

CAPITAL PROFILE REPORT

PROFILE NAME:	WASTE SERVICES IIS INFRASTRUCTURE DELIVERY	FUNDED
PROFILE NUMBER:	CM-81-2045	PROFILE STAGE: Approved
DEPARTMENT:	Integrated Infrastructure Services	PROFILE TYPE: Composite
LEAD BRANCH:	Infrastructure Planning & Design	LEAD MANAGER: Pascale Ladouceur
PROGRAM NAME:		PARTNER MANAGER: Michael Labrecque
PARTNER:	Waste Services	ESTIMATED START: January, 2019
BUDGET CYCLE:	2019-2022	ESTIMATED COMPLETION: December, 2022

Service Category: Utilities**Major Initiative:**

GROWTH	RENEWAL	PREVIOUSLY APPROVED:	17,258
50	50	BUDGET REQUEST:	-
		TOTAL PROFILE BUDGET:	17,258

PROFILE DESCRIPTION

The composite profile CM-81-2045 provides a level of funding for Waste Services capital projects that are intended to be delivered by Integrated Infrastructure Services - Infrastructure Delivery Branch in the 2019 - 2022 capital budget cycle. The approach is consistent with Administration's implementation of the Project Development & Delivery Model (PDDM) as well as the Capital Project Governance Policy C591 that was adopted by Council in April 2017.

Adherence to both the PDDM process and Policy C591 will ensure that sufficient information is prepared in advance of the capital budget process to support informed investment decisions, provide adequate resources for planning and design to ensure appropriate level of planning and design is incorporated into budget submissions and provide an overall framework to guide the management of Waste Services' capital projects.

As PDDM has previously been adopted by Council, this capital funding request establishes funding prioritization for Waste Services projects anticipated to enter the project delivery stage within a checkpoint system with strategic controls on budget and schedule. The PDDM approach is a gated process for capital projects to ensure that projects are properly developed before they are funded for delivery.

While approval for funding in this profile is required to establish the initial 2019 - 2022 capital budget and projected utility rate increases over the 4 year period, approved funding for this profile does not indicate final budget or funding for any specific capital project.

This capital funding request provides information at a concept level that pertains to the budget for projects that are anticipated to be delivered during the 2019-2022 budget cycle. Details of the individual projects listed in this profile, including budget and scheduling will be further disclosed once the project has reached checkpoint 3 and a detailed business case has been developed for approval from Utility Committee and Council.

This profile requires funding for Waste Services capital projects that are intended to be delivered by Integrated Infrastructure Services - Infrastructure Delivery Branch in the 2019 - 2022 capital budget cycle. The four year capital projection for this profile is approximately \$96 million. A high level list of projects and estimated budget allocations is listed in Appendix A.

PROJECT LIST

Funding in the profile will be used to support project delivery work for the capital initiatives of Waste Services anticipated to be delivered in the 2019-2022 budget cycle, including but not limited to:

- Organics processing
- EWMC site civil servicing
- Materials Recovery Facility (MRF) renewal
- Anaerobic Digester process to further reduce pathogens

PROFILE BACKGROUND

The PDDM is a framework to manage all capital infrastructure projects and represents the best practices in project management from the industry and comparable municipalities. It aims to achieve the following outcomes:

- (1) Better information to make capital investment decisions
- (2) Improved project schedule and budget estimates through increased level of design to ensure realistic expectations are set prior to project tendering and construction
- (3) Systematic evaluation of projects against the initial project business case and scope.

This profile sets the 2019-2022 budget for Waste Services for projects that are anticipated to reach checkpoint 3 in the PDDM process. Once a project reaches this stage, a detailed standalone business case will be developed and brought to Utility Committee and Council for approval.

This approval will result in a capital budget adjustment that transfers budget from this profile to the newly created standalone profile. Until this transaction occurs, no funds are authorized to be spent on the delivery of a capital project.

PROFILE JUSTIFICATION

Urgency of Need

The need to effectively deliver capital projects is essential for Waste Services to achieve its commitment to deliver quality sustainable waste management services to the City of Edmonton as well as effectively meet the changing needs of its customers. Projects that are anticipated to reach the third checkpoint in the PDDM process within this budget cycle have been identified and prioritized based on strategic criteria such as environmental impact, health and safety and alignment with Branch and Corporate goals. Delivery of these concept level projects within this profile will be fundamental to Branch operations and will help to ensure continued delivery of sustainable waste collection and processing services.

As Waste Services capital budget is supported by the utility rate, business cases for both planning and delivery phases of approved capital projects within the PDDM approach are required in order to have funds allocated to the composite profile and determine the utility rates required to support the capital budget. While approval for funding in this profile is necessary to determine capital budget and utility rates, approved funding for this profile does not indicate final budget or funding for any specific capital project.

Anticipated Outcomes

In alignment with the PDDM approach, Waste Services will realize the achievement of branch goals through working with Integrated Infrastructure Services to effectively manage the delivery of capital projects. Effective asset management will ensure that Waste Services has the resources to achieve its objectives by aligning its vision, mission and strategic plan with daily activities to achieve its goals. Waste Services envisions the following outcomes::

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. Through the PDDM process, project maturity is regularly assessed to ensure that projects are ready to advance to the next stage of development
Improved project schedule and budget estimates: Following industry best practices, a control budget and schedule is established on the basis of a completed design to ensure realistic expectations are set with IIS prior to tendering and construction
Reliable facilities and infrastructure that enable sustainable waste management in a cost effective manner.
High levels of customer service delivered in both an efficient and effective way through leading-edge waste processing facilities that use current and emergent technology to enable high rates of diversion of waste from landfill
Facilities that can be operated in a safe manner, protecting employees, customers and contractors
Capitalize on opportunities to reduce cost to operate and process waste in an environmentally and fiscally responsible way

Scope

The scope of this business case includes the detailed design, construction and project closeout stages, which subsumes work after completing Checkpoint 3 through Checkpoint 4 (Authorization for Construction expenditure) and Checkpoint 5 (Authorization for closeout) for all authorized Capital projects being led by IIS on behalf of Waste Services.

Checkpoint 4: Final check before the project goes to tender, to verify the project is ready to be tendered and develop a refined control budget. This will include an assessment of readiness and a final scope review. If the project is within the approved scope, schedule, and budget, an Internal Control Budget, Control Schedule and Authorization for Expenditure will result. If it is not, it will either be forwarded for a Change Request or will be sent back for revision. Approved projects are authorized to spend up to their control budget levels.

Checkpoint 5: This checkpoint is to verify that the project is ready for the final closeout within Integrated Infrastructure Services. Closeout will ensure that the scope has been met satisfactorily and that all closeout activities have been completed.

Out of Scope

Project planning and design phase of the PDDM approach is out of scope for this business case. (This includes Checkpoint 1 (Project initiation), Checkpoint 2 (Authorization for Design Expenditure) and Checkpoint 3 (Approval for Capital Budget) of the PDDM approach.
Critical Success Factors

Critical success factors include:

Efficient, consistent and accurate communication between Waste Services and IIS
Regular check-ins with the Waste Services Branch Leadership team to align with the strategic direction and branch goals
Accurate and sufficient data and cost analyses to support high level budget estimate and informed decision makings for the projects
On time, on budget delivery of capital projects within the PDDM approach.

STRATEGIC ALIGNMENT

Projects following the PDDM approach for Waste Services align with the following strategic goals of City of Edmonton:

Healthy City/Urban Places/Regional Prosperity/Climate Resilience

City of Edmonton's Waste Management Policy C527 and Waste Management Utility Fiscal Policy C558A as well as the Capital Project Governance Policy C591. This profile also aligns with Waste Services integrated 25-year strategic outlook that will help to ensure Edmontonians receive maximum economic and environmental benefits while minimizing the cost increases of managing solid waste.

ALTERNATIVES CONSIDERED

This is a capital funding request and does not present any alternatives for consideration.

In this process, multiple checkpoints occur prior to the budget approval for the delivery of a single project, including a detailed business case, ensuring that budget and schedule adjustments may be made prior to the tender process.

COST BENEFITS

Tangible:

- Improved efficiency in project mgt
- Increased adherence to budget and schedule estimates
- Improved ability to forecast capital expenditure thus allowing for more certainty in utility rates

Intangible:

- Structured process to evaluate readiness, scope and prioritization
- Increased project accountability
- Increased project awareness and controls
- Closer integration of City departments
- More efficient and consistent procurement process

KEY RISKS & MITIGATING STRATEGY

RISK- PDDM is a gated process and the additional steps required in this new process may increase timelines or compromise scheduled completion dates

MITIGATION- Waste Services will work closely on the project team with IIS and other parties to ensure project planning process is started in advance, timely review and approval is occurring and schedules are adhered to

RISK-Emerging priorities may cause delay

MITIGATION-The conceptual project list can be changed. Regular project team meetings will ensure integration & implementation of planned projects & respond to emergent projects..

RESOURCES

Projects will be managed by the Infrastructure Delivery Branch. Where outside resources are required the tender process will be managed by IIS. Subject matter expertise will be contributed by Waste Services from current staff complement. There will be no addition to the current approved FTE required

CONCLUSIONS AND RECOMMENDATIONS

The capital funding request outlines the overall budget requirement for projects anticipated to move into the Project Delivery phase for the 2019 -2022 budget cycle for a total of approximately \$896M. Projects moving into the delivery phase will have detailed business cases and budget adjustment will be requested from Utility Committee and Council. Waste Services recommends continuing to follow the PDDM approach and release funds for project delivery phase for all capital projects handled by IIS. This will lead to higher control on the scope, schedule, budget and delivery.

CHANGES TO APPROVED PROFILE

2019 Fall SCBA #19-32/2.2-2 Scope Changes: Proposed budget reductions to this profile include scope change for major projects such as the OPF that is not anticipated to be delivered in the current budget cycle (\$54,594K).

2019 Fall SCBA #19-32/2.4-1 Transfers >\$2M: Additional funds required due to unforeseen, adverse ground conditions encountered during trenching of both east and west sections and associated costs for remedial action, groundwater pumping, GCs, and consulting due to schedule extension. Transfer of \$3.2M from CM-81-2045: Waste Services IIS Infrastructure Delivery to 18-33-2033: Groundwater Diversion System Replacement. Revised completion date is December 2020.

2020 Spring SCBA: 20-12: The \$8.3 million capital budget adjustment is required to initiate and fund development of the Organics Processing Facilities Project by transferring approved funding from composite profile CM-81-2045 to standalone profile 19-81-2049. The development includes activities required to advance the project up to contract award, such as project development, request for qualification, request for proposal and other procurement activities required prior to contract award.

2020 Spring SCBA: 20.12: The RDF Enhancement project has met the PDDM checkpoint 3 readiness criteria. A capital budget adjustment is required to fund a stand alone capital profile by transferring approved funding from composite profile CM-81-2045 to progress this project through the delivery phase of PDDM. There is no resulting financial implication to the Utility as this will be funded by budget transfers from the approved composite profile CM-81-2045.

2021 Utility Fall SCBA (#21-32, 3.2-1): This scope change is required to increase the budget for capital profile "CM-81-2045 - Waste Services IIS Infrastructure Delivery" by \$3.15 million to account for the item noted in the December 9, 2021 City Council report CO00837 Eco Station Update (Private). This scope change request will be fully funded with a transfer from existing capital profile "CM-81-2048 - Waste Services Vehicles and Equipment", resulting in no rate impact to the ratepayers.

CAPITAL PROFILE REPORT

PROFILE NAME: **Waste Services IIS Infrastructure Delivery**
 PROFILE NUMBER: **CM-81-2045**
 BRANCH: **Infrastructure Planning & Design**

FUNDED
 PROFILE TYPE: **Composite**

CAPITAL BUDGET AND FUNDING SOURCES (000's)

	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
APPROVED BUDGET	Approved Budget											
	Original Budget Approved	53,839	42,190	-	-	-	-	-	-	-	-	96,029
	2019 Cap Administrative	1,292	-	-	-	-	-	-	-	-	-	1,292
	2019 Cap Council	-18,797	-38,997	-	-	-	-	-	-	-	-	-57,794
	2019 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-
	2020 Cap Council	-19,727	-4,020	-	-	-	-	-	-	-	-	-23,747
	2020 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-
	2021 Cap Council	-530	3,150	-	-	-	-	-	-	-	-	2,620
	2021 Cap Carry Forward	-4,606	4,606	-	-	-	-	-	-	-	-	-
	2021 Cap Release to Corp Pool	-1,141	-	-	-	-	-	-	-	-	-	-1,141
Current Approved Budget	10,329	6,929	-	-	-	-	-	-	-	-	-	17,258
APPROVED FUNDING SOURCES	Approved Funding Sources											
	Self-Liquidating Debentures	7,187	6,922	-	-	-	-	-	-	-	-	14,108
	Waste Mgt Retained Earnings	3,142	8	-	-	-	-	-	-	-	-	3,150
Current Approved Funding Sources	10,329	6,929	-	-	-	-	-	-	-	-	-	17,258

BUDGET REQUEST	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
Budget Request	-	-	-	-	-	-	-	-	-	-	-

REVISED BUDGET (IF APPROVED)	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
Revised Budget (if Approved)	10,329	6,929	-	-	-	-	-	-	-	-	17,258
Requested Funding Source											
Self-Liquidating Debentures	7,187	6,922	-	-	-	-	-	-	-	-	14,108
Waste Mgt Retained Earnings	3,142	8	-	-	-	-	-	-	-	-	3,150
Requested Funding Source	10,329	6,929	-	-	-	-	-	-	-	-	17,258

CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Construction	10,329	3,779	-	-	-	-	-	-	-	-	-	14,108
	Other Costs	-	3,150	-	-	-	-	-	-	-	-	-	3,150
	Total	10,329	6,929	-	-	-	-	-	-	-	-	-	17,258

OPERATING IMPACT OF CAPITAL

Type of Impact:

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