

CAPITAL PROFILE REPORT

PROFILE NAME:	WASTE SERVICES FACILITIES, INFRASTRUCTURE AND PROCESS EQUIPMENT	FUNDED
PROFILE NUMBER:	CM-81-2047	PROFILE STAGE: Approved
DEPARTMENT:	Utilities	PROFILE TYPE: Composite
LEAD BRANCH:	Waste Services	LEAD MANAGER: Denis Jubinville
PROGRAM NAME:		PARTNER MANAGER:
PARTNER:		ESTIMATED START: January, 2023
BUDGET CYCLE:	2023-2026	ESTIMATED COMPLETION: December, 2026

Service Category: Utilities	Major Initiative:
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GROWTH	RENEWAL	PREVIOUSLY APPROVED:	35,688
50	50	BUDGET REQUEST:	-
		TOTAL PROFILE BUDGET:	35,688

PROFILE DESCRIPTION

Composite Profile CM-81-2047 provides capital funding for capital renewal, upgrade, and improvement projects for Waste Services valued at less than \$5 million. Waste Services assets include a number of facilities such as Eco Stations, employee workspaces, equipment facilities, administration buildings, waste processing facilities, and research and development facilities. These facilities contain heating, cooling, ventilation, fire protection systems, plumbing, electrical distribution, and other building systems. In addition to these systems, Waste Services owns and operates a series of specialized waste processing equipment required to meet the branch mandate of efficient and environmentally sound waste management operations. Waste Services also manages a variety of infrastructure including roads, drainage, and buried utilities for operating industrial processes at the Edmonton Waste Management Centre (EWMC) and other locations in the city.

To deliver sustainable waste management services, maintain optimal service levels, and have a sustainable and efficient asset management program, capital funds are required to carry out capital renewal, growth, modifications, improvements, and upgrades of Waste Services assets. This will result in safer and more reliable assets while maintaining high levels of customer service. Without this funding in place, facilities, process equipment, and infrastructure will be at increased risk of failure as the waste collection and processing systems age. Emergency situations caused by unforeseen failures can result in expensive unplanned repairs, safety issues for staff and public, and interruption to operations.

Waste Services manages these renewal and growth projects in collaboration with its partners such as Integrated Infrastructure Services (IIS), Fleet and Facility Services, and operation and maintenance contractors. This profile contains projects that have high integration with plant operations, are specific to waste processing, or are smaller than the IIS project thresholds, and therefore can be managed effectively by Waste Services. This requires funding of approximately \$19.4 million between 2023 and 2026.

To ensure adequate levels of funding are available for this capital profile, Waste Services has adopted a planning and prioritization approach that builds on understanding project drivers (need) and criticality (risk), which is closely aligned with the City's Corporate Risk-based Infrastructure Management System (RIMS) and Capital Budgeting Framework. This approach informs overall required capital investment in the improvement, renewal, and upgrade of the aforementioned assets, and is combined with the implementation of formalized asset condition assessment, preventative maintenance programs, safety and environmental improvements, and process improvement needs.

PROFILE BACKGROUND

Waste Services has an extensive infrastructure inventory which include facilities such as Eco Stations, employee workspaces, equipment facilities, administration buildings, waste processing facilities, and research and development facilities. These facilities contain mechanical, electrical, fire protection, other building systems, and specialized equipment. Infrastructure includes the Edmonton Waste Management Centre and Kennedale site utilities, roadways, drainage, communications, transaction data collection hardware and software, and specialized systems. As of December 2021, the replacement value of Waste Services assets, captured through the Annual Infrastructure Inventory, is about \$369 million. These assets require regular maintenance, upgrade, renewal, or modification for various reasons such as environmental compliance, safety enhancement, asset renewal/upgrade, process improvement, and strategic and business needs. Waste Services will continue to assess asset conditions and criticality, and will implement capital projects to maintain the integrity and efficiency of the system.

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PROFILE JUSTIFICATION

This initiative will provide funding for maintenance, renewal, upgrades, and efficiency improvements for Waste Services facilities and infrastructure. The main factors are the age of the infrastructure and facilities, existing safety issues, increasing demand and needed improvements to increase operational efficiency and effectiveness.

Urgency of Need:

During the initial planning process, a robust prioritization methodology was developed by Waste Services that aligns with corporate prioritization methods. The projects identified as critical or very important that cannot be deferred are included in this budget cycle. The risk of deferring these projects include potential asset and system failure, greater fire and safety risks, environmental noncompliance and inability to meet corporate and branch goals (such as diversion).

Anticipated Outcome:

Better information to make capital investment decisions: Through a structured and integrated process, administration will ensure that projects identified as priorities by Waste Services receive robust evaluation of alternatives and scope identification. This will ensure stable utility rates.

Improved project schedule and budget estimates: Following City and industry best practices, a control budget and schedule is established on the basis of a completed design to ensure realistic expectations that are aligned with the Waste Services Project Management Framework prior to tendering and construction. The Waste Services Project Management Framework aligns with the IIS processes to ensure projects provide value-for-money and demonstrate sound stewardship.

Reliable facilities and infrastructure that enable sustainable waste management in a cost-effective manner.

High levels of customer service are delivered in both efficient and effective ways through leading-edge waste processing facilities that use current and emergent technology to enable high rates of diversion of waste from landfill.

STRATEGIC ALIGNMENT

This capital funding request contributes to the overall strategic direction of City Council and goals of policies and corporate strategic documents listed in the table below. This contribution is made by demonstrating leadership in waste management and processing standards, and by increasing diversion of waste from landfill.

City of Edmonton Environmental Policy C512

ConnectEdmonton: Vision 2050

Waste Services Business Plan 2022-2025

25 Year Waste Strategy

Waste Services Utility Fiscal Policy C558B

Capital Project Governance Policy C591

ALTERNATIVES CONSIDERED

This is a capital funding request and does not present any alternatives for consideration. This profile is taking a status quo approach (funding capital renewal/upgrade work as required) continuing from the 2019-2022 budget cycle business case.

COST BENEFITS

Tangible:

Improved operational efficiency of facilities, infrastructure and process equipment.

Reduction in safety-related incidents.

Long term savings due to reduction in repair costs.

Improved productivity due to better access to facilities and equipment, and increased availability due to reduced down time.

Intangible:

Increased employee morale due to better working conditions.

Safer working environment for staff and customers.

Increased or maintained customer satisfaction.

KEY RISKS & MITIGATING STRATEGY

Risk: Global supply chain issue for specialized equipment.

Mitigating Strategy: Use locally available materials and equipment to specification if possible. Allow sufficient time for equipment supply lead time.

Risk: Health and safety issues if numerous small value projects are not implemented on time.

Mitigating Strategy: Prioritize projects and ensure timely implementation.

Risk: Changes in processing equipment brought about by future waste initiatives to increase diversion rate.

Mitigating Strategy: Develop asset management strategic plan incorporating required process equipment to address future waste initiatives.

RESOURCES

The projects within this profile will be led by Waste Services Project Managers. They will coordinate with General Supervisors of the respective facilities and infrastructure, operating and maintenance groups, Occupational Health and Safety coordinators, and other stakeholders.

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CONCLUSIONS AND RECOMMENDATIONS

Conclusion:

This profile will provide capital funding for capital renewal, upgrade, and improvement projects for Waste Services valued at less than \$5 million. This funding will ensure assets provide overall improvement in operating efficiency, effectiveness, safe working conditions and meet environmental compliance. The total funding requested for 2023-2026 is approximately \$19.4 million.

Recommendation:

It is recommended this profile be approved to assist Waste Services to meet its commitment to deliver integrated and sustainable waste management services. This will ensure capital renewal and upgrade of assets due to new or increased waste streams, safety concerns, and design improvements that increase efficiency of Waste Services' operations.

CHANGES TO APPROVED PROFILE

2022 Fall SCBA (#22-31, CFO.35): Change in source of funding by using excess cash to finance the capital program instead of borrowings, in order to save interest expenses. The adjustments result in no overall impact on the budget within the program.

2024 Spring SCBA (#24-12, Council Item 7.8): To optimize use of its cash, the Waste Utility has decided to fund 2022 and 2023 costs of these profiles, with Retained Earnings in lieu of Self-Liquidating Debentures. This allows the Utility to forego borrowing at high interest rates while using excess cash. This was not brought forward in November 2023's SCBA report to ensure full 2023 costs could be captured and avoiding bringing a similar cost transfer forward for this profile twice.

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PROFILE NAME: **Waste Services Facilities, Infrastructure and Process Equipment**
 PROFILE NUMBER: **CM-81-2047**
 BRANCH: **Waste Services**

FUNDED

PROFILE TYPE: **Composite**

CAPITAL BUDGET AND FUNDING SOURCES (000's)

	Prior Years	2024	2025	2026	2027	2028	2029	2030	2031	2032	Beyond 2032	Total	
APPROVED BUDGET	Approved Budget												
	Original Budget Approved	18,446	-	-	-	-	-	-	-	-	-	18,446	
	2019 Cap Administrative	-790	-	-	-	-	-	-	-	-	-	-790	
	2019 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-	
	2020 Cap Council	-1,292	-	-	-	-	-	-	-	-	-	-1,292	
	2020 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-	
	2021 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-	
	2021 Cap Release to Corp Pool	-86	-	-	-	-	-	-	-	-	-	-	-86
	2022 Cap Administrative	-	-	-	-	-	-	-	-	-	-	-	-
	2022 Cap Budget Request for Next Cycle	4,235	6,788	5,275	3,111	-	-	-	-	-	-	-	19,409
	2022 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-	-
	2023 Cap Carry Forward	-261	261	-	-	-	-	-	-	-	-	-	-
	2024 Cap Council	-	-	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	20,253	7,049	5,275	3,111	-	-	-	-	-	-	-	35,688
APPROVED FUNDING SOURCES	Approved Funding Sources												
	Self-Liquidating Debentures	7,950	7,049	5,275	3,111	-	-	-	-	-	-	23,385	
	Waste Mgt Retained Earnings	12,303	-	-	-	-	-	-	-	-	-	12,303	
Current Approved Funding Sources	20,253	7,049	5,275	3,111	-	-	-	-	-	-	-	35,688	

BUDGET REQUEST	2024	2025	2026	2027	2028	2029	2030	2031	2032	Beyond 2032	Total
Budget Request	-	-	-	-	-	-	-	-	-	-	-

REVISED BUDGET (IF APPROVED)	Prior Years	2024	2025	2026	2027	2028	2029	2030	2031	2032	Beyond 2032	Total
Revised Budget (if Approved)	20,253	7,049	5,275	3,111	-	-	-	-	-	-	-	35,688
Requested Funding Source												
Self-Liquidating Debentures	7,950	7,049	5,275	3,111	-	-	-	-	-	-	-	23,385
Waste Mgt Retained Earnings	12,303	-	-	-	-	-	-	-	-	-	-	12,303
Requested Funding Source	20,253	7,049	5,275	3,111	-	-	-	-	-	-	-	35,688

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2024	2025	2026	2027	2028	2029	2030	2031	2032	Beyond 2032	Total
REVISED BUDGET (IF APPROVED)	Construction	19,837	7,049	5,275	3,111	-	-	-	-	-	-	-	35,271
	Design	416	-	-	-	-	-	-	-	-	-	-	416
	Total	20,253	7,049	5,275	3,111	-	-	-	-	-	-	-	35,688

OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-