



Staff Report

Administration – Chief Administrative Officer

Report To: Council Meeting
Meeting Date: July 13, 2026
Report Number: ADM.26.054
Title: KPMG Capital Project Delivery Review
Prepared by: Adam Smith, Chief Administrative Officer

A. Recommendations

THAT Council receive Staff Report ADM.26.054, entitled “KPMG Capital Project Delivery Review”;

AND THAT Council accepts KPMG’s Capital Project Delivery Review Report as the final performance audit and investigative exercise into the delivery of the Mill Street Pumping Station, Bay-Grey Street Linear Works and Craigleith Lift Station;

AND THAT Council direct staff to implement the recommendations of KPMG’s Capital Project Delivery Review including making necessary revisions to the proposed Capital Project Reporting Framework;

AND THAT Council direct staff to facilitate training opportunities and resources to further develop maturity in the Town’s capital project management program.

B. Overview

The purpose of this staff report is to provide Council with KPMG’s Capital Project Delivery Review Report. Contained within the report is an assessment of the bundled projects being the Mill Street Pumping Station, Bay-Grey Street Linear Works and Craigleith Lift Station. It serves to assess the process and construction environment underpinning the management of the projects and in turn, strategize around the Town’s approach to these types of projects in the future.

C. Background

At the April 20, 2026 Council meeting, Council provided the following direction:

THAT, with respect to Staff Report ADM.26.024, entitled “Performance Audit Re: Craigleith SLS, Mill Street SPS and Bay-Grey Linear Works Projects”, Council direct staff to move forward with an agreement with KPMG (inclusive of technical expertise) up to a maximum of \$100,000 (plus HST) to conduct a capital project delivery review.

During the same meeting, Council also directed the following:

THAT Council endorses a scope that will focus on elements of project management including but not limited to: anatomy of the business case, process integrity, internal decision-making including escalation frameworks, financial oversight, risk management; and the adherence to procurement and other appropriate policies; The organizational structure to support system wide improvements to accountability and governance including staff-Council reporting relationship touch points;

AND THAT the final report is to be delivered to Council no later than July 13, 2026

In retaining KPMG an aggressive project timeframe was established that required the timely submission of project documentation and interviews with key members of staff that have been involved in the project at varying points. The culmination of this work is a report that is forward-looking and focused on identifying opportunities to strengthen procurement strategy, governance, and execution.

D. Analysis

In reviewing the final report presented by KPMG, staff believe it aligns with the scope identified through resolution by Council on April 30th, 2026. Offered below are high-level linkages from the KPMG report to the Council direction from a staff perspective noting that staff respected the independence of KPMG in completing their assessment with feedback on the report focused primarily on informing context to the management of the projects.

Anatomy of the business case

The Town's capital strategy reflects strong foundational planning practices. Projects were appropriately informed by environmental assessments, asset management planning, growth projections, and system capacity analysis, demonstrating that infrastructure needs were identified through a structured and defensible planning process. In addition, the decision to bundle projects reflected a logical attempt to coordinate interdependent wastewater system upgrades and improve delivery efficiency.

However, project definition did not keep pace with scope evolution. Early approvals—including engineering budgets, funding strategies, and grant applications—were based on conceptual (Class C/D) estimates that did not fully capture system-wide requirements, constructability considerations, or regulatory complexity. As engineering progressed, the project expanded significantly to include corridor reconstruction, stormwater infrastructure, outfall works, and system optimization measures.

Staff Considerations: KPMG recommended further linking capital approvals to project definition and estimate maturity including the requirement that major capital approvals clearly identify project scope, estimate class, confidence level, needed contingencies and key assumptions so there is understanding of approval-stage uncertainty. The recently approved Budget Policy entrenches this requirement with the next step being operationalizing within the 2027 Budget process. Further, the guidelines within the Policy and KPMG's report will be used

inform budgetary amendments that may be necessary for projects that emerge particularly as grant opportunities emerge.

Process Integrity

The Town's governance framework was consistent with common municipal practice, with Council approvals tied to capital budgets, procurement awards, and funding decisions. Senior management and staff were actively engaged, and governance was exercised through both formal approvals and ongoing coordination between staff and the engineering consultant.

However, governance checkpoints were primarily budget-driven rather than through planning, design and delivery stage gates. There was a lack of stage-gate control; being defined checkpoints through the project lifecycle requiring reassessment of scope, cost, risk, funding, and readiness before advancing from one phase. Further, many decisions related to scope adjustments, interpretation of cost estimates, contingency assumptions, and funding implications were developed at the staff–consultant level before Council reporting, reducing visibility into assumptions and trade-offs underlying the recommendations.

Staff Considerations: KPMG has recommended additional 'stage gate' controls and that at each gate, the Town defines required inputs, approval authorities, decision criteria, and documentation expectations so that project readiness is validated before advancement. Currently, stage gate control is applied through the design process (30%, 60%, 90%) and there are meetings associated with each check-point. Depending on complexity, bi-weekly project meetings can occur. There is the opportunity to embed additional controls into this process from an 'owner' perspective including formalizing project management tools such as change logs, risk registers and utilizing a RASCI (Responsible, Accountable, Supportive, Consulted, Informed) framework that is iterative through concept, design and construction.

Internal decision-making including escalation frameworks

Escalation of risks/issues to senior management or Council was largely triggered by funding constraints or procurement events, rather than by predefined thresholds (e.g., cost variance, contingency use, or risk exposure). Cost pressures were identified progressively but were not escalated through defined thresholds, resulting in late escalation of cumulative impacts.

Staff Considerations: KPMG recommended that the draft Capital Project Reporting Framework include defined escalation thresholds for scope changes, schedule delays, contingency use, funding compliance risks, and changes in projected final cost. In concurrence with KPMG, staff believe this would create consistency in the visibility of emerging issues and reduce reliance on judgment-based escalation.

Financial Oversight

Managing multiple project components within a single program-level funding envelope reduced the ability to identify and escalate project-level cost pressures early. Emerging risks were escalated at certain points, but not consistently at the point of when scope, cost, contingency,

or schedule pressures first exceeded defined thresholds. This limited the Town's ability to pause, reassess, or adjust strategy earlier in the project lifecycle.

Staff Considerations: Among the opportunities identified include implementing project-level financial tracking within bundled programs: For programs with multiple projects, require each project to track budget, actuals, contingency, forecast final cost, tender results, and funding sources separately. This would improve transparency and enable earlier identification of cost pressures affecting specific elements of a program. While the practice of bundling projects has concluded, consideration is being given to ensuring capital reporting even with individual projects following a standardized template in compliance with the Budget Policy and Capital Project Reporting Framework.

Risk Management

Project controls did not keep pace with the complexity of the program. Early budgets were based on preliminary estimates without sufficient contingency or formal re-baselining as design matured. Risk, variance, and contingency controls were not consistently documented through defined thresholds or escalation triggers, which meant cumulative cost pressures became visible late in the lifecycle.

Risks were discussed and managed through meetings and technical reports but were not consistently documented through formal risk registers with defined ownership, mitigation strategies, or escalation triggers.

Staff Considerations: Generally, the Town does not maintain a formal suite of project management templates and tools. For major capital projects, regular project meetings and associated logs are catalogued to navigate decision-points and issues associated with capital projects. Instituting standardized templates can be developed but ensuring they are used in a consistent manner and with confidence will require additional support. Risk registries are an immediate next step that are beginning to be utilized and will be engrained within the Capital Project Reporting Framework.

Adherence to procurement and other appropriate policies

Procurement practices were executed in accordance with established municipal policies and reflected sound practical judgment. The Town demonstrated an understanding of contractor market dynamics. These decisions align with typical municipal practice and were generally appropriate given the technical nature of the work. However, procurement strategy was not supported by a formal evaluation framework, and several limitations emerged tied to reliance on past practice, limited integration with capital planning, timing sensitivity and procurement as a cost validation mechanism.

Staff Considerations: The appendices to the KPMG report outline practices other municipalities employ in broadening the role of procurement in the capital planning process. Understanding these are large urban centers, further evaluation of their methodology underpinning procurement strategy is required alongside assessing internal capacity to move beyond the focus on tender preparation, assessing bid compliance and maintaining the integrity of the

procurement process. Among the opportunities is further integration of ‘owner’ controls into tender documents such as standardized project management tools (risk registries, issue logs etc.) In addition, further investigation will be required into opportunities for cost validation beyond the tendering process recognizing there will always be a degree of variability from design to construction. Focus can be directed to reviewing and formalizing practices to calculate contingency amounts to address inherent risk in class estimates.

The organizational structure to support system wide improvements to accountability and governance including staff-Council reporting relationship touch points

Importantly, many recommendations offered by KPMG are in-flight and in operationalizing these new policies, staff are confident the Town can advance along the maturity scale with respect to managing complex capital projects. The internal capability to manage capital projects exists but there are opportunities to further formalize practices related to stage-gate approvals, risk management and cost assurance. In the immediate term, standardized templates and tools particularly related to risk registries, change logs and formalized escalation triggers beyond what has already been addressed through the Budget Policy can all be considered within the scope of the Capital Project Reporting Framework.

New methodologies to project management introduce a scale of change that if not appropriately resourced, will inevitably fail. Concurrent with the priority on bringing forward a revised Capital Project Reporting Framework to Council, is the need to procure additional third-party support to institutionalize new practices that typically have been relied upon by engineering consultants. This could include a combination of workshops with staff, standard template design and piloting the use of a third-party to act as the municipality’s project manager over certain initiatives. While subject to available budget, this could be considered in the follow-up report with regards to the Capital Project Report Framework that is being targeted for Fall 2027.

E. Strategic Priorities

1. Communication and Engagement

We will enhance communications and engagement between Town Staff, Town residents and stakeholders

2. Organizational Excellence

We will continually seek out ways to improve the internal organization of Town Staff and the management of Town assets.

3. Community

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

F. Environmental Impacts

N/A

G. Financial Impacts

There are no financial impacts associated with the recommendation to this staff report. While certain recommendations in the KPMG report will require third-party support to implement, these will be considered in future staff reports and in the 2027 Budget.

H. In Consultation With

Serena Wilgress, Manager of Procurement and Risk Management

Allison Kershaw, Manager of Water and Wastewater

Mike Humphries, Senior Infrastructure Coordinator

I. Public Engagement

The topic of this Staff Report has not been the subject of a Public Meeting and/or a Public Information Centre as neither a Public Meeting nor a Public Information Centre are required. However, any comments regarding this report should be submitted to Adam Smith, Chief Administrative Officer cao@thebluemountains.ca.

J. Attached

1. KPMG Capital Project Delivery Review Final Report

Respectfully submitted,

Adam Smith
Chief Administrative Officer

For more information, please contact:
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Report Approval Details

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Attachments:	- Blue Mountains Final Report 08 July 26.pdf
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This report and all of its attachments were approved and signed as outlined below:

Adam Smith - Jul 9, 2026 - 1:07 PM



Town of The Blue Mountains

Capital Project Delivery Review

Final Report

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July 7, 2026



Disclaimer

This document has been prepared by KPMG LLP (“KPMG”) for the Town of the Blue Mountains (“the Town” or “Client”) pursuant to the terms of our engagement agreement with Client dated May 5, 2026 (the “Engagement Agreement”). KPMG neither warrants nor represents that the information contained in this report is accurate, complete, sufficient or appropriate for use by any person or entity other than Client or for any purpose other than set out in the Engagement Agreement. This report may not be relied upon by any person or entity other than Client or for any purpose other than set out in the Engagement Agreement. This report may not be relied upon by any person or entity other than Client, and KPMG hereby expressly disclaims any and all responsibility or liability to any person or entity other than Client in connection with their use of this report.

The information provided to us by Client was determined to be sound to support the analysis. Notwithstanding that determination, it is possible that the findings contained could change based on new or more complete information. KPMG reserves the right (but will be under no obligation) to review all calculations or analysis included or referred to and, if we consider necessary, to review our conclusions in light of any information existing at the document date which becomes known to us after that date. Analysis contained in this document includes financial projections. The projections are based on assumptions and data provided by Client. Significant assumptions are included in the document and must be read to interpret the information presented. As with any future-oriented financial information, projections will differ from actual results and such differences may be material. KPMG accepts no responsibility for loss or damages to any party as a result of decisions based on the information presented. Parties using this information assume all responsibility for any decisions made based on the information.

No reliance should be placed by Client on additional oral remarks provided during the presentation, unless these are confirmed in writing by KPMG.

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

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KPMG Team Members

Bruce Peever, Engagement Partner

Jamie Cameron, Partner (Capital Project Delivery Specialist)

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Esther Lin, Lead Financial Analyst

Yash Chaurasia, Lead Project Management Analyst

Norbert Barat, Analyst

01

Project Overview

Introduction

Introduction

Establishes the purpose, scope, and context of the review, defining the program and key objectives.

01 Objectives

02 Drivers

03 Approach

Project overview



Project Objectives – *How did we define success?*

This engagement reviewed the procurement process used for the Town's recent major infrastructure program, including the bundled delivery of a \$53 million capital scope encompassing upgrades to the Mill Street Pump Station, linear works on Bay Street, and upgrades to the Craighleith facility.

While acknowledging that construction cost escalation and budget overages were being experienced broadly across the municipal sector, Council has expressed specific interest in understanding whether the Municipality's procurement policy, strategy, and implementation practices remain fit for purpose for large, complex infrastructure projects supported by grant funding.

This engagement was designed as a forward-looking process review, focused on identifying opportunities to strengthen procurement strategy, governance, and execution — rather than attributing fault for past outcomes. The objectives of the engagement were to:

- Assess the effectiveness of procurement strategies and processes used on the project;
- Assess the maturity of capital project delivery at the Town, with emphasis on major capital programs;
- Identify enhancement opportunities that could reduce risk, improve cost predictability, and strengthen governance on future projects;
- Provide Council and senior staff with practical, actionable recommendations to improve how large infrastructure projects are procured and delivered.



Project Drivers – *What problem are we trying to solve?*

- Improvement-Oriented Lens: The review focused on what can be done better going forward — what could be strengthened, clarified, or modernized — rather than assigning blame for past decisions.
- Context-Aware Assessment: Findings were assessed considering market-wide conditions, including construction inflation, contractor capacity constraints, and current industry pricing dynamics.
- Proportionality: Recommendations be practical and scalable, recognizing the municipality's size, capacity, and governance environment.
- Transparency: The review process, findings, and conclusions will be clearly documented and traceable to evidence.



Project Timing

The project has commenced on May 14, 2026, and completed by the end of June 2026.

Work plan

Our approach to the project was divided into four phases.



02

Assess

Project History, Procurement & Framework

Project History, Procurement & Framework

Examines how the project was planned, procured, and delivered, and identifies how evolving scope, cost, and complexity challenged existing controls.

- 01 Project Evolution
- 02 Procurement and Delivery Approach
- 03 Governance and Controls
- 04 Key Delivery Dynamics

Project context & evolution

The Craigleith Sewage Lift Station, Mill Street Pumping Station, and Bay–Grey Street Linear Works program emerged from a set of legitimate infrastructure needs that, over time, evolved into a much larger and more complex municipal capital initiative. The program was originally driven by a combination of wastewater system capacity constraints, aging infrastructure, environmental assessment outcomes, and the need to support future growth within the Town’s servicing areas. As planning progressed, these individual infrastructure needs became increasingly interconnected, leading the Town to advance the work as a bundled program rather than as a series of stand-alone projects.

What began as targeted wastewater upgrades ultimately developed into an integrated infrastructure corridor project that combined wastewater, stormwater, water, and roadway components. This evolution reflected both technical logic and practical delivery considerations. Bundling created opportunities to coordinate engineering, reduce duplication, and align construction activity across interdependent assets, and increasing the scale, complexity, and financial interdependence of the overall program. By the time the project entered detailed design and procurement, it no longer reflected a conventional single-asset capital project, but rather a multi-component capital program requiring stronger planning, governance, and financial oversight than would typically be needed for a more discrete infrastructure undertaking.

A further driver of the program’s evolution was the successful pursuit of external infrastructure funding. The Town secured significant provincial support through the Housing-Enabling Water Systems Fund, helping make the broader program financially achievable but also introduced new timing, eligibility, and delivery pressures. The availability of grant funding supported accelerated and coordinated delivery, but it also increased the importance of alignment between scope, budget, procurement sequencing, and project readiness. As later stages of design revealed more fully developed scope requirements and more robust cost information, the tension between early funding assumptions and the eventual cost of the program became increasingly significant.



This context is important to the review as it explains the underlying nature of the project: the Town was not delivering a typical capital project, but rather a rapidly evolving, grant-supported, multi-asset infrastructure program within a conventional municipal delivery model. The purpose of the review is therefore not simply to revisit individual project decisions, but to assess whether the Town’s procurement strategy, governance practices, and capital delivery framework were tolerably mature and suited to a project of this scale and complexity. The sections that follow trace how the program evolved, cost and scope changed over time, and what this experience suggests for future large capital projects.

Project history summary

The Craigleith Sewage Lift Station (SLS), Mill Street Sewage Pumping Station (SPS), and Bay–Grey Street Linear Works projects (**together referred to as the “program”**) originated through capital planning processes driven by engineering master plans, environmental assessments (EAs), and asset management considerations. The projects were identified by:

Wastewater system capacity constraints and growth projections

End-of-life infrastructure identified through asset management planning

Annual capacity reports identifying service limitations to support existing properties and new development

Year	Phase	Summary of Key Activities and Decisions
2022	Project initiation and early planning	- Single asset, Craigleith SLS upgrade, evolves into a multi-asset initiative by including the Mill Street SPS upgrade. - Approved \$2.0M for engineering work. Introduced bundling to improve efficiency and coordination of engineering work between Craigleith SLS and Mill Street SPS projects.
2023	Procurement of engineering services	- Tendering of engineering services for the bundled Craigleith SLS and Mill Street SPS projects; \$2.2M contract. - Scope expanded to include Bay Street reconstruction. Engineering budget increased to \$2.6M. Transition from discrete asset upgrades to a more integrated infrastructure program by combining water, wastewater, roadway, and outfall infrastructure under a single capital project delivery program.
2024	Design development and funding application	- Engineering advanced from conceptual Class D to preliminary and detailed design. Total program cost estimated at \$35M. - Housing-Enabled Water Systems (HEWS) grant secured \$25.4M based on preliminary Class C/D cost estimates. - The HEWS grant incentivized bundled delivery to meet funding deadlines and housing growth objectives.
2025	Design maturation and cost evolution	- Engineering advanced to Class A design revealing significantly higher costs of \$53M. \$19M funding gap emerges. - Tenders of Craigleith SLS and Bay–Grey Street Linear Works confirm cost escalation. - Council approves budget increase to \$53M in December 2025.
2026	Governance enhancements	- Investigations highlight governance and reporting gaps - New controls and reporting frameworks are being implemented

Project history in 2022

Project scope transformation

The Town's original project scope initially conceived as a set of targeted wastewater infrastructure upgrades to address known system deficiencies and growth requirements within the Craigleith–Thornbury servicing area. The original scope, as approved by Council in 2022, comprised three primary elements:

- Upgrade and expansion of the Craigleith Sewage Lift Station (SLS).
- Upgrade of the Mill Street Sewage Pumping Station (SPS).
- Construction of a sanitary forcemain to connect the Mill Street Sewage Pumping Station with the Thornbury wastewater treatment plant.

This scope reflected infrastructure priorities identified through the Town's environmental assessment (EA) processes, wastewater servicing analysis, and asset management planning to address capacity limitations, end-of-life assets, and growth-related servicing requirements.

At the time of initial approval, the scope was **conceptual in nature**, supported by high-level cost estimates and preliminary engineering inputs rather than fully developed designs and cost estimates to formulate early budget figures.

Description	Amount	Notes
Craigleith SLS upgrades: original approved scope and 2021 capital budget	\$1,285,000	2021 approved budget included engineering, construction and contingency. Budget was carried forward in 2022 and reallocated to support a broader wastewater engineering project.
Expanded project scope of Craigleith SLS, Mill Street SPS, and sanitary force main engineering work	\$2,000,000	Revised 2022 budget was approved for the engineering work. Funding sources were identified as: • \$1M from Wastewater Asset Replacement Reserve Fund • \$1M from Wastewater Development Charges
Total construction cost estimate	\$12,110,000	The estimated construction cost was identified for future years, and not part of the 2022 budget.

Scope transformation decision

The original Craigleith SLS project scope was a standalone project focused on capacity upgrades. In early 2022, as the Town was completing its environmental assessment, broader system issues were identified and the project scope expanded to an integrated system redesign solution to address capacity, growth, system resilience concerns.

- Scope evolved from individual wastewater system expansion projects to a coordinated multi-component infrastructure program.
- Budget moved from “construction-ready project” to “front-end engineering investment” to determine the construction cost of system expansion.
- The revised funding approach reflected the dual purpose of addressing both existing infrastructure deficiencies and future growth requirements.

Project history in 2023

Project bundling

The Town adopted a strategy of bundling multiple infrastructure components into a single coordinated program at the engineering and planning stage with the objective of improving overall value for money.

1. Two of the three original components were functionally interdependent and formed part of a broader wastewater servicing solution. Upgrades to one component would not fully achieve the intended capacity or performance outcomes without corresponding upgrades to the others. As such, bundling was seen as a logical approach to ensure that system-wide requirements were addressed cohesively.
2. Bundling was expected to improve **efficiency in project delivery**, particularly at the engineering stage. The Town aimed to accelerate design timelines, coordinate sequencing across assets, and enable more timely tendering with construction market conditions.
3. Bundling was anticipated to generate **cost efficiencies**, by reduced duplication in consulting services, contract administration, site coordination, procurement efforts.

Staff reflected that the bundling decision was based on prior capital project experience and perceived efficiencies instead of conducting a formal business case supported by structured governance and evaluation criteria.

Description	Amount	Notes
Tendering of engineering services for the bundled Craigleith SLS and Mill Street SPS projects	\$2,200,000	Tendering results of engineering services exceeded the approved \$2M budget. Council approved to increase budget to \$2.2M.
Project expanded to include engineering work of: • Full Bay-Grey Street reconstruction	\$2,550,000	Project bundled further into a multi-asset corridor rebuild and the engineering budget increased to \$2.55M. Additional funding sources were identified to support the expanded scope of work.
Thornbury WWTP outfall engineering work	\$2,200,000	The Thornbury WWTP outfall project was a separate capital initiative. While not part of the bundled Craigleith SLS, Mill Street SPS, and Bay-Grey Street program, engineering coordination activities occurred where project delivery timelines and construction interfaces overlapped.

Continuous scope expansion from capital project to integrated infrastructure program

As the program progressed through engineering design, the scope evolved significantly beyond the initial wastewater-focused definition. Key scope additions included:

- Full reconstruction of Bay Street and Grey Street (including road, water, wastewater, and stormwater infrastructure)
- Integration of additional system components
- Optimization measures, such as the elimination of an existing pumping station through revised system configuration
- Enhanced design requirements reflecting updated engineering standards, including climate change considerations and increased flow capacity.

These changes were not the result of a single decision, but rather occurred incrementally through the design process, as additional technical information, asset condition data, and system requirements became available. While the Town had experience with bundled project delivery prior to this program, **it did not have a formal governance framework** to manage an integrated infrastructure program. The shift from standalone projects to bundled delivery introduced interdependencies and shared budget risk.

Project history in 2024

Detailed design development & funding application

Engineering advanced from conceptual to detailed design during 2024. During this period, the Town applied to the Housing-Enabling Water Systems (HEWS) Fund based on preliminary design estimates ranging from approximately \$30M to \$34.8M and successfully secured \$25.4M in provincial funding.

The grant incentivized a bundled capital delivery approach to support housing capacity expansion, with an expected completion date of March 2027. As a result, the program's funding model evolved to rely more heavily on provincial infrastructure grants to reduce pressure on reserves and the tax levy. In turn, the program became increasingly time-sensitive to align with funding requirements.

An additional \$1.34M in Housing-Enabling Core Services (HECS) funding was also secured to support municipal bridges, culverts, and guiderails.

Due to technical complexity, public consultation requirements, and political concerns, each component of the program – Craigeleith SLS, Bay-Grey Street reconstruction, and Mill Street SPS – progressed at differing rates through design development. This variation ultimately led to the decision to separate the construction works into three distinct tenders in 2025.

Description	Amount	Notes
2024 approved construction budget	\$30,600,000	Budget based on preliminary design estimates received from the engineering consultant. Funding allocation: \$1,065,000 – Parks & Recreation Development Charges \$4,263,000 – Wastewater Asset Replacement Reserve \$25,272,000 – Wastewater Development Charges
HEWS funding application	\$34,791,129	Program cost estimated adjusted to \$34.8M for the HEWS application.
HEWS funding award	\$25,397,524	The Town secured \$25.4M in HEWS funding. <i>Note: Staff subsequently discovered that incorrect numbers from the engineering estimates were used in the funding application. Staff reached out to the Province for opportunity to access additional funding, recognizing an additional 25% contingency may have been available in the grant application. Under the Town's Transfer Payment Agreement, the Province indicated that cost overruns are the responsibility of the municipality.</i>

Development of 2024 Wastewater Master Plan

Following the 2023 capital project expansion—during which engineering budgets increased to \$2.55M and scope was expanded to include corridor reconstruction and components of the WWTP outfall works—the Town transitioned into a system-wide planning phase in 2024 with the initiation of a Wastewater Master Plan.

The Master Plan built on previously approved capital projects and studies and evaluated long-term infrastructure requirements to accommodate full build-out growth across the municipality. Initial findings confirmed that, while recent projects addressed critical near-term capacity constraints, significant additional investment would be required to address system-wide limitations at pumping stations, trunk sewers, and treatment plants.

The program's early conceptual estimates and associated HEWS funding application were completed prior to finalization of the 2024 Wastewater Master Plan. The Master Plan subsequently informed and guided the program's detailed design development.

Project history in 2025

Design maturation and cost evolution

As engineering advanced, program cost estimates progressed from Class C/D estimates to Class A (tender-ready) estimates. This progression resulted in significant cost increases driven by the addition of scope elements, greater definition of design and quantities, and the integration of interdependent works, all of which were further informed by the 2024 Wastewater Master Plan.

Program components advanced at varying rates through the design development phase. By mid-2025, total program cost estimates had increased from \$34.8M to \$53.8M. Tendering results subsequently confirmed that the observed cost escalation was primarily attributable to scope and design maturation, rather than market pricing pressures alone.

In December 2025, Council approved a \$19M budget increase and concurrently directed the implementation of enhanced governance and financial controls in response to the magnitude of the variance.

Program component	Class C/D estimate (2024)	HEWS funding application (2024)	Class B estimate (2025)	Class A estimate issued for tender (2025)	Tender award value (2025)	2025 approved budget	2025 revised budget	June 2026 budget reported to COW
Engineering	-	\$2,775,200 + 25% contingency	-	-	\$2,479,646	\$2,775,200	\$2,775,200	\$2,775,200
Craighleith SLS	\$7,268,000	\$5,067,900 + 25% contingency	\$9,134,105	\$7,739,000	\$8,977,900	\$32,015,929	\$51,015,929	\$9,135,910
Bay-Grey Street	\$15,590,878	\$12,472,703 + 25% contingency	No formal estimate	\$19,794,621	\$20,338,000			\$20,695,950
Mill Street SPS	\$10,780,000	\$7,517,100 + 25% contingency	No formal estimate	\$19,941,000	Tendered not awarded			\$20,268,299
Utilities relocation & miscellaneous	-	-	-		\$618,313			\$915,840
Total	\$33,638,878	\$34,791,129	No formal total	\$47,474,621	\$32,413,859	\$34,791,129	\$53,791,129	\$53,791,199

Procurement strategy and policy framework

Engineering procurement approach

The Town issued an RFP for engineering services in late 2022, selecting a consultant to deliver design across the bundled program. The decision to bundle engineering services was due to:

- The interrelated nature of wastewater system upgrades.
- A desire to improve efficiency and reduce procurement and construction timelines through coordinated design efforts.

With scope expansion, the program transformed into a broader integrated infrastructure program; however, the Town's governance, procurement, and capital program management practices were not updated at the time to support an integrated infrastructure program.

Construction procurement approach

Construction procurement was undertaken through three separate tenders, despite the projects being bundled for engineering. Key rationales to separate the construction tenders were:

- Different technical disciplines between vertical pumping stations and linear infrastructure and road reconstruction.
- Limited number of capable contractors available in the market to deliver the full program, many were specialized. Contractor pre-qualification was used to engage market interest.
- Construction sequencing constraints required separating the construction tender.
- Design completion timelines varied across infrastructure components.

Procurement policy framework

The Town's procurement policy and strategy is a typical model used by many Ontario municipalities with tiered procurement pathways based on estimated procurement value. Additional tools may be used for capital projects, such as pre-qualification (RFPQ) to screen vendors upfront, cooperative purchasing, and RFI for market testing.

The Town's procurement policy (POL.COR.07.05) and purchasing procedures (FS.08.08) were last updated in 2020 and 2018 respectively and were designed to support purchasing of traditional goods, services, and construction delivery efforts. The policy included traditional risk management controls of:

- Bid deposits
- Performance, labour and material payment and maintenance bonds
- Holdbacks
- Liquidated damages provisions
- Insurance and WSIB compliance

The procurement policy and purchasing procedures were stressed by this integrated infrastructure program as the policies were designed to respond to procurement efforts with defined scopes and budgets. The policies had limited guidelines or mechanisms to manage scope change and cost uncertainty for progressive design-build projects. Cost estimates continued to evolve as design matured and project components progressed through procurement. Changes were addressed through construction addenda. The policy does not have explicit guidance on how to manage a bundled capital program where procurement is staged in phases under three separate tenders as major components reached design readiness.

Procurement history

The program budget was anchored down in 2025 based on the 2024 HEWS funding award amounts that were based on Class C/D estimates. The budget for procurement was not adjusted as Class B and Class A estimates became available leaving no budget room for the procurement of the Mill Street SPS project.

Milestone	Craigleith SLS	Bay-Grey Street Reconstruction	Mill Street SPS
Class D Estimate / Concept to 30% Design	August – October 2023: Initial servicing analysis completed; no detailed design or formal cost estimate.	- March – April 2024: Concept and Class D estimated at \$15,590,877 for HEWS application. - July - September 2024: Public consultation; Council directed preferred forcemain alignment.	- August – October 2023: Initial servicing analysis completed; no detailed design or formal cost estimate. - The April 2024 HEWS application used \$7,517,100 + 25% contingency. - May 2025: 30% designed report reviewed.
Class C Estimate / 60% Design	- April 2024: Class C estimate \$7,268,000 prepared for HEWS funding application. - July – September 2024: Design advanced and service approach validated; scope evolving.	- September – December 2024: Detailed design advancement with scope expansion; utility coordination initiated - February 2025: Class C estimate \$15,821,706.	July 2025: 60% design package reviewed (multi-discipline design involving civil, structural, mechanical, and electrical).
Contractor pre-qualification	January – February 2025: Market engagement initiated; qualified bidders shortlisted for tender.	March – April 2025: Market engagement initiated; qualified bidders shortlisted for tender.	RFPQ done together with Craigleith SLS. Market engagement initiated for qualified bidder.
Class B Estimate / 90% Design	- February 2025: Class B estimate at \$9,134,105 as design specifics became more defined. - April 2025: Near final design completed; tender structure finalized.	May – June 2025: 90% design reviewed and final 100% design completed with cost estimate of \$17,214,906.	- September 2025: Advanced design near completion; preparation for tender. No formal Class B estimate in Town project files. - October 2025: Remaining HEWS funding was estimated at \$13.7M
Issued for Tender	June 2025: Final tender package issued with detailed scope and specifications.	July – August 2025: Final tender package issued; Class A estimate updated to \$25,569,621.	- October 2025: Class A estimate at \$19,941,000. - Issued for tender in May 2026.
Tender Award	- September 2025: Tender closed. Engineering consultant review bids based on Class B Estimates. - October 2025: Tender awarded at \$8,977,900.	October 2025: Tender closed and contract awarded at \$20,338,000 to lowest bidder.	November 2025: Council was informed after the award of the Craigleith SLS and Bay-Grey Street reconstruction that available program budget was exhausted.
Class A Estimate	November 2025: Class A estimate finalized at \$7,739,000 after construction contract award.	February 2026: Class A estimate revised to \$19,794,621 to correct estimation error.	Not finalized yet.

Project delivery management framework

While the Town applied a traditional design–bid–build (DBB) model, delivery of the program in practice extended beyond a conventional, discrete DBB approach. Scope definition, cost estimating, funding alignment, and construction packaging continued to evolve throughout design development, supported by significant consultant-led analysis and staff-level coordination prior to formal Council decision points.

Governance of the Craigeleith SLS, Mill Street SPS, and Bay–Grey Street Linear Works program was exercised through both formal Council approvals and ongoing working-level collaboration between Town staff and the engineering consultant. This collaboration was particularly influential in shaping scope, cost assumptions, and alignment with available funding.

While this approach enabled flexibility and real-time coordination as technical information matured, it reduced transparency regarding how key decisions—such as scope adjustments, cost estimates, contingency utilization, funding allocation, and procurement sequencing—were evaluated before being advanced through formal Council reporting.

1

The engineering consultant played a central role in both **technical and financial aspects of program delivery** by leading the following activities:

- Developed progressive engineering designs and cost estimates.
- Prepared pre-tender cost estimates and detailed bills of quantities.
- Supported cost variance analysis between estimates and tender results.
- Provided advisory input to support staff decision-making and Council reporting.

2

Coordination of project scope and budget control was done at the program level under a fixed total funding envelope (inclusive of HEWS funding), instead of tracking Craigeleith SLS, Mill Street SPS, and Bay–Grey Street Linear Works each with its individual project budget.

Scope and cost adjustments were made at the “component level” as a practice of bundling projects; however, tendered prices from Craigeleith SLS and Bay–Grey Street Linear Works depleted available funding for Mill Street SPS.

Competitive tendering was used as the primary mechanism to validate cost assumptions. Cost certainty was achieved at the tender stage.

3

The program did not have a structured change control process. Scope and budget were continuously adjusted in real time through an iterative, design-driving process.

- The scope was not fixed – the scope changed and expanded as engineering design evolved.
- Revised cost estimates were analyzed and documented through technical memos with no structured financial review workflow to adjust budgets.
- Decisions on scope changes, cost adjustments, and cost allocation were made collaboratively between staff and the engineering consultant prior to Council reporting.

4

In practice, governance operated through a two-step model: first, technical, cost, and funding analysis at the staff/consultant level; second, formal approval through Council reporting.

The consultant supported cost explanation and funding allocation while staff focused on budget justification and sequencing Council reporting.

Strong reliance was put on individual judgment and cost control mechanisms were estimation-based and reactive to design maturity and tender outcomes.

Council approvals were tied to budget and funding instead of stage-gate controls or predefined reporting thresholds.

Key delivery milestone shifts

The program experienced three distinct phases of shift

Phase 1 – Strategic Expansion (2022 – 2024)

The project evolved from a focused asset upgrade into an integrated capital program driven by growth and funding opportunities. Decisions during this phase prioritized coordination within the program, funding alignment, and delivery speed, but relied heavily on early-stage assumptions embedding **cost uncertainty and governance complexity**.

- The project shifted from a standalone asset replacement to a broader, system-wide wastewater program, significantly expanding scope and complexity.
- Multiple projects were bundled into a single delivery program to improve coordination and efficiency, but this introduced interdependencies and reduced visibility at the individual project level.
- Concept-level (Class C/D) estimates were appropriate for early budgeting; however, the budget and funding strategy did not sufficiently account for uncertainty of early-stage estimates through contingency, allowance for design development, or formal re-baselining as scope matured.
- Grant timelines, particularly under HEWS, hastened decision-making and required commitments before full technical scope was validated.
- The **capital budget became anchored to early estimates, establishing a baseline that understated both cost risk and potential scope evolution.**

Phase 2 – Cost Reality Emergence (2025)

As the program moved into detailed design and procurement, the gap between early assumptions and actual requirements became clearer. Costs increases were driven by design maturity and scope **definition, rather than escalatory market effects alone**.

- Cost estimates progressed to fully developed Class A design, incorporating detailed quantities, regulatory requirements, and previously undefined scope.
- Costs increased materially through design development, culminating in a program-level cost increase of approximately \$19M.
- Tender results aligned with updated design-stage estimates, confirming that cost increases reflected scope refinement rather than contractor pricing or procurement issues.
- The fixed-price tender process provided cost certainty only once each project component reached tender readiness; it did not, on its own, provide earlier visibility into program affordability or emerging budget pressure.
- Cost pressures emerged progressively during mid-2025 but were not escalated in a structured or timely manner.

Phase 3 – Governance Reset (late 2025-2026)

Following confirmation of the budget overrun, the Town entered a **corrective phase** for this program while also beginning broader improvements to its capital delivery framework. These changes are intended to strengthen governance, transparency, and affordability oversight for future major capital projects. This represents a shift from reactive, project-by-project issue resolution toward a more structured, policy-driven capital delivery model.

- The bundled delivery approach was discontinued in favour of separate project governance to improve cost transparency and accountability.
- Escalation practices is shifting from informal judgment-based processes to defined thresholds, approval checkpoints, and enhanced oversight.
- Reporting to Council evolved from reactive updates to a model focused on early identification and communication of emerging risks.
- New policies are being introduced across budgeting, procurement, and reserves to standardize controls for future capital projects.
- Capital planning is shifting toward a program-level perspective, incorporating prioritization, funding strategy, and long-term financial sustainability.

03

Assess

**Market and Industry Context
Validation**

Validation lens

Market and industry conditions are used to test whether project planning, cost and procurement assumptions remain realistic.

- 01** Macroeconomic trends
- 02** Current market conditions
- 03** Contractor landscape
- 04** Procurement & delivery risk
- 05** Capital delivery implications

Macroeconomic Trends Affecting Major Municipal Projects

Macroeconomic trends provide insight into the delivery environment for major municipal capital projects, including funding constraints, construction cost escalation, infrastructure renewal backlogs, and increasing climate and lifecycle requirements. For the capital delivery review, these trends provide important context for why projects are becoming more expensive, complex, and difficult for municipalities to fund, procure, and deliver.



Structurally high demand for municipal infrastructure



Canadian municipalities own and maintain a major share of public infrastructure, and national/ provincial sources show a persistent backlog. **Municipalities maintain about 60% of Canada's essential infrastructure**, while receiving only 8 cents of every tax dollar. Therefore, municipalities carry most of the cost and responsibility, but do not control enough revenue to comfortably fund major municipal projects. *Source: The Federation of Municipalities Canada*



Cost escalation has moderated but has not gone away



Statistics Canada reported in Q1 2026 that non-residential building **construction costs rose 0.5% quarter-over-quarter, and 3.6% year-over year** across the 15-CMA composite. This leads to direct pressure for municipalities on capital budgets, leaving reduced purchasing power, procurement and delivery challenges, and the heightened risk of cost overruns. *Source: Statistics Canada*



Ontario has large municipal infrastructure backlog



Ontario's **municipal infrastructure backlog was estimated at \$52.1 billion in 2020**, representing the capital spending required to bring municipal assets into a state of good repair. **Roads accounted for the largest backlog, at \$21.1 billion**, with other buildings and facilities at \$9.5 billion and wastewater at \$7.3 billion. This indicates that large projects are being driven not only by growth, but by the need to replace and rehabilitate aging roads, bridges, water systems and municipal facilities. *Source: Financial Accountability Office of Ontario*



Climate resilience and sustainability are increasing project complexity



Municipal projects increasingly include objectives beyond basic asset replacement. Roads, stormwater systems, and wastewater facilities are being planned with resilience, emissions reduction, energy efficiency, and lifecycle performance in mind. This causes projects to require more upfront design coordinator, specialized subcontractors, better lifecycle costing and stronger commissioning, increasing the upfront capital cost and procurement complexity. *Source: Ontario Regulation 588/17 – Asset Management Planning for Municipal Infrastructure*

Impact: At the macro level, municipalities are delivering capital projects within a constrained fiscal and asset renewal environment, where infrastructure backlogs, limited revenue flexibility, and expanding resilience and lifecycle requirements are increasing the scale and complexity of capital planning decisions.

Current Market for Large Capital Projects

While the previous slide describes structural municipal infrastructure pressures, this slide focuses on current market conditions that affect tender pricing, contractor participation, and estimate reliability for large capital projects.

Broader Construction Market Escalation

The broader construction market has experienced sustained cost escalation since the pandemic period, although the pace of escalation has moderated from earlier peaks. Statistics Canada reported that non-residential building construction costs increased by 3.8% year-over-year in Q4 2024, with continuing pressure from skilled labour shortages, labour rate increases, building code changes, and development-related constraints.

Infrastructure Backlog and Input Cost Pressures

Large infrastructure programs have also faced pressure from the scale of public-sector capital pipelines. Infrastructure Ontario's June 2025 market update identified 28 projects in pre-procurement and active procurement with a combined design and construction value exceeding \$30 billion, reflecting continued demand for contractor, consultant, and specialist trade capacity.

The Canadian Construction Association has also identified continuing cost pressure in the construction sector, including elevated input costs and volatility in steel-intensive divisions, concrete, plumbing, and other major construction inputs.



2025 Pricing Conditions

Escalation pressures remained present through 2025, but were no longer uniform across all project types, geographies, or procurement models. Turner & Townsend noted that construction cost escalation in Canada was expected to soften in 2025, but that uncertainty related to tariffs, material supply chains, labour conditions, and infrastructure workload continued to influence pricing

Municipal Infrastructure and Project-Specific Cost Risks

For municipal infrastructure specifically, tariff and trade-related uncertainty has become an additional cost risk. AMO's 2025 municipal tariff modelling materials estimated that tariffs could add approximately \$1 billion to Ontario municipal capital costs, with construction machinery expected to carry a particularly significant burden.

Impact: Taken together, the four market drivers indicate that external cost pressures remained a material factor for municipal capital delivery. While broader construction escalation had moderated from earlier peaks, continued labour constraints, input-cost volatility, infrastructure pipeline demand, tariff uncertainty, and project-specific pricing risks continued to affect estimate reliability and tender-stage pricing for projects like the Town's.

Contractor Landscape for Major Municipal Projects

Contractor market conditions are a key delivery consideration for major municipal projects, as labour constraints, project delays, rising costs, financing pressures, and procurement complexity are influencing bidder behaviour.



Contractor capacity and labour availability remain a delivery risk

Ontario's construction sector employed 578,900 people in 2024, or 7.1% of Ontario's workforce. However, **construction saw the largest decrease in employment, by 4.4% in 2024**. Although labour is not uniformly unavailable, the constraint is more specific, leading for skilled trades, supervisors, project managers and civil crews to be tight when multiple public and private projects compete at once. *Source: Government of Canada – Job Bank*



Contractors are managing labour constraints

Half of contractors in Ontario expect **hiring skilled workers to become more difficult in 2026**, while 70% of firms employ apprentices. This points to a market where contractors are trying to build capacity but still face near-term labour constraints. Municipalities that tender incomplete or poorly coordinated projects may receive fewer bids or higher prices due to labour constraints at contractors. *Source: Ontario Construction Secretariat*



Contractors are adapting to more complex municipal procurement rules

Ontario's Municipal Buy Ontario Procurement Directive took effect in 2026. It requires that for capital infrastructure procurement, municipalities include a list of major goods and services in procurement documents and require vendors to submit a Domestic Supply Chain Plan identifying the sources of listed major goods and services. This adds procurement complexity and could affect cost or lead times for specialized equipment. *Source: Government of Ontario*



Contractors are becoming more selective due to delays being widespread

In Ontario, it was found **that project delays and cancellations are affecting more than half of contractors**. The key drivers for project disruption were identified as escalating material costs, limited access to financing, trade-related uncertainty, and high interest rates. *Source: Ontario Construction Secretariat's 2026 Contractor Survey*

Impact: Contractors in Ontario are operating in a constrained and risk-sensitive market, where skilled labour shortages, widespread project delays, rising costs, financing uncertainty, and more complex procurement rules are causing firms to be more selective in bidding and municipalities to face higher prices, fewer bids, and greater delivery risk.

Procurement and Delivery Risk Environment

Procurement and delivery risks are increasingly shaping municipal capital project outcomes. Tender readiness, risk allocation, contractor capacity, long-lead equipment, and unvalidated project assumptions can directly affect pricing, schedule, bid competitiveness, claims, and change orders.



Tender readiness is becoming a critical success factor

Municipal projects are exposed to bid risk when tender documents are issued before design, permits, utility coordination, quantities, and owner requirements are sufficiently complete. Incomplete tender packages reduce bidder confidence and may lead to exclusions, contingencies, or reduced competition.



Risk allocation is a major driver of bid pricing

Contractors are more selective about the risks they are willing to accept. Where contracts transfer risks that bidders cannot reasonably control, contractors may increase pricing, qualify submissions, or decline to bid. Balanced risk allocation can improve competition and reduce downstream disputes.



Long-lead equipment is becoming a critical path risk

Long-lead equipment can delay municipal projects even when construction labour is available. For major municipal projects, procurement timing for items such as generators, transformers, pumps, and specialized equipment is now a schedule-control issue..



Contractor bid competitiveness is under pressure

Contractors operating near capacity may prioritize projects with clear scope, realistic schedules, strong owner governance, and manageable commercial terms. Municipalities may see fewer bidders or wider bid spreads when projects are complex, compressed, or perceived as high risk.



Change-order risk increases when scope, site conditions, or utilities are uncertain

Change orders often arise when tender documents do not fully reflect actual site conditions, utility conflicts, stakeholder requirements, constructability constraints, or operational needs. Stronger pre-tender validation helps reduce post-award changes, claims, and schedule impacts.

Impact: The procurement and delivery environment for major municipal projects is increasingly risk-sensitive, as incomplete tender packages, poor risk allocation, long-lead equipment, constrained contractor capacity, and uncertain site conditions can reduce bid competitiveness, increase contingencies, and drive schedule delays, claims, and change orders.

Key implications for Capital Project Delivery

The table below summarizes the implications of the market and industry context, highlighting the key takeaways and their relevance to capital project delivery.

Capital Delivery Implications	Macroeconomic Trends	Current Market	Contractor Landscape	Procurement and Delivery
Municipal Capital Delivery	Funding Capacity is a constraint Prioritizing projects carefully is key, as available tax, reserve, and funding sources may not be sufficient to advance all renewal, growth, and service-level needs at once.	Budgets may not hold to tender Even with slower cost escalation, elevated prices can reduce buying power and increase the likelihood of scope reductions, budget increases, or delayed projects.	Contractor capacity may limit delivery Procurement may receive fewer bids, higher pricing, or longer schedules if projects are not well coordinated and easy for contractors to staff.	Tender readiness affects bid outcomes Incomplete designs, permits, utilities, or site information can lead to fewer bids, higher pricing, delays, and change orders
Strategic Considerations	Deferral increases long-term risk Delaying major infrastructure projects may ease near-term budget pressure, but can increase future costs, service disruption risk, and the difficulty of maintaining aging assets.	Competition for market capacity is high Increased need for earlier planning, stronger tender packaging, and clearer project terms to attract contractors, consultants, and specialist trades.	Projects need to be easier to price and deliver Clear scopes, realistic timelines, and balanced contract terms will help attract competitive contractor interest.	Risk allocation drives contractor interest Clear scope, realistic schedules, and fair contract terms can improve bid competitiveness and reduce claims risk.
Capital Planning and Delivery Impact	Projects require stronger upfront planning As projects become more complex, there will need to be more robust design, costing, contractor coordination, commissioning, and lifecycle planning to support long-term affordability and resilience.	Cost estimates need more protection Tariffs, material volatility, and input-cost uncertainty make estimates less reliable, so capital plans should include updated costing, escalation allowances, contingency, and early procurement for high-risk materials.	Procurement complexity can affect market interest Added documentation and sourcing requirements may lengthen procurement, increase costs, and make contractor participation harder to secure.	Early planning reduces delivery delays Long-lead equipment and unresolved assumptions must be addressed early to avoid commissioning delays, cost increases, and service-readiness issues.

04

Strategize

Maturity Model, Observations & Opportunities

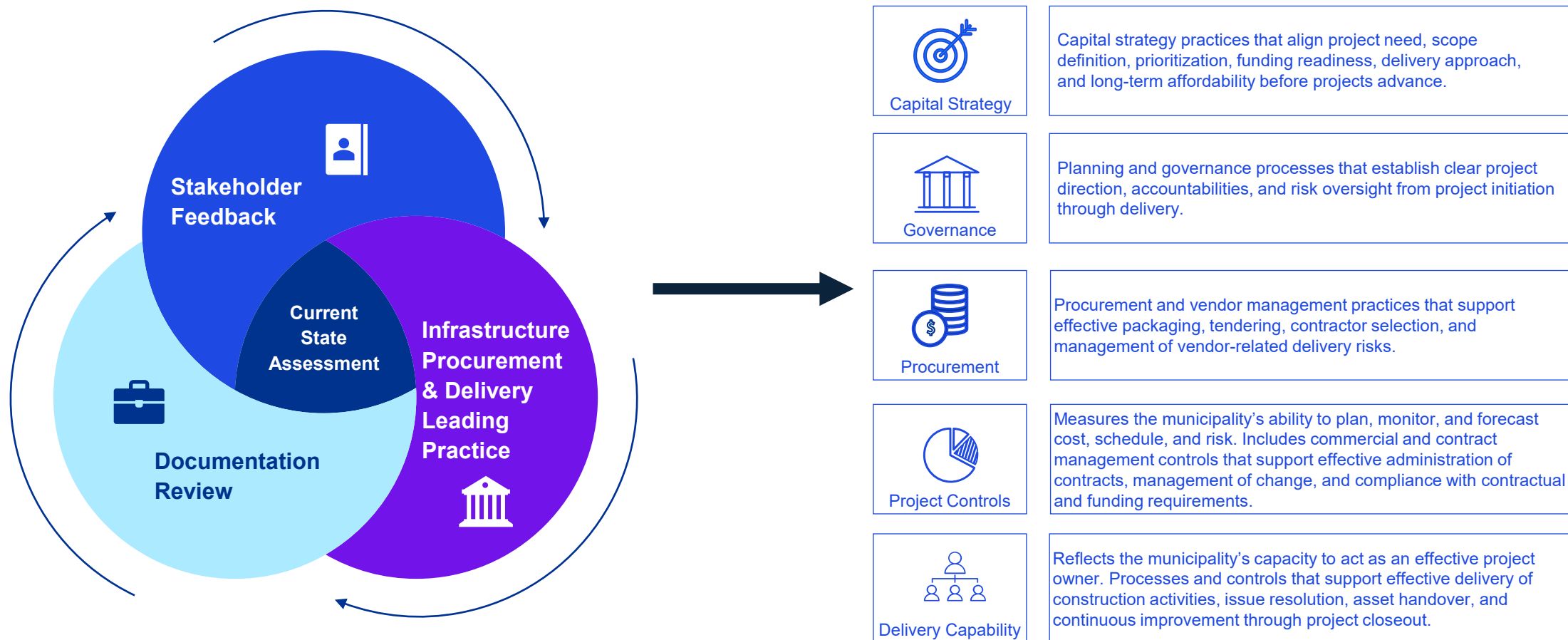
Validation lens

Assesses capital delivery capability against leading practices and identifies targeted opportunities to strengthen project definition, governance, procurement, and cost discipline.

- 01** Maturity Assessment Framework
- 02** Key Observations
- 03** Opportunities for Improvement

Current State Assessment

A clearly defined current state is key to understanding the infrastructure issues, challenges and pain points within an organization, and the first step in the identification of gaps and potential improvement initiatives. A key tool in assessing the current state is a Capital Delivery maturity model. A **capital delivery maturity model** is a framework used to assess and improve an organization's infrastructure delivery capabilities over time. It breaks down infrastructure practices into stages or levels of maturity, from basic to advanced, and helps organizations understand where they stand and what steps are needed to progress. Information gathered from stakeholder feedback, Infrastructure procurement and delivery leading practice, documentation review and stakeholder feedback were used to assess Town's current state.



Understanding Maturity Models

What it is

A structured framework that describes how practices evolve from reactive to consistent, integrated, and strategic.

It helps assess: capability, capacity, consistency, integration across functions, and readiness to manage risk and complexity.

Key idea: the value is not the score – it is the conversation about readiness, priorities and risk.

Why it matters

Provides a natural, practical way to:

- Explain risk without personalizing issues
- Identify gaps between current and required capability
- Prioritize limited resources
- Align governance, capacity and systems
- Support clearer conversations with Council and leadership

Risk emerges when complexity grows faster than systems, controls, and capacity.

From scorekeeping to better conversations

Reactive		Structured		Leading	
Domain	Reactive	Developing	Managed	Integrated	Strategic
Capital Strategy	Projects are reactive or plan-informed, with inconsistent scope definition, prioritization, and funding alignment.	Projects follow a defined process with business cases, clear scope, and structured prioritization before approval.	Projects are rigorously defined using cost, risk, and sequencing criteria aligned to funding realities.	Capital planning is integrated across functions, with projects managed as part of a coordinated portfolio.	Decisions are data-driven and risk-informed, with readiness, funding, and delivery strategy fully aligned.
Planning, Governance & Risk	Oversight exists but roles, reporting, and decision rights are inconsistent and often reactive.	Governance is structured with defined roles, stage-gates, and clear escalation pathways.	Governance is actively applied with thresholds, consistent reporting, and documented decisions.	Governance is standardized across projects with portfolio-level visibility into risks and performance.	Governance is predictive and analytics-driven, enabling early issue identification and timely decisions.
Procurement & Vendor Management	Procurement relies on default or precedent-based methods with limited market or complexity analysis.	Procurement methods are selected using defined criteria aligned to project size, complexity, and risk.	Procurement strategies align with market conditions, contractor capacity, and delivery requirements.	Procurement is integrated with capital planning to balance competition, efficiency, and outcomes.	Procurement is market-informed and adaptive, using intelligence and learning to optimize delivery models.
Project Controls	Cost, schedule, and risk controls are basic or inconsistent, with issues often identified late.	Projects use defined baselines, risk registers, and structured reporting aligned with project stages.	Controls are actively managed with forecasting, escalation thresholds, and cost/schedule reconciliation.	Controls are integrated across projects, providing portfolio-level visibility into performance and risk drivers.	Advanced controls enable scenario forecasting and data-driven decisions using market and risk intelligence.
Delivery & Closeout	Delivery relies heavily on consultants, with developing internal capability and inconsistent practices.	Project management and contract administration roles are defined, with improved internal oversight.	Delivery capability is established, with active contract management and systematic lessons learned.	The municipality operates as a consistent owner, aligning internal capacity and using consultants strategically.	A mature owner's function is embedded, with continuous improvement, strong oversight, and scalable delivery.

Maturity = being equipped for risk and decisions — not perfection

Capital Delivery Maturity Model

Assess maturity across the core capabilities required for consistent capital delivery

Maturity progression 					
Domain	Reactive	Developing	Managed	Integrated	Strategic
Capital Strategy	Projects are reactive with planning inputs present but inconsistently translated into defined scope, prioritization, and funding alignment.	Projects follow a defined process with business cases, clear scope, and structured prioritization before approval.	Projects are rigorously defined using cost, risk, and sequencing criteria aligned to funding realities.	Capital planning is integrated across functions, with projects managed as part of a coordinated portfolio.	Decisions are data-driven and risk-informed, with readiness, funding, and delivery strategy fully aligned.
Planning, Governance & Risk	Oversight exists but roles, reporting, and decision rights are inconsistent and often reactive.	Governance is structured with defined roles, stage-gates, and clear escalation pathways.	Governance is actively applied with thresholds, consistent reporting, and documented decisions.	Governance is standardized across projects with portfolio-level visibility into risks and performance.	Governance is predictive and analytics-driven, enabling early issue identification and timely decisions.
Procurement & Vendor Management	Procurement relies on default or precedent-based methods with limited market or complexity analysis.	Procurement methods are selected using defined criteria aligned to project size, complexity, and risk.	Procurement strategies align with market conditions, contractor capacity, and delivery requirements.	Procurement is integrated with capital planning to balance competition, efficiency, and outcomes.	Procurement is market-informed and adaptive, using intelligence and learning to optimize delivery models.
Project Controls	Cost, schedule, and risk controls are basic or inconsistent, with issues often identified late.	Projects use defined baselines, risk registers, and structured reporting aligned with project stages.	Controls are actively managed with forecasting, escalation thresholds, and cost/schedule reconciliation.	Controls are integrated across projects, providing portfolio-level visibility into performance and risk drivers.	Advanced controls enable scenario forecasting and data-driven decisions using market and risk intelligence.
Delivery & Closeout	Delivery relies heavily on consultants, with developing internal capability and inconsistent practices.	Project management and contract administration roles are defined, with improved internal oversight.	Delivery capability is established, with active contract management and systematic lessons learned.	The municipality operates as a consistent owner, aligning internal capacity and using consultants strategically.	A mature owner's function is embedded, with continuous improvement, strong oversight, and scalable delivery.

Darker shades indicate higher maturity; use the matrix to compare current and target states.

   **Low → High maturity**

Capital Strategy

Capital strategy practices that align project need, scope definition, prioritization, funding readiness, delivery approach, and long-term affordability before projects advance.



Observations	Opportunities
Current maturity: Developing Key observations Capital needs were supported by formal planning inputs: The project was informed by environmental assessments, asset management planning, wastewater capacity analysis, growth projections, and annual capacity reporting, indicating that projects were identified through a defined planning process. Funding was considered as part of project approval: Council approvals were supported by identified funding sources, including reserves, development charges, and HEWS grant funding, showing that capital planning was connected to available financing and growth-related funding opportunities. Bundling reflected a strategic capital planning decision: The Town bundled related wastewater assets to coordinate interdependent infrastructure, reduce duplication in engineering and administration, and accelerate delivery for a program with shared system objectives. Delivery strategy adjusted as the program matured: Engineering was bundled to support coordinated planning, while construction was separated based on technical discipline, contractor capacity, sequencing, and design readiness, reflecting an attempt to align delivery approach with project conditions. Scope growth outpaced formal planning controls: As design advanced, project expanded from discrete wastewater upgrades into a multi-asset infrastructure program. This occurred before formal business case and re-baselining controls were in place to reassess scope, budget, funding, and delivery assumptions.	Link capital approvals to estimate maturity: Require each project approval to identify the estimate class, confidence level, and design maturity. Note: the Town's budget policy has been updated in March 2026 to ensure capital decisions reflect the reliability of the budget and scope. Reassess scope, budget, and funding at key milestones: Build formal decision gates into capital planning so projects are reviewed as scope evolves, estimates mature, and funding assumptions change. Use portfolio-level capital reporting: Track major projects through a consistent dashboard showing approved budget, projected final cost, variance, contingency, schedule status, risks, and next decision points across the Town's capital portfolio. Integrate project-level changes into broader capital prioritization: Use forecast changes, funding pressures, and delivery risks from major projects to inform capital sequencing, debt and reserve requirements, tax rate impacts, and trade-offs across the broader capital portfolio. Align scope, funding, and delivery readiness before advancement: Require confirmation that project scope, funding sources, estimate maturity, contingency, and delivery approach remain aligned before projects move through decisions gates into procurement or construction.

Planning, Governance & Risk

Planning and governance processes that establish clear project direction, accountabilities, and risk oversight from project initiation through delivery.



Observations	Opportunities
Current maturity: Reactive Key observations: • Governance existed, but was not stage-gated: Council, budget, and procurement approvals occurred at key points; however, these approvals were not tied to formal project gates that would require reassessment of scope, cost, risk, funding, and readiness by cross-functional stakeholders as design advanced. • Escalation was primarily driven by funding and approval events: Council updates were generally prompted once the project required additional funding or could not proceed within the remaining budget, rather than when cost estimates or project risks first exceeded defined thresholds. • Program-level budgeting limited oversight: Managing the three components within one overall funding envelope made it harder to identify component-level budget pressures early, particularly as Craigeith SLS and Bay–Grey Street costs consumed funding needed for Mill Street SPS. • Roles were active but not formally governed: Operations, finance, procurement, consultants, and project staff were all involved in delivery; however, decision rights, reporting expectations, and escalation responsibilities were not consistently defined in a formal capital project governance framework.	• Standardize stage-gate governance across major projects: Establish mandatory checkpoints at initiation, planning, design, procurement, construction, and closeout, with required reassessment of scope, cost, funding, risk, readiness, and approvals before a project advances. • Expand escalation triggers beyond funding pressures: Introduce formal escalation thresholds for scope changes, schedule delays, risk changes, procurement issues, contingency use, and grant compliance, so issues are raised before funding constraints emerge. • Formalize project-level risk management: Require risk registers for major projects, with defined risk owners, mitigation actions, review frequency, and escalation requirements to support proactive risk oversight across the capital portfolio.

Procurement & Vendor Management

Procurement and vendor management practices that support effective packaging, tendering, contractor selection, and management of vendor-related delivery risks.



Observations	Opportunities
Current maturity: Developing Key observations • Procurement followed an established policy framework: The Town used its existing value-based procurement policy, including standard controls such as bid security, bonding, insurance and contract protections; however, the policy was designed for traditional procurements with clearer scope and budgets. • Pre-qualification was used to manage contractor risk: For complex construction components, the Town screened bidders before tendering to confirm technical capability and market capacity, which helped align procurement with the scale and specialized nature of the work. • Engineering was bundled for coordination and efficiency: The Town bundled engineering because the wastewater assets were functionally connected, and coordinated design was expected to reduce duplication, improve sequencing, and support delivery within funding timelines. • Construction was intentionally separated into three tenders: The Town separated construction because the work required different contractor skill sets, including vertical pumping station work and linear road reconstruction, and because design readiness and sequencing varied by component. • Procurement rationale was practical but not formally documented: The Town considered interdependencies, contractor availability, technical discipline, and timing; however, these considerations were not documented through a business case or structured evaluation of delivery alternatives.	• Formalize procurement strategy assessment for major projects: Require documented evaluation of packaging, sequencing, delivery model, market capacity, contractor capability, and procurement risks before tendering begins. • Integrate procurement decisions with capital planning gates: Link procurement readiness to capital planning decision gates so scope, estimate maturity, funding availability, delivery sequencing, and market conditions are reviewed together before proceeding. • Document rationale for bundling, unbundling, and sequencing: Require clear decision records explaining how procurement packaging decisions balance competition, efficiency, cost, schedule, contractor availability, and project risk. • Strengthen vendor risk management beyond pre-qualification: Define how contractor capability, market constraints, supply chain risks, and performance risks will be assessed, monitored, and escalated from procurement planning through construction. Please see Appendix B for examples of these four different opportunities

Project Controls

Measures the municipality's ability to plan, monitor, and forecast cost, schedule, and risk. Includes commercial and contract management controls that support effective administration of contracts, management of change, and compliance with contractual and funding requirements.



Observations

Current maturity: Reactive

Key Observations:

- **Early cost baselines were set without sufficient contingency to reflect uncertainty:** Early budgets and the HEWS funding application were based on preliminary Class C/D estimates, which is appropriate at early design stages; however, the budget did not appear to include sufficient contingency, allowance for design development, or structured re-baselining to reflect the inherent uncertainty of those estimates.
- **Program-level budgeting limited cost visibility:** The control issue was less the use of a consolidated program envelope itself, and more the lack of parallel project-level tracking to show how each component was performing against budget, contingency, and forecast final cost.
- **Scope and budget changes were not formally re-baselined:** As design advanced, the project expanded and costs changed, but there was no consistent stage-gate process to reset the approved scope, budget, contingency, and delivery assumptions.
- **Cost issues were confirmed late in the lifecycle:** The Town relied on consultant estimates and tender results to validate costs, meaning significant cost pressures became clear closer to tendering and award rather than being forecasted earlier.
- **Risk and variance controls were not consistently applied:** Risk registers, variance thresholds, contingency triggers, and formal escalation points were not consistently used to identify when emerging cost exposure should be reported to senior leadership or Council.

Opportunities

- **Standardize estimate maturity and budget re-baselining:** Require estimate class, assumptions, contingency basis, and confidence level to be documented at each key stage gate, with formal re-baselining of scope, budget, funding, and delivery assumptions when warranted as design matures.
- **Implement project-level cost tracking for bundled programs:** Track approved budget, actuals, forecast final cost, variance, contingency, and funding source by project component, even when projects are managed under one consolidated program envelope.
- **Define escalation thresholds for cost, schedule, risk, and contingency:** Establish clear triggers for when variances, contingency drawdown, schedule delays, or risk exposure must be escalated to management or Council before funding constraints emerge.

Delivery & Closeout

Reflects the municipality's capacity to act as an effective project owner. Processes and controls that support effective delivery of construction activities, issue resolution, asset handover, and continuous improvement through project closeout.



Observations	Opportunities
Current maturity: Reactive Key observations: • Consultant reliance was significant: The Town appropriately relied on engineering consultants for specialized technical design, estimating, procurement support, and construction expertise. However, the owner-side risks associated with that reliance—such as independent cost review, challenge of assumptions, decision documentation, and escalation of emerging issues—were not consistently managed through a formal capital delivery framework. • Internal assigned program roles existed but were informal: Operations, water/wastewater, finance, procurement, and capital coordination staff were involved, but responsibilities were not supported by a standardized capital project delivery framework. • Delivery continuity was affected by capacity and turnover: The project relied on a small internal team, and staff changes shifted responsibilities after engineering work was already underway. • Project management practices were inconsistent: Formal tools such as project management plans, risk registers, value engineering logs, and structured cost-change tracking were not consistently used. • Capability improvements were underway: The Town has started developing project management policy materials, roles and responsibilities, and escalation triggers, indicating that internal delivery capability is evolving.	• Define Town-side delivery responsibilities: Clearly assign internal roles and responsibilities for construction oversight, contract administration, issue tracking, change review, deficiency resolution, and handover to effectively manage owner-obligations in largely consultant-led delivery processes. • Standardize construction performance monitoring: Track schedule progress, cost performance, scope status, contractor performance, risks, and forecast-versus-actual results consistently throughout construction. • Formalize issue, risk, and claims management: Establish a structured process to log, assign, monitor, escalate, and resolve construction issues, delivery risks, and contractual claims during execution. • Strengthen change order and contingency oversight: Require change orders, contingency use, and updated projected costs to be reviewed, approved, and reported with clear authorities and escalation triggers. • Implement structured closeout and lessons learned: Require final cost confirmation, deficiency resolution, handover documentation, and post-project reviews that capture lessons learned and feed them into future planning and delivery.

05

Report

Key Findings & Recommendations

Validation lens

Summarizes key findings and sets out a clear path to strengthen governance, cost predictability, and capital delivery performance.

- 01 Project approach
- 02 Summary of key findings
- 03 Strategic Recommendations

Conclusion: Project phases and approach

Project Overview

The Town of the Blue Mountains initiated this engagement to assess the effectiveness of procurement and capital project delivery practices in the context of a recent large-scale, complex infrastructure program. The review focused on a bundled capital initiative comprising the Craigleith Sewage Lift Station upgrades, Mill Street Pumping Station upgrades, and Bay–Grey Street linear infrastructure works. Together, these projects represent a significant investment and a step change in scale, complexity, and delivery requirements relative to typical municipal capital works.

Project Goal

The objective of the engagement was to support the Town in strengthening its capital project delivery capability following a Council resolution to commission an independent review in response to concerns regarding major capital project reporting, cost escalation, financial oversight, and overall project governance.

The desired outcome is a stronger capital delivery framework with improved alignment of scope, cost, and funding, and earlier visibility into emerging risks.

The engagement was structured into four phases to provide a clear and disciplined approach to analysis and recommendation development:

Phase 1: Plan	Phase 2: Assess	Phase 3: Strategize	Phase 4: Report
Established project scope, confirm objectives, and align with key stakeholders through a project charter and initial planning activities.	This stage assessed whether the procurement strategy and policy framework and project delivery governance and management framework applied to the project were appropriate given the size, complexity, and risk profile of the work.	The third phase involved the incorporation of the findings from the second phase of work into a capital delivery maturity model. From this, a series of observations and opportunities were developed	The project concluded with the fourth phase where the final report was drafted and presented to the Senior Management of the Town.

Across these phases, the engagement included a range of analytical activities to support a comprehensive understanding of current practices and performance::

Documentation Review Detailed analysis of project records, Council reports, procurement documents, engineering estimates, and financial data related to the bundled program.	Stakeholder Engagement Discussions with Town staff, project leads, and functional teams across finance, operations, and procurement to understand how processes function in practice.	Capital Delivery Assessment Evaluation of procurement strategy, governance structures, cost management practices, and delivery approaches using a structured maturity model.
Market and Industry Context Validation Consideration of broader municipal infrastructure conditions—including cost escalation, contractor capacity, and procurement risk—to differentiate internal process issues from external market pressures.	Synthesis and Recommendation Development Integration of findings to identify practical improvement opportunities and define a clear path forward for strengthening capital project delivery.	Provide Implementation Guidance/ Plan Development of a practical, phased implementation plan to support the Town in transitioning from current-state practices to an enhanced capital delivery framework.

Conclusion: Summary of key findings (1/3)

The review identified a consistent pattern across capital planning, procurement, governance, and delivery practices: while the Town demonstrated the ability to advance complex infrastructure projects, delivery relied heavily on iterative processes, consultant-led inputs, and budget-based decision-making, rather than structured, stage-gated controls. The following summarizes key findings across the core domains of capital delivery:

1. Capital Strategy & Project Definition

The Town's capital strategy reflects strong foundational planning practices. Projects were appropriately informed by environmental assessments, asset management planning, growth projections, and system capacity analysis, demonstrating that infrastructure needs were identified through a structured and defensible planning process. In addition, the decision to bundle projects reflected a logical attempt to coordinate interdependent wastewater system upgrades and improve delivery efficiency.

However, project definition did not keep pace with scope evolution. Early approvals—including engineering budgets, funding strategies, and grant applications—were based on conceptual (Class C/D) estimates that did not fully capture system-wide requirements, constructability considerations, or regulatory complexity. As engineering progressed, the project expanded significantly to include corridor reconstruction, stormwater infrastructure, outfall works, and system optimization measures.

This expansion was driven by legitimate technical requirements, but it occurred without consistent re-baselining of scope, cost, and funding assumptions at key decision points. As a result:

- Initial budgets became anchored to early-stage assumptions without sufficient contingencies or subsequent revisions;
- Funding strategies reflected immature scope definitions;
- Capital decisions were based on estimates with a high degree of uncertainty without matching contingencies;
- The program transitioned from a discrete set of projects to an integrated infrastructure program without a formal reset of underlying assumptions.

In practical terms, this created a structural gap between what was approved and what was ultimately required to deliver the program, which became more apparent as design matured and procurement progressed.

2. Planning, Governance & Risk

The Town's governance framework was consistent with common municipal practice, with Council approvals tied to capital budgets, procurement awards, and funding decisions. Senior management and staff were actively engaged, and governance was exercised through both formal approvals and ongoing coordination between staff and the engineering consultant.

However, governance checkpoints were primarily budget-driven rather than through planning, design and delivery stage gates. Key gaps included:

Lack of stage-gate control:

There were no defined checkpoints through the project lifecycle requiring reassessment of scope, cost, risk, funding, and readiness before advancing from one phase (e.g., initiation → planning → design → procurement → execution → closeout/handover).

Informal escalation practices:

Escalation of risks/issues to senior management or Council was largely triggered by funding constraints or procurement events, rather than by predefined thresholds (e.g., cost variance, contingency use, or risk exposure).

Limited decision transparency:

Many decisions related to scope adjustments, interpretation of cost estimates, contingency assumptions, and funding implications were developed at the staff–consultant level before Council reporting, reducing visibility into assumptions and trade-offs underlying the recommendations.

Program-level financial governance:

Managing multiple project components within a single program-level funding envelope reduced the ability to identify and escalate project-level cost pressures early. Emerging risks were escalated at certain points, but not consistently at the point of when scope, cost, contingency, or schedule pressures first exceeded defined thresholds. This limited the Town's ability to pause, reassess, or adjust strategy earlier in the project lifecycle.

Conclusion: Summary of key findings (2/3)

The review identified a consistent pattern across capital planning, procurement, governance, and delivery practices: while the Town demonstrated the ability to advance complex infrastructure projects, delivery relied heavily on iterative processes, consultant-led inputs, and budget-based decision-making, rather than structured, stage-gated controls. The following summarizes key findings across the core domains of capital delivery:

3. Procurement & Vendor Management

Procurement practices were executed in accordance with established municipal policies and reflected sound practical judgment. The Town demonstrated an understanding of contractor market dynamics by:

- Bundling engineering services to coordinate design across interdependent assets;
- Separating construction tenders to reflect differences between linear infrastructure and pumping station work;
- Using prequalification to confirm contractor capability and manage market capacity constraints;
- Considering sequencing and technical requirements in procurement execution.

These decisions align with typical municipal practice and were generally appropriate given the technical nature of the work. However, procurement strategy was not supported by a formal evaluation framework, and several limitations emerged:

- **Reliance on precedent and judgment:** Decisions regarding bundling, packaging, sequencing, and delivery lacked documented business cases or structured analysis.
- **Limited integration with capital planning:** Procurement decisions were not consistently linked to estimate maturity, budget alignment, or overall funding capacity at the program level.
- **Timing sensitivity:** Tendering occurred at different stages of design maturity and funding availability, creating sequencing challenges that affected overall program affordability.
- **Procurement as cost validation mechanism:** Project costs were most clearly confirmed through tender results. Earlier estimates carried uncertainty, and the tender process became where the full extent of current market pricing and budget pressure became apparent.

In practice, this meant that while procurement execution was competent, it was not fully positioned as a strategic tool for managing cost risk, delivery risk, and market engagement, particularly for a program of this scale and complexity.

4. Project Controls, Risk & Cost Assurance

Project controls did not keep pace with the complexity of the program. Early budgets were based on preliminary estimates without sufficient contingency or formal re-baselining as design matured. Risk, variance, and contingency controls were not consistently documented through defined thresholds or escalation triggers, which meant cumulative cost pressures became visible late in the lifecycle.

- **Early budget baselining:** Initial budgets and funding allocations were based on preliminary estimates before design maturity, introducing inherent uncertainty into the capital plan without the requisite contingencies or allowance for design development to account for that uncertainty.
- **Absence of structured re-baselining:** As scope evolved and estimates matured (Class C → B → A), there was no consistent process to formally update approved budgets, funding strategies, or cost expectations.
- **Limited cost assurance:** The Town relied heavily on consultant estimates and tender results for cost validation, with limited independent review, benchmarking, or structured variance analysis.
- **Informal risk management:** Risks were discussed and managed through meetings and technical reports but were not consistently documented through formal risk registers with defined ownership, mitigation strategies, or escalation triggers.
- **Reactive escalation:** Cost pressures were identified progressively but were not escalated through defined thresholds, resulting in late escalation of cumulative impacts.
- **Program-level tracking:** Consolidated budgeting reduced transparency into component-level performance and delayed visibility into where cost pressures were emerging.

Overall, cost certainty was achieved late in the lifecycle rather than through ongoing forecasting and risk-adjusted planning. This meant that cost overruns were largely revealed, rather than anticipated, limiting the Town's ability to proactively manage financial exposure.

Conclusion: Summary of key findings (3/3)

The review identified a consistent pattern across capital planning, procurement, governance, and delivery practices: while the Town demonstrated the ability to advance complex infrastructure projects, delivery relied heavily on iterative processes, consultant-led inputs, and budget-based decision-making, rather than structured, stage-gated controls. The following summarizes key findings across the core domains of capital delivery:

5. Delivery Capability, Contract Administration & Continuous Improvement

The Town demonstrated the ability to deliver a complex, multi-component infrastructure program; however, delivery capability relied significantly on external expertise and evolving internal practices. Key observations include:

- **High consultant reliance:** The engineering consultant played a central role across design, estimating, procurement support, cost analysis, and reporting. While appropriate from a technical perspective, this extended into areas typically associated with owner-side cost assurance and decision support where a stronger owner capacity would be desirable.
- **Informal internal delivery structure:** Staff from operations, finance, procurement, and project management were actively involved, but roles, responsibilities, and accountabilities were not supported by a standardized capital delivery framework and its defined processes, tools and templates.
- **Inconsistent project management practices:** Formal tools such as project management plans, risk registers, change logs, and value engineering processes were not consistently applied across the program.
- **Iterative, flexible delivery approach:** The project benefited from flexibility and responsiveness as design evolved, but this reduced traceability and clarity regarding when and how key decisions, and the considered benefit/tradeoffs associated with them, were made.
- **Emerging improvement efforts:** The Town has begun implementing governance enhancements, including new draft policies, escalation thresholds, and reporting frameworks, indicating a shift toward a more structured delivery model.

Overall, the Town functioned as a developing owner's organization, capable of advancing complex work but without consistently defined internal controls, processes, and assurance mechanisms required for large, integrated capital programs.

6. Overall Conclusion

The Town's experience demonstrates that project complexity increased faster than the maturity of governance, controls, and internal delivery capability. While external market conditions contributed to cost pressure, the primary drivers of variance were rooted in scope evolution, estimate maturity, and process structure.

Future success will depend not on eliminating complexity, but on strengthening internal systems—particularly stage-gated governance, cost assurance, procurement strategy, and owner-side capability—to manage that complexity more effectively.

Conclusion: Strategic Recommendations (1/3)

The Town has already begun to respond to the challenges experienced on the bundled Craigleith, Bay–Grey, and Mill Street program through policy, reporting and governance updates. The recommendations below are intended to build on that progress by strengthening the Town’s capital delivery model across five domains of maturity: capital strategy, governance, procurement, project controls, and delivery capability, supporting a more structured, transparent, and scalable approach to delivering large municipal infrastructure projects.



01 Capital Strategy & Project Definition

- 1. Link capital approvals to project definition and estimate maturity:** Require major capital approvals to clearly identify project scope, estimate class, confidence level, needed contingencies and key assumptions so Council and management understand the approval-stage uncertainty. This would reduce the risk of anchoring budgets and funding strategies to early conceptual assumptions that are likely to change as design matures.
- 2. Introduce formal re-assessment of baselines at key project stage gates:** Establish required stage gates where scope, budget, funding sources, contingencies, and delivery are formally reassessed and, where necessary, updated through a change management process before the project advances to next stage. This would help ensure project evolution is explicitly recognized rather than absorbed informally over time.
- 3. Strengthen capital portfolio management:** Manage major projects not only as stand-alone approvals, but as part of a broader capital portfolio with visibility into affordability, interdependencies, and funding capacity. This would support better decisions when scope changes or cost escalation in one project affect the feasibility of others.



02 Planning, Governance & Risk

- 1. Standardize stage-gate governance for major capital projects:** Introduce a formal stage-gate model across initiation, planning, design, procurement, construction, and closeout. For each gate, define required inputs, approval authorities, decision criteria, and documentation expectations so that project readiness is validated before advancement. This would move the Town from budget-based governance toward a more disciplined lifecycle control framework.
- 2. Expand escalation triggers beyond funding shortfalls:** Build on the Town’s draft policy by introducing defined escalation thresholds for scope changes, schedule delays, contingency use, funding compliance risks, and changes in projected final cost. This would create earlier visibility of emerging issues, reducing reliance on judgment-based escalation.
- 3. Formalize project-level risk management practices:** Require risk registers for all major projects, including defined risk ownership, mitigation strategies, review frequency, and escalation expectations. Risks should be revisited at each project stage and incorporated into reporting to senior management and Council where material.
- 4. Introduce standardized project reporting:** Develop a standardized dashboard for major capital projects showing scope status, approved budget, forecast final cost, contingency use, schedule status, funding alignment, key risks, and upcoming decision points. This would enable both project-level governance and Town-wide visibility into the capital program.

Conclusion: Strategic Recommendations (2/3)

The recommendations below are phased to address immediate financial risks while strengthening governance, capacity and planning for sustainable improvement.



03 Procurement & Market Management

- 1. Require a structured procurement strategy assessment for major projects:** Before procurement begins, require documented consideration of packaging, sequencing, delivery model, risk allocation, design readiness, market capacity, and contractor specialization. This would strengthen the rationale for procurement decisions and ensure that the strategy reflects both project complexity and market conditions.
- 2. Document procurement rationale for bundling, sequencing, and delivery approach:** Key decisions such as whether to bundle or separate components, whether to prequalify bidders, and how to sequence procurements should be supported by written rationale and retained as part of the project record. This would improve transparency and enable future learning from procurement outcomes.
- 3. Strengthen market and vendor risk management:** Expand procurement planning to include explicit assessment of contractor capability, market interest, long-lead equipment, supply chain risks, and potential vendor performance issues. These risks should continue to be monitored after award, rather than ending at tender close.
- 4. Integrate procurement decisions with governance and funding controls:** Procurement should not function solely as a compliance exercise or cost validation point; rather, it should be integrated with project controls, budget readiness, and governance checkpoints. This would help ensure the Town does not proceed to tender without confirming scope, estimate maturity, and affordability.



04 Project Controls, Risk & Cost Assurance

- 1. Standardize estimate development and budget re-baselining:** Require estimate class, assumptions, contingency basis, and confidence level to be documented at each major project stage. When newer estimates materially change the forecast cost or scope understanding, the project budget, funding strategy, and projected final cost should be formally updated. This would improve cost discipline and reduce the risk of decisions being made on outdated budget assumptions.
- 2. Implement project-level financial tracking within bundled programs:** For programs with multiple projects, require each project to track budget, actuals, contingency, forecast final cost, tender results, and funding sources separately. This would improve transparency and enable earlier identification of cost pressures affecting specific elements of a program.
- 3. Strengthen variance analysis and escalation reporting:** Build on the Town's current direction by requiring structured reporting of forecast versus actual cost, variance drivers, contingency drawdown, and schedule impacts at regular intervals. Variance reporting should be consistent across projects and aligned to defined escalation thresholds.
- 4. Introduce independent cost assurance for major projects:** For large or high-risk projects, require independent validation or peer review of key estimates, major scope changes, and pre-tender pricing assumptions. This would help reduce over-reliance on a single consultant's interpretation of cost risk and improve management confidence in cost forecasts.

Conclusion: Strategic Recommendations (3/3)

The recommendations below are phased to address immediate financial risks while strengthening governance, capacity and planning for sustainable improvement.



05 Delivery Capability, Contract Administration & Continuous Improvement

- 1. Clarify and formalize the Town's owner-side delivery responsibilities:** Define internal responsibilities across project management, construction oversight, contract administration, issue escalation, change review, funding compliance, and closeout. This would reduce reliance on consultant-led processes for core governance and delivery control functions.
- 2. Standardize delivery-phase monitoring and performance reporting:** Establish a consistent approach to monitoring construction progress, schedule performance, cost status, change orders, contractor performance, claims, and issue resolution. These measures should be reported regularly and linked to project controls and escalation requirements.
- 3. Strengthen change order and contingency governance:** Define how change orders are reviewed, approved, documented, and linked to budget, risk, and contingency impacts. This would improve transparency and ensure that contingency use is actively managed rather than only tracked after the fact.
- 4. Embed structured closeout and lessons learned processes:** Require all major projects to complete final cost reconciliation, deficiency closeout, handover documentation, and post-project lessons learned. These lessons should be used to refine templates, controls, reporting practices, and future project planning.



06 Overall Recommendation

The Town has already taken important steps to strengthen governance, reporting, and financial oversight. The next phase should focus on implementing an integrated capital delivery framework that aligns project planning, governance, procurement, cost assurance, and delivery controls across the full project lifecycle. This should include formal stage-gate approvals, structured risk management, component-level financial reporting, and enhanced cost assurance practices such as independent estimate reviews, value engineering, market sounding, and estimate validation at key design milestones. Together, these measures will improve cost predictability, strengthen decision-making, and enhance the Town's ability to deliver complex capital programs with greater confidence, transparency, and control.

BOTTOM LINE: The Town does not need to eliminate complexity to improve outcomes; it needs to match increasing project complexity with a more structured, transparent, and disciplined capital delivery framework.

06

Appendix: Scope of review

Scope of review

Phase 1: Initiate May 2026	Phase 2: Assess May – June 2026	Phase 3: Strategize June 2026	Phase 4: Report June 2026
This phase laid a strong foundation for the project through the facilitation of introductory and kick-off meetings with the Town's Project Team.	Develop an understanding of the Town's capital project history, decision points, and outcomes. Evaluate procurement and capital project delivery practices. Assess market conditions impacting capital project delivery.	Synthesize findings from Phase 2 into a clear, practical set of improvement opportunities.	Develop a comprehensive report compiling the findings of prior phases and a roadmap to long-term financial sustainability

Stakeholders engaged

Stakeholder title			
CAO (Chief Administrative Officer)	Director of Operations	Director of Corporate and Financial Services	Manager of Purchasing and Risk Management
Manager of Water and Wastewater	Senior Infrastructure Coordinator		

Documents Reviewed

Documents			
POL-COR-07-05 Purchasing of Goods and Services Policy	FS.08.08 Procedures for Procurement	POL-COR-17-07 Asset Management Policy	OPS-26-018 Capital Project Reporting and Enhanced Procedural Controls
2026 Staff reports: - June 8 and June 9 2026 COW Agenda Packages - OPS.26.013 Craileith SLS, Mill St SPS and Bay-Grey Linear Works Update - OPS.26.008 Craileith SLS, Mill St SPS and Bay-Grey St. Linear Works Financial Reporting and Project Cost Update - B-4-2-ADM-26-015 Investigative Report - D-1-ADM-26-020 Investigative Report Follow-up	2025 Staff reports: - OPS.25.009 HECS Funding Announcement - OPS.25.049 Request for Construction Budget Increase for Craileith SLS, Mill St SPS and Bay-Grey Linear Works - OPS.25.018 Wastewater Master Plan PIC2 Follow-up 2024 Staff reports: - CSOPS.24.040 Wastewater Master Plan PIC1 Presentation and Follow-up	2023 Staff reports: - CSOPS.23.011 Craileith WWTP Sewage Pumping Station Class EA PIC2 and Notice of Completion - CSOPS.23.019 Engineering Services Upgrades Budget Increase - CSOPS.23.044 Addition of Engineering for Bay Street Reconstruction and Construction Administration for Outfall	2022 Staff reports: - CSOPS.22.033 Craileith WWTP Sewage Pumping Station Class EA PIC1 - CSOPS.22.041 Growth Related Budget Transfer – Wastewater Collection System - CSOPS.22.055 Craileith WWTP Sewage Pumping Station Class EA PIC1 Follow-up
2022 Engineering Tendering files	Craileith Main Lift Station Upgrades Tendering files	- Bay-Grey Street Reconstruction Prequalification files - Bay-Grey Street Reconstruction Tendering files	- Craileith and Mill Street SPS Prequalification files - Mill Street SPS Upgrades Tendering files (on hold)
Capital Project Management: 2023 Approved Engineering Budget & Map 2024 Approved Construction Budget 2025 Approved Capital Projects	Cost Estimates: - Craileith Class C 30%, Class B 60%, Class A estimate files and emails with EVB Engineering and WT Infrastructure - Bay-Grey Street Class D, Class A Rev Pretender, Class A Bid Recommendation, Class A 100% Design files and emails with EVB Engineering and WT Infrastructure - Mill Street Class C and Class A estimates	Purchase Orders: - Engineering services: WT Infrastructure - Craileith: Peak Construction Group, Hydro One, Arbtech Tree Care Services - Bay Street: Arnott Construction, Bell, Embridge, EPCOR, Rogers - Mill Street: Arbtech Tree Care Services (joint PO with Bay Street)	Contract Delivery: - Engineering contractor, WT Infrastructure Draw Requests / Invoices and Scope Change Requests - Bay-Mount Services bulk water delivery - Craileith Progress Payment Certificates - Bay Street: Critical Path Schedules, Progress Payment Certificates, site meetings and project tracking files

06

Appendix B: Procurement & Vendor Management Examples

Procurement & Vendor Management

The Town has established procurement processes that support compliance and competitive procurement. However, procurement decisions related to project packaging, contractor market capacity, procurement sequencing, and vendor risk were generally managed on a project-by-project basis. As project scale and complexity increase, there is an opportunity to adopt more structured procurement planning and market-management practices that are increasingly common across the municipal sector.

#1: Formalize Procurement Strategy Assessments

Many municipalities now require a formal procurement strategy review before advancing major infrastructure projects to tender. These assessments help determine the most appropriate delivery model based on project complexity, market conditions, organizational capacity, and risk. Municipal examples include:

Region of Durham

- Reviews project complexity, contractor availability, market capacity, and delivery options before advancing major water, wastewater, and transportation projects.
- Uses front-end planning and delivery strategy assessments to determine whether projects should be bundled, phased, or delivered separately.

City of Mississauga

- Requires procurement planning for major capital projects to consider packaging, sequencing, market competition, and project readiness before tender release.
- Major procurements are evaluated through a governance framework before proceeding to market.

City of Ottawa

- Large infrastructure projects commonly include procurement strategy reviews that assess risk allocation, market conditions, procurement timing, and contractor capability before selecting the final delivery approach.

Application for the Town

A formal procurement strategy assessment would provide a documented rationale for decisions such as:

- Bundling versus stand-alone delivery; Timing and sequencing of tenders; Contractor prequalification requirements; Alternative delivery approaches; and Market capacity considerations.

#2: Strengthen Vendor and Market Risk Management

Leading municipalities are increasingly treating contractor and supplier capacity as a project risk that is actively monitored throughout planning, procurement, and delivery. Municipal examples include:

City of Calgary

- Conducts contractor market engagement and capacity assessments for major infrastructure projects to understand bidder appetite, workload pressures, and market readiness before procurement.

Infrastructure Ontario

- Uses market sounding and industry engagement to assess supplier interest, risk allocation, and procurement attractiveness before launching large procurements.
- Adjusts procurement and packaging strategies when market feedback indicates potential competition challenges.

York Region

- Uses contractor prequalification and performance monitoring on major construction projects to reduce vendor risk and improve understanding of contractor capability and past performance.

Application for the Town

The Town could establish an annual review of:

- Bid participation trends;
- Number of compliant bids received;
- Tender variances;
- Change order patterns;
- Contractor performance; and procurement lessons learned.

Procurement & Vendor Management

These four practices are becoming increasingly common among municipalities delivering complex infrastructure programs. Adopting a more structured approach to procurement strategy assessment, market intelligence, vendor risk management, and procurement governance would help the Town improve competition, strengthen decision-making, enhance transparency, and reduce delivery risk on future large-scale capital projects.

#3: Integrate Procurement with Capital Governance

Best practice municipalities increasingly treat procurement as part of project governance rather than a standalone purchasing activity. Municipal examples include:

Region of Halton

- Requires procurement readiness reviews before major projects proceed to market, confirming scope definition, funding availability, estimate maturity, risk assessment, and governance approvals.

Region of Waterloo

- Uses formal project control and governance checkpoints to ensure procurement decisions remain aligned with approved project scope, budget, and Council direction.

City of Vaughan

- Integrates procurement planning into broader project governance processes, ensuring that project readiness, budget status, and delivery risk are reviewed before tender release.

Application for the Town

A procurement readiness review could confirm:

- Scope is sufficiently defined;
- Design maturity is appropriate for procurement;
- Updated cost estimates remain within approved funding;
- Key project risks have been assessed;
- Grant eligibility requirements remain satisfied; and
- Market conditions support procurement success.

#4: Strengthen Vendor and Market Risk Management

A growing number of municipalities are moving beyond compliance-focused procurement and building internal market intelligence capabilities. Municipal examples include:

City of Calgary

- Maintains oversight of contractor participation trends, bid activity, and procurement outcomes across major capital programs.

Region of Peel

- Uses capital program reviews to analyze bid spreads, procurement timing, and market competitiveness to improve future procurement planning.

Region of Niagara

- Increasingly uses procurement and capital delivery lessons learned to inform future packaging, scheduling, and contractor engagement decisions.

Application for the Town

The Town could establish an annual review of:

- Bid participation trends;
- Number of compliant bids received;
- Tender variances;
- Change order patterns;
- Contractor performance; and
- Procurement lessons learned.

This would provide an evidence-based foundation for future procurement strategy decisions rather than relying solely on historical practices or professional judgment.



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