

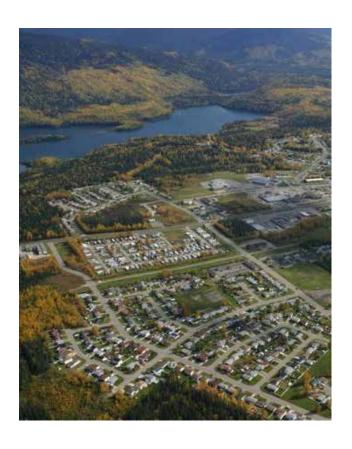


ACCESSIBILITY • INDEPENDENCE • TRANSPARENCY • PERFORMANCE

LOCAL GOVERNMENT'S

CAPITAL PROJECT MANAGEMENT

DISTRICT OF MACKENZIE



An independent assurance audit carried out by the Auditor General for Local Government of British Columbia



MESSAGE FROM THE ACTING AUDITOR GENERAL FOR LOCAL GOVERNMENT

To the mayor and council members of the District of Mackenzie:

I am pleased to present this performance audit report on capital project management to the District of Mackenzie.

Our performance audits are independent, unbiased assessments, carried out in accordance with professional standards. They aim to determine the extent to which the area being examined has been managed with due regard to economy, efficiency and effectiveness.

We conducted this audit in accordance with the standards for assurance engagements set by the Auditing and Assurance Standards Board of the Chartered Professional Accountants of Canada and under the authority of the Auditor General for Local Government Act.

The major project reviewed as part of the audit process was the Mackenzie Recreation Centre Energy Retrofit and Community Hall Upgrades Project, Phase 2. This report reviews the results of the capital project against its objectives as well as the capital project management policies and practices of the District of Mackenzie.

In this audit, we found that the District of Mackenzie was successful in delivering the initial project scope of the Phase 2 project plus some additional scope items within the funds allocated by council. The project was completed seven months later than expected. We were not able to determine if the delay in the project schedule was a result of the additional scope added to the project, as the District did not track the impact of change orders on the project schedule.

We also found that the District implemented many good practices related to capital project management, for example, project risk management, cost tracking, monthly project status reporting and others, which were brought by the contracted project manager. Adherence to these good practices was reduced once the contractor left the project a few months prior to the completion of construction, as these practices were not embedded into the District's policies and procedures. We also found that the District's existing policies and practices had some gaps and should be strengthened, such as the procurement policy and open procurement documentation, stakeholder engagement, records management and others.

Success in future capital projects will be enhanced if the District of Mackenzie strengthens its approach to capital project management by incorporating the good practices brought to the Phase 2 project by the contracted project manager and other improvement opportunities highlighted in this report.

We have provided the following options for the District to consider as it strives to improve its capital project management processes:

▶ The District should incorporate good practices and improvements brought by the Phase 2 contracted project manager into the District's own capital project management framework so that, in the future, the District is not dependent on a consultant to bring these practices.



MESSAGE FROM THE ACTING AUDITOR GENERAL FOR LOCAL GOVERNMENT



- ▶ Should the District of Mackenzie decide that due to limited internal capacity it is not able to manage large, complex capital projects internally in the foreseeable future, the District should use this audit report to develop procedures to guide staff on the various aspects of capital project management it would expect an external project management company to bring and implement for the project. This will help the District take a more proactive role in overseeing the external contractor as it manages the capital project on the District's behalf.
- ▶ The District could consider using a blended approach of the two options described above and develop some of the key capital project management policies and procedures internally and supplement the rest with those brought by a contracted project manager.

Regardless of which approach the District selects, management should ensure that staff is provided with appropriate and sufficient training and understands how to apply various aspects of capital project management.

In addition, the District should strengthen its existing policies and procedures and ensure compliance with them, as identified in this audit report.

I want to thank the District of Mackenzie for its cooperation during the performance audit process and for its response to our findings and recommendations.

Mike Furey

Acting Auditor General for Local Government

Surrey, B.C.



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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

- r. The quality of life and economic success of every community is heavily influenced by the quality of its water supply, sewerage system, roads, community, culture, recreation and other infrastructure. Local governments undertake capital projects to construct, refurbish and maintain assets to meet the needs of their community.
- 2. Effective planning and delivery of major capital projects is necessary to deliver them on time and within budget while realizing their intended benefits this is critical to a local government's ability to achieve its objectives, enhance services to the public and improve productivity. Poor planning and management diminish the benefits of these projects, potentially delaying project delivery and creating additional costs to taxpayers.

WHAT WE EXAMINED

- 3. The purpose of this audit was to provide an objective independent examination of the District of Mackenzie's capital project management practices to determine if the District effectively managed the planning and delivery of a capital project to meet its objectives. We examined the District's practices in managing Phase 2 of the Mackenzie Recreation Centre Energy Retrofit and Community Hall Upgrades Project ("Phase 2 project").
- 4. Our findings are based on our review of relevant documentation and data, interviews with key local government management and staff and observational visits to the facility. The period covered by the audit was from January 1, 2015 to December 31, 2019. Our audit also considered significant subsequent events.

WHAT WE FOUND

5. Our review of the Phase 2 project demonstrated that the District was successful in receiving substantial grant funding for its recreation centre renovation which made previously-identified improvements to the facility feasible. The District's priority was to maximize the value for money from the funds received, which influenced its approach to project execution by making the project's scope a moving target.

- 6. Overall, we found that the District was successful in delivering the baseline project scope of the Phase 2 project plus some additional scope items within the funds allocated by council. The District completed the project seven months later than originally planned. We were not able to determine if the delay in the project schedule was a result of the additional scope items added to the project as the District did not track the impact of these scope changes on the project schedule and has not revisited the original project schedule.
- 7. From a capital project management perspective, our review of the Phase 2 project found that the District was partially successful in meeting our expectations:
- ➤ The District identified and aligned project needs with corporate priorities
- The District recognized a risk associated with its limited internal capacity to manage the project and mitigated this risk by contracting an owner's representative to manage the project on the District's behalf
- ➤ The District put in place a number of good practices, including a project risk management process, cost tracking, monthly project status reporting and others
- Most of the examples of implemented good practices related to capital project management were brought by a contracted owner's representative. Adherence to good practice declined a few months prior to construction being complete, once the owner's representative left the project, as these practices were not embedded into the District's policies and procedures
- ➤ The District had a number of its own policies and processes, such as a procurement policy and process, stakeholder engagement process and others, however, these policies and processes had some gaps and required improvements
- 8. To be better positioned to successfully deliver future capital projects, the District should strengthen its approach to capital project management, recognizing what capital project management is, the importance and role of a capital project management framework and that projects should be managed

differently depending on the capital value or risk/complexity. We identified a number of options for the District to consider as it improves its processes:

- ▶ The District should take the opportunity to document and implement good practices brought by the owner's representative during the Phase 2 project and other improvement opportunities as highlighted in this report. These could be incorporated into the District's capital project policies and procedures so that, in future, the District is not dependent on a consultant to bring these practices.
- ➤ We acknowledge that smaller local governments like the District of Mackenzie might consider the development and implementation of a capital project management framework to be a lower priority and they may face challenges in securing resources to develop a framework. However, the benefits resulting from such an investment would accrue in all of a local government's future capital projects, as continual improvements to efficiency, effectiveness and value for money are realized. To minimize the efforts and costs as the District develops its own capital project management framework, we encourage it to reach out and collaborate with other local governments. We also encourage the District to examine frameworks developed by other local governments and the AGLG Perspectives Series Booklet on capital project management that makes reference to publicly available frameworks developed by other Canadian local governments.
- ➤ Should the District of Mackenzie decide that, due to limited internal capacity, it does not plan to manage internally complex and/ or risky capital projects in the foreseeable future, the District should use this report as guidance on capital project management processes it would expect a contracted project management company to implement. The District should take on a more proactive role in overseeing contracted project management companies as they manage the District's capital projects and ensure consistency in the project management processes from one capital project to another, regardless who is managing the project. It is important that the differences in approach to capital project management be driven by the size, complexity

- and risks of the capital project and not by the organization managing the capital project.
- The District could also consider blending the two options presented above. It could identify and develop some of the key components of a capital project management framework and supplement the rest of the framework with those provided by a contracted project management company.

Regardless of which approach the District selects, management will need to ensure that staff is provided with appropriate and sufficient training and understand how to apply various aspects of capital project management. In addition, the District should strengthen its existing policies and procedures and ensure compliance with them, as identified in this report.

- 9. As the District decides on its approach to develop stronger capital project management, the District should prioritize improvements in its processes, especially as it embarks on construction of a new fire hall to be completed in fall 2021, for example:
- Establish requirements for effective governance arrangements to oversee major capital projects and ensure compliance with these requirements
- ➤ Formalize internal and external reporting requirements for capital projects
- Strengthen its procurement policy and processes, including open procurement documentation
- Document procedures for risk management and stakeholder engagement
- ➤ Develop guidance for establishing and managing changes to a project baseline, including the project budget, schedule and scope

Exhibit 1 - SUMMARY OF RECOMMENDATIONS

- 1. As part of the District of Mackenzie's efforts to establish an asset management program, the District should develop formal requirements to support its capital project initiation processes. This should include development of a capital project business case to a level of detail suitable to the project scale and complexity.
- **2.** The District of Mackenzie should adopt a consistent approach to capital project management. This could be achieved by developing a capital project management framework that brings together all existing relevant procedures in a rational and structured manner, supplemented with newly-developed procedures aligned with capital project management good practices. Management should ensure that staff is provided with appropriate and sufficient training and understands how to apply various aspects of capital project management.
- **3.** The District of Mackenzie should strengthen its governance of major capital projects by developing and following systematic and structured processes for project oversight with an appropriate governance structure in place, such as a project board or committee.
- **4.** The District of Mackenzie should ensure it identifies, develops, properly approves, distributes in a timely way and updates all essential guiding documentation for capital projects, including a project charter.
- **5.** The District of Mackenzie should develop and implement a formal approach to capital project risk management, especially projects involving significant capital investment or risk. The approach should include policy and procedures that require formal risk identification, assessment, monitoring and reporting throughout each project, along with awareness-raising activities and training.
- **6.** The District of Mackenzie should establish requirements for developing and approving the baseline scope of each capital project, as well as the management of any scope changes. The District should communicate these expectations to capital project management personnel and monitor project activities to ensure compliance with them.

- **7.** The District of Mackenzie should develop a policy and procedures for capital project budget development, approval and management, which could include guidance on:
- ➤ Preparation and use of construction cost class estimates for higher value capital projects
- ➤ Appropriate contingency allocations for various types of capital projects
- ➤ Creation of a management reserve for unallocated contingency funds
- ➤ Re-baselining a project budget when forecast costs increase or decrease
- **8.** The District of Mackenzie should strengthen its financial controls for capital projects through:
- ➤ Documenting key accounts payable controls and ensuring they function effectively
- ➤ Establishing policy guidance on capital project financial reporting, including expectations on cost reporting against project baseline budgets and raising staff awareness of these requirements
- **9.** The District of Mackenzie should establish guidance and policy requirements for developing and monitoring capital project schedules, including:
- Guidance for the development and approval of a baseline project schedule and any changes to it.
- ➤ A requirement that any construction change orders identify schedule impact as well as cost
- ➤ A process to monitor and periodically report on schedule progress and forecasts
- **10.** The District of Mackenzie should strengthen its procurement management by:
- ➤ Addressing procurement policy gaps, for example, guidance on ethical considerations and alternative procurement methods and aligning the policy with relevant trade agreements and evolving good practices

- ➤ Regularly reviewing its procurement policy to ensure it is clear, complete and up to date
- ➤ Raising staff awareness and familiarity with the policy and related procurement procedures to ensure it is properly implemented in practice
- 11. The District of Mackenzie should review the legal basics of competitive bidding and procurement in Canada and assess its competitive bid documentation to ensure its templates for procurement tools contain clear clauses applicable to the specific procurement tool used.
- **12.** The District of Mackenzie should closely monitor its procurement activities and enforce compliance with its procurement policies, procedures and trade agreements.
- **13.** The District of Mackenzie should enhance its capital project contract management practices by:
- Developing a formal evaluation process that documents the selection of a project delivery method for each major capital project
- ➤ Formalizing a review and approval process for contract terms and conditions
- ➤ Monitoring contract changes and ensuring change orders are authorized appropriately and all related documentation is complete and accurate
- **14.** The District of Mackenzie should define organizational expectations for reporting on its future capital projects to ensure that regular and consistent updates are provided to all stakeholders to increase accountability, transparency and efficient information flow for project decision-making.
- **15.** The District of Mackenzie should develop and implement a records management system for its capital projects to ensure project knowledge and information are maintained, appropriately shared, accessible and decisions are based on the most current information.

- **16.** The District of Mackenzie should improve its stakeholder engagement for capital projects by developing relevant guidance. This may include developing a stakeholder engagement strategy and a plan that identifies all project's stakeholders, analyzes their needs, determines an appropriate degree of input that may be required and defines a stakeholder engagement approach for the duration of the capital project.
- 17. The District of Mackenzie should develop a capital project close-out process to ensure activities are properly completed and handed over at the end of a project. This should include an assessment of project performance against its objectives and the identification of opportunities for future improvement.



INTRODUCTION

EXECUTIVE SUMMARY

- This report presents the results of a performance audit conducted by the Auditor General for Local Government of British Columbia (AGLG) under the authority of the *Auditor General for Local Government Act*. The audit was performed in accordance with the standards for assurance engagements set out by the Auditing and Assurance Standards Board of the Chartered Professional Accountants of Canada (see "About the Audit" for more information).
- theme "Infrastructure Sustainability and Infrastructure Asset Management." This is the second round of audits undertaken by our office relating to capital projects. The first round of audits on the topic "Learnings from Local Government Capital Procurement and Asset Management Programs" was conducted between 2013 and 2016, including six local governments located across the Province.
- management because this is an area of local government activity that involves major investment and presents significant financial and other risks for the local government. Effective planning and management are needed to deliver projects on time and within budget while realizing the intended benefits. We selected the District of Mackenzie and the City of Victoria as the two auditees under the topic "Capital Project Management." We chose these auditees based on their different sizes, capacities, geographic locations and individual community characteristics.
- 13. The overall purpose of this audit was to provide an objective, independent examination to determine if the District of Mackenzie effectively managed the planning and delivery of the Mackenzie Recreation Centre Energy Retrofit and Community Hall Upgrades Project, Phase 2 to meet its objectives.
- 14. Our findings are based on a review of relevant documentation and data, interviews with key local government management and staff, as well as observational visits to the facility. The period covered by the audit was January 1, 2015 to December 31, 2019. Our audit also considered any subsequent events that may have been considered significant to the District of Mackenzie's capital project management practices.

OUR EXPECTATIONS

- 15. Effective planning and delivery of major capital projects is critical to local governments achieving their objectives. If delivered well, infrastructure enhances services to the public and improves productivity. Poor management diminishes the benefits of these projects, potentially delays delivery and may result in additional costs to taxpayers.
- project procedural frameworks have a greater chance of their capital projects delivering the intended outcomes. And, while following procedural frameworks is fundamentally important for project success, the overall success of capital projects also depends on timely, accurate decision-making and having experience, leadership and strong communication skills.
- 17. Our examination of the District's approach to project management of the Mackenzie Recreation Centre Energy Retrofit and Community Hall Upgrades Project, Phase 2, included an assessment of the results of the capital project and a review of the District's approach to capital project management. We expected that the District would have:

Project Needs Justification – a prioritized listing of capital projects that provide the most benefit to the community, developed using a well-structured process

Governance and Oversight – established an effective project governance structure and oversight processes

Risk Management – documented and managed capital project risks within the local government's risk framework

Resource Management – complied with an established project reporting structure involving personnel with appropriate levels of training, experience and availability

Project Scope, Budget and Schedule – established clear baselines for the project's scope, schedule and budget, with any changes effectively managed during project delivery

Procurement – implemented fair and transparent procurement processes

Contract Management – implemented effective contract management

Project Reporting – prepared and made available reports that documented the project's progress and performance relative to an established project baseline

Stakeholder Engagement and Awareness – appropriately engaged the public and other stakeholders during planning and delivery of the capital project

Project Close-out and Impact Evaluation – implemented project close-out processes and evaluated project results against documented objectives

CONTEXT

- 18. The District of Mackenzie is located between the south end of Williston Lake to the west and Morfee Lakes to the north-east. As part of the Regional District of Fraser-Fort George, Mackenzie is approximately 180 kilometres from Prince George, the region's administrative centre. The original townsite, which the District now encompasses, developed around British Columbia Forest Products operations, including a pulp mill and two sawmills, which were established in 1965.
- 19. Mackenzie was incorporated in 1966. The District's principal activity is to provide local government services including administrative, protective, transportation, environmental, recreational, water, waste water and fiscal services. The District of Mackenzie has 14 staff members to support these services.
- 20. The District's population grew by 5.9 per cent from 3,507 in 2011 to 3,714 in 2016, higher than the provincial average growth of 5.6 per cent and the national average of 5.0 per cent.
- 21. The 2016 Census indicated that the District had a relatively young population, with 89 per cent under the age of 65. The average age of residents in Mackenzie was 38.9, lower than both the regional average of 39.6 and the provincial average of 42.3.

Exhibit 2 - VISUAL FACTS OF DISTRICT OF MACKENZIE



Source: 2016 census, BC Stats

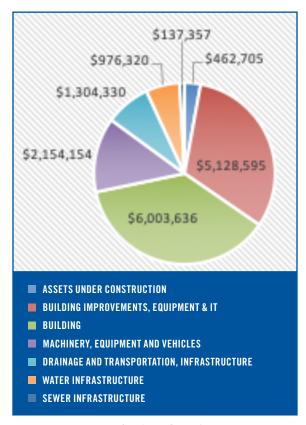
22. Mackenzie's economy is almost entirely dependent on forestry, which is a cyclical industry. Next to forestry, mining is the biggest resource opportunity available, followed by hydroelectricity and, more recently, tourism. Over the last few years, the forest sector has struggled, with many mills slowing production or closing entirely. As of 2019, approximately two dozen mills across B.C.'s interior declared closures or production cuts due to volatile lumber markets. This included three wood products operations in Mackenzie, which closed indefinitely or cutting operating hours due to high log costs and adverse market conditions. More than 20 per cent of Mackenzie's workforce was affected directly or indirectly by these changes. leading to challenges for the local government in ensuring the community's long-term viability.

DISTRICT OF MACKENZIE'S INVESTMENTS IN CAPITAL PROJECTS

23. In 2009, the District was significantly impacted by the global economic downturn, which impacted all its major industries, resulting in the loss of some \$2.5 million in municipal tax revenue. To compensate for this lost revenue, among other measures, the District prolonged the service life of major facilities, some of which operated ten years beyond their previously estimated service life.

- ^{24.} As the District recovered from this downturn, the replacement of ageing infrastructure became a priority. Between 2015 and 2019, the District's total estimated investment in new projects was approximately \$16.32 million dollars. This included \$5.1 million in buildings and \$6.0 million in building improvements, equipment and information technology (32 per cent and 37 per cent of new project expenses, respectively).
- 25. Ehibit 3 shows the District's allocation of these capital additions. The Mackenzie Recreation Centre upgrade Phase 1 and Phase 2 were the two major capital projects during this period. Exhibit 4 provides project details.

Exhibit 3 - DISTRICT OF MACKENZIE 2015-2019 CAPITAL ADDITIONS



Source: 2015-2019 District of Mackenzie financial statements Note: These figures exclude land, land improvements and contributed assets.

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS SUMMARY OF FINDINGS

SUMMARY OF FINDINGS

- 26. The overall purpose of this audit was to provide an objective, independent examination of the District of Mackenzie's capital project management processes in place during the planning and delivery of the Mackenzie Recreation Centre Energy Retrofit and Community Hall Upgrades Project, Phase 2. Specifically, we set out to determine whether the District managed planning and delivery of the project to meet its objectives.
- 27. The District successfully completed the baseline project scope and a few additional items within its budget allocated by council. The project was completed seven months later than planned. We were not able to determine if the delay in the project schedule was due to the additional scope added to the project, as the District did not track the impact of the change orders on the schedule and did not re-baseline the project schedule.
- 28. Our review of the District's capital project management processes relating to this project indicated that the District was partially successful in meeting our expectations:
- ➤ The District aligned project needs with its corporate strategic priorities
- The District recognized a risk associated with its limited internal capacity to manage the project and mitigated this risk by contracting an owner's representative to manage the project on the District's behalf
- ➤ The contracted owner's representative introduced many good project management practices, which the District implemented during the project, for example, it prepared a project plan that defined the management roles and responsibilities, project objectives, scope, schedule and budget, which it tracked and reported against during construction
- 29. However, our review identified a number of weaknesses in the District's capital project management, for example:
- ➤ Project governance lacked a formal steering committee to provide strong capital project governance and oversight
- ➤ A few capital project management processes stopped being followed once the owner's representative left the project just prior to it being completed. A number of project

- management processes were not fully completed as intended, for example, the project close-out and evaluation of results
- Some of the District's existing processes were either not formalized, for example, stakeholder engagement, or not always followed as intended, for example, accounts payable controls. In addition, the procurement policy, open procurement documentation and records management processes required strengthening
- 30. To ensure the successful delivery of future capital projects, the District should improve its capital project management. We proposed a few options for the District to contemplate:
- The District should consider documenting the good practices brought by the owner's representative and additional improvements identified in this audit report and include these in a capital project management framework that is followed up by staff training. This will help the District to be less dependent on a vendor to bring these practices. The framework should include policies and procedures covering project phases and functions, for example, project governance, risk management, contract management, monitoring and reporting and others.

As the District develops its capital project management processes and procedures, we encourage it to reach out and collaborate with other local governments. The District could benefit from examining frameworks developed by other local governments as it builds on its own project management activities.

In addition, we recently released an AGLG Perspectives booklet related to capital project management for local governments. This includes information that should be relevant to a wide range of local governments, such as capital project governance, planning and performance management. It also includes references to capital project management frameworks developed by other local governments that are publicly available. We hope the booklet will provide useful information to all local governments interested in enhancing their capital project management practices.



- > Should the District decide that, due to limited internal capacity, it does not plan to manage complex and/or risky capital projects in the foreseeable future, the District should use this report as guidance on capital project management processes it would expect a contracted project manager to implement during a future capital project. The District should take a proactive role in overseeing contracted project managers as they manage the District's capital projects and ensure consistency in the project management processes from one capital project to another, regardless of who is managing the project.
- ➤ The District could also consider blending the two options presented above. It could identify and develop some of the key components of the capital project management framework and supplement the rest of the framework with those provided by a contracted project manager.
- 31. Regardless of which approach the District selects, management should ensure that staff is provided with appropriate and sufficient training and understands how to apply various aspects of capital project management.
- 32. In addition, the District should strengthen its existing policies and procedures and ensure compliance with them, as identified in this report.
- 33. As the District of Mackenzie decides on its approach toward capital project management, it should prioritize making improvements in some of its policies and processes, especially as it embarks on construction of a new fire hall to be completed in fall 2021:
- ➤ Establish requirements for effective governance arrangements to oversee major capital projects and ensure compliance with these requirements
- **▶** Strengthen open procurement documentation
- ➤ Update its procurement policy and ensure compliance with it
- ➤ Establish internal and external reporting requirements for capital projects
- Establish guidance for stakeholder engagement and public communication
- Ensure formal procedures for project risk management are in place

- ➤ Ensure there is guidance for establishing and managing changes to project budget, schedule and scope
- 34. The recommendations in this audit report are written with the assumption that the District will pursue developing its own capital project management framework. Together with detailed audit findings, this will help the District see a full picture of practices that organizations with more experience would have in place when managing capital projects.
- 35. Should the District decide not to develop such a framework, the District could use the detailed audit findings and recommendations as a guide to assess and oversee the capital project management processes implemented by a contractor. The District might find it beneficial to develop a checklist or other tools, based on this audit report, to assist it with oversight of an external project manager.

CAPITAL PROJECT MANAGEMENT





















PROJECT OBJECTIVES & RESULTS

PROJECT NEEDS

JUSTIFICATION

GOVERNANCE AND OVERSIGHT

RISK MANAGEMENT

SCOPE, BUDGET, Schedule Management AND FINANCIAL CONTROLS

PROCUREMENT

CONTRACT MANAGEMENT

PROJECT REPORTING

STAKEHOLDER ENGAGEMENT AND

CLOSE-OUT



PHASE 2 PROJECT BACKGROUND

36. The District of Mackenzie's residents depend on the District's Recreation Centre to help meet their recreational and social needs. The recreation centre is the core of Mackenzie's community life, comprising an arena, library, pool and multipurpose spaces. The phased construction of this facility, with parts dating back to the 1960s, has left the District with a facility that is disjointed in its functionality, rapidly approaching the end of its life and unable to meet the diverse needs of the community.

37. Starting with a building retrofit feasibility study in 2012, the District has been implementing a \$20 million phased program of building enhancements. As of December 2019, the District had completed two out of four phases of this long-term project, as detailed in Exhibit 4. The timing and scope of phases 3 and 4 are unknown and will depend on future funding opportunities.

Exhibit 4 - MACKENZIE RECREATION CENTRE UPGRADE, COMPLETED PHASES

PHASE	FACILITY IMPROVEMENTS	PROJECT Period	PROJECT Budget	FINANCING	PROJECT Managed by	STATUS
Phase 1	- Arena renewal investment - Critical building retrofits, including: energy efficiency, upgrades for compliance with the BC Building Code and relevant regulations, refrigeration, building envelope, lighting upgrades to the arena and library, new hockey change rooms	2012-2015	\$2.5 million	100% internal funding	District	Completed in 2015
Phase 2 Subject of this audit	- Construction of a new multi-purpose community hall - Improved lobby-office-concession area - Energy conservation measures - Upgrades to the exterior insulation of the pool building - Pool and library heating, ventilation and air conditioning upgrades - Accessibility upgrades - Water-saving plumbing fixtures - Additional sprinklers for fire safety	2016-2019	\$8 million	75% grants 12.5% contribution from Mcleod Lake Mackenzie Community Forest 12.5% borrowing	Contracted owner's representative and the District	Completed in 2019
Phase 2.5 Subject of this audit	- Improved children's play centre - New climbing wall	2018-2019	Part of Phase 2 budget	Part of Phase 2 funding	Owner's representative and the District	Completed in 2019





















ASSESSMENT OF PROJECT SUCCESS

- 38. Assessment of project success can include establishing whether the project achieved its intended objectives and was well-managed. In this section, we discuss whether the District achieved Phase 2 project objectives. Our assessment of whether the project was well managed is discussed throughout this report.
- 39. The District substantially completed the Phase 2 project in January 2019. As of December 2019, the District had not formally evaluated the project outcome against its objectives set out in the project plan. Based on our analysis of documentation and physical observation, the District accomplished all eight project objectives, as shown in Exhibit 5.

Exhibit 5 – PROJECT ASSESSMENT AGAINST PROJECT OBJECTIVES

#	PHASE 2 PROJECT OBJECTIVES	ACHIEVEMENT OF PROJECT OBJECTIVES — AUDITOR'S ASSESSMENT
1	Demolish and replace the existing curling rink and surrounding ancillary spaces with a new 10,000 sq. ft. 500-person capacity multipurpose community hall	⊘
2	Improve lobby-offices-concession areas with relocated play centre	⊗
3	Water-saving plumbing fixtures	⊗
4	Upgrade life-safety systems	V
5	Improvements to the pool, library and HVAC upgrades	⊗
6	Expand recreation and cultural services to the community	⊗
7	Improve spatial efficiencies and multi-purpose functionality	V
8	Extend the functional life of the facility	(

40. For its objective six ("Expand recreation and cultural services to the community"), the District did not formally define a targeted service level against which to measure its actual service performance. Nevertheless, our audit confirmed that the District added a number of service facilities as part of the Phase 2 project, including a climbing wall, community hall and children's play area. The District also increased the recreation centre's use, for example, according to its admission statistics, adult passes and ticket sales increased from 2015 to 2019 by 22 per cent.





















- 41. In addition to the project objectives, the District also established five success criteria by which the Phase 2 project was to be evaluated upon completion, to conclude whether it was successful, as viewed by stakeholders. The District has not formally assessed the achievement of these criteria.
- documentation and observations, the District achieved two of its five success criteria, related to the project scope and budget. Strictly speaking the District failed to achieve its criterion related to schedule. The District added additional scope to the project but failed to re-baseline the project schedule. Due to lack of documentation, we were not able to determine if the seven-month delay in project completion was as a result of the additional project scope items added. Results on two other success criteria cannot be determined, as shown in Exhibit 6.

Exhibit 6 - PROJECT SUCCESS CRITERIA ASSESSMENT

#	PROJECT'S SUCCESS CRITERIA		AUDITOR'S ASSESSMENT OF THE District's Success Criteria Achievement
1	Deliver the project within budget	\$8M total budget	Actual expenditure as of March 31, 2020 - \$7,940,494 (*)
2	Meet the schedule	Project completion - June 2018 for asset handover from general contractor - August 2018 full project close-out	Substantial completion - January 2019, i.e. seven months after planned asset handover date. The impact of the additional scope items on the project schedule cannot be determined due to lack of documentation.
3	Achieve scope	- Site preparation and utility service relocations - Demolish existing curling rink and ancillary spaces - Construct multipurpose Community Hall - Complete life safety system upgrades - Install water-saving plumbing fixtures - Complete HVAC upgrades	Completed baseline scope and additional scope items (*)
4	Limit disruption to existing services as cost effectively as possible	Not established	? Cannot be concluded due to lack of evidence
5	Achieve long-term goals	Provide seamless transition to the future phases of the Recreation Centre Retrofit Efficient future operations and maintenance long-term sustainability	Cannot be concluded at the time of audit due to long-term nature of this criterion
	Success criteria achieved Cannot be concluded	Success criteria not achieved Success (criteria not strictly achieved, some conditions in place

 $(\hbox{\rm *}) - See \hbox{\rm ``Scope, Budget and Schedule Management''} section of this report for more details$

























PROJECT NEEDS JUSTIFICATION

EXPECTATION

It is important for local governments to initiate capital projects that align with their overall mandate and strategic goals. High value/high risk projects should be supported by information necessary to make an informed investment decision.

We expect local governments to determine their long-term capital needs and prioritize capital projects that align with their strategic priorities and provide the most benefit to the community. We also expect local governments to develop a business case and evaluate options to address the identified needs.

- 43. The District of Mackenzie partially met our expectations for project needs justification. During project initiation and planning, the District aligned the Phase 2 project with organizational priorities and goals. However, the District did not develop sufficient policy and process to support capital project initiation.
- 44. The District identified recreation as one of the key services it provided to residents through its Official Community Plan (1994) and Council Strategic Priorities (2012-2015 and 2017-2020). These documents highlighted the importance of investing in and providing opportunities for recreation to residents and highlighted the importance of environmental sustainability and investments in energy saving infrastructure. Its Phase 2 project documentation demonstrated alignment with these strategic priorities.
- 45. At the time of project initiation, the District had not yet developed an asset management plan to inform its recreational capital asset needs and priorities, targeted service levels and other aspects. Rather, the District relied on staff knowledge of community needs and challenges associated with the existing recreation centre building, including anticipated increasing maintenance needs and operational costs.

- 46. To identify opportunities, priorities and directions to address deficiencies in the recreation centre's infrastructure and extend the building's service life, the District had undertaken three feasibility studies in 2011, 2012 and 2015. The 2015 study reflected the accomplishments of Phase 1 and helped inform Phase 2 project scope development.
- 47. The District did not have policy requirements or procedures for capital project initiation, with the exception of a procurement policy that set out a requirement to consider service delivery options and develop a project business case that included key elements such as project rationale, asset life cycle value, funding availability, time sensitivity and risks. While some of these elements were included in various project documentation, the District produced neither a business case nor a service delivery options analysis for Phase 2, as required by its policy.
- 48. In addition, the District had an informal practice of using a capital budget request form to capture the project rationale, service delivery options, asset conditions and funding sources. This form was typically submitted to council as part of the funding approval process. The District did not use such a form for the Phase 2 project.
- 49. In April 2020, after the period covered by the audit, the District made progress in developing its asset management program by adopting a corporate asset management policy. This policy was meant to guide future asset management practices by identifying the scope of the process, outcomes, guiding principles and responsibilities.

RECOMMENDATION ONE

As part of the District of Mackenzie's efforts to establish an asset management program, the District should develop formal requirements to support its capital project initiation processes. This should include development of a capital project business case to a level of detail suitable to the project scale and complexity.























GOVERNANCE AND OVERSIGHT

EXPECTATION

Project governance is the management framework that enables those accountable for a project to provide effective oversight over those responsible for its implementation. Defining and implementing an effective project governance framework is an important component of the management of capital projects. We expect local governments to have a robust project governance structure and oversight processes in place for their capital projects.

- 50. The District of Mackenzie partially met our expectations for project governance. While the District did not have a policy that defined governance and oversight requirements for its capital projects, it did establish a project steering committee to provide oversight over the Phase 2 project. Unfortunately, this committee was only active during project planning.
- 51. The District developed a project plan that assigned key project management roles and responsibilities, defined accountabilities and established delegated authority limits, however this document was never formally signed, its existence was not known to all project team members and it was not maintained to reflect changes over the course of the project.

PROJECT GOVERNANCE STRUCTURE

- 52. While some projects are routine and low-risk in nature, projects that represent higher risk or involve more significant capital investment can benefit from oversight provided throughout planning and implementation by a well-structured project board or steering committee made up of the project sponsor and experienced subject matter experts.
- 53. The District did not have a policy that defined governance and oversight requirements for its high-risk and/or high-value capital projects. The District's purchasing and procurement policy, dated 2016, contained some guidelines for capital project planning and procurement, including oversight, however, these guidelines were high level and not well known or followed by staff.

- 54. In the early project initiation phase, the District established a formal steering committee with the authority to make recommendations on design and any other issues pertaining to the project. This committee, however, was only active for a short period and little documentation was maintained of meetings and decisions made by the committee.
- 55. In the absence of a steering committee, the District relied on the guidance of the project management team, including the project sponsor and project manager, as described in the project plan. See Exhibit 7 for the project management team structure.

PROJECT MANAGER

- 56. Clear definition of who is accountable and who is responsible for the success of a project is an important component of defining the project governance structure. This process includes defining and establishing appropriate roles, responsibilities, authorities and the accountability structure for the project.
- as project manager on its behalf (the "owner's representative"). The District chose to outsource this role due to a lack of appropriate in-house resources with the necessary experience, training and availability. The specific roles and responsibilities of the owner's representative were identified in the service contract and the project plan.
- 58. The owner's representative joined the District late in the project initiation phase and represented the District's interests during most of the construction phase. In October 2018, two months prior to the recreation centre grand re-opening, the contract with the owner's representative ended. The District chose not to renew the owner's representative contract and began managing the project in-house. As a result, project management responsibilities were informally transferred to the project sponsor, the Director of Recreation Services.



















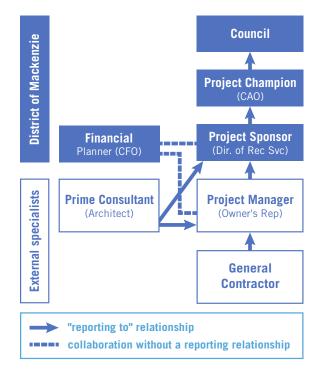


- 59. We found that some construction-phase project management responsibilities were discontinued when the owner's representative contract ended, for example: maintenance of an up-to-date project cost log to track costs against the project baseline budget; monthly project status reporting, including an analysis and updates on project risks, challenges, scheduling, scope, financial position; duties relating to change and contract management, and others.
- 60. In addition, some post-construction-phase project management responsibilities were either not completed or were not documented, for example: contract closures and formal assessment of work performed against the contracts' requirements; handover of all closeout documentation; handover and acceptance of activities; administrative close-out including lessons learned, project closeout report, formal release of resources and others.

PROJECT SPONSOR

- 61. The District appointed its Director of Recreation Services to act as the project sponsor accountable for the project's success. The project plan detailed the associated responsibilities, authority limits and lines of reporting.
- 62. The project had some project member turnover, including a change in the project sponsor, and experienced some challenges with project knowledge transfer. For example, current staff had limited knowledge of the project documentation and rationale behind some of the decisions made during the planning phase. Some District staff also told us that they were unaware of foundational project documentation, such as the project plan, which identified objectives, critical success factors and roles and responsibilities for the capital project. The project management team structure and reporting relationships were as shown in Exhibit 7.
- 63. The Director of Recreation Services, acting as project sponsor, had limited knowledge and experience in capital project management and relied on the collective knowledge and experience of the key contractors, including the owner's representative, architect and general contractor.





Note: This chart excludes the project steering committee, which was only active for a short time during project initiation and planning.

DELEGATED LEVELS OF AUTHORITY

- 64. The District established delegated levels of authority for the project, which were aligned with its procurement policy requirements:
- ➤ Council had sole authority to approve the project budget and any subsequent changes
- Approval of purchase orders, invoices, contracts and other documents was delegated to staff based on a dollar value threshold
- 65. The project manager was responsible for reviewing project invoices, change orders and other documentation prior to issuing recommendations to the District for final approval.
- 66. The District generally complied with its delegated authority limits with a few exceptions as discussed in the Procurement Management section of this report.

CAPITAL PROJECT MANAGEMENT POLICY AND FRAMEWORK

67. A capital project management policy and framework is a good practice for local governments to follow, bringing together all the relevant policies and procedures that should be adhered to in the delivery of its capital projects.





















68. While the District did not have a capital project management policy and framework, it did have certain formal and informal procedures covering some aspects of capital project management.

PROJECT CHARTER AND PROJECT MANAGEMENT PLAN

- 69. A project charter can be a useful and effective governance tool this is a document that records the formal approval of the project scope, budget and schedule and identifies the project manager, project sponsor, key stakeholders and risks.
- 70. The District of Mackenzie did not develop a project charter for the Phase 2 project, however, certain key elements typically documented in a project charter were set out in a comprehensive project plan. We noted a number of deficiencies with this document that prevented it from functioning as a project charter:
- ➤ It was established a month after construction mobilization and demolition began, rather than during the project initiation phase
- ➤ It was not signed by the project sponsor and communicated throughout the project team
- ➤ It was not updated to reflect changes in project team members and re-assignment of project management roles and responsibilities

RECOMMENDATION TWO

The District of Mackenzie should adopt a consistent approach to capital project management. This could be achieved by developing a capital project management framework that brings together all existing relevant procedures in a rational and structured manner, supplemented with newly-developed procedures aligned with capital project management good practices. Management should ensure that staff is provided with appropriate and sufficient training and understands how to apply various aspects of capital project management.

Recommendations throughout this report identify many aspects of capital project management that could be integrated into the District's capital project management framework or used to assess and oversee the approach implemented by an external project manager.

RECOMMENDATION THREE

The District of Mackenzie should strengthen its governance of major capital projects by developing and following systematic and structured processes for project oversight with an appropriate governance structure in place, such as a project board or committee.

Policy and procedural guidance for capital project governance and oversight could be integrated into a capital project management framework.

RECOMMENDATION FOUR

The District of Mackenzie should ensure it identifies, develops, properly approves, distributes in a timely way and updates all essential guiding documentation for capital projects, including a project charter.

Policy and procedural guidance on essential project documentation could be integrated into a capital project management framework.

























RISK MANAGEMENT

EXPECTATION

A formal approach to managing project risk includes risk identification, assessment, monitoring and reporting along with implementation of documented risk mitigation strategies. This should include maintenance of a risk register that identifies the assessed likelihood of occurrence and the severity of impact of each identified risk.

We expect local governments to adopt a formal approach to identify, report and manage project risks throughout the life of capital projects.

- 71. The District partially met our expectations for project risk management. The District formally identified, monitored, mitigated and reported project risks; however, this risk management activity did not continue for the full duration of the project.
- 72. The District developed a number of policies and procedures to guide risk management processes, including:
- A corporate risk management policy developed in 1999. The policy has not been updated since 2008
- ▶ Project risk management procedures to follow during initiation and planning of a capital project, as outlined in the District's procurement policy (2016)
- 73. However, the project team members we interviewed were not familiar with these policy requirements and procedures and did not implement them for the project.
- 74. District staff had some understanding of risks facing the project, for example, escalating costs due to market forces, increased demand for contractors and the challenges of working in a northern community. The District also recognized a risk associated with its limited internal capacity, skills and experience to manage the project.
- 75. To mitigate risks, the District hired an owner's representative that developed a risk management plan as part of the project plan. The plan provided a structured and formalized approach to the identification, assessment,

monitoring, mitigation and reporting of project risks and assigned responsibility for project risk management to the owner's representative.

- 76. During most of the construction period, the owner's representative identified, monitored and mitigated project risks and reported to the District via monthly project status reports. Associated documentation was comprehensive and followed good practice. For example, monthly status reports described project risk types, potential impacts to scope, schedule, budget and quality, risk ranking and probability level, possible risk management strategies and response options, including those to mitigate, accept or transfer the risks and responsibilities for related actions. The project risk documentation identified unrealistic construction and project delivery schedule as a risk with the highest ranking.
- 77. Formal risk management processes, including risk monitoring, maintenance of the project risk register and reporting, were discontinued when the owner's representative contract expired late in the construction phase, about two months prior to the grand re-opening of the recreational centre. District staff assigned to the project told us that they relied on the owner's representative and were unaware of the risk management activities or documents specific to the Phase 2 project.

INSURANCE AND BONDING

78. The District established insurance and bonding procedures as part of its procurement policy and followed these procedures for the project. The District used industry standard documents to tender and contract services and obtained appropriate bonding and insurance coverage for the project.

RECOMMENDATION FIVE

The District of Mackenzie should develop and implement a formal approach to capital project risk management, especially projects involving significant capital investment or risk. The approach should include policy and procedures that require formal risk identification, assessment, monitoring and reporting throughout each project, along with awareness-raising activities and training.

Policy and procedural guidance on project risk management could be integrated into a capital project management framework.























SCOPE, BUDGET, SCHEDULE MANAGEMENT AND FINANCIAL CONTROLS

EXPECTATION

A project baseline defines a project in terms of the approved project scope and associated project budget and schedule and enables subsequent change management and performance transparency.

We expect local governments to have a process that includes the development and approval of a sufficiently detailed project baseline that defines a capital project in terms of scope, budget and schedule. We also expect local governments to establish procedures to authorize any subsequent changes to the project baseline and to ensure that the cost and time implications of any changes in scope are factored into any decision to re-baseline a capital project.

PROJECT SCOPE MANAGEMENT

- 79. The District partially met our expectations for management of project scope. The District considered community needs and developed a series of construction cost estimates to inform project scope and budget development. The District defined the baseline project scope and scope change procedures and generally followed these procedures with a few exceptions.
- 80. Overall, the District delivered the baseline scope plus some additional scope items, such as a trophy case, climbing wall, children's play area and sport flooring, as it tried to maximize the value of the grant funding it received.

PROJECT SCOPE ACHIEVEMENTS

- 81. The project's baseline scope, as stated in the project plan, included six components:
 - 1. Site preparation and utility service relocations
 - 2. Decommissioning, hazardous materials abatement and demolition of the existing curling rink and ancillary spaces
 - 3. Construction of a new multipurpose community hall
 - 4. Life-safety system upgrades
 - 5. Water-saving plumbing fixtures
 - 6. HVAC upgrades

- 82. Project documentation demonstrated that all the above baseline scope items were completed, including installation of an energy efficient roofing primer a retrofit item that was part of the environmental objective of the grant funding.
- 83. The District's project plan identified a number of additional scope items to be included subject to budget availability. The District re-prioritized additional scope items on several occasions during the project and delivered those that were approved by council and the project sponsor, as shown in Exhibit 8.

 $Exhibit\ 8$ — Additional scope items added to the phase 2 project

ADDITIONAL PROJECT SCOPE ITEMS	costs, \$	
Custom trophy cases		
Children's active play area and gym structure		
Climbing wall	382,192	
Fixture, furniture & equipment for lobby and multi-purpose rooms	·····	
Landscaping	145,327	
Exterior bi-fold glass doors for west side of the new multipurpose room	67,409	
Replacement of an existing arena lobby and rubber sport flooring	39,647	
Media wall	19,067	
Facility signage	18,327	
TOTAL	671,969	

Source: District of Mackenzie documentation

BASELINE SCOPE

- 84. The project scope was driven by community needs identified through consultation with the public, increasing building maintenance requirements and by grant funding opportunities available to the District, including grants for infrastructure projects with environmental goals.
- 85. The owner's representative developed a baseline project scope and documented it in the project plan. However, this document was never formally approved and neither was the scope.





















86. The owner's representative monitored and regularly reported the status of the project scope to the District until their contract expired late in the construction phase. Staff advised that the project sponsor continued monitoring the scope after the departure of the owner's representative, with support from the general contractor and the architect, although this was done informally. Taking into account the overarching significance of the project's monitoring process, we do not consider such informal oversight to be sufficient and appropriate.

SCOPE CHANGE CONTROLS

- 87. The owner's representative outlined procedures for initiating and monitoring scope changes in the project plan. These required the District to review and approve any scope changes based on input and recommendations from the owner's representative. The District used change order templates as part of its scope change approval process.
- 88. We noted that the District, for the most part, followed the change order procedures, however, there were a number of exceptions:
- Authorization of some change orders did not comply with the District's procurement policy
- ➤ The District did not accurately document the rationale for each change order and did not identify their impact on project schedule
- 89. These exceptions are further discussed in the Contract Management section of this report.

RECOMMENDATION SIX

The District of Mackenzie should establish requirements for developing and approving the baseline scope of each capital project, as well as the management of any scope changes. The District should communicate these expectations to capital project management personnel and monitor project activities to ensure compliance with them.

Policy and procedural guidance on capital project scope management could be integrated into a capital project management framework.

PROJECT BUDGET MANAGEMENT

OVERVIEW OF CAPITAL PROJECT BUDGET DEVELOPMENT

- go. The District partially met our expectations for capital project budgeting. The District had some high-level procedures in place to assist with the development of capital project budgets, which it followed, but these guidelines did not sufficiently address the needs and risks in capital project budget management. The District did not develop a project charter to formally approve the project baselines.
- 91. The District included a baseline project budget in the project plan, however, it did not sign the project plan. Council approved the project budget indirectly through approval of the organizational five-year financial plan on October 10, 2017.
- 92. The District had developed some procedures relating to capital project budgeting, for example:
- ➤ The procurement policy specified spending limit approval thresholds for any given project and required a review of cost estimates and a revision of the project budget before a construction contract is awarded
- The project plan identified key risk factors which might impact the project budget and outlined procedures for re-baselining the budget and monitoring and reporting budget
- 93. The project budgeting procedures were generally high-level and had opportunities for further improvement, for example, by offering guidance on different construction cost estimates and when to rely on each class throughout the project design cycle.

PROJECT CONTINGENCY

- 94. The District did not have formal procedures to guide the allocation, draw-down and monitoring of capital project contingencies.
- 95. The project baseline budget developed in September 2017 by the owner's representative contained a separate line item for contingency of 7.5 per cent. During the construction phase in April 2018, the contingency increased to 19.7 per cent of the project budget, to a total of \$1,573,271, and remained at this level thereafter, as shown in Exhibit 9.





















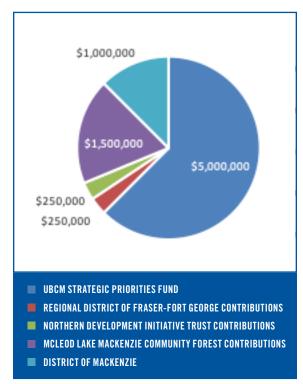
96. This increase in contingency was to reflect the lower than anticipated construction cost rather than an increase in project risk. Better practice would have been to either re-baseline the project budget downwards, or to restrict the Project Manager's access to these funds by use of a management reserve.

Exhibit 9 - PROJECT CONTINGENCY BUDGET

PROJECT Budget items	SEPTEMBER 2017 Baseline Budget, \$	APRIL 2018 Budget re-allocations, \$	CHANGE \$	CHANGE %
Construction Costs	6,390,000	5,166,529	(1,223,471)	(19%)
Other Costs	1,010,000	1,260,200	250,200	25%
Contingency	600,000 or 7.5% of the budget	1,573,271 or 19.7% of the budget	973,271	162%
Total Project Budget	8,000,000	8,000,000	-	0%

97. To fund construction of the project, the District identified potential grant opportunities for up to \$7 million and presented prospective funding sources to council in February 2017.

Exhibit 10 - PROJECT BUDGET BY FUNDING SOURCES



Source: District of Mackenzie documentation

- 98. In September 2017, the owner's representative developed a baseline project budget as part of the project plan for a total of \$8 million that reflected projected construction costs based on an executed construction contract. A month later, council approved the project's total budget of \$8 million through an amendment to its 2017-2021 five-year financial plan.
- budget of \$8 million, the District did not have a project charter which, if it had existed, would have ensured that the project sponsor had also formally approved the project budget. Except for this, the District generally followed budgeting procedures for the project.

COST ESTIMATES

100. Different construction project cost estimates (such as class D, C, B, A with class D being the least accurate to Class A being the most accurate), are a prediction of the most likely total cost and represent the best judgement based on the information available at the time the estimate is prepared.





















to guide development of different classes of cost estimates during the Phase 2 project planning phase. However, the District did produce a series of Class D, C and A construction cost estimates as the project design progressively developed as shown in the Exhibit 11. The District engaged a cost consultant (a professional quantity surveyor) for the preparation of the Class C and A estimates.

Exhibit II - PROJECT COST ESTIMATES

CONSTRUCTION COST ESTIMATE	DATE PUBLISHED	ESTIMATE AMOUNT (\$)	CHANGE FROM LAST ESTIMATE (\$)
Class D	22-Nov-16	6,988,019	-
Class C (recal.)	02-Mar-17	7,091,200	+ 103,181
Class C (rev.)	14-Mar-17	6,398,327	- 692,873
Class A	27-Apr-17	8,183,900	+ 1,785,573
Class A (rev.)	08-May-17	6,637,755	- 1,546,145

Source: District of Mackenzie documentation

RECOMMENDATION SEVEN

The District of Mackenzie should develop a policy and procedures for capital project budget development, approval and management, which could include guidance on:

- Preparation and use of construction cost class estimates for higher value capital projects
- ➤ Appropriate contingency allocations for various types of capital projects
- Creation of a management reserve for unallocated contingency funds
- Re-baselining a project budget when forecast costs increase or decrease

Policy and procedural guidance on project budget management could be integrated as part of a capital project management framework.

FINANCIAL CONTROLS

on financial controls. The District assigned responsibilities and outlined procedures in the project plan and other contractual documents on how to manage the project budget and

expenditures. The District followed procedures for monitoring and reporting on the project's financial position, however, this practice was suspended during the latter stages of construction.

103. The District had not formalized some of its key accounts payable controls. A sample of invoices tested identified instances where purchases were not properly authorized and did not comply with the District's procurement policy.

COST REPORTS

104. The District monitored the project's financial performance in a number of ways, for example:

- The owner's representative monitored and reported on financial performance on a regular basis, which included a cost tracking log based on project billings and production of monthly status reports to provide financial updates including actual to budget expenditures, estimated impact of proposed change orders, expenditure commitments and forecast cost to completion
- ➤ The District's finance staff and the owner's representative reconciled project billings on a monthly basis





















ros. Council was regularly updated on the project's financial performance. District staff reported to council monthly on the year-to-date capital spending and annually on actual to budget expenditures. A more complete picture of the project's financial performance would have been provided if these reports compared total project cost to date to the approved project budget, rather than presenting annualized data.

the District did not prepare a final report on the total actual to budgeted expenditure. Based on the District's financial records, we estimated the total project cost was \$7,940,495 as at December 31, 2019, which was slightly below the total project budget of \$8 million, as shown in Exhibit 12.

Exhibit 12 - PROJECT ACTUAL EXPENDITURES 2016-2019

PROJECT EXPENDITURES BY CONTRACT	2016	2017	2018	2019	TOTAL
Architect	16,892	460,926	171,757	5,720	655,296
General contractor	-	2,138,469	3,651,864	252,999	6,043,332
Owner's representative	-	130,404	133,434	-	263,838
Fixture, furniture and equipment supply	-	-	263,022	-	263,022
Other contracts	21,205	219,584	404,228	69,990	715,007
Total Contracts	38,097	2,949,383	4,624,305	328,709	7,940,495

Source: District of Mackenzie financial records

ACCOUNTS PAYABLE CONTROLS

accounts payable controls, for example, invoice and payment approval authorization limits, segregation of duties, invoice to batch payment reconciliation, holdback management controls and others. With the exception of the authorization limits prescribed in the procurement policy, these controls were not documented to ensure consistency in implementation. The District had an accounts payable manual, however, this document focused on the administrative steps of entering invoices into the accounting system rather than controls over the accounts payable cycle.

payable controls, we tested a sample of 46 invoices covering 25 per cent of total invoices and 88 per cent of the total dollar value. We specifically looked at compliance of the purchase

approval process with the procurement policy, completeness of the supporting documentation, appropriateness of segregation of duties, finance department's due diligence in reviewing supporting documents prior to processing invoices and compliance of the holdback amount with the contact terms.

109. Our review of the sampled transactions demonstrated some good practices in place, for example:

- ➤ The finance department generally exercised appropriate due diligence and controls in processing invoices and holdback amounts
- Sufficient purchase documentation was in place





















non-compliance with the procurement policy authorization limits. Two out of 46 invoices we tested (\$144,000 and \$27,000 in value respectively) demonstrated that the purchase was initiated and approved by the same staff with an approval limit significantly lower than the actual amount approved. This non-compliance was not caught by the finance department before processing the invoice and payment.

RECOMMENDATION EIGHT

The District of Mackenzie should strengthen its financial controls for capital projects through:

- Documenting key accounts payable controls and ensuring they function effectively
- ➤ Establishing policy guidance on capital project financial reporting, including expectations on cost reporting against project baseline budgets and raising staff awareness of these requirements

Policy and procedural guidance on capital project financial controls and reporting could be integrated as part of a capital project management framework.

PROJECT SCHEDULE MANAGEMENT

on project schedule and timelines. It developed procedures for managing the project's scheduling and timeline but did not formally approve the baseline schedule. Substantial completion of the project was seven months delayed from the baseline schedule.

112. The District developed a baseline schedule for the project as part of the project plan. However, the schedule was developed two months after construction had started and there was no formal documentation to demonstrate the District's approval of the schedule and any subsequent changes to it.

for monitoring the project schedule, including procedures for extending or modifying construction timelines through change order forms. The District used the change order forms until the owner's representative's contract expired at the end of October 2018. District staff told us that from that point until the project was substantially complete in January 2019, they received informal updates on the schedule from the general contractor and the architect. Taking into account the overarching significance of the project's monitoring process, we do not consider such informal oversight to be sufficient and appropriate.



















r14. As shown in the Exhibit 13, construction was substantially complete in January 2019, seven months behind the baseline schedule specified in the project plan. We were not able to determine if delay in the project schedule was a result of the additional scope added to the project due to the following reasons:

- ➤ The project schedule was not revised when additional project scope items were added
- ➤ Some change orders were triggered by changes in design and construction scope, for example, hazardous materials abatement and revisions to mechanicals, however, the change orders did not identify anticipated scheduling impacts

Exhibit 13 - PROJECT TIMELINE

INITIATION	April 2015 Updated retrofit feasibility study	December 2015 UBCM funding (up to \$5 million) approved	August 2016 Architect contract awarded	December 2016 Project consultation completed
PLANNING	November 2016 -May 2017 Class estimates D, C, and A produced	June 2017 Construction contract and owner's representative contract awarded	September 2017 Project plan developed, including baseline budget, scope and schedule	October 2017 Capital budget for Phase 2 approved through 5-year financial plan amendment
CONSTRUCTION	July 2017 Mobilization of general contractor	August 2017 Demolition of curling rink. Construction begins.	October 2018 Owner's representative contract expired	
COMPLETION	December 2018 Recreation Centre grand re-opening	January 2019 Substantial completion of Phase 2	At the time of publication of the the project has not been formate.	

Source: District of Mackenzie documentation

RECOMMENDATION NINE

The District of Mackenzie should establish guidance and policy requirements for developing and monitoring capital project schedules, including:

- Guidance for the development and approval of a baseline project schedule and any changes to it
- ➤ A requirement that any construction change orders identify schedule impact as well as cost
- A process to monitor and periodically report on schedule progress and forecasts

Policy and procedural guidance on capital project schedule management could be integrated into a capital project management framework.

























PROCUREMENT

EXPECTATION

Capital procurement is the process by which a local government enters into a contractual agreement with a vendor to design, build or improve a physical asset of lasting value. Proper management of capital procurement helps to achieve economy, efficiency and effectiveness.

We expect local governments to develop, implement and comply with policies and processes that reflect principles of transparency and accountability for the spending of public funds.

expectations in this area. The District established a procurement policy in 2016 that contained many elements of good practice, although some information was out of date and other sections were not fully developed. While District staff generally followed the procurement policy during the project, there were some examples of non-compliance with policy. The District's open procurement documentation for the main contracts associated with the project contained language that did not always comply with requirements of trade agreements.

PROCUREMENT POLICY

- many elements of good practice, for example, it clearly set out procurement policy objectives, principles, authorities and responsibilities. The policy had sufficient procedures for procuring contracts, including acquisition authority, signing authority, competitive methods and documentation required to be kept on file.
- However, some aspects of the procurement policy were not fully developed, for example: the policy did not identify alternative procurement methods and procedures; it had limited guidance on ethical considerations such as code of conduct, conflict of interest and non-disclosure, and others; it did not refer to current trade agreements; some procedures, such as solesource requirements, had sufficient detail, while other procedures, such as competitive bid forms and evaluation, lacked sufficient guidance.

tas. Staff told us that while they understood the basic requirements of the procurement policy, they were not fully aware or trained on some procedures included in the policy, for example, procurement risk assessment and management procedures.

COMPLIANCE WITH PROCUREMENT POLICY

- ment mechanisms when conducting four main procurements for the project, including: construction, owner's representative, architectural services and supply of fixture, furniture and equipment as shown in Exhibit 12. These represented 90 per cent of the total project budget.
- obtained through an open competitive process, with one procurement for architectural services sole sourced, with appropriate justification and council's approval in place to do so. The District felt that it established an excellent rapport with the architect during the Phase 1 project and engaging a new firm for the Phase 2 project would lead to additional design costs and schedule delays due to the steep learning curve.
- 121. The District appropriately authorized the acquisition of goods and services as required by the procurement policy. It also allowed, in our opinion, a reasonable amount of time for construction companies to bid on the project and for the District to evaluate the results before awarding the contract. The District appropriately used the BC Documents Committee standard documents and guidelines for its construction services.
- 122. However, we noted instances where the District was not compliant with its procurement policy, for example:
- ➤ For two out of four contracts awarded, including the fixture, furniture and equipment and the owner's representative contracts, the District did not maintain procurement evaluation records, as required by the procurement policy, to demonstrate fairness and transparency of the process
- ▶ While the District developed vendor performance evaluation procedures as part of its procurement policy, these were not implemented formally and consistently during the project. Instead, the District relied on informal evaluation of contractors conducted on an as-needed basis





















The District's procurement policy required staff to use a purchase order to initiate a purchase. In practice, the District used purchase orders to collect approval signatures after services and goods were received and invoiced which could lead to a risk of unauthorized procurement.

OPEN PROCUREMENT DOCUMENTATION

for four main project procurements. Our review noted that the District appropriately ran an open procurement for the construction services using the BC Documents Committee standard documentation for stipulated price bids on publicly funded projects. However, we noted a number of weaknesses in the procurement documentation for the other three main project procurements, as outlined below.

Owner's Representative Services Procurement

- District to use a purchase order as a substitute for a contract, a practice that is discouraged for complex services as there is not enough protection for the organization.
- 125. The procurement documentation included four criteria and assigned a weighting to each of them to assist in evaluating proposals. There were no criteria related to evaluation of price supplied by the bidder.
- 126. The procurement documentation stated that payments were to be made 30 days after key deliverable stages, however, these stages were not identified.
- 127. Debriefing of unsuccessful bidders, as required by trade agreements¹, was not mentioned in the documentation.
- owner's representative services indicated that these were binding competitions. However, the procurement documentation included a wide range of negotiation points that gave an impression that anything could be negotiated, which is not consistent with the requirements of a binding competition.

Fixtures, Furniture and Equipment Procurement

- 129. With the exception of a notice of award, the procurement documentation discouraged any communication between bidders and the District during the procurement process, including debriefings with unsuccessful bidders at their request. This does not align with the intent of requirements outlined in trade agreements.
- 130. The documentation stated that the District would enter into a contract, meaning that only one contract would be awarded to one supplier for all of the requirements. This statement contradicted other statements in the documentation where suppliers were advised that they were not required to provide pricing for all items in the bundles and evaluation would take place separately for each bundle.
- 131. The documentation required that all inquiries be emailed to the contact person and the District would respond in writing or issue an addendum. The documentation also stated that responses could be distributed to all bidders, at the District's option. Requirements of binding competitive bids² state that any new information or clarification of original information should be provided by addendum and no individual responses should be provided.
- 132. Strictly speaking, individual responses could be permitted if the information does not pertain to new material or clarification of existing material. However, this brings up the subjectivity of the nature of the inquiry and potentially could result in escalated complaints by other bidders about unfair access and discrimination. If this happens, the District will need to spend time and effort to resolve such complaints and ensure that its reputation is not affected unfavourably. It is a more transparent and fair process to provide responses to all inquiries by addendum and ensure that all bidders receive the same information.

¹ Canada Free Trade Agreement, Article 516 Transparency of Procurement Information, Information Provided to Suppliers – 1, Page 48 New West Partnership Trade Agreement, Guidelines to the Procurement Obligations of Domestic and International Trade Agreement, Part B: General Obligations, Section IV Transparency 1(d), Page 5 Province of BC Core Policy and Procedures Manual, Chapter 6.3.3 Contract Award-All Procurements, c. Responses

² Canada Free Trade Agreement, Article 503 General Procurement Rules #5. (g), Page 34 and Article 510 Modifications, Clarifications or New Information #1, Page 43 New West Partnership Trade Agreement, Guidelines to the Procurement Obligations of Domestic and International Trade Agreement, Part C: Procurement Procedures, Section V-Tender Documentation, Modifications, Clarifications or New Information, #6-7, Page 9 Province of BC, Core Policy and Procedures Manual, Chapter 6.3.2 Pre-Award and Solicitation, All Procurement #7























- 133. The documentation contained an indication that alternative or equivalent supply of fixtures, furniture and equipment would be considered. However, there was no process to identify approved alternates or equivalents, which could potentially give one bidder an advantage over others. It is important that bidders provide a price on the same information and alternative supply should be a separate item for the organization to consider.
- 134. The District's request for proposals for supply of fixtures, furniture and equipment indicated that this was a binding competition. However, the procurement documentation included a wide range of negotiation points that gave an impression that anything could be negotiated, which is inconsistent with the requirements of a binding competition.

Architectural Services Procurement

135. The District did not publicly post a Notice of Intent or publish award information that justified limited tendering for the sole sourced procurement of architectural services, as required by the District's procurement policy and trade agreements³.

RECOMMENDATION TEN

The District of Mackenzie should strengthen its procurement management by:

- Addressing procurement policy gaps, for example, guidance on ethical considerations and alternative procurement methods and aligning the policy with relevant trade agreements and evolving good practices
- Regularly reviewing its procurement policy to ensure it is clear, complete and up to date
- Raising staff awareness and familiarity with the policy and related procurement procedures to ensure it is properly implemented in practice

RECOMMENDATION ELEVEN

The District of Mackenzie should review the legal basics of competitive bidding and procurement in Canada and assess its competitive bid documentation to ensure its templates for procurement tools contain clear clauses applicable to the specific procurement tool used.

RECOMMENDATION TWELVE

The District of Mackenzie should closely monitor its procurement activities and enforce compliance with its procurement policies, procedures and trade agreements.

³ Province of BC, Core Policy and Procedures Manual, Chapter 6.3.2 Pre-Award and Solicitation – B. Goods – 5. Canada Free Trade Agreement, Article 516 Publication of Award Information 2 (f), Page 48 New West Partnership Trade Agreement, Guidelines to the Procurement Obligations of Domestic and International Trade Agreement, Part B: General Obligations, Section IV Transparency 1. (a), Page 5 and Part C: Procurement Procedures, Section II Electronic Tendering #1, Page 6























CONTRACT MANAGEMENT

EXPECTATION

Procurement contracts specify the obligations of the buyer and seller for the goods and services to be provided. Managing contracts for capital projects includes carrying out procedures for contract and procurement strategy, contract development, approval, execution and monitoring to ensure contractual obligations are properly fulfilled to meet project needs.

We expect local governments to effectively manage their capital project contracts through implementation of formal procedures for selection of the capital project delivery model and appropriate review and approvals of terms and conditions, including any subsequent changes.

136. The District of Mackenzie partially met our expectations on contract management. The District established a process to manage scope changes, however, the process demonstrated certain weaknesses in documentation and approval process. The District had not established a formal process to review contracts' terms and conditions

PROJECT DELIVERY METHOD SELECTION

- 137. Capital projects can be approached through different project delivery methods, each of which offers a different set of advantages and disadvantages.
- 138. Early in the project planning stage, the District and the architect performed an informal evaluation and selected the design-bid-build model for the project. For a project with a budget of this size, it would have been a good practice to have a formal project delivery method evaluation done to justify the selection made by the District.

PROJECT DELIVERY METHODS

Government entities should analyze and select a capital project delivery model that considers the capacity of the organization, financial resources available, risks and ultimately value for money. Traditional project delivery models, like designbuild and design-bid-build, and more novel models such as public-private-partnership, offer a variety of levels of control over scope, budget and time as well as risks.

Source: Capital Project Management Framework, Province of B.C., 2012

CONTRACT PREPARATION AND APPROVAL

- 139. The District conducted four main procurements for the Phase 2 project and had contracts in place that outlined the scope of the work and other aspects. We noted that:
- ➤ The District's chief administrative officer signed these contracts, upon council's approvals, as required by the procurement policy
- While the contracts were approved and signed, there was no evidence to confirm that the District thoroughly reviewed and discussed the contracts' terms and conditions prior to approving them. Staff told us that the District did not have its own contract templates and relied on industry standard contract templates for construction and architectural services and relied on industry standard contract templates for the owner's representative services and the supply of fixtures, furniture and equipment
- 140. According to staff, subsequent to completion of the Phase 2 project, the District made improvements to this process by developing a small service contract template with terms and conditions reviewed by legal counsel.

CONTRACT CHANGE ADMINISTRATION

rate. The District outlined procedures to manage project and contract changes in several documents, including its procurement policy, the project plan and the construction contract with the general contractor.

















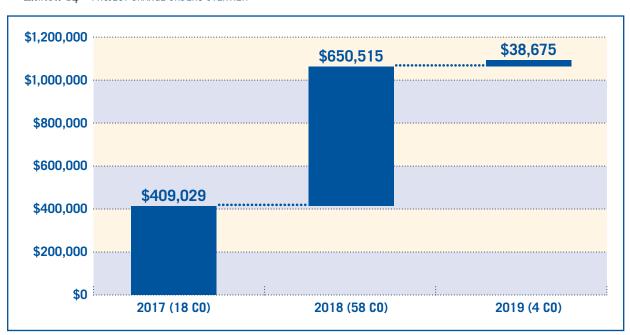






- the construction contract to the owner's representative. The owner's representative, serving as the project and construction contract manager, was tasked with reviewing all change orders prior to making a recommendation to the District's project sponsor.
- 143. District staff told us that, after the owner's representative's contract ended in October 2018, they became responsible for reviewing and approving change orders supplied by the general contractor. There was no documentation or formal process to re-assign these duties to District staff, who had limited capital project management experience.
- 144. Over the term of the project, there were 80 change orders totalling \$1,098,219, as shown in Exhibit 14.

Exhibit 14 - PROJECT CHANGE ORDERS OVERVIEW



Source: District of Mackenzie documentation

- 145. To examine the effectiveness of internal controls over change orders, we tested a sample of 25 change orders covering 31 per cent of all project change orders or 61 per cent of their total value. The test covered a sample of change orders managed by the owner's representative up until their contract ended and all change orders managed by the District thereafter.
- 146. We reviewed the District's compliance with the delegated authority levels established in the District's procurement policy, compliance with the change order procedures outlined in the project plan and completeness of change order documentation.





















147. Our review of the transactions identified instances where change orders were not properly approved, for example, there were two instances where there was no evidence that the District approved change orders and 13 instances where change orders were not signed by the general contractor. The majority of instances of non-compliance happened after the owner's representative left the project and responsibility for change order management had been transferred to the District.

148. We also noted the following weaknesses in documentation:

- ➤ Construction change orders often failed to specify the time impact, if any, on the construction schedule, leaving the District open to the risk of later claims for additional time and costs associated with additional time
- ➤ The change order master list did not always reflect accurate information from the change orders

RECOMMENDATION THIRTEEN

The District of Mackenzie should enhance its capital project contract management practices by:

- ▶ Developing a formal evaluation process that documents the selection of a project delivery method for each major capital project
- Formalizing a review and approval process for contract terms and conditions
- Monitoring contract changes and ensuring change orders are authorized appropriately and all related documentation is complete and accurate

Policy and procedural guidance on contract management could be integrated into a capital project management framework.

























PROJECT REPORTING

EXPECTATION

Project status reporting refers to the provision of a regular formal status update on progress relative to the project plan. Regular, complete, up-to-date, accurate and consistent status updates enables effective governance and informed decision-making.

We expect local governments to have a robust project reporting process in place and to be able to provide a complete record of project reporting over the life of the project.

- 149. The District partially met our expectations for project reporting. The District did not have an established policy or procedures relating to capital project reporting; however, project reporting requirements were documented in the project plan and the District generally followed these requirements.
- 150. The District produced comprehensive project status reports; however, these reports were not consistent in timing or format and were discontinued late in the construction phase. In addition, the District did not have an effective system in place to ensure adequate management of capital project records.

PROJECT REPORTING

- 151. The District reported internally on the progress of the project. This information was presented in several types of reports and partially followed the format and frequency prescribed.
- 152. The District received comprehensive project status reports from the owner's representative. These reports provided informative details, for example: completion milestones and any deviations from those milestones, master project schedule, health and safety concerns, risk register and risk mitigation strategies, change order summary and financial updates including cost logs, budget status and committed expenditures.
- 153. However, the owner's representative did not consistently produce the status reports every month as required. There were ten reports issued over 16 months, with some reports consolidating reporting over several months. After the owner's representative's contract ended late in the construction phase, the formal project reporting process ended.

- 154. The project's architect prepared twelve monthly site reports for the District and held weekly phone conferences with the District to provide status updates, although there were no minutes kept of these calls.
- 155. The project sponsor provided monthly project progress briefings at council committee of the whole meetings, including recent project activities and items for approval. In addition, from December 2016 onward, the project sponsor presented quarterly project updates to council that detailed the progress of project planning and construction, identified funding opportunities, tracked capital expenditures and the award of contracts. The District also provided annual project updates to council through the legislated annual report, which tracked the capital expenditures.

CAPITAL PROJECT RECORDS MANAGEMENT

rs6. The District did not have an effective records management system in place to ensure adequate management of capital project records. Storage of project documentation was decentralized, kept in hard copies and electronic format across a number of computer drives and physical locations, including one of the consultant's offices. Current project staff had limited knowledge of the content of project files and folders and had some difficulty finding certain documents.

RECOMMENDATION FOURTEEN

The District of Mackenzie should define organizational expectations for reporting on its future capital projects to ensure that regular and consistent updates are provided to all stakeholders to increase accountability, transparency and efficient information flow for project decision-making.

RECOMMENDATION FIFTEEN

The District of Mackenzie should develop and implement a records management system for its capital projects to ensure project knowledge and information are maintained, appropriately shared, accessible and decisions are based on the most current information.

Policy and procedural guidance on capital project reporting and record management could be integrated in a capital project management framework.





















STAKEHOLDER ENGAGEMENT AND AWARENESS

EXPECTATION

Sharing and promoting understanding of how a project affects local residents, organizations and other governments can help proactively identify risks and opportunities for improvement, ultimately leading to a more successful project. Ongoing engagement and communication activities with stakeholders can also improve transparency and increase the community's sense of ownership of a project.

We would expect local governments to develop and follow policies and procedures to engage stakeholders appropriately during the planning and construction of the capital projects.

157. The District of Mackenzie partially met our expectations for stakeholder engagement. The District did not have a stakeholder engagement and communication plan during the project. For the most part, it engaged with the community and periodically reported on the progress of the project.

158. The District recognized the importance of stakeholder engagement and communication; however, it did not develop a formal strategy for stakeholder engagement and did not formally identify all project stakeholders. The District engaged with the community during the planning phase and periodically reported to the public and other stakeholders on the project's status up until the grand re-opening date late in 2018. It did this by several means, as summarized in Exhibit 15. Staff informed us that the District undertook limited consultation around the demolition of the curling rink in 2017, which resulted in some negative public reaction.

Exhibit 15 - REPORTING TO PUBLIC AND OTHER STAKEHOLDERS

ONLINE REPORTS To the public	NUMBER OF Reports issued	PERIOD	FREQUENCY
Weekly Progress Reports	27	10/2017 to 08/2018	27 reports over 11 months with higher frequency of reports during construction. Weekly reporting frequency was not strictly followed.
			No reports were published after the owner's representative left the project late in the construction phase.
District of Mackenzie News	6	late 2016 to late 2018	3 reports per year
Annual Reports, Fact Sheets	7	2014-2018	1.4 reports per year

Source: District of Mackenzie documentation























159. In addition, as demonstrated in Exhibit 16, the District held a number of engagement sessions with internal and external stakeholders throughout the life of the project.

Exhibit 16 - INTERNAL AND EXTERNAL STAKEHOLDER ENGAGEMENT

YEAR	STAKEHOLDER ENGAGEMENT EXAMPLES
2015-2016	Consultation with the public and community groups regarding community needs, which informed the Mackenzie Recreation Centre Retrofit Feasibility Study and the concept plan
2016	Consultation sessions with internal stakeholders including senior staff, director of recreation services, recreation staff, public works and food services personnel
2018	Two focus groups with internal stakeholders to discuss furnishings, fixtures, equipment and the community hall performance stage
Ongoing	Announcements on Mackenzie's local FM radio station about events related to the recreation centre, as stated by District staff
Ongoing	Facebook posts with regular updates on the project, including weekly progress reports, fact sheets, announcements and information on events. As of December 2019, the District had approximately 860 followers or 25 per cent of the local population.

160. The District demonstrated its commitment to stakeholder engagement by developing a Recreation Services Community Engagement Guide in 2019, which could potentially be used for future engagement with stakeholders related to capital projects of a similar nature.

RECOMMENDATION SIXTEEN

TThe District of Mackenzie should improve its stakeholder engagement for capital projects by developing relevant guidance. This may include developing a stakeholder engagement strategy and a plan that identifies all project's stakeholders, analyzes their needs, determines an appropriate degree of input that may be required and defines a stakeholder engagement approach for the duration of the capital project























PROJECT CLOSE-OUT

EXPECTATION

It is important to close-out a capital project thoroughly and systematically and to evaluate the project's results against its stated objectives in order to demonstrate accountability and transparency.

We expect local governments to establish a capital project close-out process to ensure all activities are properly completed at the end of a project. This includes: ensuring that project deliverables have been completed, accepted and commissioned into operations; project performance against metrics has been assessed; any open issues and risks have recommended actions; and lessons learned have been recognized and recommended for incorporation into future practices.

- 161. The District of Mackenzie partially met our expectations for project close-out. While the District included close-out procedures in its project plan, some of the procedures were not completed and the project outcome was not formally evaluated against its objectives.
- 162. The District specified the project's close-out procedures in the project plan. It included a description of the close-out process, a commissioning team and its responsibilities and detailed tasks and expectations with respect to the construction deficiency review, substantial performance of construction, lien period, payment process, occupancy, contract closure, documentation, post occupancy review, warranties, administrative close-out and facility handover.
- 163. The District obtained an occupancy permit and held a grand re-opening of the Mackenzie Recreation Centre in December 2018. It substantially completed construction on January 22, 2019, at which time holdbacks were released to the general contractor. However, we noted:
- ➤ Following the departure of the owner's representative in October 2018, the District did not re-assign roles and responsibility for the close-out process to any of its staff

- As of December 2019, 11 months after substantial completion, some close-out related tasks had not been completed, for example: some contract closures and formal assessment of work performed against the contracts' requirements; handover of all closeout documentation; handover and acceptance of activities; non-safety related construction work and other small deficiencies remained outstanding. The project had a one-year warranty period, however, there was no evidence to demonstrate that the District carried out an inspection prior to the end of the warranty period.
- The District did not develop any formal procedures for post-project performance evaluation including lessons learned, project closeout report, formal release of resources and others. As of December 2019, the District had not evaluated the project outcome against the objectives set out in the project plan. Our assessment of project results summarized in Exhibit 5 was based on documents reviewed and observations.

RECOMMENDATION SEVENTEEN

The District of Mackenzie should develop a capital project close-out process to ensure activities are properly completed and handed over at the end of a project. This should include an assessment of project performance against its objectives and the identification of opportunities for future improvement.

Policy and procedural guidance on capital project close-out could be integrated into a capital project management framework.



ABOUT THE AUDIT

164. The office of the AGLG follows the independence requirements, other ethical requirements and rules of professional conduct of the Chartered Professional Accountants of British Columbia applicable to the practice of public accounting and related to assurance engagements and the standards of conduct of the B.C. Public Service.

165. We performed this audit in accordance with the standards for assurance engagements set out by the Auditing and Assurance Standards Board of the Chartered Professional Accountants of Canada in the CPA Canada Handbook – Assurance and Value-for-Money Auditing in the Public Sector, PS 5400, PS 6410, PS 6420 and Canadian Standard on Assurance Engagements 3001 – direct engagements. Additionally, the AGLG applies Canadian Standards on Quality Control, CSQC 1.

PURPOSE

166. The purpose of this audit was to provide an objective independent examination of the local government's capital project management practices to determine if the local government effectively managed the planning and delivery of its capital project to meet its objectives.

PERIOD COVERED BY THE AUDIT

167. The audit covered management practices in place during the period of each capital project construction and subsequent material changes in these practices. For the District of Mackenzie, the audit period was January 1, 2015 to December 31, 2019.

168. We completed our examination work in April 2020.

AUDIT SCOPE AND APPROACH

169. The audit included a review of the District of Mackenzie's capital project management policies and processes across all stages of the Mackenzie Recreation Centre Energy Retrofit and Community Hall Upgrades Project, Phase 2, as well as an assessment of its results against its objectives.

170. To carry out the audit, we designed detailed audit procedures that we used to obtain sufficient and appropriate audit evidence. We also reviewed documents related to the audit topic, interviewed internal stakeholders and analyzed relevant data and information.

AUDIT CRITERIA

171. Performance audit criteria define the expectations against which we assessed the local government's performance. We identify our criteria before we begin assessing a local government. We intend them to be reasonable expectations for the local government's management of the area being audited in order to achieve expected results and outcomes.

172. Below are the criteria we used to assess the local government:

The local government identified and prioritized capital projects that would provide the most benefit to the community

The local government established appropriate levels of oversight for its capital project activities

The local government managed risks throughout the life of the capital project

The local government developed, approved and managed the capital project budget, changes and expenditures in accordance with its policies and procedures

The local government implemented effective financial controls to mitigate risks of fraud, waste and abuse

The local government defined, approved and successfully managed the capital project schedule

The local government defined, approved and managed the capital project scope and scope changes

The local government procurement process was well documented, open and transparent

The local government effectively managed its capital project contracts

The local government assigned key roles on the capital project to individuals who have knowledge, experience and availability to deliver the project

The local government appropriately engaged internal and external stakeholders prior to and during the capital project

The local government implemented an internal reporting process to support effective decision-making during the capital project

The local government closed-out the project and evaluated the results against capital project's objectives



SUMMARY OF LOCAL GOVERNMENT COMMENTS



The District of Mackenzie has reviewed the results and recommendations set out by the Auditor General for Local Government in the final audit report for the Mackenzie Recreation Centre Energy Retrofit and Community Hall Upgrades Project, Phase 2 capital project audit. Council has received and reviewed the report and action plan at their closed meeting held on October 26th, 2020. The District is satisfied with the results and recommendations of the report and as such have no comments or responses to the report as it was presented.

The District has compiled an action plan to address the capital project management and practice recommendations put forward in the final report and it is attached for your review.

Thank you,

Diane Smith

Chief Administrative Officer District of Mackenzie 250-997-3221 | Ext. 230







DISTRICT OF MACKENZIE ACTION PLAN

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBILITY	TARGET DATE
RECOMMENDATION ONE As part of the District of Mackenzie's efforts to establish an asset management program, the District should develop formal requirements to support its capital project initiation processes. This should include development of a capital project business case to a level of detail suitable to the project scale and complexity.	As part of the capital project planning process moving forward, business cases will be required suitable to the project scale and complexity. If the District commits to any future capital projects, the District will determine if it requires funding towards a project manager as well.	Internal	Finance	December 2021
	Revise the capital project form with additional details.			
RECOMMENDATION TWO The District of Mackenzie should adopt a consistent approach to capital project management. This could be achieved by developing a capital project management framework that brings together all existing relevant procedures in a rational and structured manner, supplemented with newly developed procedures aligned with capital project management good practices. Management should ensure that staff is provided with appropriate and enough training and understand how to apply various aspects of capital project management.	Management team will research other local governments' approaches and connect with a project management firm and consultants and work towards creating a capital project management framework. Design the framework based on scale and complexity. Will review documentation provided by the AGLG.	Staff time and financial resources	Management team	December 2021
RECOMMENDATION THREE The District of Mackenzie should strengthen its governance of major capital projects by developing and following systematic and structured processes for project oversight with an appropriate governance structure in place, such as a project board or committee.	Include a governance structure in the project framework development.	Staff time and financial resources	Management team	December 2021
RECOMMENDATION FOUR The District of Mackenzie should ensure it identifies, develops, properly approves, distributes in a timely way and updates all essential guiding documentation for capital projects, including a project charter.	Include in the project framework development.	Staff time and financial resources	Management team	December 2021
RECOMMENDATION FIVE The District of Mackenzie should develop and implement a formal approach to capital project risk management, especially projects involving significant capital investment or risk. The approach should include policy and procedures that require formal risk identification, assessment, monitoring and reporting throughout each project, along with awareness-raising activities and training.	Review and revising risk management policy. Create a risk management team. Staff training and awareness.	Staff time	Management team	August 2021
RECOMMENDATION SIX The District of Mackenzie should establish requirements for developing and approving the baseline scope of each capital project, as well as the management of any scope changes. The District should communicate these expectations to capital project management personnel and monitor project activities to ensure compliance with them.	Look into project management software to manage scope changes.	Staff time and financial resources	Management Team	August 2021

DISTRICT OF MACKENZIE ACTION PLAN

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBILITY	TARGET DATE
RECOMMENDATION SEVEN The District of Mackenzie should develop a policy and procedure for capital project budget development, approval and management, which could include guidance on:	Include in project management framework.	Staff time and financial resources	Finance	December 2021
• Appropriate contingency allocations for various types of capital projects				
Creation of a management reserve for unallocated contingency funds				
Re-baselining a project budget when forecast costs increase or decrease				
RECOMMENDATION EIGHT The District of Mackenzie should strengthen its financial controls for capital projects through: • Documenting key accounts payable controls and ensuring they function effectively • Establishing policy guidance on capital project financial reporting, including expectations on cost reporting against project baseline budgets and raising staff awareness of these requirements	Look into best practices. Review of accounts payable control cycle. Include in project management framework.	Staff time	Finance	December 2021
RECOMMENDATION NINE The District of Mackenzie should establish guidance and policy requirements for developing and monitoring capital project schedules, including: Guidance for the development and approval of a baseline project schedule and any changes to it A requirement that any construction change orders identify schedule impact as well as cost A process to monitor and periodically report on schedule progress and forecasts	Integrate into the capital project management framework.	Staff time	Management Team	December 2021
RECOMMENDATION TEN The District of Mackenzie should strengthen its procurement management by: • Addressing procurement policy gaps, for example, guidance on ethical considerations and alternative procurement methods and aligning the policy with relevant trade agreements and evolving good practices • Regularly reviewing its procurement policy to ensure it is clear, complete and up to date • Raising staff awareness and familiarity with the policy and related procurement procedures to ensure it is properly implemented in practice	Review and revise current procurement policy. Conduct staff training on the policy. Streamlining and condensing parts of the procurement process. Look at other municipalities procurement policies and best practices.	Staff time	Finance	December 2021
RECOMMENDATION ELEVEN The District of Mackenzie should review the legal basics of competitive bidding and procurement in Canada and assess its competitive bid documentation to ensure its templates for procurement tools contain clear clauses applicable to the specific procurement tool used.	Review, assess and update bidding and procurement policy and tools.	Time and budget	Management Team	December 2021



DISTRICT OF MACKENZIE ACTION PLAN

AGLG RECOMMENDATION	STEPS TAKEN	RESOURCES NEEDED	RESPONSIBILITY	TARGET DATE
RECOMMENDATION TWELVE The District of Mackenzie should closely monitor its procurement activities and enforce compliance with its procurement policies, procedures and trade agreements.	Continue to closely monitor our procurement process. Create a checklist for procurement. Include staff training for procurement policies and practices.	Staff time	Management Team	December 2021
RECOMMENDATION THIRTEEN The District of Mackenzie should enhance its capital project contract management practices by:	Create a policy on capital project contract management practices.	Consultant	Management Team	October 2021
 Developing a formal evaluation process that documents the selection of a project delivery method for each major capital project 				
Formalizing a review and approval process for contract terms and conditions				
 Monitoring contract changes and ensuring change orders are authorized appropriately and all related documentation is complete and accurate 				
RECOMMENDATION FOURTEEN The District of Mackenzie should define organizational expectations for reporting on its future capital projects to ensure that regular and consistent updates are provided to all stakeholders to increase accountability, transparency and efficient information flow for project decision-making.	Develop organizational expectations for reporting and communications for capital projects.	Consultant	Management team	October 2021
RECOMMENDATION FIFTEEN The District of Mackenzie should develop and implement a records management system for its capital projects to ensure project knowledge and information are maintained, appropriately shared, accessible and decisions are based on the most current information.	Formalize capital project document retention procedure and checklist. Implement a review process before documents go into retention.	Staff time	Corporate Services	December 2021
RECOMMENDATION SIXTEEN The District of Mackenzie should improve its stakeholder engagement for capital projects by developing relevant guidance. This may include developing a stakeholder engagement strategy and a plan that identifies all project's stakeholders, analyzes their needs, determines an appropriate degree of input that may be required and defines a stakeholder engagement approach for the duration of the capital project.	Formalize communications and public engagement for all projects.	Staff time	Management team	December 2021
RECOMMENDATION SEVENTEEN The District of Mackenzie should develop a capital project close-out process to ensure activities are properly completed and handed over at the end of a project. This should include an assessment of project performance against its objectives and the identification of opportunities for future improvement.	Integrate policy and procedure guidance for capital project close-out into capital project management framework.	Staff time and budget	Consultant	December 2021



AGLG CONTACT INFORMATION

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The AGLG welcomes your feedback and comments. Contact us via email <code>info@aglg.ca</code>, our website at <code>www.aglg.ca</code> or follow us on Twitter <code>@BC_AGLG</code>.

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