

Branch — Project Management and Maintenance Services

Introduction

Project Management and Maintenance Services enhances the liveability of the city for all Edmontonians by supporting other departments, boards and authorities in the delivery of their capital projects by managing design and construction of buildings, facilities, attractions, parks and open spaces, maintaining the existing assets, and stewarding corporate project management knowledge and processes.



In 2012, the branch was integrated into the Community Services Department through a corporate reorganization. The work of the branch is delivered by three program areas:

Buildings Design and Construction's role is to protect the City's and the public's interests as a knowledgeable owner, and ensure that buildings and facility projects are delivered to meet the immediate and long term needs of the City. This is accomplished by adhering to project management best practices, ensuring compliance with legislative requirements and City policies, and ensuring that client and key stakeholder needs are met.

Landscape Design and Construction's role is to protect the City's and the public's interests as a knowledgeable owner, and ensure that parks and public open space projects are delivered to meet the immediate and long term needs of the City. This is accomplished through the use of in-house project management, design and construction resources for small and mid-sized projects, supplemented with external design consultants and construction contractors for larger projects.

Facility Maintenance Services operates and maintains city-owned facility infrastructure (buildings, park spray decks, splash pads, River Valley foot bridges), with the goal of maximizing their useful lives and minimizing disruption to public services. In addition, this section provides custodial and energy management services to client departments.

This Program Area also includes the Corporate Centre for Project Management, which provides a centralized, shared service for all civic employees on matters related to capital project management. Their services include: providing and continuously improving and standardizing corporate project management practices, coordinating corporate project management training and development, and stewarding corporate project management knowledge.



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Approved 2013 Budget – Branch Summary

(\$000)

	2011 Actual	2012 Budget	2013 Budget	\$ Change '12-'13	% Change '12-'13
Revenue & Transfers					
User Fees, Fines, Permits, etc.	\$ 510	\$ 346	\$ 492	\$ 146	42.2
Grants	(13)	-	-	-	
Transfer from Reserves	-	-	-	-	
Total Revenue & Transfers	<u>497</u>	<u>346</u>	<u>492</u>	<u>146</u>	42.2
Expenditure & Transfers					
Personnel	38,314	42,795	46,120	3,325	7.8
Materials, Goods & Supplies	5,985	5,818	6,120	302	5.2
External Services	26,278	24,156	26,192	2,036	8.4
Fleet Services	2,104	2,430	2,920	490	20.2
Intra-municipal Services	5,763	4,530	3,878	(652)	(14.4)
Utilities & Other Charges	865	902	1,043	141	15.6
Transfer to Reserves	150	-	-	-	
Subtotal	79,459	80,631	86,273	5,642	7.0
Intra-municipal Recoveries	(38,840)	(36,433)	(37,884)	(1,451)	4.0
Total Expenditure & Transfers	<u>40,619</u>	<u>44,198</u>	<u>48,389</u>	<u>4,191</u>	9.5
Net Operating Requirement	\$ 40,122	\$ 43,852	\$ 47,897	\$ 4,045	9.2
Full-time Equivalents	468.5	490.5	511.7	21.2	

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Budget Changes for 2013

(\$000)

Revenue & Transfers - Changes

User Fees, Fines, Permits, etc. \$146

The City provides facility maintenance to Alberta Health Services for its Ambulance Facilities. The increase represents service requests by the client.

Expenditures & Transfers - Changes

Personnel \$3,325

An increase of \$2,172 is a result of 2013 wage settlements, movement within salary ranges and benefit increases. Increase of \$1,761 (21.0 FTEs) in facility maintenance staff (tradesmen, custodial, administrative staff) to meet infrastructure growth in 2013. The elimination of the Infrastructure Services General Manager's Office resulted in a reduction of \$(608).

Material, Goods & Supplies \$302

Increase due to inflation on external material and goods for life cycle facility maintenance and custodial services \$191, increase in hired equipment and computer (lease) costs \$111.

External Services \$2,036

Increase due to inflation and projected increase in demand for contracted facility maintenance / custodial services \$1,571, service package requirements for Fire Door Inspections and Arc Flash Hazard Analysis \$395, and for life cycle facility maintenance on new facilities (operating impact of capital - new facilities) \$70.

Fleet Services \$490

Increase in Fleet Services of \$390 due to acquisition of vehicles for Facility Maintenance Services (operating impact of capital -new facilities). Additional increase of \$100 is attributable to fuel cost increases and variable Fleet Services charges.

Intra-municipal Services \$(652)

Decrease in Intra-Municipal Services is mainly due to reduced space requirements and the elimination of the Infrastructure Services General Manager's Office.

Utilities and other charges \$141

Increase due to recosting of utilities including telephones.

Intra-municipal Recoveries \$(1,451)

Increase in Facility Maintenance Services recoveries from Police \$(414) & Libraries \$(175) for new facilities, and \$(862) for projected increase in demand work (including inflation on contracted services) from other departments.

Full-time Equivalents - Changes

Facility Maintenance Services requires 20.0 FTEs addresses the operating impacts of capital (new facilities) and 1.0 FTE for the Fire Doors Inspections Service Package. An adjustment of 0.2 FTE was identified due to the reconciliation of the branch FTEs.

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Approved 2013 Budget – Program Summary

Program Name - Building Design and Construction

Results to be Achieved

Buildings Design and Construction (BDC) is a service provider to other departments, boards and authorities (e.g. Libraries, Police) by providing corporate oversight during the management of buildings and facility projects through various project phases. BDC is also used by the corporation as a resource for technical input.

Service Standards	Resources (\$000)	2011 Actual	2011 Budget	2012 Budget	2013 Budget
BDC's main goal is to manage the delivery of client projects on-time and on-budget, while protecting the City's and the public's interests. This is accomplished by managing risks at the project and corporate levels, adhering to project management best practices, ensuring that legislative requirements and City policies are met, and ensuring that the clients and key stakeholders needs are addressed.	Revenue & Transfers	\$ 14	\$ -	\$ -	\$ -
	Expenditure & Transfers	1,035	1,034	1,156	1,019
	Net Operating Requirement	\$ 1,021	\$ 1,034	\$ 1,156	\$ 1,019
	Management			4.0	4.0
	Exempt			19.0	17.0
	Union			33.0	33.0
	Temporary			-	-
	Full - Time Equivalents		56.0	54.0	54.0

2012 Services

- Managed the design & construction of approximately \$193 million of new buildings, facilities, and attractions, and the rehabilitation of existing infrastructure. Major projects include: Meadows and Clareview Recreation Centres & Libraries, Jasper Place & Highlands Libraries, Valley Zoo Entry & Wander, Heritage Valley Fire Station, SW Police Station, various roof replacements
- Managed various building demolitions and hazardous material abatement as required by client departments
- Managed conceptual and feasibility studies, and providing technical input and support to the corporation

Changes in Services for 2013

- Based on the projected workload for 2013, service levels are not expected to change
- The staffing levels will remain constant in order to manage the expected volume of projects in 2013

Program Name - Landscape Design and Construction

Results to be Achieved

Landscape Design and Construction (LDC) is a service provider to other departments by providing corporate oversight while delivering parks and public green projects. LDC utilizes both external design consultants and construction contractors, and in-house design & construction resources to deliver projects.

Service Standards	Resources (\$000)	2011 Actual	2011 Budget	2012 Budget	2013 Budget
LDC's main goal is to manage the delivery of client projects on-time and on-budget, while protecting the City's and the public's interests. This is accomplished by managing risks at the project and corporate levels, adhering to project management, design & construction best practices, ensuring that legislative requirements and City policies/standards are met, and meeting client and key stakeholder needs.	Revenue & Transfers	\$ -	\$ 11	\$ 11	\$ 11
	Expenditure & Transfers	2,465	2,184	3,098	3,200
	Net Operating Requirement	\$ 2,465	\$ 2,173	\$ 3,087	\$ 3,189
	Management			1.0	1.0
	Exempt			3.0	5.0
	Union			57.0	62.0
	Temporary			19.5	19.5
	Full - Time Equivalents		80.5	87.5	87.5

2012 Services

- Managed the design & construction of over 110 parks and public green space projects with a value of approximately \$24 million
- Major projects include:
- New Park Construction: Multi-Sport Tournament Site, Eaux Claires, Meadows
 - Park Renewal: John Fry, Mill Woods, Borden, Callingwood District Parks
 - Playground Conservation: repair of playground equipment at 11 playground sites

Changes in Services for 2013

- Based on the projected workload for 2013, service levels are not expected to change
- The staffing levels will remain constant in order to manage the expected volume of projects in 2013

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Approved 2013 Budget – Program Summary

Program Name - Facility Maintenance Services

Results to be Achieved

Provides the lowest lifecycle cost practical through the efficient operation and maintenance program combined with effective building capital rehabilitation project planning. The Program Area also includes the Corporate Centre for Project Management (CPPM).

Service Standards	Resources (\$000)	2011 Actual	2011 Budget	2012 Budget	2013 Budget	
Provides maintenance services for all City buildings including boards, authorities and external clients (AHS), and operates on a partial cost recovery model. Maintenance trades: approximately 27% of all work is cost recovery and 45% of all maintenance activity is delivered by external contractors. Custodial: cost recovery of approximately 55% from EPL, EPS etc. More than 80% of custodial work is delivered by external contractors.	Revenue & Transfers	\$ 483	\$ 326	\$ 335	\$ 481	
	Expenditure & Transfers	37,119	38,036	39,944	44,170	
	Net Operating Requirement	\$ 36,636	\$ 37,710	\$ 39,609	\$ 43,689	
	Management			1.0	2.0	2.0
	Exempt			16.0	12.0	12.0
	Union			307.2	325.6	347.6
	Temporary			7.8	9.4	8.6
	Full - Time Equivalents			332.0	349.0	370.2

2012 Services

- Operated buildings & facilities infrastructure and provided custodial services for over 900 buildings worth over \$4.2B
- Planned and implemented preventive and corrective maintenance; planned capital renewal and performed smaller renovation projects
- Managed buildings and facilities energy program
- Lead the creation of a common Project Management Reference Guide for use in managing capital construction projects

Changes in Services for 2013

- Operating Impact of Capital – support operations and maintenance of new buildings to be completed during 2013
- Changes to legislation and safety regulations require the implementation of a Fire Door Inspection and Repair Program
- Initiation of an Arc Flash Evaluation and Labelling Program for all existing city-owned buildings

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Program - Facility Maintenance Services Operating Impacts of Capital- Buildings Services

FUNDED

Description

In 2013, over \$120 million in new facilities are expected to be brought into service. Custodial services must be provided to these facilities to ensure the efficient operations of City programs. This package is based upon a 2% allowance for the maintenance of typical public facilities, and 1% for minor facilities such as park shelters. Custodial services are based on applying current standards of service. A full year's cost is projected at \$3.4 million. As some of the buildings will not be in service until part way through the year, \$2.8 million and 20.0 FTE are required in 2013. The staffing complement includes 16 trades staff and 4 custodial staff requiring 5 vans and 3 trucks.

Justification

The City is expected to complete a number of new facilities in 2013, which will be put into service for the public. Some of these facilities are the EPS New SW Division, Valley Zoo Wander Path, Highlands Library and approximately 16 new park shelters and spray decks. There were also a number of facilities underfunded in the 2012 budget, including the Valley Zoo Pinniped, Capitol Theatre and EPCOR Rosedale Buildings. These facilities require regular maintenance and custodial services to ensure the public has a positive and safe experience in the various programs and services that are offered. These new facilities contain a variety of building components which must be inspected and serviced in accordance with the warranty requirements. Furthermore, as confirmed in the City Auditor's report, planned maintenance is generally less expensive than corrective maintenance. Planned maintenance allows for the orderly shut down of a facility to avoid unplanned service disruptions to the public, and the work is more likely to be completed by using in-house personnel during regular scheduled work hours rather than after hours call-out of contractors.

Service Level Impact

If the package is not approved, planned maintenance in other facilities will need to be reduced to provide the budget required to keep warranties valid. This will increase the risk of unplanned maintenance and erode the progress made to date on increasing the reinvestment in capital.

Impact on Other Departments

This package will enhanced the likelihood of planned maintenance being maintained at the current level, thereby minimizing unexpected disruption to other Departments' delivery of programs and services.

Incremental (\$000)	2013				2014				2015			
	Exp	Rev	Net	FTEs	Exp	Rev	Net	FTEs	Exp	Rev	Net	FTEs
New Budget	\$ 2,136	-	2,136	20.0	\$ -	-	-	-	\$ -	-	-	-
Annualization	694	-	694	-	-	-	-	-	-	-	-	-
Total	\$ 2,830	-	2,830	20.0	\$ -	-	-	-	\$ -	-	-	-

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Program - Facility Maintenance Services Fire Doors Inspections

FUNDED

Description

Annual Inspection and Repair/Replacement of Fire Doors as a result of Alberta Building Code adoption of NFPA 80 in 2013. There will be one permanent FTE required for this additional work. The Alberta Building Code is adapting the National Fire Protection Association 80 Standards for Fire Doors and Other Opening Protectives 2010 Edition, in 2013. Facility Maintenance Services will be responsible to develop an inventory of all fire doors in city buildings, correct all deficiencies and maintain documentation proving to the "authority having jurisdiction" that the work has been completed as required by the code.

Justification

The Alberta Building Code is adapting the National Fire Protection Association 80 Standards for Fire Doors and Other Opening Protectives 2010 Edition, in 2013. Facility Maintenance Services will be responsible to develop an inventory of all fire doors in city buildings, correct all deficiencies and maintain documentation proving to the authority having jurisdiction that the work has been completed as required by the code.

Most damaged fire doors that do not pass the inspection will have to be replaced as fire doors typically can not be repaired. The funding for the replacement of fire doors will initially be covered from the \$280,000 identified in the 2013 service package. Based on the results of the first year of the program, additional funding may be requested in subsequent service packages, if necessary.

Service Level Impact

Building occupants will not be adversely affected by the implementation of this program. Protection from fire impacts will be improved as a result of program implementation as the fully functioning fire doors will reduce flame spread and smoke damage in the event of a fire in a structure. If funding is not provided, Facility Maintenance Services will do its best to implement the program using existing resources and budgets. The result would be a significantly reduced inspection and replacement program which will result in contravention of the Alberta Building Code. Response to locksmith - related repair work will be significantly reduced as existing staff will be re-directed to carry out fire door inspections and repairs.

Impact on Other Departments

In the first year of program development there will be no impact on other departments. As the program expands, there may be additional costs for departments that fund maintenance on a fee-for-service basis as they will be required to cover the cost of the inspections and repair work.

Incremental (\$000)	2013				2014				2015			
	Exp	Rev	Net	FTEs	Exp	Rev	Net	FTEs	Exp	Rev	Net	FTEs
New Budget	\$ 280	-	280	1.0	\$ -	-	-	-	\$ -	-	-	-
Annualization	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$ 280	-	280	1.0	\$ -	-	-	-	\$ -	-	-	-

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Program - Facility Maintenance Services Arc Flash Hazard Analysis

FUNDED

Description

An arc flash is the uncontrolled release of electrical energy. The release occurs in milliseconds, but the amount of energy, even from small installations, is extreme and causes significant injuries or even death. Temperatures in the area of an arc flash can reach 20,000 degrees Celcius. An arc flash can be caused by an accidental contact between electrical componenets or a failure of an electrical component. Between 2004 and 2008, the province of Alberta experienced 178 injuries and 10 deaths related to electrical accidents, some of which involved arc flash incidents.

This service package initiates an Arc Flash Hazard Analysis Program for existing facilities to establish (a) Arc Flash Boundary (b) incident energy at the working distance and (c) Personal Protective Equipment (PPE) that personnel within the arc flash boundary shall use. These standards are being adopted as of September 2012.

Justification

The Canadian Electrical Code Part 1 and CSA Standards Z462-12 Workplace Electrical Safety the Analysis and Labeling of Equipment became effective September 2012. They provide the threat level for maintenance staff which enables the electrician to obtain the required PPE before exposing him or herself to potentially hazardous situations. There are times when equipment must remain energized while it is serviced. This standard provides the guidance for doing that. The arc flash analysis can only be carried out by an electrical engineer. The specifications for all new City buildings include the appropriate arc hazards calculations and placards being provided by the electrical engineer. This service package will provide the resources to begin the process to provide the same level of placarding for existing buildings and other installations.

CSA-Z462 will apply to any workers potentially at risk for working in proximity to electrical equipment. The new standard will also define areas within which anyone must follow strict safety precautions, which include the use of PPE.

Service Level Impact

This service package will provide the funding to start the process to conduct arc flash hazard assessments for existing City buildings. The resulting detailed calculations and the safety placards will protect city and contractor staff when they work on energized building systems. The City will face significantly increased risk if it does not initiate the review of these significant hazards.

Impact on Other Departments

There will be no direct impact on other City departments.

Incremental (\$000)	2013				2014				2015			
	Exp	Rev	Net	FTEs	Exp	Rev	Net	FTEs	Exp	Rev	Net	FTEs
New Budget	\$ 200	-	200	-	\$ -	-	-	-	\$ -	-	-	-
Annualization	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$ 200	-	200	-	\$ -	-	-	-	\$ -	-	-	-