Region of Queens Municipality Regular Council
Tuesday, December 9, 2025

The meeting will begin directly after the Years of Service Awards Presentation scheduled for 9:00 a.m. The public is welcome to be in the gallery during the presentation.

Agenda

1.0 Call to Order, Land Acknowledgement, and Years of Service Award Recipients

1.1 Years of Service Awards Recipients

2.0 Approval of Agenda

3.0 Adoption of Minutes

3.1 Regular Council Meeting – November 25, 2025
3.2 Special Council Meeting – November 27, 2025

4.0 Public Comment

5.0 Delegations and Presentations

6.0 Unfinished Business

7.0 Staff Reports

7.1 South Shore Regional Airport - Asset Management Plan

7.2 Financial Report - 2025-2026 Quarter 2
7.3 South Shore Regional Library Board Resignation
7.4 Wastewater System Assessment Reports
7.5 Dry Hydrant Construction
7.6 Council Remuneration
7.7 Interim Review of Municipal Planning Strategy and Land Use Bylaw

8.0 Bylaws and Policies

8.1 Administrative Policy No. 59 – Sewer Fees
8.2 Administrative Policy No. 60 – Solid Waste Fees
8.3 Operational Policy No. 99 – Winter Maintenance

9.0 Correspondence for Action

9.1 Dogwood Lane Request

10.0 Correspondence for Information

11.0 Report from In Camera

12.0 Mayor's Report

13.0 Council Reports

14.0 New Business

15.0 In Camera

15.1 Legal
15.2 Contract Negotiations
15.3 Personnel
15.4 Personnel

16.0 Adjournment

Region of Queens Municipality
2025 Years of Service Awards Recipients

5 Years

- Tammy Weare – Hillsview
- Terra Whynot-Gibson – Hillsview
- Elise Johnston – Infrastructure
- Linda Karlsen – Infrastructure
- Michael Peach – Infrastructure
- Christine Whynot - Queens Place

10 Years

- Steve Kennedy – Infrastructure

15 Years

- KayLee Oickle – Finance
- Rachel Joudrey – Hillsview
- James Rhyno – Infrastructure
- Larry D. Whynot – Infrastructure

20 Years

- Tracy Baker – Hillsview
- Steven Parnell – Infrastructure
- Jeff Cunningham – Infrastructure

25 Years

- Paulette Smith – Finance
- David Henderson – Infrastructure

35 Years

- Jane Lawson - Hillsview

Region of Queens Municipality Regular Council
Tuesday, November 25, 2025
4:00 p.m.

Minutes

Present: Mayor Scott Christian, Chair
Deputy Mayor Maddie Charlton
Councillor Roberta Roy
Councillor Courtney Wentzell
Councillor Vicki Amirault
Councillor Jack Fancy
Councillor Stewart Jenkins
Councillor Wanda Carver

Staff: Willa Thorpe, Chief Administrative Officer
Angela Green, Municipal Clerk

1.0 Call to Order

Mayor Christian called the meeting to order at 4:00 p.m.

2.0 Approval of Agenda

It was moved by Councillor Amirault and seconded by Councillor Jenkins:

THAT the Council of Region of Queens Municipality approve the November 25, 2025 agenda as presented.

MOTION CARRIED unanimously.

3.0 In Camera

It was moved by Councillor Jenkins and seconded by Deputy Mayor Charlton that the Council of Region of Queens Municipality move to Closed Session at 4:03 p.m. to discuss the following five items:

3.1 Personnel
3.2 Contract Negotiation
3.3 Property Matter
3.4 Property Matter
3.5 Contract Negotiation

It was moved by Deputy Mayor Charlton and seconded by Councillor Roy that the Council of Region of Queens Municipality return to Open Session at 4:54 p.m.

While In Camera, Council was unable to conclude discussion of all items on the agenda. Mayor Christian therefore directed that the remaining matters be addressed in a second Closed Session to be held at the end of the meeting.

Council recessed for dinner break at 4:55 p.m.

Mayor Christian called the meeting back to order at 5:30 p.m. He outlined the new evening meeting format, noting that Closed Session (In Camera) begins at 4:00 p.m., with the Open (Public) Session commencing at 5:30 p.m.

It was moved by Councillor Jenkins and seconded by Councillor Roy that Item 12.2 – Property Matter be added to the agenda.

MOTION CARRIED unanimously.

4.0 Adoption of Minutes

4.1 November 12, 2025 – Regular Council Meeting Minutes

It was moved by Councillor Carver and seconded by Deputy Mayor Charlton:

> **THAT** the Council of Region of Queens Municipality adopt the November 12, 2025 Regular Council Meeting minutes as circulated.

MOTION CARRIED unanimously.

4.1 November 12, 2025 – Public Hearing Minutes

It was moved by Councillor Amirault and seconded by Councillor Carver:

> **THAT** the Council of Region of Queens Municipality adopt the November 12, 2025 Public Hearing minutes as circulated.

MOTION CARRIED unanimously.

5.0 Public Comment

1. Dr. Deniage McDonnell, Liverpool

Dr. McDonnell appeared before Council to express concerns regarding ongoing bylaw violations at a neighbouring property. She stated that the current owners, as well as the previous owner, have engaged in activities that she believes contravene municipal bylaws, including residing in a building zoned for commercial use, storing and using a motor home in a prohibited manner, undertaking unauthorized development of a parking area, and not maintaining the required abutting setback between commercial and residential uses. She advised Council that she has filed a formal complaint with the Municipality's Department of Land Use and noted that the issues have persisted over time and have intensified

under the new ownership. Dr. McDonnell also expressed concern that conditions will worsen with the onset of winter. In addition, Dr. McDonnell reiterated her opposition to the proposed amendment to the Land Use Bylaw that would permit greater residential space within commercial buildings in the downtown area.

2. Dave White, South Brookfield

Mr. White appeared before Council to express his support for staff's recommendation to give First Reading to Bylaw 28 – *Designation of Road Trails on Municipal Roadways*. He advised that he is the President of the Queens County ATV Association, Secretary of the Queens Rails to Trails Association, and a member of the provincial board of ATVANS. Mr. White informed Council that the organizations have been approached by the South Shore Tourism Cooperative to collaborate on tourism initiatives once the designated routes are established. He also reminded Council that the costed items identified in the initial staff report accompanying the proposed Bylaw will need to be addressed. He noted that the group has met with contractors regarding the bypass trail and has received two of three expected quotes, both of which are under the amount originally allotted. The group has begun assessing the required work and has forwarded signage information to the Municipality for review.

6.0 Delegations and Presentations

There were no Delegations or Presentations for this meeting.

7.0 Unfinished Business

There was no Unfinished Business for this meeting.

8.0 Staff Reports

8.1 Appointment of Auditors

The current agreement for Audit Services expired on March 31, 2024. A Request for Proposal for Audit Services was issued on the Nova Scotia Procurement site on October 10, 2025, and two submissions were received: Doane Grant Thornton (incumbent) and BDO Canada LLP. The Audit and Internal Control Committee reviewed the proposals at its meeting on November 10, 2025, and recommends that Council appoint Doane Grant Thornton as the Municipal Auditor for the 2025–2026 fiscal year.

It was moved by Councillor Jenkins and seconded by Councillor Fancy:

THAT the Council of Region of Queens Municipality appoints Doane Grant Thornton as Municipal Auditors for the 2025-2026 fiscal year.

MOTION CARRIED unanimously.

8.2 Appointment of Development Officer

The *Municipal Government Act* requires that Council appoint a Development Officer to administer the Municipality's Land Use Bylaw and Subdivision Bylaw. Staff recommend that Council appoint Rebecca Zolkower to the position of Development Officer.

It was moved by Councillor Jenkins and seconded by Councillor Carver:

THAT the Council of Region of Queens Municipality appoint Rebecca Zolkower as a Development Officer to administer the Municipality's Land Use Bylaw and Subdivision Bylaw.

MOTION CARRIED unanimously.

9.0 Bylaws and Policies

9.1 First Reading of Bylaw 28 – Road Trails Designation

As outlined in Section 5(2) of the *Road Trails Act*, the designation of road trails, proposed routes, and any future designations must be established through bylaw and subsequent bylaw amendments. Staff therefore recommend that Council introduce and give First Reading to Bylaw No. 28 – Designation of Road Trails on Municipal Roadways.

It was moved by Councillor Wentzell and seconded by Councillor Roy:

> **THAT** the Council of Region of Queens Municipality give First Reading to Bylaw No. 28 – Designation of Road Trails on Municipal Roadways, a bylaw respecting the designation and regulation of road trails on municipal roadways within Region of Queens Municipality.

MOTION CARRIED unanimously.

9.2 Amendments to Administrative Policy 16 – Building Permit Fees

The Region of Queens Municipality is a partnering municipality in a Shared Building Inspection Services agreement. One of the fundamental principles of this collaboration is the establishment of a standard level of building inspection service in the South Shore region. Part of this standardized level of service includes establishing a consistent method of calculating permit fees. A key component of this Shared Service is the development and implementation of a digital permitting system, which requires a single method for calculating fees. In discussions with the other participating Municipal units, it was felt that a system based on the dollar value of a project would be the most appropriate. Staff recommended Council adopts the amended Administrative Policy No. 16 – Building Permit Fees.

Council asked Director MacLeod several clarifying questions regarding the proposed new fees and the implementation timeline for the new electronic permitting system. Council expressed concerns that many of the recommended fees are lower than the Municipality's current fees, making it difficult to understand the financial implications of adopting the proposed schedule. Council requested additional information, including data on projected revenues based on the various examples outlined in the report. Members noted that they do not yet have sufficient information on the true costs of building permitting and inspection to consider adopting the policy as presented and emphasized the importance of avoiding undue impacts on the general tax ratepayer, while recognizing that full cost recovery may not be achievable.

It was moved by Deputy Mayor Charlton and seconded by Councillor Jenkins:

> **THAT** the Council of Region of Queens Municipality requests that staff include additional revisions to Administrative Policy No. 16 – Building Permit Fees.

MOTION CARRIED unanimously.

It was moved by Deputy Mayor Charlton and seconded by Councillor Jenkins:

> **THAT** the Council of Region of Queens Municipality directs staff to bring back a report to address the fees in Policy 7 – Fees for Planning Services.

MOTION CARRIED unanimously.

9.3 Second Reading of Amendment to Bylaw 24 – Land Use

Per Section 205 of the *Municipal Government Act*, all bylaws respecting planning documents must be read twice prior to adoption. Staff recommend that section 17.2.1(vi) of the draft Bylaw Respecting Amendments to the Region of Queens Municipality

Land Use Bylaw be removed, as per our solicitor's advice. Staff also recommend that Council give second reading to a bylaw respecting amendments to the Land Use Bylaw to change the site plan approval provisions for dwellings in commercial buildings to allow for greater ground floor area to be utilized for residential uses.

It was moved by Deputy Mayor Charlton and seconded by Councillor Amirault:

> **THAT** the Council of Region of Queens Municipality recommend that section 17.2.1(vi) of the draft Bylaw Respecting Amendments to the Region of Queens Municipality Land Use Bylaw be removed and section 17.2.1 be renumbered accordingly.

MOTION CARRIED unanimously.

It was moved by Deputy Mayor Charlton and seconded by Councillor Jenkins:

> **THAT** the Council of Region of Queens Municipality give second reading to a Bylaw Respecting Amendments to the Region of Queens Municipality Land Use Bylaw to change the site plan approval provisions for dwellings in commercial buildings to allow for greater ground floor area to be utilized for residential uses.

MOTION CARRIED with seven (7) in favour, one (1) opposed.

Council recessed at 6:27 p.m., and reconvened at 6:36 p.m.

10.0 Correspondence for Action

There was no Correspondence for Action.

11.0 Correspondence for Information

There was no Correspondence for Information.

12.0 Report from In Camera

12.1 Property Matter

Mayor Christian called on the Municipal Clerk to give background on this item. Ms. Green stated that during the In Camera session earlier in the meeting, Council received a staff report concerning the property at 89 Main Street in Liverpool, identified as PID 70025374. Council then reviewed background information related to the fire and subsequent cleanup, the outstanding charges owed to the Municipality, the appraisal and survey work completed, and the legislative authority that permits a municipality to expropriate land. Council also discussed staff's recommendation to proceed with expropriation of the property in order to support future intersection improvements at Main and School Streets and confirmed that the property owner was provided notice of this meeting and offered the opportunity to appear before Council today. Council was then prepared to consider the matter in open session.

It was moved by Councillor Wentzell and seconded by Deputy Mayor Charlton:

THAT Council for Region of Queens Municipality authorizes, approves and directs the expropriation for the Municipality of property identified as PID# 70025374, located at 89 Main Street in Liverpool.

AND THAT the Municipality shall cause to be deposited with the Registrar of Deeds the required expropriation documents, including a certified copy of this resolution and attached schedules, and shall take such other actions as may be required to expropriate the lands.

MOTION CARRIED unanimously.

12.2 Property Matter

Mayor Christian provided a brief overview of the matter concerning the Municipal-owned Path Lake property in East Port L'Hebert. He reminded Council that the Nature Conservancy of Canada (NCC) had previously presented to Council regarding their mandate and approach to long-term land conservation. The Path Lake parcel was identified during those discussions as a property currently owned by the Municipality that presents a strong opportunity for NCC stewardship. Mayor Christian also noted that when the property was originally bequeathed to the Region, covenants were included to preserve public use and restrict development. Should Council proceed with a sale, these covenants would remain in place to ensure the land continues to be available for activities such as hiking, hunting, and fishing in accordance with the donor's intent, and that development remains prohibited.

Council was advised that NCC considers the property to possess significant ecological importance, including habitat for several rare and endangered species. NCC has expressed interest in collaborating with the Municipality to enhance protection of the land. Staff recommended that Council enter into a Purchase and Sale Agreement with NCC to transfer the Path Lake property for $1.00, with the conditions that NCC commits to permanent protection and stewardship of the land, and that all associated transaction costs be borne by the Nature Conservancy of Canada.

It was moved by Councillor Jenkins and seconded by Councillor Roy:

THAT the Council of Region of Queens Municipality gives notice of its intent to enter into a purchase and sale agreement with the Nature Conservancy of Canada to transfer Municipal lands identified as PID# 70067921, located at 242 East Port L'Hebert Road in the community of East Port L'Hebert, to the Nature Conservancy of Canada for $1.00,

AND THAT a Public Hearing be held of February 10, 2026, in the Council Chambers of the Municipal

Building, 249 White Point Road in Liverpool, NS, at 9:00 a.m.

MOTION CARRIED unanimously.

13.0 Mayors Report

Mayor Christian provided the following report on recent activities:

- **November 15 – Ted Foster Memorial OHV Run:**
  The Mayor participated in the Ted Foster Memorial Off Highway Vehicle Run with members of ATVANS, where more than 80 OHVs travelled from Port Mouton to the Jordan Falls area. Several participants continued to Shelburne, where the Mayor observed the use of Road Trails within the Town. The group rode into Shelburne for lunch before returning to Port Mouton. The Mayor extended thanks to the organizers and local businesses for their support and noted the potential opportunities related to OHV recreation in Queens.

- **November 17 – Regional Leadership Meeting:**
  The Mayor met with the Mayors, Wardens, and Deputy Mayors of the five Lunenburg County municipalities to advance discussions on regional collaboration. Topics included water security, coastal protection planning, and emerging practices in non-market and affordable housing, with a presentation from Municipality of the District of Lunenburg on their Housing Strategy.

- **November 18 – North Queens "Meet Your Neighbour" Event:**
  The Mayor attended the 2nd Annual *Meet Your Neighbour* community event in North Queens, joined by Councillor Carver and RQM staff. Activities included music and community engagement with both long-time and new residents. The Mayor expressed appreciation to the organizers and noted the success of the event.

- **November 19 – NSRAB Water Rate Hearing:**
  The Mayor reported on participation in the NSRAB Water Rate Hearing and thanked staff and contractors for their preparation and contributions.

The Mayor noted the Water Utility's significant operating deficit and also acknowledged the intervention by Ms. Druzina on behalf of the Queens Community Health Board, highlighting affordability concerns for water utility customers.

- **November 21 – Tour of the new Long Term Care Facility**
  Mayor Christian reported that he, together with members of Council, the CAO, and Deputy CAO, had the opportunity to tour the new Long Term Care Facility currently under construction on Queens Place Drive. Once completed, this facility will replace both Queens Manor and Hillsview Acres Home for Special Care, consolidating services in a modern, purpose-built environment. Mayor Christian expressed his gratitude to Christopher Clarke, Chair of the Queens Home for Special Care Society, and Andrew MacVicar, Executive Director at Queens Manor, for their dedication, leadership, and sustained efforts in advancing this significant community project. He noted that their hard work and passion have been instrumental in bringing the new facility closer to reality.

14.0 Council Business

14.1 Expenses for Jane's Place Board Member

Councillor Fancy declared a conflict of interest on this item and left the table at this time.

The Municipal Clerk provided context regarding the request for reimbursement of mileage and related expenses for Councillor Jack Fancy in connection with his work with Jane's Place Society. Although Jane's Place is not a formal committee of Council, its efforts to establish second-stage housing for women and children affected by domestic violence represent a significant community initiative within the Region of Queens. Councillor Fancy has been actively involved with the Society and is expected to continue dedicating considerable time as the project progresses. Ms. Green noted that, given the Municipality's interest in supporting initiatives that enhance community safety, housing stability, and social well-being, Council may wish to consider authorizing reimbursement of

Councillor Fancy's mileage and eligible expenses in accordance with the Municipality's existing Councillor expense policies.

It was moved by Deputy Mayor Charlton and seconded by Councillor Jenkins:

THAT the Council of Region of Queens Municipality approve the reimbursement of eligible expenses incurred by Councillor Fancy in relation to his service on the Jane's Place Society Board of Directors, in accordance with the Municipality's established policies for Councillor expenses.

MOTION CARRIED unanimously.

Councillor Fancy returned to the table at this time and resumed participation in the meeting.

14.2 Police Advisory Board Report

Councillor Amirault reported that the Police Advisory Board met on November 13, 2025. During the meeting they discussed several safety concerns that were raised during Council's seven (7) Town Hall sessions. Items discussed included issues at the Liverpool skatepark, the operation of e-bikes and e-scooters, speeding throughout the Region, and supports for vulnerable residents.

E-bikes / E-scooters / Skatepark Issues
Constable Windsor reviewed how e-bikes and e-scooters are defined under the Motor Vehicles Act, noting the growing safety concerns associated with their use. Particular focus was given to Bristol Avenue due to narrow lanes and heavy traffic. The Board discussed sidewalk versus roadway use, and suggested that limited sidewalk use supported by signage and reduced speeds may be appropriate in targeted areas. This discussion led to a review of Bylaw 12, originally adopted in the 1990s to restrict skateboarding in the downtown area. The Board agreed the bylaw is outdated and overly restrictive, and recommended that it be modernized to

remove obsolete provisions and establish clear, enforceable rules for e-bike and e-scooter operation.

Speeding and Traffic Enforcement
Speeding was identified as a consistent theme at Town Hall meetings across Queens County. The Board received a letter from a resident expressing concerns regarding ATV use and speeding in Labelle. Constable Windsor advised that RCMP Traffic Services have been deployed more frequently in Queens County and targeted enforcement projects are underway, including planned operations in North Queens, with the aim of improving roadway safety and visibility of enforcement.

Vulnerable Residents
Concerns were raised at the North Queens Town Hall regarding vulnerable residents. Constable Windsor explained that the RCMP conduct wellness checks when contacted; however, these checks are reactive in nature and do not necessarily prevent situations in which individuals may go unnoticed for extended periods.

Speed Radar Signs Program
Director Grant provided an overview of the speed radar sign program. Council approved three (3) units in 2023 with the intention of rotating them throughout Queens County; however, the program has been resource intensive and limited by provincial approval requirements for placement on provincial roads. Consequently, most monitoring has taken place in Liverpool. While data from the devices has been helpful in identifying speeding hotspots and guiding RCMP enforcement, staff time is required to maintain the units. Director Grant presented three (3) options going forward. The Board agreed the signs remain an important tool and suggested that a motion be brought forward to Council to convert the existing units to solar power, and for Council to consider adding additional units at budget time, particularly for fixed locations such as school zones and other priority areas.

Carter's Beach Parking and Signage
The Board received an update from Public Works advising that "No

Parking" signage has been installed along the northern side of Carter's Beach Road and updated tow-away tabs will be installed over the winter for the 2026 season. Constable Windsor noted that signage does not cover the full roadway. The Board agreed that further discussion is required, and requested that the Nova Scotia Public Works District Director be invited to a future meeting.

It was moved by Councillor Amirault and seconded by Deputy Mayor Charlton:

> **THAT** the Council of Region of Queens Municipality direct staff to research and present options for updating Bylaw 12 – Prohibiting Certain Activities, including the removal of overly restrictive provisions related to skateboarding, and the development of clear, enforceable provisions regarding operation of e-bikes and e-scooters as recommended by the Police Advisory Board;
>
> **AND THAT** the resulting options and proposed amendments be brought back to the Police Advisory Board for review prior to being forwarded to Council.

MOTION CARRIED unanimously.

It was moved by Councillor Amirault and seconded by Councillor Carver:

> **THAT** the Council of Region of Queens Municipality direct staff to explore converting the three existing battery-powered speed display devices to solar power as recommended by the Police Advisory Board.

MOTION CARRIED unanimously.

It was moved by Councillor Amirault and seconded by Deputy Mayor Charlton:

THAT the Council of Region of Queens Municipality direct staff to investigate traffic calming options for Liverpool as recommended by the Police Advisory Board.

MOTION CARRIED unanimously.

15.0 New Business

There was no New Business for discussion today.

Mayor Christian asked for a motion to return to closed session.

It was moved by Councillor Roy and seconded by Deputy Mayor Councillor Jenkins that the Council of Region of Queens Municipality return to Closed Session at 7:12 p.m. to conclude discussion of the following five items:

3.1 Personnel
3.2 Contract Negotiation
3.3 Property Matter
3.4 Property Matter
3.5 Contract Negotiation

It was moved by Deputy Mayor Charlton and seconded by Councillor Roy that the Council of Region of Queens Municipality return to Open Session at 7:54 p.m.

16.0 Adjournment

The meeting was adjourned at 7:55 p.m.

_____
Mayor Scott Christian, Chair

_____
Angela Green, Municipal Clerk

Date Approved: _____

Region of Queens Municipality Special Council
Thursday, November 27, 2025
5:00 p.m.
Virtual Meeting

Minutes

Present: Mayor Scott Christian, Chair
Councillor Roberta Roy
Councillor Courtney Wentzell
Councillor Vicki Amirault
Councillor Jack Fancy
Councillor Stewart Jenkins
Councillor Wanda Carver

Regrets: Deputy Mayor Maddie Charlton

Staff: Willa Thorpe, Chief Administrative Officer
Angela Green, Municipal Clerk

1.0 Call to Order and Land Acknowledgement

Mayor Christian called the meeting to order at 5:00 p.m. and opened the meeting by acknowledging that we have the privilege to live and work in Mi'kma'ki, the traditional and unceded territory of the Mi'kmaq people.

2.0 Approval of Agenda

It was moved by Councillor Amirault and seconded by Councillor Jenkins:

THAT the Council of Region of Queens Municipality approve the November 27, 2025 Agenda as presented.

MOTION CARRIED unanimously.

3.0 Bylaw 13 – Solid Waste Management - Second Reading and Consideration for Adoption

It was moved by Councillor Jenkins and seconded by Councillor Amirault:

THAT the Council of Region of Queens Municipality receive Bylaw 13 – Solid Waste Management for Second Reading, and move for adoption.

MOTION CARRIED unanimously.

4.0 Adjournment

The meeting was adjourned at 5:04 p.m.

_____
Mayor Scott Christian, Chair

_____
Angela Green, Municipal Clerk

Date Approved: _____

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: November 10, 2025

File No: 10350-50-2512-01

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: South Shore Regional Airport Asset Management Plan

Prepared by:	Supervisor:	CAO Concurrence:
C. O'Brien *Asset Management Coordinator*	*J. Veinotte* *Director of Finance*	*W. Thorpe* *CAO*

RECOMMENDATION

THAT Council for Region of Queens Municipality receives the report titled 'South Shore Regional Airport Asset Management Plan' for information.

PURPOSE

Many of the individual assets which make up the South Shore Regional Airport have reached or exceeded their useful life, some having eclipsed safe or functional condition. The purpose of this report is to outline the current state of the South Shore Regional Airport and prompt consideration from Council regarding the desired future state of the South Shore Regional Airport.

BACKGROUND

The South Shore Regional Airport (SSRA) is owned by Region of Queens Municipality (RQM) and is located on a 170-acre property (PID#70110903) in Greenfield.

The SSRA was originally established by the Liverpool Queens Industrial Commission more than four (4) decades ago and has been operating at various levels since that time. For much of that time, it had a full-time manager and operator as well as various management committees, both of which were discontinued in the late 2000's.

In 2003, the Region of Queens Municipality entered into an agreement with the Nova Scotia Drag Racers Association (NSDRA) to hold drag racing events at the South Shore Regional Airport. In 2015 an agreement was made between RQM and the South Shore Flying Club (SSFC) – stipulating they would assume maintenance and upkeep of the airport terminal building, hangar, and runway infrastructure.

In 2023, Region of Queens Municipality entered into 20-year agreements with the South Shore Flying Club and Nova Scotia Drag Racers Association.

Recent airport investments include the replacement of avgas fuel tanks in 2021 at a cost of $40,576 and a hangar buyout in 2022/2023 at an unbudgeted cost of $25,000.00.

Region of Queens Municipality budgeted $10,000 for airport operations and maintenance in the 2025-2026 financial plan; the airport reserve currently includes a balance of $147,000. The current annual allocation to this reserve is $12,000 toward future runway resurfacing.

The SSRA has been a topic of discussion at multiple meetings of Council in recent years:

At the April 12, 2022 Regular meeting, Council passed the following motion:

> That Council of Region of Queens Municipality enter into the proposed Purchase and Sale Agreement with Liemke Ventures Limited for property bearing PID#70110903, being the property known as South Shore Regional Airport, for the appraised value of $565,000 plus HST.

At the November 8, 2022 Regular meeting, Council passed the following motion:

> That Council of Region of Queens Municipality give notice of its intent to sell PID #70110903, also known as the property of South Shore Regional Airport, to Nova Scotia Drag Racers Association, for less than fair market value.

> AND that a public hearing respecting the proposed sale be held on December 13, 2022, in Council Chambers of the Municipal Administration Building, 249 White Point Road, Liverpool, at 9:00 a.m.

At the November 8, 2022 Regular meeting, Council defeated the following motion:

> That the wording "to Nova Scotia Drag Racers Association" be removed from the recommendation and replaced with "to all potential buyers".

At the November 8, 2022 Regular meeting, Council defeated the following motion:

> That the motion be deferred until legal representation is sought on concerns of where the Region stands with the sale and the MGA.

On December 13, 2022, Region of Queens Municipality held a public hearing regarding the sale of Municipal Property Identified as PID #70110903, also Known as the property of South Shore Regional Airport.

At the December 13, 2022 Regular meeting, Council defeated the following motion:

> That Council of Region of Queens Municipality enter into a purchase and sale agreement with Nova Scotia Drag Racers Association to convey municipal land identified as PID #70110903 and known as South Shore Regional Airport for the purchase price of $50,000.00.

At the February 28, 2023 Regular meeting, Council passed the following motion:

> That Council of Region of Queens Municipality enter into the proposed lease agreement with Nova Scotia Drag Racers Association for their continued use of South Shore Regional Airport.

At the March 28, 2023 Regular meeting, Council passed the following motion:

> That Council of Region of Queens Municipality enter into the proposed lease agreement with South Shore Flying Club for their continued use of South Shore Regional Airport.

At the November 12, 2024 Regular meeting, Council passed the following motion:

> That the Council of the Region of Queens Municipality direct staff to provide a report regarding the expenses of the South Shore Regional Airport including information regarding the leases at the airport.

At the December 10, 2024 Regular meeting, Council passed the following motion:

> That Council receive the report titled "Airport Financials and Agreement" for information.

At the December 10, 2024 Regular meeting, Council passed the following motion:

> That Region of Queens Municipality Council direct staff to provide a report with the operational plan for the Airport dated January 2024 and request the financial statements of the Flying club and Drag Racers Club for Council to make informed decisions on future agreements.

At the March 11, 2025 Regular meeting, Council tabled the following motion:

> That Region of Queens Municipality's Council approve forgiveness of the rent fee for South Shore Flying Club in the amount of $4,000.00 rent due to financial limits the club is experiencing.

At the March 25, 2025 Regular meeting, Council defeated the following motion:

> That Region of Queens Municipality's Council approve forgiveness of the rent fee for South Shore Flying Club in the amount of $4,000.00 rent due to financial limits the club is experiencing.

At the September 9, 2025 Regular meeting, Council defeated the following motion:

> That the Council of Region of Queens Municipality approve $4,675.00 plus HST for replacement of the painted runway markings at the South Shore Regional Airport, to be funded from the Airport Reserve.

In January 2025, Region of Queens Municipality's Acting CAO requested staff to complete a review of the South Shore Regional Airport and corresponding liabilities, risks, depreciation and replacement cost of all assets.

In February 2025, Region of Queens Municipality's Interim CAO requested staff complete a full asset management plan for the South Shore Regional Airport.

ALTERNATIVES/OPTIONS

1) Council receives the report titled 'South Shore Regional Airport Asset Management Plan' for information.
2) Council defines the preferred level of service and directs staff to develop a 3-year operating and financial plan for the South Shore Regional Airport to operate exclusively as an airport.
3) Council defines the preferred level of service and directs staff to develop a 3-year operating and financial plan for the South Shore Regional Airport to operate exclusively as a drag racing strip.
4) Council directs staff to explore transferring the South Shore Regional Airport to an airport authority.
5) Council directs staff to explore ceasing operation and divesting all assets of the South Shore Regional Airport prior to Global Navigation Satellite System approaches require recertification in June 2027.

ANALYSIS

Option 1	Provides Council with sufficient information to establish a desired level of service at the South Shore Regional Airport
Option 2	• Focuses the business model strictly on airport operations • Requires the Nova Scotia Drag Racers Association to explore operating in an alternate location
Option 3	• Enables a more permanent location for drag racing • Results in loss of air traffic in Queens County as runways and hangars would no longer be available
Option 4	• Enables airport operations to continue while reducing risk for and control by Region of Queens Municipality • Promotes uncertainty of long-term sustainability of drag racing in the area
Option 5	• Eliminates risk and various long-term costs for Region of Queens Municipality • Promotes uncertainty for airport operations and drag racing in the area

IMPLICATIONS

Financial

Financial implications will be determined by Council direction. Predicted costs associated with each option is included in the CYAU South Shore Regional Airport Asset Management Plan.

Legislative

If Council elects not to recertify the Global Navigation Satellite System approaches by June 2027, the South Shore Regional Airport will lose its status as a registered aerodrome, inhibiting the ability to function as an airport.

Staffing

There is currently no staff resource dedicated to the management or support of the South Shore Regional Airport.

Social

Since the South Shore Regional Airport was opened in 1974, some variation of local flying club has played a vital role in inspiring, developing, operating and maintaining the SSRA.

Since 2003, Nova Scotia Drag Racers Association events have attracted many people from across the Maritimes, generating an estimated average of $650,000 in economic activity annually through lodging, fuel, food, and vehicle parts sales and maintenance.

The utilization of and impacts to secondary interest groups and guests could not be measured, but it has been demonstrated that the South Shore Regional Airport plays a role for several secondary audiences.

Environmental

Without the recertification of Global Navigation Satellite System approaches and loss of registered aerodrome status, utilizing the South Shore Regional Airport as a hub for environmental or emergency aerial response or mitigation would not be possible.

COMMUNICATIONS

Region of Queens Municipality will continue to communicate directly with the South Shore Flying Club and Nova Scotia Drag Racers Association. Council direction will be provided to both tenants, residents of Queens County, and the public.

BYLAWS/PLANS/POLICIES

Operational Policy 77 - Tangible Capital Assets

Legal

Legal implications will be determined after Council establishes a desired level of service.

For awareness, section 50 (5) of the Municipal Government Act provides that a municipality may:

- (a) acquire property, including property outside the municipality, that the municipality requires for its purposes or for the use of the public;
- (b) sell property at market value when the property is no longer required for the purposes of the municipality;
- (c) lease property owned by the municipality at market value;

Section 51 of the Municipal Government Act authorizes that:

- 51 (1) A municipality may sell or lease property at a price less than market value to a nonprofit organization that the council considers to be carrying on an activity that is beneficial to the municipality.
- (2) A resolution to sell or lease property referred to in subsection (1) at less than market value shall be passed by at least a two thirds majority of the council present and voting.
- (3) Where the council proposes to sell property referred to in subsection (1) valued at more than ten thousand dollars at less than market value, the council shall first hold a public hearing respecting the sale.
- (4) The council shall advertise the public hearing at least twice, in a newspaper circulating in the municipality, the first notice to appear at least fourteen days before the hearing.
- (5) The notice of the public hearing shall include the date, time and place of the hearing, the location of the real property or a description of the tangible personal property, the estimated value of the property and the purpose of the sale.

SUMMARY

The South Shore Regional Airport has been in service for over four (4) decades and has a total replacement value of $8,764,980. Due to its age, many of the individual assets which make up the SSRA have reached or eclipsed their useful life, falling below industry standards for performance.

Staff were directed to complete an asset management plan to aid Council in decision-making for the South Shore Regional Airport and to guide future direction of asset management planning activities.

Staff recommend that Council receives the report titled 'South Shore Regional Airport Asset Management Plan' for information.

ATTACHMENTS/REFERENCE MATERIALS)

- CYAU South Shore Regional Airport Asset Management Plan
- April 12, 2022 Regular Meeting of Council – Sale of Municipal Property
- November 8, 2022 Regular Meeting of Council
- December 13, 2022 Public Hearing - Sale of Municipal Property
- December 13, 2022 Regular Meeting of Council
- February 28, 2023 Regular Meeting of Council
- March 28, 2023 Regular Meeting of Council
- November 12, 2024 Regular Meeting of Council
- December 10, 2024 Regular Meeting of Council
- March 11, 2025 Regular Meeting of Council
- March 25, 2025 Regular Meeting of Council
- September 9, 2025 Regular Meeting of Council

South Shore Regional Airport Asset Management Plan

Prepared for:
Mayor, Council, and Leadership – Region of Queens Municipality

Prepared by:
Connor O'Brien CAMP | CAMA | CSAM – Asset Management Coordinator, Region of Queens Municipality, April 2025

Asset
CYAU South Shore Regional Airport

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Related Documents	Canadian Aviation Regulations (CAR), Part 2, Subpart 02. TP 312 – Aerodrome Standards and Recommended Practices.

Related Systems	NA
Revision History	NA

Table of Contents

Preface

Organizational Context

The Region of Queens Municipality (RQM) was created in 1996 following the amalgamation of the Municipality of Liverpool and the Municipality of Queens County. RQM took ownership of all assets, liabilities and commitments belonging to Municipality of Liverpool and the Municipality of Queens County – including ownership of the South Shore Regional Airport (SSRA).

RQM is a regional municipality spanning 2400km^2, made up of 54 communities with over 10 000 permanent residents with influxes of seasonal residency throughout the year. Queens County is nestled in between Shelburn County (Southwest), Yarmouth County (South-Southwest), Digby County (West-Northwest), Annapolis County (North) and Lunenburg County (East-Northeast) with shared boundaries with each.

RQM provides Sanitary and Storm Sewer Collection and Treatment, Water Production and Distribution, Snow Removal, Recreational Facilities and Events, Parks and

Recreation, Transportation Infrastructure, and Solid Waste Collection and Disposal/Transfer among lesser critical services throughout the county. Some of these services are exclusive to South Queens (Liverpool/Brooklyn/Milton) while others are exclusive to North Queens (Caledonia/Kempt/Greenfield) with a variety of services provided at different levels spanning across more inclusive parts of the county.
As per Environment and Climate Change Canada Data, over the past 3 years (2022-2024) Liverpool has experienced an average annual precipitation of 1389mm, an average annual maximum temperature of 29.8 (degrees Celsius), annual minimum temperature of -18.3, and annual mean temperature of 8.1.
As per the Climate Atlas of Canada V2 (2019), Liverpool is liable to experience significant changes in the climate from historical figures (1976-2005) to modeled figures (2021-2050). This impact can be anticipated by considering an increase in mean annual precipitation from 1457mm to 1538mm, with as much as 1807mm – and in the anticipated increase in mean annual temperature from 7.2 to 9, possibly as high as 10.3. It's modelled that this impact will also be reflected in the annual "Number of Very Hot Days (+30) increasing from 1 day to 4 days, with as many as 10 days – and an increase in annual "Frost-Free" days from 165 days to 189 days, with as many as 219 days.

AMP Objectives

Primary Objectives

-Establish a clear asset inventory with baseline data including information on condition, lifecycle, performance, and replacement value.
-Identify existing or imminent regulatory compliance and/or health and safety concerns.
-Define current, minimum, and optimal customer and technical levels of service in a sustainable and measurable manner and identify performance gaps.
-Evaluate risk to the organization's insurance, liability, and/or current customer levels of service, and identify action and controls.

Secondary Objectives

-Evaluate and define asset lifecycle activity needs.
-Forecast the immediate, short, and long-term financial needs as it pertains to capital investments, and operations and maintenance needs.

-Implement GIS (spatial) mapping and geodatabase development of assets and asset locations for analysis and representation.
-Develop a set of holistic immediate, short, and long-term recommendations that prioritize and manage regulatory, health and safety, insurance, liability, and levels of service risk in a sustainable and cost-effective manner.

Document Organization

This document has been assembled in a way that the reader may be successful in gaining a working understanding of which individual assets make up the SSRA, how they contribute to maintaining service level expectations, where they lie on the spectrum of lifecycle delivery activities, and what degree of risk currently exists to the stakeholders and owners of the South Shore Regional Airport for the purposes of informed decision-making.
Throughout the document two service level models are employed consistently which define the scope, bounds, and levers by which the organization's leadership may choose to manage its assets. These service level models demonstrate basic starting points for defining and maintaining customer, technical, and operational levels of service while providing a solid foundation to build from. These service level models are represented throughout this AMP.
Recommendations align with the minimum service level model – holistically considering assets performance, levels of service, lifecycle delivery and risk.
The **executive summary** enables the reader to quickly understand the context, objectives, and overview of the recommendations laid out in this document.
Baseline asset information and results yielding from the levels of service analysis, lifecycle delivery analysis, and risk analysis appear before the budget forecast – outlining the financial impacts of each of the two service level models.
The **methodology** details which criteria, processes, and assumptions were utilized in creating the South Shore Regional Airport Asset Management Plan.
A set of **recommendations** that consider performance, levels of service, lifecycle delivery, and risk through a holistic asset management lens are outlined in detail at the end of this document.

Executive Summary

This Asset Management Plan for the CYAU South Shore Regional Airport was completed in April 2025 in its draft form.

The objectives of the SSRA AMP were to establish a clear asset inventory with baseline data including information on condition, lifecycle, performance, and replacement value. Identify existing or imminent regulatory compliance and/or health and safety concerns. Define current, minimum, and optimal customer and technical levels of service and identify performance gaps. Evaluate risk to the organization, stakeholders and/or current customer levels of service, and identify action and controls. Evaluate and define asset lifecycle activity needs. Forecast the immediate, short, and long-term financial needs as it pertains to capital investments, and operations and maintenance needs. Implement GIS (spatial) mapping and geodatabase development of assets and asset locations for analysis and representation. Develop a set of holistic recommendations that prioritize and manage performance, levels of service, lifecycle delivery, and risk in a sustainable and affordable way.

The South Shore Regional Airport's purpose is to serve the residents of the Region of Queens and surrounding areas as a recreational, natural resource management, and emergency response hub. The airport is a registered aerodrome and drag raceway. As the only registered aerodrome with a paved runway between Halifax and Yarmouth, SSRA provides a critical link in western Scotia to a variety of stakeholders. Supporting life-saving access, air-ambulance, wildfire suppression, natural resources management, law enforcement, military, navy, air-force, coast guard, ground search and rescue, and flight training. Primarily, the SSRA is used by two key stakeholders, the Nova Scotia Drag Race Association and the South Shore Flying club.

The South Shore Regional Airport assets have been categorized into asset classes, the first being Buildings, which has a Terminal Building, two Hangars, and a Storage Shed. Airside Surfaces boast a 3937'x 75' Runway (with Burn Out Pads), Apron and Taxiway, and Pit Parking. Security and Access has graveled Terminal, Spectator, and Airside Parking. The site is accessed by a single road with no other occupancy, semi-secure behind some perimeter fencing ending in the woods. Contrary to most aerodromes, the SSRA has Guardrails and a paved Return Road running alongside the runway. Ground Support Services has a VHF Aircraft Communication system, Aircraft Tie Downs, an Altimeter, Windsock, and an Avgas Storage and Dispensing System. An invisible asset exists at the SSRA, being GNSS Flight Approaches, which enables pilots to safely navigate to CYAU SSRA.

Assert performance and financial data, functional and operational requirements, dynamic factors, and stakeholder needs and priorities come together into a levels of

service analysis, creating the customer levels of service modeling that is represented throughout this AMP. This same data and results are fed into a lifecycle analysis, resulting in lifecycle delivery activities that align with current and desired customer levels of service modeling. Together, lifecycle delivery activities and customer levels of service performance inform a SWOT analysis resulting in the SSRA top strengths, weaknesses, opportunities, and threats. The SWOT analysis is fed directly into the risk analysis which leverages a concise risk context and forgiving risk appetite – all to produce a list of high priority action items. 31 strategic risks were identified, the top 10 risks being included in this AMP.

Armed with this knowledge, two recommendations were made which holistically consider the CYAU South Shore Reginal Airport and its history, role in the community, performance, levels of service, lifecycle delivery, and risk.

Recommendation #1 – Strive for minimum customer levels of service for a 3-year planning horizon. This recommendation includes:

Revenue Generation and Diversification
Airport Management Committee Creation
Pull/Push Customer Levels of Service Levers
Airport Manager Appointment – RQM Part Time
Airport Operator – External Part Time
Airport Operations Manual Development
Airport Investments
Airport Budget
Key Stakeholder Contract Revision
Collaboration

Recommendation #2 – Divestiture of the South Shore Regional Airport for the purpose of sustaining its vital role in Queens County and Southwestern Nova Scotia.

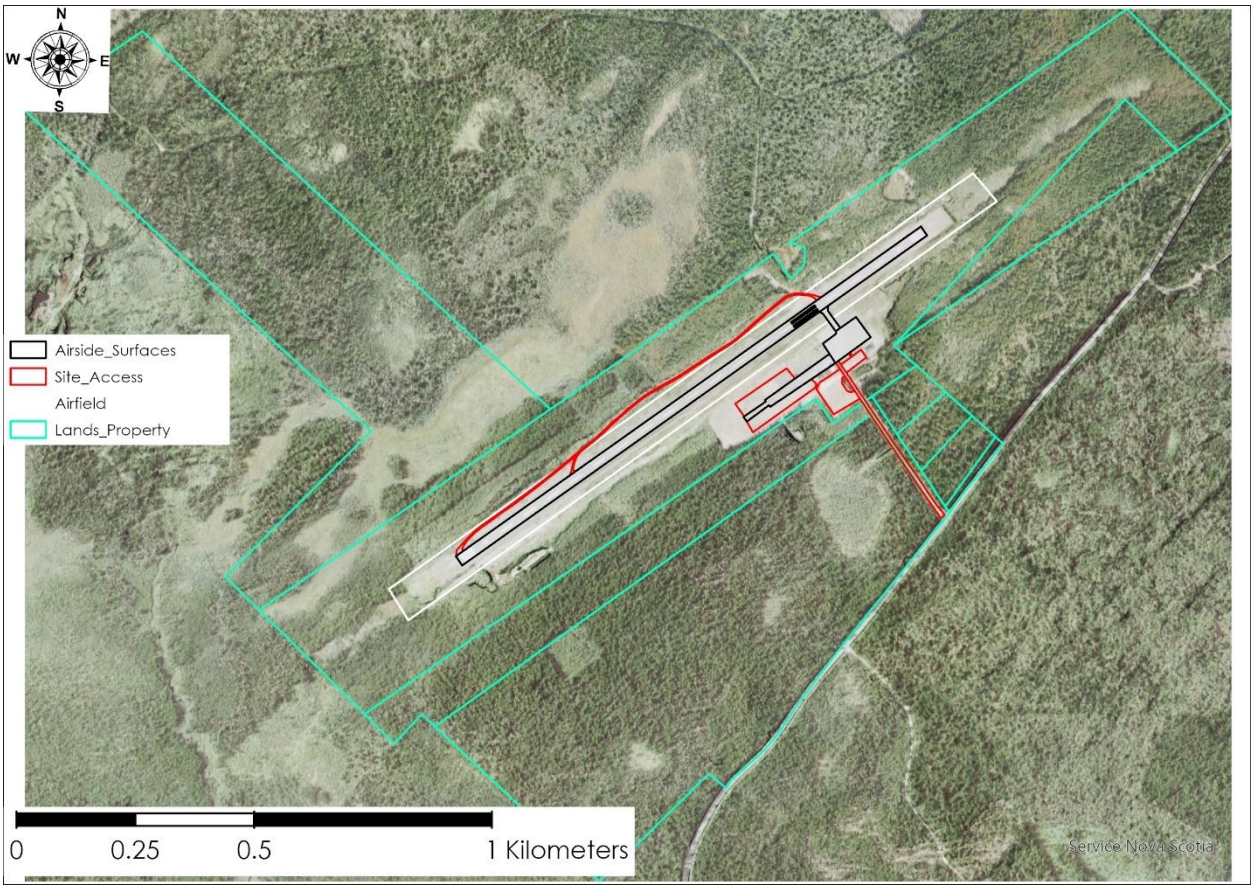
In the case of the SSRA, it would be reasonable for the Region of Queens Municipality to wish to transfer the risk and investment needs of the South Shore Regional Airport to a party interested in injecting resources into its sustained use and development. If the Region of Queens Municipality were to choose to explore divesting the South Shore Regional Airport, it's recommended that every effort is made to protect the NSDRA and SSFC current and future interests in continuing to utilize the South Shore Regional Airport in a way that continues to support and benefit the residents of Queens County. The estimated preliminary market value of the South Shore Regional Airport is $702,000.00 (round).

Recommendation details can be found on page 121.
Methodologies can be found on page 109.

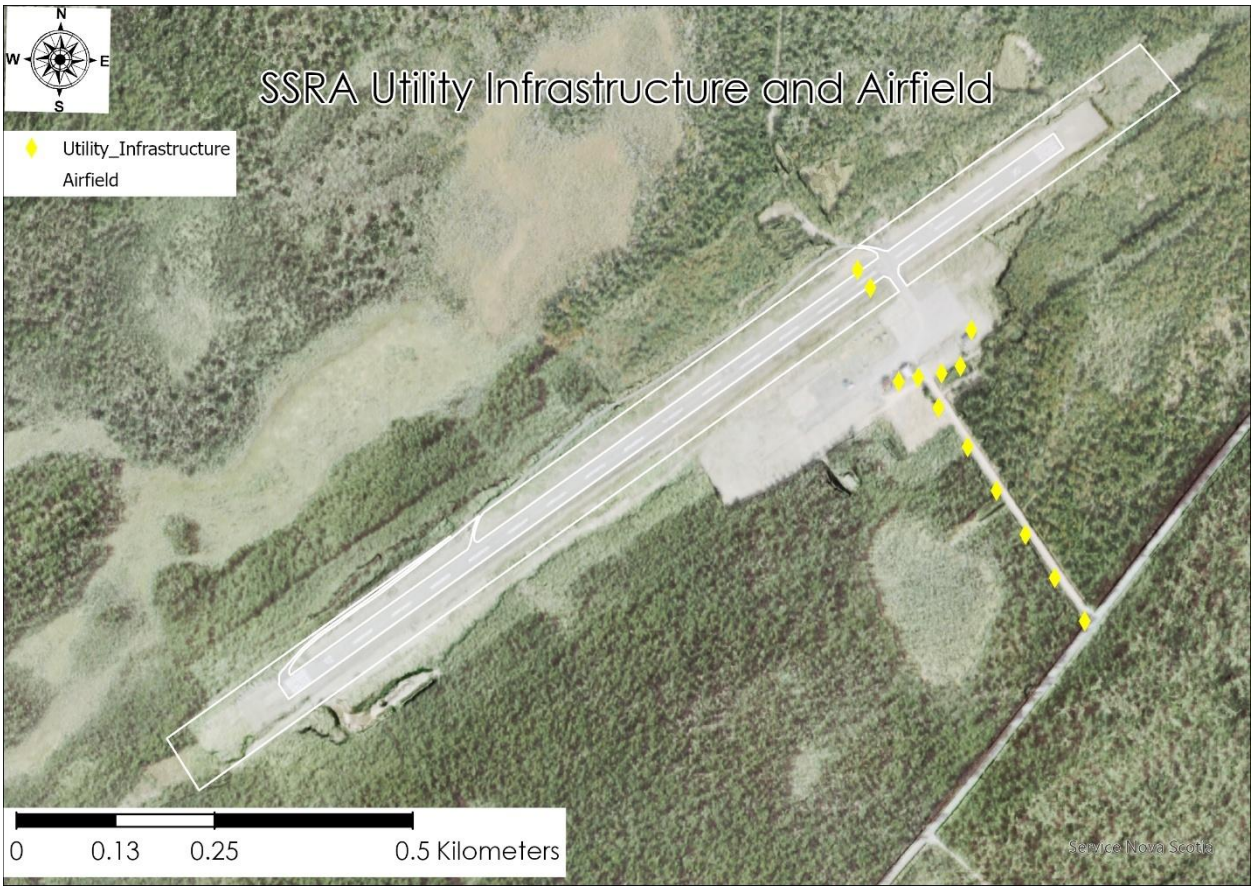
Introduction

SSRA Profile

The South Shore Regional Airport (SSRA) is a registered aerodrome (ICAO code CYAU) located at 78 Airport Road, Greenfield Nova Scotia, B0T 1E0 at an elevation of 325'. The SSRA is a 26-minute drive (24.5km straight-line) north-west of Liverpool Queens General Hospital, and a 37-minute drive (32km straight-line) south-west of South Shore Regional Hospital. It is a 34-minute (36.6km straight-line) drive south-east from Kejimkujik National Park and National Historic Site. CYAU is operated by the South Shore Flying Club operating under the VHF radio frequency 122.8. CYAU boasts a 3937'x 75' runway at 071° (Rwy-07) and 251° (Rwy-25) – the only registered non-precision paved runway between Halifax and Yarmouth. The SSRA is not operational during the winter months or for night-time operations as a function of not having winter maintenance or runway lighting to support either of these services – nor is it a port of entry.



Map showing an overview of the South Shore Regional Airport airfield and associated property bounds, airside, and access infrastructure in Greenfield, Nova Scotia.



Map showing an overview of the South Shore Regional Airport airfield and associated hydro utility infrastructure in Greenfield, Nova Scotia.

SSRA History

1974

The Federal Department of Transport agrees to fund 90% of airport runway paving with the Province of Nova Scotia agreeing to fund the remaining 10%.

1975

South Shore Regional Airport (3000' runway) is sponsored, constructed, and operated by the Liverpool Queens Industrial Commission with support from the Airport Committee.
SSRA licensed for daytime operations
Overall investment in the South Shore Regional Airport had been nearly $240000.00. It was estimated that considering the vast amount of volunteer labor involved, the actual site worth is well in excess of that invested by the government and private enterprises.

Runway, apron, and taxiway paving commences.

1977

The estimated value of the South Shore Regional Airport is in excess of $500000.00. To date, the site had been primarily operated and maintained by volunteers.

18 young people are hired as the first paid employees of the SSRA history.

The South Shore Regional Airport has experienced over 3000 combined aircraft movements to date.

1978

Runway edge lighting system bid of $52950.00 is accepted.

Plans to hire a base operator to operate and monitor the airport begin.

1979

Runway edge lighting is to be completed, funded by the Federal Department of Transportation.

Flight training is offered as a service of the South Shore Regional Airport under a certified flight instructor.

The South Shore Regional Airport is managed by the Liverpool Queens Industrial Commission – a committee of members from both the Municipality of Liverpool and the Municipality of Queens County.

The Liverpool Airport Auxiliary supports and promotes the activities of the South Shore Regional Airport in collaboration with the Liverpool Airport Management Committee, Liverpool Queens Industrial Commission, the Airport Base Operator, and the Liverpool Flying Club.

1980

The Liverpool Flying Club has 59 members.

19 students are enrolled and participating in flight training.

The Airport Operations Committee are responsible for monitoring airport operations.

The Liverpool Queens Industrial Commission and Nova Scotia Department of Development fund the extension of the runway.

Several site improvements occurred as funded by the Airport Management Committee, Liverpool Queens Industrial Commission, and the Airport Auxiliar including the expansion of approaches, the installation of radio controlled runway edge lighting, a wheelchair ramp, terminal and aircraft parking improvements and expansions, picnic area improvements, landscaping, terminal building painting, aviation fueling infrastructure painting and fuel storage installation, access road improvements, airfield brushing and clearing, snowplow and front end loader overhaul, the purchase of a new snowplow, and upgraded furnishings in the terminal building.

1981

South Shore Regional Airport is an all-season, 24-hour service, registered and certified aerodrome with a terminal building and two hangars (still in service today).
The Municipality of Queens and Liverpool councils budget $60000.00 per year for the next 5 years for the operations, maintenance, and development of their municipal airport. The South Shore Regional Airport operates at a fraction of the cost of other similar aerodromes because of the efforts of local volunteers, the Airport Committee, and the Liverpool Queens Industrial Commission.

1982

The South Shore Regional Airport receives a $9747.00 grant from the Federal Department of Health and Welfare for outdoor space expansion, and $20000.00 from the Department of Transport for runway repairs, airfield brushing and clearing of 80 acres.
The annual Liverpool Flying Club membership fees are $40 for active members and $15 for associate members.

1983

The South Shore Regional Airport general expenses are budgeted at $27200.00 with the following estimated revenues:

- $5600.00 from Department of Transportation
- $4500.00 from Liverpool Services (grant)
- $5000.00 from Municipality of Liverpool (grant)
- $5000.00 from Municipality of Queens County (grant)

The Municipality of Queens Council commit $500000.00 to the development of an industrial park at the South Shore Regional Airport site.
The Liverpool Queens Industrial Commission acquires 240 acres of land from the Department of Lands and Forests for runway infrastructure expansion, crosswind runway development, and industrial or commercial park development on the South Shore Regional Airport site.

1984

The fuel storage and dispensing infrastructure is upgraded as funded by both the Municipality of Queens and the Municipality of Liverpool at a combined cost of $38000.00.
Airport Development Feasibility study is undertaken to assess industrial or commercial development on the South Shore Regional Airport site, results are as follows:

- Phased development approach to be taken.
- Phase one would include developing a portion of the airport property along the existing access (airport road).
- Phase one cost estimate is to cost $474413.00 to commercially develop 20 acres of land on the property along the existing access (airport road).

- Estimates to commercially develop the entire 150 acres as planned on the South Shore Regional Airport site range from 2.4 to 2.9 million dollars, including 42-45 lots.

The Liverpool Queens Development Commission receives a grant of $122500.00 from the Federal Department of Transport for airport improvements including the weather station, non-directional beacon, the improvement of the apron, and runway and taxiway improvements including shoulder grading.

1985

Installation of a new weather station with reporting capabilities to the Department of Environment, a new fuel storage and dispensing system (improvement from 10gal/min to 25gal/min to better accommodate large firefighting aircraft), and 25-watt solid state transmitter for the non-directional beacon as well as repairs to the existing tower at a total value of $122500.00. Approximately $40000.00 was allocated towards runway improvements (expansion of runway edges) and repairs as well as expanding the apron and the installation of security fencing and improvements to the parking lot.

1993

South Shore Regional Airport awarded a grant for upgrades including lengthening the runway from 3000' to 3937', expanding and improving aircraft parking (apron), and increasing the runway surface thickness to accommodate a Hercules C130 landing and takeoff.

1996

Municipality of Queens County and Municipality of Liverpool amalgamation leading to the creation of the Region of Queens Municipality – which absorbed and inherited the assets, responsibilities, and liabilities of both the Municipalities, which included the South Shore Regional Airport.

2009

Flight training is no longer a service provided by SSRA.

2010

The Avgas system developed a leak, resulting in the removal of the entire system for environmental liability concerns. This work resulted in the destruction and removal of underground hydro lines from site source (terminal building) to the airside infrastructure.

2015

The terminal building fuel storage (oil tank) is removed for liability concerns. Furnace and ductwork were left intact but are no longer in service.

The South Shore Flying Club take over responsibility for operating and maintaining the terminal building – including repairing and returning it to service.

2016

The South Shore Flying Club and Region of Queens Municipality enter into an agreement which enables the South Shore Flying Club to operate and manage the South Shore Regional Airport and associated assets.

2017

A heat pump was donated and installed in the terminal building by a member of the South Shore Flying Club.

2021

The South Shore Regional Airport is assessed by Kemptown Appraisals and assigned a suggested market value of $565000.00. The Region of Queens Municipality attempts to complete the sale of the South Shore Regional Airport to an interested party with plans to install a Jet fuel storage and dispensing system as well as other improvements to accommodate law enforcement, military, firefighting, EHS, midsized business jets, encouraging a more diverse range of key and secondary stakeholders.

Avgas storage and dispensing system is installed as funded by the Region of Queens Municipality.

2022

A new steel roof is installed on the terminal building as funded by a private party with a vested interest in the South Shore Regional Airport.

SSRA Ownership Purpose

The airport is owned to serve the residents of Queens County and the surrounding areas as a recreational emergency response hub. The SSRA's purpose is served as a recreational airport and as a drag raceway. The SSRA serves as a vital part of the emergency management and response network in southwestern Nova Scotia as the only registered aerodrome with a paved runway between Yarmouth and Halifax providing a critical link.

The South Shore Regional Airport exists to provide and support life-saving access, air-ambulance access and operations, wildfire suppression operations training and management, natural resources management, law enforcement operations and training, military operations and training, navy operations and training, air-force operations and training, coast guard operations and training, ground search and rescue operations and training, and flight training. The site also exists as a transportation link between communities, an industrial attraction tool, an employment center and economic generator, and a recreational center and tourist attraction.

SSRA Ownership Objectives

-That the South Shore Regional Airport remains safe and functional in sustainably serving its purpose to the residents of Queens County as a registered aerodrome that is also

suitable for hosting drag racing events, and that it can be relied upon as vital infrastructure in the county and provinces preparedness and response to emergencies.
-That the South Shore Regional Airport meets all regulatory and compliance requirements while following best management and operational practices which encourage the sustainability of the aerodrome's registration status and ability to perform and meet minimum customer LOS expectations.
-That short and long-term investment priorities for the South Shore Regional Airport are affordable for stakeholders and owners via predictable and sustainable performance management, lifecycle delivery, risk management, and customer LOS expectations.

SSRA Stakeholders

Key Stakeholders

Signage at the entrance to the site representing two of the key stakeholders of the South Shore Regional Airport.

South Shore Flying Club

The South Shore Flying Club has been responsible for the operations and maintenance of the South Shore Regional Airport since 2015/2016, mostly as a function of volunteer efforts and donations with financial assistance from the Region of Queens Municipality. The SSFC utilizes the Terminal Building as a clubhouse and operational flight center and utilizes Hangar A for aircraft storage and rentals as a part of their contract with RQM. Although the SSRA is an unmanned aerodrome, members of the SSFC provide on-call services for incoming aircraft and aerodrome operations including flight coordination. Historically, the SSFC have been cooperative in operating and maintaining the SSRA in a way that accommodates a broad range of stakeholders including the Nova Scotia Drag Race Association. The SSFC pays RQM a small fee for the rental and use of site facilities, and as a part of their contract and are allowed to provide services that enable revenue generation including hangar rentals and fuel sales. The South Shore Flying Club are key stakeholders as the primary site users who play a vital role in operating and maintaining the SSRA. In the event of stakeholder disengagement or withdrawal, their contribution to the operations and maintenance of the SSRA would need to be replaced to maintain customer LOS expectations. The lack of a certified flight instructor and flight training over the past 16 years and sporadic customer LOS expectations over the past 25 years have contributed to reduced access and interest in flight training, discouraging membership and contributors to the SSFC. Due to the reduced membership and site availability, those responsible for much of the volunteer efforts contributed to the SSRA's operations and maintenance historically are aging, dead, or no longer able and/or interested in contributing to the aerodrome's sustainability. The SSFC are required to submit an operational plan and financial statements to RQM annually, and to hold insurance for premises liability, hangar-keepers liability, products liability, personal injury liability, contingent employers' liability, tenants' legal liability, and fuel storage liability.

Nova Scotia Drag Race Association

The Nova Scotia Drag Race Association has been responsible for the operations and maintenance of various South Shore Regional Airport assets since 2005, mostly as a function of volunteer efforts funded from hosting drag racing events. The NSDRA utilizes the Baby Barn for drag racing equipment storage and Hangar B for equipment storage and maintenance. Historically, the NSDRA have been cooperative in operating and maintaining the SSRA in a way that accommodates a broad range of stakeholders including the South Shore Flying Club. The NSDRA pays RQM a small fee for the use of the SSRA annually. The Nova Scotia Drag Race association are key stakeholders as the secondary site users who play an important role in operating, maintaining, and funding the SSRA. In the event of stakeholder disengagement or withdrawal, their contribution

to the operations and maintenance of the SSRA would need to be replaced to maintain customer LOS expectations. The contract between the RQM and the NSDRA allow them to host up to 6 events lasting no longer than 3 days each for a total of 18 days annually during the summer months. The NSDRA are allowed to occupy and operate the site for up to 0.5 days before and 0.5 days following designated events, and for 1 day within 7-10 days prior to events, with an additional 3-4 days per year in accordance with the operational plan that they're required to submit to RQM annually. The NSDRA are also required to submit financial statements annually, to have all members sign approved waivers, and to hold insurance for commercial general liability, owner's and contractor's protective liability, tenants' legal liability, non-owned automobile liability, and contingent employers' liability.

Each drag racing event held at the SSRA by the NSDRA hosts 130-160 high-performance vehicles and drivers from across the Maritimes, attracting 1000-1250 visitors over the 2-day span that events occur. Each event that occurs provides Queens County with an economic benefit from $450,000.00 - $840,000.00 annually through lodging, fuel, food, and vehicle parts and maintenance, while giving the local fire departments opportunities to exercise equipment and training.

Residents of the Region of Queens Municipality

Residents of Queens County benefit from the economic generation that drag racing events provide, as well as the recreational opportunities to participate in drag racing and fly-in events at the South Shore Regional Airport. Residents also benefit from having a critical piece of emergency response and wildfire management infrastructure in place that also enables operations and training for a variety of law enforcement and emergency response personnel locally. Residents of the Region of Queens Municipality do not hold any responsibilities for the South Shore Regional Airport.

Council and the Mayor of the Region of Queens Municipality

Council and the Mayor of the Region of Queens Municipality benefit from the industrial and economic development opportunities that accompany owning a functional registered aerodrome including political leverage, industrial development, and tourism. As the ultimate owners of the South Shore Regional Airport, Council, and the Mayor of the Region of Queens Municipality hold the responsibility as the aerodrome's ultimate decision-makers.

Local Businesses and Industries

Queens County has a long history of natural resource management both inland and offshore. Having access to a registered aerodrome with a large, paved runway provides opportunities for industrial growth and expansion through exploratory and sustained visits and use of aerodrome facilities. Local businesses and industries do not hold any responsibilities for the South Shore Regional Airport.

Secondary Stakeholders

NSDNRR – Nova Scotia Department of Natural Resources and Renewables
Natural resource management, wildfire suppression and management, arial pest control, arial silviculture applications, arial survey applications, and remote access.

RCMP – Royal Canadian Mounted Police
Enforcement, monitoring, emergency response, interconnectivity.

CAF – Canadian Air Force
Training, monitoring, emergency response.

RCN – Royal Canadian Navy
Training, monitoring, emergency response.

RCAF – Royal Canadian Air Force
Training, monitoring, emergency response.

CCG – Canadian Coast Guard
Training, monitoring, emergency response.

NSEHS – Nova Scotia Emergency Health Services
Training, monitoring, emergency response. Fixed-wing air ambulance services, interconnectivity.

Transport Canada
Provider of registration and standards that must be complied with – regulator of the South Shore Regional Airport.

Nav Canada
Provider of certification and standards that must be complied with by the South Shore Regional Airport.

Government of Canada
Political leverage, security, access, interconnectivity.

Government of Nova Scotia
Political leverage, security, access, interconnectivity.

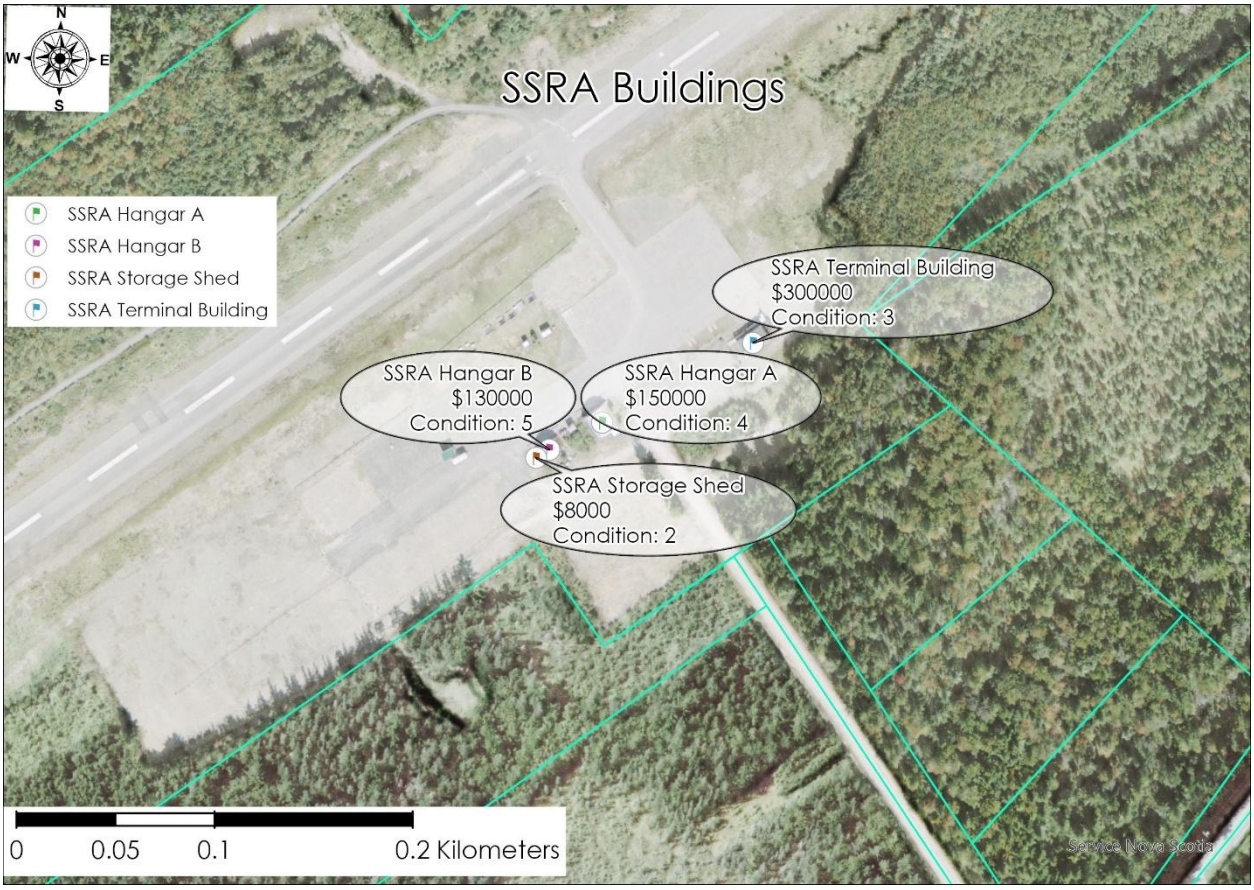
Local Fire Departments
Training, emergency response.

Other Secondary Users
Remote control vehicle groups.
Driver training groups.
Private rentals for vehicle break-in, maintenance, performance testing.
Vehicle manufacturer testing.

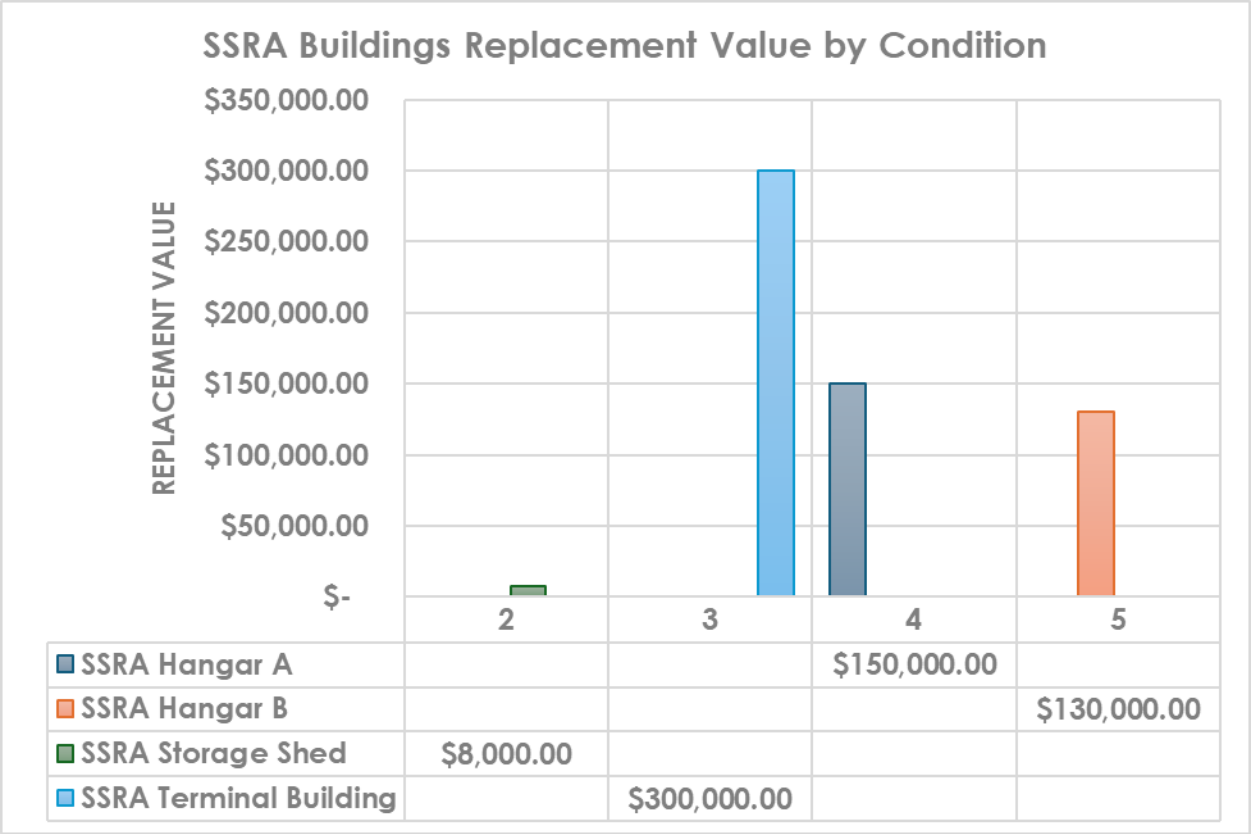
Asset Information

SSRA Buildings

There are four buildings at the SSRA that belong to RQM. Three of the buildings are substantial and have been fixtures of the SSRA for over 45 years. Buildings on the properties serve a variety of purposes, from the storage and maintenance of drag racing equipment and aircraft, to receiving visitors, flight planning, and operating CYAU as a registered aerodrome.



Map showing the location, replacement value, and condition of Building Assets at the SSRA owned by RQM.



Graph showing the replacement value of Building Assets based on their condition. The Storage Shed is in the best condition and has the lowest replacement value, the Terminal Building has the highest replacement value, and Hangar B is in the worst condition – as compared to Building Assets. The total replacement value of Building Assets at the SSRA is $588,000.00

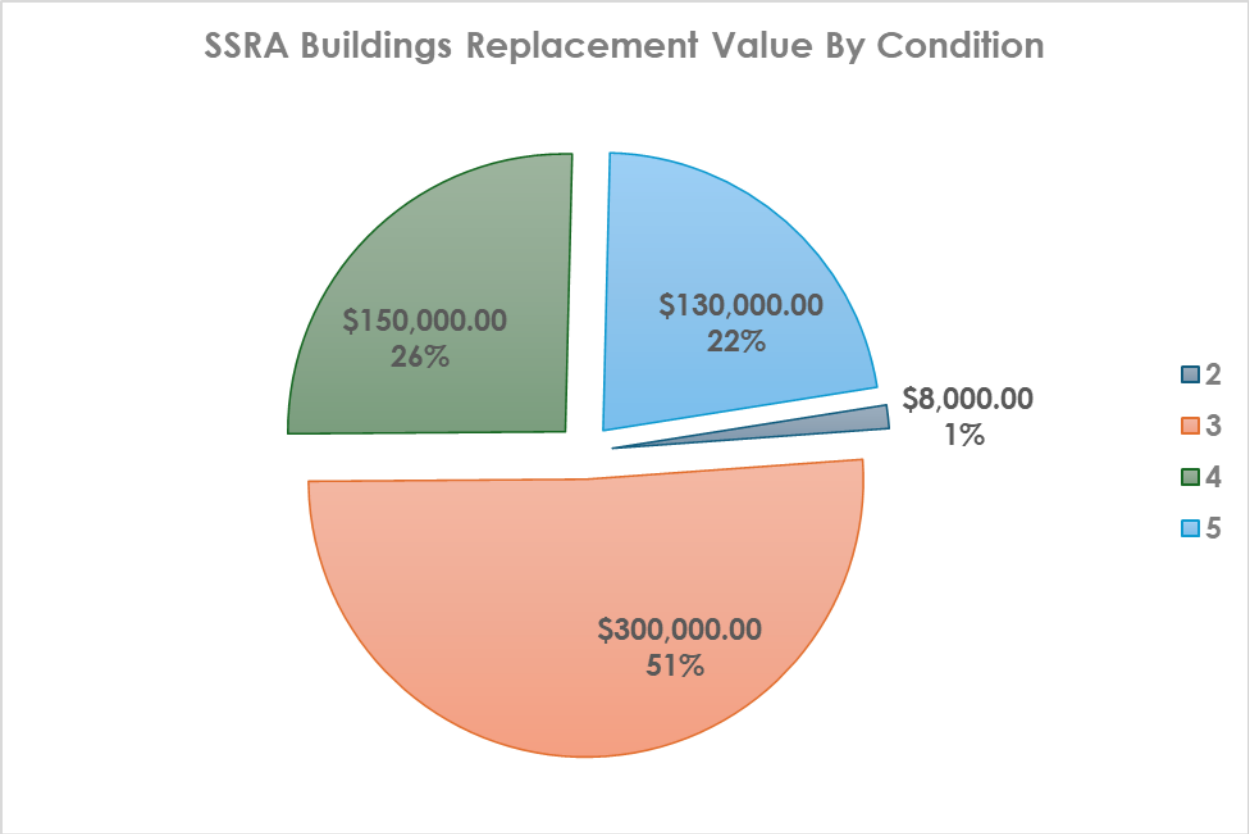
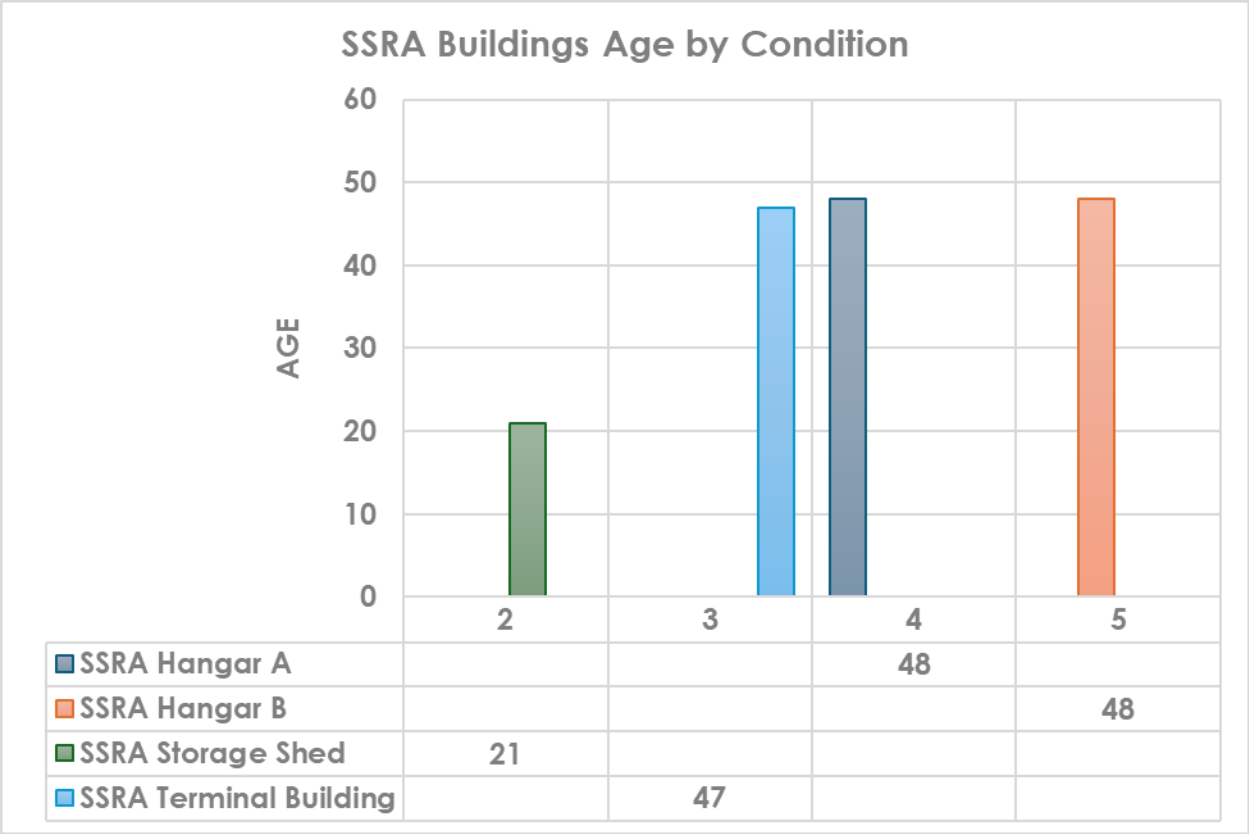
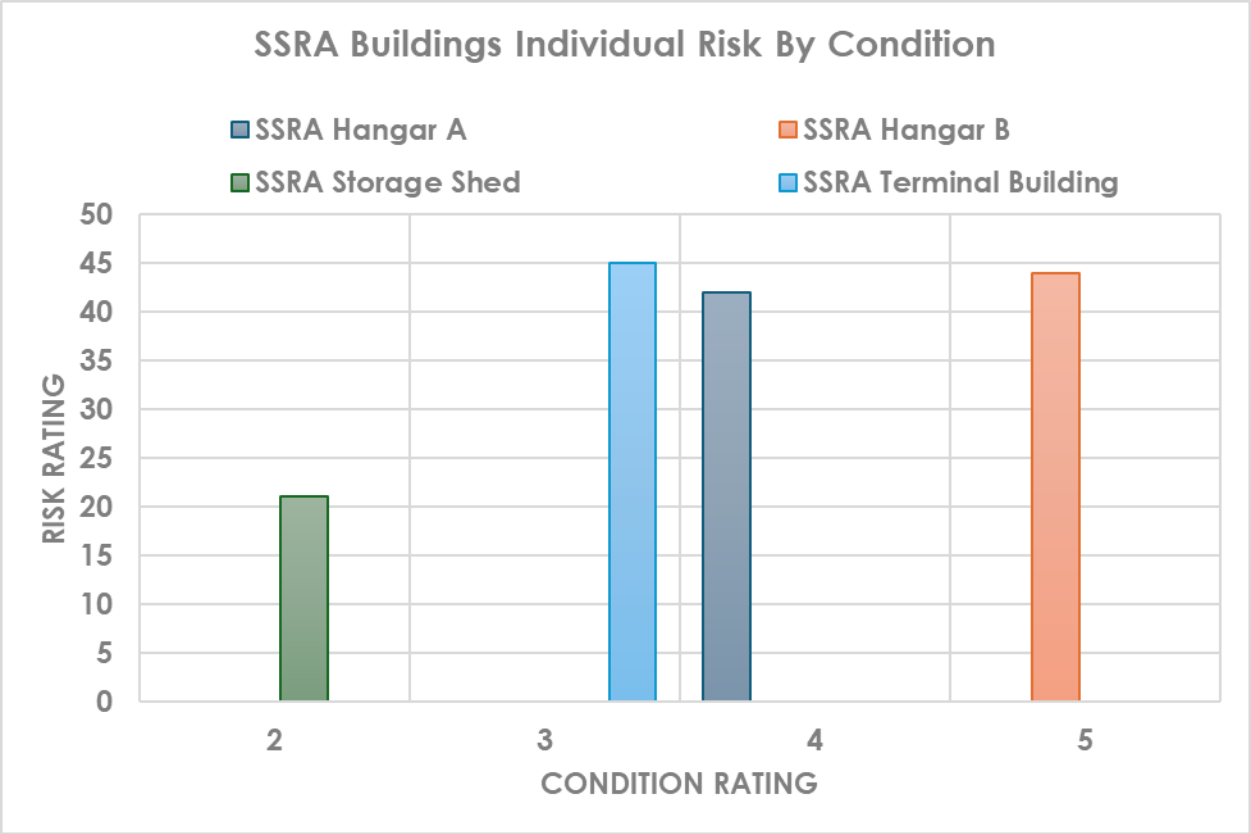


Chart showing the replacement value of Building Assets based on their condition. 48% of Building Assets are in poor (4) or unsatisfactory (5) condition.



Graph showing the age of Building Assets based on their condition. The Storage Shed is the youngest (21 years). The Terminal Building, Hangar A, and Hangar B were all installed around the same time and are at least 47 years old.



Graph showing the individual risk rating of Building Assets based on their condition. The Storage shed has the lowest individual risk rating (21). The Terminal Building has the highest individual risk rating (45) with Hangar A and Hangar B having an individual risk rating of 42 and 44 respectively.

SSRA Hangar A

Quonset hut built in 1977 by volunteers and members of the Liverpool Queens Industrial Commission – used for aircraft storage and maintenance.

Photo of Hangar A from the airside.

Photo of Hangar A from the groundside.

SSRA Hangar B

Quonset hut built in 1977 by volunteers and members of the Liverpool Queens Industrial Commission – used for drag racing equipment storage and maintenance.

Photo of Hangar B from the airside (left) and groundside (right).

SSRA Terminal Building

Wood Frame building with basement built in 1978 by volunteers and members of the Liverpool Queens Industrial Commission – used for aerodrome operation and flight coordination.

Photo of Terminal Building from the airside.

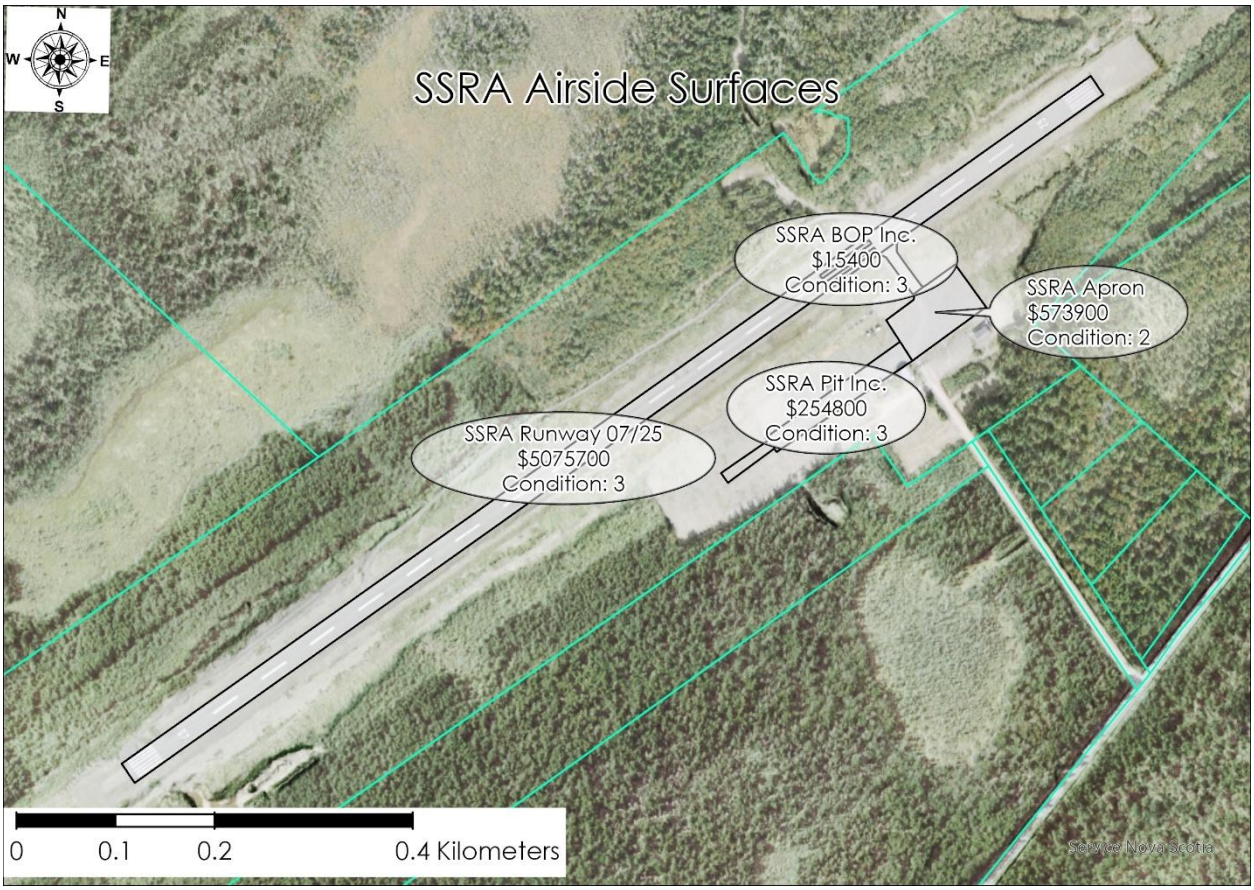
SSRA Storage Shed

Baby barn installed in 2004 – used for drag racing equipment storage.

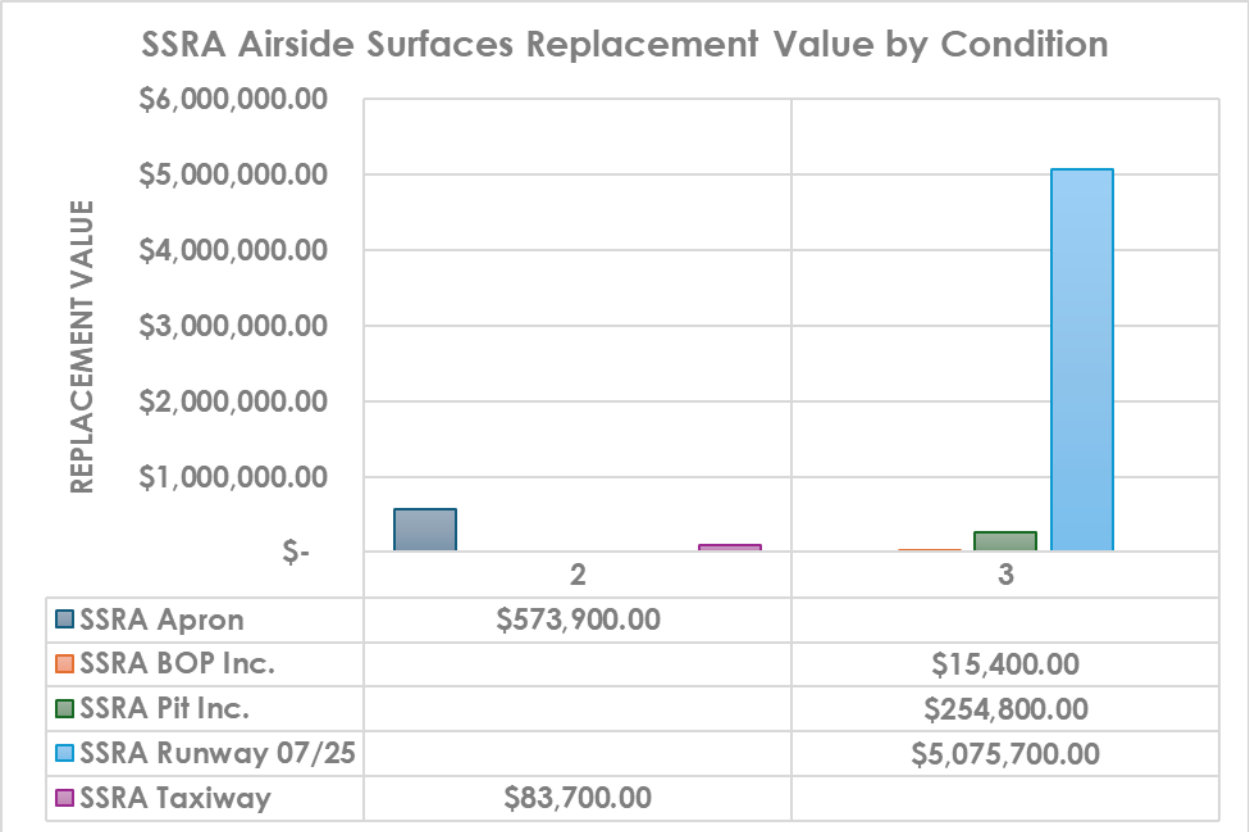
Photo of Storage Shed from the airside.

SSRA Airside Surfaces

The Airside Surfaces are operational surfaces on the secure side of the fencing. These surfaces include the Runway, Apron, Taxiway, Pit parking, and Burn Out Pads. The Pit Parking and Burn Out Pads are used primarily by the NSDRA for drag racing events. The Apron and Taxiway are used primarily by the SSFC for flight activities. The Runway is used by both the NSDRA and the SSFC.



Map showing the location, replacement value, and condition of Airside Surfaces Assets at the SSRA owned by RQM.



Graph showing the replacement value of Airside Surface Assets based on their condition. The Apron and Taxiway are in the best condition. The Burn Out Pads, Pit Parking, and Runway are in the worst condition. The runway has the highest replacement value of just over 5 million dollars. The total replacement value of Airside Surfaces Assets at the SSRA is $6,003,500.00

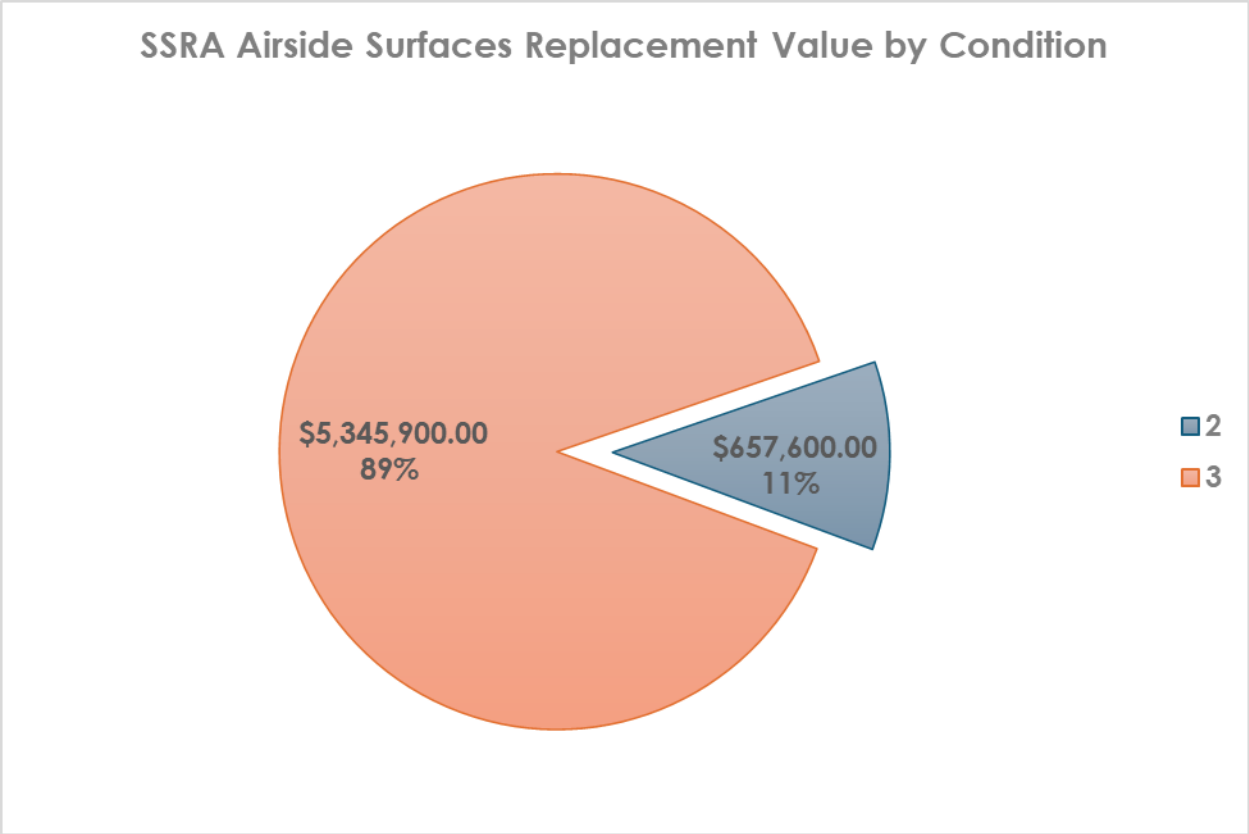
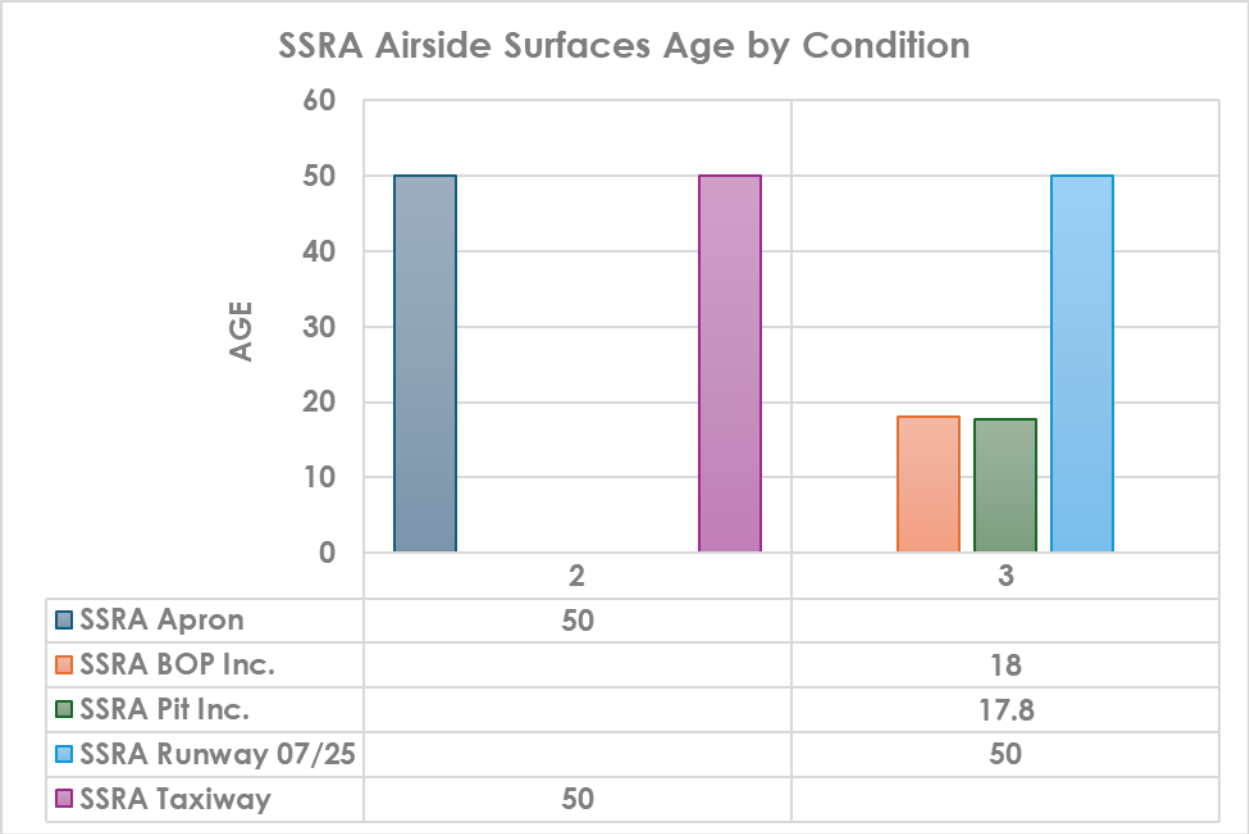
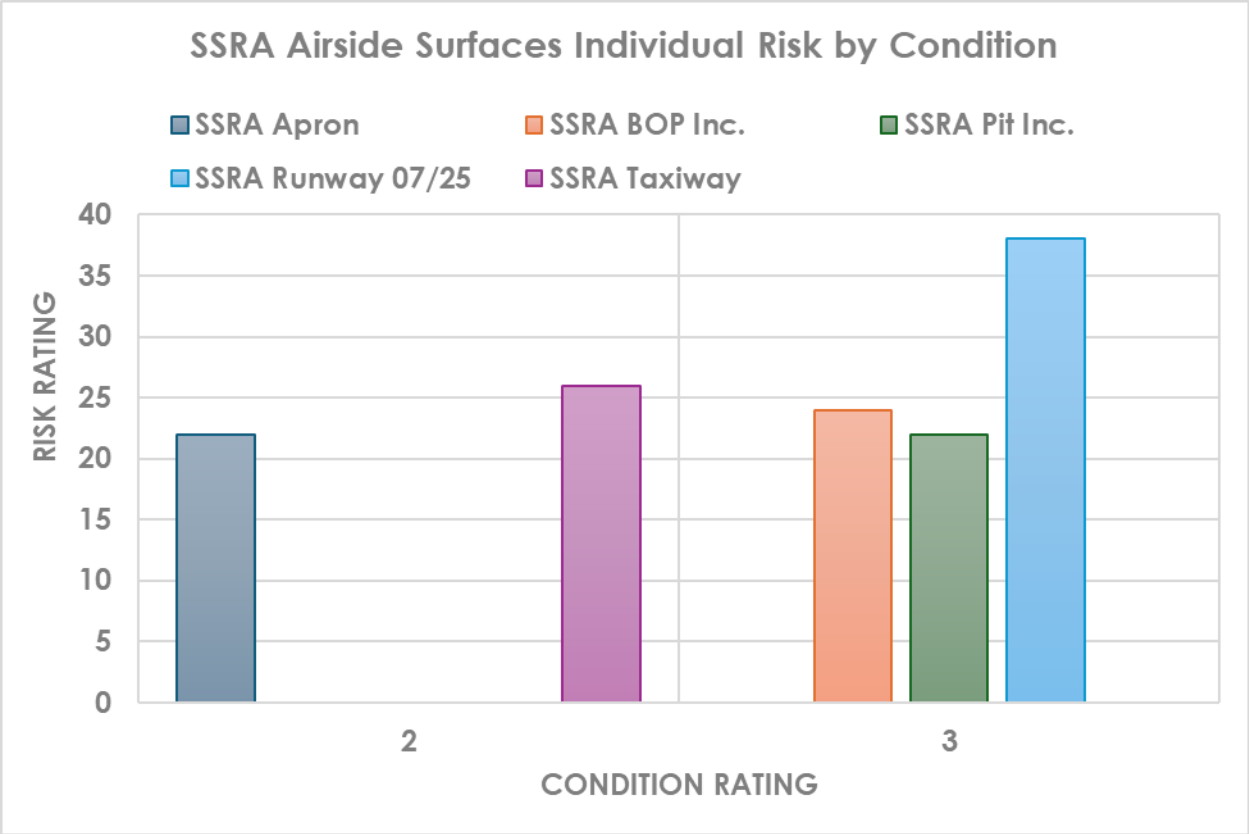


Chart showing the replacement value of Airside Surfaces Assets based on their condition. 89% of Airside Surface Assets are in okay (3) condition.



Graph showing the age of Airside Surface Assets based on their condition. The Burn Out Pads and Pit are the youngest. The Runway, Taxiway, and Apron were all installed at the same time and are at least 50 years old.



Graph showing the individual risk rating of Airside Surfaces Assets based on their condition. The Apron and Pit Parking have the lowest individual risk ratings of 22. The Runway has the highest individual risk rating (38) with Taxiway and Burn Out Pads having an individual risk rating of 26 and 24 respectively.

SSRA Runway 07/25

Runway installed in 1975 – used for aircraft landing and take-off and drag racing events.

Photo of Runway from the airside.

SSRA Apron

Apron installed in 1975 – used for aircraft parking.

Photo of Apron from the airside.

SSRA Taxiway

Taxiway installed in 1975 – used for aircraft transit from Apron to Runway for landing and take-off, and for drag racing transit from Pit to Runway for drag racing events.

*No photo available.

SSRA Pit Parking

Pit Parking installed in 2005 by the NSDRA – used for drag racing vehicle parking and maintenance during drag racing events.

*No photo available.

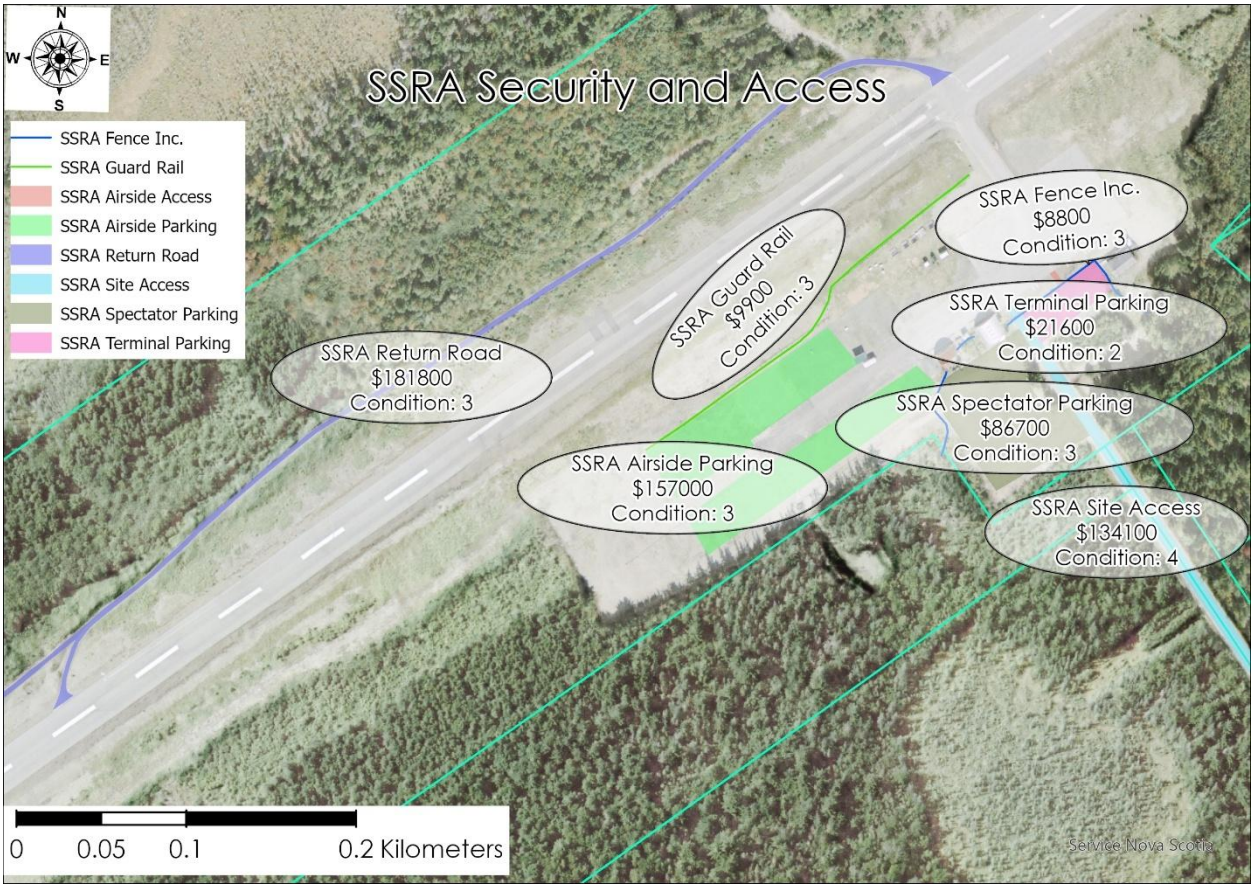
SSRA BOP

Burn Out Pads installed in 2007 by the NSDRA – used for drag racing vehicle tire preparation prior to and during drag racing events.

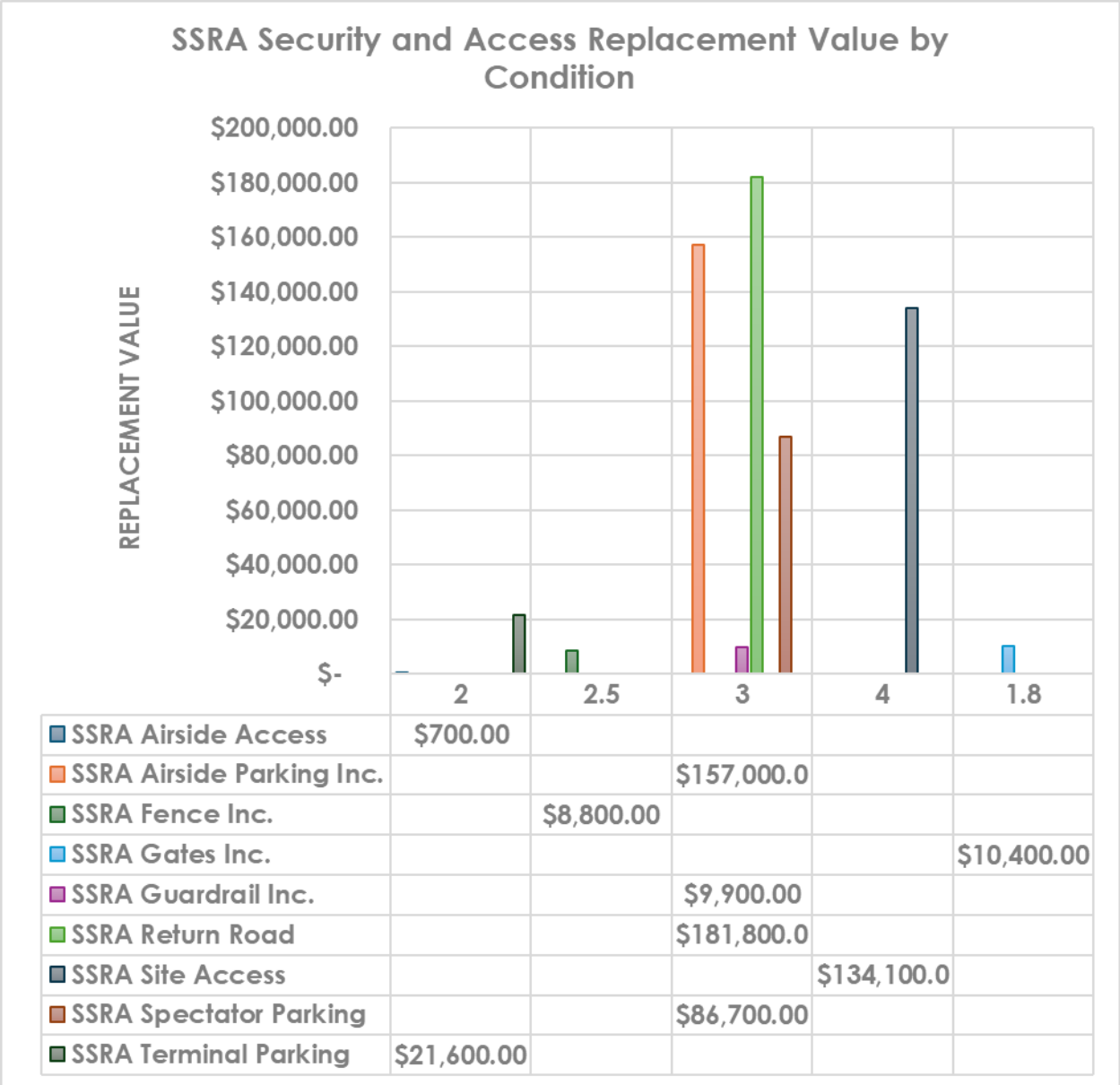
Photo of Burn Out Pads from Airside.

SSRA Security and Access

The Security and Access Assets include Fencing, Gates, Site Access, Return Road, Terminal Parking, Airside Parking, Spectator Parking, Airside Access, and Guardrails. The Site Access, Airside Access, and Return Road provide access to and across the site. Fencing and Gates provide site security and discourage unauthorized entry. The Terminal Parking, Spectator Parking, and Airside Parking provide parking and access to the site. The Guardrails provide safety and security for spectators participating in drag racing or fly-in events.



Map showing the location, replacement value, and condition of Security and Access Assets at the SSRA owned by RQM.



Graph showing the replacement value of Security and Access Assets based on their condition. The Gates, Airside Access and Terminal Parking are in the best condition. The Site Access is in the worst condition. The total replacement value of Security and Access Assets at the SSRA is $611,000.00.

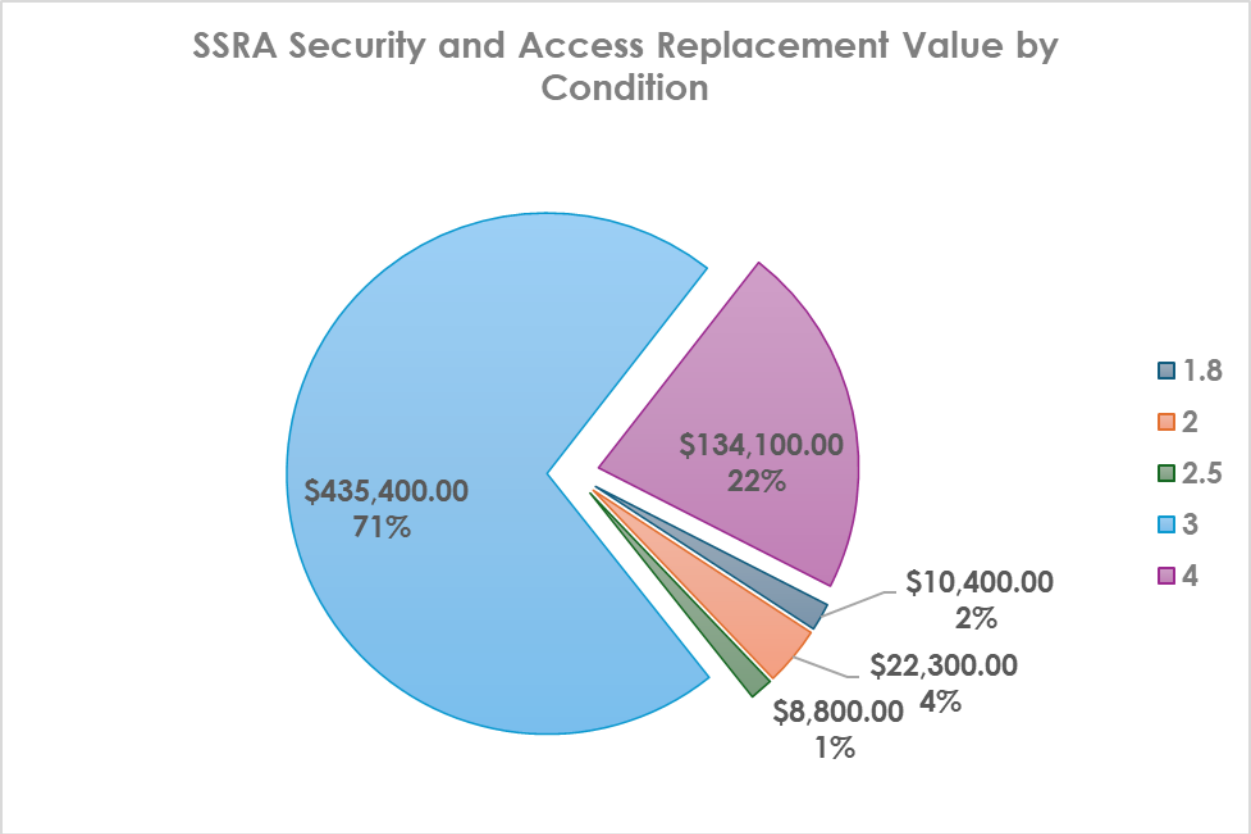
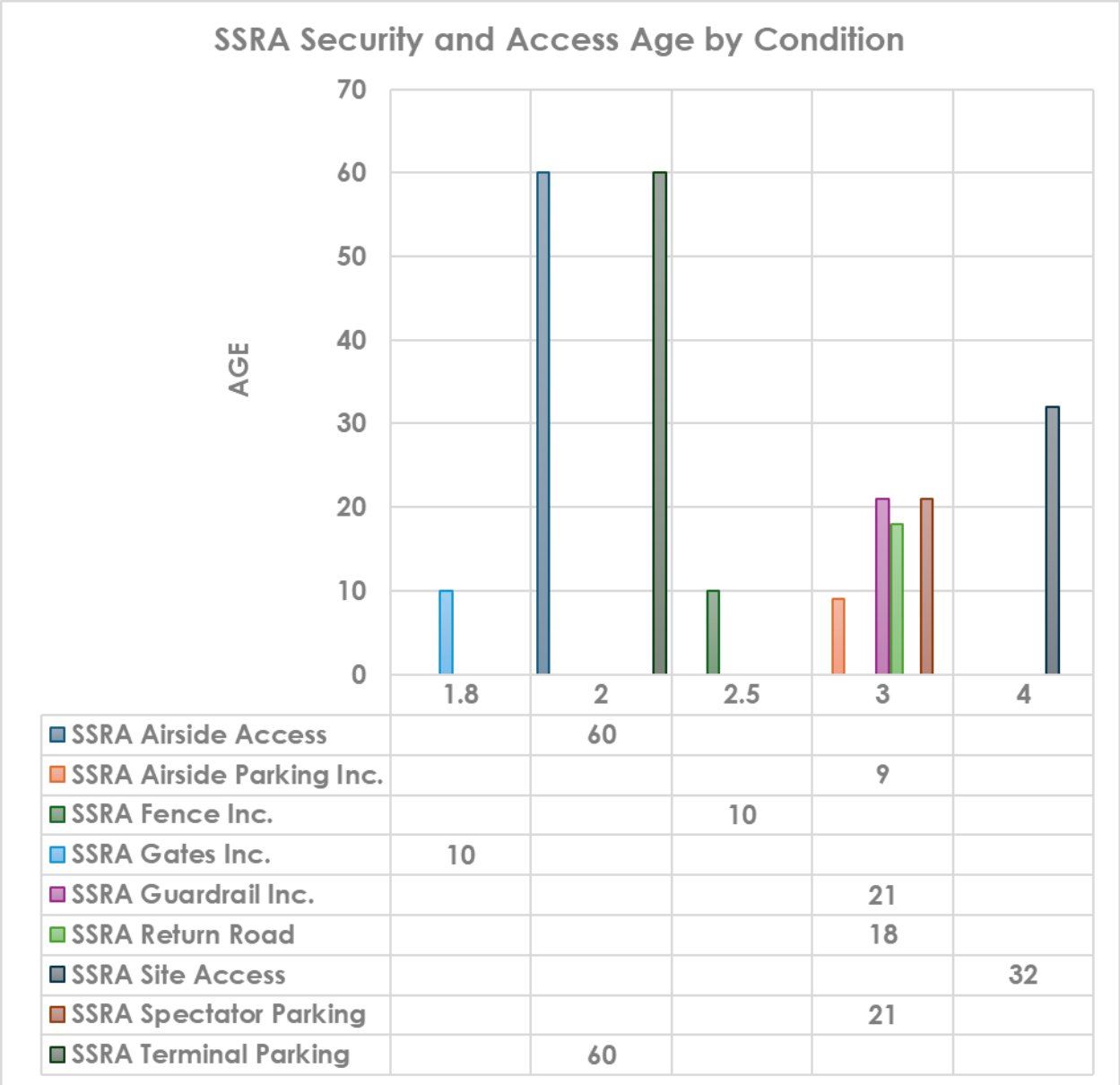


Chart showing the replacement value of Security and Access Assets based on their condition. 22% of Security and Access Assets are in poor (4) condition.



Graph showing the age of Security and Access Assets based on their condition. The Airside Parking, Fencing, and Gates are the youngest. The Site Access is 32 years old and in the worst condition.

Graph showing the individual risk rating of Security and Access Assets based on their condition. The Airside Access has the lowest individual risk ratings of 10. The Fencing has the highest individual risk rating (39) with Site Access, Return Road, and Guardrails having an individual risk rating of 33, 24, and 21 respectively. The Airside Parking and Terminal Parking have an individual risk rating of 16, and the Gates have an individual risk rating of 15.

SSRA Fencing

Fencing installed in 2015 – used for site security and discouraging unauthorized site access and use.

Photo of Fencing from the groundside.

SSRA Gates

Gates installed in 2015 – used for site access, security, and discouraging unauthorized site access and use.

Photo of Person Gate (left) and Access Gate (right) from the groundside.

SSRA Site Access

Site access installed in 1993 – used for access to the SSRA from NS-210.

*No photo available.

SSRA Return Road

Return Road installed in 2007 by NSDRA – used for site access along the Runway for drag racing vehicles to safely exit the drag strip and return to the Pit Parking.

*No photo available.

SSRA Airside Access

Airside Access installed in 1965 – used for access from the Terminal Parking to the Airside Surfaces via the Apron.

*No photo available.

SSRA Airside Parking

Airside Parking installed in 2016 by NSDRA – used for spectator and drag race vehicle parking during drag racing events.

*No photo available.

SSRA Spectator Parking

Spectator Parking installed in 2004 by NSDRA – used for drag racing and fly-in event spectator parking.

Photo of Spectator Parking from the groundside.

SSRA Terminal Parking

Terminal Parking installed in 1965 – used for aerodrome users and visitors parking.

Photo of Terminal Parking from the groundside.

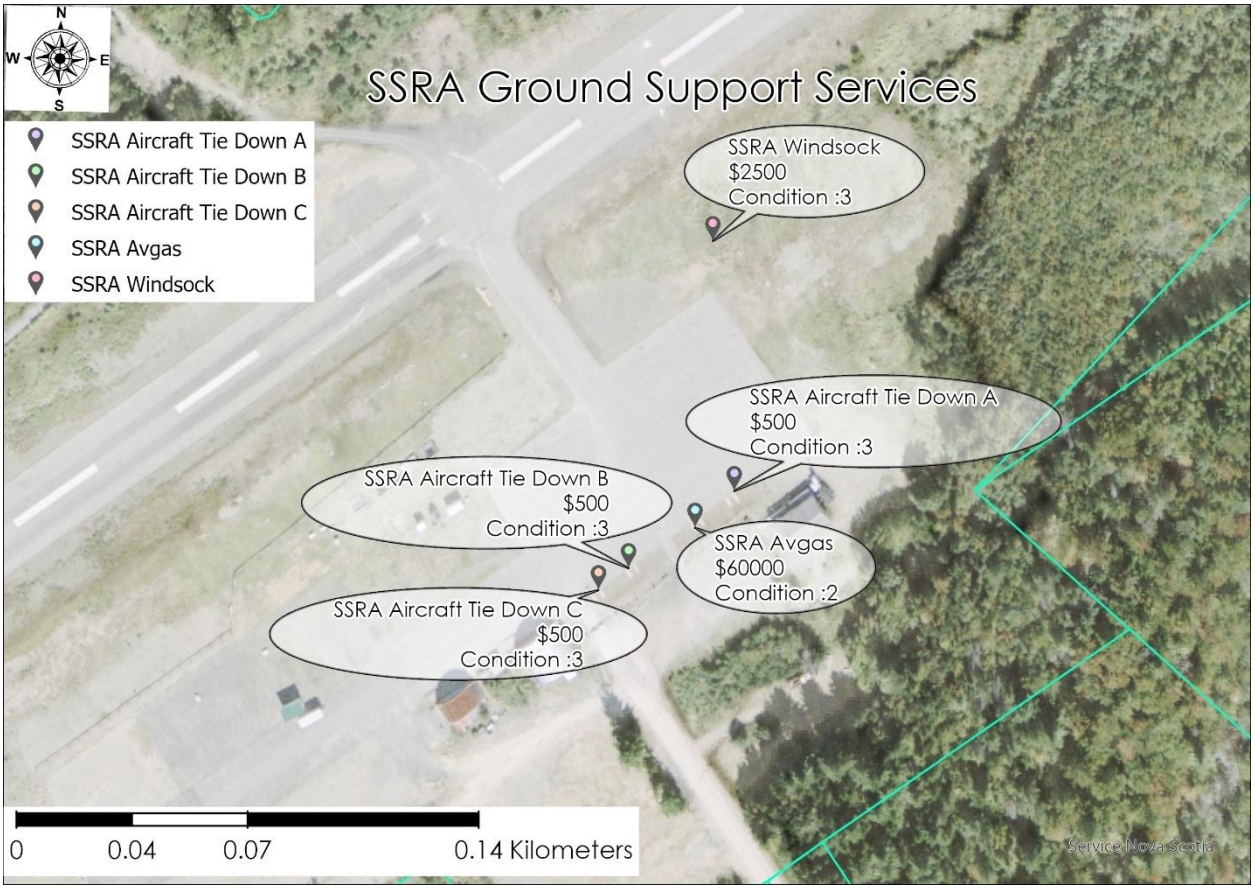
SSRA Guard Rails

Guardrails installed in 2004 by the NSDRA – used for spectator safety for drag racing and fly-in events.

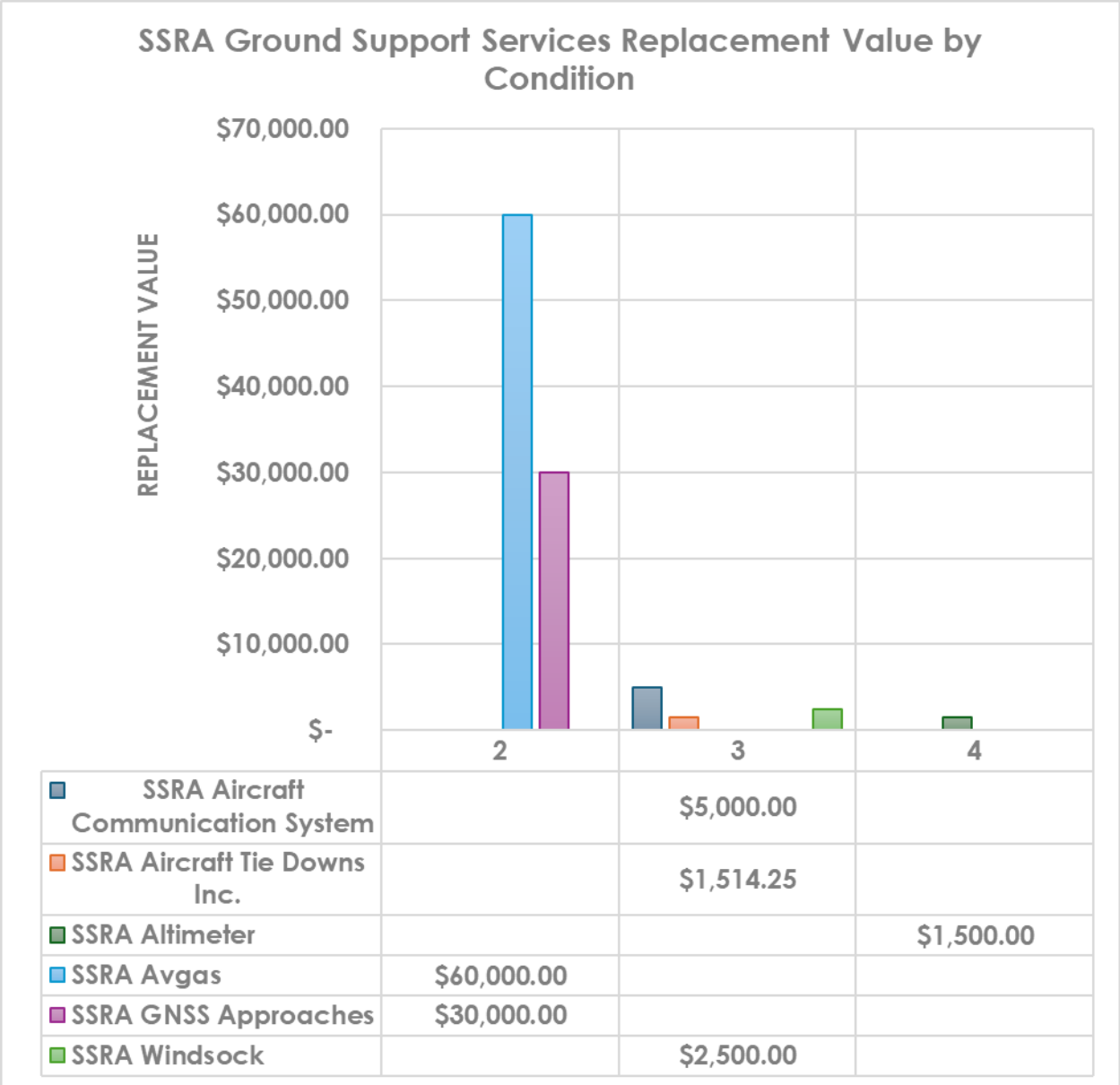
Photo of Guardrails from the airside.

SSRA Ground Support Services

The Ground Support Services Assets include the Aircraft Communication System, GNSS Flight Approaches, Windsock, Altimeter, Avgas, and Aircraft Tie Downs. The Aircraft Communication System (VHF Radio System), GNSS Flight Approaches, Windsock, and Altimeter are used by incoming or departing aircraft for flight coordination, navigation, and communication. The Avgas storage and dispensing provides fueling infrastructure, and the Aircraft Tie Downs provide a safe and secure place to park and leave aircraft.



Map showing the location, replacement value, and condition of Ground Support Services Assets at the SSRA owned by RQM.



Graph showing the replacement value of Ground Support Services Assets based on their condition. The Avgas and GNSS Flight Approaches are in the best condition. The Altimeter is in the worst condition. The total replacement value of Ground Support Services Assets at the SSRA is $100,500.00.

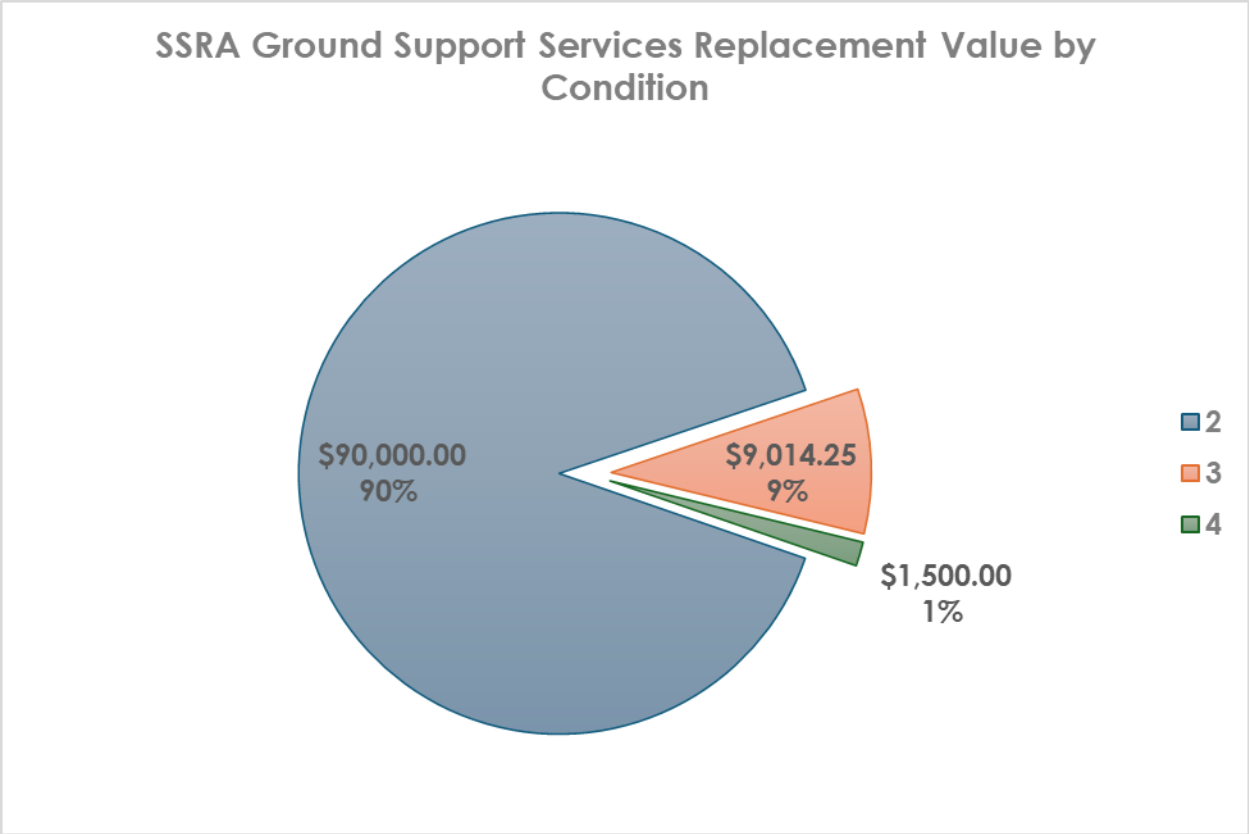
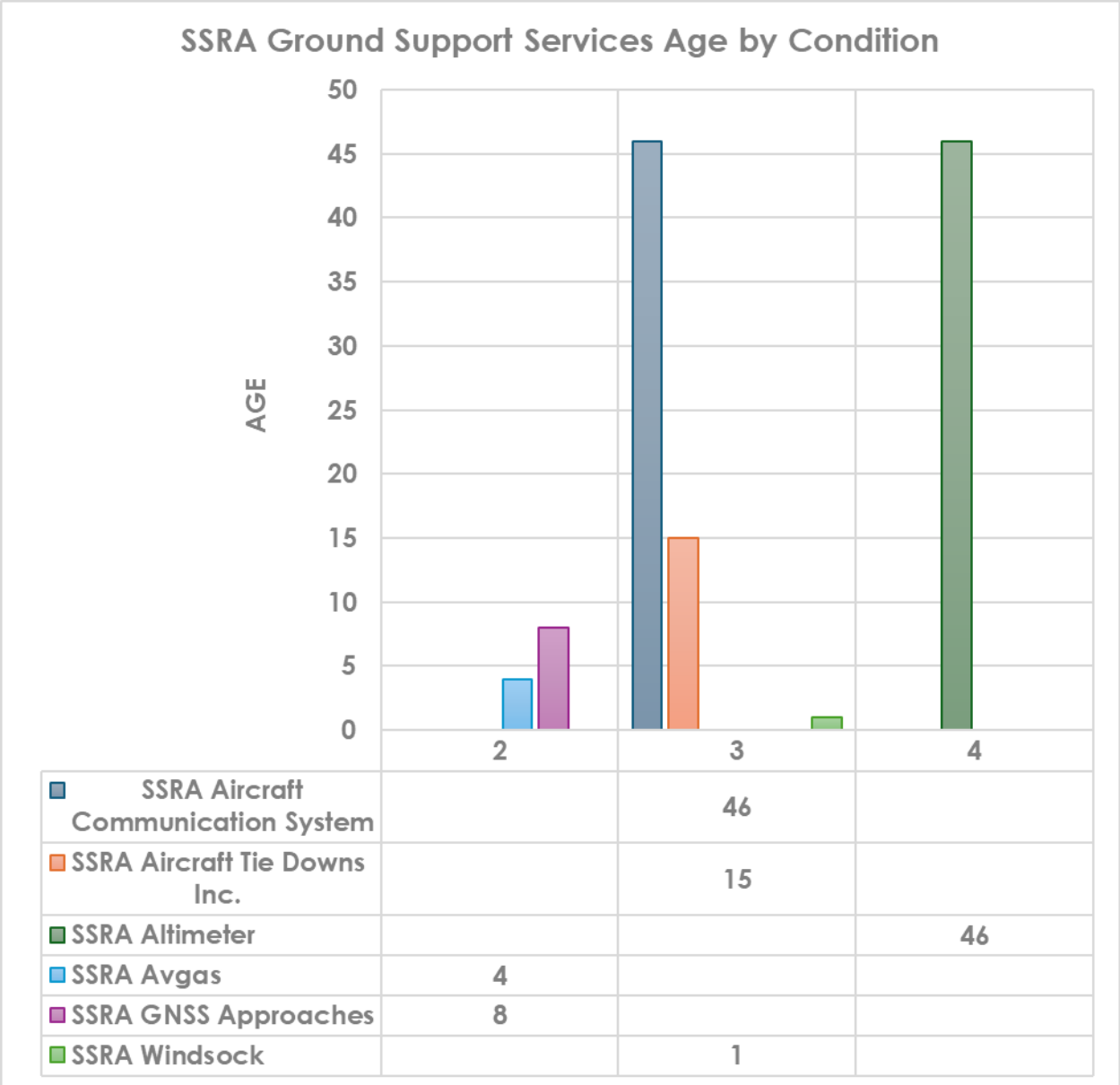
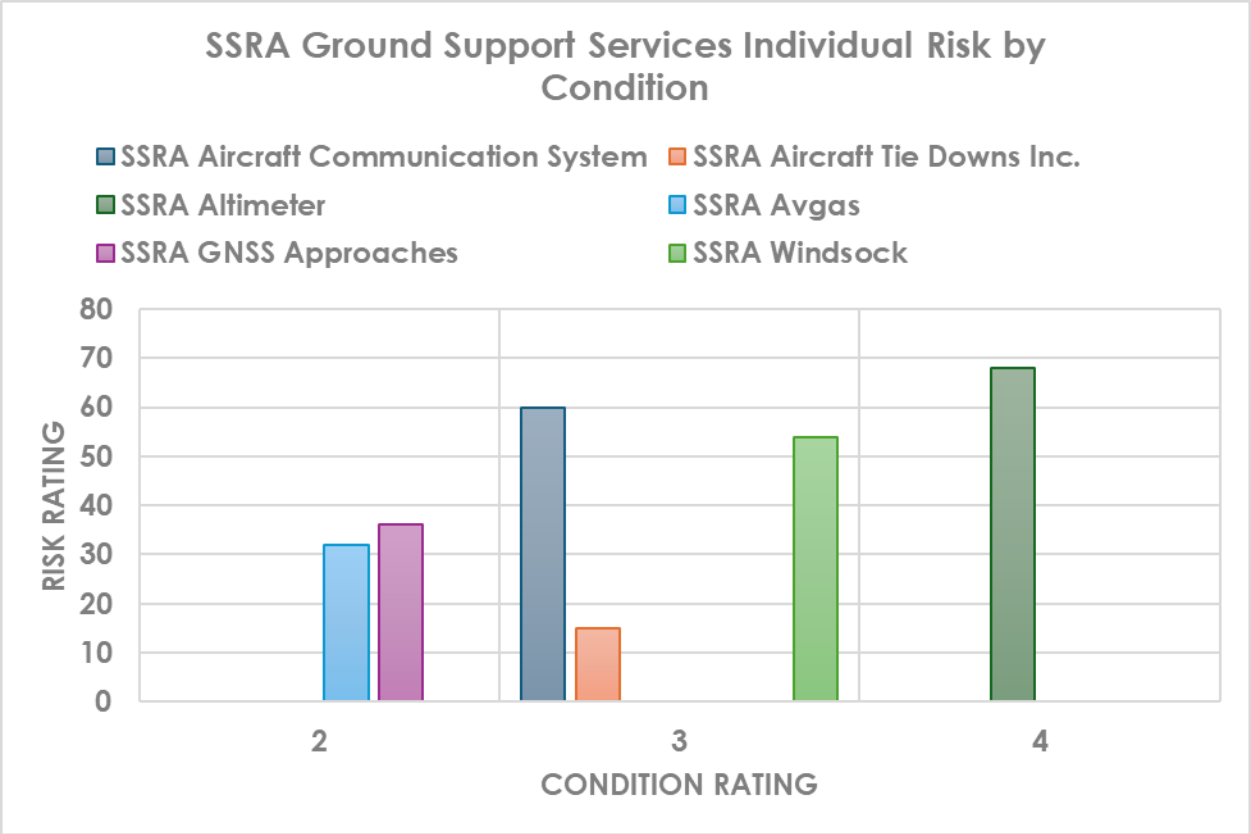


Chart showing the replacement value of Ground Support Services Assets based on their condition. 90% of Ground Support Services Assets are in good (2) condition.



Graph showing the age of Ground Support Services Assets based on their condition. The Altimeter and Aircraft Communications System are 46 years old, with the Altimeter being in the worst (4) condition.



Graph showing the individual risk rating of Ground Support Services Assets based on their condition. The Aircraft Tie Downs have the lowest individual risk ratings of 15. The Altimeter has the highest individual risk rating (68) with the Aircraft Communication System and Windsock having an individual risk rating of 60 and 54 respectively. The Avgas and GNSS Flight Approaches have an individual risk rating of 32 and 36 respectively.

SSRA Aircraft Communication System

Aircraft Communication System (VHF) installed in 1979 – used for site operations, flight coordination, and communication with aircraft.

Photo of the Aircraft Communication System in the Terminal Building.

SSRA Aircraft Tie Downs

Aircraft Tie Downs installed in 2010 – used for secure aircraft parking and anchoring.

Photo of Aircraft Tie Downs from the airside.

SSRA GNSS Approaches

GNSS Approaches installed in 2017 by JetPro and SSFC – invisible asset used for safe and reliable incoming and departing aircraft navigation to Runway.

*No photo available.

SSRA Windsock

Windsock installed in 2024 (sock only) – used for aircraft departure and navigation.

Photo of Windsock from the airside.

SSRA Altimeter

Altimeter installed in 1979 – used for providing incoming and departing aircraft with corrected elevation and pressure information.

Photo of Altimeter inside the Terminal Building.

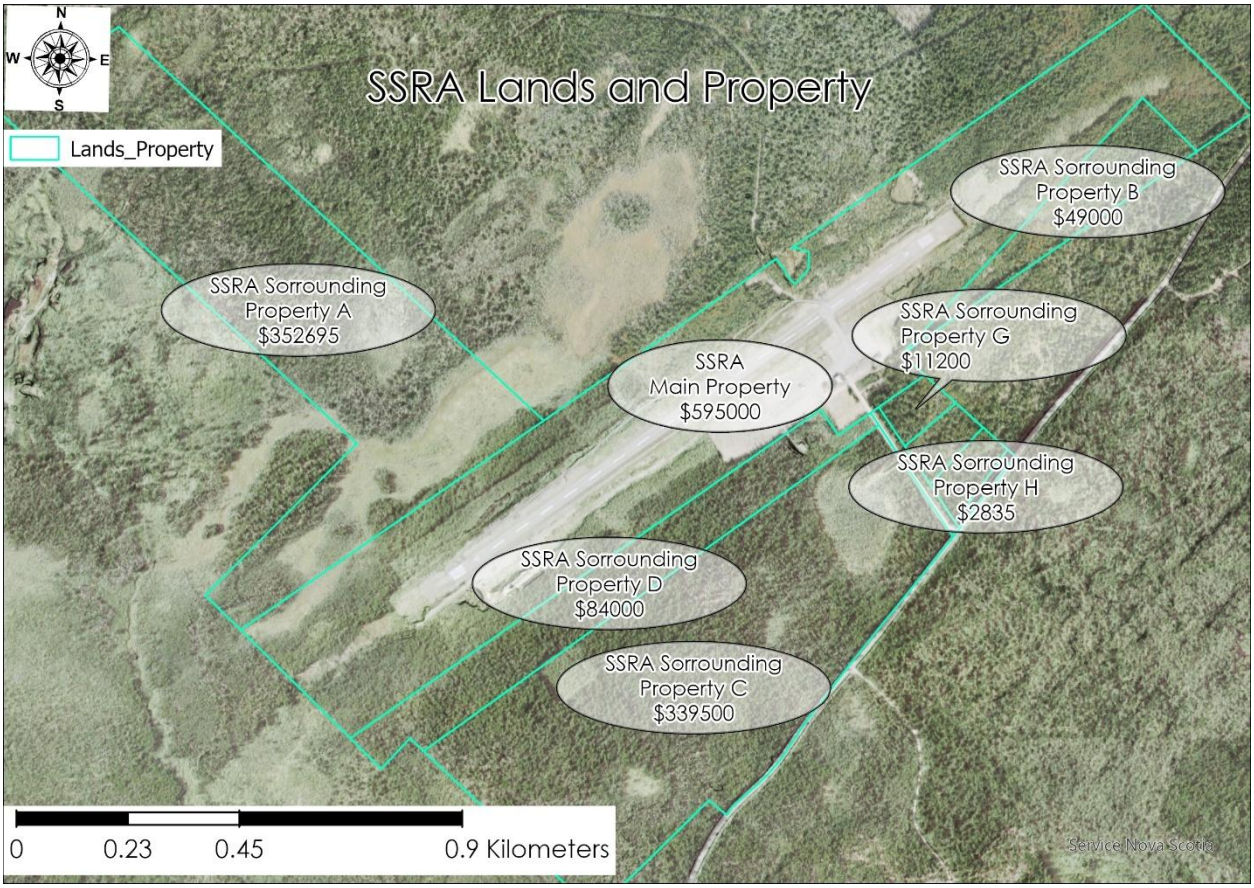
SSRA Avgas

Avgas Storage and Dispensing system installed in 2021 by the Region of Queens Municipality – used for storing and providing avgas to aircraft.

Photo of Avgas Storage and Dispensing from the airside.

SSRA Lands and Property

The Lands and Property Assets include the Main property and Surrounding Properties. The Main Property encompasses the entirety of the SSRA and its assets. The Surrounding Properties provide relief and opportunity for integrated forest management planning, development, and/or expansion.



Map showing the location, replacement value of Lands and Property Assets at the SSRA owned by RQM.

SSRA Main Property

Main Property – bordering and encompassing the SSRA and its assets entirely.
*No photo available.

SSRA Surrounding Property Inc.

Surrounding Properties acquired in 1983 from the Department of Lands and Forests – intended for industrial development and aerodrome expansion.
*No photo available.

SSRA Asset Information Summary

Assets of the South Shore Regional Airport have been categorized into the following classes:
Buildings – Total Replacement Value of $588,000.00
Airside Surfaces – Total Replacement Value of $6,003,500.00
Security and Access – Total Replacement Value of $611,000.00
Ground Support Services – Total Replacement Value of $100,500.00
Lands and Property – Total Replacement Value of $1,456,980.00
South Shore Regional Airport – Total Replacement Value of $8,764,980.00

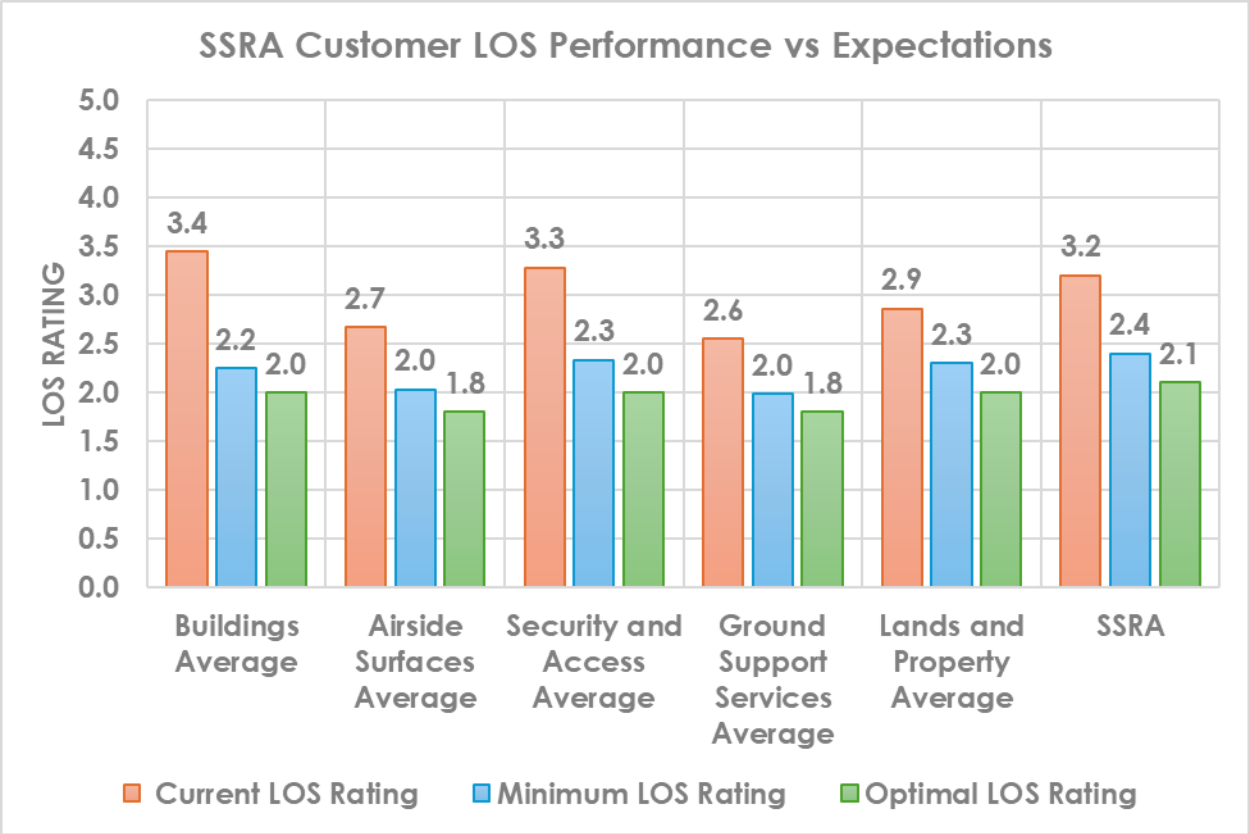
Market value assumptions for similar types of significant assets are calculated at 10% of the replacement value. Due to the age, performance, and risk involved in owning and operating the SSRA in its current condition, an additional 2% was reduced for a total market value factor of 8% of the replacement value for a preliminary market value of $702,000.00 (round).

Levels of Service

Customer Levels of Service Assumptions

Customer Levels of Service Modelling

Two Customer Levels of Service (LOS) models were built to accommodate for the fact that RQM does not have clear or defined levels of service or performance expectations for the South Shore Regional Airport. These service levels models as they are described below are designed to reduce the overwhelming nature asset management by creating defined checkpoints, platforms, and standards that can act as the asset owner's best entry point for continuing to manage and monitor asset performance, lifecycle delivery, and risk. The criteria that make up the LOS models act as the levers that the mayor, council, leadership, and decision-makers may choose to push and pull in adjusting customer LOS expectations, enabling the definition of technical, and operational LOS. These LOS models define the scope and bounds of asset management priorities as a starting point for informed decision-making.



Graph showing the distribution of customer LOS analysis results across each asset class as compared to the current, minimum, and optimal LOS expectations.

Regulatory Requirements

Canadian Aviation Regulations (CAR), Part 2, Subpart 02.
TP 312 – Aerodrome Standards and Recommended Practices.

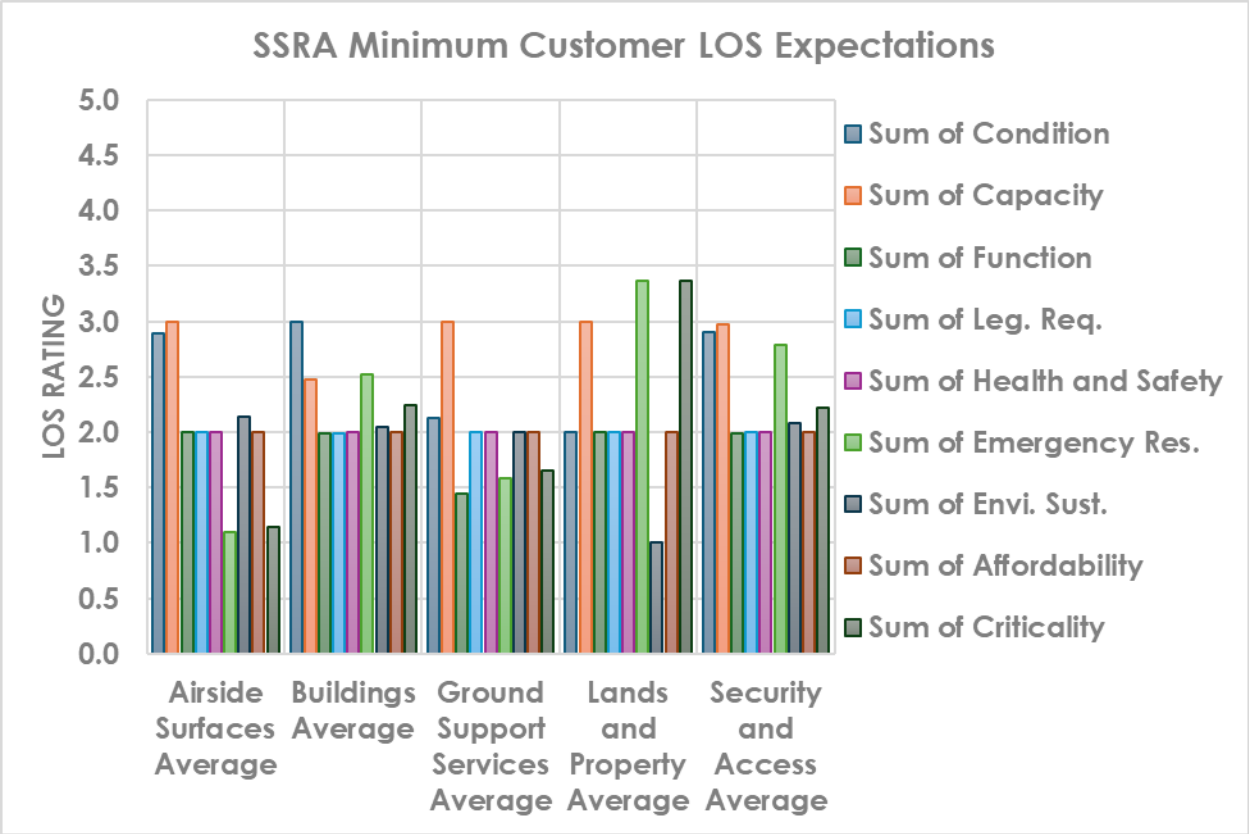
Minimum Service Level Model

Maintaining registered aerodrome status:
A registered aerodrome requires that accurate site information is provided to Transport Canada for inclusion in the Canadian Flight Supplement (CFS) including location, elevation, markings, radio frequency, operator information, service levels, lighting, and maintenance standards.
Maintaining non-precision approaches:

To maintain the non-precision runway status, the GNSS instrument approaches must be recertified by JetPro in June of 2027, and then recertified every 5 years. Recertification of the GNSS approaches requires that the airfield has appropriate obstacle clearance (520' before each approach and 91' to each side of runway 07/25) which involves brushing, clearing, and the proactive mitigation and removal of hazards and communication of changes.

Minimum Customer Levels of Service Performance Expectations

Condition – What is the assets physical or age-based condition?
Okay - Some visual and/or operational deficiencies. Within 75% of expected useful life. Reassess in 12-18 months.
Function – How well does the asset meet its functional requirements?
Functional – Meeting 70-90% of functional requirements.
Capacity – How well is the asset utilized as compared to its optimal availability?
Semi-Utilized – Between 50-70% utilization as compared to availability.
Health and Safety – How well does the asset protect and maintain the health and safety of users and stakeholders?
Up to date protection and maintenance of health and safety for users and stakeholders. Health and safety are unlikely to become compromised.
Legislative Requirements – How well does the asset meet relevant legislative or regulatory compliance requirements?
Meeting all relevant legislative and regulatory compliance requirements. Awareness of future requirements.
Affordability – How affordable is maintaining and accessing the asset as compared to current LOS expectations?
Predictable and sustainable cost to users, stakeholders and owners over 3-year horizon.
Environmental Sustainability and Climate Readiness – How well does the asset contribute to the community's climate readiness and environmental sustainability?
Proactive, sustained, localized (short/long-term) contribution to the community's climate readiness and environmental sustainability.
Emergency Response – How well does the asset contribute to the community's ability to respond to emergencies?
Vital/central role in the community's emergency response.
Criticality – How critical is the asset to maintaining LOS expectations?
Supporting role in maintaining LOS expectations. In the event of failure, LOS could become compromised (short term/temporary).



Graph showing minimum customer LOS expectations for each asset class as they correspond to customer LOS criteria.

Optimal Service Level Model

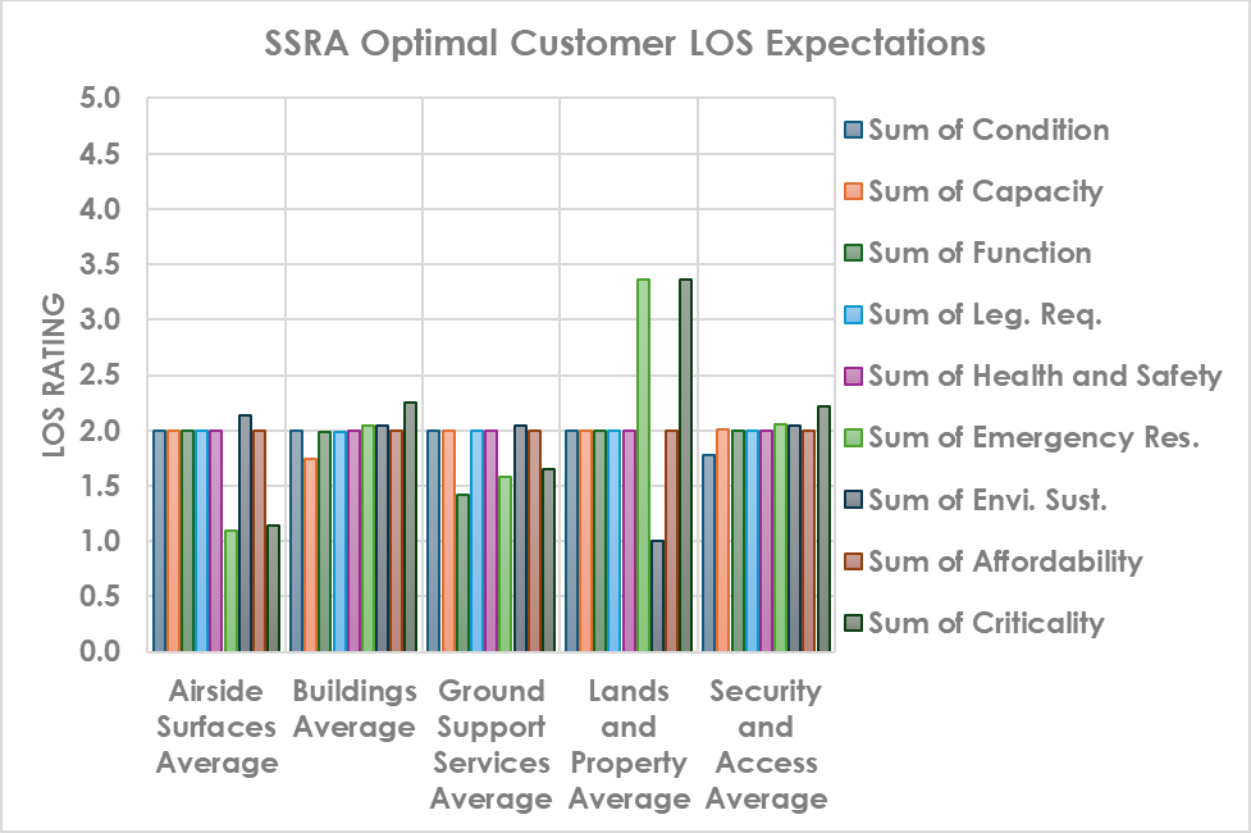
Achieving certified aerodrome status:
Becoming certified would include conducting an analysis in tandem with Transport Canada to determine exactly what CYAU SSRA would require to becoming certified and begin strategically removing barriers before seeking certification. It is highly likely that results from such an analysis would translate into a need to adhere to a higher level of standards compliance as outlined in Canadian Aviation Regulations (CARs), Part 2, Subpart 02 and Standards outlined by Transport Canada in TP-312 – Aerodrome Standards and Recommended Practices (TP-312) – which would include assessing and improving infrastructure, having a functional airport operations manual detailing operational procedure including winter maintenance, safety management system and measures, and emergency response measures for all seasons, and requiring regular operation, oversight, and both regulatory and non-regulatory inspections.

Achieving unrestricted aerodrome status:
Becoming unrestricted would include conducting an aeronautical study in tandem with Nav Canada to determine exactly why CYAU SSRA Runway 07/25 is restricted and begin strategically removing barriers before seeking unrestricted status. It is highly likely that results from such a study would translate into a need to adhere to a higher level of standards compliance as outlined in the CARs and TP-312, improve navigation and design limitations, improve obstacle clearance to aid in the development of precision instrument landing system and approaches which include both lateral and horizontal guidance and a 2% approach glide slope. It would also include developing a comprehensive safety management system and airport operations manual detailing operating procedures and winter maintenance considering the unmanned nature of the aerodrome, installing a weather station that integrates and reports to Environment Canada, conducting both regulatory and non-regulatory runway inspections, and upgrading the altimeter to deliver a certified measure, and installing radio-controlled runway lighting.
Additional Investment Opportunities:
Investment in a JetFuel storage and dispensing system. Hangar investments. Terminal building investments. Heliport investments.

Optimal Customer Levels of Service Performance Expectations

Condition – What is the assets physical or age-based condition?
Good – No visual or operational deficiencies. Within 50% of expected useful life. Reassesses in 18-24 months.
Function – How well does the asset meet its functional requirements?
Fully-Functional – Meeting over 90% of functional requirements.
Capacity – How well is the asset utilized as compared to its optimal availability?
Utilized – Between 70-90% utilization as compared to availability.
Health and Safety – How well does the asset protect and maintain the health and safety of users and stakeholders?
Proactive protection and maintenance of health and safety for users and stakeholders. Health and safety are highly unlikely to become compromised.
Legislative Requirements – How well does the asset meet relevant legislative or regulatory compliance requirements?
Meeting all relevant legislative and regulatory compliance requirements. Proactively prepared for future requirements.
Affordability – How affordable is maintaining and accessing the asset as compared to current LOS expectations?
Predictable and sustainable cost to users, stakeholders and owners over 5-year horizon.

Environmental Sustainability and Climate Readiness – How well does the asset contribute to the community's climate readiness and environmental sustainability?
Proactive, sustained, widespread (long-term/permanent) contribution to the community's climate readiness and environmental sustainability.
Emergency Response – How well does the asset contribute to the community's ability to respond to emergencies?
Vital/central role in the community's emergency response.
Criticality – How critical is the asset to maintaining LOS expectations?
Supporting role in maintaining LOS expectations. In the event of failure, LOS could become compromised (short term/temporary).



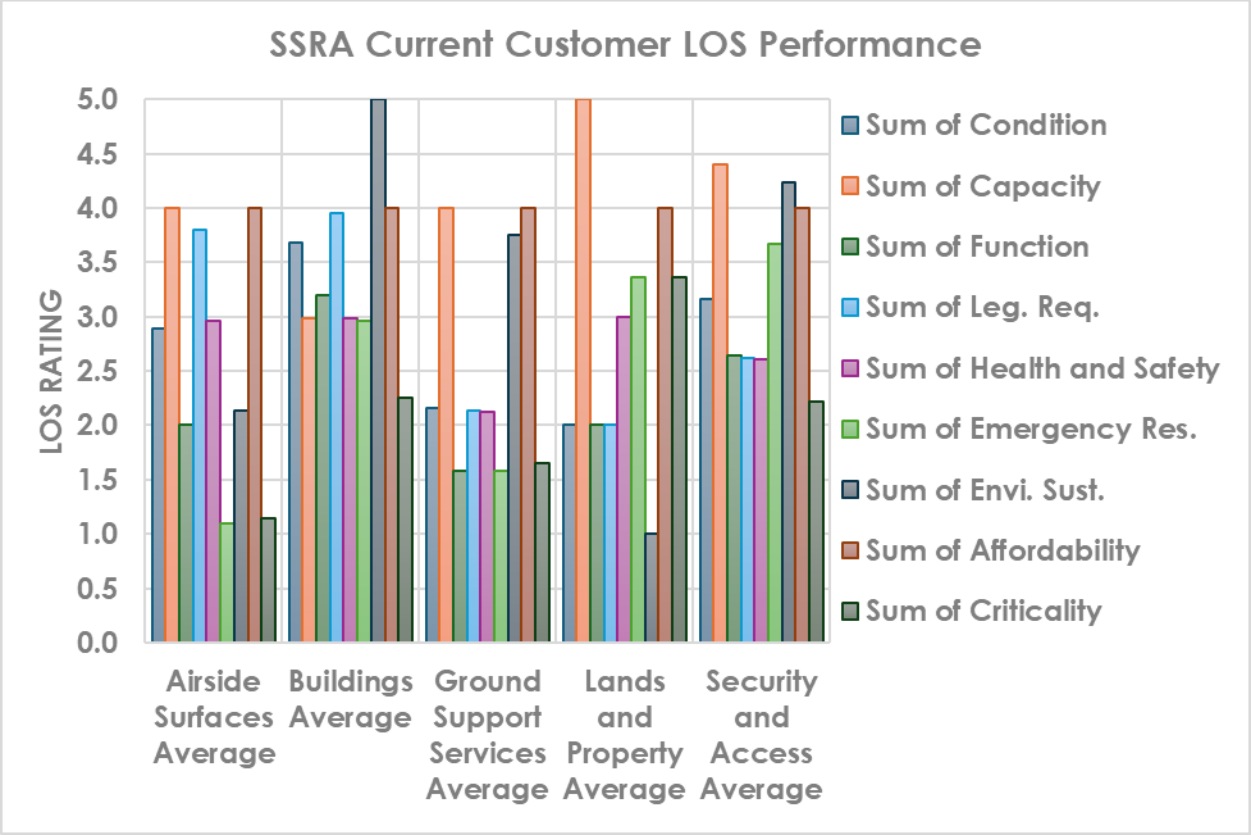
Graph showing optimal customer LOS expectations for each asset class as they correspond to customer LOS criteria.

Levels of Service Analysis

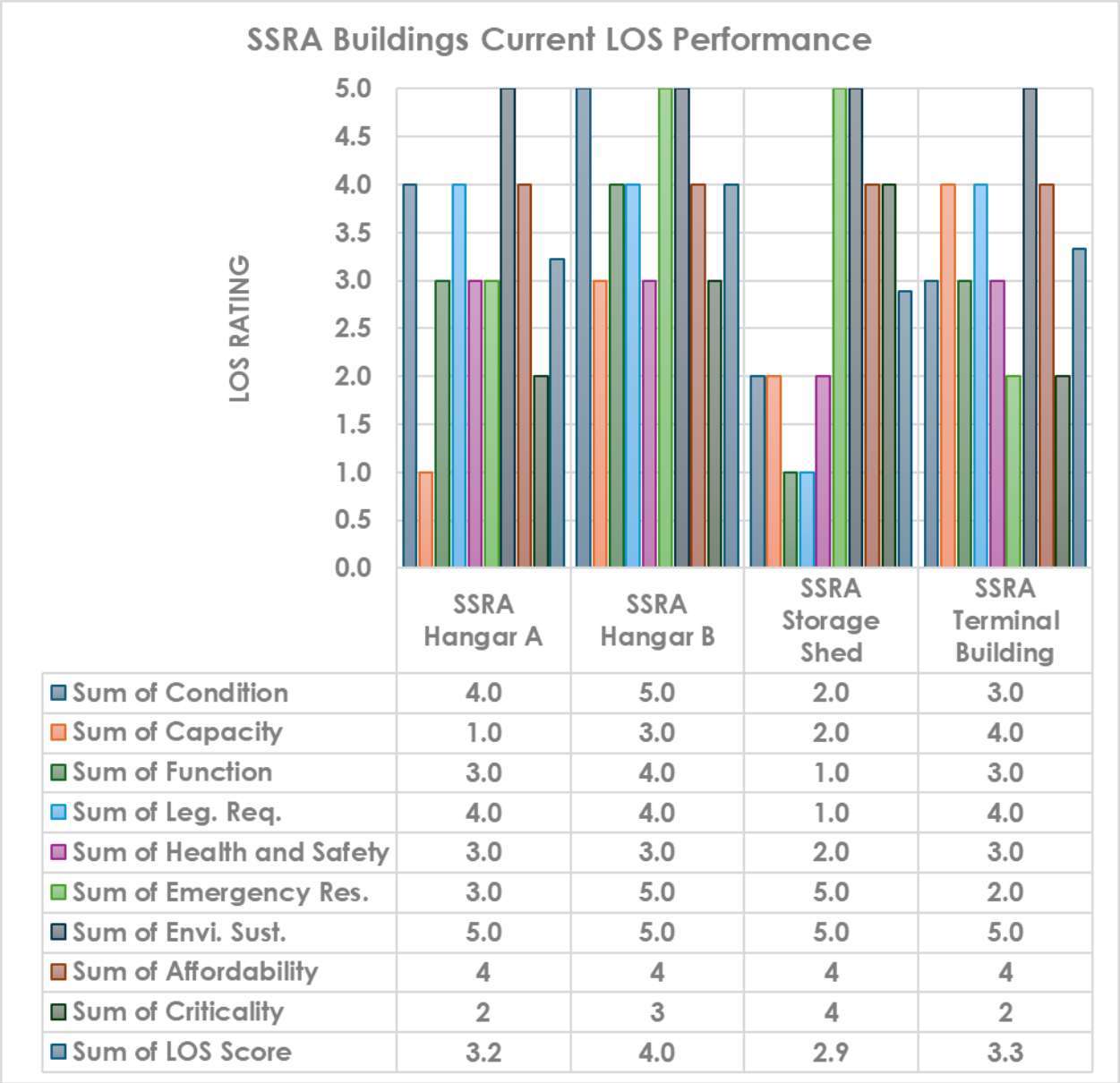
Current Customer Levels of Service Performance

Condition – What is the assets physical or age-based condition?
Okay - Some visual and/or operational deficiencies. Within 75% of expected useful life. Reassess in 12-18 months.
Function – How well does the asset meet its functional requirements?
Functional – Meeting 70-90% of functional requirements.
Capacity – How well is the asset utilized as compared to its optimal availability?
Under-Utilized - Between 30-50% utilization as compared to availability.
Health and Safety – How well does the asset protect and maintain the health and safety of users and stakeholders?
Antiquated protection and maintenance of health and safety for users and stakeholders. Health and safety could become compromised.
Legislative Requirements – How well does the asset meet relevant legislative or regulatory compliance requirements?
Meeting some relevant legislative requirements. Future legislative requirements could compromise LOS.
Affordability – How affordable is maintaining and accessing the asset as compared to current LOS expectations?
Predictable and unsustainable cost to users and stakeholders over 3-year horizon.
Environmental Sustainability and Climate Readiness – How well does the asset contribute to the community's climate readiness and environmental sustainability?
Reactive, localized (short/long-term) contribution to the community's climate readiness and environmental sustainability.
Emergency Response – How well does the asset contribute to the community's ability to respond to emergencies?
Vital/central role in the community's emergency response.
Criticality – How critical is the asset to maintaining LOS expectations?
Critical to maintaining LOS expectations. In the event of failure, LOS is certain to become compromised (long-term/permanent).
Operational restrictions:
As a restricted aerodrome with non-precision approaches CYAU SSRA Runway 07/25 has certain operational restrictions which impact its availability to visually clear days, increased operational licensing and aircraft requirements, and pilots must have previous experience with the aerodrome before they are able to land. As a function of the services provided by the SSRA, there is no winter maintenance hence no winter use,

and no night-time operations permitted due to the absence of runway lighting. Flight training is not provided at CYAU SSRA due to the absence of a certified flight instructor.

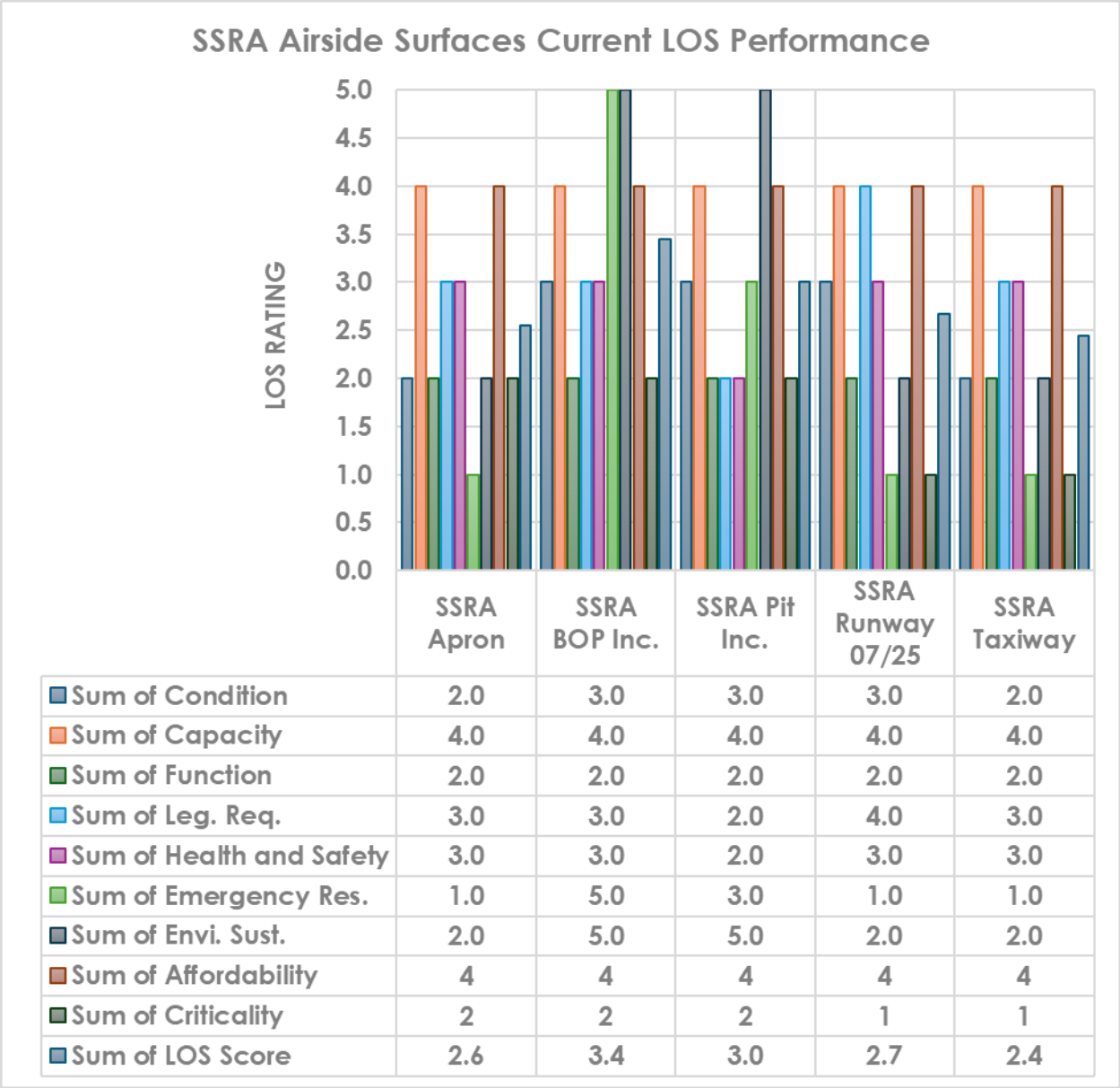


Graph showing current customer LOS expectations for each asset class as they correspond to customer LOS criteria.



	SSRA Hangar A	SSRA Hangar B	SSRA Storage Shed	SSRA Terminal Building
Sum of Condition	4.0	5.0	2.0	3.0
Sum of Capacity	1.0	3.0	2.0	4.0
Sum of Function	3.0	4.0	1.0	3.0
Sum of Leg. Req.	4.0	4.0	1.0	4.0
Sum of Health and Safety	3.0	3.0	2.0	3.0
Sum of Emergency Res.	3.0	5.0	5.0	2.0
Sum of Envi. Sust.	5.0	5.0	5.0	5.0
Sum of Affordability	4	4	4	4
Sum of Criticality	2	3	4	2
Sum of LOS Score	3.2	4.0	2.9	3.3

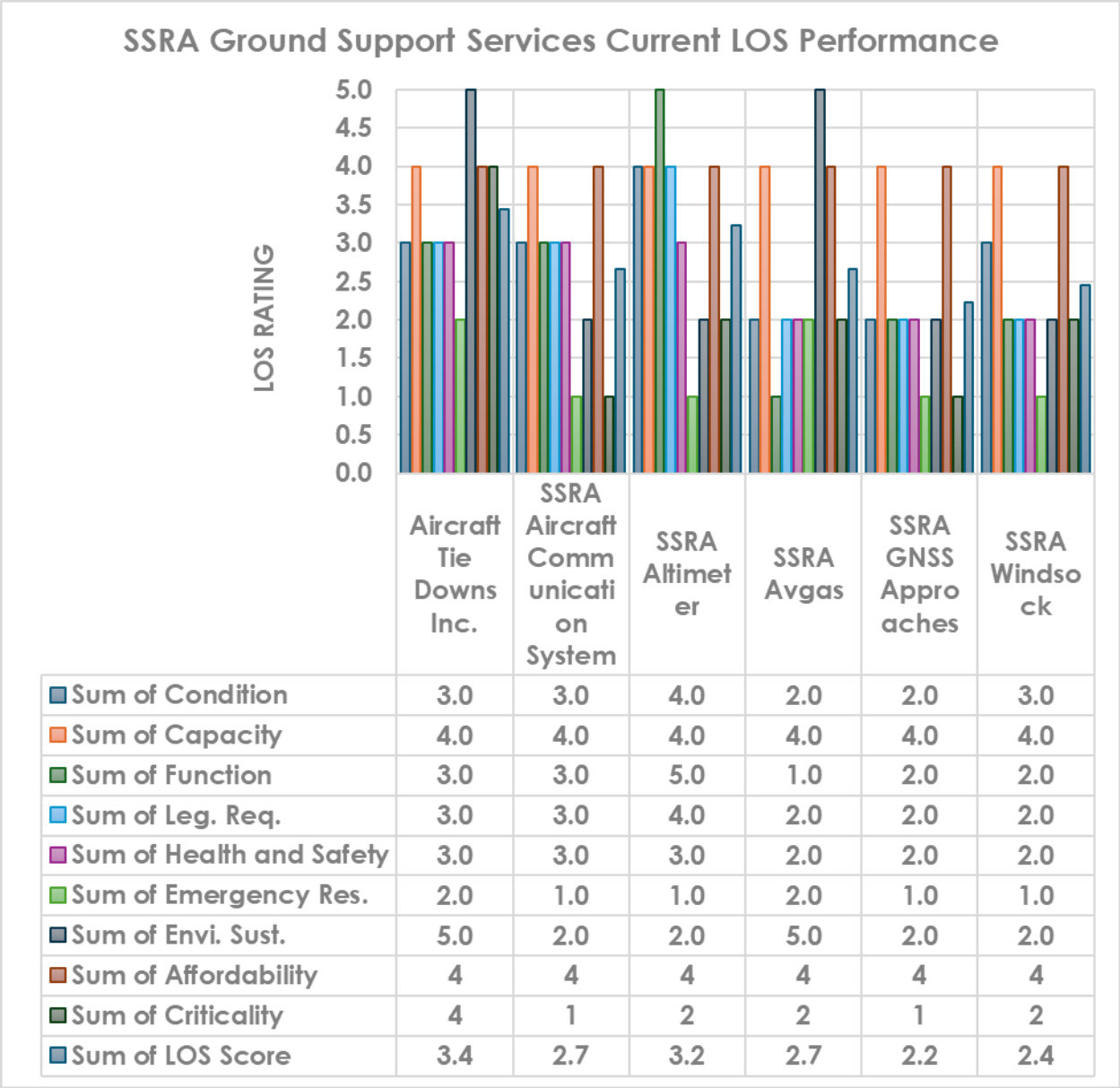
Graph showing SSRA Building assets current customer LOS performance.



	SSRA Apron	SSRA BOP Inc.	SSRA Pit Inc.	SSRA Runway 07/25	SSRA Taxiway
Sum of Condition	2.0	3.0	3.0	3.0	2.0
Sum of Capacity	4.0	4.0	4.0	4.0	4.0
Sum of Function	2.0	2.0	2.0	2.0	2.0
Sum of Leg. Req.	3.0	3.0	2.0	4.0	3.0
Sum of Health and Safety	3.0	3.0	2.0	3.0	3.0
Sum of Emergency Res.	1.0	5.0	3.0	1.0	1.0
Sum of Envi. Sust.	2.0	5.0	5.0	2.0	2.0
Sum of Affordability	4	4	4	4	4
Sum of Criticality	2	2	2	1	1
Sum of LOS Score	2.6	3.4	3.0	2.7	2.4

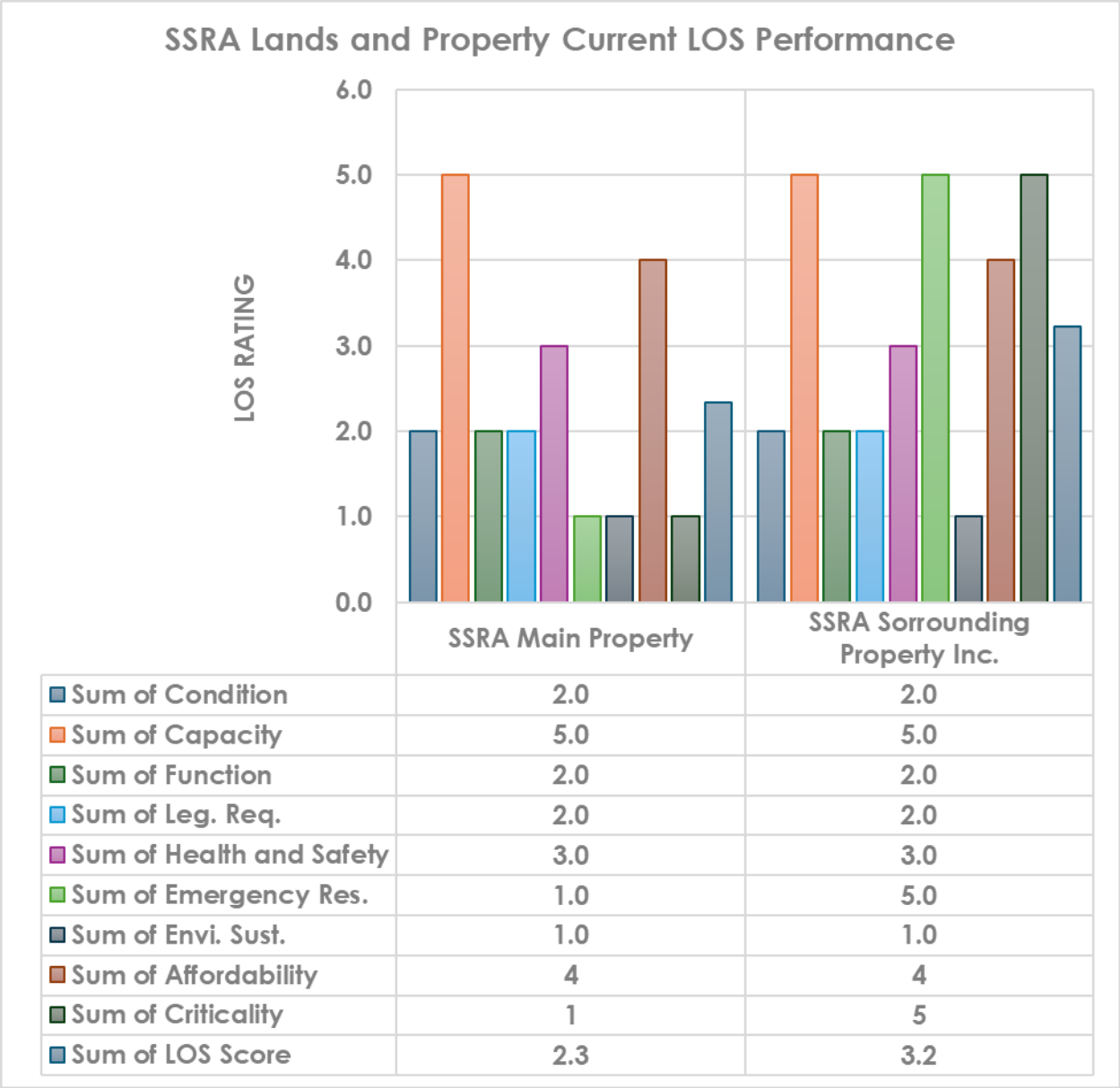
Graph showing SSRA Airside Surface assets current customer LOS performance.

Graph showing SSRA Security and Access assets current customer LOS performance.



	Aircraft Tie Downs Inc.	SSRA Aircraft Communication System	SSRA Altimeter	SSRA Avgas	SSRA GNSS Approaches	SSRA Windsock
Sum of Condition	3.0	3.0	4.0	2.0	2.0	3.0
Sum of Capacity	4.0	4.0	4.0	4.0	4.0	4.0
Sum of Function	3.0	3.0	5.0	1.0	2.0	2.0
Sum of Leg. Req.	3.0	3.0	4.0	2.0	2.0	2.0
Sum of Health and Safety	3.0	3.0	3.0	2.0	2.0	2.0
Sum of Emergency Res.	2.0	1.0	1.0	2.0	1.0	1.0
Sum of Envi. Sust.	5.0	2.0	2.0	5.0	2.0	2.0
Sum of Affordability	4	4	4	4	4	4
Sum of Criticality	4	1	2	2	1	2
Sum of LOS Score	3.4	2.7	3.2	2.7	2.2	2.4

Graph showing SSRA Ground Support Services assets current customer LOS performance.



	SSRA Main Property	SSRA Sorrounding Property Inc.
Sum of Condition	2.0	2.0
Sum of Capacity	5.0	5.0
Sum of Function	2.0	2.0
Sum of Leg. Req.	2.0	2.0
Sum of Health and Safety	3.0	3.0
Sum of Emergency Res.	1.0	5.0
Sum of Envi. Sust.	1.0	1.0
Sum of Affordability	4	4
Sum of Criticality	1	5
Sum of LOS Score	2.3	3.2

Graph showing SSRA Lands and Property assets current customer LOS performance.

Performance Gap Analysis

Minimum Performance Gap

The minimum performance gaps identified below point towards which service area needs support to maintain desired customer LOS expectations.

Buildings

- Condition improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Function improvements (O&M/R&R/investment/oversight) –Align with lifecycle delivery and risk management results and recommendations.
- Legislation compliance (O&M/R&R/investment/oversight) –Align with lifecycle delivery and risk management results and recommendations.
- Health and Safety improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Emergency Response preparedness (O&M/R&R/investment/oversight/collaboration) – Align with lifecycle delivery and risk management results and recommendations.
- Environmental Sustainability improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Affordability improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.

Recommendations are to improve the condition, function, legislative compliance, and health and safety of buildings by inspecting, upgrading, repairing, and improving old systems and systems deficiencies in line with the immediate repair and compliance needs identified. Improve environmental sustainability and emergency response preparedness through upgrades to building systems and collaboration with key and secondary stakeholders. Improve affordability by understanding and supporting desired services through adequate resource allocation, planning, investment, and oversight in line with minimum O&M needs.

Airside Surfaces

- Capacity improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Legislation compliance (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Health and Safety improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Affordability improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.

Recommendations are to improve capacity through advertising and collaborating with key stakeholders to increase utilization, considering the improvement of services and implementation of user fees. Improve legislative compliance and health and safety through inspecting, upgrading, and repairing systems and system deficiencies in line with immediate repair and compliance needs identified. Improve affordability by understanding and supporting desired services through adequate resource allocation, planning, investment, and oversight in line with minimum O&M needs.

Security and Access

- Condition improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Capacity improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Function improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Legislation compliance (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Health and Safety improvements (O&M/R&R//investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Emergency Response preparedness (O&M/R&R/investment/oversight/collaboration) – Align with lifecycle delivery and risk management results and recommendations.
- Environmental Sustainability improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Affordability improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.

Recommendations are to improve the condition, function, legislative compliance, and health and safety of security and access by inspecting, upgrading, repairing, and improving old systems and system deficiencies in line with the immediate repair and compliance needs identified. Improve capacity through advertising and collaborating with key stakeholders to increase utilization, considering the improvement of services. Improve environmental sustainability and emergency response preparedness through upgrades to security and access systems and collaboration with key and secondary stakeholders. Improve affordability by understanding and supporting desired services through adequate resource allocation, planning, investment, and oversight in line with minimum O&M needs.

Ground Support Services

- Condition improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.

- Capacity improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Function improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Legislation compliance (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Health and Safety improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Environmental Sustainability improvements (O&M/R&R//investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Affordability improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.

Recommendations are to improve the condition, function, legislative compliance, and health and safety of ground support services by inspecting, upgrading, repairing, and improving old systems and system deficiencies in line with the immediate repair and compliance needs identified. Improve capacity through advertising and collaborating with key stakeholders to increase utilization, considering the improvement of services and user fees. Improve environmental sustainability through upgrades to security and access systems and collaboration with key and secondary stakeholders. Improve affordability by understanding and supporting desired services through adequate resource allocation, planning, investment, and oversight in line with minimum O&M needs.

Lands and Property

- Capacity improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Health and Safety improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.
- Affordability improvements (O&M/R&R/investment/oversight) – Align with lifecycle delivery and risk management results and recommendations.

Recommendations are to improve the health and safety of land and property by inspecting, upgrading, repairing, and improving old systems and system deficiencies in line with the immediate repair and compliance needs identified. Improve capacity through advertising and collaborating with key stakeholders to increase utilization, considering the improvement of services and user fees. Improve affordability by understanding and supporting desired services through adequate resource allocation, planning, investment, and oversight in line with minimum O&M needs.

Optimal Performance Gap

Buildings

- Condition improvements (O&M/R&R/investment/oversight).
- Capacity improvements (O&M/R&R/investment/oversight).
- Function improvements (O&M/R&R/investment/oversight).
- Legislation compliance (O&M/R&R/investment/oversight).
- Health and Safety improvements (O&M/R&R/investment/oversight).
- Emergency Response preparedness (O&M/R&R/investment/oversight/collaboration).
- Environmental Sustainability improvements (O&M/R&R/investment/oversight).
- Affordability improvements (O&M/R&R/investment/oversight).

Recommendations would include those noted above, while considering investment into additional hangar buildings, investment into the terminal building basement, and exploration into increased but affordable services and user fees that line up with increasing the utilization and security of buildings.

Primary Airside Surfaces

- Condition improvements (O&M/R&R/investment/oversight).
- Capacity improvements (O&M/R&R/investment/oversight).
- Legislation compliance (O&M/R&R/investment/oversight).
- Health and Safety improvements (O&M/R&R/investment/oversight).
- Affordability improvements (O&M/R&R/investment/oversight).

Recommendations would include those noted above and exploration into increased but affordable services and user fees that line up with increasing the utilization and security of the site and site assets.

Security and Access

- Condition improvements (O&M/R&R/investment/oversight).
- Capacity improvements (O&M/R&R/investment/oversight).
- Function improvements (O&M/R&R/investment/oversight).
- Legislation compliance (O&M/R&R/investment/oversight).
- Health and Safety improvements (O&M/R&R//investment/oversight).
- Emergency Response preparedness (O&M/R&R/investment/oversight/collaboration).
- Environmental Sustainability improvements (O&M/R&R/investment/oversight).
- Affordability improvements (O&M/R&R/investment/oversight).

Recommendations would include those noted above, while considering investment into additional perimeter fencing and cameras and investment into the signage and condition of paved site access, and exploration into increased but affordable services

and user fees that line up with increasing the utilization and security of the site and site assets.

Ground Support Services

- Condition improvements (O&M/R&R/investment/oversight).
- Capacity improvements (O&M/R&R/investment/oversight).
- Function improvements (O&M/R&R/investment/oversight).
- Legislation compliance (O&M/R&R/investment/oversight).
- Health and Safety improvements (O&M/R&R/investment/oversight).
- Environmental Sustainability improvements (O&M/R&R//investment/oversight).
- Affordability improvements (O&M/R&R/investment/oversight).

Recommendations would include those noted above, while considering investment into Jetfuel storage and dispensing infrastructure and investment into weather monitoring and reporting infrastructure and instrumentation, and exploration into increased but affordable services and user fees that line up with increasing the utilization and security of the site and site assets.

Lands and Property

- Capacity improvements (O&M/R&R/investment/oversight).
- Health and Safety improvements (O&M/R&R/investment/oversight).
- Affordability improvements (O&M/R&R/investment/oversight).

Recommendations would include those noted above, while considering investment into full boundary line maintenance program and land signage and investment into an integrated forest management plan and exploration into increased but affordable services and user fees that line up with increasing the utilization and security of the site and site assets.

Lifecycle Delivery

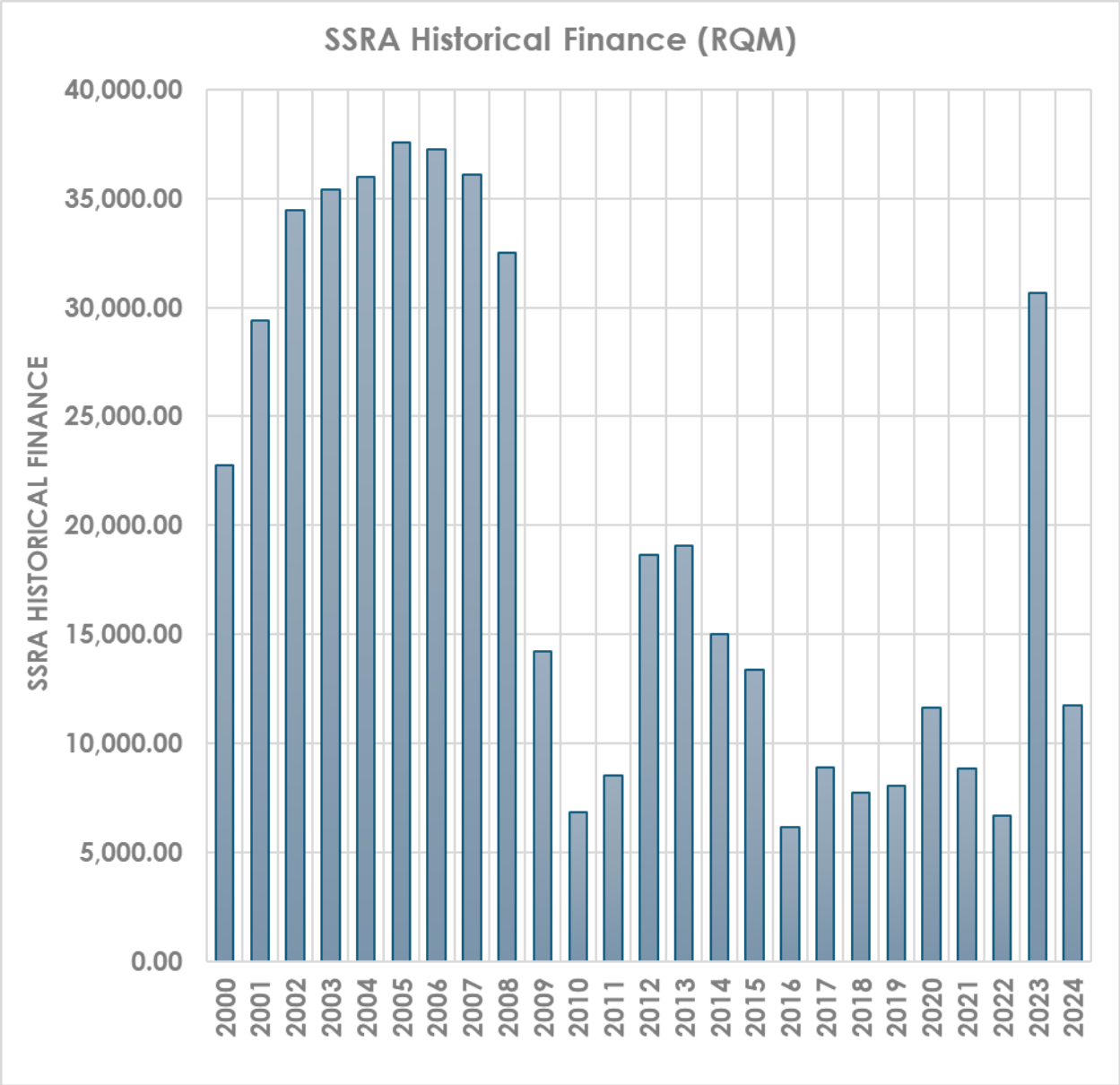
Operations and Maintenance History and Strategy

Current Operations and Maintenance History

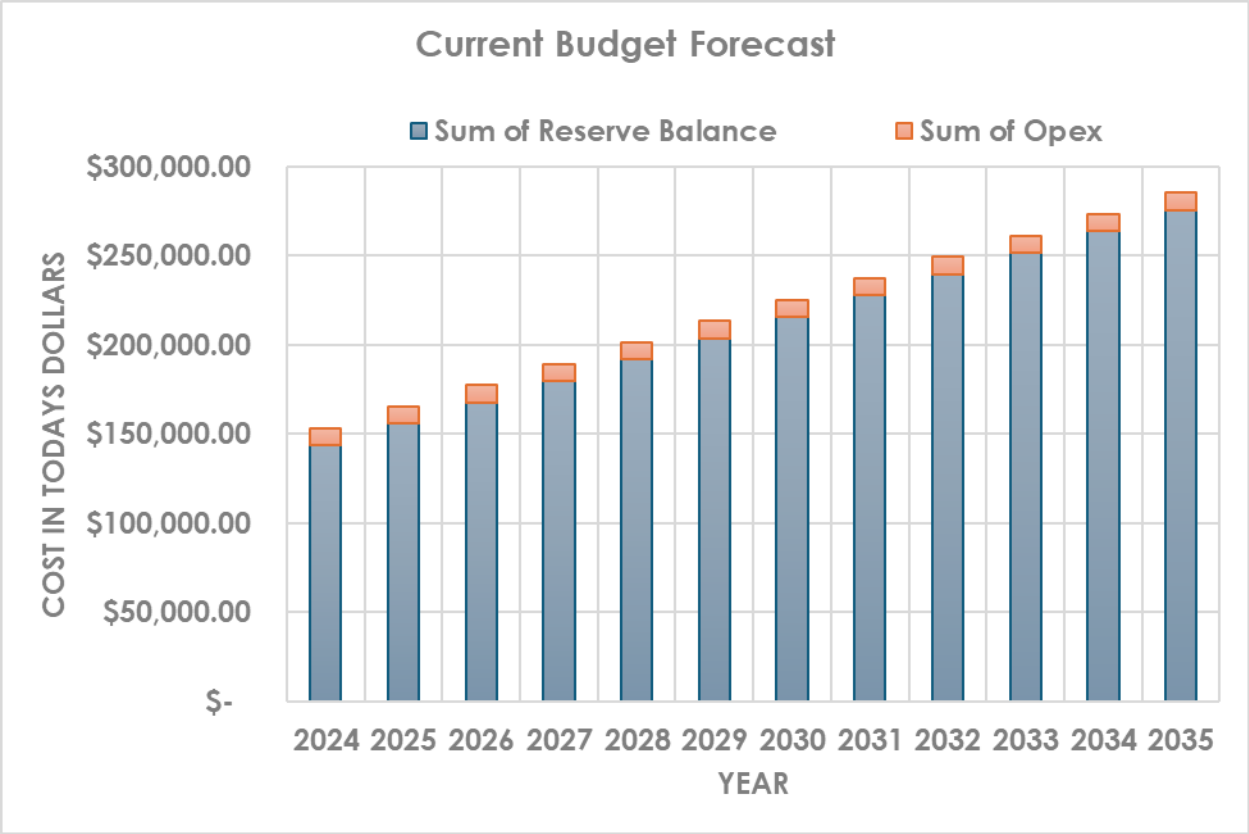
SSRA development decision-making, operations and maintenance responsibilities and activities have been overseen and carried out by a variety of parties over the lifespan of the site. Prior to amalgamation in 1996, the SSRA was governed primarily by the Liverpool Queens Development Commission (LQDC) formerly the Liverpool Queens Industrial Commission (LQIC) – which was made of representatives from the Municipality of Liverpool and Municipality of Queens County. Development, operations, and associated activities were supported by the Liverpool Airport Auxiliary, Liverpool Airport Management Committee. Liverpool Air Services and VRF Aviators and the Liverpool Flying Club were also key in supporting airport development, operations, and associated activities. In 1996 the Region of Queens Municipality (RQM) was formed as a result of amalgamation and RQM inherited CYAU SSRA and its liabilities.

Until 2009, RQM funded and supported an airport manager who was responsible for CYAU operation and oversight.

In the absence of a dedicated airport manager, SSRA has been operated and maintained by two key stakeholders. The South Shore Flying Club (SSFC), who have operated and maintained site assets as a regional airport since 2015 – and the Nova Scotia Drag Racing Association (NSDRA), who operate and maintain assets as a drag raceway for drag racing events since 2004. Both key stakeholders have active user contracts with RQM which outline user guidelines, operations and maintenance roles and responsibilities, and reporting requirements. Both groups submit an annual operational plan including completed financial statements and are required to hold insurance consistent with the type of activities pursuant to the site use. No committee or auxiliary exists currently with the sole intent of governing and supporting CYAU SSRA activities, nor has a designated type of committee or oversight existed since 2009 with the termination of the airport manager. In the years since, development and investment decisions have been driven by key stakeholder needs and available resources and funding.



Graph showing the historical expenditures related to the South Shore Regional Airport since the year 2000. It should be noted that in 2023 RQM spent $25,000.00 to purchase Hangar A from the previous owners, inflating the perceived investment into the site in 2023 as compared to other years.



Graph showing the current budget allocation for investment, operations, and maintenance of the South Shore Regional Airport. RQM allocates $12,000.00 annually to the airport reserve which is currently at $131,750.00 - $50,000.00 of which was allocated for future Jetfuel system installation in hopes of securing additional funding ($200,000.00). RQM allocated $9,500.00 annually for site operations and maintenance.

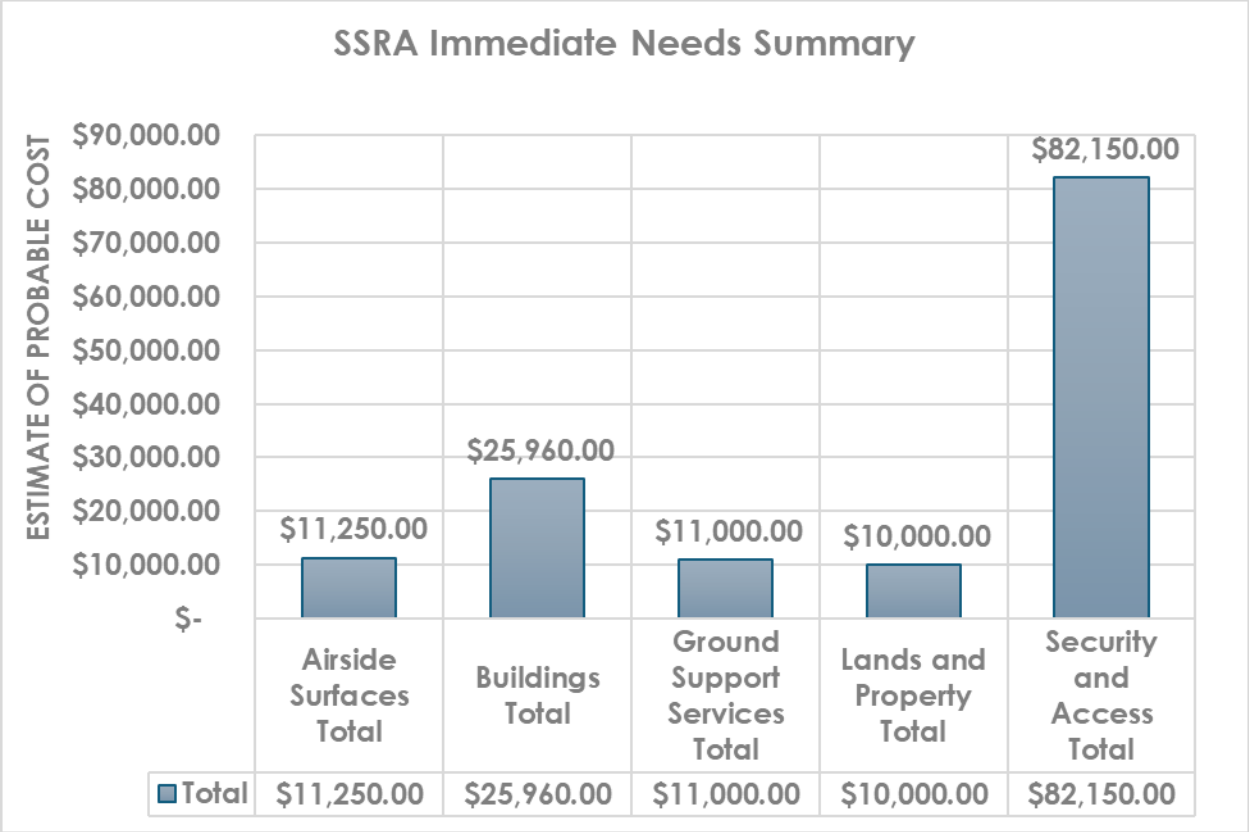
Current Operations and Maintenance Strategy

SSRA oversight, development, and decision-making are the responsibility of the Council and Mayor of the Region of Queens Municipality. Operations, maintenance and development are planned and carried out by the SSFC and NSDRA with approval and oversight from RQM as a function of contract performance management. Asset repair and renewal, and operations and maintenance activities are driven primarily by key stakeholder immediate needs and balanced against investment requirements into key stakeholders own assets in the form of informal operational plans. Asset performance, lifecycle, and risk management have not been considerations when managing key stakeholder investment, development, and contract needs. A considerable sum of R&R

and O&M activities are carried out as a function of unmonitored volunteer and service donations – as a result of the unmonitored nature, lacking data and performance management and oversight financial limitations if key stakeholders, much of these activities are not reflected in operational plans or financial statements.

Operations and Maintenance Requirements

R&R Needs



Graph showing the sum of the estimate of probable cost for immediate needs (repair, renewal, upgrade) required per asset class at the South Shore Regional Airport.

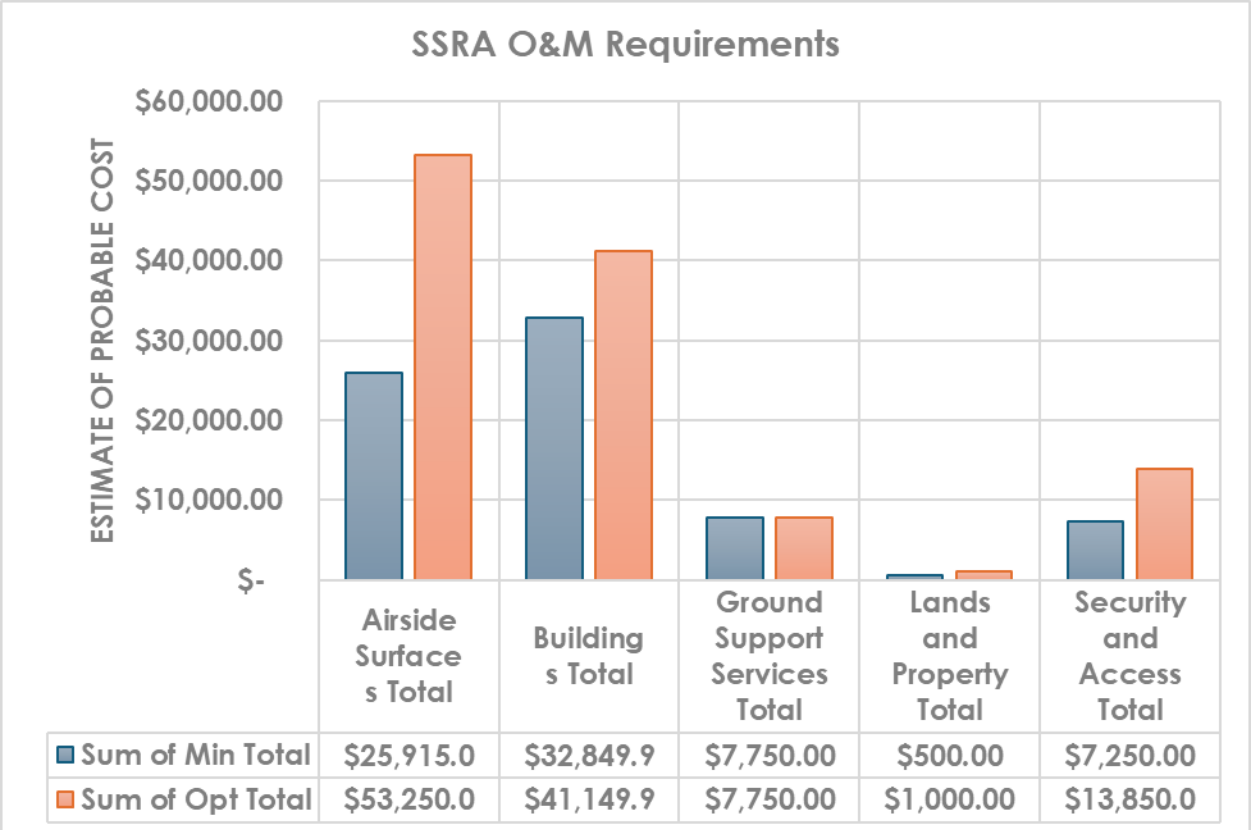
Buildings – Exterior paint, door repairs, concrete repairs, smoke and monoxide detection installation, electrical and lighting repairs, floor repairs, window replacement, fire suppression installation, ventilation, insulation improvements, sewer and water system inspection.

Airside Surfaces – Paint replacement, transition repairs, patching and crack sealing.

Ground Support Services – Chain and hook repairs, airfield brushing and mowing, altimeter recertification, communication system replacement.

Security and Access – Fence replacement and extension, access road resurfacing, guardrail repairs.
Lands and Property – Boundary line refreshing.

O&M Requirements



Minimum Customer Levels of Service

Buildings – Grounds and yard maintenance, exterior aesthetics and repairs, roof inspection and maintenance, doors and frames maintenance, foundations and walls maintenance, safety equipment inspection and maintenance, electrical system and lighting maintenance, kitchen equipment maintenance, water and sewer testing and monitoring and maintenance, heating and ventilation maintenance, interior aesthetics, interior furnishings, windows and frames maintenance, pest management, security systems maintenance, moisture management, insurance, hydro, internet.
Airside Surfaces – Surface inspections and maintenance, structural maintenance, airfield brushing and mowing, paint maintenance, transition maintenance.

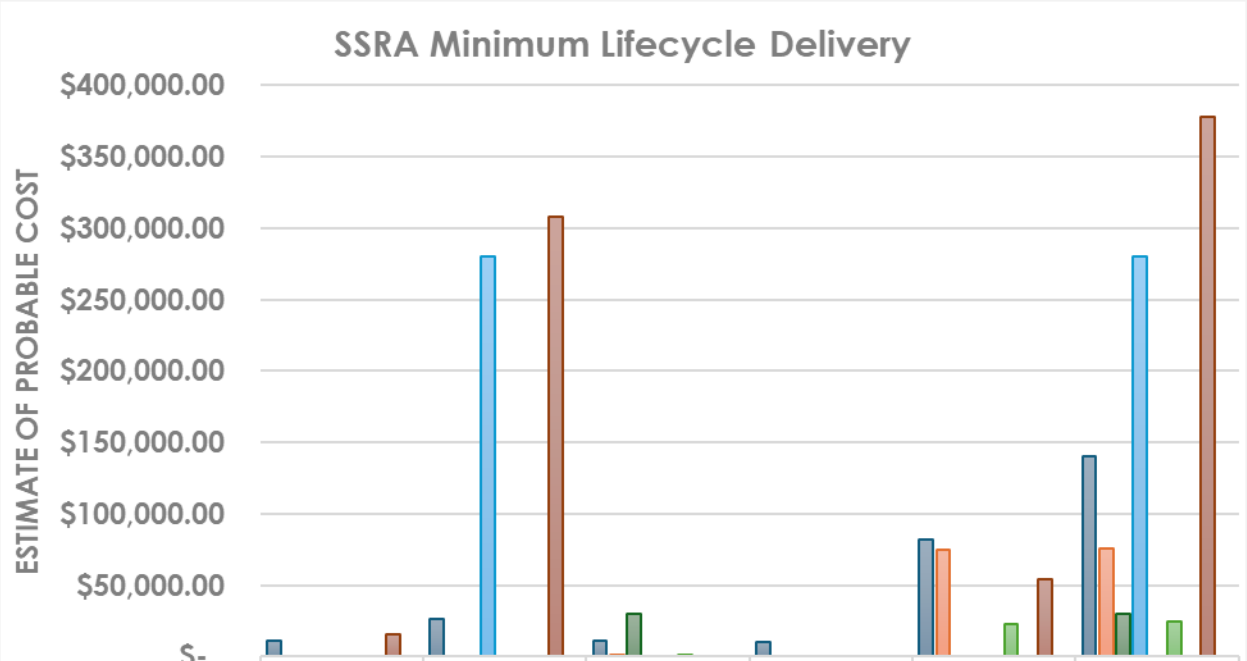
Ground Support Services – Chains and hooks maintenance, surface maintenance and inspections, wiring and antenna maintenance, sock and hardware maintenance, calibration, testing, certification, tank and nozzle inspections and maintenance, spill and fire protection, licensing fees.
Security and Access – Surface maintenance, structural maintenance, transition maintenance.
Lands and Property – Boundary line maintenance.

Optimal Customer Levels of Service

Buildings – Grounds and yard maintenance, exterior aesthetics and repairs, roof inspection and maintenance, doors and frames maintenance, foundations and walls maintenance, safety equipment inspection and maintenance, electrical system and lighting maintenance, kitchen equipment maintenance, water and sewer testing and monitoring and maintenance, heating and ventilation maintenance, interior aesthetics, interior furnishings, windows and frames maintenance, pest management, security systems maintenance, moisture management, insurance, hydro, internet.
Airside Surfaces – Surface inspections and maintenance, structural maintenance, airfield brushing and mowing, paint maintenance, transition maintenance, snow removal, surface sweeping.
Ground Support Services – Chains and hooks maintenance, surface maintenance and inspections, wiring and antenna maintenance, sock and hardware maintenance, calibration, testing, certification, tank and nozzle inspections and maintenance, spill and fire protection.
Security and Access – Surface maintenance, structural maintenance, transition maintenance, snow removal.
Lands and Property – Boundary line maintenance.

Lifecycle Analysis

Minimum Customer Levels of Service

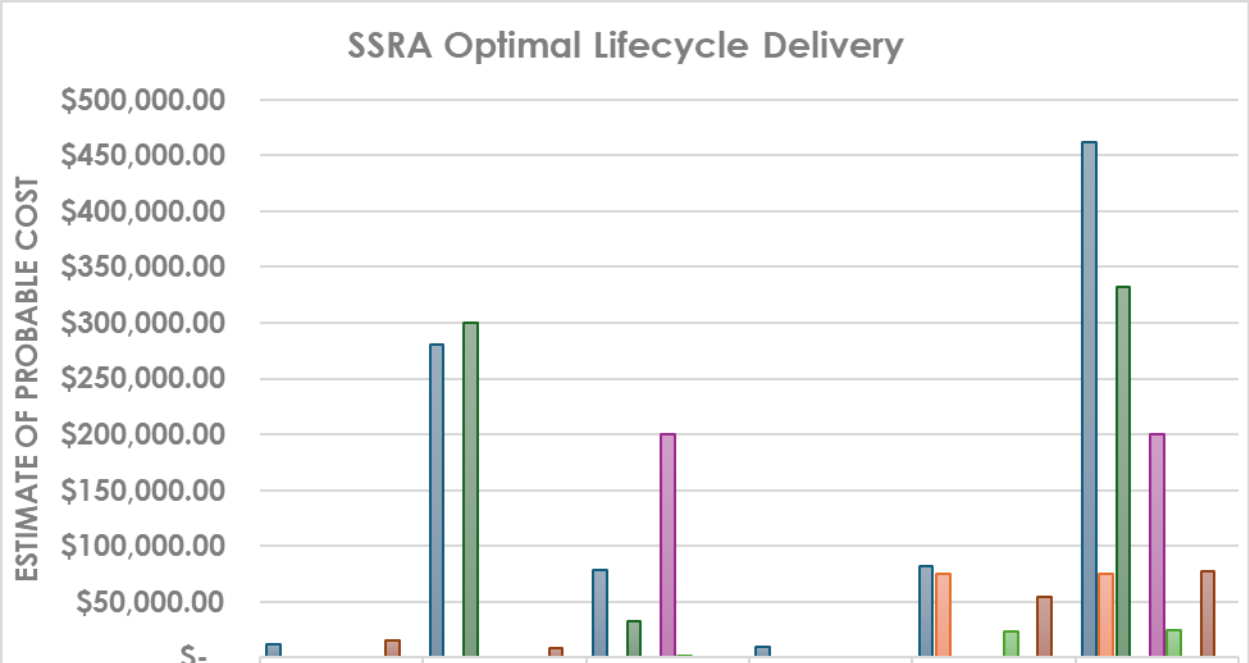


	Airside Surfaces Total	Buildings Total	Ground Support Services Total	Land and Property Total	Security and Access Total	SSRA Assets Total
Sum of 25/26	$11,250.	$25,960.	$11,000.	$10,000.	$82,150.	$140,360
Sum of 26/27	$-	$-	$500.00	$-	$75,000.	$75,500.
Sum of 27/28	$-	$-	$30,000.	$-	$-	$30,000.
Sum of 28/29	$-	$280,000	$-	$-	$-	$280,000
Sum of 29/30	$-	$-	$-	$-	$-	$-
Sum of 30/31	$-	$-	$1,000.0	$-	$23,200.	$24,200.
Sum of 31/32	$-	$-	$-	$-	$-	$-
Sum of 32/33	$15,400.	$308,000	$-	$-	$54,500.	$377,900
Sum of 33/34	$-	$-	$-	$-	$-	$-

Graph showing minimum customer LOS lifecycle delivery activities. Asset lifecycle delivery activities are prioritized to delay design and acquisition activities via renewal, rehabilitation, and upgrade activities as well as operations and maintenance activities. This should be considered the most affordable short-term lifecycle delivery strategy for

sustaining customer LOS expectations and sustaining the SSRA. This strategy prolongs the inevitable need to prioritize design and acquisition activities while retaining an increasing level of LOS and performance risk.

Optimal Customer Levels of Service



	Airside Surfaces Total	Buildings Total	Ground Support Services Total	Land and Property Total	Security and Access Total	SSRA Assets Total
Sum of 25/26	$11,250.	$280,000	$78,750.	$10,000.	$82,150.	$462,150
Sum of 26/27	$-	$-	$-	$-	$75,000.	$75,000.
Sum of 27/28	$-	$300,000	$32,500.	$-	$-	$332,500
Sum of 28/29	$-	$-	$-	$-	$-	$-
Sum of 29/30	$-	$-	$200,000	$-	$-	$200,000
Sum of 30/31	$-	$-	$1,000.0	$-	$23,200.	$24,200.
Sum of 31/32	$-	$-	$-	$-	$-	$-
Sum of 32/33	$15,400.	$8,000.0	$-	$-	$53,800.	$77,200.
Sum of 33/34	$-	$-	$-	$-	$-	$-

Graph showing optimal customer LOS lifecycle delivery activities. Asset lifecycle delivery activities are prioritized to meet asset lifecycle immediate needs via a

combination of operations and maintenance, and renewal, rehabilitation and upgrade activities. This should be considered the optimal long-term lifecycle delivery strategy for sustaining customer LOS expectations and sustaining the SSRA while reducing and eliminating LOS and performance risk. This lifecycle delivery model assumes that the Region of Queens Municipality chooses to operate, manage, and maintain the SSRA optimally.

Lifecycle Delivery

Lifecycle Delivery Stages

Planning and Needs – This is the stage in which functional and operational needs and demand are compared against the organization strategic priorities for the purpose of identifying, measuring, and leveraging assessments to determine the need for asset improvement, re-design, replacement, procurement, or disposal.

Design and Acquisition – This is the stage in which aligned needs are leveraged to ensure the design, acquisition, or major improvement of assets considering the sustainable operations, maintenance, renewal, replacement and upgrade activities that will follow the full lifecycle of the asset.

Operate and Maintain – This is the longest stage in an assets whole lifecycle where it is operated and maintained in-line with customer LOS expectations to optimize asset useful life, safety, and performance. It's in this stage that performance monitoring is most important. This is also the stage in which asset lifecycles can be greatly reduced or extended as a function of reliability centered maintenance activities and performance that are practiced over the asset's lifecycle.

Renewal Replacement and Upgrade – As asset are utilized, age, and deteriorate, they may require renewal, replacement, or upgrade activities to return the asset to its desired safety or performance as a function of customer LOS expectations and evolving stakeholder needs.

Disposal and Decommissioning – This is the final stage in an asset lifecycle where it is retired, removed from service, or repurposed as it reaches the end of its useful life as a function of customer LOS expectations. It's critical to consider the cost of decommission and disposing of assets when calculating whole asset lifecycle costs.

Minimum Levels of Service

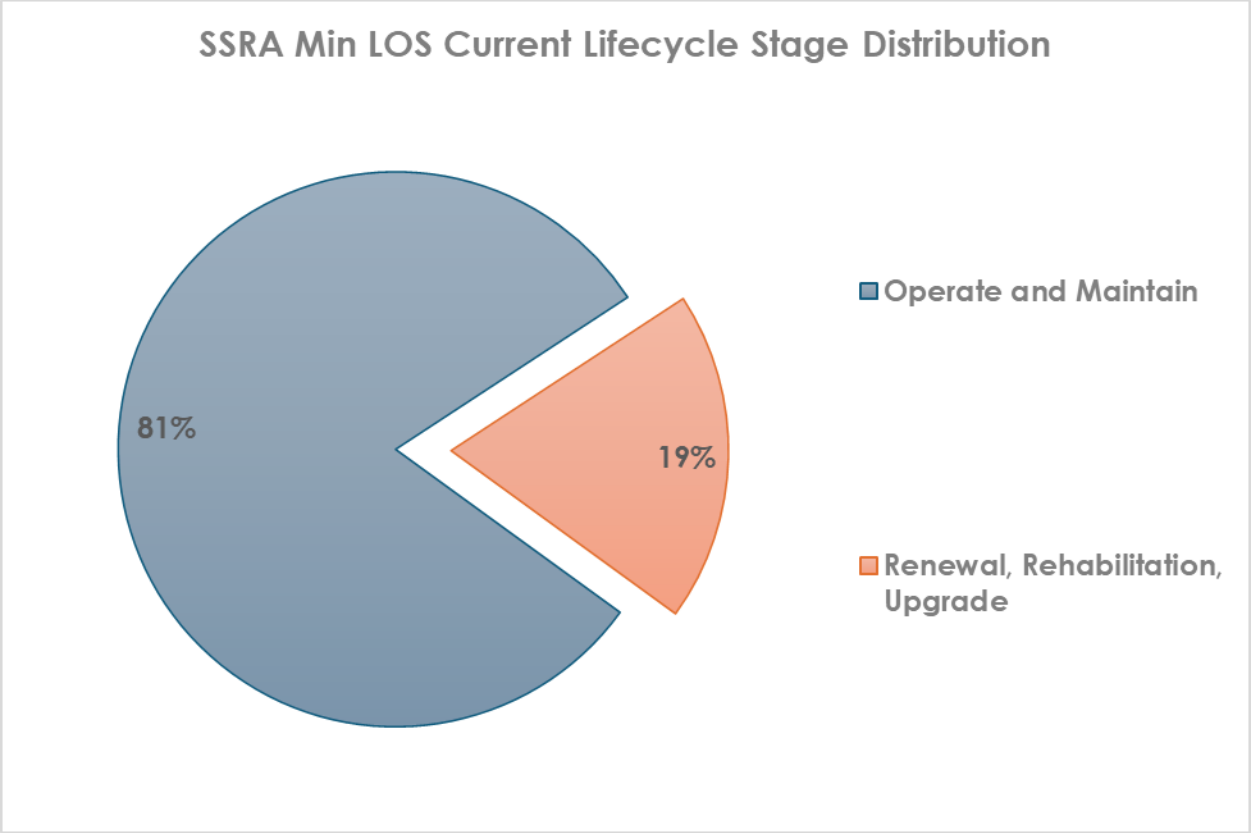
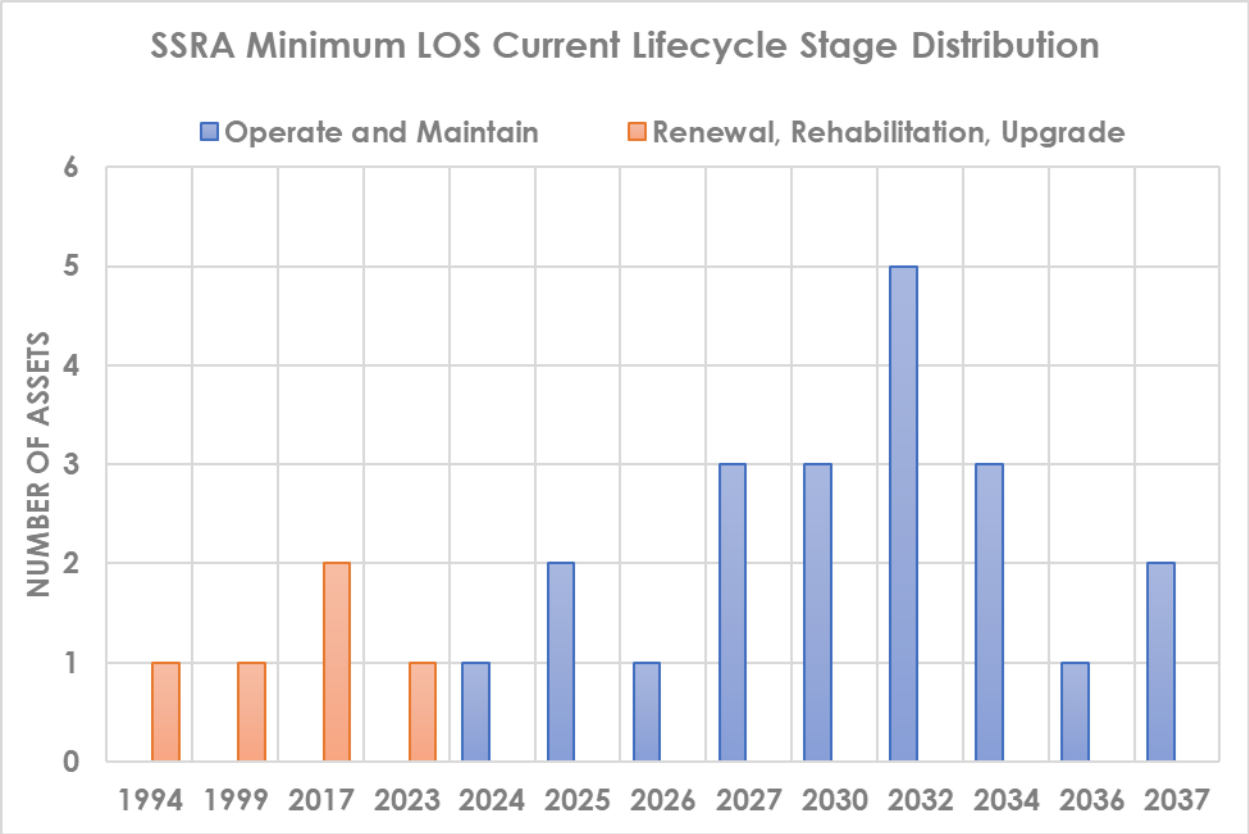


Chart showing the distribution of current asset lifecycle stages in line with the minimum customer LOS model. 19% of site assets are in renewal, rehabilitation, and upgrade stage, representing the deferred or backlogged lifecycle delivery activities that currently exist.



Graph showing the distribution of current asset lifecycle stages in line with the minimum customer LOS mode. The 19% deferred or backlogged lifecycle activities are represented in the 5 assets that are in renewal, rehabilitation, and upgrade prior to the year 2023.

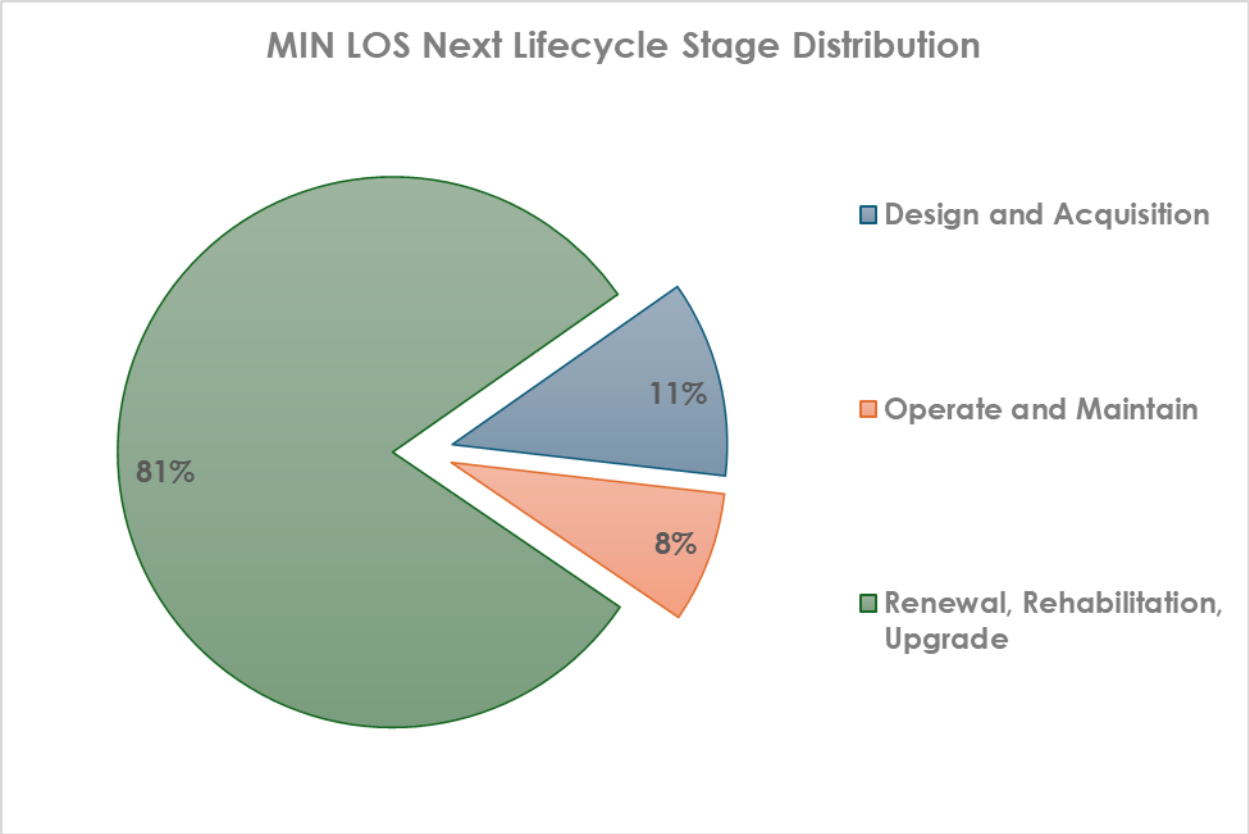
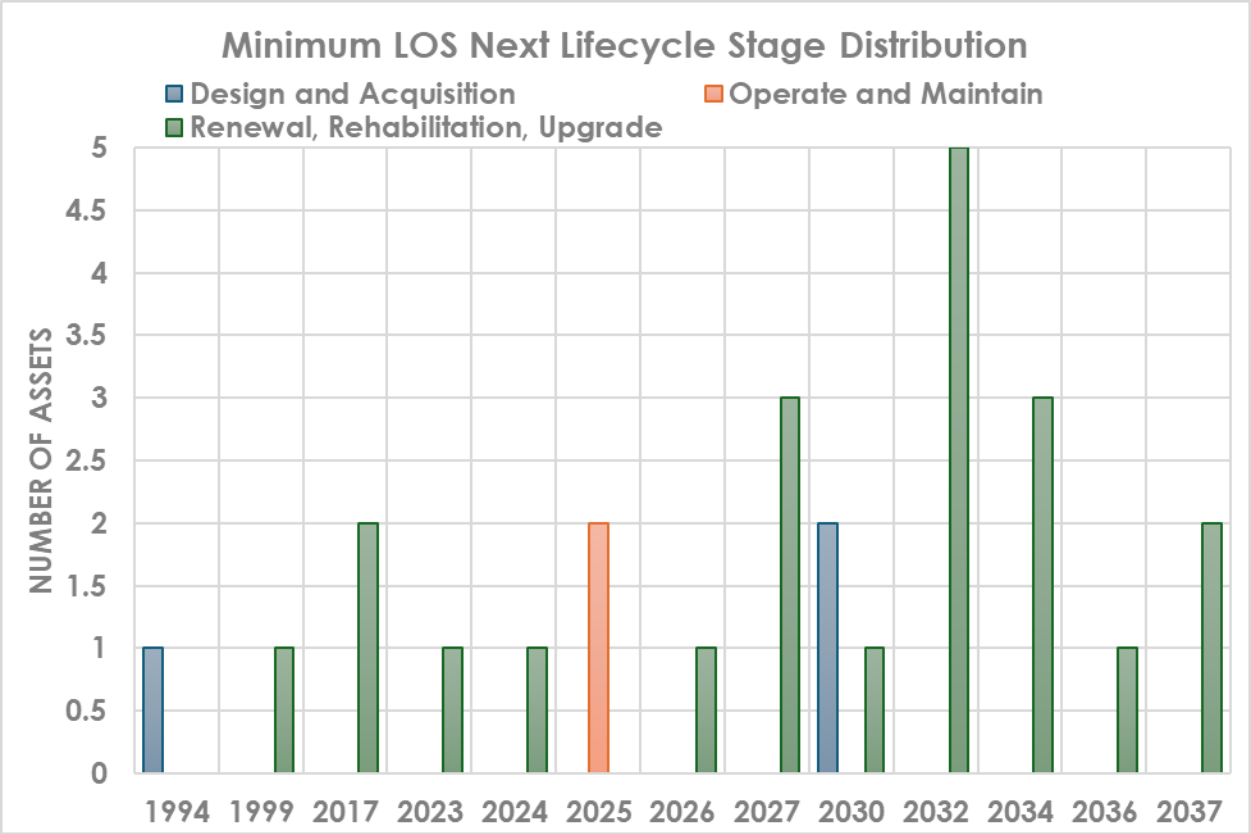


Chart showing the distribution of next asset lifecycle stages in line with the minimum customer LOS model. 81% of site assets will enter the renewal, rehabilitation, and upgrade stage. Only 8% will enter the operate and maintain stage, while 11% will enter the design and acquisition stage. This distribution is a function of the strategy utilized to prioritize lifecycle delivery activities in the minimum customer LOS model.



Graph showing the distribution of next lifecycle stages in line with the minimum LOS model. The 19% of deferred or backlogged lifecycle activities are represented in the 5 assets entering the design and acquisition and the renewal, rehabilitation, and upgrade stages prior to the year 2023.

Optimal Levels of Service

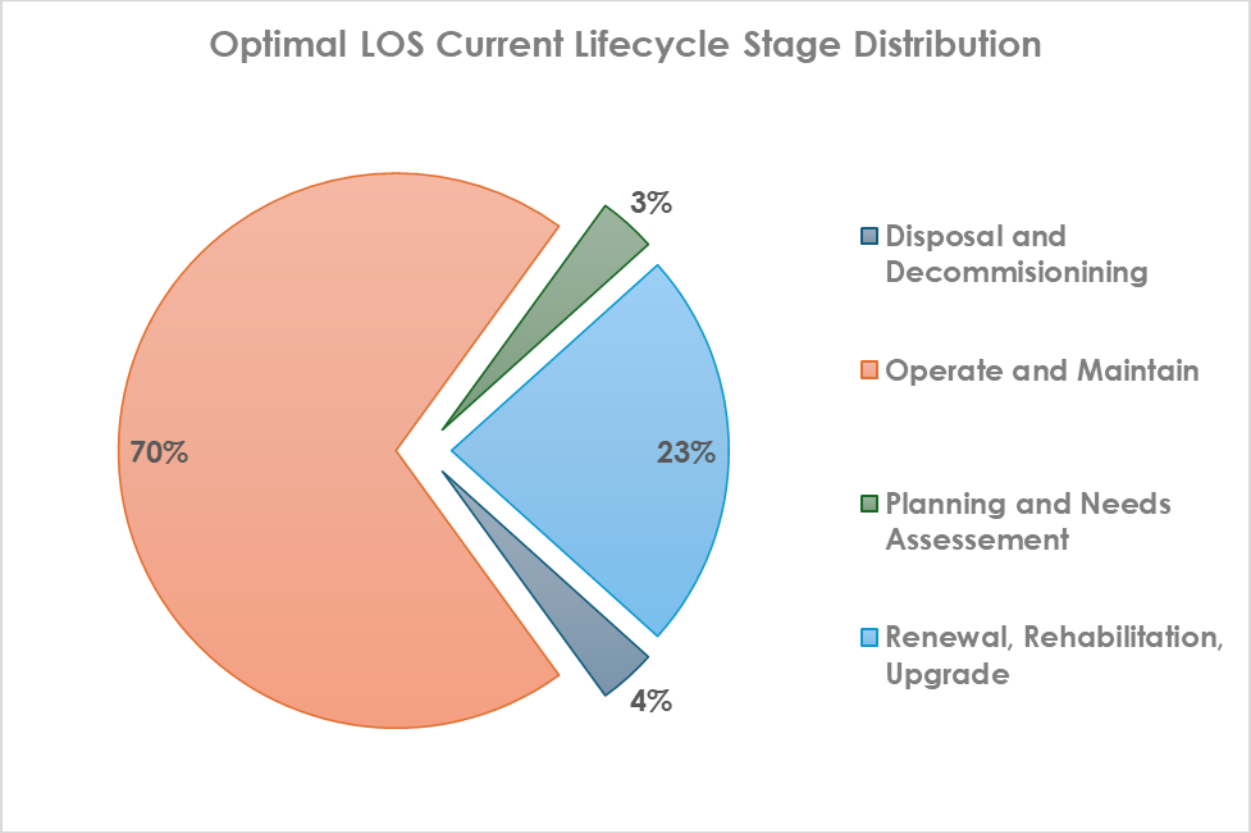


Chart showing the distribution of current asset lifecycle stages in line with the optimal customer LOS model. 23% of site assets are in renewal, rehabilitation, and upgrade stage, 3% are in the planning and needs stage, and 4% are in the disposal and decommission stage, representing the deferred or backlogged lifecycle delivery activities that currently exist.

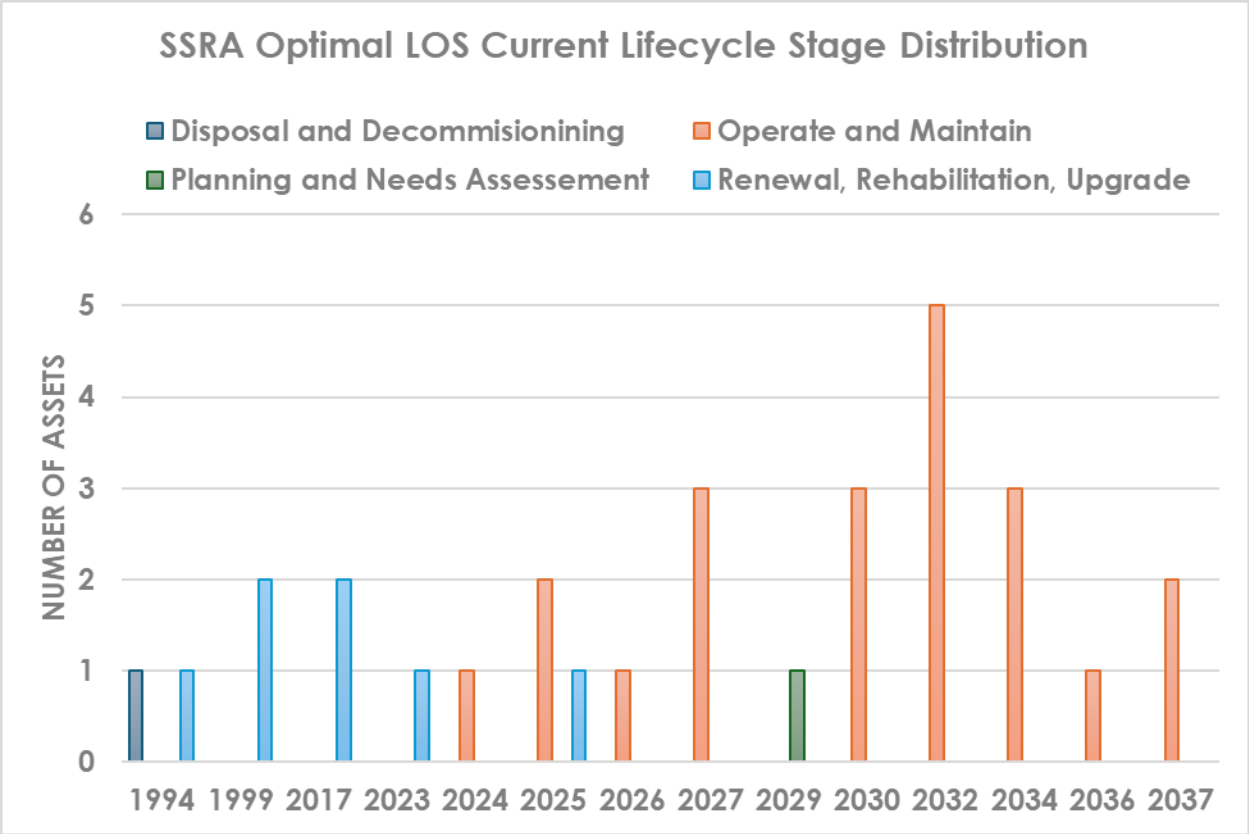


Chart showing the distribution of current asset lifecycle stages in line with the optimal customer LOS model. The 30% of deferred or backlogged lifecycle activities are represented in the 7 assets that are in disposal and decommission and renewal, rehabilitation and upgrade stages prior to the year 2023.

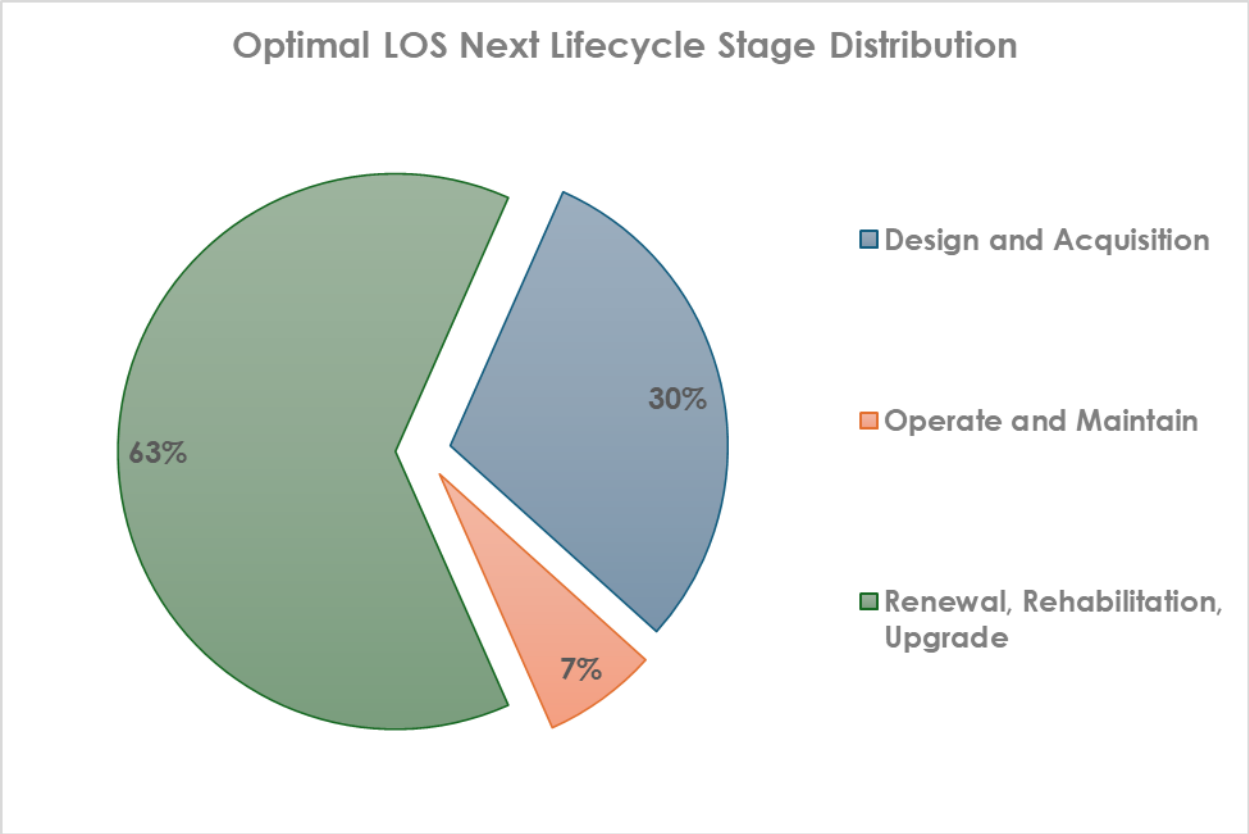
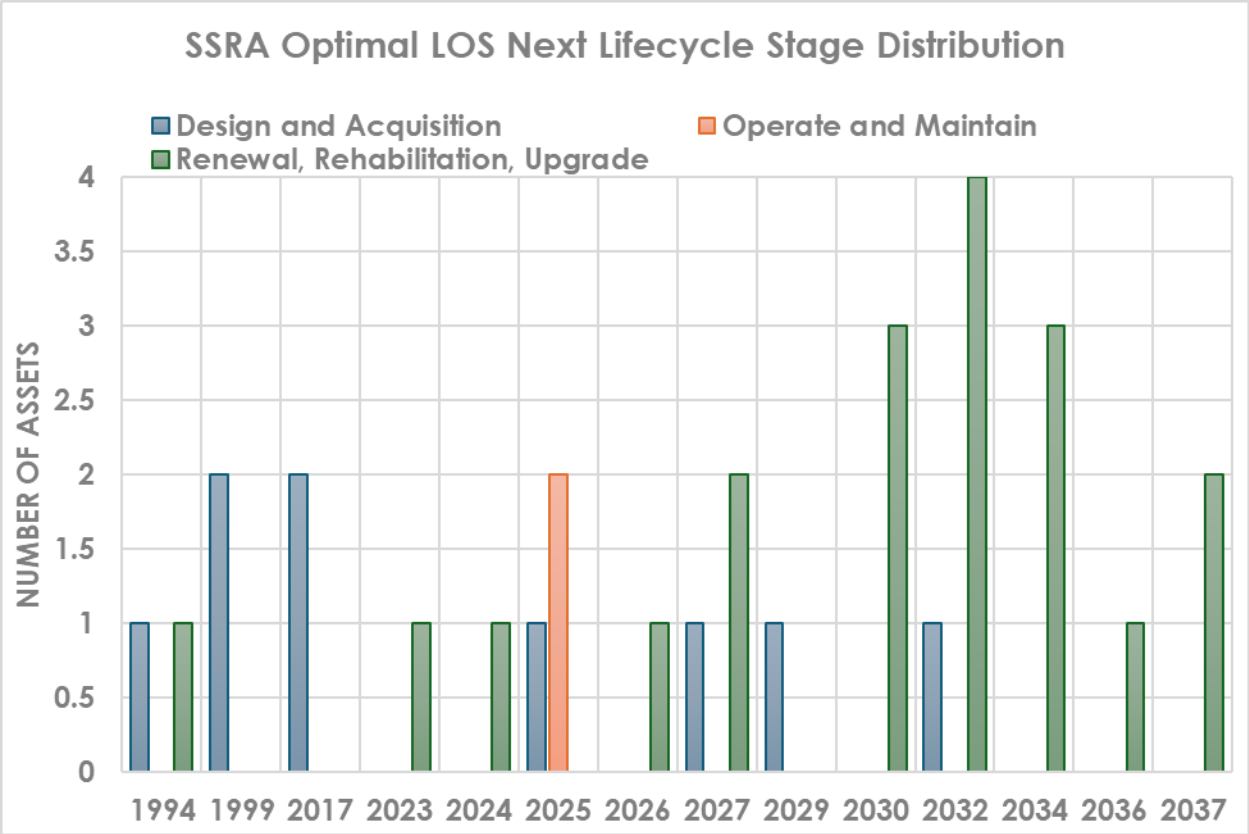


Chart showing the distribution of next asset lifecycle stages in line with the optimal customer LOS model. 63% of site assets will enter the renewal, rehabilitation, and upgrade stage. Only 7% will enter the operate and maintain stage, while 30% will enter the design and acquisition stage. This distribution is a function of the strategy utilized to prioritize lifecycle delivery activities in the optimal customer LOS model.



Graph showing the distribution of next lifecycle stages in line with the optimal LOS model. The 30% of deferred or backlogged lifecycle activities are represented in the 6 assets entering the design and acquisition and the renewal, rehabilitation, and upgrade stages prior to the year 2023.

Risks Management

SWOT Analysis

Top Strengths (Internal Positive)

No outstanding debt
Airside surfaces
Airport reserve fund of $131,750.00
Registered aerodrome status
Avgas storage and dispensing infrastructure

Top Weaknesses (Internal Negative)

Little economic generation for key stakeholders and owners
Underutilization of site and site assets
Contracts and contract management
Not sustainably affordable for key stakeholders and owners
Key stakeholders and owners alignment and communication
Little revenue generation and diversification by key stakeholders and owners
Owner site oversight
Under-maintenance of site assets
Site security
Performance monitoring

Top Opportunities (External Positive)

Key stakeholder commitment and dedication to service delivery and asset sustainability
Airside lighting for night-time operations
Winter maintenance for winter operations
Jet-A fuel system installation
Increased demand

Top Threats (External Negative)

Loss of registered aerodrome status
Increased regulatory requirements
Decreased demand
Vandalism/unauthorized access
Wildfire causing increased demand

Strategic Risk Management

Risk Context

Risks were measured and assessed against the following context statements:
Risks that could impact customer LOS expectations.
Risks that could impact the Region of Queens Municipality.
Risks that could impact key or secondary stakeholders.

Risk Appetite

Risks that are deemed "moderate" or lesser are recorded and monitored for increasing consequences or likelihood.
Any risks deemed "High" or "Extreme" must be communicated and treated as a function of the risk analysis and asset management planning process.

Risk Analysis

Top Risks

Risk#29 – O&M and R&R Funding and Planning Gap

Trigger: Resource allocation and lifecycle delivery activity gaps.
Consequence: Asset deterioration and premature failure, accident resulting in injury, death, and/or asset damage.
Recommended Action: Mitigate risk via collaborative planning, resource allocation, investment scheduling, and performance monitoring.
Recommended Treatment: Communicate operations and maintenance needs, immediate needs, and lifecycle delivery needs to identify funding gaps as a function of minimum customer LOS expectations – adjusting customer LOS expectations if required. Ensure resources allocations and investment schedules are in line with desired customer LOS are available over a minimum 3-year planning horizon.

Risk#31 – Site Oversight and Management

Trigger: Poor oversight, key stakeholder contract and performance monitoring and alignment of priorities, roles, and responsibilities as they relate to customer LOS expectations.
Consequence: Asset deterioration and premature failure, accident resulting in injury, death, and/or asset damage.
Recommended Action: Mitigate risk via collaborative planning and performance monitoring.

Recommended Treatment: Develop "Airport Operations and Management Manual" aligning roles, responsibilities, and capabilities requirements for operating and managing and monitoring the performance of the site and site assets with desired customer LOS and "SSRA Asset Management Plan".

Risk#7 – O&M and R&R Lifecycle Activity Delivery Neglect

Trigger: Lifecycle delivery activities are neglected or misdirected, and the site isn't operated, maintained, repaired, or renewed in line with desired customer LOS expectations.
Consequence: Asset deterioration and premature failure, accident resulting in injury, death, and/or asset damage.
Recommended Action: Mitigate risk via collaborative planning, resource allocation, investment scheduling, and performance monitoring.
Recommended Treatment: Communicate operations and maintenance needs, immediate needs, and lifecycle delivery needs to identify capabilities gaps as a function of minimum customer LOS expectations – ensuring resource allocation, investment schedules, and capabilities requirements are identified and available over a minimum 3-year planning horizon.

Risk#1 – Loss of Registered Aerodrome Status

Trigger: GNSS flight approaches are not recertified **OR** assets fail to meet Transport Canada or Nav Canada registered aerodrome minimum regulatory compliance requirements **OR** airport operator failure to report accurate site information to Transport Canada for Canadian Flight Supplement.
Consequence: CYAU SSRA is not included in the Canadian Flight Supplement or other aeronautic publications for use. Key and secondary stakeholder (SSFC, NSEHS, RCMP, CAF, RCN, RCAF, CCG, NSDNRR) asset availability becomes limited to non-existent apart from the NSDRA. The effort and expense required to re-obtain aerodrome registration are complex and extensive – requiring an Aeronautical Study in collaboration with Nav Canada to identify deficiencies.
Recommended Action: Mitigate risk via collaborative planning, resource allocation, investment scheduling, and performance monitoring.
Recommended Treatment: Engage with JetPro to identify current and future hazards and threats to GNSS flight approaches, collaborate with key stakeholders to begin strategically eliminating hazards and mitigating threats prior to re-certification in June 2027 as a function of minimum lifecycle delivery needs, prioritizing appropriate resource allocations towards maintaining GNSS flight approach integrity. Perform cost-benefit analysis to determine the value in upgrading from non-precision approaches to

precision approaches. Ensure the reporting of key aerodrome details to Nav Canada for inclusion in the Canadian Flight Supplement as a function of performance monitoring.

Risk#36 – Non-Certified/Non-Licensed/Unknown Users

Trigger: Unmonitored and/or unauthorized use of the site and site assets.
Consequence: Asset deterioration and premature failure, accident resulting in injury, death, and/or asset damage. Negative economic impact as a function of unmonitored use. Key stakeholders and/or owner liability for negative consequences of illegal or inappropriate site use.
Recommended Action: Mitigate risk via collaborative planning, resource allocation, investment scheduling, and performance monitoring.
Recommended Treatment: Communicate operations and maintenance needs, immediate needs, and lifecycle delivery needs to identify and improve security and monitoring capabilities gaps as a function of minimum customer LOS expectations – ensuring resource allocation, investment schedules, and capabilities requirements are identified and available over a minimum 3-year planning horizon in order to effectively collaborate with key stakeholders to monitor and record site activity to begin strategically discouraging and ultimately eliminate the number of unauthorized users through improved performance management and security.

Risk#2 – Decreased Demand

Trigger: Key stakeholder loss or reduced use **OR** reduction in customer LOS expectations limiting secondary stakeholder site use.
Consequence: Reduction in O&M and R&R investment resulting in asset deterioration and premature failure, accident resulting in injury, death, and/or asset damage.
Recommended Action: Mitigate risk via collaborative customer LOS planning, resource allocation, investment scheduling, performance monitoring, and collaboration with key and secondary stakeholders.
Recommended Treatment: Engage with key and secondary stakeholders to ensure desired customer LOS expectations align with stakeholder needs. Identify existing and future demand drivers to leverage low effort-high impact strategies for measuring, monitoring, and strategically influencing demand proactively for alignment to customer LOS, O&M, and R&R requirements in collaboration with stakeholders. Define a customer LOS that enables financial viability for key and secondary stakeholders and owners at semi-utilization (50%-70%) with a target of 85% utilization. Diversify revenue streams that consider landing fees, fuel sales, tie down and hangar rental fees, and terminal and facility use or rental fees.

Risk#4 – Unauthorized Site Access

Trigger: Site trespassing occurs.
Consequence: Accident or vandalism resulting in injury, death, and/or asset damage.
Recommended Action: Mitigate risk via collaborative planning, resource allocation, investment scheduling, and performance monitoring.
Recommended Treatment: : Communicate operations and maintenance needs, immediate needs, and lifecycle delivery needs to identify and improve security and monitoring capabilities gaps as a function of minimum customer LOS expectations – ensuring resource allocation, investment schedules, and capabilities requirements are identified and available over a minimum 3-year planning horizon in order to effectively collaborate with key stakeholders to discourage and ultimately eliminate unauthorized site access and vandalism through improved performance monitoring and security.

Risk#13 – Wildfire: Abrupt Increase in Demand

Trigger: Site utilization increases abruptly outside or in excess of customer LOS expectations and/or normal operating conditions.
Consequence: Asset deterioration and premature failure, accident resulting in injury, death, and/or asset damage and/or site becomes incapable of supporting wildfire operations.
Recommended Action: Mitigate risk via collaborative planning, resource allocation, investment scheduling, and performance monitoring.
Recommended Treatment: Collaborate with NSDNRR to identify assets critical to wildfire operations and minimum customer LOS requirements to maintain critical assets in safe, sustainable, functional condition – ensuring appropriately prioritized resource allocation, investment schedules, and capabilities requirements are identified and available over a minimum 3-year planning horizon in order to effectively support wildfire operations.

Risk#6 – Inappropriate Site Use

Trigger: Stakeholder site use and activities don't align with customer LOS expectations, site limitations, permissions, and/or legal compliance.
Consequence: Asset deterioration and premature failure, accident resulting in injury, death, and/or asset damage. Owner liability for negative consequences of illegal or inappropriate site use.
Recommended Action: Mitigate risk via collaborative planning and performance monitoring.
Recommended Treatment: Communicate operations and maintenance needs, immediate needs, and lifecycle delivery needs to identify and improve performance

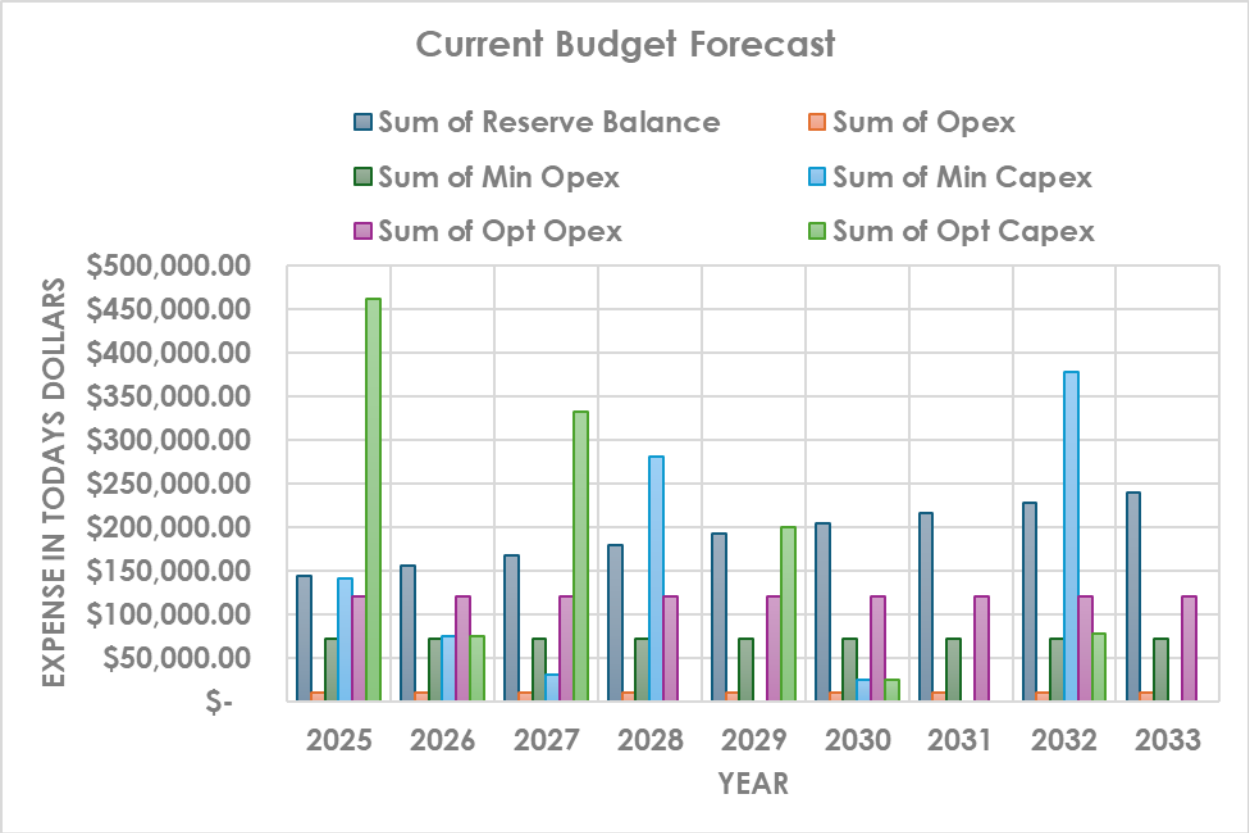
monitoring capabilities as a function of minimum customer LOS expectations – ensuring resource allocation, investment schedules, and capabilities requirements are identified and available over a minimum 3-year planning horizon in order to effectively collaborate with key stakeholders to discourage and ultimately eliminate inappropriate or non-permitted site use through improved performance monitoring.

Risk#26 – Erection of Windmills or Other Structures

Trigger: Windmills or other significant structures are approved and installed in a location which negatively impacts GNSS flight approach maintenance and recertification.
Consequence: GNSS flight approaches aren't recertified, loss of registered aerodrome status, and significant reduction to customer LOS expectations.
Recommended Action: Mitigate risk via collaborative planning, lobbying, resource allocation, investment scheduling, and performance monitoring.
Recommended Treatment: Engage with JetPro to identify current and future hazards and threats to GNSS flight approaches, collaborate with key stakeholders to begin strategically eliminating hazards and mitigating threats prior to re-certification in June 2027 as a function of minimum lifecycle delivery needs, prioritizing appropriate resource allocations towards maintaining GNSS flight approach integrity. Collaborate with politicians and industry leaders who drive industrial development to ensure CYAU SSRA sustainability of operations. Ensure reporting of key aerodrome details to Nav Canada for inclusion in the Canadian Flight Supplement as a function of performance monitoring.

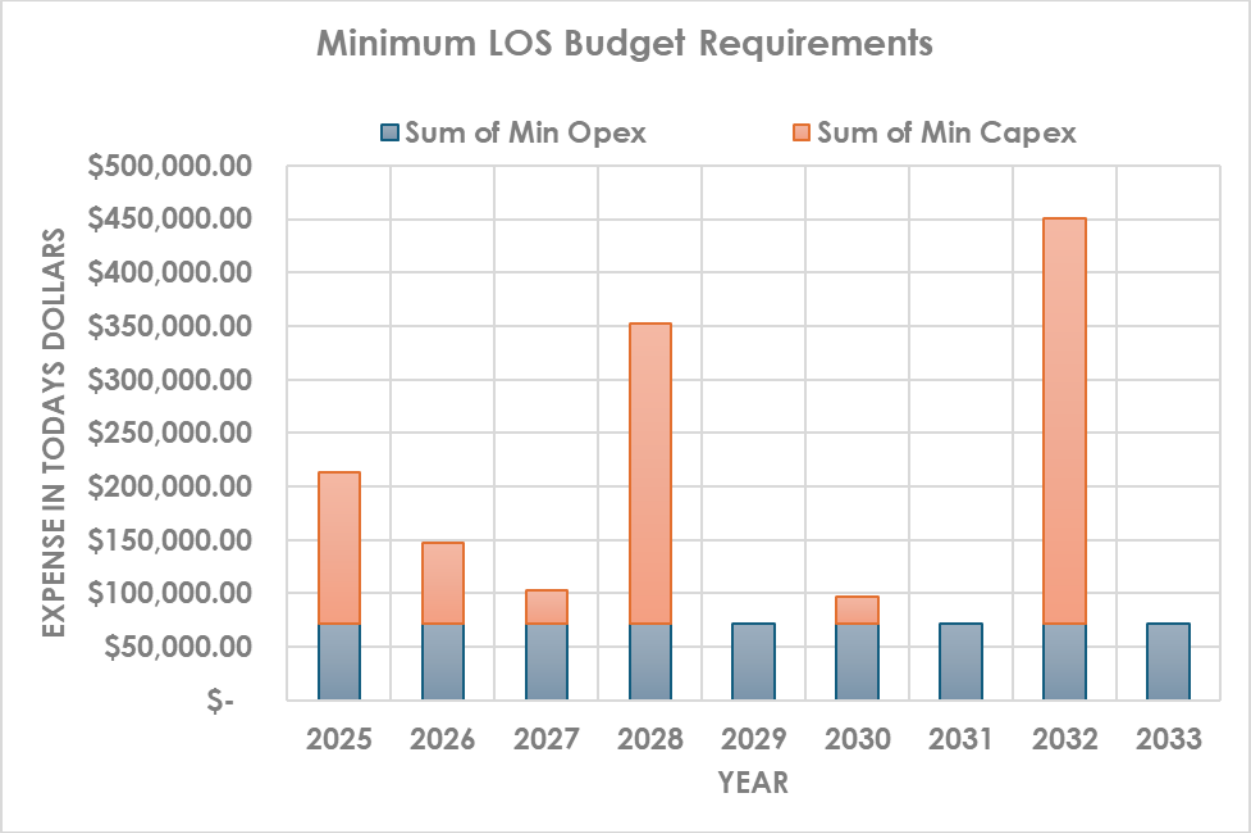
Budget Forecast

Current Forecast



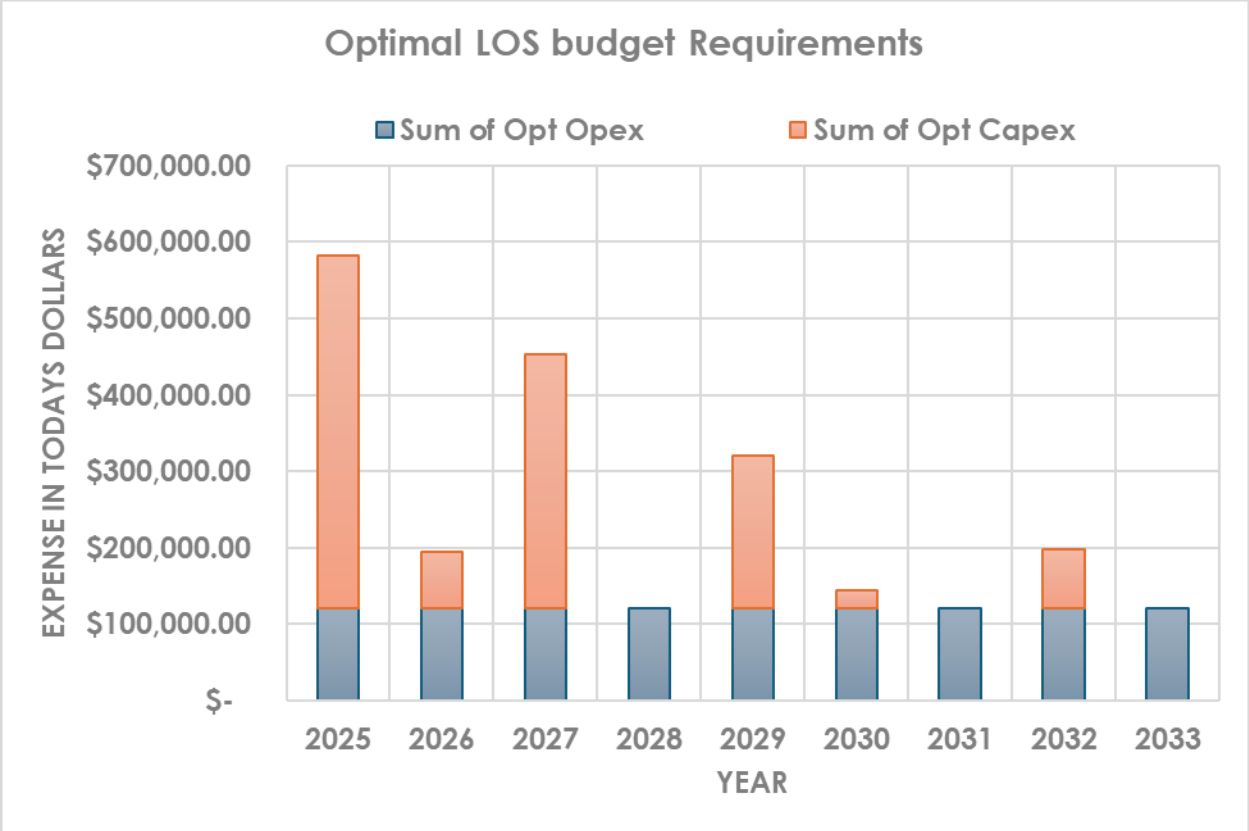
Graph showing the allocation of resources to the SSRA as compared to the accumulated sum of the airport reserve balance, the sum of the Opex and Capex requirements under the minimum customer LOS model, and the sum of Opex and Capex requirements under the optimal customer LOS model.

Minimum Levels of Service



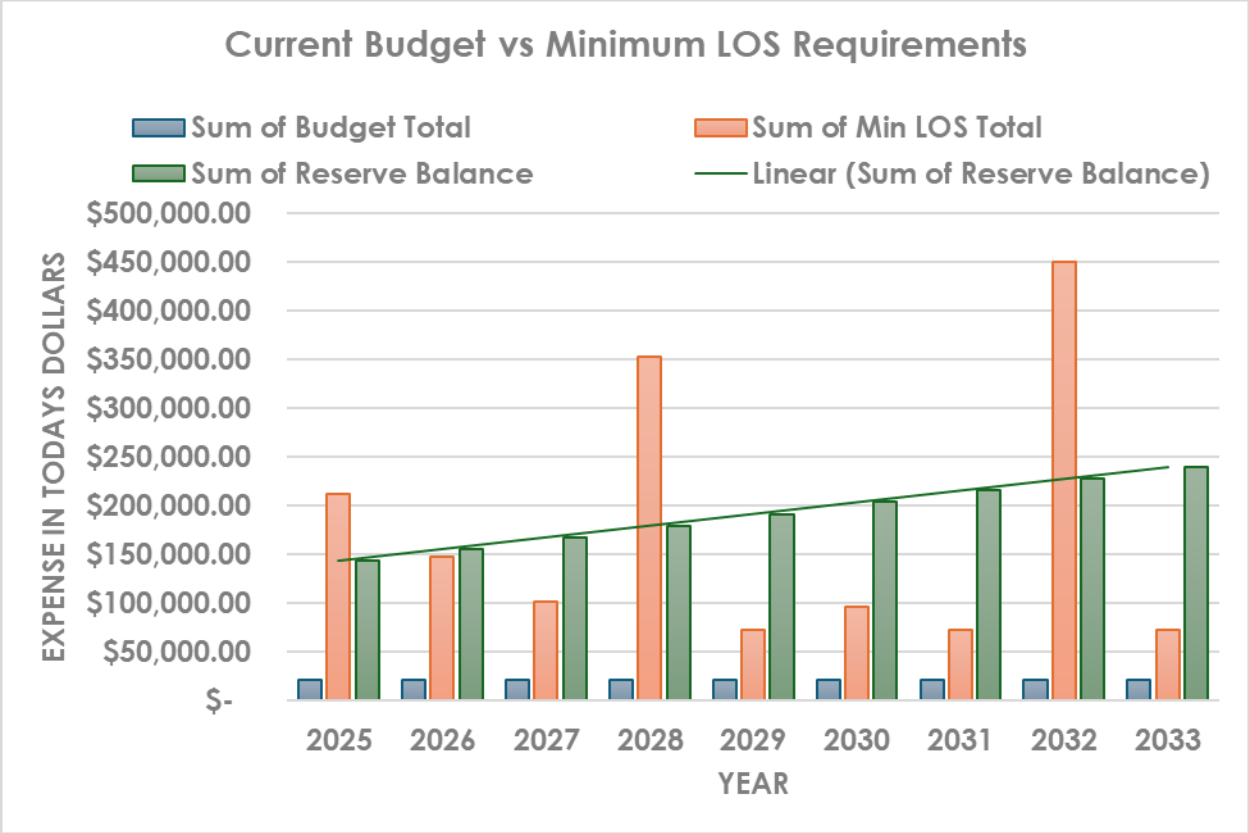
Graph showing the sum of the Opex and Capex requirements under the minimum customer LOS model per year.

Optimal Levels of Service



Graph showing the sum of the Opex and Capex requirements under the optimal customer LOS model per year.

Minimum Funding Gap

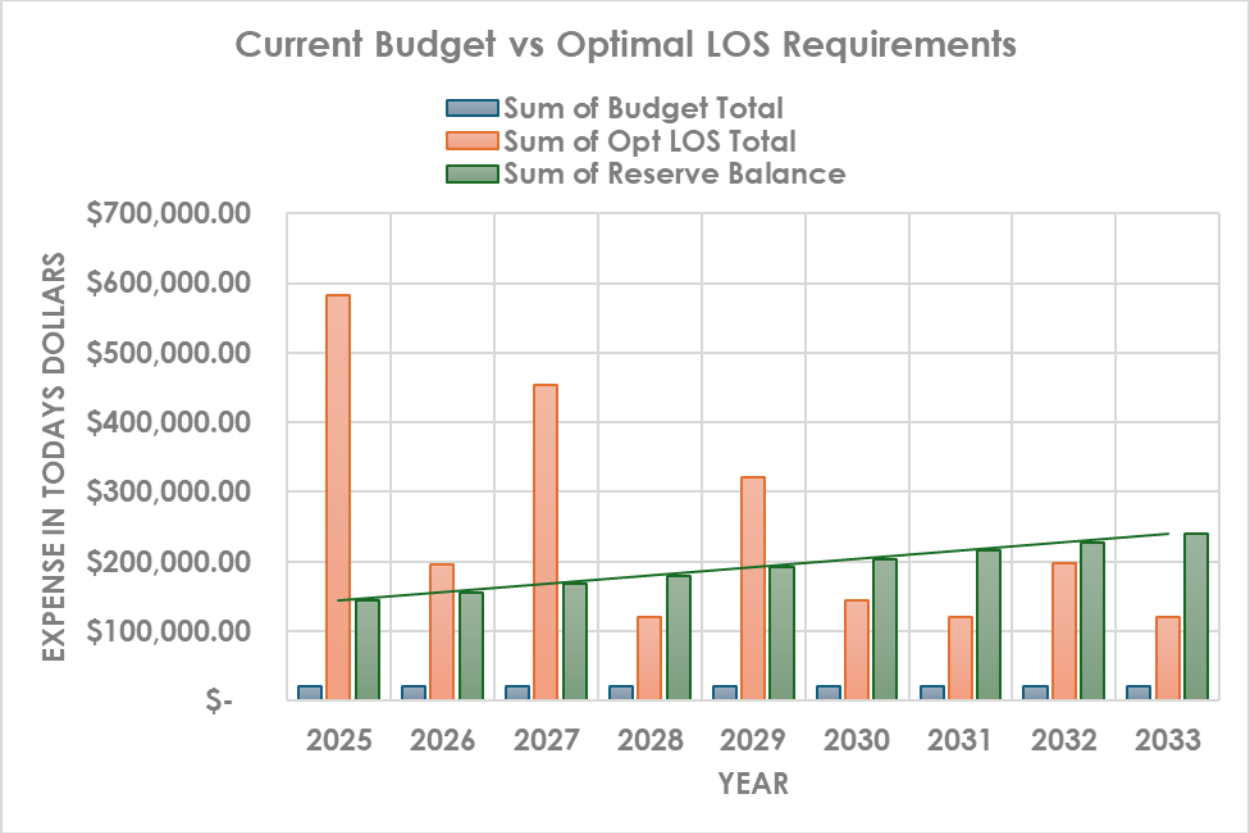


Graph showing the current budget Opex and airport reserve balances as compared to the sum of Opex and Capex requirements under the minimum customer LOS model. Reserve balances aren't included in the following gap analysis as it is assumed to be unavailable resources in the short term, and if it were available in the short term, it would be entirely utilized on deferred or backlogged maintenance.

Current Minimum Customer LOS Funding Gap

2025 - $191,160.00
2026 - $126,300.00
2027 - $80,800.00
2028 - $330,800.00
2029 - $50,800.00
2030 - $75,000.00
2031 - $50,800.00
2032 - $428,700.00
2033 - $50,800.00

Optimal Funding Gap



Graph showing the current budget Opex and airport reserve balances as compared to the sum of Opex and Capex requirements under the optimal customer LOS model. Reserve balances aren't included in the following gap analysis as it is assumed to be unavailable resources in the short term, and if it were available in the short term, it would be entirely utilized on deferred or backlogged maintenance.

Current Optimal Customer LOS Funding Gap

2025 - $582,349.00
2026 - $195,199.00
2027 - $452,699.00
2028 - $120,199.00
2029 - $320,199.00
2030 - $144,399.00
2031 - $120,199.00
2032 - $197,399.00
2033 - $120,199.00

Methodology

Process Description

Context and Objectives Definition

Gaining a working understanding of the scope, context, objectives, and expectations of what the SSRA AMP deliverables were to be.

Research

Researching, learning, and understanding the South Shore Regional Airport, its history and stakeholders. Gaining a working understanding what type of knowledge would be required to meet the scope, context, objectives, and deliverables. Working back from the required knowledge to understand which types of information must come from analysis, and which processed data is required to feed such analysis. This enables the systems development stage.

Systems Development

Building GIS geodatabase, systems, collection maps, and SharePoint infrastructure to accommodate data collection, analysis, tools, and sustainable storage of information. Testing data collection systems, tools, criteria and models.

Stakeholder Meetings

Meeting with key stakeholders and secondary stakeholders to understand levels of service and where data might be found.

Data Collection

Conducting data collection using various tools and systems. Begin transferring and processing data conducting data gap analysis and using the feedback loop to guide the data collection process. Starting with casting a big net, raking in and storing data that is caught, looking at where the holes are too large and data remains, adjusting the diameter of the mesh and recasting the net strategically to fill gaps and ensure data validity and consistency.

Data Processing

Processing raw data into information that can be analyzed, summarized, and compared. Perform additional processing, calculations, filling any gaps that remain prior to beginning analysis.

Information Analysis

Performing LOS, Performance, Lifecycle Delivery, SWOT and Risk analysis on processed information.

Information Summary

Summarizing analysis results in a way that can be easily consumed with clear and rationales for recommendations can be clearly mapped back to their sources and alignment to AMP objectives.

Report Development

Developing an asset management plan outline that meets the scope, context, deliverables, and objectives as they were established to mitigate creep. Ensuring desired knowledge is easily accessed through deliverables in the leanest delivery. Create graphics, tables, and summarize analysis results and recommendations at a high level that still enable informed decision-making. Include comprehensive data and analysis in the appendices.

AMP Completion

Sustainable storage of records, processes, tools, raw data, information, analysis, results, recommendations, geodatabases, databases, correspondence, and background information in a consumable and accessible manner and location for future use and informed decision-making.

Knowledge Sharing

Communicating deliverables and supporting decision-makers and senior leadership in consuming, implementing, and monitoring asset management plan knowledge and recommendations.

Valuation Process and Assumptions

The following factors were used in analysis and calculations:
Paving $230/ton installed
Subgrade preparation $60/cubic yard installed
Concrete $150/ton installed
Gravel $30/cubic yard installed
Fence $50/foot installed
Large gate $2000 installed
Small gate $1200 installed

Guardrail $12/foot installed
Pavement milling $8/square meter

Customer Levels of Service Criteria and Assumptions

Condition

What is the assets physical or age based condition?
1 Great – Recently upgraded or built. No visual or operational deficiencies. Within 25% of expected useful life. Reassess in 36 months.
2 Good – No visual or operational deficiencies. Within 50% of expected useful life. Reassess in 18-24 months.
3 Okay – Some visual and/or operational deficiencies. Within 75% of expected useful life. Reassess in 12-18 months.
4 Poor – Clear visual and/or operational deficiencies to address at earliest convenience. Past 75% of expected useful life. Reassess in 6-12 months.
5 Unsatisfactory – Clear visual and/or operational failure requiring immediate attention. Past 100% of expected useful life. Reassess/address within 6 months.

Capacity

How well does the asset meet its functional requirements?
1 Fully-Utilized – Greater than 90% utilization as compared to availability.
2 Utilized – Between 70-90% utilization as compared to availability.
3 Semi-Utilized – Between 50-70% utilization as compared to availability.
4 Under-Utilized – Between 30-50% utilization as compared to availability.
5 Non-Utilized – Less than 30% utilization as compared to availability.

Function

How well does the asset meet its functional requirements?
1 Fully-Functional – Meeting over 90% of functional requirements.
2 Functional – Meeting 70-90% of functional requirements.
3 Mostly-Functional – Meeting 50-70% of functional requirements.
4 Semi-Functional – Meeting 30-50% of functional requirements.
5 Non-Functional – Meeting less than 30% of functional requirements.

Criticality

How critical is the asset to maintaining LOS expectations?

1 Critical to maintaining LOS expectations. In the event of failure, LOS certain to become compromised (long-term/permanent).
2 Semi-Critical to maintaining LOS expectations. In the event of failure, LOS likely to become compromised (short/long-term).
3 Supporting role in maintaining LOS expectations. In the event of failure, LOS could be compromised (short-term/temporary).
4 non-Critical to maintaining LOS expectations. In the event of failure, LOS unlikely to become compromised.
5 Negligible to maintaining LOS expectations. In the event of failure, LOS certain to remain uncompromised.

Affordability

How affordable is maintaining and accessing the asset as compared to current LOS expectations?

1 Predictable and sustainable cost to users and stakeholders over 5-year horizon.
2 Predictable and sustainable cost to users and stakeholders over 3-year horizon.
3 Predictable and sustainable cost to users and stakeholders over 1-year horizon.
4 Predictable and unsustainable cost to users and stakeholders over 3-year horizon.
5 Unpredictable and unsustainable cost to users and stakeholders over 3-year horizon.

Environmental Sustainability and Climate Readiness

How well does the asset contribute to the community's climate readiness environmental sustainability?
1 Proactive, sustained, widespread (long-term/permanent) contribution to the community's climate readiness environmental sustainability.
2 Proactive, sustained, localized (short/long-term) contribution to the community's climate readiness and environmental sustainability.
3 Reactive, localized (short/long-term) contribution to the community's climate readiness and environmental sustainability.
4 Reactive, localized (short-term) contribution to the reduction/mitigation of negative impacts on the community's climate readiness and environmental sustainability.
5 No contribution to the reduction/mitigation of negative impacts on the community's climate readiness and environmental sustainability.

Emergency Response

How does the asset contribute to the community's ability to respond to emergencies?
1 Vital/central in the role of the community's emergency response.

2 Important in the role of the community's emergency response.
3 Supportive in the role of the community's emergency response.
4 Minor contributor in the role of the community's emergency response.
5 Negligible in the role of the community's emergency response.

Health and Safety

How well does the asset protect and maintain the health and safety of users and stakeholders?
1 Proactive protection and maintenance of health and safety for users and stakeholders. Health and safety highly unlikely to become compromised.
2 Up to date protection and maintenance of health and safety for users and stakeholders. Health and safety unlikely to become compromised.
3 Antiquated protection and maintenance of health and safety for users and stakeholders. Health and safety could become compromised.
4 Inadequate/partial protection and maintenance of health and safety for users and stakeholders. Health and safety likely to become compromised.
5 Fully lacking protection or maintenance of health and safety for users and stakeholders. Health and safety highly likely to become compromised.

Legislative Compliance

How well does the asset meet its legislative requirements?
1 Meeting all relevant legislative requirements. Proactively prepared for expected future legislative requirements.
2 Meeting all relevant legislative requirements. Awareness of future legislative requirements.
3 Meeting most relevant legislative requirements. Unprepared for future legislative requirements.
4 Meeting some relevant legislative requirements. Future legislative requirements could compromise LOS.
5 Not meeting relevant legislative requirements. Future legislative requirements certain to compromise LOS.

Service Life Criteria and Assumptions

Service life assumptions were made in line with the Region of Queens Tangible Capital Assets Policy as a starting point and adjusted based on updated knowledge supporting the adjustments.
Buildings – 40 years

Airside Surfaces – 50 years
Access Surfaces – 30 years
Burn Out Pads – 25 years
Fences and Gates – 15 years
Gravel Surfaces – 10 years
Guardrails – 20 years
Aircraft Tie Downs – 20 years
Avgas Storage and Dispensing – 15 years
GNSS Flight Approaches – 5 years
Technology and Instrumentation – 15 years

Functional Requirements Criteria

System	Function	Requirement
Hangars	Durability	Able to withstand a variety of harsh weather conditions.
	Ventilation	Prevents vapor built up.
	Security	Lockable doors and surveillance.
	Fire Protection	Alarms and suppression.
	Lighting	Interior and exterior lighting.
	Drainage	Prevents slips and moisture buildup.
	Door Operation	Weather resistant, reliable, and easy operation
	Storage	Space for aircraft and maintenance equipment.
Terminal Building	Amenities	Restroom, seating, and controlled climate.
	Operations Hub	Dedicated space for flight and site planning and coordination.
	Security	Lockable doors and surveillance.
	Utilities	Primary and backup power ensuring continuous operation.
	Communications	Internet, phone, and radio communication.
	Signage	Clearly defined areas, hazards, and emergency response.
	Fire Protection	Alarms and suppression.

	Accessibility	Compliance with accessibility standards.
	Storage	Document, equipment, and supply storage.
	Meeting Hub	Space for training, meeting, and briefings.
Runway	Surface Integrity	Weather resistant, skid resistant, deterioration free.
	Load Capacity	Able to withstand the weight of aircraft.
	Drainage	Encourages runoff to ditching and prevents pooling.
	Clearance and Obstacles	Brush cleared within immediate area, obstacles proactively removed and GNSS approaches recertified regularly.
	Foreign Objects and Debris	Regularly inspected, cleaned, and free of foreign objects and debris.
	Signage and Markings	Clearly defined directions, instructions, and guidance, in compliance with regulations.
Apron	Surface Integrity	Weather resistant, skid resistant, deterioration free.
	Load Capacity	Able to withstand the weight of aircraft.
	Signage and Markings	Clearly defined operational bounds, parking, and direction.
	Drainage	Encourages runoff to ditching and prevents pooling.
	Lighting	Facilitating nighttime activity and operations.
	Foreign Objects and Debris	Regularly inspected, cleaned, and free of foreign objects and debris.
Taxiway	Surface Integrity	Weather resistant, skid resistant, deterioration free.
	Load Capacity	Able to withstand the weight of aircraft.
	Signage and Markings	Clearly defined operational bounds, parking, and direction.
	Drainage	Encourages runoff to ditching and prevents pooling.

	Lighting	Facilitating nighttime activity and operations.
	Foreign Objects and Debris	Regularly inspected, cleaned, and free of foreign objects and debris.
Aircraft Tie Down Area	Load Capacity	Able to withstand the weight of aircraft.
	Anchoring System	Secure tie down locations.
	Drainage	Encourages runoff to ditching and prevents pooling.
	Lighting	Facilitating nighttime activity and operations.
	Security	Surveillance and fencing.
Paint and Markings	Regulatory Compliance	Type and information in compliance with regulations.
	Visibility and Reflectivity	High-contrast and anti-skid paint.
	Durability	Able to withstand a variety of harsh weather conditions and resist spills.
Aircraft Communicati on System	Clear and Reliable	No dropouts or interference.
	Operational Integration	Seamless communication standard.
	Redundancy	Primary and backup power ensuring continuous operation.
	Emergency Alerts	Ability to broadcast emergency alerts.
GNSS Instrument Approaches	Accuracy and Integrity	Accurate data for precise navigation.
	Compatibility	Standardized to enable broad range of aircraft.
	Regular Calibration and Testing	Ensured accuracy and functionality.
	Alternate Procedure	Failsafe and contingency for system failure.
Altimeter	Calibration and Accuracy	Regular testing and recertification.

	Data Integration	Provides real time data to pilots.
	Durability	Accurate in a variety of harsh weather conditions.
Fuel Storage and Dispensing	Safety and Compliance	Compliance with environmental and aviation regulations.
	Containment and Spill Prevention	Secondary containment and spill response planning and materials.
	Reliability and Redundancy	Consistent flow of fuel and accurate metering on primary or backup power ensuring continuous operation.
	Security	Restricted access and surveillance.
Fencing	Perimeter Security	Prevents unauthorized access.
	Durability	Able to withstand a variety of harsh weather conditions.
	Gates and Access Control	Secure and monitored entry points.
Parking	Capacity	Large enough to accommodate times of high use.
	Accessibility	Prioritized parking and mobility considerations in compliance with accessibility standards.
	Surface and Drainage	Encourages runoff to ditching and prevents pooling.
	Lighting	Facilitating nighttime activity and operations.
	Security	Surveillance.
Access Roads	Load Capacity	Able to withstand the weight of emergency vehicles.
	Drainage	Encourages runoff to ditching and prevents pooling.
	Signage	Clear direction, instruction, and safety information.

Risk Analysis

Risk Identification

By meeting with stakeholders and professionals, assessing performance data and LOS data, a SWOT analysis was performed. The SWOT analysis in combination with performance and LOS data was used to identify 31 strategic risks as per the risk context and scope. Each risk is recorded and classified by the risk type:

Operational
Health and Safety
Financial
Regulatory
Environmental
Strategic
Technological
Social and Geopolitical
Reputational

Each risk must have the following information recorded in the register for the risk management process to be effective.

Risk ID – To track and monitor risk actions and performance.
Risk Title – Describing the risk
Trigger – What trigger event occurs to engage the consequences and turn the risk from passive to active?
Consequence – What are the consequences if the risk is to become active?

Risk Ranking and Prioritization

Risks are run through the asset management risk matrix. Having a clear concept of the scope and context, and what triggers and consequences exist for the risk in question supports moving through the risk matrix from left to right efficiently. By selecting the value that corresponds with the expected consequence and choosing an exposure frequency or likelihood that's supported by historical data and performance, a block on the risk matrix is easily identified in the junction where the total consequence and exposure frequency or likelihood meet. The total value of the consequence multiplied by the exposure frequency or likelihood is the risk rating. Risks are categorized as low, moderate, high, and extreme. This risk categorization enables a risk appetite to be chosen and applied. The color of the block corresponds to an action level on the right side of the matrix, guiding and supporting users through a recommended starting point for communicating, recording, mitigating, and treating risk.

Consequence Rating

Safety and Peoples

1 – No Injury/No impact
2 – Minor Injury (first aid)/Low Impact
3 – Minor Injury (first aid)/High Impact
4 – Major Injury (hospitalization)/High Impact
5 – Major Injury (Fatality)/High Impact

Asset and LOS

1 – No Damage/No LOS Impact
2 – Minor Damage/No LOS Impact
3 – Minor Damage/Temporary LOS Impact (>75% scheduled availability)
4 – Major damage/Long-Term LOS Impact (<75% scheduled availability)
5 – Major Damage/Permanent LOS Impact (<50% scheduled availability)

Cost

1 – <$5000
2 – $5000 - $50 000
3 – $50 000 - $250 000
4 – $250 000 - $2 000 000
5 – >$2 000 000

Environmental Impact

1 – No Impact
2 – Localized/Isolated (short-term) Impact
3 – Localized/Isolated (long-term) Impact
4 – Sustained/Widespread (long-term) Impact
5 – Sustained/Widespread (permanent) Impact

Reputation

1 – No Impact
2 – Isolated Impact (days)
3 – Short-Term Impact (weeks)
4 – Long-Term Impact (months)
5 – Permanent Impact (years)

Exposure Frequency/Likelihood Rating

1 – Once/10 Years (Rare)
2 – Once/5 Years (Unlikely to Occur)
3 – Once/Year (As likely as Unlikely to Occur)
4 – Once/Month (Likely to Occur)
5 – Once/Week (Certain to Occur)

Risk Action and Treatment

List recommendations and actions for treating risk based on strengths and opportunities – especially if the recommendations reduce or solve threats or weaknesses.

Risk Action

Level 1 – No action required. Record risk in register for future use/review

Level 2 – Communicate risk to management. Develop long-term strategic treatment. Review and monitor.

Level 3 – Communicate risk to management. Develop short term strategic treatment, contingency plans, control and mitigation strategies and long-term strategic treatment. Review and monitor.

Level 4 – Communicate risk to management. Immediate treatment. Develop/review short-term strategic treatment, contingency plans, control and mitigation strategies and long-term strategic treatment. Review and monitor.

Action Planning

Action planning informs the treatment of risk through mitigation and control planning, strategies and tactics. These recommendations are developed as a function of techniques and tactics that target and treat risk strategically. Due dates and persons responsible for risk treatment should be identified.

Threats:

-Avoid risk by adjusting levels of service to reflect a change in the consequences or probability of the risk occurring.

-Mitigate risk by developing contingency and mitigation plans, or by implementing contingency and mitigation measures.

-Transfer risk to another organization or party by purchasing insurance or other forms of protection or transferring part of the risk.

-Accept risk as it is with review and monitoring strategies in place.

Opportunities:

-Exploit risk by positively increasing the source strength strategically or creatively.

-Enhance risk by positively mitigating a consequence or possibility strategically or creatively.

-Share risk with another organization or party to split the burden or benefit.

Recommendations

Recommendation #1 – Strive for minimum customer levels of service for a 3-year planning horizon.

Revenue Generation and Diversification

As a function of the performance monitoring, desired investment schedule, and operations and maintenance budget – begin monitoring and tracking use for the purpose of revenue generation. Create an "Airport Schedule of User Fees" that enables the sustained use and investment in the South Shore Regional Airport such as:
-Landing fee of $25/1000/kg for planes under 5000kg and $15/1000kg for planes over 5000kg.
-Aircraft tie-down and parking fee of $10/1000kg per 12 hours.
-Hangar rental fee of $1000-$1200/month.
-Increased price for fuel sales for investment back into fueling infrastructure.
-$500/10 hours of runway, return road, and pit inclusive rental.
*This is only an example of a user fee schedule.

Airport Management Committee Creation

Committee made of representatives of council, key stakeholders, and secondary stakeholders to guide customer levels of service expectations and decision-making. To meet and provide direction to the Airport Manager.

Pull/Push Customer Levels of Service Levers

Adjust customer levels of service model to best suit the 3-year planning horizon and develop technical and operational levels of service to support the creation of the Airport Operations Manual. Define desired customer levels of service that enables financial sustainability at semi-utilization (50%-70%). Engage with stakeholders to understand what demand divers exist and determine a range of low effort high impact strategies for measuring, influencing, and monitoring demand.

Airport Manager Appointment – RQM Part Time

As a part-time role, appoint an individual from the Region of Queens Municipality to manage and oversee the South Shore Regional Airport and support the Airport Operator in performance monitoring and lifecycle delivery activities.

Airport Operator – External Part Time

As a part-time role, hire an airport operator to operate, maintain, and monitor, and oversee lifecycle delivery activities at the South Shore Regional Airport with the support from the Airport Manager in performance monitoring.
The procurement of a full-time airport operator to operate, maintain, and monitor the South Shore Regional Airport could reduce the operations and maintenance costs as much as 60% as a large portion of the operations and maintenance requirements are labor related.

Airport Operations Manual Development

As a function of desired customer levels of service expectations, develop technical and operational levels of service to support in the development of an Airport Operations Manual that provides guidance and support to the Airport Manager, Airport Operator, and stakeholders.

Airport Investments

Utilize the $131,750.00 in the airport reserve fund required lifecycle delivery activities as identified in the immediate needs for the SSRA.
Request cost-sharing for the resurfacing of the site access road (Airport Road) from the Province of Nova Scotia Department of Public Works.
As a function of desired customer levels of service expectations, prioritize investments in the GNSS Flight Approaches and Airfield in 2026/2027.

Airport Budget

Adjust the operating budget for the South Shore Regional Airport to reflect desired customer levels of service expectations. The model currently requires $74,200.00, however that number could be reduced by up to 45% with the procurement of a part-time Airport Operator and up to 60% with the procurement of a full-time Airport Operator, as a large portion of the operations and maintenance requirements are labor related.

Key Stakeholder Contract Revision

As a function of customer levels of service, risk analysis, performance monitoring and revenue generation and diversification – revise key stakeholder contracts to better reflect operations and maintenance roles and responsibilities, performance expectations, reporting requirements, and mechanisms for ensuring the alignment of priorities and successful collaboration of all stakeholders.

Collaboration

With key stakeholders, secondary stakeholders, JetPro, NSDNRR and NSEHS to ensure customer levels of service and operational policies and procedures as they're outlined in the Airport Operations Manual are met and investment strategies provide optimal benefit. As a function of performance monitoring requirement from revised key stakeholder contracts, collaborate with JetPro and key stakeholders and allocate appropriate resources towards monitoring and collaborating with external parties who may be interested in erecting windmills or other significant structures to ensure GNSS approach integrity.

Recommendation #2 – Divestiture of the South Shore Regional Airport for the purpose of sustaining its vital role in Queens County and Southwestern Nova Scotia.

It would be reasonable for the Region of Queens Municipality to choose to transfer the risk associated with the asset, and not to continue to invest money into the South Shore Regional Airport as an aging asset with low utilization and increasing needs.

The South Shore Regional Airport is a vital background part of the emergency response and natural resource management network in Queens County and western Nova Scotia. Although not impossible, it would be time, effort, and resource consuming to return the South Shore Regional Airport to service if it were to lose its registration as a registered aerodrome or suffer from a major failure compromising customer levels of service expectations. During the first half of the South Shore Regional Airports lifecycle, it received a tremendous amount of provincial and federal support and resources ensuring its longevity and status as a registered aerodrome.

The South Shore Regional Airport is home to the "Greenfield Dragway" where the NSDRA hosts drag racing events which attract 130-160 racers per event and 1000-1250 spectators per day. These events are popular amongst Queens County residents as well as visiting residents. It's estimated that the NSDRA events collectively generate $450,000.00 - $840,000.00 annually through lodging, fuel, food, and vehicle parts and maintenance, while giving the local fire departments opportunities to exercise equipment and training.

The South Shore Flying Club in its newest form has been called many things but had many of the same membership over the years. Since the South Shore Regional Airport was opened in 1974, some variation of the local flying club has played a vital role in inspiring, developing, operating and maintaining, and supporting the South Shore Regional Airport and the development of pilots in Queens County. Much of this effort has been in the form of donations and labor generated by members of the local flying club, and cannot be

If the Region of Queens Municipality were to choose to explore divesting the South Shore Regional Airport, it's recommended that every effort is made to protect the NSDRA and SSFC current and future interests in continuing to utilize the South Shore Regional Airport in a way that continues to support and benefit the residents of Queens County. The estimated preliminary market value of the South Shore Regional Airport is $702,000.00 (round).

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: November 27, 2025

File No: 10350-50-2512-02

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Financial Report 2025 – 2026 Quarter 2

Prepared by:	Supervisor:	CAO Concurrence:
J. Veinotte *Director of Finance*	W. Thorpe *Chief Administrative Officer*	W. Thorpe *CAO*

RECOMMENDATION

THAT Council of Region of Queens Municipality receive the report titled 'Financial Report 2025 – 2026 Quarter 2' for information.

PURPOSE

To summarize financial results for the second quarter of the 2025 – 2026 fiscal year.

BACKGROUND

Responsible governance includes a comprehensive review of financial information and performance as compared to budget.

Non-consolidated operating financial statements for each quarter are provided to Council with a staff report containing supplemental information that Finance staff deem significant for Council.

Revenues and expenses are expressed as a percentage of annual budget. Expenses that are incurred at the beginning of the year such as insurance, will be at 100% (or close) to budget in the first quarter of the year. The percentage is also affected by timing of budgeted projects throughout the year. The percentage is meant as a guide for comparative purposes.

ALTERNATIVES/OPTIONS

1) Council receives the report titled 'Financial Report 2025 – 2026 Quarter 2' for information.

2) Council asks staff for additional information prior to accepting the quarterly report.

ANALYSIS

REVENUE

1. Taxation

- Slight reduction in Hydrant Rates collected because of appeals.
- Deed transfer tax on budget for year.
- Tax recoveries – Tax Tender in February.

2.Grants in Lieu

- Typically paid in Q4.

3. Service to Other Governments

- Contracted partners for Solid Waste – on budget for year

4. Sales of Service

- Parking meters behind budget for year. Collected in September.
- Large intake of contaminated soil in April that was not anticipated when budgeting for revenue.

5. Other revenue from Own Sources

- Building permits already at 88% of budget for year. One significant permit contributed to the overage from Q1.
- Reduction in LBDC rentals from unbudgeted loss of tenant. Efforts to rent available space ongoing.
- Penalties and interest on taxes ahead of budget. Overage is attributed to a handful of customers. Payment arrangements are in place.
- QPEC walking track access free for entire fiscal year per Council motion.
- Extended Producer Responsibility revenue will be forgone as a result of 'opting out' and having Circular Materials process Region of Queens' recyclables effective December 1, 2025.
- Vacancy Allowance is placeholder for salary costs not incurred because of delay in filling vacancies.

7. Conditional Funding

- Provincial funding for MPAL and CCTH Physical Activities funding.

8. Transfers fr. Reserves

- School Track funding has been disbursed, therefore transfer from CIP reserve has been completed.
- $22,010 was incurred in Q2 for Intervenor costs and another $38,201 in Q3 so far. Total to date $60,211 – budget for year $67,000.

EXPENSES

9. General Government Services

- Administration salaries below budget because of vacancies: Deputy CAO (filled in October), Protective Services, Policy Analyst.
- Staff training budget is being utilized for Infrastructure safety training $20,000 of the $26,831(75%).
- Audit costs will be allocated at end of year. The costs here are overage from 24/25 year.
- Tax Exemptions are at 85% of budget indicating continual enrollment in this program.
- Legal Services include Intervenor Costs.
- Other - includes insurance appraisal and survey fees for 89 Main Street, and EPW wages reallocated in Q3.

- Community Investment Fund is over because of Track funding disbursed. Funds have been transferred from reserve to cover.
- Grants to Organizations disbursed: Queens County Food Bank, Queens County Transit, Astor Architectural, Greenfield Fire disbursed Q3.

10. Protective Services

- Training for Inspectors over because of enrollment in accelerated course to increase capacity.
- Shared services billing will not happen until year end.
- Fire station repairs over in Q1.

11. Transportation

Common Services

- Infrastructure wages are at 78% of budget. This indicates that budgeted allocation of wages have not translated into actual allocations. Budgets are a plan using the best possible information at the time. Circumstances change that may cause staffing resources to be allocated to more urgent projects as they arise.
- The budget process for 2025-2026 will budget the majority of Infrastructure wages to one budget line and show actual allocations out for each quarter so that information regarding wage expense vs budget will be more transparent.
- Mechanic time is being coded to equipment repair. The budget allocation was for 25% capital, 25% landfill, and remainder equipment. This is an example of the budget vs actual difference. This is why wages for this line are already at 98%.
- Small Tool Safety Equipment is over in part because of safety equipment recommended by Safety Consultants that were not budgeted. Other larger items include: safety shoes inventory valued at $22,400, thermal boots, hoist and equipment inspections, fit testing, ripstop jackets, glasses and gloves.
- Works garage generator project over budget to complete.

Roads and Streets

- Roads and Streets over in Q1 due to equipment purchase detailed in Q1 report.

- Traffic signals and markings overage attributed to line painting completed in Q1. It is important to note that if a project is completed in Q1 – this will cause the budget to be over until the end of the fiscal year. Projects are budgeted by year, not by month.
- An example of this is paving. This may be scheduled for Q4 so that for the entire year it will look under budget like it does now at 6.5%.

12. Environmental Health Service

Wastewater

- Administrative wages are 19% of budget which is another example of the challenge of allocating out wage budgets.
- Other wage line less than 50% of budget for similar reason.

Garbage/Solid Waste

- Salary is lower than budget due to two vacancies (Manager of Environmental Service now filled, Solid Waste Facility Supervisor) and other budgeted allocations not translating to actual.
- Landfill wages below budget – budget vs actual allocation differences
- HHW Operations overage due to backlog of material and contractor having to be hired to address.

13. Hillsview Acres

- Expenses broken out at end of statement.
- Sprinklers over Q1 due to inspection cost not budgeted.
- Maintenance overage funded by DSLTC.
- Chargeable expenses result of timing difference for one-on-one attendant care.

14. Environment Development Services

Planning

- Development Officer vacancy Q1 and Q2 – now filled.

Economic Development

- Vacancies – CEDO and Deputy CAO.
- Events expenses incurred: Canada Day, tent for Library outdoor space.

15. Recreation and Cultural Services

Parks and Playgrounds

- Challenge with allocation of Infrastructure wages

Museums

- Blacksmith Museum repair costs carried over from last year detailed in Q1 report.

Other recreational services

- Wages reflect vacancy of Programmer.

16. Transfers to Reserves

- Unbudgeted expense broken out here. Astor Architecture was to be allocated to Grants to Organizations by motion of Council even though it was unbudgeted.
- Other transfers to fund reserves all budgeted.

WATER UTILITY

REVENUE

- On budget

EXPENSES

- Source of Supply - lake inspection in progress.
- Water treatment - overall costs 48% of budget.
- Transmission – labour allocations below budget.
- Rate study billed in Q3
- Depreciation calculation done at year end. Had it been posted at 50% the deficit would be $264,680, 33% of budget.

IMPLICATIONS

Financial

Variances in the operating budget create a deficit or surplus at end of the fiscal year. Tax rate calculations are based on the operating budget; therefore, it is important that operating budgets are set using the best information available at

the time and staff are held accountable for any variances. Significant unbudgeted expenses are taken to Council for approval.

COMMUNICATIONS

N/A

SUMMARY

Financial results for Quarter Two demonstrated some challenges in current Infrastructure wage allocations that will be addressed in the 2026 – 2027 budget process. $15 million of expenses were incurred in the first two quarters of the fiscal year resulting in a surplus of $9 million. This surplus is not a predictor of the financial results of the year as the tax revenue is all received in the first quarter and not spread out over the year.

ATTACHMENTS/REFERENCE MATERIALS

- Financial Report 2025-2026 Quarter Two

Region of Queen Municipality
Financial Report Quarter Two

	2026-03-31 Region Budget	YTD	%age Budget
1. Taxation			
ASSESSABLE PROPERTIES			
Residential	12,456,122	12,428,891	99.8%
Commercial	2,013,631	2,005,527	99.6%
Wind Turbine Act	25,218	25,684	101.8%
	2,038,849	2,031,211	99.6%
Resource			
Taxable Assessments	964,630	960,060	99.5%
Forest Property-Less than 50,000 Acres	28,876	28,922	100.2%
Forest Property -More than 50,000 Acres	111	111	100.0%
	993,617	989,093	99.5%
AREA RATES			
Hydrant Rate	201,424	200,691	99.6%
Transportation-Roads & Sidewalks			
Transportation-Roads & Sidewalks	241,657	235,549	97.5%
District 13	1,492,989	1,487,522	99.6%
Debt-District 13	61,356	61,131	99.6%
	1,997,425	1,984,894	99.4%
Environmental Health-Caledonia	36,000	18,001	50.0%
Environmental Health- Milton	50,500	25,931	51.3%
Environmental Health- Liverpool	435,000	215,344	49.5%
Environmental Health- Brooklyn	42,100	19,605	46.6%
	563,600	278,881	49.5%
Business Property			
Bell	48,000	47,372	98.7%
Nova Scotia Power	1,329,946	1,329,946	100.0%
Nova Scotia Power HST Rebate	50,000	54,956	109.9%
	1,427,946	1,432,274	100.3%
Deed Transfer Tax	1,100,000	550,824	50.1%
Tax Recoveries	10,000	406	4.1%
	1,110,000	551,231	49.7%
Total Taxation	**$ 20,587,560**	**$ 19,696,474**	95.7%

	2026-03-31 Region Budget	YTD	%age Budget
2. Grants in Lieu of Taxes			
Federal Government	60,892	66,139	108.6%
Provincial Government			
Provincial Property	85,400	-	0.0%
Conservation GIL	14,375	-	0.0%
Crown Timber Land	133,585	-	0.0%
Fire Protection	22,698	-	0.0%
	256,058	-	0.0%
Total Grants in Lieu of Taxes	**$ 316,950**	**$ 66,139**	20.9%
3. Services Provided to Other Governments			
Closure Costs Joint Service Board	13,600	7,087	52.1%
Closure Costs Barrington	27,600	21,677	78.5%
Closure Costs Clarks Harbour	4,400	1,028	23.4%
Barrington Solid Waste	231,400	118,218	51.1%
Clarks Harbour Solid Waste	37,900	16,284	43.0%
Joint Service Board Organics	74,300	39,025	52.5%
Barrington Organics	46,600	16,963	36.4%
Clarks Harbour Organics	0	950	#DIV/0!
Joint Service Board Recycling	93,700	62,816	67.0%
Joint Service Board Solid Waste	122,800	60,836	49.5%
Barrington Recycling	26,700	13,062	48.9%
Clarks Harbour Recycling	800	1,215	151.9%
Waste Check Solid Waste	1,436,300	742,064	51.7%
Closure Costs Waste Check	184,300	94,993	51.5%
Waste Check Under tonnage	36,900	13,839	37.5%
	$ 2,337,299	**$ 1,210,056**	51.8%

Region of Queen Municipality
Financial Report Quarter Two

	2026-03-31 Region Budget	YTD	%age Budget
4. Sales of Services			
Protective Services			
Parking Meters	12,000	3,128	26.1%
Public Health and Welfare Services			
Revenue from Residents	1,647,397	898,600	54.5%
Other Funding Sources	4,000	8,836	220.9%
	1,651,397	907,437	54.9%
Environmental Health Services			
Septage	111,100	135,779	122.2%
Commercial Solid Waste	352,000	141,669	40.2%
Commercial Organics	78,100	31,345	40.1%
Mixed C&D and O/S Queens	136,400	87,298	64.0%
Commercial Recyclables	9,600	5,134	53.5%
Commercial Closure	206,800	142,030	68.7%
Metal Sales	53,600	181	0.3%
Sorted Commercial Queens	8,800	6,424	73.0%
Sorted O/S Queens	35,200	18,119	51.5%
Recycling Commodities	77,000	12,296	16.0%
Contaminated Soil	39,600	53,104	134.1%
	1,108,200	633,379	57.2%
Other			
Tax Certificates	15,000	8,360	55.7%
Total Sales of Services	**$ 2,786,597**	**$ 1,552,304**	55.7%
5. Other Revenue from Own Sources			
Licenses & Permits			
Dog Registration Fees	11,000	8,130	73.9%
Planning Department Zoning, etc.	7,500	4,613	61.5%
Building Permits	30,000	26,473	88.2%
Vendors License	2,500	1,783	71.3%
Taxi-License & Operator	600	50	8.3%
	51,600	41,049	79.6%
Fines			
Parking Fines	1,000	817	81.7%
Sheriff Fines	30,000	16,695	55.6%
	31,000	17,512	56.5%

Region of Queen Municipality
Financial Report Quarter Two

	2026-03-31 Region Budget	YTD	%age Budget
Rentals			
Town Hall	6,000	-	0.0%
LBDC	108,883	25,094	23.0%
Registry of Deeds	16,470	8,225	49.9%
Hangar Rent-Airport	4,000	-	0.0%
	135,353	33,319	24.6%
Return on Investments			
Interest on Investments	250,000	96,174	38.5%
	250,000	96,174	38.5%
Other Revenue from Own Sources			
Penalties and Interest on Taxes	175,000	133,631	76.4%
Penalties and Interest on Misc.	10,000	6,172	61.7%
	185,000	139,803	75.6%
Recreation and Cultural Services			
Queens Place Recreation Facility			
Skate Sharpening	1,500	593	39.6%
Public Skating	2,400	1,435	59.8%
Ice Rentals	210,000	85,679	40.8%
Fitness Revenue Memberships	165,000	96,500	58.5%
Indoor Track	5,000	-	0.0%
Sponsorships & Advertising	40,000	43,921	109.8%
Room Rentals (Fitness/Community)	25,000	6,989	28.0%
Fitness Classes	2,200	2,469	112.2%
Vending Machines Revenue	5,000	2,294	45.9%
Full Facility Rental	-	-	#DIV/0!
Personal Trainer	10,000	3,691	36.9%
	466,100	243,572	52.3%
Recreation Program Revenue	40,000	3,023	7.6%
	506,100	246,595	48.7%
Miscellaneous			
Race Track Revenue	9,600	6,000	62.5%
Visitor Information Center	4,500	1,000	22.2%
Sundry Revenue	45,000	39,202	87.1%
EPR Revenue	100,000	-	0.0%
RCMP Criminal Checks	3,600	1,591	44.2%
Vacancy Allowance	507,554	-	0.0%
Revenue collected for Other Government Agencies			
Brooklyn Community Rate	49,761	49,690	99.9%
	720,015	97,483	13.5%
Total Other Revenue from Own Sources	**$ 1,879,068**	**$ 671,934**	35.8%

Region of Queen Municipality
Financial Report Quarter Two

	2026-03-31 Region Budget	YTD	%age Budget
6. Unconditional Transfer from Other Governments			
Provincial Government			
Farm Property Acreage	14,101	14,140	100.3%
Municipal Financial Capacity Grant	1,343,225	671,612	50.0%
Total Unconditional Transfers from Other Gov.	**$ 1,357,326**	**$ 685,752**	50.5%
7. Conditional Transfers from Federal & Provincial Governments or Agencies			
RRF Funding	11,000	-	0.0%
Diversion Credits	60,000	10,088	16.8%
Provincial Funding	-	47,840	#DIV/0!
911 Cost Recovery Fund	4,600	-	0.0%
Federal Funding	-	5,000	#DIV/0!
Total Conditional Transfers	**$ 75,600**	**$ 62,928**	83.2%
8. Other Transfers, Collections for Other Governments			
Accumulated Surplus			
Succession Planning	32,214	-	0.0%
Grey Box new Site Set up	24,000	-	0.0%
Community Group Funding Support	450,000	-	0.0%
New Dry Hydrants	40,000	-	0.0%
Intervenor Status	67,189	22,010	32.8%
Paving rate funding	321,098	-	0.0%
Transfer fr Surplus to balance rate change to zero	142,915	-	0.0%
	1,077,416	22,010	2.0%
Transfers from Special Operating Reserves			
Shares Services Initial Costs	110,000	-	0.0%
Hillsview Acres Deficit Transfer fr Reserves	192,259	-	0.0%
Pine Grove	25,000	-	0.0%
Accessibility	55,000	-	0.0%
CIF Reserve Track Funding	-	250,000	
Transfers from Special Equipment Reserve			
Fire Department Truck Reserve	309,071	-	0.0%
	1,768,746	**272,010**	15.4%
	$ 31,109,145	**$ 24,217,598**	77.8%

Region of Queen Municipality
Financial Report Quarter Two

	2026-03-31 Region Budget	YTD	%age Budget
9. General Government Services			
Legislative			
Remuneration-Mayor	51,220	25,606	50.0%
Remuneration-Council	179,520	90,279	50.3%
Travel	14,000	7,092	50.7%
Other Expenses	10,000	3,092	30.9%
	254,740	126,069	49.5%
General Administrative			
Administrative	1,589,820	559,096	35.2%
Administrative Benefits	10,512	4,245	40.4%
Allocated -Water Utility	(58,070)	(29,035)	50.0%
Office Expenses	75,600	41,628	55.1%
Computer Insurance	9,000	9,000	100.0%
Equipment Mtnce/Lease Costs	15,000	8,915	59.4%
Computer System	307,602	152,359	49.5%
Diversity Programs	25,000	1,000	4.0%
Staff Training	50,000	26,831	53.7%
	2,024,464	774,039	38.2%
Financial Management	45,000	9,622	21.4%
Bank Charges	2,200	467	21.2%
	47,200	10,088	21.4%
Taxation			
Administration	76,620	36,123	47.1%
Tax Billings	20,000	20,151	100.8%
Tax Exemptions	163,000	138,434	84.9%
Assessment Services	328,985	164,492	50.0%
Other Taxation-Tax Sale Costs/Appeals PY	28,560	7,070	24.8%
	617,165	366,271	59.3%
Common Services-Administration Building			
Insurance	6,700	6,700	100.0%
Electricity	36,400	11,309	31.1%
General Maintenance	55,000	32,842	59.7%
Utilities	1,720	410	23.9%
	99,820	51,261	51.4%
Other			
Legal Services	177,000	81,322	45.9%
Recruiting	50,000	34,988	70.0%
General (Town Hall's Q2)	100,000	6,205	6.2%
Safety Strategy Implementation	50,000	76,574	153.1%
Other	-	7,579	#DIV/0!
Contingency	100,000	26,547	26.5%
Homeowners Association Fees	450	-	0.0%
Utility Low Income Assistance	15,000	-	0.0%
Staff Relations Fund	25,000	5,206	20.8%

Region of Queen Municipality
Financial Report Quarter Two

2026-03-31 Region Budget	YTD	%age Budget
517,450	238,422	46.1%

Region of Queen Municipality
Financial Report Quarter Two

	2026-03-31 Region Budget	YTD	%age Budget
Other General Government Services			
Conventions & Delegations			
NSFM (Council + CAO)	25,600	11,891	46.5%
FCM (Council + CAO)	12,200	10,469	85.8%
Other Councilors Conferences	1,000	-	0.0%
AMANS	8,818	8,166	92.6%
	47,618	30,526	64.1%
General Accident, Damage Claims & Public Liability Insurance	1,120	1,120	100.0%
Grants to Other Organizations & Individuals			
Community Investment Fund	175,000	348,378	199.1%
	175,000	348,378	199.1%
Other			
Scholarships	9,000	9,000	100.0%
Municipal Floats	1,600	396	24.8%
Pension/Administration Costs	5,450	2,772	50.9%
Advertising & Promotions	13,000	2,299	17.7%
Grants to Organizations	535,500	87,336	16.3%
Communications	15,000	1,986	13.2%
	579,550	103,789	17.9%
Valuation Allowance			
Uncollectible taxes	15,000	8,980	59.9%
	$ 4,379,128	**$ 2,058,944**	47.0%
10. Protective Services			
Police Protection			
Administration-Prosecution Fees	12,400	-	0.0%
DNA Testing	10,700	1,102	10.3%
RCMP Satellite Office-Caledonia	600	63	10.6%
Seniors' Safety Coordinator	74,966	18,698	24.9%
Protective Services	2,864,265	1,483,192	51.8%
	2,962,931	1,503,055	50.7%
Law Enforcement			
Building/Fire Inspection			
Salary & Benefits	182,400	86,526	47.4%
Travel	5,000	916	18.3%
Insurance Liability/Vehicle	2,591	2,591	100.0%
Training/Memberships	5,000	7,221	144.4%
Shared Services	110,000	-	0.0%
Telephone	1,700	285	16.8%
Gasoline	12,600	6,300	50.0%
Maintenance Vehicle	3,600	1,044	29.0%
Supplies	500	415	83.1%
	323,391	105,298	32.6%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
By Law Enforcement			
Salary & Benefits	162,660	73,653	45.3%
Insurance Liability/Vehicle	1,904	1,904	100.0%
Training/Memberships	1,500	1,515	101.0%
Telephone	700	169	24.1%
Uniform	3,000	2	0.1%
Unsightly Premises	1,000	50	5.0%
Gasoline	6,000	3,000	50.0%
Bylaw Vehicle Maintenance	1,800	715	39.7%
Dog Tags	850	-	0.0%
Dog Pound General Maintenance	750	478	63.8%
Supplies for Dog Control	500	62	12.5%
Parking Meter Repairs/Tickets	5,000	2,152	43.0%
	185,664	83,700	45.1%
	509,055	188,998	37.1%
Fire Fighting Force			
Liability Insurance	13,925	14,425	103.6%
Safety Training	40,000	20,000	50.0%
Fire Department Equipment Purchases	309,071	309,071	100.0%
Grants Volunteer Fire Departments/First Resp.	692,450	470,790	68.0%
Interest on Loans	525	-	0.0%
Workers Compensation	18,400	9,284	50.5%
Medical Insurance	6,200	-	0.0%
1st Responders Insurance	1,185	1,685	142.2%
Dry Hydrant Maintenance	10,000	285	2.9%
Dry Hydrant Upgrades	40,000	-	0.0%
Dry Hydrant Labour	60,820	2,952	4.9%
Reserve Fund-Fire Department Capital	415,470	207,735	50.0%
	1,608,046	1,036,228	64.4%
Fire Alarm Systems			
Answering Contract	31,000	15,146	48.9%
Base Station/Antenna	600	252	42.0%
	31,600	15,398	48.7%
Water Supply and Hydrants			
	201,424	100,712	50.0%
Fire Station Building			
Insurance/Building/Boiler	5,139	5,139	100.0%
Building Repairs & Grounds	26,000	26,154	100.6%
Building Fuel	16,640	3,198	19.2%
Utilities	23,400	6,489	27.7%
	71,179	40,980	57.6%
Other Fire Protection			
Snow Removal N.Q. Fire Hydrants	5,000	1,960	39.2%
	1,917,249	1,195,277	62.3%

	2026-03-31 Region Budget	YTD	%age Budget
Emergency Measures			
Local EMO/GSAR	44,935	13,196	29.4%
Ground Search & Rescue- Building Fuel	5,000	604	12.1%
Vehicle/Liability Insurance	9,808	10,802	110.1%
Electricity	1,660	655	39.5%
Building Insurance	-	-	#DIV/0!
Building Maintenance	3,750	708	18.9%
	65,153	25,965	39.9%
Total Protective Services	**$ 5,454,387**	**$ 2,913,296**	53.4%
11. Transportation Services			
Common Services-Administration			
EPW Wages	570,790	447,224	78.4%
Sanitary Supplies	36,750	11,132	30.3%
Licencing and Memberships	33,180	26,071	78.6%
Communication Services	40,000	15,580	38.9%
	680,720	500,007	73.5%
Common Services-Equipment Operations			
Salary & Benefits Mechanic	83,040	81,196	97.8%
Equipment Oil & Fluids	25,000	10,174	40.7%
Equipment Gas	32,550	14,764	45.4%
Equipment Diesel	20,000	-	0.0%
EPW Vehicle Maintenance	173,750	83,584	48.1%
Trucks-Insurance	28,276	28,276	100.0%
Small Equipment Maintenance	44,250	8,616	19.5%
Plow Insurance	857	857	100.0%
Heavy Equipment Maintenance	184,000	69,778	37.9%
Loader-Insurance	3,428	4,695	137.0%
Backhoe - Insurance	429	429	99.9%
	595,580	302,368	50.8%
Small tools and Equipment			
Small Tools and Equipment	34,000	22,130	65.1%
Public Works Safety Equipment and Training	45,000	71,889	159.8%
	79,000	94,018	119.0%
Storage			
Insurance	548	548	100.0%
Grounds Building Utilities	15,600	1,764	11.3%
Grounds Building General Maintenance	10,000	3,499	35.0%
	26,148	5,812	22.2%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
Works Garage			
Works Garage Renovation	12,000	21,220	176.8%
Works Utilities	29,640	8,613	29.1%
Works Department General Maintenance	81,000	15,595	19.3%
	122,640	45,428	37.0%
Insurance	2,934	2,934	100.0%
Total Common Services	1,507,022	950,566	63.1%
Road Transport			
Roads and Streets			
Road Levy	306,840	153,424	50.0%
Street and Road Maintenance	103,890	116,443	112.1%
Street and Road Maintenance - Labour	532,360	47,450	8.9%
Sidewalks Material	64,290	8,671	13.5%
Sidewalks Labour	60,820	-	0.0%
Storm Water Management	10,000	13,426	134.3%
Storm Water Management - Labour	50,180	15,043	30.0%
De-Icing Materials Supply	75,000	-	0.0%
Traffic Signals and Markings	99,392	113,763	114.5%
Traffic Calming	50,180	-	0.0%
Equipment Permitting	16,500	5,924	35.9%
Asphalt Paving	391,230	25,439	6.5%
	1,760,682	499,583	28.4%
Debenture Principal & Interest			
Principal	64,856	43,683	67.4%
Interest	18,994	9,326	49.1%
	83,850	53,009	63.2%
Road Transport			
Street lighting			
Rental	273,000	123,850	45.4%
Decorative Light Maintenance	19,000	5,267	27.7%
	292,000	129,117	44.2%
Airport			
Airport Insurance	4,628	4,572	98.8%
Building/Grounds	2,500	-	0.0%
Heat/Lights/Fuel	2,730	719	26.4%
	9,858	5,292	53.7%
Total Transportation Services	**$ 3,653,412**	**$ 1,637,567**	44.8%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
12. Environmental Health Services			
R.Q.M. Sewage Administration			
Administrative Supervision	154,880	29,171	18.8%
Insurance-Caledonia	3,194	3,194	100.0%
WW Continuing Education/Certification	17,910	2,334	13.0%
Consulting Services	30,000	9,171	30.6%
Insurance- Brooklyn	1,948	1,948	100.0%
Insurance-STP Liverpool	15,518	15,518	100.0%
Insurance-Milton	3,880	3,880	100.0%
	227,330	65,217	28.7%
R.Q.M. Sewage Collection Systems			
NQ WW Collection and Treatment Maintenance	129,500	76,850	59.3%
NQ WW Collection and Treatment Wages and Benefit	46,350	17,149	37.0%
SQ WW Collection Wages and Benefits	132,270	49,495	37.4%
SQ WW Collection Maintenance	180,000	174,923	97.2%
	488,120	318,417	65.2%
R.Q.M. Sewage Treatment & Disposal			
SQ WW Treatment Operations	221,825	122,015	55.0%
SQ WW Treatment Wages and Benefits	46,350	9,731	21.0%
	268,175	131,745	49.1%
Debenture Principal & Interest			
Principal	162,731	146,863	0.0%
Interest	30,688	16,474	3.3%
	193,419	163,337	84.4%
R.Q.M. Total Sewage and Disposal	1,177,044	678,717	57.7%
Garbage Collection & Disposal			
Administration			
Salary and Benefits	208,030	40,699	19.6%
SW Administrative Travel	2,000	192	9.6%
SW Administrative Communications	1,500	-	0.0%
Public Engagement	17,500	174	1.0%
Curbside Inspection	25,000	630	2.5%
	254,030	41,695	16.4%
Garbage & Waste Collection			
Grey Box & Green Cart Maintenance	74,480	22,191	29.8%
Grey Box & Green Cart Maintenance - Labour	60,820	8,831	14.5%
Solid Waste Collection Contracts	1,072,140	483,626	45.1%
Solid Waste Transportation Contract	557,820	284,728	51.0%
Derelict Vehicle Program	1,000	522	52.2%
	1,766,260	799,898	45.3%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
Landfill			
SW Wages and Benefits	436,630	154,760	35.4%
Insurance	11,042	11,042	100.0%
SW Facility Operation and Maintenance	380,300	190,981	50.2%
Control Program and Testing	62,500	31,763	50.8%
HHW Operation and Maintenance	37,000	65,574	177.2%
Leachate Management	75,000	19,427	25.9%
Leachate Transportation wages	148,920	35,164	23.6%
Reserve Fund-Spec Cap-Post Closure Queens	450,000	275,000	61.1%
Reserve Fund-Spec Cap-Post Closure-Cont.	550,000	248,295	45.1%
	2,151,392	1,032,005	48.0%
Debenture Principal & Interest			
Principal	68,987	-	0.0%
Interest	2,311	-	0.0%
	71,298	-	0.0%
Recycling			
MRF Wages and Benefits	491,420	208,681	42.5%
Insurance	4,229	4,229	100.0%
MRF Operation and Maintenance	110,300	100,031	90.7%
Organics Transfer Operation and Maintenance	264,500	133,185	50.4%
Leaf and Yard Waste Operations - Labour	-	861	#DIV/0!
Leaf and Yard Waste Operations	55,000	40,918	74.4%
Debenture Principal & Interest	925,449	487,905	52.7%
Total Garbage & Waste Collection & Disposal			
	5,168,429	2,361,504	45.7%
Total Environmental Health Services	**$ 6,345,473**	**$ 3,040,220**	47.9%
13. Public Health & Welfare Services			
Hillsview Acres	$ 1,843,656	$ 915,030	
	$ 1,843,656	**$ 915,030**	49.6%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
14. Environment Development Services			
Planning			
Administration			
Salaries & Benefits	455,290	167,129	36.7%
Supplies	3,000	75	2.5%
	458,290	167,203	36.5%
Planning Other			
Travel	250	-	0.0%
Liability Insurance	977	977	100.0%
Training/Memberships	1,200	200	16.7%
Civic Number Private Road Signage	1,000	-	0.0%
Advertising	1,000	-	0.0%
Planning Projects Reserve	15,000	-	0.0%
GIS Project	5,750	-	0.0%
Heritage Property	1,200	-	0.0%
Meeting support	2,500	-	0.0%
Community Outreach	10,000	-	0.0%
Accessibility Planning/Implementation Misc.	12,500	-	0.0%
Surveying	5,000	-	0.0%
	56,377	1,177	2.1%
Total Environmental Planning & Zoning	514,667	168,381	32.7%
Other Environment Development Services			
Tourism & Economic Development			
Salaries & Benefits	347,423	130,032	37.4%
Supplies/Materials/Operations			
Supplies	500	-	0.0%
Library/Resource	150	-	0.0%
	650	-	0.0%
Department Services/Projects			
Brochure Update & Productions	15,000	-	0.0%
	15,000	-	0.0%
Queens Waterfront Development			
Port Medway Maintenance	9,710	4,328	44.6%
	9,710	4,328	44.6%
Publicity & Advertising			
Website Development	12,000	5,285	44.0%
Signage Development & Mtnce.	12,500	-	0.0%
Promotions and Advertising	25,000	1,547	6.2%
	49,500	6,832	13.8%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
Facilities			
Christmas Lighting/Wreaths	21,000	-	0.0%
VIC Maintenance	21,000	353	1.7%
	42,000	353	0.8%
Fort Point Lighthouse Park			
Insurance	950	950	100.0%
Utilities	3,220	740	23.0%
Fort Point Maintenance	6,000	2,123	35.4%
	10,170	3,813	37.5%
LBDC			
LBDC Maintenance and Operation	154,050	77,804	50.5%
Real Property Taxes	15,800	15,791	99.9%
Insurance	9,636	9,636	100.0%
	179,486	103,231	57.5%
Other			
VIC Operations	45,142	37,183	82.4%
Insurance	1,913	1,913	
Training	3,000	-	0.0%
Travel	1,500	134	8.9%
Membership	4,400	3,589	81.6%
	55,955	42,818	76.5%
Economic Development			
Regional Beautification / Façade program	40,000	9,298	23.2%
Events Strategy Implementation	50,000	36,644	73.3%
Economic Development Data and Profile	5,000	-	0.0%
Community Economic Diversification	35,000	8,013	22.9%
Regional Economic Development	10,000	-	
Branding/Wayfinding	50,000	-	0.0%
Caledonia Corner Park	30,000	-	0.0%
	220,000	53,954	24.5%
Total Tourism and Economic Development	929,894	345,362	37.1%
Total Environmental Development Serv	**$ 1,444,561**	**$ 513,742**	35.6%

	2026-03-31 Region Budget	YTD	%age Budget
15. Recreation and Cultural Services			
Recreation Facilities			
Swimming Pool/Beach			
Staff Wages/Benefits-NQAC	32,360	32,073	99.1%
Utilities-NQAC	1,810	2,408	133.1%
Supplies-NQAC	10,000	2,335	23.4%
NQAC Maintenance	8,000	8,925	111.6%
Staff Training/Travel-NQAC	7,500	6,101	81.3%
Insurance-NQAC	1,104	1,104	100.0%
Beach Meadows Beach Maintenance and Operation	21,250	26,049	40.3%
	82,024	78,994	96.3%
Parks/Playgrounds			
Grounds Crew Wages	411,686	159,672	38.8%
Liability Insurance	2,429	2,429	100.0%
Grounds Crew Gas	13,500	6,750	50.0%
Park Facilities Maintenance and Operation	112,125	43,015	38.4%
Playground Maintenance and Operation	28,450	16,749	58.9%
	568,190	228,615	40.2%
Queens Place Community Facility			
Office Supplies/Postage	6,400	797	12.4%
Insurance	17,955	17,955	100.0%
General Equipment	20,000	1,302	6.5%
Staff Training / Memberships	12,000	2,676	22.3%
Advertising & Promotion	15,000	630	4.2%
License & Fees	20,000	22,904	114.5%
Facility Building Maintenance	140,000	115,850	82.8%
Fuel Cost	74,000	42,704	57.7%
Power	315,120	156,990	49.8%
Sewer & Water Fees	12,000	2,700	22.5%
Telephone / Cable	7,000	3,978	56.8%
Propane	2,200	11	0.5%
Concessions Equipment & Supplies	5,000	-	0.0%
Bar/Beverage Supplies	8,500	1,505	17.7%
Special Events (facility rental)	25,000	-	0.0%
Fitness Center	35,000	5,908	16.9%
General Operations	28,000	7,328	26.2%
Salary & Benefits	811,120	362,652	44.7%
	1,554,295	745,891	48.0%
Debenture Principal & Interest			
Principal	158,369	158,369	100.0%
Interest	46,041	24,045	52.2%
	204,410	182,414	89.2%
Subtotal Recreation Facilities	2,408,919	1,235,914	51.3%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
Cultural Buildings & Facilities			
Historical Burial Grounds	1,000	483	48.3%
Old Town Hall/ Astor			
Old Town Hall/Astor Insurance	4,374	4,374	100.0%
Old Town Hall/Astor General Maintenance	80,000	18,460	23.1%
Old Town Hall/Astor Electricity & Fuel	35,360	6,666	18.9%
Old Town Hall/Astor Operations	2,400	730	30.4%
	122,134	30,230	24.8%
Museums			
Blacksmith Museum	4,314	16,077	372.7%
Court House Insurance, Fire & Liability	1,195	1,195	100.0%
Court House General Maintenance	10,000	6,860	68.6%
Court House Heat	5,500	671	12.2%
Court House Power Water & Sewer	2,600	762	29.3%
	23,609	25,565	108.3%
Library			
Library Operations	-	295	#DIV/0!
Regional Library	92,000	46,000	50.0%
	92,000	46,295	50.3%
Other Recreation and Cultural Services			
Travel	4,090	2,180	53.3%
Training/Workshops	3,070	364	11.9%
Community Grants & Programs	41,500	41,500	100.0%
Aquatic Training	3,070	70	2.3%
Memberships	1,530	340	22.2%
Telephone	410	80	19.6%
Equipment	4,090	-	0.0%
Community Workshops	3,840	-	0.0%
Health and Wellness Initiatives	1,530	-	0.0%
Active Transportation	1,530	177	11.6%
Volunteer Recognition	1,230	-	0.0%
Promotion	820	-	0.0%
Salaries & Benefits	201,780	70,851	35.1%
Physical Activity Strategy Implementation	52,990	9,735	18.4%
	321,480	125,297	39.0%
Less: transmission of taxes collected for Other Governments			
Brooklyn Cemetery/Recreation	49,761	24,881	50.0%
Total Recreation & Cultural Services	**$ 3,018,903**	**$ 1,488,665**	49.3%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
Unbudgeted Expenditures	-	5,083	
Heat Pump for Server Room	-	5,083	
	-	5,083	
Reserve Transfer-Special Operating Reserve			
Airport Reserve- New 23/24	12,000	-	0.0%
Sidewalk Renewal	25,000	24,500	98.0%
First Responders	5,000	2,500	
2ND Generation Landfill	150,000	75,000	50.0%
	192,000	102,000	
Reserve Transfer - Equipment Reserve			
Landfill Equipment	200,000	100,000	50.0%
General Equipment Reserve	250,000	125,000	50.0%
Equipment Reserve shortfall CIP purchases	170,610	-	0.0%
	620,610	225,000	
	812,610	332,083	
Conditional Transfers to other governments and agencies			
Appropriation to Regional School Board	4,157,016	2,078,508	50.0%
Total Conditional Transfers to other governments and agencies	4,157,016	2,078,508	
Extraordinary & Special Item			
Pension Transfer			
Total Fiscal Services	4,969,626	2,410,591	
Total Expenditures	31,109,146	14,978,055	
Operating Surplus	**$ (1)**	**$ 9,239,543**	

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
Hillsview Acres			
EXPENDITURES			
SALARIES & BENEFITS			
Salaries & Wages	1,367,031	684,304	50.1%
Benefits			
	1,367,031	684,304	50.1%
BUILDING EXPENSES			
Insurance	5,153	6,633	128.7%
Fuel	37,800	3,791	10.0%
Electricity	16,185	8,404	51.9%
Propane	8,085	2,973	36.8%
Smoke Detectors & Fire Alarm	4,000	547	13.7%
Sprinkler Repairs	4,000	13,796	344.9%
General Maintenance	60,000	124,388	207.3%
	135,223	160,533	118.7%
EQUIPMENT & SUPPLIES			
Cleaning Supplies	11,200	6,164	55.0%
Equipment & Material	4,000	4,921	123.0%
Supplies & Utensils	3,000	1,027	34.2%
Linen Supplies	3,000	398	13.3%
Grounds Maintenance	2,000	-	0.0%
Supplies	3,000	222	7.4%
	26,200	12,733	48.6%
RESIDENT'S EXPENSES			
Medication	250	-	0.0%
Sanitary Supplies	3,000	4,173	139.1%
Food	101,000	57,820	57.2%
Medical Supplies	14,000	7,510	53.6%
Activity Supplies	11,000	5,315	48.3%
Kitchen- Non food	5,000	998	20.0%
Chargeable Expenses		(25,772)	
	134,250	50,044	37.3%
Travel-Administration	1,500	989	65.9%
Office Supplies	7,000	3,768	53.8%
Agency Staffing	3,000	-	0.0%
Training	15,000	944	6.3%
Telephone	6,520	1,715	26.3%
	33,020	7,416	22.5%
TOTAL	1,695,724	915,030	54.0%

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	2026-03-31 Region Budget	YTD	%age Budget
Water Utility			
REVENUES			
Operating Revenues			
Metered Sales	610,746	304,169	49.8%
Public Fire Protection	201,424	100,712	50.0%
	812,170	404,881	49.9%
Other Operating Revenues			
Sprinkler Service	5,400	5,000	92.6%
Plate Fee & Shut off	4,400	1,280	29.1%
Connections Fee	3,000	330	11.0%
	12,800	6,610	51.6%
NON OPERATING REVENUE			
Interest	15,000	8,353	55.7%
Miscellaneous	-	-	#DIV/0!
	15,000	8,353	55.7%
TOTAL REVENUE	839,970	419,844	50.0%
EXPENDITURES			
SOURCE OF SUPPLY			
Lake Inspections	70,000	16,167	23.1%
Labour	13,900	-	
Screen Maintenance	6,500	619	9.5%
Wildlife Management	1,500	-	0.0%
Supervision and Engineering	14,435	-	0.0%
Insurance	1,937	1,937	100.0%
TOTAL SOURCE OF SUPPLY	108,272	18,723	17.3%
WATER TREATMENT (Purification)			
Labour	104,280	15,635	15.0%
Water Testing	30,000	13,303	44.3%
Chemicals and Additives	208,000	174,951	84.1%
Facility Repairs and Maintenance	79,500	119,841	150.7%
Process Equipment	114,275	5,519	4.8%
Electricity	103,370	38,619	37.4%
Generator	5,200	174	3.3%
Salaries and Benefits - Assistant Engineer	63,840	-	0.0%
Contracted Services	50,475	-	0.0%
Phone/Internet	3,720	-	0.0%
Allocated Services	13,475	2,589	19.2%
TOTAL WATER TREATMENT	776,135	370,632	47.8%

Region of Queen Municipality
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	2026-03-31 Region Budget	YTD	%age Budget
TRANSMISSION AND DISTRIBUTION			
Reading Meters Expense	23,170	2,203	9.5%
Operation Labour - Mains	37,080	6,246	16.8%
Leak Detection	30,000	14,739	49.1%
Labour - Water Leaks	99,450	35,727	35.9%
Operation Labour - Meters	14,840	548	3.7%
Labour - Flushing	8,380	3,246	38.7%
Maintenance of Mains (Materials)	25,000	10,391	41.6%
Use of Gravel	2,500	1,298	51.9%
Maintenance of Hydrants/Valves	18,000	9,663	53.7%
Maintenance of Meters	30,000	3,514	11.7%
Maintenance Hydrant/Valves-Labour	43,350	6,934	16.0%
Steet Patching	40,000	10,924	27.3%
Other Labour	39,180	-	
Cowie Well - Public Tap	5,500	2,602	47.3%
Salaries and Benefits - Assistant Engineer 5%	22,910	2,235	9.8%
Allocated Services	31,441	6,041	19.2%
TOTAL TRANSMISSION AND DISTRIBUTION	470,801	116,310	24.7%
Allocated Services - T/D 70% Treatment 30%			
Truck Repairs - Transportation	4,885	2,606	53.3%
Insurance	1,116	1,116	100.0%
Excavator Repairs	10,185	1,061	10.4%
Excavator Insurance		-	#DIV/0!
Tools & Shop Expense	5,000	1,121	22.4%
Safety Equipment	8,000	1,839	23.0%
Computer Services	14,200	887	6.2%
Meal Allowance	1,330	-	0.0%
Travel	200	-	0.0%
TOTAL ALLOCATED SERVICES	44,916	8,630	19.2%
ADMINISTRATION AND GENERAL			
Rate Study	12,000	-	0.0%
Supervision	-	12,580	#DIV/0!
Office/Admin Salaries	58,066	29,035	50.0%
Office Supplies and Expenses	2,000	378	18.9%
Contracting Services	2,400	3,110	129.6%
Advertising Expense	4,250	3,787	89.1%
Courses and Seminars	9,000	2,167	24.1%
Auditors	6,900	-	0.0%
Legal	500	-	0.0%
UARB Utility Levy	1,793	-	0.0%
Insurance	11,040	17,095	154.9%
TOTAL ADMINISTRATION AND GENERAL	107,949	68,151	63.1%
Depreciation	117,000	-	0.0%

Region of Queen Municipality
Financial Report Quarter Two

	2026-03-31 Region Budget	YTD	%age Budget
TOTAL OPERATING EXPENDITURES	1,580,157	573,816	36.3%
NON OPERATING EXPENDITURES			
Principal	59,689	45,954	77.0%
Interest/Discount	13,222	6,792	51.4%
TOTAL NON OPERATING EXPENDITURES	72,911	52,746	72.3%
TOTAL OPERATING AND NON OPERATING EXPENDITURES	1,653,068	626,562	37.9%
SURPLUS/DEFICIT	(813,098)	(206,719)	25.4%

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: November 25, 2025

File No: 10350-50-2512-03

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: South Shore Regional Library Board Resignation

Prepared by:	Supervisor:	CAO Concurrence:
A. Green *Municipal Clerk*	*P. Hirtle* *DCAO*	*W. Thorpe* *CAO*

RECOMMENDATIONS

1. That the Council of the Region of Queens Municipality accept Councillor Wentzell's request to step down from the South Shore Regional Library Board.

2. That Council determine the Municipality's future representation on the South Shore Regional Library Board, and direct staff to bring forward a recommendation/appointment process for Council's consideration.

PURPOSE

To enable Council to consider Councillor Wentzell's resignation from the South Shore Regional Library Board, and to provide Council with the opportunity to direct staff regarding the Municipality's representation on the Board going forward.

BACKGROUND

The South Shore Regional Library Board is a governing board comprised of appointed representatives from participating municipalities and at-large Board appointees. Region of Queens Municipality has historically appointed a member of Council to serve as its representative. This practice has provided a direct link between the Board's work and municipal priorities and has ensured regular reporting back to Council.

However, the Municipal Government Act does not require that the representative be an elected official. Several municipalities appoint a member of the public to sit on the Board on their behalf, typically selecting an individual with experience or interest in literacy, education, or community service. This remains an option available to Council should they wish to broaden participation or reduce demands on Council members.

Councillor Wentzell has requested to step down from the Board. Appointment to the South Shore Regional Library Board aligns with the Council term, and there are approximately three years remaining in the current Council term. Under Council's committee appointment policy, Councillors are appointed to committees and boards for two-year terms, after which appointments are typically rotated. Should Council accept the resignation, a new appointment, either a Councillor or a member of the public, would serve for the remaining one year of the current two-year rotation, until October 2026. At that time, Council will appoint a representative for the subsequent two-year period.

ALTERNATIVES/OPTIONS

Option 1: Appoint a Councillor to the Board.
Council may appoint a current member of Council to fill the vacancy for the remainder of the term. Staff would seek nominations at the meeting or at a subsequent session.

Option 2: Appoint a Member of the Public.
Council may direct staff to invite applications from qualified residents and return with a recommendation for appointment.

Option 3: Leave the Position Vacant Until New Appointments are Made.
Council may choose to leave the position unfilled for the remainder of the current appointment period. While this approach is permitted, it would limit the Municipality's direct input into Board discussions and decision-making. Should Council select this option, staff would advise the South Shore Regional Library Board of the vacancy and bring the position forward as part of the regular committee appointment process in October 2026.

Option 4: Any other direction as determined by Council.
Council may provide alternate direction consistent with the South Shore Regional Library Board governance structure.

ANALYSIS

Councillor Wentzell's resignation from the South Shore Regional Library Board creates a vacancy in the Region of Queens Municipality's representation. As participation on the Board is not prescribed to elected officials, Council has flexibility in determining how best to fill the position for the remainder of the current Council term.

Maintaining a Councillor as the appointee preserves the longstanding practice of direct Council involvement in the governance of the library system. A Councillor representative also ensures that updates, motions, and strategic decisions are readily communicated back to Council.

Alternatively, appointing a qualified member of the public is a common approach used by several other municipalities within the South Shore Regional Library system. A public appointee may bring relevant expertise, reduce workload on Council members, and provide continuity should they be reappointed after the next election. If Council chooses this approach, staff can initiate a call for expressions of interest using the standard committee/board application and appointment process.

Given there is approximately one year left in the current committee term, any appointment made now would serve only until October 2026. A new appointment, either a Councillor or a public representative, would then be made for the subsequent two-year period.

IMPLICATIONS

There are no direct financial impacts associated with accepting the resignation or appointing a new representative. Any mileage or expenses incurred by the appointee, whether a Councillor or a member of the public, would be covered under existing policy frameworks and can be accommodated within the current operational budget.

COMMUNICATIONS

The South Shore Regional Library Board will be notified of Council's decision.

BYLAWS/PLANS/POLICIES

Administrative Policy 3 – Respecting Council Appointments to Committees

Administrative Policy 7 – Council and Staff Expenses

SUMMARY

Councillor Wentzell has requested to step down from the South Shore Regional Library Board. Council must accept Councillor Wentzell's resignation and decide how to fill the vacancy for the remainder of the current appointment period, which ends in October 2026. Council may appoint another Councillor, seek a public member, or leave the position vacant until the next round of committee appointments. Staff are seeking Council's direction on the preferred approach going forward.

ATTACHMENTS/REFERENCE MATERIALS

Nova Scotia Libraries Act - Regional Libraries

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: December 4, 2025

File No: 10350-50-2512-04

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Wastewater System Assessment Reports

Prepared by:	Supervisor:	CAO Concurrence:
B. Tibert *Manager of Environmental Services*	*A. Grant* *Director of Infrastructure*	*W. Thorpe* *CAO*

RECOMMENDATION

THAT Council for Region of Queens Municipality direct staff to incorporate recommendations from the report titled 'Wastewater System Assessment Reports' into budget discussions for the 2026 – 2027 fiscal year.

PURPOSE

To provide Council with the results of a study into the Region of Queens wastewater systems.

BACKGROUND

In Nova Scotia, the operation of municipal infrastructure such as water and wastewater facilities is regulated by the Nova Scotia Department of Environment and Climate Change (NSECC). In the past, this regulation was carried out by the provincial body issuing a *Permit to Operate and Construct*, which provided approval for construction and including parameters related to appropriate construction standards as well as performance standards of the

operating facility. That process has changed over the last number of years and approvals to construct have been separated from approvals to operate. Recently the Region of Queens was issued with two new *Approval to Operate* documents from NSECC, one for the South Queens wastewater system and one for the Caledonia wastewater system.

These new approvals include numerous operational changes as well as a requirement to complete a System Assessment Report (SAR) for each facility. SARs are a detailed investigation by a 3rd party consultant into the operation of a facility. In the case of a SAR on a wastewater system, the consultant is required to look at:

- Results of effluent quality
- Description of the treatment technology currently employed.
- Details on the treatment potential of the facility.
- Summary on the treatment facility's ability to comply with established effluent limits.
- Summary of receiving water quality.
- Summary of treatment upgrades required to comply with established effluent limits.
- Assessment of collection system for inflow & infiltration.

The SAR for South Queens (Appendix A) and Caledonia (Appendix B) were received in October and included for Council's awareness.

South Queens System Assessment Report Summary:

- Treatment Facility,144 Hank Snow Drive, Brooklyn, constructed in 1999.
- Includes a Septage Receiving Station, 138 Hank Snow Drive, constructed in 2010
- Aerated lagoon system, with gravity sand filters and UV disinfection
- Processes average of 2,050 cubic meters/ day (originally designed for 5,300 cm/day)
- 100% compliance with regulatory requirements in 2024
- Discharges to the Liverpool Harbour
- Substantial level of inflow and infiltration attributed to the existence of combined sewer systems or improper connections.

The report also includes 6 recommendations which are being investigated by staff where they have not already been addressed. Additional information will be provided to Council during budget discussions.

Caledonia System Assessment Report Summary:

- Treatment Facility, 10062 Highway 8, Harmony
- Constructed originally in 1978 with substantial process changes or modifications over the operational years, most recently to operate as a Sequencing Batch Reactor
- Influent equalization tank, reactor, UV disinfection and sludge holding
- Discharges to the Mill Brook, part of the Medway watershed
- Processes average of 98 cubic meters/ day (originally designed for 95 cm/day)
- Failure to achieve discharge objectives, 66% success for CBOD (carbonaceous biochemical oxygen demand), 47% success for TSS (total suspended solids)
- Substantial level of inflow and infiltration attributed to the existence of combined sewer systems or improper connections.

The report also includes 6 recommendations which are being investigated by staff where they have not already been addressed. Additional information will be provided to Council during discussions regarding the 2026 – 2027 budget.

ALTERNATIVES/OPTIONS

1) Council direct staff to incorporate recommendations from the report titled 'Wastewater System Assessment Reports' into budget discussions for the 2026 – 2027 fiscal year.

2) Council receives the report for information.

ANALYSIS

Option 1: Achieves Council's goal to promote good environmental stewardship through resilient and sustainable infrastructure by developing a plan to address the consultant's recommendations and work towards optimal operation of the facility. This ensures the Municipality is actively working towards maintaining regulatory compliance and addressing identified system risks.

Option 2: Acknowledges the receipt of information and makes no commitment to address recommendations. Failure to address the consultant's

recommendations is expected to result in continued non-compliance, which could lead to environmental, operational, reputational, financial, and regulatory implications.

IMPLICATIONS

There are no financial implications at this time.

COMMUNICATIONS

N/A

BYLAWS/PLANS/POLICIES

N/A

SUMMARY

The Municipality has received System Assessment Reports (SARs) for the wastewater treatment systems for South Queens and Caledonia, as required under new Approvals to Operate issued by Nova Scotia Environment and Climate Change. The assessments provide detailed reviews of treatment performance, capacity, compliance, and inflow and infiltration (I&I) issues.

The South Queens facility, constructed in 1999, is operating well within design capacity and achieved full regulatory compliance in 2024, though I&I remains a concern. In contrast, the Caledonia system, originally built in 1978, is not consistently meeting effluent objectives and also experiences substantial I&I. Both reports include six recommendations each, which staff are currently reviewing. These findings will inform upcoming budget discussions to ensure sustainable and compliant wastewater operations. Staff recommend Council direct staff to incorporate recommendations from the report titled 'Wastewater System Assessment Reports' into budget discussions for the 2026 – 2027 fiscal year.

ATTACHMENTS/REFERENCE MATERIALS

Appendix A – South Queens System Assessment Report

Appendix B – Caledonia System Assessment Report

Tuesday, October 21, 2025

Nova Scotia Department of Environment and Climate Change
81 Logan Rd
Bridgewater, NS, CAN. B4V 3T3

Re: South Queens Wastewater Treatment Facility System Assessment Report

Please find the system assessment report for the South Queens Wastewater Treatment Facility located at 144 Hank Snow Drive in Liverpool, Nova Scotia, as required by Approval to Operate #2006-2316046-01.

The report, as prepared by CBCL Ltd, presents six recommendations in their section 7.1. In response to those recommendations, I am offering the following comments:

1) Influent flow measurement – staff are currently working with multiple contractors to update the current SCADA system in the collection system. It is our intention to incorporate a weather station as well as flow measuring into this SCADA so that I&I can be monitored.
2) Routine influent sampling – this is currently in place and will be included in the next revision of the operations manual.
3) Effluent sampling for compliance – this is currently in place and will be included in the next revision of the operations manual.
4) UV Transmittance (UVT) monitoring – the UV system is currently being replaced. UVT monitoring is a component of the new system and will be connected to the SCADA.
5) Replace inlet pipe in lagoon cell #1 – staff are currently exploring options to resolve this operational challenge and intended to present a project to municipal Council for consideration in the coming months.
6) Inspect aerators/laterals in lagoon - staff are currently exploring options to resolve this operational challenge and intend to present a project to municipal Council for consideration in the coming months.

Queens Coast
SEEK NATURE'S REWARDS
Region of Queens Municipality
142 Hank Snow Drive,
P.O. Box 1264, Liverpool, NS,
B0T 1K0
regionofqueens.com
P: 902-354-7170
F: 902-354-7473
E: agrant@regionofqueens.com

Should you require any additional information please do not hesitate to contact me.

Regards,

Adam Grant, P.Eng.
Director of Infrastructure

c: Blake Tibert, EIT.
Manager of Environmental Services

Region of Queens Municipality
South Queens Wastewater Treatment Facility
System Assessment Report

FINAL

250836.00 • October 2025

CBCL

0	Final		14-Oct-2025	
A	Draft	David Trudel	3-Oct-2025	Meghan Lea
Rev.	Issue	Reviewed By:	Date	Issued By:

Project No. 250836.00

October 14, 2025

Mr. Adam Grant, P.Eng.
Director of Infrastructure
Region of Queens Municipality
142 Hank Snow Drive
Liverpool, NS B0T 1K0

Dear Mr. Grant:

RE: ***South Queens Wastewater Treatment Facility System Assessment Report***

Please find enclosed FINAL System Assessment Report for the South Queens Wastewater Treatment Facility for your review/comment.

If you have any questions or require clarification on the content presented in the attached report, please do not hesitate to contact us.

Yours very truly,

CBCL Limited

Prepared by:
Meghan Lea, P.Eng.
Process Engineer
Direct: 902-421-7241
E-Mail: mlea@cbcl.ca

Reviewed by:
David Trudel, P.Eng.
Senior Project Manager

Project No: 250836.00

Contents

Appendices

1 Introduction

1.1 Introduction

The Region of Queens Municipality (Municipality) operates a Wastewater Treatment Facility (WWTF) located at 144 Hank Snow Drive in Liverpool, Nova Scotia (Queens County). Constructed in 1999, the facility consists of a four-cell aerated facultative lagoon (partially mixed), gravity sand filters, and Ultraviolet (UV) disinfection. The filters were designed for seasonal tertiary polishing. A Septage Receiving Station (SRS) was constructed just northwest of the facility in 2010. The major components of the WWTF include:

- Four-cell aerated lagoon.
- Gravity sand filters.
- UV Disinfection.

Treated effluent flows by gravity to an outlet/overflow structure and is subsequently discharged to Liverpool Harbour which opens into Liverpool Bay.

1.2 Regulatory Requirements

The Approval to Operate (#2006-2316046-01) was issued by Nova Scotia Environment and Climate Change (NSECC) to the Municipality on October 11, 2024 (Appendix A). The approval requires the Municipality submit a System Assessment Report (SAR) on the operation of the facility. The SAR must be completed by a third-party consultant with experience in Wastewater Treatment Facility Operations and contain the following:

- Summary of the quality and quantity of landfill leachate received at the facility.
- Results of effluent quality.
- Description of the treatment technology currently employed.
- Details on the treatment potential of the facility.
- Summary on the treatment facility's ability to comply with established effluent limits.
- Summary of receiving water quality.
- Summary of treatment upgrades required to comply with established effluent limits.
- Assessment of collection system for Inflow & Infiltration (I & I).

CBCL Limited (CBCL) was retained to perform the system assessment in late June 2025. Upon receipt of available background information, CBCL scheduled a site visit on August 20, 2025. The following individuals were in attendance:

- Dwayne Hurshman, Utility Supervisor, Region of Queens Municipality.
- Meghan Lea, P.Eng., Process Engineer, CBCL Limited.
- David Trudel, P.Eng., Senior Project Manager, CBCL Limited.

In addition to domestic wastewater, the facility receives leachate from the Region of Queens Waste Management Facility and effluent from the SRS. Each location operates under a separate Approval to Operate which contains site specific monitoring and recording requirements. For reference, approval numbers are provided below:

- Septage Receiving Station – Approval No. 2021-2796931-00.
- Municipal Solid Waste Landfill – Approval No. 2005-049742-A02.

2 Influent Characteristics

2.1 Municipal Influent Quality

To support the SAR process, the Municipality initiated weekly influent sampling at the Hank Snow Pumping Station. Data was obtained from operations staff for the period from January 2025 through to June 2025. Samples were analyzed for Total Kjeldahl Nitrogen (TKN), Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), and pH. Results are summarized in Table 2.1.

Table 2.1: Influent Quality (January – June 2025)

	Parameter			
	TKN (mg/L)	BOD (mg/L)	TSS (mg/L)	pH
Maximum	15.7	95	217	7.2
99% Percentile	15.6	89	200	7.2
95% Percentile	15.1	67	127	7.2
Minimum	4.1	4	19	6.3
Average	**8.6**	**40**	**57**	**6.8**

2.2 Leachate

Leachate is produced when water percolates through landfilled material, leaching biological and chemical constituents into solution. The resulting liquid can contain elevated concentrations of organics, nutrients, and trace metals. Leachate volume and composition varies depending on site-specific conditions including climate, open area, daily cover, age of the landfill, and stages of decomposition within each cell. Precipitation largely contributes to leachate production.

At the Region of Queens Waste Management Facility, leachate is collected by gravity through the collection and removal system. The system includes a series of perforated pipes, landfill liner system, non-perforated pipes, manholes, and leachate pond. The leachate pond has a storage volume of approximately 12,000 m^3. Leachate is removed from this pond via a vacuum tanker truck and transported to the SRS pumping station. The truck offloads by gravity via a flexible hose connection directly to the wet well. Submersible pumps transfer leachate from the pumping station to the WWTF via a 250 mm diameter forcemain. This forcemain increases to 300 mm diameter at the point of intersection (tee-wye) with flows from the collection system (combined forcemain) prior to discharge to Lagoon Cell #1.

Leachate Discharge Connection at SRS

Leachate volumes received during 2024 are summarized in Table 2.2. The total volume received by month varies considerably, ranging from a low of 225 m^3 (October) to more than 12,000 m^3 (April). The total volume received during this period is 52,254 m^3. This results in a monthly average volume of approximately 4,355 m^3. This seasonal variability is consistent with patterns observed in 2022 and 2023. This appears to also be consistent with rainfall patterns for Nova Scotia. Summer months tend to be the driest, while the fall/winter months tend to see an increase in precipitation events. Snowmelt may also be a contributing factor.

Table 2.2: 2024 Leachate Volumes by Month

Month	Leachate Volume (m^3)
January	7,439
February	6,404
March	10,328
April	12,126
May	8,412
June	288
July	1,370
August	1,544
September	1,515
October	225
November	1,492
December	1,112
Total	**52,254**

Assuming leachate is hauled 20 days per month, this would result in an average daily flow of approximately 220 m^3. Similar to influent data, leachate sampling data was obtained from operations staff for the period from January 2025 through to June 2025. Samples were analyzed for BOD, TSS and Chemical Oxygen Demand (COD). Results are summarized in Table 2.3.

Table 2.3: Leachate Quality (January - June 2025)

Month	Parameter		
	BOD (mg/L)	TSS (mg/L)	COD (mg/L)
Maximum	70	65	1,220
99% Percentile	68	65	1,200
95% Percentile	59	65	1,123
Minimum	13	19	370
Average	**30**	**40**	**700**

While leachate composition can vary, the leachate received at the WWTF is typical of a mature landfill (> 10 years). Mature landfill leachate concentrations are typically on the order of 100 to 200 mg/L, 100 to 400 mg/L and 100 to 500 mg/L for BOD, TSS and COD respectively. Bringing new cells online is likely to impact concentrations.

Similar to domestic influent quality, BOD values indicate the leachate is moderately low in organic strength, while COD concentrations are much higher, reflecting a predominance of refractory organics. The low BOD:COD ratio (0.05–0.10) confirms that only a small fraction of the leachate is readily biodegradable. Seasonal and temporal variability in both volume and composition is typical for landfill leachate.

2.3 Septage Receiving Station

Septage Receiving Station

In addition to the domestic wastewater and leachate, the WWTF receives septage via the SRS and associated pumping station. Constructed in 2010, the SRS has reported capacity of 800 L/min. The system consists of a rock trap, inline grinder, automated valve, flow meter, and inclined auger screen. Septage haulers back onto the drainage pad (spill containment), connect to a camlock connection, swipe their magnetic access card, and commence unloading septage. The rock trap removes granular material, the grinder reduces solids, while the auger screen separates objectionable materials from the influent. Screened materials is discharged to a bin for disposal at the Waste Management Facility, while septage drains by gravity to the pumping

station and is subsequently transferred to Lagoon Cell #1 via a 250 mm diameter forcemain. Total and maximum daily septage volumes for 2024 are summarized in Table 2.4.

Table 2.4: 2024 Septage Volumes by Month

Month	Septage Received (m^3)	Maximum Daily (m^3)
January	135	30
February	93	21
March	142	27
April	266	38
May	431	34
June	427	43
July	349	51
August	472	64
September	434	61
October	338	36
November	310	35
December	191	24
Total	**3,589**	**--**

Assuming septage is hauled 20 days per month, this would result in an average daily flow of approximately 15 m^3. Septage sampling data was obtained from operations staff for the period from January 2025 through to June 2025. Samples were analyzed for TKN, BOD, TSS and pH. Results are summarized in Table 2.5.

Table 2.5: Septage Quality (Jan - Jun 2025)

Month	Parameter			
	TKN (mg/L)	BOD (mg/L)	TSS (mg/L)	pH
Maximum	640	1,210	2,120	8.0
99% Percentile	576	1,014	1,846	7.9
95% Percentile	320	230	750	7.7
Minimum	15	20	23	5.1
Average	**171**	**131**	**230**	**7.3**

Similar to leachate, septage strength can vary signification depending on usage, composition, frequency of pumping, etc. Septage commonly has elevated concentration of organics, fats/oil/grease, nutrients, scum, grit and other extraneous material. Substation quantities of TKN, Total Ammonia Nitrogen (TAN), and/or cleaning agents may also be present depending on source of material. Septage concentrations are typically on the order of 700 mg/L, 7,000 mg/L, and 15,000 mg/L for TKN, BOD, and TSS respectively, highlighting that the organic strength at this facility is notably lower than expected.

2.4 Combined Influent Flows

The treatment facility receives influent from three primary sources:

- Municipal collection system (domestic wastewater).
- Waste Management Facility (leachate).
- Liquid/solid material removed from septic tanks, tanks, vaults, MHs, etc. (septage).

Co-treatment of leachate/septage can be one of the more efficient methods of treatment/disposal. Provided the facilities are in close proximity to one another, the primary advantage is cost effectiveness. However, external flows can exert demands on the treatment system that are not proportional to typical domestic wastewater hydraulic/organic loadings (i.e., consumes a greater capacity than similar volume of wastewater). Smaller treatment facilities are generally more susceptible to upset conditions that may result in effluent deterioration.

To gain a better understanding of influent loading to the treatment facility, a flow-weighted average approach was used to confirm influent loading under variable hydraulic/organic conditions. Results are summarized in Table 2.6.

Table 2.6: Combined Influent Characteristics

Source	Parameter			
	Daily Flow (m^3/d)	% of Daily Flow	BOD (mg/L)	TSS (mg/L)
Leachate	220	11%	41	31
Septage	15	1%	171	296
Domestic	1,815	88%	44	63
Combined	**2,050**	**100%**	**46**	**64**

As a general rule of thumb, higher strength external flows should be limited to approximately 5% of the total influent flow to the treatment facility. Lower strength (resembling typical domestic wastewater) external flows may exceed this guideline with minimal impact on effluent quality. Current influent loading is characteristic of low strength domestic wastewater (i.e., ≤100 mg/L BOD/TSS concentrations). Influent strength reflects the potential impact of Inflow & Infiltration (I&I) coupled with the relatively low strength of external flow contributions. Operations staff should continue to monitor influent quality to confirm overall loading to the treatment facility and monitor for signs of a developing trend/impact on effluent quality (decline in treatment performance).

3 Effluent Quality

The Municipality provided effluent sampling results for 2024. Quarterly results are summarized in Table 3.1 below. The results were analyzed to assess compliance with the treated effluent criteria outlined in the Approval to Operate. Wastewater sampling for fecal coliforms is being phased out in favor of *E. coli* as it has been shown to be a more reliable indicator of contamination from exposure to wastewater effluent. pH was not measured in 2024. Flow data was available for January, February, April, July, and August of 2024 only.

Table 3.1: 2024 Effluent Quality

Period	Parameter			
	Effluent Flow (m^3/d)	CBOD (mg/L)	TSS (mg/L)	Fecal Coliforms (CFU/100 mL)
Q1 2024	2,250	6.2	5.8	>200
Q2 2024	2,660	9.8	6.0	>200
Q3 2024	1,240	2.8	5.0	160
Q4 2024	--	4.5	7.5	168
Yearly Average	**2,050**	**5.8**	**6.1**	**182**

3.1 Permit Limits

The treated effluent criteria, sampling frequency, and averaging period are outlined in the Approval to Operate (Section 10 and Appendix A). Criteria are summarized in Table 3.2 below. Fish toxicity testing is also included within the effluent criteria; however, such testing is required only upon request from NSECC. CBCL is not aware of any fish toxicity testing completed in 2024.

Table 3.2: Permit Limits

Parameter	Parameter			
	CBOD (mg/L)	TSS (mg/L)	E. Coli (CFU/100 mL)	pH
Effluent Limit	20	20	200	6-9
Sample Frequency	Quarterly	Quarterly	Quarterly	Quarterly
Averaging Period	Annually	Annually	Annually	Annually

3.2 Compliance Statement

The quarterly results were analyzed to assess compliance with the treated effluent criteria outlined in the Approval to Operate. Effluent CBOD and TSS complies with the criteria in all four quarters.

A total of nineteen (19) samples were collected during the 2024 calendar year. All samples were compliant for BOD and TSS. Even though *E. coli* is a major component of the fecal coliform group, it is not the one of the treated effluent criteria listed in the Approval to Operate. pH was not measured.

4 Treatment Potential

4.1 Treatment Summary

The South Queens WWTF is a secondary treatment facility. Unit treatment processes include four-cell aerated facultative lagoon (partially mixed), gravity sand filters, and UV disinfection. Treated effluent is discharged to Liverpool Harbour. A process flow diagram is shown in Figure 4.1.

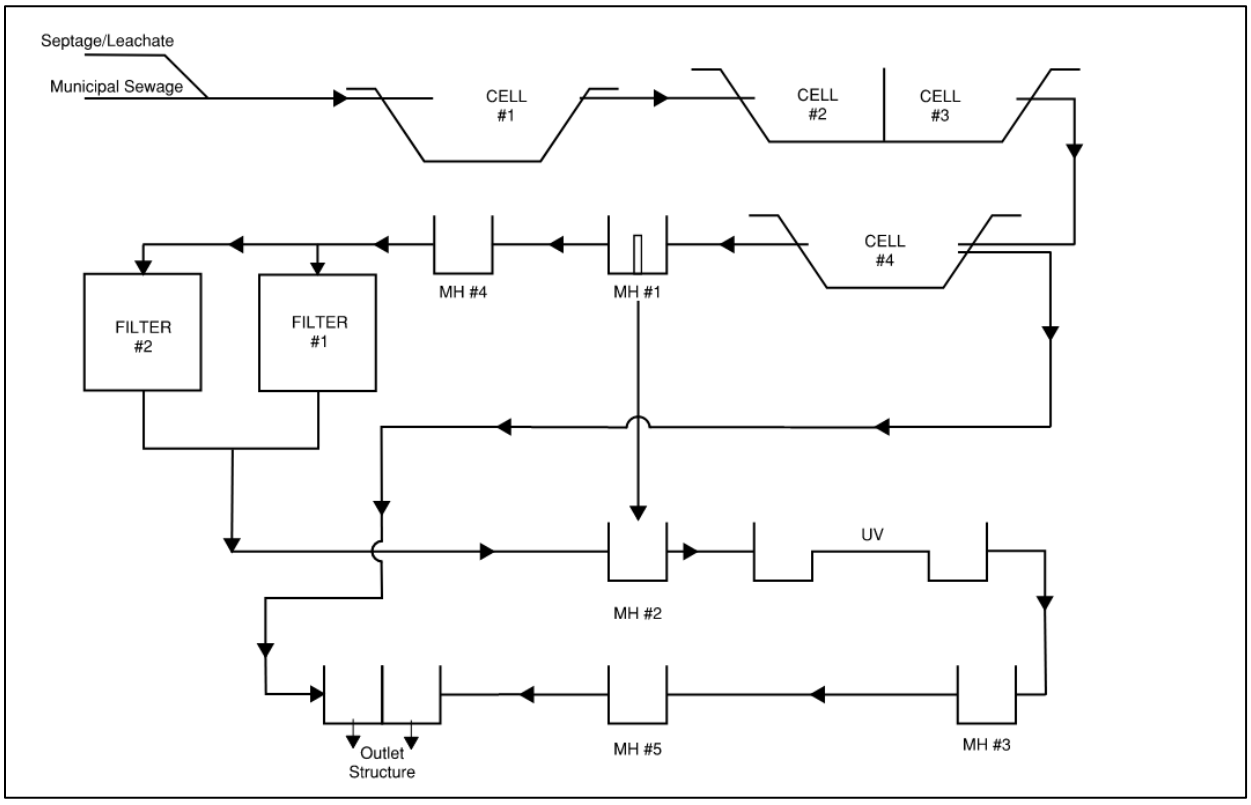

Figure 4.1: Process Flow Diagram

The facility is rated to treat an average daily flow of approximately 5,300 m^3/d (1,400,000 GPD) with a peak daily flow capacity of approximately. 12,110 m^3/d (3,200,000 GPD). All flows from the collection system are conveyed to the treatment facility via the Hank Snow Pumping Station. The station has a reported capacity of approximately 19 L/s. The collection and treatment system services Liverpool, Milton, and Brooklyn. Leachate and septage are conveyed to the treatment facility via the SRS pumping station. The forcemains

from both pumping stations intersect (tee-wye connection) at which point the combined forcemain delivers influent flows to Lagoon Cell #1.

Under normal operations, raw wastewater enters the treatment facility through Lagoon Cell #1. Flow proceeds to Lagoon Cell #2 by gravity via a crossover pipe. This lagoon is divided into two cells by a floating baffle curtain. The baffle creates a hydraulic flow pattern within the lagoon that prevents short circuiting. Flow passing through the opening in the baffle curtain proceeds to Lagoon Cell #3. A second cross over pipe transfers flow to Lagoon Cell #4. Liquid level is maintained within the lagoons by an effluent control manhole complete with stop logs. Lagoon effluent overtops the stop logs and proceeds by gravity to UV disinfection. Treated effluent flows by gravity to the outlet/overflow structure prior to discharge to Liverpool Harbour. Operations staff have the ability to divert lagoon effluent to the gravity sand filters (isolation valve) prior to UV disinfection. The system also includes interconnections that allow flow bypass of individual cells when needed. This configuration allows for operational flexibility (maintenance of individual cells) and adjustments for seasonal variations of flows/loads. Process air is supplied to the aerated lagoon cells via two blowers. The air is delivered to coarse bubble diffusers located on the bottom of the lagoon cells. Diffuser density decreases as flow passes through the lagoon cells to promote settling. A Control Building adjacent to the lagoons (northeast) houses the aeration blowers, UV disinfection equipment, instrumentation, SCADA, office/laboratory, and operator amenities.

4.1.1 Aerated Lagoon

The WWTF employs a four-cell aerated facultative lagoon for secondary treatment. Lagoon systems are contained within earthen embankments. They are designed to receive, hold, and treat wastewater for pre-determined periods of time. The lagoons are lined with High Density Polyethylene (HDPE) liner material to prevent leaks to the groundwater table. Lagoons have the capability of storing/equalizing the peak (I&I) flows received at the facility. Design includes an underdrain system which allows cells to be taken offline (emptied) for maintenance and monitoring for signs of leakage.


Lagoon Cell #2 and Cell #3

The system includes three lagoons, within the larger of the three being subdivided into two cells by a floating baffle curtain. Interior lagoon berms are sloped at 3:1, while exterior berms are sloped at 2.5:1. The lagoons operate at an average side water depth of 3.85 m, resulting in a total effective volume of approximately 90,850 m^3 (24,000,000 USgal).

Under normal operation, influent flow enters the treatment facility through an upturned elbow located in the southwest corner of Lagoon Cell #1. Flow sequentially passes through the remaining three cells prior to being directed to UV disinfection. If effluent polishing is required, lagoon effluent can be directed to the gravity sand filters prior to UV disinfection. Currently, all influent flows are being directed to Lagoon Cell #2 due to a reported clogging of the Lagoon Cell #1 inlet pipe. This may be attributed to the arrangement of the pipe (upturned) allowing material to settle in/around the inlet pipe.

Process air is supplied by three 40 HP Aerzen Delta GM-35S blowers, typically operated in a 2 + 1 arrangement (i.e., two duty + one standby). Air is distributed from the Control Building through a ductile iron air header. Each lagoon cell is provided with an aeration control chamber which contains a manifold assembly, isolation valves, and Polyethylene (PE) air laterals. The air laterals distribute air to the aerators within the lagoon cells. The aeration system consists of a total of 82 static tube aerators. Lagoon Cells #1 and #2 contain 30 aerators each to optimize BOD reduction, while Lagoon Cells #3 and #4 contain 14 and 8 aerators respectively to promote solids settling and TSS removal.

Design parameters for the lagoon system are summarized in Table 4.1. Daily flow data from January, February, April, July, and August of 2024, along with 2025 influent sampling results, were reviewed to assess performance relative to design criteria. While current influent loading is lower than the design values, the original design assumptions provide a conservative basis for evaluating lagoon performance, particularly for BOD removal.

Table 4.1: Lagoon Design Criteria

Parameter	Design Value	2024 Value
Average Daily Flow (m^3/d) [USMGD]	5,300 [1.4]	2,050
Peak Daily Flow (m^3/d) [USMGD]	12,110 [3.2]	3,800
Average HRT (days)	17	44
Peak HRT (days)	7.5	24
Average BOD (mg/L)	100	46
Average TSS (mg/L)	100	64
O_2 Required (kg O_2/day)[1]	1,135	510

[1] Using an Actual Oxygen Requirement of 1.2 kg/kg of BOD removed

The existing lagoon aeration system can supply approximately 2,165 kg O_2/day through it's 82 static tube aerators, which is sufficient to meet BOD removal under current influent loading conditions.

Many of the older aerated lagoon installations were designed primarily for BOD removal and may not provide enough Dissolved Oxygen (DO) for ammonia removal (nitrification). Nitrification of ammonia may occur during warmer months, but it severely impacted during colder months. Benthic oxygen demand may also contribute to lack of oxygen concerns within an aerated lagoon. Benthic oxygen demand arises from the decomposition of settled

organic matter, including accumulated sludge and detritus, which consumes oxygen and requires additional aeration to maintain DO throughout the lagoon.

To be conservative, an Actual Oxygen Requirement (AOR) of 1.5 kg O_2 per kg BOD removed and 4.6 kg O_2 per kg NH_3 removed has been adopted for design purposes. Allowing an additional 0.5 kg O_2 per kg BOD removed for benthic demand is also more common. Table 4.2 summarizes the lagoon's oxygen requirements under these different treatment scenarios, comparing the original design assumptions with actual 2024 loading conditions. The table highlights the incremental oxygen demand associated with BOD removal only, BOD & nitrification, as well as BOD, nitrification & benthic oxygen demand.

Table 4.2: Lagoon Oxygen Requirements Under Different Treatment Scenarios

Parameter	SOR Design Value	SOR 2024 Value
BOD Removal Only (kg O_2/day)	1,415	640
BOD & Nitrification (kg O_2/day)	2,285	1,505
BOD, Nitrification & Benthic Load (kg O_2/day)	2,760	1,718

Results indicate that the existing aeration system is adequate to meet demands under current low-strength influent loading conditions. However, the existing system falls short of meeting demands under the increased treatment scenarios coupled with design loading conditions. Additional aeration capacity would be required to fully support nitrification (warmer months) and benthic oxygen demands. It is understood that the treatment facility recently undertook a lagoon sludge removal exercise which reduces the overall benthic demand on the aeration system.

4.1.2 Gravity Sand Filters

Operations staff can divert lagoon effluent (isolation valve) to one of two gravity sand filters for tertiary treatment prior to UV disinfection. When valve is isolated, lagoon effluent overtops a 90° riser pipe within the effluent control manhole and is directed towards the gravity sand filters. Each filter is provided with its own influent/effluent isolation valve. The filters are designed to operate on alternating cycles, with one receiving effluent while the other is being drained and cleaned. Lagoon effluent passes through the filter and proceeds by gravity to the UV disinfection system. The filters are under drained by a series of perforated collection pipes beneath the layer of filter sand. The design criteria for the gravity sand filters are summarized in Table 4.3.

Table 4.3: Gravity Sand Filter Design Criteria

Parameter	
Filter Area (Per Filter) (m^2)	1,160
Filter Media Depth (mm)	600
Filter Loading Rate (per Filter) ($m^3/m^2 \cdot h$)	10.8

The original intent was that lagoon effluent would be diverted to the gravity sand filters during seasonal algae bloom events which could increase effluent TSS concentrations above permit limits. Operations staff indicated that the filters have not been used in recent years, as lagoon effluent quality has consistently met requirements. Consequently, there is no recent performance data for the filters. However, they remain available to provide additional treatment if effluent quality decreases or if regulatory requirements change.

4.1.3 Effluent Disinfection

Disinfection of the secondary effluent is achieved using UV light technology, which provides rapid and effective inactivation of microorganisms. Exposure to germicidal UV wavelengths renders microorganisms incapable of reproduction. Under normal operation, effluent from Lagoon Cell #4 flows by gravity to the UV disinfection system located within the Control Building. Effluent flows leaving the treatment facility are measured using a rectangular weir and associated ultrasonic level sensor.

Currently, the treatment facility is in the process of replacing the existing Trojan UV system (Model UV4000LF) with a Wedeco UV system (Model Duron6). Concrete modifications are required to facilitate installation of the new equipment. In the interim period, an effluent pump and portable disinfection equipment (seacan) have been provided. Effluent is intercepted at the effluent control manhole and conveyed to temporary disinfection prior to dischaged by gravity to the outlet/overflow structure. Design parameters for the new Wedeco UV disinfection system are summarized in Table 4.4.

Table 4.4: UV Disinfection Design Parameters

Parameter	Value
Peak Flow (m^3/d)	12,000 [3.2 USMGD]
Design Flow (m^3/d)	4,000 [1.1 USMGD]
Minimum UV Transmittance (%)	65
Total Suspended Solids (mg/L)	20
Disinfection Limit (FCU/100 mL)	200
Minimum UV Dose (mJ/cm^2)	30
No. of UV Banks	2
No. of UV Modules	1
No of Lamps per Module	12
No. of Lamps	24

Temporary UV System

The design criteria for the original (existing) and proposed UV disinfection systems are similar. Of note, the minimum UV Transmittance (UVT) appears high for lagoon based treatment systems. Effluent UVT from lagoons can be highly variable, primarily due to suspended solids and algae. Typically, design UVT for more recent installations is on the order of 40%.

The existing gravity sand filters were provided to assist with seasonal algae concerns which in turn may also help improve effluent UVT ahead of the disinfection system. Once the UV disinfection system has been reinstated, operations staff should monitor effluent UVT on a consistent basis for comparison against minimum design requirements. Should bacteria exceedances become a concern, operations staff may need to divert effluent to the sand filters prior to disinfection.

4.2 Treatment Potential

The aerated lagoon treatment facility performs reliably, producing effluent quality that consistently satisfies BOD and TSS permit limits. Currently, Hydraulic Retention Time (HRT) exceeds the original design (44 vs. 17 days) which may be contributing to enhanced treatment efficiency. The existing aeration system has capacity to support BOD removal under design loading conditions (i.e., currently lower strength). The existing gravity sand filters are available to operation staff should effluent quality or UVT become a concern. Overall, the facility provides effective secondary treatment and has the capacity to maintain performance under increased loading conditions.

5 Receiving Water Characteristics

5.1 Receiving Water Characteristics

The receiving water for the treatment facility is Liverpool Harbour which opens into Liverpool Bay at the mouth of the Mersey River, as shown in Figure 5.1. While specific flow and water quality data for this waterbody are not available, based on the treated effluent criteria, it is assumed that this waterbody exhibits assimilative capacity similar to other estuary/marine environments. The harbour (sheltered) opens into the bay (open coastline) which exhibits higher assimilative capacity. Depending on conditions like ambient currents, wind speeds, tidal stage, and wave action, mixing takes place over a larger area.

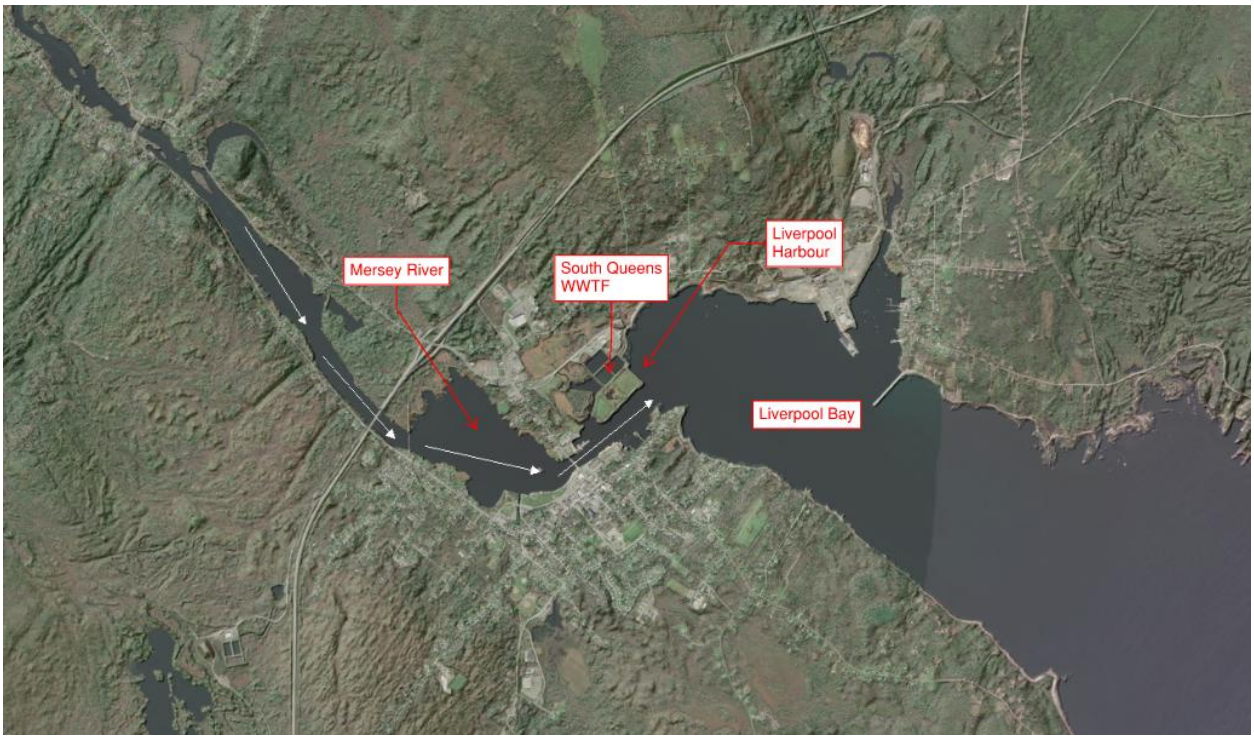

Figure 5.1: Map of Liverpool Bay, NS

6 Inflow & Infiltration

6.1 Inflow & Infiltration

Inflow and Infiltration (I & I) is the introduction of groundwater or storm water into the wastewater collection system. Depending on the source/volume of the water, it can result in significant increases on the demand of the wastewater system. Inflow is water that enters the system through a known connection. This can include roof drains, drains from driveways, or footing drains. Infiltration is water that enters the system through cracks or leaks in the piping due to age, damage and/or loose joints.

At the South Queens WWTP, I&I cannot be directly quantified as only effluent flow data is available for the lagoon system. The long HRTs observed in the lagoons effectively equalize influent fluctuations before discharge, meaning that short-term variations in flow caused by rainfall or groundwater intrusion are dampened and not captured in the effluent records. As a result, lagoon effluent monitoring does not provide an accurate measure of I&I within the collection system.

CBCL conducted flow monitoring in 2024 at two key pumping stations (Cross Street and Town Bridge) as part of the Lift Station Upgrades project. Flow data was analyzed in conjunction with local rain gauge records to evaluate system performance under both dry and wet weather conditions. Results indicate that wet weather flows at the Cross Street pumping station peaked at approximately 17 times the average dry weather flows, demonstrating a substantial level of I&I and highlighting the increased pumping demands placed on the stations during rainfall events. Quantifying I&I at the Town Bridge pumping station is more complex, as the Cross Street station discharges into its sewer shed. The Municipality is undertaking a separate project to separate portions of the combined sewer system within the Cross Street sewer shed, which is expected to help reduce I&I contributions in the future.

7 Recommendations

7.1 Recommendations

The South Queens WWTF satisfies treated effluent criteria for BOD and TSS on a consistent basis (year-round). However, several improvements can be implemented to enhance plant performance, reduce the need for operator intervention, and improve overall reliability and efficiency. The recommendations are divided into two categories: operational improvements and infrastructure upgrades.

Operational recommendations focus on process adjustments and control strategies to optimize the performance of the existing plant. The following operational recommendations are proposed:

- **Influent Flow Measurement** – Implement influent flow measurement to gain a better understanding of flow patterns and quantify I&I contributions to the system.
- **Routine Influent Sampling** – Implement routine influent sampling (domestic wastewater, leachate, septage) to gain a better understanding of raw wastewater characteristics and assess capacity of existing aeration system.
- **Effluent Sampling for Compliance** – Implement monitoring of effluent E. coli (in lieu of fecal coliforms) and pH as per regulatory requirements. Sampling and data collection will support reporting requirements.
- **UV Transmittance (UVT) Monitoring** – Implement monitoring of lagoon effluent UVT to gain a better understanding of effluent quality and potential impact on disinfection. Results inform decisions on use of the existing gravity sand filters.

Infrastructure changes involve upgrades or modifications to equipment and systems to improve overall reliability and efficiency. The following infrastructure recommendations are proposed:

- **Replace Inlet Pipe in Lagoon Cell #1** – Replace the existing upturned elbow inlet pipe with a horizontal inlet pipe penetrating the interior berm slope ensuring adequate pipe submergence. Horizontal configuration will minimize clogging and reduce maintenance requirements.
- **Inspect Aerators/Laterals in Lagoon** – Based on visual observations of the aeration patterns during the site visit, areas with more vigorous or localized bubbling at the surface may indicate damaged or disconnected laterals or diffusers. The aerators should be inspected, and any components found to be defective should be repaired or replaced as necessary.

APPENDIX A

Approval No. 2006-2316046-01

NOVA SCOTIA

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APPROVAL

Province of Nova Scotia
Environment Act, S.N.S. 1994-95, c.1 s.1

APPROVAL HOLDER: REGION OF QUEENS MUNICIPALITY

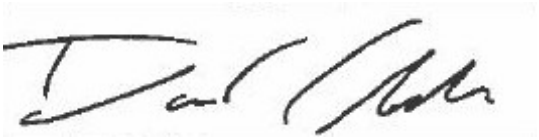
SITE PID: 70161815

APPROVAL NO: 2006-2316046-01

EXPIRY DATE: October 11, 2034

Pursuant to Part V of the Environment Act, S.N.S. 1994-95, c.1 s.1 as amended from time to time, approval is granted to the Approval Holder subject to the Terms and Conditions attached to and forming part of this Approval, for the following activity:

Municipal - Sewage Works - Treatment Facility



Administrator: David Clarke

Effective Date: October 11, 2024

The Minister's powers and responsibilities under the Act with respect to this Approval have been delegated to the Administrator named above. Therefore, any information or notifications required to be provided to the Minister under this Approval can be provided to the Administrator unless otherwise advised in writing.

TERMS AND CONDITIONS OF APPROVAL

Nova Scotia Department of Environment and Climate Change

Approval Holder: REGION OF QUEENS MUNICIPALITY

Project: Liverpool, Queens County, NS

Site:

PID	Civic #	Street Name	Street Type	Community	County
70161815	144	HANK SNOW	DR.	LIVERPOOL	QUEENS COUNTY

Approval No: 2006-2316046-01

File No: 94300-30-BRI-2006-2316046

Grid Reference: Easting - 362772, Northing - 4878630

Reference Documents

- Application submitted July 30, 2024 and attachments.

1. Definitions

a. Act means Environment Act. 1994-95, c.1, s.1, and includes, unless the context otherwise requires, the regulations made pursuant to the Act, as amended from time to time.

b. Acutely lethal in relation to effluent, means that the effluent at 100% concentration kills, during a 96-hour period, more than 50% of the rainbow trout subjected to it as determined by:

i. Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout (EPS 1/RM/13) as amended from time to time; or

ii. Procedure for pH Stabilization During the Testing of Acute Lethality of Wastewater Effluent to Rainbow Trout (EPS 1/RM/50), as amended from time to time.

c. Collection System means all auxiliaries for the collection, storage and discharge of sewage from the source to the facility.

d. Composite sample means a representative sample which is taken from the combination of individual samples that shall be obtained by:

i. An automated sampling device by either the flow paced or time paced method at time intervals of 30 minutes or less over a 24 hour period; or

ii. A series of 3 grab samples of equal volume taken at a minimum of 2 hour intervals, over an 8 hour period.

e. Department means the Nova Scotia Department of Environment and Climate Change, and the contact for the Department for this approval is:
Nova Scotia Department of Environment and Climate Change
Western Region, Bridgewater Office
81 Logan Road, Floor 1
Bridgewater, Nova Scotia B4V 3T3

Phone: (902) 543-4685
Fax: 902-527-5480

f. Grab sample means an individual sample collected in less than thirty (30) minutes and which is representative of the substance sampled.

g. Minister means the Minister of Environment and Climate Change and includes any person delegated the authority of the Minister.

h. Quarter means any of the four periods of three months that begin on the first day of January, April, July and October.

i. Residual means an organic or inorganic by-product generated from a treatment process.

j. Site means a place where a designated activity and/or undertaking is occurring or may occur.

k. Surface Watercourse means a watercourse as defined in the Environment Act, excluding groundwater.

l. Treated Effluent Discharge Criteria means the average concentration of a parameter sampled and calculated in accordance with this Approval.

2. Scope

a. This Approval (the "Approval") relates to the Approval Holder(s) and their application and all documentation submitted to the Department prior to the issuance of this approval for the Treatment Facility situated at or near Liverpool, Queens County, NS and associated Collection System.

b. The Approval Holder(s) shall ensure the designated activity is carried out in accordance with this Approval and reference documents, including the application and supporting documentation.

c. This Approval does not apply to the electrical, roadways, and structural components of the project.

3. General

a. Unless otherwise specified in this approval, the Approval Holder(s) shall conduct the Designated Activity in accordance with the following provisions:

   i. The Act, as amended from time to time;

   ii. Any standard adopted by the Department, as amended from time to time, which includes but is not limited to the following:

      (a) Atlantic Canada Wastewater Systems Guidelines, as amended from time to time.

b. Nothing in this Approval relieves the Approval Holder(s) of the responsibility for obtaining and paying for all licenses, permits, approvals or authorizations necessary for carrying out the work authorized to be performed by this Approval which may be required by municipal by-laws, provincial or federal legislation, or other organizations. The Minister does not warrant that such licenses, permits, approvals or other authorizations will be issued.

c. No authority is granted by this Approval to enable the Approval Holder(s) to commence or continue the designated activity on lands which are not in the control or ownership of the Approval Holder(s). It is the responsibility of the Approval Holder(s) to ensure that such a contravention does not occur. The Approval Holder(s) shall provide, to the Department, proof of such control or ownership upon expiry of any relevant lease or agreement. Failure to retain said authorization may result in this Approval being cancelled or suspended.

d. If there is a discrepancy between the reference documents and the terms and conditions of this Approval, the terms and conditions of this Approval shall apply.

e. Any request for renewal or amendment of this Approval is to be made in writing, to the Department, at least ninety (90) days prior to the Approval expiry.

f. The Approval Holder(s) shall not transfer, sell, lease, assign or otherwise dispose of this Approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of the approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.

g. If the Minister cancels or suspends this Approval, the Approval Holder(s) remains subject to the penalty provisions of the Act.

h. The Approval Holder(s) shall advise the Department in writing prior to any proposed extensions or modifications to the Activity and/or the Site. An amendment to this Approval may be required before implementing any extension or modification.

i. The Approval Holder(s) shall immediately notify the Department of any incidents of non-compliance with this Approval.

j. The Approval Holder(s) shall bear all expenses incurred in carrying out the environmental monitoring required under the terms and conditions of this Approval.

k. All sampling and analysis operations, including sample collection, preservation and submission, laboratory requirements and analysis results reporting, shall be performed in accordance with the American Public Health Association (APHA), American Water Works Association (AWWA) and Water Environment Federation (WEF): Standard Methods for the Examination of Water and Wastewater, as amended from time to time.

l. All samples required by this Approval shall be analyzed by a laboratory that is:

   i. accredited under ISO/IEC 17025:2005 entitled General Requirements for the Competence of Testing and Calibration Laboratories, as amended from time to time, by an accrediting body that is a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement, and whose accreditation includes the analytical method used to make the determination; or

   ii. maintaining an acceptable standard in a proficiency testing program conducted by the Canadian Association for Laboratories Accreditation Inc., and whose proficiency testing program includes the analytical method used to make the determination.

m. The Approval Holder(s) shall ensure that this Approval, or a copy, is present on Site while personnel are on Site.

n. The Approval Holder(s) shall ensure that personnel directly involved in the designated activity are made fully aware of the terms and conditions of this Approval.

o. Upon any changes to the Registry of Joint Stock Companies information, the Approval Holder(s) shall provide a copy to the Department within five (5) business days.

4. Air Emissions

a. If the Department determines that the designated activity is generating excessive odours, the Approval Holder(s) shall be required to take any measures required by the Department to address those odours.

5. Surface Water

a. The Approval Holder(s) shall ensure the Site is developed and maintained to prevent contaminants from being discharged into a water resource or beyond the property boundary.

b. The Approval Holder(s) shall ensure that the following water quality limits are met in the water resource downstream of construction activities:

   i. Total Suspended Solids, Clear Flows (Normal Background Conditions):

      (a) Maximum increase of 25 mg/l from background levels for any short term exposure (24 hour or less);

(b) Maximum average increase of 5 mg/l from background levels for longer term exposure (inputs lasting between 24 hours and 30 days);

ii. Total Suspended Solids, High Flow (Spring Freshets and Storm Events):

(a) Maximum increase of 25 mg/l from background levels at any time when background levels are between 25 mg/l and 250 mg/l;

(b) Maximum increase of 10% over background levels when background is >250 mg/l;

c. Additional surface water monitoring may be required at the request of the Department.

d. The Approval Holder(s) shall develop and implement an Erosion and Sediment Control Plan, upon Department request.

e. No authority is granted by this Approval to enable the Approval Holder(s) to discharge surface water onto adjoining lands without the authorization of the affected landowner(s).

f. The Approval Holder(s) shall install and maintain erosion and sediment controls in line with industry best practices (e.g., Nova Scotia Environment Erosion and Sediment Control Handbook for Construction Sites) with the following considerations:

i. The controls shall be installed prior to the commencement of the construction activities;

ii. The controls shall remain in place until areas disturbed by construction activities are stabilized so that the risk of release of sediment to a water resource has been mitigated;

iii. Control features shall be installed as per applicable product specifications or manufacturer's directions; and

iv. Control materials shall be clean, non-erodible, non-ore-bearing, non-watercourse derived and non-toxic.

g. The Approval Holder(s) shall ensure that surface water runoff that may be impacted by petroleum hydrocarbons from the Site is collected and directed for necessary treatment prior to discharge from Site.

h. Work at the site shall only take place when erosion and sediment controls are functional. Contingency erosion and sediment control materials shall be kept on Site in case of failure.

i. The Approval Holder(s) shall ensure that the following activities take place at a distance of a minimum of thirty (30) metres from a surface watercourse or wetland in an area such that a release will not enter a surface watercourse or wetland:

i. Fuel storage, refueling, and/or lubrication of equipment

ii. Washing of machinery or equipment

iii. Storage of equipment, excavated/stockpiled materials, and potential contaminants

6. Releases

a. Releases shall be reported in accordance with the Act.

b. Spills or releases shall be cleaned up in accordance with the Act.

7. Collection and Pumping

a. The facility has been classified as a Class II Collection facility.

b. The Approval Holder(s) shall provide the name and contact information of the Overall Direct Responsible Charge Operator for the Wastewater Collection facility to the Department in writing when there is a change in the facility's operator(s).

8. Residuals Management

a. All residuals generated at the Site shall be managed in accordance with a Residuals Management Plan deemed acceptable by the Department.

b. The Approval Holder shall submit a plan for the management and/or disposal of residuals from the activity to the Department for acceptance on or before January 1, 2025.

c. Written authorization is required from the Department to modify the residuals management plan.

d. The residuals management plan shall contain, at a minimum, the following information for each waste stream:

i. type of residual;

ii. processing method; and

iii. expected annual volume of residuals to be generated by the activity.

e. The Approval Holder(s) shall record the following information each time residuals are removed from the facility and make the records available to the Department immediately upon request:

i. the type of residual;

ii. the volume of each residual transported, expressed as cubic metres or kilograms;

iii. the residuals total solids content, expressed as a percentage,

iv. hauler, if applicable;

v. date of transport; and

vi. final destination of residuals.

9. Operation

a. The facility has been classified as a Class I Wastewater Treatment facility. NOTE: Facility classification may change as a result of a review of the System Assessment Report required by the Site Specific Section of this Approval.

b. The Approval Holder(s) shall ensure there are measures in place to protect against failures of the power supply, treatment process, Collection System and equipment.

c. The Approval Holder(s) shall provide the name and contact information of the Overall Direct Responsible Charge Operator for the Wastewater Treatment facility to the Department in writing when there is a change in the facility's operator(s).

d. The Approval Holder(s) shall ensure that an Operations Manual is prepared on or before September 1, 2025. The Operations Manual shall include:

i. standard operational procedures;

ii. procedures for seasonal start up and shut down, if applicable;

iii. emergency response and notification procedures;

iv. contingency plan;

v. notification procedures to be used to contact relevant authorities and the public in case of emergency situations, exceedances of approved effluent criteria or bypasses;

vi. procedures to record and respond to complaints.

e. A copy of the Operations Manual is to be kept on Site at all times and is to be available to the Department for review upon request.

f. The Approval Holder(s) shall not establish nor maintain a by-pass to divert wastewater around one or more unit processes within the wastewater treatment facility or a discharge to the environment from the wastewater treatment facility at a location other than the facility outfall unless it has been approved by the Department.

i. The Approval Holder(s) shall record the date, time, and duration of any use of a by-pass.

g. The Approval Holder(s) shall take immediate preventive or corrective action, when the Approval Holder(s) and/or operator becomes aware of conditions which may result in an adverse effect.

10. Performance and Limits

a. The Approval Holder(s) shall ensure effluent being discharged from the Facility meets the following Treated Effluent Discharge Criteria, subject to the Site Specific Section of this Approval:

i. Carbonaceous Biochemical Oxygen Demand, CBOD5, shall not exceed 20 mg/l.

ii. Total Suspended Solids shall not exceed 20 mg/l

iii. E. Coli shall not exceed 200 E. Coli/100mls

iv. pH shall be within the range of 6.0 to 9.0

v. non-acutely lethal.

11. Monitoring and Recording

a. Effluent being discharged from the Facility shall be sampled and averaged in accordance with Table 1: Effluent Monitoring.

b. Samples shall be collected from the effluent after final effluent treatment but before discharge to a surface water body, unless specified otherwise in this Approval.

c. Flow volumes shall be determined by equipment that can continually measure influent or effluent volume unless the annual average daily volume is less than 100 m3/day, in which case an estimate based on practices deemed acceptable to the Department can be used.

d. All equipment shall be installed, maintained and calibrated as specified by the manufacturer's instructions.

e. The facility will be considered in compliance with the Treated Effluent Discharge Criteria if the average value calculated for the averaging period meets the specified limits. All average residual shall be the arithmetic mean with the exception of E.Coli, which shall be the geometric mean.

f. Following a review of any of the analytical results required by this Approval, the Department may alter the frequencies, location, and parameters for analyses required for this Approval.

g. The Approval Holder(s) shall record the average values within 45 days of the end of the respective averaging period and notify the Department immediately if the average is not in compliance with the discharge limit.

12. Reporting

a. The Approval Holder(s) shall prepare and submit an annual report on or before February 15 for the previous calendar year. The report shall contain the following information:

i. the average daily flow rate for the averaging period(s), expressed in m3/day;

ii. maximum single daily flow rate occurring during the averaging period(s), expressed in m3/day, and the date of its occurrence, if applicable;

iii. average of the sample results for the averaging period(s) as defined by this approval;

iv. all toxicity results, if applicable;

v. the total annual volume (m3 or kg) of inorganic and organic residuals transported from the facility;

vi. the annual average total solids content (%) of organic residuals transported from the facility;

vii. a description of any emergency or upset conditions, including bypass events, which occurred during the reporting period and any action taken to correct them;

viii. a description of any complaints received and the follow up actions taken;

ix. a summary and interpretation of any instances of non-compliance with this approval and corrective action taken.

13. Records

a. The Approval Holder(s) shall ensure that all records required by this Approval are maintained for a period of five (5) years and are to be made available to the Department upon request.

b. A copy of project reports, construction documents and drawings, inspection reports, shall be kept for the life of the facility and are to be made available to the Department upon request.

14. Site Specific

a. The Approval Holder(s) shall submit to the Department on or before September 1, 2025, a System Assessment Report on the operation of the facility. The report shall be prepared by a third-party consultant with experience in Wastewater Treatment Facility operations and contain the following:

i. a summary and interpretation of the quality and quantity of landfill leachate received at the facility;

ii. results of effluent quality;

iii. a description of the treatment technology currently employed;

iv. details on the treatment potential of the existing plant;

v. a summary and conclusion of the existing facility's capacity to comply with the limits established in this Approval;

vi. a summary of the receiving water quality;

vii. an outline of the treatment upgrades, if any, required to comply with the limits established in this Approval;

viii. an assessment of the collection system for inflow and infiltration and a schedule for improvements, if required.

b. The Approval Holder(s) shall be required to undertake modifications and/or upgrades to the facility at the direction of the Department. If so directed to undertake modifications or upgrades, the Approval Holder(s) shall provide the following:

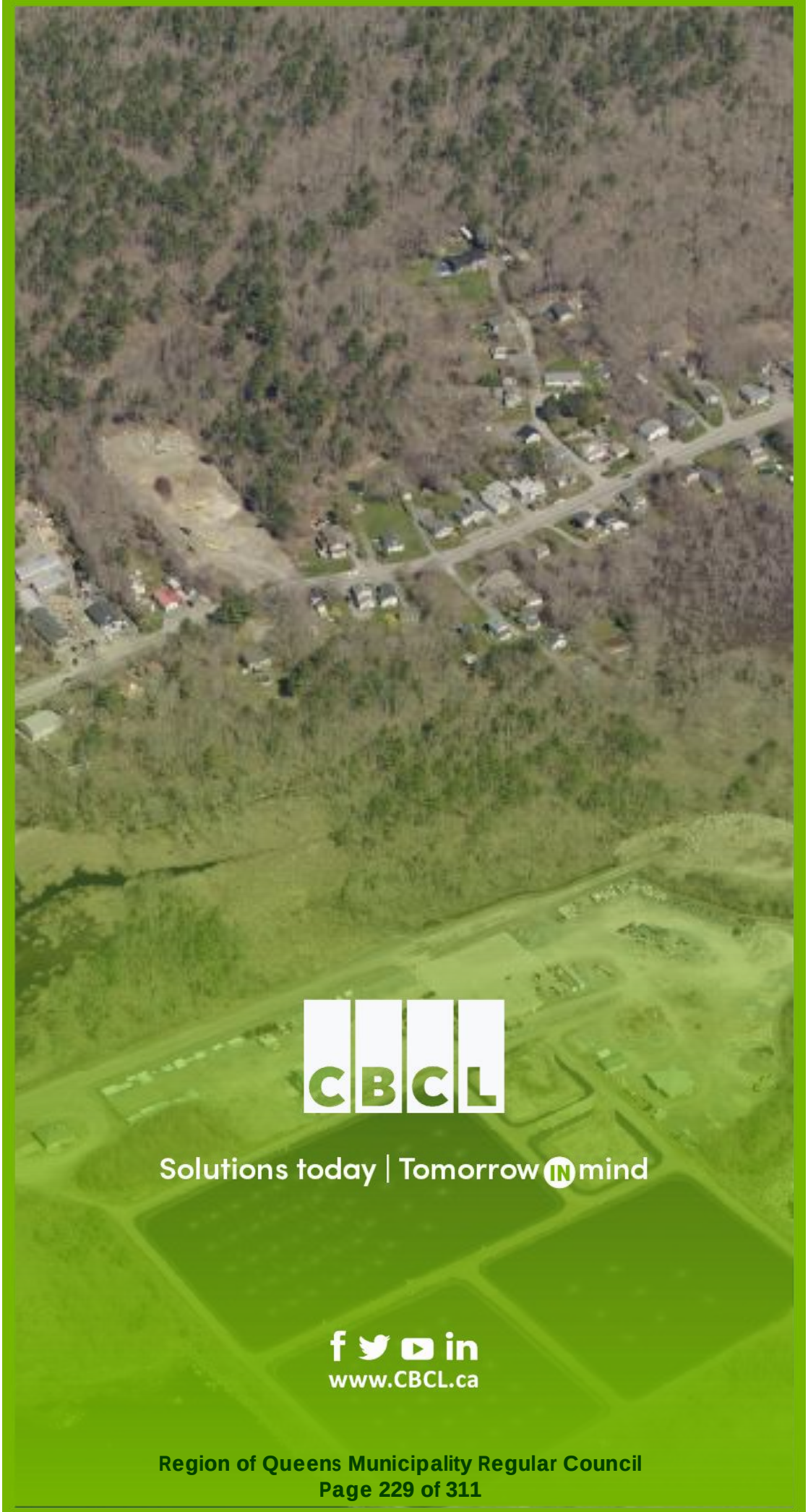
i. an application for amendment of approval if required by the Department;

ii. a plan to complete the modification and/or upgrades and a schedule for the completion of work. The plan shall be prepared by a third-party consultant with experience in Wastewater Treatment Facility operations. Design drawings and specifications shall be prepared by an engineer licensed to practice in the Province of Nova Scotia, if the plan requires engineering;

iii. the facility upgrades and/or modifications shall be completed in accordance with the plan and in a time frame acceptable to the Department.

APPENDIX A

TABLE 1: EFFLUENT MONITORING				
PARAMETER	**SAMPLE TYPE**	**SAMPLING FREQUENCY**	**AVERAGING PERIOD**	**LOCATION**
$cBOD_5$	Grab	Quarterly	Annual	Treated effluent discharge
Total Suspended Solids	Grab	Quarterly	Annual	Treated effluent discharge
E. Coli	Grab	Quarterly	Annual	Treated effluent discharge
pH	N/A	Continuous	Annual	Treated effluent discharge
Plant Volumes	N/A	Continuous	Annual	Entering or leaving plant
Fish Toxicity	Grab	Upon Department request	N/A	Treated effluent discharge


CBCL
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Tuesday, October 21, 2025

Nova Scotia Department of Environment and Climate Change
81 Logan Rd
Bridgewater, NS, CAN. B4V 3T3

Re: Caledonia Wastewater Treatment Facility System Assessment Report

Please find the system assessment report for the Caledonia Wastewater Treatment Facility located at 10062 Highway 8 in Caledonia, Nova Scotia, as required by Approval to Operate #2003-2229815-01.

The report, as prepared by CBCL Ltd, presents six recommendations in their section 6.1. In response to those recommendations, I am offering the following comments:

1) Enhanced controls and monitoring – this work is currently underway with a contractor, expected to be deployed in the next 6 months.
2) Influent EQ tank overflow study – currently underway
3) Effluent sampling for compliance – this is currently in place and will be included in the next revision of the operations manual.
4) Tertiary filtration – this will be investigated further.
5) Mechanical screening before equalization tank – staff are currently working with a consultant on a solution for this.
6) Improved pump lifting mechanisms – staff have ordered the necessary parts and are scheduling this item.

Queens Coast
SEEK NATURE'S REWARDS
Region of Queens Municipality
142 Hank Snow Drive,
P.O. Box 1264, Liverpool, NS,
B0T 1K0
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P: 902-354-7170
F: 902-354-7473
E: agrant@regionofqueens.com

Should you require any additional information please do not hesitate to contact me.

Regards,

Adam Grant, P.Eng.
Director of Infrastructure

c: Blake Tibert, EIT.
Manager of Environmental Services

Region of Queens Municipality
142 Hank Snow Drive,
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E: agrant@regionofqueens.com

Region of Queens Municipality
Caledonia Wastewater Treatment Facility
System Assessment Report

FINAL

250836.00 • October 2025

CBCL

0	Final		10-Oct-2025	
A	Draft	David Trudel	16-Sep-2025	Meghan Lea
Rev.	Issue	Reviewed By:	Date	Issued By:

Project No. 250836.00

October 10, 2025

Mr. Adam Grant, P.Eng.
Director of Infrastructure
Region of Queens Municipality
142 Hank Snow Drive
Liverpool, NS B0T 1K0

Dear Mr. Grant:

RE: Caledonia Wastewater Treatment Facility System Assessment Report

Please find enclosed FINAL System Assessment Report for the Caledonia Wastewater Treatment Facility for your review/comment.

If you have any questions or require clarification on the content presented in the attached report, please do not hesitate to contact us.

Yours very truly,

CBCL Limited

Prepared by:
Meghan Lea, M.A.Sc., P.Eng.
Process Engineer
Direct: 902-421-7241
E-Mail: mlea@cbcl.ca

Reviewed by:
David Trudel, P.Eng.
Senior Project Manager

Project No: 250836.00

Contents

Appendices

1 Introduction

1.1 Introduction

The Region of Queens Municipality (Municipality) currently operates a Wastewater Treatment Facility (WWTF) located at 10062 Highway 8 in Caledonia, Queens County, Nova Scotia. Constructed in 1978, the facility originally included a trickling filter based treatment system. The system was upgraded to the extended aeration process in 1997. Upgrades included the addition of a gravity flow sand filter (tertiary level treatment) and Ultraviolet (UV) disinfection. The sand filter reportedly struggled with the quality of effluent leaving the facility (frequent clogging), and as such was only used intermittently. Ultimately, the Caledonia WWTF was converted to the Sequencing Batch Reactor (SBR) treatment process in the early 2000s. The sand filter is no longer in service (bypassed). The facility consists of the following major components:

- Influent Equalization Tank.
- Sequencing Batch Reactor.
- UV Disinfection.
- Sludge Holding Tank.

Treated effluent flows by gravity to an outfall chamber and is subsequently discharged to Mill Brook which drains to the Medway River.

1.2 Regulatory Requirements

The Approval to Operate (#2003-2229815-01) was issued by Nova Scotia Environment and Climate Change (NSECC) to the Region of Queens Municipality (Municipality) on October 11, 2024 (Appendix A). The approval requires the Municipality to submit a System Assessment Report (SAR) on the operation of the facility. The SAR must be completed by a third-party consultant with experience in Wastewater Treatment Facility Operations and contain the following:

- Results of effluent quality.
- Description of the treatment technology currently employed.
- Details on the treatment potential of the facility.
- Summary on the treatment facility's ability to comply with established effluent limits.
- Summary of receiving water quality.
- Summary of treatment upgrades required to comply with established effluent limits.
- Assessment of collection system for Inflow & Infiltration (I & I).

CBCL Limited (CBCL) was retained to perform the system assessment in late June 2025. Upon receipt of available background information, CBCL scheduled a site visit on August 20, 2025. The following individuals were in attendance:

- Dwayne Hurshman, Utility Supervisor, Region of Queens Municipality.
- Meghan Lea, P.Eng., Process Engineer, CBCL Limited.
- David Trudel, P.Eng., Senior Project Manager, CBCL Limited.

2 Effluent Characteristics

2.1 Effluent Quality

The Municipality provided effluent sampling results for 2024. Quarterly results are summarized in Table 2.1 below. The results were analyzed to assess compliance with the treated effluent criteria outlined in the Approval to Operate. Wastewater sampling for fecal coliforms is being phased out in favor of *E. coli* as it has been shown to be a more reliable indicator of contamination from exposure to wastewater effluent. pH was not measured in 2024.

Table 2.1: 2024 Effluent Quality

Period	Parameter			
	Effluent Flow (m^3/d)	CBOD (mg/L)	TSS (mg/L)	Fecal Coliforms (CFU/100 mL)
Q1 2024	190	216	660	>200
Q2 2024	103	44	997	>200
Q3 2024	71	3	16	>200
Q4 2024	84	4	6	>200
Yearly Average	98	67	420	>200

2.2 Permit Limits

The treated effluent criteria, sampling frequency, and averaging period are outlined in the Approval to Operate (Section 10 and Appendix A). Criteria are summarized in Table 2.2 below. Fish toxicity testing is also included within the effluent criteria; however, such testing is required only upon request from NSECC. CBCL is not aware of any fish toxicity testing completed in 2024.

Table 2.2: Permit Limits

Parameter	Parameter			
	CBOD (mg/L)	TSS (mg/L)	E. Coli (CFU/100 mL)	pH
Effluent Limit	5	5	200	6-9
Sample Frequency	Monthly	Monthly	Monthly	Monthly
Averaging Period	Quarterly	Quarterly	Quarterly	Quarterly

2.3 Compliance Statement

The quarterly results were analyzed to assess compliance with the treated effluent criteria outlined in the Approval to Operate. Effluent CBOD complies with criteria in quarters Q3 and Q4. Results indicate a substantial improvement in CBOD and TSS results for quarters Q3 and Q4. The following exceedances were identified for 2024:

- CBOD – Q1, Q2.
- TSS – Q1, Q2, Q3, Q4.

Performance improved noticeably in the second half of 2024, with CBOD consistently meeting criteria in Q3 and Q4 and TSS showing fewer and lower exceedances compared to the first half of the year.

A total of forty (40) samples were collected during the 2024 calendar year. A summary of the total number of exceedances is provide below:

- CBOD: 13 out of 40 samples were above 5 mg/L (66% passing).
- TSS: 21 out of 40 samples were above 5 mg/L (47% passing).

Even though *E. coli* is a major component of the fecal coliform group, it is not the one of the treated effluent criteria listed in the Approval to Operate. pH was not measured.

3 Treatment Potential

3.1 Treatment Summary

The Caledonia WWTF is a secondary treatment facility. Unit treatment processes include manually raked bar screen, influent equalization, SBR, and UV disinfection. Sludge is wasted to the sludge holding tank. Sludge is periodically removed by a vacuum truck for disposal at the South Queens Septage Receiving Station (SRS). Treated effluent is discharged to Mill Brook. A process flow diagram of the system is provided in Figure 3.1.

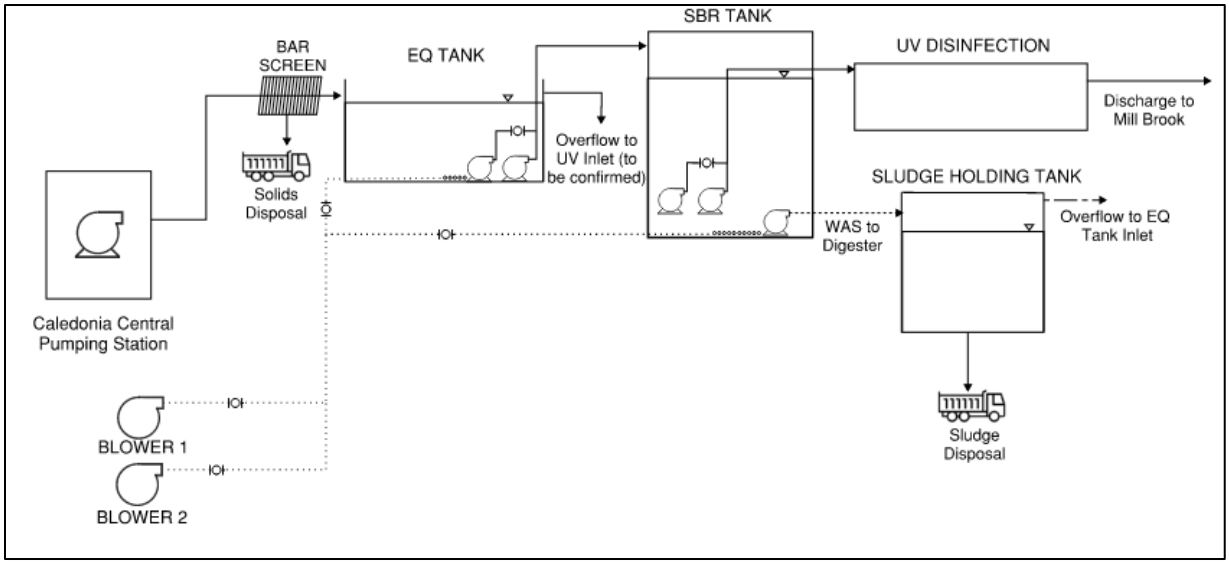


Figure 3.1: Caledonia WWTF Process Flow Diagram

The facility is rated to treat an average daily flow of approximately 95 m^3/d (25,000 GPD), with a peak daily flow capacity of approximately 365 m^3/d (96,000 GPD). All flows from the collection system are conveyed to the treatment facility via the Caledonia Central Pumping Station (PS), which is fed from the Caledonia Nursing Home PS and gravity sewers. The system serves approximately 110 residential customers, several small commercial establishments, schools, and nursing home.

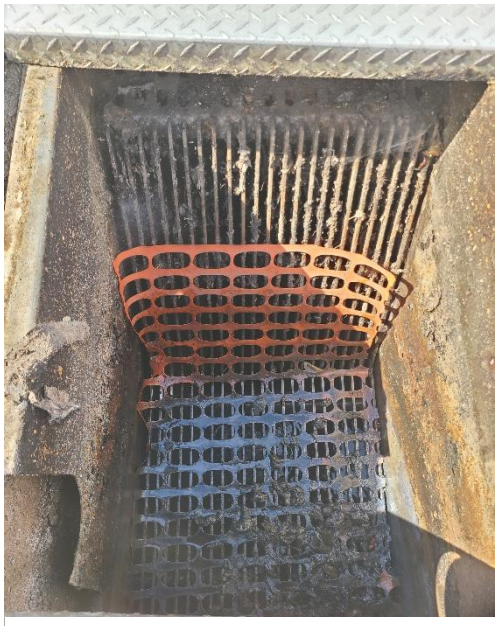
Raw wastewater enters the treatment facility through a manually raked bar screen. The screen captures large debris, which is periodically removed by operation staff. Screened wastewater then flows by gravity to the influent Equalization (EQ) tank. Flow equalization helps to reduce variations in hydraulic and/or organic loadings to the WWTF. Batches of wastewater are accumulated in the EQ for processing in the SBR (fed intermittently). A pair

of submersible pumps transfer the wastewater to the SBR for biological treatment. The SBR process is a fill-and-draw activated sludge system operating with a timed sequence of operations or cycles. A pair of submersible pumps transfer clarified effluent to UV disinfection. Treated effluent flows by gravity to an outfall chamber and is subsequently discharged to Mill Brook which drains to the Medway River. Sludge is periodically wasted to the Sludge Holding Tank (SHT) by a submersible pump. Wasted sludge is transported off-site for disposal, while overflow from the SHT returns to the EQ tank. Process air is supplied to both the influent EQ and SBR tanks via two blowers. The air is delivered to diffusers mounted at the at the bottom of the tank to provide mixing (EQ) and supply oxygen to maintain biological activity (SBR).

3.1.1 Influent Equalization

Influent Equalization Tank

The influent EQ tank is equipped with a manually raked bar screen on the discharge from the forcemain of the Caledonia Central PS. The bar screen prevents large inorganic debris from entering the treatment process. Bar spacing is approximately 25 mm (1") on center. A piece of snow fence has been installed over the screen to assist with solids capture and cleaning. Collected screenings are hauled offsite for disposal at the Waste Management Facility.



Bar Screen

The influent EQ tank has a volume of approximately 100 m^3 and serves to buffer wastewater flows/loads from the collection system. Aeration is provided intermittently (coinciding with SBR aeration via common header) to maintain adequate mixing within the tank and reduce the likelihood of odours. Diffusers appear to be focused on the submersible SBR feed pump side of the tank. An ultrasonic level sensor provides for level monitoring and controls operation of the feed pumps. Once sufficient batch volume has accumulated, a pair of submersible feed pumps transfers wastewater to the SBR for treatment. Table 3.1 summarizes the design parameter for the EQ tank and its associated equipment.

Table 3.1: Influent EQ Tank Design Parameters

Parameter	Value
Tank Length (m)	8.0
Tank Width (m)	3.8
Top Water Level (m)	3.2
Tank Volume (m^3)	98
No. of Transfer Pumps	2
Estimated Transfer Pump Flow (L/s) [USgpm]	25 [400 GPM]

Operations staff have reported that the submersible feed pumps are prone to clogging, leading to frequent maintenance events. This may be as a result of larger objectionable material passing through the bar screen or material weaving under aeration. Removal from the influent EQ tank is labor-intensive, as the existing davit crane is reportedly seized. Currently, pumps are removed manually requiring significant time and effort.

The influent EQ tank may be susceptible to overflows during extreme rainfall events or power outages. The SBR operates in discrete batches (average cycle time of 4 hours). As such, the tank must temporarily store all incoming flows until a batch can be processed. Operations staff have not reported any overflows. However, the 2024 Annual Report notes that the influent EQ tank is prone to such events.

To assess the capacity of the influent EQ tank, the capacity of the Central Caledonia PS and SBR must be considered. The PS is equipped with a pair of Xylem (Flygt) 3085 submersible pumps which transfer the wastewater to the WWTF via approximately 125 m of 150 mm (6") diameter forcemain. The pumps are operated in a duty/standby arrangement to ensure continuous operation and permit routine maintenance without interrupting flow. Based on the pump curve and estimated forcemain losses (minor losses assumed negligible), the pump appears to be capable of approximately 11 L/s (180 USgpm). During peak flows, the SBR can treat up to 6 batches (4 hour cycles) per day for a total of approximately 273 m^3/d (72,000 USgpd).

The influent EQ tank appears capable of accommodating flows ranging from 300 m^3/d (80,000 USgpd) to 360 m^3/d (96,000 USgpd) over 4 hour period. However, at a flow rate of 11 L/s, the influent EQ tank would take only approximately 2.5 hours to fill from empty. During extreme rainfall events, the Central Caledonia PS may operate continuously to maintain the wet well level setpoint. Extended pump operation during such events, particularly periods exceeding 2.5 hours, could result in the influent EQ tank exceeding its storage capacity, leading to overflows. This occurs when the combined inflow from the pumping station and stormwater contributions exceeds the available volume before a complete SBR cycle can be processed.

Currently, it is unclear whether an influent EQ overflow exists and if so, where is the discharge location. Similar installations have overflowed direct to disinfection prior to discharge to the receiving environment. To better understand potential impacts on the

receiving environment and identify operational risks, it is recommended that the overflow pathway be investigated further. Since record drawings are not available, this may include dye/smoke testing or visual inspection of existing tank penetrations. Determining the overflow destination will help inform operational strategies and potential upgrades to mitigate the risk of uncontrolled discharges during wet weather events.

3.1.2 Sequencing Batch Reactor (SBR)

Secondary treatment is provided via the SBR process (activated sludge). The SBR is fed intermittently. SBR systems have five steps, which are carried out in sequence as follows:

1. **Fill:** Raw wastewater is introduced into the reactor.
2. **React:** Oxygen is introduced into the reactor to support biological activity.
3. **Settle:** Aeration is stopped; activates sludge settles to the bottom of reactor by gravity.
4. **Decant:** Clarified secondary effluent is removed from the top of the reactor.
5. **Idle:** Reactor waits to begin the next cycle.

Sequencing Batch Reactor

Typically, process modifications can be made by varying the times associated with each step to achieve specific treatment objectives. Processing capacity can be increased by decreasing the overall cycle length. Sludge is wasted from the reactor to maintain a healthy biomass. Wasting usually occurs during the settle (end) or idle phases. Waste Activated Sludge (WAS) is pumped to the SHT. The SBR is configured to operate in the Intermittent Feed Intermittent Discharge (IFID) arrangement, commonly referred to as a 'true batch' reactor.

The reactor is equipped with bottom mounted diffusers for aeration. A common blower (see influent EQ) provides the required airflow, supporting the biological degradation of the wastewater. An ultrasonic level sensor and/or floats control operation of cycles. A pair of submersible pumps are provided to decant secondary effluent to UV disinfection. Design parameters for the SBR are summarized in Table 3.2.

Table 3.2: SBR Design Parameters

Parameter	Value
Average Batch Volume (m^3) [USgal]	22.7 [6,000 USgal]
Peak Batch Volume (m^3) [USgal]	46.2 [12,200 USgal]
Average/Peak Fill Time (h)	0.25 / 1
Average/Peak React Time (h)	4.5 / 1
Average/Peak Settle Time (h)	1 / 1
Average/Peak Decant Time (h)	0.25 / 1
Average/Peak Cycles per Day	4 / 6
Average Decant Flow Rate (L/s) [USgpm]	25 [400 USgpm]
Peak Decant Flow Rate (L/s) [USgpm]	12.5 [200 USgm]
No. of Decant Pumps	2
No. of Blowers	2
Blower Output (SCFM)	600

Using average/peak batch volumes and associated cycles time as per Table 3.2, the SBR is rated to treat an average daily flow of approximately 91 m^3/d (24,000 USgpd), with a peak daily flow capacity of approximately 277 m^3/d (73,175 USgpd). Assuming relatively low strength influent wastewater (BOD 110 mg/L, TSS 100 mg/L, TKN 20 mg/L), the Standard Oxygen Required (SOR) is approximately 85 kg/d. This equates to a blower capacity of the order of 85 m^3/h (50 SCFM). For comparison purposes, medium strength wastewater results in an SOR of approximately 165 kg/d, and a blower capacity of approximately 170 m^3/h (100 SCFM). The existing blower is rated at approximately 1,023 m^3/h (600 SCFM) at 60 kPa (8.7 psi) but serves both the influent EQ and SBR tanks. Based on the footprint of the influent EQ tank, the mixing air requirement is approximately 114 m^3/h (67 SCFM). Calculations suggest that the blower capacity exceeds the estimated oxygen demand; however, actual influent concentrations and flow rates may vary. Routine influent sampling is recommended to confirm oxygen requirements and verify that the blowers provide sufficient aeration under all operating conditions. Operating water levels between the two tanks may also result in an imbalance of air distribution (majority of air to tank with lower operating level).

Operations staff have reported solids carryover from the decant pumps to the UV disinfection system in the past. Staff noted that settleability testing indicates that most of the solids settle within the designated settle cycle time, suggesting that the SBR is achieving solids separation under normal conditions. The observed carryover was likely associated with the placement (elevation) of the decant pumps (set too low within the reactor). Solids carry over (first or post flush event) can reduce the effectiveness of downstream UV disinfection (UV transmittance, lamp fouling, etc.). As such, operations staff have adjusted the height of the pumps.

3.1.3 Sludge Handling

Sludge management is a critical step in the activated sludge process. It helps to control biomass concentration, maintain performance, and prevents problems from occurring. At the conclusion of the decant cycle, sludge is conveyed to the SHT using a submersible WAS pump. Operations staff monitor Mixed Liquor Suspended Solids (MLSS) concentrations within the reactor and adjust the amount of sludge removed accordingly. Within the sludge holding tank, solids undergo further settling and stabilization. The sludge handling design parameters are summarized below in Table 3.3.

Sludge Holding Tank

Table 3.3: Sludge Holding Tank Design Parameters

Parameter	Value
Tank Length (m)	10.0
Tank Width (m)	3.0
Top Water Level (m)	2.1
Operating Volume (m^3)	63
No. of WAS pumps	1

Historically, the SHT was emptied only a few times per year. Once the tank became full, any supernatant or overflows would be returned back to the influent EQ tank. This resulted in increased loading to the treatment facility due to significant solids carryover. Currently, the tank is emptied on a weekly basis, and the operating liquid level is maintained below the overflow elevation to prevent flows solids carryover to the influent EQ tank.

3.1.4 Effluent Disinfection

UV Disinfection System

Disinfection of the secondary effluent is provided by UV light technology. UV lights provides rapid, effective inactivation of microorganisms. When exposed to germicidal wavelengths of UV light, microorganisms are rendered incapable of reproduction. Effluent is pumped from the SBR to disinfection during the decant cycle. The UV disinfection system is installed within a stainless-steel channel located within the Filter Building. Decant flows are measured by

a magnetic type flowmeter installed upstream of the UV system. The design parameters for the UV disinfection system are summarized in Table 3.4.

Table 3.4: UV Disinfection Design Parameters

Parameter	Value
Peak Flow (L/s) [USgpd]	15.8 [360,000]
Design Flow (L/s) [USgpd]	12.6 [288,000]
Minimum UV Transmission (%)	50
Total Suspended Solids (mg/L)	30
Disinfection Limit (FCU/100 mL)	200
No. of UV Banks	1
No. of UV Modules	4
No of Lamps per Module	4
No. of Lamps	16

Previously, both decant pumps were operated simultaneously, resulting in instantaneous flows to the UV system that exceeded its rated capacity (25 L/s vs. 15.8 L/s - see Table 3.2). Operations staff have since modified the decant process such that only one pump is used at a time and throttled a valve upstream of the UV to maintain flows at approximately 5 L/s (80 USgpm). Throttling decant flow impacts the overall length of the decant cycle, which may inadvertently impact the overall cycle length (impact SBR throughput). The original disinfection limit appears to based on fecal coliform, however the regulatory treated effluent criteria currently includes *E. coli*. Effluent sampling should be adjusted accordingly. Under these operating conditions, the UV disinfection system is expected to provide adequate disinfection.

3.1.5 Effluent Discharge

Treated effluent flows by gravity to an outfall chamber and is subsequently discharged to Mill Brook which ultimately drains to the Medway River.

3.1.6 Effluent Filtration

The treatment facility was provided with a tertiary filter during the 1997 upgrades, however, the unit is no longer is service (bypassed via pipework). The gravity sand filter (Centra-flo model #CF-12-UF) was intended for removal of suspended/colloidal solids to ensure compliance with treated effluent criteria on a consistent basis. Originally, decanted secondary effluent was directed to the secondary clarifier (old extended aeration facility) and subsequently flowed by gravity to the filter prior to undergoing UV disinfection. The clarifier was intended to equalize flows to the filter (decant flows exceed design capacity). Design parameters are summarized in Table 3.5.

Filtration Unit (Not in Use)

The filter reportedly has issues with clogging/plugging and required frequent cleaning/maintenance events. Eventually, the system was bypassed by operations staff.

Table 3.5: Tertiary Filter Design Parameters

Parameter	Value
Area (m^2)	0.65
Diameter (m)	1.22
Height (m)	3.2 or 4.3
Loading (L/s) [USgpm]	0.95 – 3.80 [15 – 60]
Reject (L/s)	0.30 – 0.50 [5 – 8]
Air (m^3/h) [SCFM]	1.7 [1]

3.2 Treatment Potential

The treatment facility struggles with compliance issues on a consistent basis (see Section 2). As such, the operations staff have been working with external consultants to implement operational changes aimed at improving overall effluent quality. The primary focus has been on optimizing sludge management practices. Namely, sludge wasting within the reactor and sludge removal from the SHT. This has involved routine MLSS measurements within the reactor and adjustments to the sludge wasting frequency.

Optimizing sludge wasting is critical. If not managed properly, excess biomass may contribute to performance issues (breakdown of organic matter, sludge bulking, poor settling, foaming, etc.). Higher effluents solids concentration may also impact effectiveness of disinfection. When operated optimally, SBRs can reliably produce effluent quality of 10/10 for BOD and TSS respectively. The tertiary filter is no longer in operation, but the original intent was that it would provide for effluent polishing to 5/5 on a consistent basis.

4 Receiving Water Characteristics

4.1 Receiving Water Characteristics

The receiving water for the facility is Mill Brook. While specific flow and water quality data for this watercourse are not available, based on the required treated effluent criteria, it is assumed that this watercourse exhibits relatively low base flows and limited assimilative capacity. Mill Brook is fed by Scott Lake and Flinn Lake and flows northeast before converging with the Medway River as shown in Figure 4.1 below.

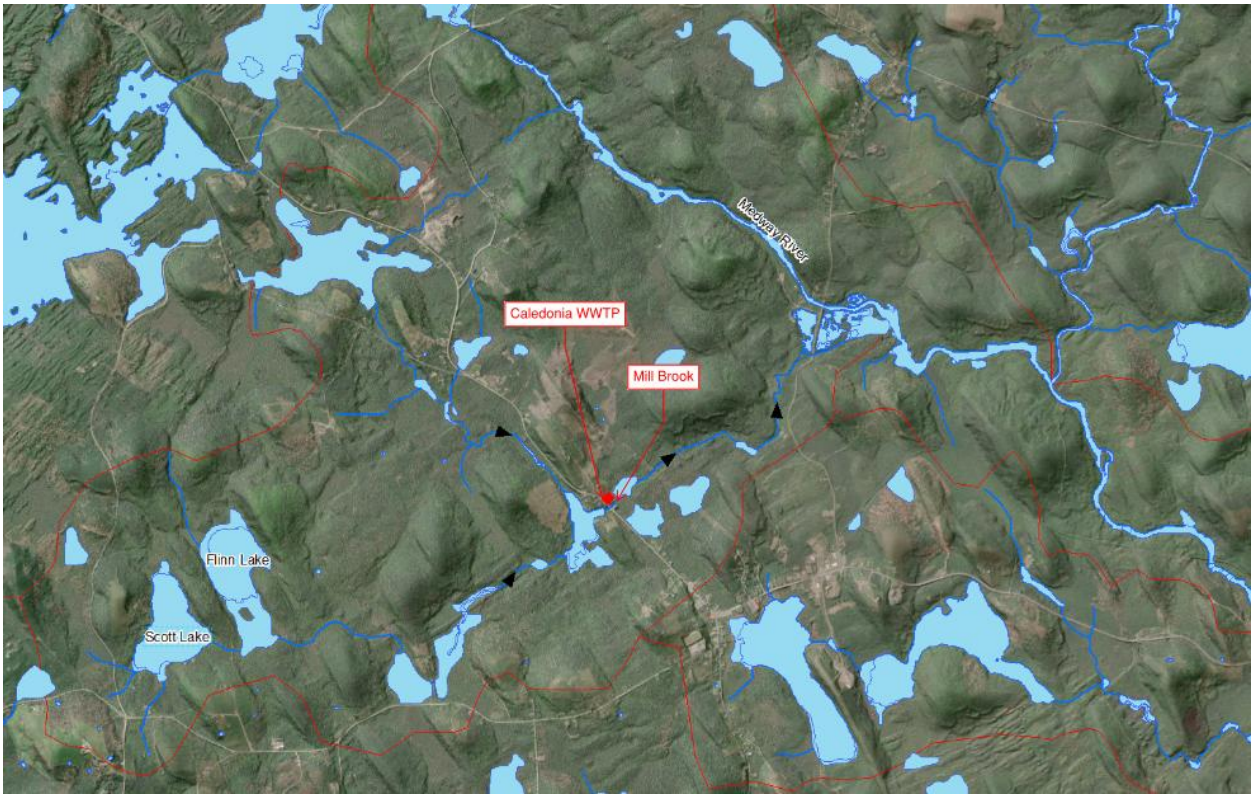


Figure 4.1: Topographic map of Mill Brook, Caledonia, NS

5 Inflow & Infiltration

5.1 Inflow & Infiltration

Inflow and Infiltration (I & I) is the introduction of groundwater or storm water into the wastewater collection system. Depending on the source/volume of the water, it can result in significant increases on the demand of the wastewater system. Inflow is water that enters the system through a known connection. This can include roof drains, drains from driveways, or footing drains. Infiltration is water that enters the system through cracks or leaks in the piping due to age, damage and/or loose joints.

Available daily flow data and precipitation records were reviewed to assess the impact of wet weather on influent flows to the treatment facility, as shown in Figure 5.1. The dataset, however, is limited in several respects. The SCADA system is not configured to generate or trend daily flow records, and therefore daily values were obtained through manual recordings taken on multiple days each month during 2024. These spot measurements were used to establish a representative record of daily flow across the year, but they do not provide a continuous dataset.

Even though the dataset is limited, the chart indicates a correlation between precipitation events and increased plant flows, suggesting that the facility is susceptible to I & I. Rainfall can contribute to significant fluctuations in daily flows and loading to the treatment facility. Improved flow monitoring would provide a better understanding of flows arriving at the WWTF and help to confirm the impact of I & I on the wastewater system.

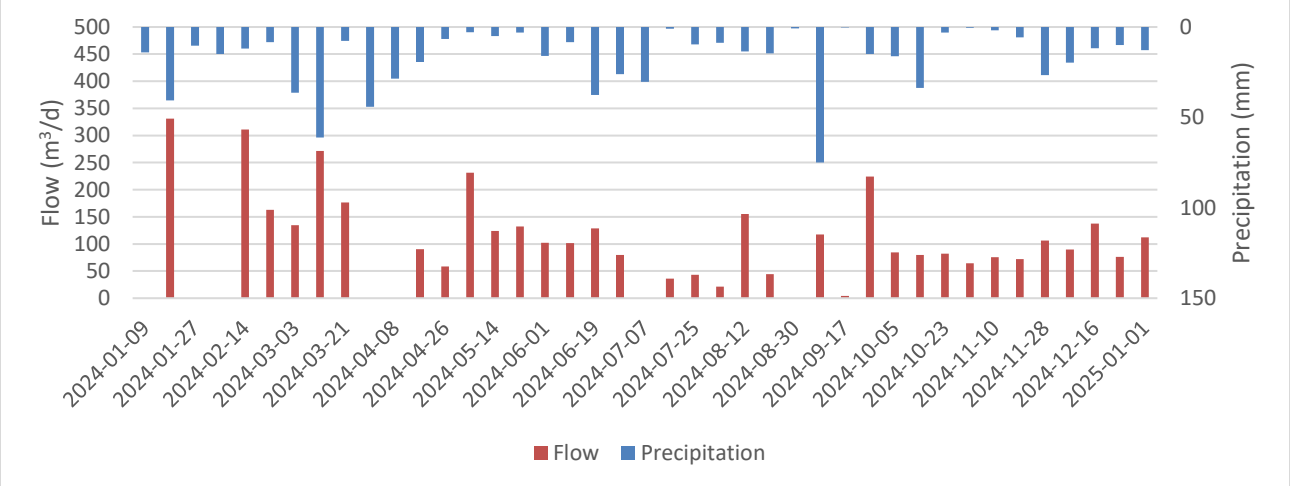


Figure 5.1: Daily Flow vs. Precipitation

6 Recommendations

6.1 Recommendations

The Caledonia WWTF has challenges with satisfying treated effluent criteria on a consistent basis. Under optimal conditions, SBRs can regularly produce effluent quality of 10/10. Several improvements can be implemented to enhance plant performance, reduce the need for operator intervention, and achieve the 5/5 effluent criteria. The recommendations are divided into two categories: operational improvements and infrastructure upgrades.

Operational recommendations focus on process adjustments and control strategies to optimize the performance of the existing plant. The following operational recommendations are proposed:

- **Enhanced Controls and Monitoring** – Upgrade the PLC/SCADA system to improve real-time monitoring, data collection, and process control. This will enable operators to track trends, respond promptly to deviations, and optimize SBR performance. The system should allow trending of flows, SBR cycle status and times, and provide operator-adjustable setpoints (i.e., sludge wasting) for key operational parameters.
- **Influent EQ Tank Overflow Study** – Investigate the influent EQ tank overflow pathway to confirm the presence/location. Control strategy may include isolation of air to tank (i.e., act as a primary clarifier during extreme events).
- **Effluent Sampling for Compliance** – Implement monitoring of effluent *E. coli* (in lieu of fecal coliforms) and pH as per regulatory requirements. Sampling and data collection will support reporting requirements.

Infrastructure changes involve upgrades or modifications to equipment and systems to improve overall reliability and efficiency. The following infrastructure recommendations are proposed:

- **Tertiary Filtration** – Replace the filter unit upstream of the UV disinfection system to consistently meet treated effluent criteria.
- **Mechanical Screening Before Equalization Tank** – Replace the manually raked bar screen with a mechanical fine screen to protect against reduced operating efficiency, blockages, or physical damage to downstream infrastructure.
- **Improved Pump Lifting Mechanisms** – Replace davit crane to provide for more efficient removal of submersible pumps for inspection/maintenance (fixed sockets and portable davit crane). This will reduce operator effort, downtime, and improve overall operational efficiency.

APPENDIX A

Approval No. 2020-2704407-00

NOVA SCOTIA

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APPROVAL

Province of Nova Scotia
Environment Act, S.N.S. 1994-95, c.1 s.1

APPROVAL HOLDER: REGION OF QUEENS MUNICIPALITY

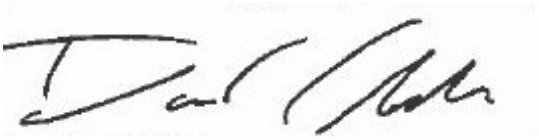
SITE PID: 70150099

APPROVAL NO: 2003-2229815-01

EXPIRY DATE: October 11, 2034

Pursuant to Part V of the Environment Act, S.N.S. 1994-95, c.1 s.1 as amended from time to time, approval is granted to the Approval Holder subject to the Terms and Conditions attached to and forming part of this Approval, for the following activity:

Municipal - Sewage Works - Treatment Facility



Administrator: David Clarke

Effective Date: October 11, 2024

The Minister's powers and responsibilities under the Act with respect to this Approval have been delegated to the Administrator named above. Therefore, any information or notifications required to be provided to the Minister under this Approval can be provided to the Administrator unless otherwise advised in writing.

TERMS AND CONDITIONS OF APPROVAL

Nova Scotia Department of Environment and Climate Change

Approval Holder: REGION OF QUEENS MUNICIPALITY

Project: Harmony Mills, Queens County, NS

Site:

PID	Civic #	Street Name	Street Type	Community	County
70150099	10062	HIGHWAY 8	HWY.	HARMONY MILLS	QUEENS COUNTY

Approval No: 2003-2229815-01

File No: 94300-30-BRI-2003-2229815

Grid Reference: Easting - 337433, Northing - 4916321

Reference Documents

- Application submitted July 30, 2024 and attachments.

1. Definitions

a. Act means Environment Act. 1994-95, c.1, s.1, and includes, unless the context otherwise requires, the regulations made pursuant to the Act, as amended from time to time.

b. Acutely lethal in relation to effluent, means that the effluent at 100% concentration kills, during a 96-hour period, more than 50% of the rainbow trout subjected to it as determined by:

i. Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout (EPS 1/RM/13) as amended from time to time; or

ii. Procedure for pH Stabilization During the Testing of Acute Lethality of Wastewater Effluent to Rainbow Trout (EPS 1/RM/50), as amended from time to time.

c. Collection System means all auxiliaries for the collection, storage and discharge of sewage from the source to the facility.

d. Composite sample means a representative sample which is taken from the combination of individual samples that shall be obtained by:

i. An automated sampling device by either the flow paced or time paced method at time intervals of 30 minutes or less over a 24 hour period; or

ii. A series of 3 grab samples of equal volume taken at a minimum of 2 hour intervals, over an 8 hour period.

e. Department means the Nova Scotia Department of Environment and Climate Change, and the contact for the Department for this approval is:
Nova Scotia Department of Environment and Climate Change
Western Region, Bridgewater Office
81 Logan Road, Floor 1
Bridgewater, Nova Scotia B4V 3T3

Phone: (902) 543-4685
Fax: 902-527-5480

f. Grab sample means an individual sample collected in less than thirty (30) minutes and which is representative of the substance sampled.

g. Minister means the Minister of Environment and Climate Change and includes any person delegated the authority of the Minister.

h. Quarter means any of the four periods of three months that begin on the first day of January, April, July and October.

i. Residual means an organic or inorganic by-product generated from a treatment process.

j. Site means a place where a designated activity and/or undertaking is occurring or may occur.

k. Surface Watercourse means a watercourse as defined in the Environment Act, excluding groundwater.

l. Treated Effluent Discharge Criteria means the average concentration of a parameter sampled and calculated in accordance with this Approval.

2. Scope

a. This Approval (the "Approval") relates to the Approval Holder(s) and their application and all documentation submitted to the Department prior to the issuance of this approval for the Treatment Facility situated at or near Harmony Mills, Queens County, NS and associated Collection System.

b. The Approval Holder(s) shall ensure the designated activity is carried out in accordance with this Approval and reference documents, including the application and supporting documentation.

c. This Approval does not apply to the electrical, roadways, and structural components of the project.

3. General

a. Unless otherwise specified in this approval, the Approval Holder(s) shall conduct the Designated Activity in accordance with the following provisions:

   i. The Act, as amended from time to time;

   ii. Any standard adopted by the Department, as amended from time to time, which includes but is not limited to the following:

      (a) Atlantic Canada Wastewater Systems Guidelines, as amended from time to time.

b. Nothing in this Approval relieves the Approval Holder(s) of the responsibility for obtaining and paying for all licenses, permits, approvals or authorizations necessary for carrying out the work authorized to be performed by this Approval which may be required by municipal by-laws, provincial or federal legislation, or other organizations. The Minister does not warrant that such licenses, permits, approvals or other authorizations will be issued.

c. No authority is granted by this Approval to enable the Approval Holder(s) to commence or continue the designated activity on lands which are not in the control or ownership of the Approval Holder(s). It is the responsibility of the Approval Holder(s) to ensure that such a contravention does not occur. The Approval Holder(s) shall provide, to the Department, proof of such control or ownership upon expiry of any relevant lease or agreement. Failure to retain said authorization may result in this Approval being cancelled or suspended.

d. If there is a discrepancy between the reference documents and the terms and conditions of this Approval, the terms and conditions of this Approval shall apply.

e. Any request for renewal or amendment of this Approval is to be made in writing, to the Department, at least ninety (90) days prior to the Approval expiry.

f. The Approval Holder(s) shall not transfer, sell, lease, assign or otherwise dispose of this Approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of the approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.

g. If the Minister cancels or suspends this Approval, the Approval Holder(s) remains subject to the penalty provisions of the Act.

h. The Approval Holder(s) shall advise the Department in writing prior to any proposed extensions or modifications to the Activity and/or the Site. An amendment to this Approval may be required before implementing any extension or modification.

i. The Approval Holder(s) shall immediately notify the Department of any incidents of non-compliance with this Approval.

j. The Approval Holder(s) shall bear all expenses incurred in carrying out the environmental monitoring required under the terms and conditions of this Approval.

k. All sampling and analysis operations, including sample collection, preservation and submission, laboratory requirements and analysis results reporting, shall be performed in accordance with the American Public Health Association (APHA), American Water Works Association (AWWA) and Water Environment Federation (WEF): Standard Methods for the Examination of Water and Wastewater, as amended from time to time.

l. All samples required by this Approval shall be analyzed by a laboratory that is:

   i. accredited under ISO/IEC 17025:2005 entitled General Requirements for the Competence of Testing and Calibration Laboratories, as amended from time to time, by an accrediting body that is a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement, and whose accreditation includes the analytical method used to make the determination; or

   ii. maintaining an acceptable standard in a proficiency testing program conducted by the Canadian Association for Laboratories Accreditation Inc., and whose proficiency testing program includes the analytical method used to make the determination.

m. The Approval Holder(s) shall ensure that this Approval, or a copy, is present on Site while personnel are on Site.

n. The Approval Holder(s) shall ensure that personnel directly involved in the designated activity are made fully aware of the terms and conditions of this Approval.

o. Upon any changes to the Registry of Joint Stock Companies information, the Approval Holder(s) shall provide a copy to the Department within five (5) business days.

4. Air Emissions

a. If the Department determines that the designated activity is generating excessive odours, the Approval Holder(s) shall be required to take any measures required by the Department to address those odours.

5. Surface Water

a. The Approval Holder(s) shall ensure the Site is developed and maintained to prevent contaminants from being discharged into a water resource or beyond the property boundary.

b. The Approval Holder(s) shall ensure that the following water quality limits are met in the water resource downstream of construction activities:

   i. Total Suspended Solids, Clear Flows (Normal Background Conditions):

      (a) Maximum increase of 25 mg/l from background levels for any short term exposure (24 hour or less);

(b) Maximum average increase of 5 mg/l from background levels for longer term exposure (inputs lasting between 24 hours and 30 days);

ii. Total Suspended Solids, High Flow (Spring Freshets and Storm Events):

(a) Maximum increase of 25 mg/l from background levels at any time when background levels are between 25 mg/l and 250 mg/l;

(b) Maximum increase of 10% over background levels when background is >250 mg/l;

c. Additional surface water monitoring may be required at the request of the Department.

d. The Approval Holder(s) shall develop and implement an Erosion and Sediment Control Plan, upon Department request.

e. No authority is granted by this Approval to enable the Approval Holder(s) to discharge surface water onto adjoining lands without the authorization of the affected landowner(s).

f. The Approval Holder(s) shall install and maintain erosion and sediment controls in line with industry best practices (e.g., Nova Scotia Environment Erosion and Sediment Control Handbook for Construction Sites) with the following considerations:

i. The controls shall be installed prior to the commencement of the construction activities;

ii. The controls shall remain in place until areas disturbed by construction activities are stabilized so that the risk of release of sediment to a water resource has been mitigated;

iii. Control features shall be installed as per applicable product specifications or manufacturer's directions; and

iv. Control materials shall be clean, non-erodible, non-ore-bearing, non-watercourse derived and non-toxic.

g. The Approval Holder(s) shall ensure that surface water runoff that may be impacted by petroleum hydrocarbons from the Site is collected and directed for necessary treatment prior to discharge from Site.

h. Work at the site shall only take place when erosion and sediment controls are functional. Contingency erosion and sediment control materials shall be kept on Site in case of failure.

i. The Approval Holder(s) shall ensure that the following activities take place at a location to maximize the distance to a surface watercourse or wetland such that a release will not enter a surface watercourse or wetland:

i. Fuel storage, refueling, and/or lubrication of equipment

ii. Washing of machinery or equipment

iii. Storage of equipment, excavated/stockpiled materials, and potential contaminants

6. Releases

a. Releases shall be reported in accordance with the Act.

b. Spills or releases shall be cleaned up in accordance with the Act.

7. Collection and Pumping

a. The facility has been classified as a Class I Wastewater Collection facility.

b. The Approval Holder(s) shall provide the name and contact information of the Overall Direct Responsible Charge Operator for the Wastewater Collection facility to the Department in writing when there is a change in the facility's operator(s).

8. Residuals Management

a. All residuals generated at the Site shall be managed in accordance with a Residuals Management Plan deemed acceptable by the Department.

b. The Approval Holder shall submit a plan for the management and/or disposal of residuals from the activity to the Department for acceptance on or before January 1, 2025.

c. Written authorization is required from the Department to modify the residuals management plan.

d. The residuals management plan shall contain, at a minimum, the following information for each waste stream:

i. type of residual;

ii. processing method; and

iii. expected annual volume of residuals to be generated by the activity.

e. The Approval Holder(s) shall record the following information each time residuals are removed from the facility and make the records available to the Department immediately upon request:

i. the type of residual;

ii. the volume of each residual transported, expressed as cubic metres or kilograms;

iii. the residuals total solids content, expressed as a percentage,

iv. hauler, if applicable;

v. date of transport; and

vi. final destination of residuals.

9. Operation

a. The facility has been classified as a Class II Wastewater Treatment facility. NOTE: Facility classification may change as a result of a review of the System Assessment Report required by the Site Specific Section of this Approval.

b. The Approval Holder(s) shall ensure there are measures in place to protect against failures of the power supply, treatment process, Collection System and equipment.

c. The Approval Holder(s) shall provide the name and contact information of the Overall Direct Responsible Charge Operator for the Wastewater Treatment facility to the Department in writing when there is a change in the facility's operator(s).

d. The Approval Holder(s) shall ensure that an Operations Manual is prepared on or before September 1, 2025. The Operations Manual shall include:

i. standard operational procedures;

ii. procedures for seasonal start up and shut down, if applicable;

iii. emergency response and notification procedures;

iv. contingency plan;

v. notification procedures to be used to contact relevant authorities and the public in case of emergency situations, exceedances of approved effluent criteria or bypasses;

vi. procedures to record and respond to complaints.

e. A copy of the Operations Manual is to be kept on Site at all times and is to be available to the Department for review upon request.

f. The Approval Holder(s) shall not establish nor maintain a by-pass to divert wastewater around one or more unit processes within the wastewater treatment facility or a discharge to the environment from the wastewater treatment facility at a location other than the facility outfall unless it has been approved by the Department.

i. The Approval Holder(s) shall record the date, time, and duration of any use of a by-pass.

g. The Approval Holder(s) shall take immediate preventive or corrective action, when the Approval Holder(s) and/or operator becomes aware of conditions which may result in an adverse effect.

10. Performance and Limits

a. The Approval Holder(s) shall evaluate the effluent being discharged from the Facility to the following Treated Effluent Discharge Criteria, subject to the Site Specific Section of this Approval:

i. Carbonaceous Biochemical Oxygen Demand, CBOD5, shall not exceed 5 mg/l.

ii. Total Suspended Solids shall not exceed 5 mg/l

iii. E. Coli shall not exceed 200 E. Coli/100mls

iv. pH shall be within the range of 6.0 to 9.0

v. non-acutely lethal.

11. Monitoring and Recording

a. Effluent being discharged from the Facility shall be sampled and averaged in accordance with Table 1: Effluent Monitoring.

b. Samples shall be collected from the effluent after final effluent treatment but before discharge to a surface water body, unless specified otherwise in this Approval.

c. Flow volumes shall be determined by equipment that can continually measure influent or effluent volume unless the annual average daily volume is less than 100 m3/day, in which case an estimate based on practices deemed acceptable to the Department can be used.

d. All equipment shall be installed, maintained and calibrated as specified by the manufacturer's instructions.

e. The facility will be considered in compliance with the Treated Effluent Discharge Criteria if the average value calculated for the averaging period meets the specified limits. All average residual shall be the arithmetic mean with the exception of E.Coli, which shall be the geometric mean.

f. Following a review of any of the analytical results required by this Approval, the Department may alter the frequencies, location, and parameters for analyses required for this Approval.

g. The Approval Holder(s) shall record the average values within 45 days of the end of the respective averaging period and notify the Department immediately if the average is not in compliance with the discharge limit.

12. Reporting

a. The Approval Holder(s) shall prepare and submit an annual report on or before February 15 for the previous calendar year. The report shall contain the following information:

i. the average daily flow rate for the averaging period(s), expressed in m3/day;

ii. maximum single daily flow rate occurring during the averaging period(s), expressed in m3/day, and the date of its occurrence, if applicable;

iii. average of the sample results for the averaging period(s) as defined by this approval;

iv. all toxicity results, if applicable;

v. the total annual volume (m3 or kg) of inorganic and organic residuals transported from the facility;

vi. the annual average total solids content (%) of organic residuals transported from the facility;

vii. a description of any emergency or upset conditions, including bypass events, which occurred during the reporting period and any action taken to correct them;

viii. a description of any complaints received and the follow up actions taken;

ix. a summary and interpretation of any instances of non-compliance with this approval and corrective action taken.

13. Records

a. The Approval Holder(s) shall ensure that all records required by this Approval are maintained for a period of five (5) years and are to be made available to the Department upon request.

b. A copy of project reports, construction documents and drawings, inspection reports, shall be kept for the life of the facility and are to be made available to the Department upon request.

14. Site Specific

a. The Approval Holder(s) shall submit to the Department on or before September 1, 2025, a System Assessment Report on the operation of the facility. The report shall be prepared by a third-party consultant with experience in Wastewater Treatment Facility operations and contain the following:

i. results of effluent quality;

ii. a description of the treatment technology currently employed;

iii. details on the treatment potential of the existing plant;

iv. a summary and conclusion of the existing facility's capacity to comply with the limits established in this Approval;

v. a summary of the receiving water quality;

vi. an outline of the treatment upgrades, if any, required to comply with the limits established in this Approval;

vii. an assessment of the collection system for inflow and infiltration and a schedule for improvements, if required.

b. The Approval Holder(s) shall be required to undertake modifications and/or upgrades to the facility at the direction of the Department. If so directed to undertake modifications or upgrades, the Approval Holder(s) shall provide the following:

i. an application for amendment of approval if required by the Department;

ii. a plan to complete the modifications and/or upgrades and a schedule for the completion of work. The plan shall be prepared by a third-party consultant with experience in Wastewater Treatment Facility operations. Design drawings and specifications shall be prepared by an engineer licensed to practice in the Province of Nova Scotia, if the plan requires engineering;

iii. the facility upgrades and/or modifications shall be completed in accordance with the plan and in a time frame acceptable to the Department.

APPENDIX A

TABLE 1: Treated Effluent Criteria				
PARAMETER	**SAMPLE TYPE**	**SAMPLING FREQUENCY**	**AVERAGING PERIOD**	**LOCATION**
$cBOD_5$	Grab	Monthly	Quarterly	Treated effluent discharge
Total Suspended Solids	Grab	Monthly	Quarterly	Treated effluent discharge
E. Coli	Grab	Monthly	Quarterly	Treated effluent discharge
pH	Grab	Monthly	Quarterly	Treated effluent discharge
Plant Volumes	N/A	Continuous	Annual	Entering or leaving plant
Fish Toxicity	Grab	Upon Department request	N/A	Treated effluent discharge

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Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: December 4, 2025

File No: 10350-50-2512-05

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Dry Hydrant Construction

Prepared by:	Supervisor:	CAO Concurrence:
A. Grant *Director of Infrastructure*	W. Thorpe *Chief Administrative Officer*	*W. Thorpe* *CAO*

RECOMMENDATIONS

1) THAT the Council of Region of Queens Municipality rescind the motion made at the September 23, 2025, meeting: "THAT the Council of Region of Queens Municipality approves the purchase of a dry hydrant from C. Eugene Ingram Construction and installation at 9565 Highway 8, Caledonia at a value of $40,000 + HST."

2) THAT Council for Region of Queens Municipality direct staff to complete a public process to purchase and install a dry hydrant at 9565 Highway 8, Caledonia before November 1, 2026.

PURPOSE

To cancel the award of construction for the installation of a new dry hydrant due to failure to complete within the required timeframe.

BACKGROUND

At the September 23, 2025 Regular meeting, Council was presented with a report on the status of dry hydrants in Queens County. Included in that information package was a request for Council approval to award the construction of a new dry hydrant which did not align with the previously approved budget.

Following that meeting, staff gave notice to the successful contractor to proceed. However, the contractor had not mobilized and failed to meet the established deadline of October 31, 2025.

In recognition of risks associated with this nature of construction during the winter, staff have notified the contractor not to proceed at this time in agreement with their submitted tender package. That decision is two-fold: Nova Scotia Environment and Climate Change who is responsible for oversight with installations does not typically permit installations outside of the dry season. As well, the method of solvent welding PVC pipe for the installation requires a specific temperature and humidity to ensure ultimate success which is extremely unlikely over the winter months.

ALTERNATIVES/OPTIONS

1) Council rescinds the motion made at the September 23, 2025, meeting: "THAT the Council of Region of Queens Municipality approves the purchase of a dry hydrant from C. Eugene Ingram Construction and installation at 9565 Highway 8, Caledonia at a value of $40,000 + HST."

2) Council directs staff to complete a public process to purchase and install a dry hydrant at 9565 Highway 8, Caledonia before November 1, 2026.

3) Council directs staff to extend the window for this work until fall 2026.

4) Council directs staff to allow the contractor to complete the work at the earliest availability ensuring compliance with all regulations.

ANALYSIS

Option 1: Despite the installation of this dry hydrant being unsuccessful, it does ensure that installations continue to occur in an environmentally responsible manner with the highest quality of installation achieved.

Option 2: Ensures staff is clear on Council's direction on this file.

Option 3: Allows for the installation to potentially complete next season but does not assure the proposed cost of $40,000. The tender package required the contractor's proposal as valid until October 15, 2025.

Option 3: Does not ensure the dry hydrant is installed timely or ensure quality installation.

IMPLICATIONS

Rescinding the motion will prevent the expenditure of $40,000 in the 2025 – 2026 fiscal year.

COMMUNICATIONS

The Department of Infrastructure will formally notify the contractor of the cancellation in agreement.

BYLAWS/PLANS/POLICIES

N/A

SUMMARY

At the September 23, 2025 Regular meeting, Council approved awarding the construction of a new dry hydrant. Though staff gave notice to the successful contractor to proceed, the contractor failed to meet the established deadline of October 31, 2025. Staff recommend that Council rescind the motion made at the September 23, 2025, meeting and direct staff to complete a public process to purchase and install a dry hydrant at 9565 Highway 8, Caledonia before November 1, 2026.

ATTACHMENTS/REFERENCE MATERIALS

N/A

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: November 24, 2025

File No: 10350-50-2512-06

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Council Remuneration

RECOMMENDATIONS

1) THAT Council for Region of Queens Municipality directs staff to establish a Citizen Advisory Committee on Council remuneration.

2) THAT Council for Region of Queens Municipality adopts the Citizen Advisory Committee on Council Remuneration Terms of Reference.

PURPOSE

To review current Administrative Policy 27 – Remuneration for Mayor and Councillors.

BACKGROUND

The *Municipal Government Act* enables municipalities to enact policies regarding compensation of elected officials. Regarding remuneration,

> 23 (1) The council may make policies
>
> (d) providing for and fixing
>
> (i) the annual remuneration to be paid to the mayor
>
> or warden,

(ii) the annual remuneration to be paid to the deputy mayor or deputy warden,

(iii) the annual remuneration to be paid to councillors.

On September 13, 2018, Council for Region of Queens Municipality repealed previous *Administrative Orders Respecting the Remuneration of Mayor and Councillors*, approving *Administrative Policy 27 – Remuneration for Mayor and Councillors*. That policy included annual remuneration for the Mayor of $41,730, and each Councillor at $20,865.

Based on Administrative Policy 27, annual gross remuneration for members of Council in the current fiscal year (2025 – 2026) includes:

Mayor	$48,533
Deputy Mayor	$25,667 (Councillor x 49 weeks, Acting Mayor x 3 weeks)
Councillors	$24,267

In fall 2025, staff contacted each municipality in Nova Scotia seeking some general feedback about the process for reviewing remuneration for members of Council; 9 responses were received:

Question	Response
Has the municipality established a process to determine remuneration?	One municipality had not reviewed remuneration levels in 10 years; all others utilize a process to review levels of remuneration (usually once per term of Council)
Does the municipality engage a third-party to complete the review, or are reviews handled in-house?	Half of the municipalities conducted their review in-house versus utilizing a committee or external agency
Are comparator communities considered, or are adjustments based solely on Council's existing renumeration levels?	Almost all the municipalities utilized comparator communities
Does the remuneration package include pension or benefits?	2/3 of the municipalities included some component of benefits or pension

ALTERNATIVES/OPTIONS

1) Council directs staff to establish a Citizen Advisory Committee on Council remuneration.

2) Council adopts the Citizen Advisory Committee on Council Remuneration Terms of Reference.

3) Council directs staff to engage a third party to conduct a review of Council remuneration.

4) Council directs staff to conduct a review of Council remuneration.

5) Council directs staff to continues to utilize Administrative Policy 27 as currently written.

ANALYSIS

Option 1	Engaging residents to review the remuneration package promotes civic engagement and avoids a perceived conflict of interest.
Option 2	Terms of reference provide clear direction to committees regarding scope of work.
Option 3	Engaging a third party to review the remuneration package will avoid a perceived conflict of interest and will require unbudgeted financial resources to complete.
Option 4	Tasking staff who report to Council with conducting a compensation review may be perceived as a conflict of interest.
Option 5	The current remuneration policy has not been reviewed since 2018 and is considered outdated.

IMPLICATIONS

Financial implications of any adjustments to the remuneration package will be determined by direction from Council. Any adjustment to the remuneration package will be reflected in corresponding annual operating budgets.

COMMUNICATIONS

Any change to Administrative Policy 27 will follow standard 'repeal and replace' practice and any resulting policy will be posted on the Region of Queens Municipality's website.

BYLAWS/PLANS/POLICIES

Administrative Policy 27 – Remuneration for Mayor and Councillors

SUMMARY

The *Municipal Government Act* enables municipalities to enact policies regarding compensation of elected officials. Since 2018, remuneration of elected officials at Region of Queens Municipality has been outlined in Administrative Policy 27 and is considered outdated. Staff recommend Council direct staff to establish a Citizen Advisory Committee on Council remuneration and adopt the Citizen Advisory Committee on Council Remuneration Terms of Reference.

ATTACHMENTS/REFERENCE MATERIALS

- Citizen Advisory Committee on Council Remuneration Terms of Reference
- Administrative Policy 27 – Remuneration for Mayor and Councillors
- Municipal Government Act

Region of Queens Municipality
Citizen Advisory Committee on Council Remuneration
Terms of Reference

1.0 Purpose and Authority

1.1 The Citizen Advisory Committee on Council Remuneration ("the Committee") is hereby established by Council pursuant to Sections 24 and 26 of the Municipal Government Act (MGA) for the purpose of providing independent, time-limited advisory recommendations to Council regarding the remuneration provided to the Mayor and Councillors.

1.2 The Committee shall conduct a review of Administrative Policy 27 – Respecting Remuneration for Mayor and Councillors, including comparative practices, governance and legislative considerations, fiscal context, and policy clarity.

1.3 The Committee is advisory only. Final decision-making authority remains with Council.

2.0 Mandate

2.1 The Committee shall:

a) Review the current RQM Administrative Policy 27.
b) Review relevant comparator municipalities and best practices.
c) Consider governance, legislative, and financial implications of remuneration levels.

d) Identify options for policy updates, including potential adjustments to remuneration.
e) Prepare and submit a Final Advisory Report to Council no later than February 28, 2026.

3.0 Term of Committee

3.1 The Committee is established as a temporary, task-specific advisory body.

3.2 The Committee shall dissolve automatically upon:

a) Submission of the Final Advisory Report to Council, or
b) March 1, 2026,

whichever occurs first.

4.0 Membership

4.1 The Committee shall be composed of three to five (3–5) citizen members, appointed by Council.

4.2 Applicants shall have experience in governance, legislation, public policy, finance, or related fields.

4.3 Municipal staff may attend meetings as resource personnel (non-voting).

4.4 No members of Council shall serve on this committee.

5.0 Appointment Process

5.1 A public call for applications shall be issued beginning December 10, 2025.

5.2 Applications shall be submitted via email to the Municipal Clerk no later than January 2, 2026, and must include a brief summary of relevant experience and a statement of interest.

5.3 The Municipal Clerk shall review submitted applications and, together with relevant staff, assess and select applicants who demonstrate the required knowledge and experience to serve on the committee.

5.4 Council shall appoint Committee members by motion at the first regular Council meeting in January 2026.

6.0 Meetings

6.1 The Committee shall meet twice in January 2026 and once in February 2026 at dates determined by the Clerk in consultation with members.

6.2 A majority of appointed members shall constitute a quorum.

6.3 The Committee shall elect a Chair at its first meeting.

6.4 Meetings shall be open to the public unless closed in accordance with MGA provisions.

7.0 Procedures

7.1 Meetings shall follow RQM's Procedural Policy for committees.

7.2 Decisions shall be made by consensus or majority vote.

7.3 Minutes shall be prepared by the Municipal Clerk or designate.

8.0 Conflict of Interest and Conduct

8.1 Committee members shall disclose any real or perceived conflict of interest.

8.2 Members shall adhere to RQM respectful conduct expectations and policies.

9.0 Staff Support

9.1 The Director of People and Culture or designate shall provide logistical, administrative, and policy support.

10.0 Reporting

10.1 The Committee shall submit a Final Advisory Report to Council no later than February 28, 2026.

10.2 Council may invite members to present their report.

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: November 20, 2025

File No: 10350-50-2512-07

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Interim Review of Municipal Planning Strategy and Land Use Bylaw

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Prepared by:	Supervisor:	CAO Concurrence:
M. MacLeod *Director of Land Use*	W. Thorpe *Chief Administrative Officer*	*W. Thorpe* *CAO*

RECOMMENDATION

THAT Council for Region of Queens Municipality directs staff to engage external resources to initiate an interim review of the Municipal Planning Strategy and Land Use Bylaw to address housekeeping items and include the following:

- Commercial uses in residential zones
- Comprehensive regulations for short-term rentals
- Keeping of livestock in residential and rural zones
- Light pollution mitigation and dark sky considerations
- Additional coastal protection measures and climate resilient land use regulations
- Minimum property standards

PURPOSE

Staff are seeking direction from Council respecting the initiation of an interim review of the Municipal Planning Strategy and Land Use Bylaw.

BACKGROUND

Planning provides a framework for the orderly, healthy, and sustainable development of our communities. It entails identifying the types and intensity of land uses that a community feels are appropriate within a planned area, provides direction on sustainable development practices, and reduces conflicts between competing land uses.

A municipal planning strategy (MPS) is one of the tools used by Council to establish this framework to guide positive change and development in the community. The MPS outlines a combination of long-range and short-term goals for the area as a whole, with more detailed guidelines for specific sub-areas, issues or initiatives.

An MPS works within broader objectives established by Council for the Region of Queens Municipality. While issues and areas of focus will vary from one community to another, the MPS looks at some or all of the following policy areas: land use, sustainability, transportation, housing, municipal infrastructure and utilities, natural environment, recreation and open space, community facilities and services, social policy, local economy, heritage, culture, the environment and public safety.

The MPS is intended to address a range of key issues, including:

- demographic changes, including increasing diversity and an aging population;
- changing service needs and high demand for community amenities with limited municipal resources to respond to the demand;
- integrating new developments into existing neighbourhoods;
- providing enhanced and creative ways to connect with residents and other invested parties and ensure broader participation.

While the MPS provides the policy framework respecting planning for the future of communities in Queens, the Land Use Bylaw (LUB) is the principal implementation tool used to meet Council's vision, goals, objectives and policies as detailed in the MPS. The LUB sets out such things as:

- the land-use zones
- permitted uses for these zones
- standards for development

- performance standards
- developments to be considered by development agreement
- developments to be considered by site-plan approval process
- future transportation reserves

The current Region of Queens Municipality MPS and LUB were adopted by Council on May 24, 2022 and became effective as of July 20, 2022. These planning documents apply to all lands within the boundary of the Municipality.

While considerable thought and effort went into the preparation of the current MPS and LUB, like any comprehensive document, they are never perfect. Staff have been working with these documents over the last couple of years and have identified several smaller non-substantive housekeeping items that require correction. There have also been several other issues / concerns that have come to the forefront, which were not envisioned during the review process for the current documents. The MPS and LUB are meant to be living documents and are intended to evolve over time as our communities and the priorities of Council evolve.

The Municipal Government Act sets out that Council shall include policy within the municipal planning strategy on how it intends to review MPS and LUB. As such, this process This is set out in Section 6.8 of the MPS.

At the October 28, 2025 Regular meeting, Council passed the following motion:

> THAT Council direct staff to commence a comprehensive review and revision process for the Region of Queens Municipality Municipal Planning Strategy and Land Use Bylaw, with particular focus on:
>
> - Commercial uses and allowances within residential zones;
> - Regulation and permitting of short-term rentals;
> - The keeping of livestock within residential and rural zones;
> - Light pollution mitigation and related dark-sky considerations;
> - Coastal protection measures and climate-resilient land use provisions; and
> - Minimum property standards.
>
> AND FURTHER THAT staff prepare a report outlining proposed consultation timelines, engagement methods, and anticipated resource requirements to support this review process, for Council's consideration at the Regular Council Meeting on December 9, 2025.

ALTERNATIVES/OPTIONS

Option 1

Council directs staff to engage external resources to initiate an interim review of the Municipal Planning Strategy and Land Use Bylaw to address housekeeping items and include the following:

- Commercial uses in residential zones
- Comprehensive regulations for short-term rentals
- Keeping of livestock in residential and rural zones
- Light pollution mitigation and dark sky considerations
- Additional coastal protection measures and climate resilient land use regulations
- Minimum property standards

Option 2

That Council directs staff to utilize existing internal staff resources to initiate an interim review of the Municipal Planning Strategy and Land Use Bylaw to address housekeeping items and include the following:

- Commercial uses in residential zones
- Comprehensive regulations for short-term rentals
- Keeping of livestock in residential and rural zones
- Light pollution mitigation and dark sky considerations
- Additional coastal protection measures and climate resilient land use regulations
- Minimum property standards

ANALYSIS

Option 1 would enable the interim review to be carried out by external consultants. Although this would not be a full comprehensive review of the planning documents, an interim review is still a significant undertaking, including considerable research, community engagement and drafting of revised documents.

The current planning documents were prepared by the consulting firm *UPLAND Planning and Design*. The projected timeline for this project was 18 months, at a

cost of $140,000. However, due to COVID 19, the project took almost four years to complete. While it is not anticipated that this interim review would take that length of time, the process outline would be similar. Several of the proposed items for consideration under this review are significant and will take time to research and fully consider options.

Option 2 has the interim review being carried out by existing staff within the Land Use Department. The current staffing resources within the Land Use Department would make completing the project in-house challenging. While staff can conduct this review, this project would have impact the Department's ability to carry out other duties and responsibilities.

In the interest of having an interim review of the Municipal Planning Strategy and Land Use Bylaw carried out in a timely manner, Staff are proposing that this work be contracted out to a third-party planning consulting firm. With this in mind, staff are seeking the approval of Council to move forward with a planning review project through the issuance of a request for proposals to engage the services of an integrated land use planning and engineering consulting firm with expertise in the area of land use planning to carry out an interim review of the Region's Municipal Planning Strategy and Land Use Bylaw. Staff anticipate this project would take up to 8 months from the time of hiring the successful consulting firm.

IMPLICATIONS / CONSIDERATIONS

Financial Implications:

Under Option 1, there would be financial implications to hire a consulting firm to carry out the review. The costs would be an unknown until an RFP for consulting services was issued and submissions received.

There would also be financial implications under Option 2. Outside of staff time to carry out the review, there would be associated costs for things like advertising, printing, venue rentals, etc. The costs for Option 2 would be considerably less than under Option 1, however.

Since the implementation of the current planning documents in 2022, Council has been budgeting $15,000 per year and placing into a reserve for future planning review projects such as this. The reserve currently contains

approximately $50,000, which could be used toward the costs of this interim planning review.

Staffing Implications:

Under Option 1 or 2, Staff would have direct involvement in moving the interim review project forward; however, the time spent on the project would be significantly less under Option 1.

Level of Service:

Under Option 1, it is expected that the public would see little change in the level of service that staff provide.

Under Option 2, the Council would expect to see significant impacts to timelines, capacity of staff to move current files forward in a timely manner and capacity of staff to process new files.

LEGISLATION

The *Municipal Government Act* establishes the process for adopting planning documents, and amendments thereto.

Requirements for adoption of planning documents

205 (1) A council shall adopt, by by-law, planning documents.

(2)A by-law adopting planning documents shall be read twice.

(3) Before planning documents are read for a second time the council shall hold a public hearing.

(4) A council shall complete the public participation program before either placing the first notice for a public hearing in a newspaper circulating in the municipality or posting notice of the public hearing on the municipality's website.

(4A) A notice published on the municipality's website under subsection (4) must include the date the notice is posted and remain posted until the public hearing has been completed.

(5) The notice for the public hearing is sufficient compliance with the requirement to advertise second reading of a by-law.

(6) Second reading shall not occur until the council has considered any submissions made or received at the public hearing.

(7) Only those council members present at the public hearing may vote on second reading of the planning documents.

(8) A council shall adopt planning documents, at second reading, by majority vote of the maximum number of members that may be elected to council.

The Act also establishes a requirement that the MPS include policy respecting the periodic review of the planning documents.

Statements of policy in planning strategy

214 (1) A municipal planning strategy must include statements of policy respecting

(c) the implementation and administration of the municipal planning strategy and ***the periodic review of the municipal planning strategy, its implementing land-use by-law*** *and the extent to which the objectives set out in the municipal planning strategy are achieved;*

BYLAWS/PLANS/POLICIES

In relation to MGA Section 214 above, Section 6.8 of the MPS deals with Monitoring, Reviewing and Updating the Plan and is as follows:

6.8.1 Plan Updates

Good plans are not set in stone. While every effort has been made to be thorough in the preparation of this Municipal Planning Strategy, things can change. The assumptions under which this plan was made, the technologies and land use issues of the day, and the values of community members will all change over time. This Plan must be monitored and periodically reviewed and updated to remain effective.

Policy 6-25: Council shall initiate a housekeeping review of this Plan at least once every two years from the completion of the previous review. The intent of this review is to identify errors, omissions, or ways to streamline the Plan; and to update Chapter 7, Investing in the Future.

Policy 6-26: Council shall initiate an interim review of this Plan at least once every five years from the completion of the

previous review. The intent of this review is to identify emerging policy issues and gaps in the Plan, and adopt new or modified Plan policies to address these issues and gaps.

Policy 6-27: Council shall initiate a comprehensive review of this Plan within ten years of adopting this Plan. The intent of this review is to conduct extensive public consultation, review the Vision and Goals of the Plan, and update or replace components of the Plan as necessary to support the new Vision and Goals.

Council has also adopted an Operational Policy respecting public participation (*Policy Number 31 - Public Participation Program*) which is to be utilized for the preparation of municipal planning strategies and land use bylaws and amendments thereto.

COMMUNICATIONS

A requirement under a request for proposals would be submission of a detailed communication / engagement plan, outlining how the consultant plans to deal with communicating and engaging with the public during the project.

SUMMARY

The current Municipal Planning Strategy and Land Use Bylaw were adopted and became effective in July of 2022. Section 214(1)(c) of the *Municipal Government Act* sets out that a municipal planning strategy must include statements of policy respecting periodic review of the planning documents. With this, Section 6.8 of the MPS sets out a process for periodic reviews of the planning documents, and includes:

- initiate a housekeeping review of this Plan at least once every two years
- initiate an interim review of this Plan at least once every five years
- initiate a comprehensive review of this Plan within ten years

In working with the new planning documents over the last couple of years, Staff have identified several smaller non-substantive housekeeping items that require correction. There have also been several other issues / concerns that have come up, which were not envisioned during the review process for the current documents.

At the October 28, 2025 Regular meeting, Council directed staff to commence a comprehensive review and revision process for the Region of Queens Municipality Municipal Planning Strategy and Land Use Bylaw. Staff recommend Council direct staff to engage external resources to initiate an interim review of the Municipal Planning Strategy and Land Use Bylaw to address housekeeping items and include commercial uses in residential zones, comprehensive regulations for short-term rentals, keeping of livestock in residential and rural zones, light pollution mitigation and dark sky considerations, additional coastal protection measures and climate resilient land use regulations and minimum property standards.

ATTACHMENTS/REFERENCE MATERIALS

- Region of Queens Municipal Planning Strategy and Land Use Bylaw
- Municipal Government Act - Planning and Development (Part VII)
- Policy Number 31 - Public Participation Program
- October 28, 2025 Council Minutes

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: December 4, 2025

File No: 10350-50-2512-08

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Administrative Policy No. 59 - Sewer Fees

Prepared by:	Supervisor:	CAO Concurrence:
A. Grant *Director of Infrastructure*	*W. Thorpe* *Chief Administrative Officer*	*W. Thorpe* *CAO*

RECOMMENDATIONS

1) THAT Council for Region of Queens Municipality approve Administrative Policy 59 – Sewer Fees Policy.

2) THAT Council for Region of Queens Municipality direct staff to remove all fees included in Bylaw 11 – Regulation of Discharges to the Public Sewer Systems.

PURPOSE

To create a policy that establishes fees related to municipal sewer services by the Region of Queens.

BACKGROUND

Region of Queens Municipality operates two sewer systems in Queens County, Central sewer and the Queens Septage Facility. Central sewer is provided to residents in the communities of Caledonia, Liverpool, Milton and Brooklyn, with

charges levied in accordance with Bylaw 11. The Queens Septage Facility at 138 Hank Snow Drive receives and treats bio-liquid waste from customers who have on-site systems.

Fees associated with public sewer systems in Queens County are currently included in Bylaw 11 – The Regulation of Discharges to the Public Sewer Systems. However, best practice is to separate fees out of bylaws, to enable adjusting fees without requiring the associated bylaw to be repealed and replaced. The draft fee policy would establish a framework of charges by removing the existing charges from Bylaw 11 and the charges for septage disposal from the schedule of charges for Solid Waste Tipping. Currently in Bylaw 11 there is no fee associated with the following:

- Administration fee
- Account creation fee
- Missed appointment
- Sewer connection
- Special service

The current bylaw does state:

> 10.16 Every person connecting to the public sewer system shall pay the building sewer connection charge therefor as may from time to time be set by the Council of the Region.

However, it does not establish what that charge is. What is proposed is the addition of charges which mirror the framework currently in use by our water utility to establish parity throughout Queens County where these fees are applicable to water customers only. As an example, a customer in South Queens connecting to the water system will pay numerous fees and charges as established, whereas a customer in South Queens connecting only to the sewer system will not be charged despite both scenarios presenting a very similar administrative and operational burden.

Included in the current version of Bylaw 11, but not included in this policy are the following items:

> 10.4 Hospitals, homes with medical care facilities and public schools shall pay an annual sewer charge based on an Equivalent User Unit as set out in Schedule "A" of this bylaw, but in no case shall hospitals, homes with medical care facilities and public schools pay more than three thousand twenty-five dollars ($3025.00) for their annual sewer service charge.

10.5 Laundromats shall pay an annual sewer service charge based on an Equivalent User Unit as set out in Schedule "A" of this bylaw, but in no case shall laundromats pay more than nine hundred sixty-eight dollars ($968.00) for their annual sewer service charge.

It is recommended by staff that these caps are removed from the pending bylaw review at that time as they establish an inequity at implementation of user fees. The sewer system operates on a cost recovery model derived from contribution by users, known as 'Equivalent User Units' (EUU). EUU is a widely adopted, standardized measurement mechanism which establishes proportional equity between users. As an example, a single-family home is 1.0EUUs, whereas an 8-unit apartment building is 8.0 EUUs.

Establishing this policy is the first step in the review of Bylaw 11 and will allow the revised bylaw to appropriately focus on more regulatory aspects. Staff will present the revised bylaw to Council in early 2026. Following approval of the revised bylaw, staff will then complete a fulsome rate review to ensure that the revenue generated meets Council's desired level of service.

ALTERNATIVES/OPTIONS

1) Council approves Administrative Policy 59 – Sewer Fees.

2) Council directs staff to remove all fees included in Bylaw 11 – Regulation of Discharges to the Public Sewer Systems.

3) Council directs staff to continue to include rates for public sewer systems in Bylaw 11.

ANALYSIS

Option 1: If Council adopts Administrative Policy 59 – Sewer Fees, rates for municipal sewer services will be moved from a bylaw to a policy. Currently, the rates are included in Bylaw 11 – Sewer Bylaw which is currently under review and will be presented to Council for first reading in the coming months. Establishing the relevant fees outside of the bylaw will provide for them to be updated annually in a more fluid manner. No changes to the rates are proposed at this time.

Option 2: Including fees only in the policy will avoid confusion, ensuring fees are listed in a single document.

Option 3: Staff will continue with review of the sewer bylaw and build the fees into that document.

IMPLICATIONS

During the current fiscal year, there have been more than six new sewer connections to the municipal sewer system and 10 new accounts created. Under the proposed fee structure, this would have resulted in $3,000 in revenue.

COMMUNICATIONS

Council direction will be reflected in bylaws and policies posted on the Municipality's website.

BYLAWS/PLANS/POLICIES

Bylaw 11 – Regulation of Discharges to the Public Sewer Systems

SUMMARY

Region of Queens Municipality operates two sewer systems in Queens County, Central sewer and the Queens Septage Facility. To reflect best practice, fees associated with services would be included in policies, rather than bylaws. Staff recommend Council direct staff to approve Administrative Policy xx – Sewer Fees Policy and remove all fees included in Bylaw 11 – Regulation of Discharges to the Public Sewer Systems.

ATTACHMENTS/REFERENCE MATERIALS

- Administrative Policy No. 59 – Sewer Fees (Draft)

Region of Queens Municipality

Administrative Policy No. 59 – Sewer Fees

BE IT ENACTED by the Council of Region of Queens Municipality, under the authority of the *Municipal Government Act*, S.N.S. 1998, Chapter 18, as follows:

This policy shall be known as Administrative Policy No. 59 and may be cited as the "SEWER FEES POLICY".

POLICY PURPOSE

The purpose of this policy is to establish a schedule of charges for municipal sewer services.

AUTHORITY

Sections 47 and 48 of the *Municipal Government Act* provide that:

47(1) Council shall make decisions in the exercise of its powers and duties by resolution, by policy or bylaw.

48(3) In addition to matters specified in this Act or another Act of the Legislature, the council may adopt policies on any matter that the council considers conducive to the effective management of the municipality.

ACCOUNTABILITY

Responsibility for the oversight and implementation of this policy shall lie with the Director of Finance.

EFFECTIVE DATE

This policy shall take effect from the date of approval by Council.

VERSION LOG

Version Number	Amendment Description	Amendment/Policy Owner	Approved By	Approval Date
1.0	**Creation of Policy**	**Director of Infrastructure**	**Council**	

OFFICIAL CERTIFICATION

THIS IS TO CERTIFY THAT this policy was passed by the Council of Region of Queens Municipality at a duly constituted meeting of said Council held on the XXth day of XXXXX, 202X. SIGNED by the Mayor and Municipal Clerk this XXth day of XXXXX, 202X.

_____

Mayor

_____

Municipal Clerk

SCHEDULE 'A'

MUNICIPAL SEWER FEES		
FEE TYPE	**FEE ($)**	
Sewer service charge	$261.36 per equivalent user unit	
Administration Fee	$60	
Account Creation Fee	$60	
Missed Appointment Charge	$50 ($200 After Hours)	
Sewer Connection Fee	Existing Lateral	$400
	Replacement lateral	Actual Cost
Special Service Charge	Actual Cost	
Septage Disposal – within Queens	$0.0335 per mton	
Septage Disposal – outside Queens	$0.0443 per mton	

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: December 4, 2025

File No: 10350-50-2512-09

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Administrative Policy No. 60 - Solid Waste Fees

Prepared by:	Supervisor:	CAO Concurrence:
A. Grant *Director of Infrastructure*	*W. Thorpe* *Chief Administrative Officer*	*W. Thorpe* *CAO*

RECOMMENDATION

THAT Council for Region of Queens Municipality approve Administrative Policy No. 60 – Solid Waste Fees.

PURPOSE

To create a policy that establishes fees related to solid waste services by the Region of Queens.

BACKGROUND

The Region of Queens Municipality operates the Queens Solid Waste Facility at 3750 Highway 8 Milton, NS. As of December 1, 2025, this facility accepts the following material:

- Solid waste
- Construction and demolition waste
- Organics
- Scrap metal, paints, lightbulbs

- Household Hazardous Waste

The Region of Queens Municipality also provides curbside collection to residents of Queens County and provides organics green carts for their use. As well, the Municipality offers a loan program for waste receptacles as community events.

The policy attached is two parts with charges levied at the solid waste facility as well as fees applicable outside of the facility. In previous years, tipping fees at the facility were approved by Council in the winter of each year and advertised on the municipal website but never contained within a municipal policy. Additionally, with the closure of the materials recovery facility, the current schedule of fees is incorrect as it indicates that the Queens Solid Waste Facility accepts recyclables – which is now untrue. No change the in rates previously approved by Council in February 2025 are proposed at this time. Staff will return to Council in February 2026 with proposed rate changes.

Additionally in the policy for Council's consideration is an account creation fee of $60 for commercial accounts. The proposed amount is reflective of the amount charged under water and wastewater account creations. As well, there is the addition of fees related to organics carts and multi-stream receptacles. Currently, the Region of Queens provides unlimited green carts to residential and ICI at the Municipality's expense. Requests for replacements are completed by the Department Infrastructure without question and currently cost $8,000 to $10,000 which does not include the expense of staff to deliver these throughout the County. Staff recommend that the property owner bearing these assets would be responsible to protect them from damage and neglect, rather than be included as an expense within the operating budget. The Public Works Division has numerous sets of multi-stream receptables which are currently loaned out on a first-come basis. Similar to the organics carts, when materials are damaged at return, they are repaired or replaced by the operating budget and not the borrower. The fees proposed reflect the actual cost to the Municipality at the most recent procurement.

ALTERNATIVES/OPTIONS

1) Council approves Administrative Policy No. 60 – Solid Waste Fees
2) Council directs staff to provide additional information before considering approving Administrative Policy No. 60 – Solid Waste Fees

ANALYSIS

Option 1: If Council adopts Administrative Policy No. 60 – Solid Waste Fees, staff will have clear direction on the rates applicable to waste streams and other charges as they relate to the implementation of Bylaw 13 – Solid Waste Bylaw. No changes in the rates as most recently adopted are proposed at this time; the change is administrative only. Staff will in February 2026 propose any changes to the rates, if necessary, that would take effect April 1, 2026.

Option 2: Current rates are approved in February each year, distributed to commercial contractors and posted on the municipal website. These current rates include Queens ICI and out of County recyclables which is contrary to provincial legislation as it pertains to extended producer responsibility as well as the closure of the Materials Recovery Facility.

IMPLICATIONS

It is expected that the account creation fee of $60 will create an additional $1800 in revenue which will offset the expense of staff time.

Annually, Public Works delivers approximately 50 organics carts to residents and businesses in Queens County. Invoicing the replacement cost of these is expected to generate $6,750 in additional revenue. Adding the cost of staff time will also help to recover approximately 0.25 FTE (full-time equivalent) staff position which is the direct expense of delivering carts to ICI, or replacement residential carts. Both of these fees are intended to encourage proper handling by property owners to reduce damage.

COMMUNICATIONS

Council direction will be reflected in policies posted on the Municipality's website.

BYLAWS/PLANS/POLICIES

N/A

SUMMARY

Administrative Policy 60 – Solid Waste Fees establishes a policy for solid waste related fees, maintains agreement with relevant provincial legislation and reflects the current state of municipal operations.

ATTACHMENTS/REFERENCE MATERIALS

- Administrative Policy No. 60 – Solid Waste Fees

Region of Queens Municipality

Administrative Policy No. 60 – Solid Waste Fees

BE IT ENACTED by the Council of Region of Queens Municipality, under the authority of the *Municipal Government Act*, S.N.S. 1998, Chapter 18, as follows:

This policy shall be known as Administrative Policy No. 60 and may be cited as the "SOLID WASTE FEES POLICY".

POLICY PURPOSE

The purpose of this policy is to establish a schedule of charges for solid waste disposal services provided by the Municipality.

AUTHORITY

Sections 47 and 48 of the *Municipal Government Act* provide that:

47(1) Council shall make decisions in the exercise of its powers and duties by resolution, by policy or bylaw.

48(3) In addition to matters specified in this Act or another Act of the Legislature, the council may adopt policies on any matter that the council considers conducive to the effective management of the municipality.

ACCOUNTABILITY

Responsibility for the oversight and implementation of this policy shall lie with the Director of Finance.

EFFECTIVE DATE

This policy shall take effect from the date of approval by Council.

VERSION LOG

Version Number	Amendment Description	Amendment/Policy Owner	Approved By	Approval Date
1.0	**Creation of Policy**	**Director of Infrastructure**	**Council**	

OFFICIAL CERTIFICATION

THIS IS TO CERTIFY THAT this policy was passed by the Council of Region of Queens Municipality at a duly constituted meeting of said Council held on the XXth day of XXXXX, 202X. SIGNED by the Mayor and Municipal Clerk this XXth day of XXXXX, 202X.

_____

Mayor

_____

Municipal Clerk

SCHEDULE 'A'

FEE TYPE		FEE ($)	
SOLID WASTE			
Commercial Account creation Fee		$60	
New Organics Green Cart		Free to residents $125.00 each for ICI*	
Replacement Organics Green Cart		$125.00 each*	
Mini Organics Bin		Free to residents $40.00 each for ICI*	
Replacement Mini Organics Bin		$40.00 each*	
Multi-stream event carts and receptacles	Public Event	Refundable deposit equal to replacement value	
	Private Event*	Refundable deposit equal to replacement value	
***** Additional charge of the actual cost of delivery will be added.			
Queens Solid Waste Facility 3750 Highway 8 Tipping Fees per metric ton			
Material	Generated within Queens		Generated outside Queens
	Residential	Commercial	
Residual Waste*	No charge	$145.82	
Sorted C&D Waste*	No charge	$51.61	$79.80
Mixed C&D Waste*	No charge	$83.50	
Recyclables	No charge	Not accepted	
Organic Waste*	No charge	$143.00	
Metal	No charge	$51.66	
*Subject to closure fee			
Contaminated Soil	$67.14		

Region of Queens Municipality
Staff Report
For the Regular Meeting of
December 9, 2025

Date: December 4, 2025

File No: 10350-50-2512-10

To: Mayor and Council

From: Willa Thorpe, CAO

Subject: Operational Policy No. 99 - Winter Maintenance

Prepared by:	Supervisor:	CAO Concurrence:
A. Grant *Director of Infrastructure*	*W. Thorpe* *Chief Administrative Officer*	*W. Thorpe* *CAO*

RECOMMENDATION

THAT Council for Region of Queens Municipality approve Operational Policy No. 99 – Winter Maintenance.

PURPOSE

To create a policy that outlines Council's preferred level of service for winter operations.

BACKGROUND

The Region of Queens Municipality provides winter maintenance throughout Queens County with the majority focused on the community of Liverpool. This ensures municipal transportation infrastructure, including roads, sidewalks, and public facilities, are managed effectively during snow, ice, and other winter weather events or conditions, while providing a consistent, transparent, and measurable level of service throughout the community.

Currently, no policy exists for this service and staff operate reactively each season. Establishing this policy will provide clarity for staff as winter maintenance is provided while also providing a clear expectation to residents and provides an opportunity to balance community safety and accessibility with the Municipality's financial and operational capacity.

ALTERNATIVES/OPTIONS

1) Council adopts Operational Policy No. 99 – Winter Maintenance.
2) Council directs staff to maintain the current approach to winter maintenance.
3) Council directs staff to consider additional information and return with a new draft.

ANALYSIS

Option 1: If Council adopts Operational Policy No. 99 – Winter Maintenance, staff will have certainty in how to approach this season's effort. The draft policy as included, puts into terms the historic practice as it has evolved over the years.

Option 2: Staff will continue to operate as they have in previous years, using their judgement in resource allocation and responding variably through the season.

Option 3: Staff will incorporate Council direction in an updated draft policy.

IMPLICATIONS

N/A

COMMUNICATIONS

Public communications will be developed and circulated on social media to residents.

BYLAWS/PLANS/POLICIES

N/A

SUMMARY

The Region of Queens Municipality provides winter maintenance throughout Queens County with the majority focused on the community of Liverpool. Currently, no policy exists for this service and staff operate reactively each season. A winter works policy would define the priority for staff during winter maintenance and provide clarity for the public on services they can expect to

receive. Staff recommend that Council approve Operational Policy No. 99 – Winter Maintenance.

ATTACHMENTS/REFERENCE MATERIALS

- Operational Policy No. 99 – Winter Maintenance (Draft)

Region of Queens Municipality

Operational Policy No. 99 – Winter Maintenance

BE IT ENACTED by the Council of Region of Queens Municipality, under the authority of the *Municipal Government Act*, S.N.S. 1998, Chapter 18, as follows:

> This policy shall be known as Operational Policy No. 99 and may be cited as the "WINTER MAINTENANCE POLICY."

POLICY PURPOSE

The purpose of the Winter Maintenance Policy is to define the level of service for winter operations at Region of Queens Municipality. It ensures that Municipal transportation infrastructure (roads and sidewalks) and public facilities are managed effectively during snow, ice, and other winter weather events or conditions, while providing a consistent, transparent, and measurable level of service throughout the community.

AUTHORITY

Sections 47 and 48 of the *Municipal Government Act* provide that:

47(1) Council shall make decisions in the exercise of its powers and duties by resolution, by policy or bylaw.

48(3) In addition to matters specified in this Act or another Act of the Legislature, the council may adopt policies on any matter that the council considers conducive to the effective management of the municipality.

ACCOUNTABILITY

Responsibility for the oversight and implementation of this policy shall lie with the Chief Administrative Officer of Region of Queens Municipality.

SCOPE

The Winter Maintenance Policy shall apply to Municipal assets under the jurisdiction of Region of Queens Municipality.

DEFINITIONS

Anti-icing: is the application of a chemical or other agent to prevent or reduce the opportunity for precipitation or frost to bond to the surface.

De-icing: is the application of a product such as road salt or traction sand to the top of the snow, frost or iced surface to promote melting of the snow, frost or ice or provide traction.

Cross-cuts: a crossing point where the elevation of the sidewalk meets the road surface to provide access to crosswalks or accessible parking stalls.

Minor Storm: a weather system that is forecast to produce less than 10 cm of snow (or precipitation mixture) in one continuous event as forecast.

Major Storm: a weather system that is forecast to produce more than 10 cm of snow (or precipitation mixture) in one continuous event as forecast.

Forecast: Interpretation by staff of available forecasts, combining published information from Environment Canada and other available resources such as Municipal weather stations and the Emergency Management Office appropriate Queens County communities.

Pre-wetting: the application of a liquid into the sand or salt at the time of application.

Snow Plowing or Scraping: the use of equipment or devices to move (or remove) snow from accumulating on a surface.

Passable Lane: Cleared roadway that may have an accumulation of snow or slippery surfaces. May be limited to a single cleared lane on a local roadway. Passable by typical vehicles equipped for winter conditions.

Travelled Lane: the travelled lane is the asphalt surface from the road centerline, the width of the marked lane (multi-lane roadways) or the equivalent of a lane width on a two-lane roadway.

Arterial Roadways: Major roadways within the community which connect vital services (i.e.: access to Queens General Hospital from Highway 103). Typically defined as a high-capacity urban road that serves to accept traffic from collector roads and as a primary route for local traffic. (Schedule B).

Collector Roadways: Roadways that connect local roadways to the main arterial roadways. (Schedule B).

Local Roadways: The remainder of the roadways within the community that feed into the collector roadways, typically comprised entirely of residential properties with low volumes. These do not include lanes or private property (Schedule B).

Department of Infrastructure Contact: Telephone: 902-354-7170. Available 24 hours a day, 7 days per week, providing a public point of contact to the Public Works Division.

PRIORITY

Priority for winter maintenance shall be as follows:

1. Arterial Roads and sidewalks providing selective access to the following facilities:
    - Public Works Garage
    - Hillsview Acres Home for Special Care
    - Municipal Services Building (including Ancillary Building)
    - Municipal Administration Building
    - Liverpool Business Development Centre
    - Queens Place Emera Centre
    - Queens Waste Management Facility
2. Collector Roads and Sidewalks, selective Downtown Parking, including:
    - Waterfront Parking Lot
    - Main St. parking between Legion St. and Carten St.
3. Local Roads and Sidewalks, increasing access to stalls in parking lots
4. Deferred Locations:
    - Municipal Waste Collection Sites ("Grey Boxes"),
    - Dry Hydrants,
    - Pine Grove Park,
    - Ground Search & Rescue,
    - Town Hall Arts & Cultural Centre

ALTERNATIVE RESPONSE FOR EMERGENCY SITUATIONS

Notwithstanding the above, the Director of Infrastructure (or designate), in response to a developing emergency, may deviate from the priority arrangement presented above to improve emergency response by other agencies. For example, the Director may reallocate resources working on Priority

Level 1 to provide winter maintenance at a Dry Hydrant (Priority Level 4) at the request of first responders before resuming Priority Level 1 efforts.

LEVELS OF SERVICE

This Policy is in effect from December 1 to March 31. Winter maintenance outside of this time frame will be conducted based on resource availability, which may vary from the policy and procedures outlined.

The objective of winter maintenance is to promote access for motorists and pedestrians throughout the community by exposing a travel lane (or bi-directional lanes on arterial roadways). Priority will be provided to emergency vehicles and first responders. During a minor or major event, the goal will be to create passable lanes based on the rate and accumulation of precipitation during the event.

Regular application of anti-icing materials will be used as preventative measures to control the development of ice and/or frost and provide a barrier between the surface and accumulation. The anti-icing materials will be applied following the Priority Listing.

De-icing will be applied once the bare asphalt begins to show, allowing for melt-off and preventing re-freezing. Snow-packed travel ways will be treated with de-icing materials to provide traction, particularly when temperatures aren't favourable for other de-icing agents such as salt to be effective.

Service levels for a minor storm event will focus on anti-icing streets and intersections, with plowing of the streets as a secondary goal based on the rate of accumulation. The approach for a major storm will be to shift the focus to plowing operations, followed by anti-icing operations or a combination of plowing with anti-icing along Priority 1 assets. Winter storm events vary in duration, intensity and potential accumulation. These factors will be considered in resource deployment as a response. Focus will continue, in most cases, on the first and second priority until the end of the storm event. This will result in a limited number of residential roads being plowed prior to the end of the event.

Regular inspection of Priority 1 and Priority 2 assets during a snow event will be a proactive measure to ensure resources can be redirected back to those routes if conditions worsen. This will be done by or under the direction of the Manager of Public Works (or designate) and will be scheduled based on existing conditions and short-term forecasting.

Priority 3 assets shall commence once Priority Level 1 and Priority Level 2 assets have been completed, or as resources permit.

Schedule A provides the level of service expected at each asset during and at regular intervals following the conclusion of a typical winter weather event.

EFFECTIVE DATE

This policy shall take effect from the date of approval by Council.

VERSION LOG

Version Number	Amendment Description	Amendment/Policy Owner	Approved By	Approval Date
1.0	**Creation of Policy**	**Director of Infrastructure**	**Council**	

OFFICIAL CERTIFICATION

THIS IS TO CERTIFY THAT this policy was passed by the Council of Region of Queens Municipality at a duly constituted meeting of said Council held on the XXth day of XXXXX, 202X. SIGNED by the Mayor and Municipal Clerk this XXth day of XXXXX, 202X.

_____

Mayor

_____

Municipal Clerk

SCHEDULE A

Asset	ACTIVE STORM	POST STORM		
		6-Hours	12-Hours	48-Hours
Arterial Roads	Anti-icing may be applied before the storm. Both lanes are actively maintained but may be snow-covered. Anti-icing is applied at steep grades (more than 7%) and arterial intersections.	Both lanes are plowed; bare asphalt may be showing.	Both lanes are cleared to bare asphalt.	
Collector Roads	Anti-icing may be applied before the storm. A single access lane is cleared at regular intervals to provide access to arterial roads. Anti-icing is applied at steep (more than 7%) grades and intersections.	Both lanes have been plowed but remain snow-packed.	Both lanes are cleared, bare asphalt may be showing	Both lanes are cleared to bare asphalt
Local Roads	Anti-icing may be applied before the storm.		Both lanes have been serviced, but remain snow-packed. De-icing material may be applied.	Both lanes are cleared, with some bare asphalt showing.
Arterial Sidewalks	Anti-icing may be applied before the storm. A minimum of 1.0m of sidewalk is maintained as well as cross-cuts. The surface may be snow-covered and cross-cuts snow-packed. Anti-icing is applied at steep grades (7%) and intersections.	A minimum of 1.2m of sidewalk is maintained, as well as cross-cuts. Surface plowed, with some bare sidewalk showing and snow-covered crosscuts.	Full width of sidewalk is plowed (less street windrow), as well as cross-cuts. Surface is, and cross-cuts are bare.	

SCHEDULE A (continued)

Collector Sidewalks	Anti-icing may be applied before the storm. Typically snow-packed.	A minimum of 1.0m of sidewalk is maintained as well as cross-cuts. The surface may be snow-covered and cross-cuts snow-packed.	A minimum of 1.2m of sidewalk is maintained, as well as cross-cuts. Surface generally cleared, with some bare sidewalk showing and snow-covered crosscuts.	Full width of sidewalk is maintained, as well as cross-cuts. Surface is, and crosscuts are bare.
Local Sidewalks	Anti-icing is applied before the storm. Generally, snow-packed.	Generally, snow-packed.	A minimum of 1.2m of sidewalk is maintained as well as cross-cuts. The surface may be snow-covered and cross-cuts snow-packed.	Full width of sidewalk is maintained, as well as cross-cuts. Surface generally cleared, with some bare sidewalk showing and snow-covered crosscuts.
Public Works Garage (including Hank Snow Drive)	Maintain access to entrances, including garage bays, as well as access to fuel pumps and de-icing materials. Surfaces may be snow-covered.		Access to entrances, including garage bays, and parking as well as access to fuel pumps and de-icing materials. Surfaces are bare on asphalt and snow packed in gravel.	Access around sewer lagoons
Hillsview Acres	As outlined in the current snow clearing and removal agreement			
Municipal Services Building	Access to apparatus bays, the ancillary building, as well as parking stalls along Henry Hensey Drive. Surfaces may be snow covered.			

SCHEDULE A (continued)

Municipal Administration Building	The parking lot on the South side of White Point Rd and the front walkways should be serviced regardless of office closure. Surfaces may be snow covered.		All asphalt parking lots are serviced, with some bare asphalt showing. All entrances and sidewalks cleared with some bare surfacing.	All asphalt parking lots are serviced, with some bare asphalt showing. Gravel parking lot is snow packed. All entrances and sidewalks cleared with some bare surfacing.
Liverpool Business Development Centre	Priority parking sections as identified in Schedule B to be plowed, and entrances and exits to be maintained to allow egress. Surfaces will be snow-covered.	Priority parking section (Schedule B) are serviced, with some bare asphalt showing. All entrances and sidewalks cleared with some bare surfacing.		Entire parking lot is serviced, with some bare asphalt showing. All entrances and sidewalks cleared with some bare surfacing.
Queens Place Emera Centre	Priority parking sections as identified in Schedule B to be plowed, and entrances and exits to be maintained to allow egress. Surfaces will be snow-covered.	Priority parking section (Schedule B) are serviced, with some bare asphalt showing. All entrances and sidewalks cleared with some bare surfacing.	Entire parking lot is serviced, with some bare asphalt showing. All entrances and sidewalks cleared with some bare surfacing.	
Ground Search & Rescue	Priority parking sections as identified in Schedule B to be plowed. Surfaces will be snow-covered.	Priority parking section (Schedule B) are serviced and remain snow covered.		Entire parking lot are serviced but may remain snow packed.
Town Hall Arts & Cultural Centre	Front sidewalk to be serviced. Surface will be snow covered.		Front sidewalk to be cleared with some bare surfacing. Entrances and exits to be cleared during RQM regular business hours. Parking lot cleared but snow covered.	The entire parking lot is serviced, with some bare asphalt showing. All entrances and sidewalks cleared to bare surface.

SCHEDULE A (continued)

Downtown Parking	Priority parking sections, as identified in Schedule B to be plowed. Surfaces will be snow-covered.		The entire parking lot is serviced, with some bare asphalt showing.	
Queens Waste Management Facility	Parking near the maintenance garage is cleared, as well as the main road and scales, public drop off and leachate pond. Surfaces will be snow-covered.		Parking near the maintenance garage is cleared, as well as the main road and scales, public drop off and leachate pond. Gravel surfaces will be snow-packed.	
Pine Grove Park				Parking area at Milton Rd plowed. Gravel surfaces will be snow-packed.
Community Waste Collection Sites ('Grey Boxes')				Access to bins cleared. Surface may be snow-covered or snow-packed. Apply traction
Dry Hydrants				Access road and turning point cleared around the hydrant head. Surface may be snow-covered or snow-packed.

Winter Maintenance

SCHEDULE B

Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
Printed:
Scale: 1:7,662
Reference Scale: 1 centimeter equals 0.08 kilometers

November 21st 2025
To: Municipality of the Region of Queens
Council and Administration

Re: Request for Renaming of Queens Place Drive to Dogwood Lane

Dear Members of Council,

On behalf of the Queens Home for Special Care project team, I am writing to formally request consideration for renaming the section of road recently added by your Public Works team as an extension to the existing Queens Place Drive. The requested name is Dogwood Lane. This name will be in keeping with the new facility's name being revealed on Friday November 28th.

As you know, the new facility will reside on this new stretch of roadway. With the amalgamation of Queens Manor and Hillsview Acres into a unified, modern facility, this project represents an important milestone for our community - reflecting both our history and our future. As we approached discussions around the naming of the road, it became clear that we wanted a name that honours the identity of Queens County, the natural landscape that surrounds us, and the thoughtful work that has gone into shaping this home.

The dogwood tree, found throughout the region, has long been associated with the Queens area. It is a familiar and meaningful local symbol - one that residents, families, and staff will instantly recognize. Naming the roadway Dogwood Lane provides a natural, welcoming connection between the home and the broader community it serves. It also offers a clear, standalone identity as we merge the operations of the two existing homes into this new, shared space.

We understand that, while this request does not fall neatly within the Municipality's Operational Policy 6 – Naming and Renaming of Roads, Council retains the authority to approve road names for municipally owned roads. Based on the guidance provided, we are submitting this formal letter of request so that the proposed name may be brought forward for Council's consideration.

We appreciate your time and support as the project moves toward completion, and we would be happy to provide any additional information you may require.

Thank you for your attention to this request.

Respectfully submitted,

Andrew MacVicar
Administrator, Queens Home for Special Care