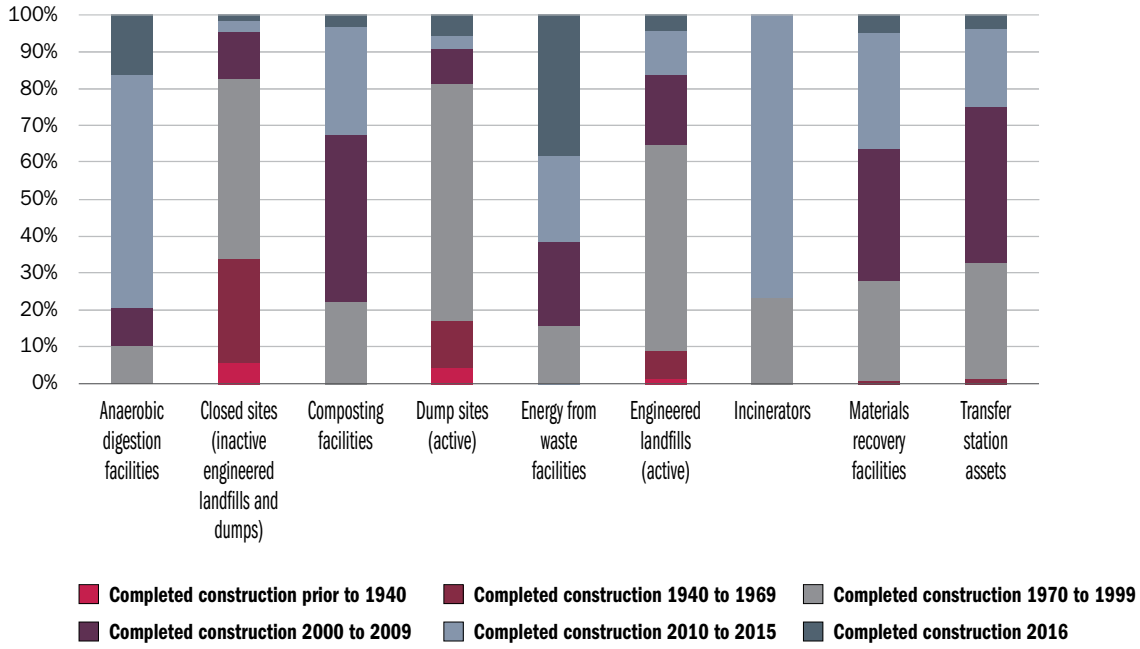
RESULTS BY INFRASTRUCTURE CATEGORY

SOLID WASTE

THE CURRENT STATE

The solid waste assets in our survey included transfer stations assets, waste diversion assets (i.e., composting facilities, materials recovery facilities, anaerobic digestion facilities) and waste disposal assets (i.e., engineered landfills, dump sites, closed sites, incinerators, energy from waste facilities).

Solid Waste: Publicly Owned Asset Inventory (Completed Construction)

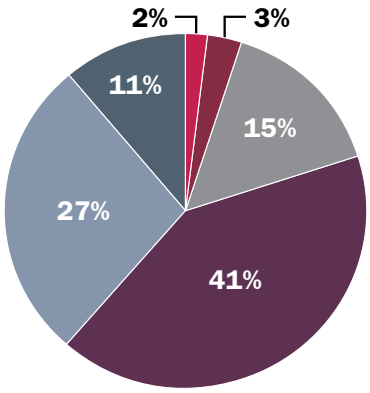


CANADIAN INFRASTRUCTURE REPORT CARD 2019

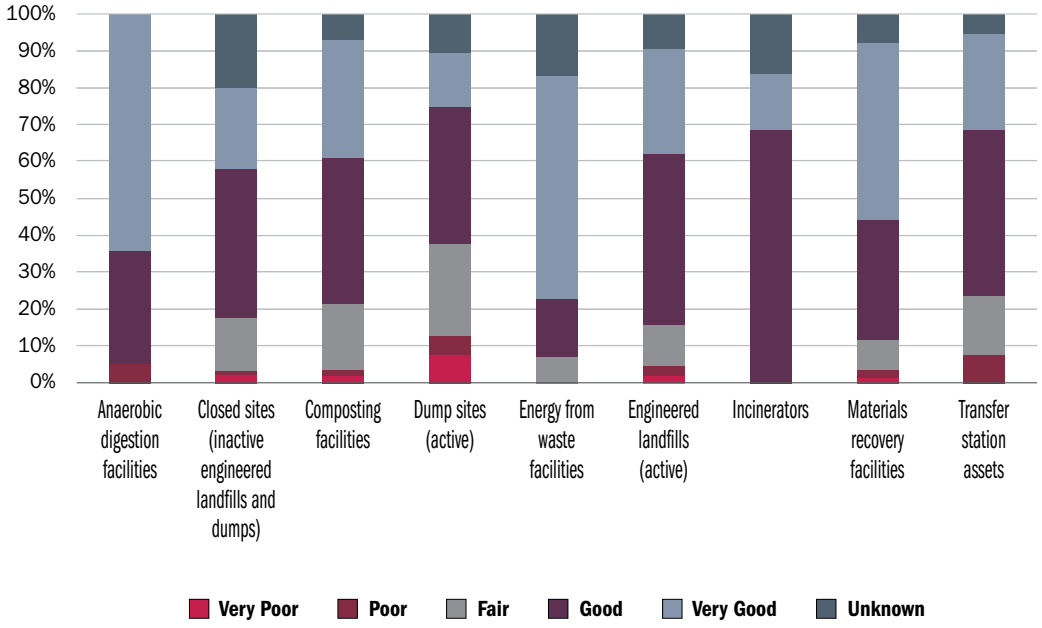
RESULTS BY INFRASTRUCTURE CATEGORY

SOLID WASTE

Solid Waste: Overall Asset Condition



Solid Waste: Detailed Asset Condition

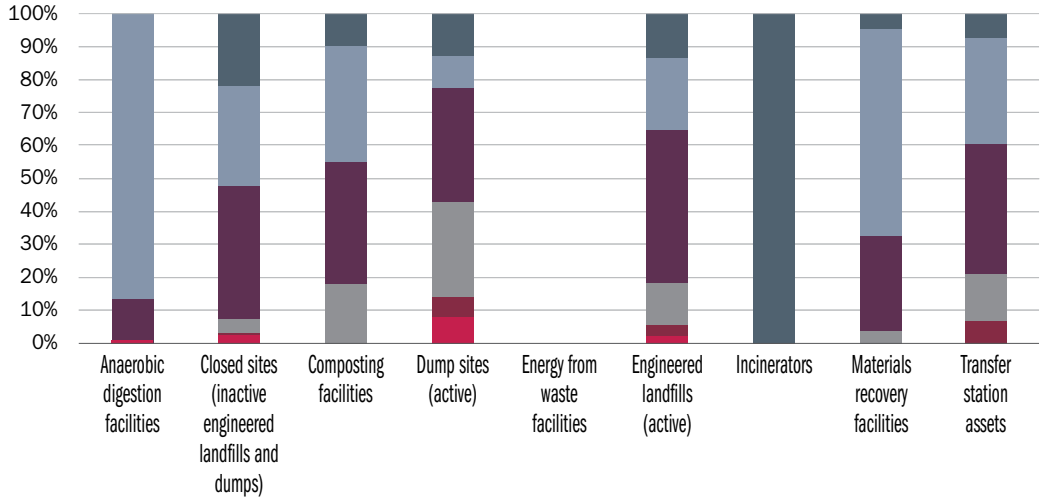


CANADIAN INFRASTRUCTURE REPORT CARD 2019

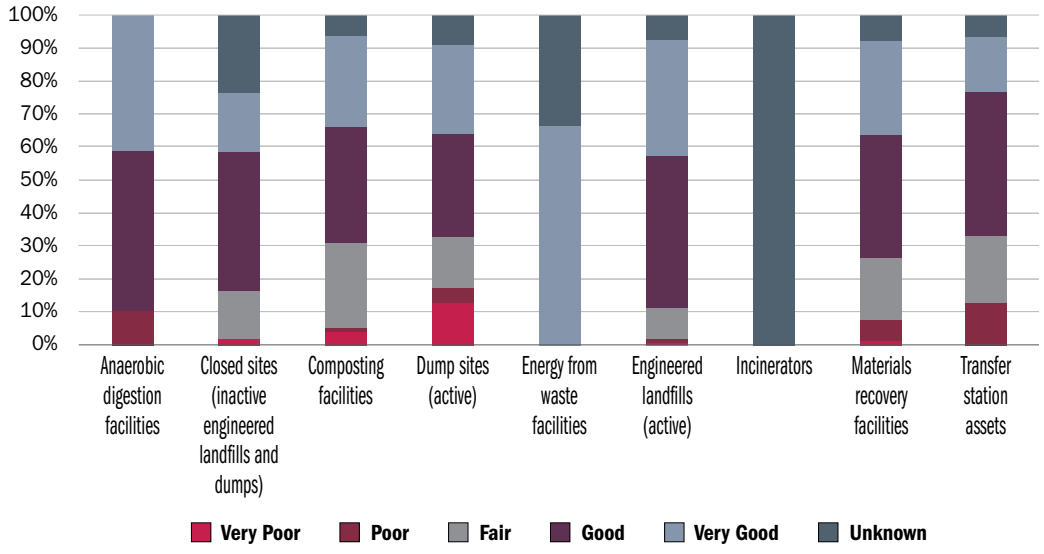
RESULTS BY INFRASTRUCTURE CATEGORY

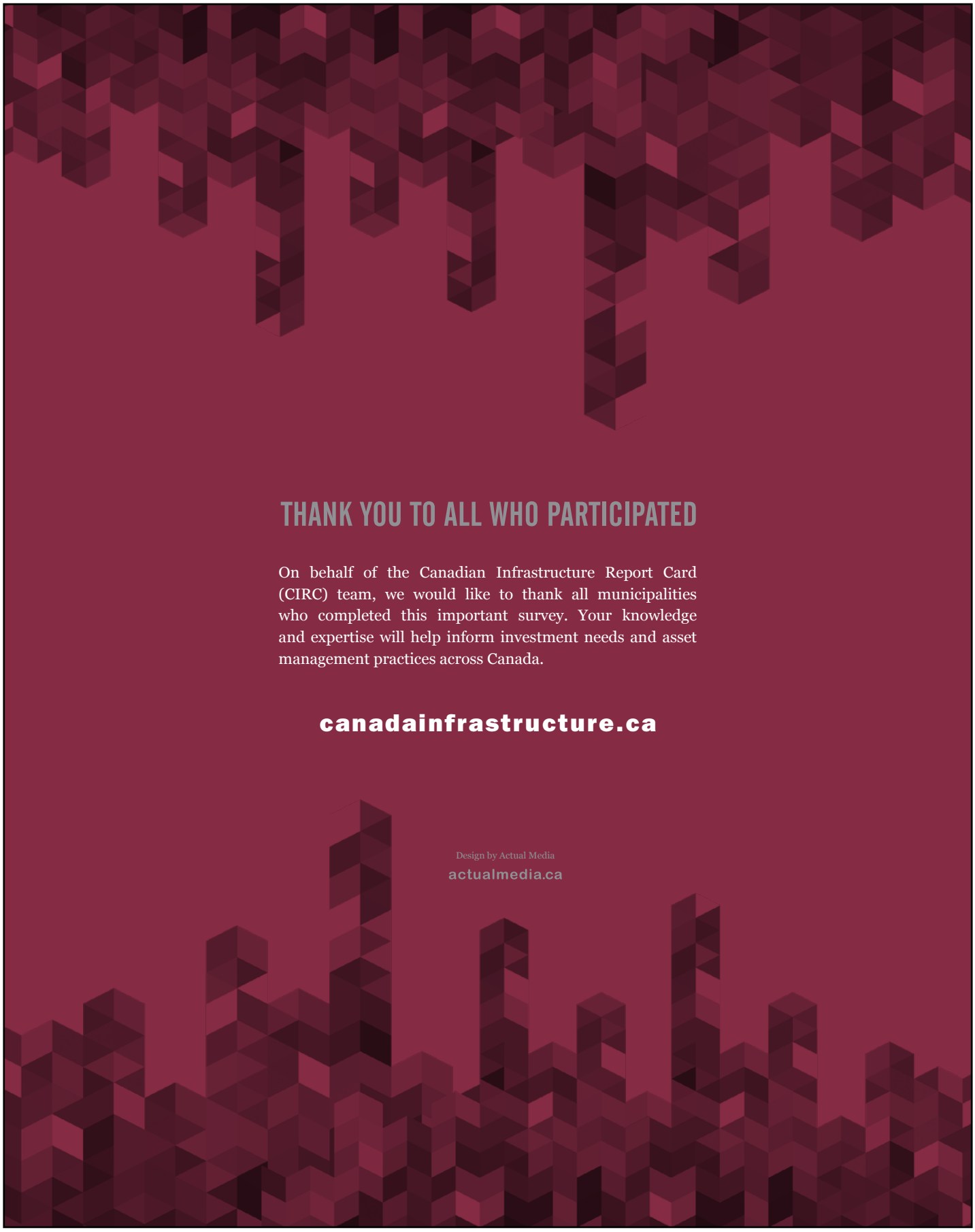
SOLID WASTE

Solid Waste: Other Relevant Data – Municipally Owned Asset Condition (All Rural Municipalities)



Solid Waste: Other Relevant Data – Municipally Owned Asset Condition (All Urban Municipalities)




THANK YOU TO ALL WHO PARTICIPATED
On behalf of the Canadian Infrastructure Report Card (CIRC) team, we would like to thank all municipalities who completed this important survey. Your knowledge and expertise will help inform investment needs and asset management practices across Canada.
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By-Law Number 2019-0034

of

The Corporation of the County of Frontenac

being a by-law to amend By-law No. 2013-0020 (to govern the proceedings of the Council and its Committees, the Conduct of Members and the Calling of Meetings) as it relates to the reading of motions at Council meetings

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Whereas Section 238(2) of the *Municipal Act, 2001, S.O. 2001, c.25, as amend*ed (the Act) provides that Council shall pass a procedure by-law for governing the calling, place and proceedings of meetings;

And Whereas By-law No. 2013-0020, being a bylaw to provide for governing the proceedings of the Council and its committees, the conduct of members and the calling of meetings, was adopted by the Council of the Corporation of the County of Frontenac on May 15, 2013;

And Whereas The Corporation of County of Frontenac deems it expedient to amend By-law No. 2013-0020 as it relates to the reading of motions;

Now Therefore Be It Resolved That the Council for The Corporation of the County of Frontenac hereby enacts as follows:

That Procedural By-law 2013-0020 as amended be further amended as follows:

1. **That** Section 19 – Motions, of the County's Procedural By-law be amended to add a new Section 19.11 as follows:

Motion Considered to be read	19.11	Motions contained in the published agenda will only be read if requested by a member of Council or under the following conditions: a) A member requests a recorded vote on the motion b) Where an amendment to a main motion is made, both the amendment, and the motion as amended Any member of Council may request that a motion be summarized by its author. Motions not contained in the published agenda shall be read.

That this by-law shall come into force and take effect on the date of final passing.

Read a First and Second Time this 16th day of October, 2019.

Read a Third Time, Signed, Sealed and Finally Passed this 16th day of October, 2019.

The Corporation of the County of Frontenac

Ron Higgins, Warden	Jannette Amini, Clerk

By-Law No. 2019-0035

of

The Corporation of the County of Frontenac

being a by-law to establish a fees and fares schedule for the Frontenac-Howe Islander Ferry operation for the year 2020

Whereas Section 391 of the *Municipal Act, 2001, S.O. 2001, c.25, as amended* authorizes a municipality to impose fees or charges on persons:

(a) for services or activities provided or done by or on behalf of it;

(b) for costs payable by it for services or activities provided or done by or on behalf of any other municipality or any local board; and

(c) for the use of its property including property under its control.

And Whereas the Corporation of the County of Frontenac operates a ferry to and from Howe Island known as the Frontenac-Howe Islander Ferry;

And Whereas the Council of the County of Frontenac deems it expedient to adopt the following fees and fares in relation to the Frontenac-Howe Islander Ferry operation for the year 2020;

Now Therefore Be It Resolved That the Council of the County of Frontenac hereby adopts the following fees and fares structure in relation to the Frontenac-Howe Islander Ferry operation for the year 2019:

1. The 2019 pass shall provide access to both the County and Township operated ferries.

2. A common fee structure shall apply for both the County and Township operated ferries.

4. Fees shall only be collected when vehicles are coming onto Howe Island from either the County or Township operated ferry.

5. The County and the Township will continue to make available temporary passes to provide for short term requirements, which can be arranged at the Frontenac-Howe Islander Ferry office or the Township of Frontenac Islands' municipal office on Howe Island.

6. The discounted tickets to provide to visiting friends and family will be continued in 2020. One book of 10 tickets will be sold per pass holder for a price of $45.00 to accommodate this requirement.

7. 2020 Fees and Fares shall be established as follows:

Annual pass for a single vehicle	* $265.00
One additional annual pass for a single vehicle per household **	* $70.00
Two way trip for single vehicle	$6.00
Two way trip for single vehicle with trailer in tow	$15.00
Additional charges for annual pass holder with trailer in tow	$6.00
Two way trip for any heavy vehicle	$15.00
Replacement fee per annual pass (Charged for every replacement)	$25.00

Definitions

Single Vehicle

Single vehicle will include a car, motorcycle, van, SUV, or pickup truck.

Heavy Vehicle

Any vehicle greater than 6,000 kgs and/or 7 metres (23 feet).

* These fees will be discounted by 10% for applicants who can show documentation indicating they are 65 years of age or older during 2020.

** A second pass for $70.00 will only be available if the second vehicle involved is registered to:

- The same individual who purchased the first full-price 2020 annual pass;
- An individual who is married to or is in a common-law relationship with the full-price 2020 annual pass purchaser;
- The dependent child of a full-price 2020 annual pass purchaser or the full-price pass purchaser's married or common-law spouse who is under the age of 18;
- The dependent child of a full-price 2020 annual pass purchaser or the full-price pass purchaser's married or common-law spouse who is over the age of 18 only if the dependent child has both the same permanent address as the full-price 2020 annual pass purchaser and is attending school full-time.

8. Documentation must be provided that satisfies the staff person issuing the passes.
9. A third pass at a reduced rate is not available.
10. Township of Frontenac Islands' vehicles and vehicles which, through previous notification, the Township of Frontenac Islands identifies as undertaking Township business are exempted.

11. A memorandum of understanding addressing the details of this arrangement has been executed to address the sharing of revenues between the County and the Township.

12. That this by-law shall come into force and take effect on the date of final passing.

Read a first and second time this 16th day of October, 2019.

Read a third time and finally passed this 16th day of October, 2019.

The Corporation of the County of Frontenac

Ron Higgins, Warden

Jannette Amini, Clerk

By-Law No. 2019-0036

of

The Corporation of the County of Frontenac

being a by-law to adopt a 2020 Legislated Land Ambulance Response Time Performance Plan

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Whereas Section 5 of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, gives Council the authority to exercise the powers of the municipal corporation and requires that the powers of every Council are to be exercised by by-law;

And Whereas on July 31, 2008 changes were made to the *Ambulance Act, Ontario Regulation 267/08, amending O. Reg. 257/00* with the heading "Section 22: Part VIII, Response Time Performance Plans, Sections 22 and 23";

And Whereas the County is to submit its Response Time Performance Plan to the Ministry of Health and Long-Term Care (MOHLTC), Emergency Health Services Branch Director no later than October 1 of each year (Section 23 (5)) including performance targets for sudden cardiac arrest, CTAS 1, 2, 3, 4, 5, where CTAS is the Canadian Triage and Acuity Scale, a priority setting scale to describe the severity of a patient's condition;

And Whereas by March 31 of each year the same table with the actual times achieved in the year previous will be reported to the MOHLTC;

Now Therefore Be It Resolved That the Council of the County of Frontenac hereby adopts the following land ambulance response time performance plan for the calendar year of 2020, from January 1 to December 31:

1. **That** the County of Frontenac set the following criteria under Regulation 257/00, as amended, for its response time targets for 2019:

    i. Designated Delivery Agent (DDA) - **Sudden Cardiac Arrest**
    48% percent of the time, within 6 minutes from the time ambulance dispatch conveys the call information to the paramedic, the **County of Frontenac** will endeavour to have a person equipped and ready to use an AED at the location of a patient determined to be in sudden cardiac arrest.

    ii. EMS Designated Delivery Agent - CTAS 1
    70% percent of the time, within 8 minutes from the time ambulance dispatch conveys the call information to the paramedic, the **County of Frontenac** will endeavour to have a PARAMEDIC as defined by the *Ambulance Act* and duly equipped at the location of a patient determined to be CTAS 1.

iii. EMS Designated Delivery Agent - CTAS 2, 3, 4, 5
The **County of Frontenac** will endeavour to have a **Paramedic** as defined by the *Ambulance Act* and duly equipped at the location of a patient determined to be CTAS 2, 3, 4, 5 within a period of time determined appropriate by the DDA and noted below in Table 1, or as resources permit (level of effort):

Table 1, CTAS 2, 3, 4, 5 EMS Delivery Agent Commitment

CTAS	Target Time from Paramedic Received Until on Scene	% Target
2	10 minutes	75%
3	10 minutes	75%
4	10 minutes	75%
5	10 minutes	75%

2. **That** this by-law shall take effect on the date of its final passing.

Read a first and second time this 16th day of October, 2019.

Read a third time, finally passed, signed and sealed the 16th day of October, 2019.

The Corporation of the County of Frontenac

Ron Higgins, Warden

Jannette Amini, Clerk

By-Law No. 2019-0037

of

The Corporation of the County OF Frontenac

being a by-law to confirm all actions and proceedings of County Council on October 16, 2019

Whereas Section 8 of the *Municipal Act, S.O. 2001, c.25* and amendments thereto provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under the *Municipal Act* or any other *Act*; and;

Whereas Subsection 2 of Section 11 of the *Municipal Act, S.O. 2001, c.25* and amendments thereto provides that a lower-tier municipality and an upper-tier municipality may pass by-laws respecting matters within the spheres of jurisdiction described in the Table to Subsection 2 subject to certain provisions, and;

Whereas Section 5 of the *Municipal Act, S.O. 2001, c. 25* and amendments thereto provides that a municipal power, including a municipality's capacity, rights, powers and privileges under Section 8 shall be exercised by its council and by by-law unless the municipality is specifically authorized to do otherwise; and;

Whereas the Council of the County of Frontenac deems it expedient to confirm its actions and proceedings;

Now Therefore Be It Resolved That the Council of the Corporation of the County of Frontenac hereby enacts as follows:

1. **That** all actions and proceedings of the Council of the County of Frontenac taken at its regular meeting held on October 16, 2019 be confirmed as actions for which the municipality has the capacity, rights, powers and privileges of a natural person.

2. **That** all actions and proceedings of the Council of the County of Frontenac taken at its regular meeting held on October 16, 2019 be confirmed as being matters within the spheres of jurisdiction described in Subsection 2 of Section 11 of the *Municipal Act, S.O. 2001, c.25* and amendments thereto.

3. **That** all actions and proceedings of the Council of the Corporation of the County of Frontenac taken at its regular meeting held on October 16, 2019 except those taken by by-law and those required by by-law to be done by resolution are hereby sanctioned, ratified and confirmed as though set out within and forming part of this by-law.

4. **That** this by-law shall come into force and take effect as of the final passing thereof.

Read a First and Second Time this 16th day of October 2019.

Read a Third Time and Finally Passed, Signed and Sealed this 16th day of October, 2019.

The Corporation of the County Of Frontenac

Ron Higgins, Warden

Jannette Amini, Clerk