

# Branch — Drainage Design and Construction

## Introduction

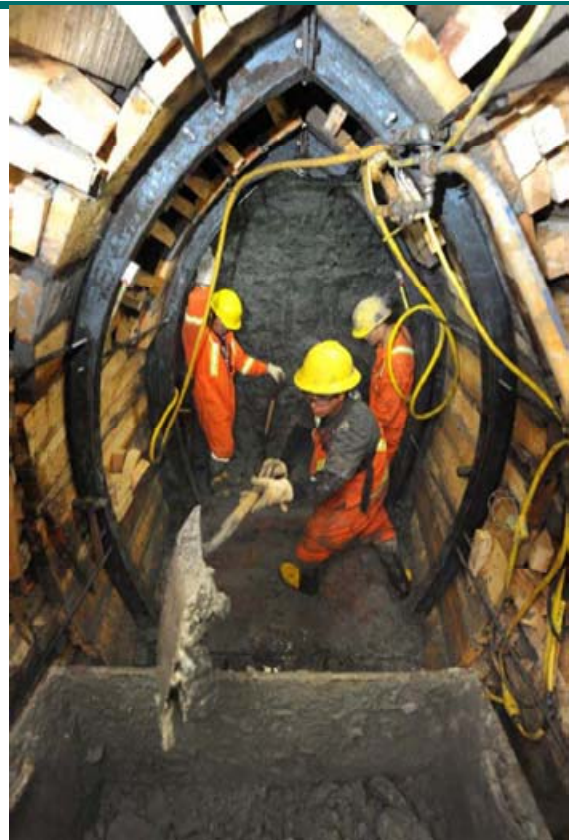
**Vision:** *To become Western Canada's recognized leader in underground infrastructure design and construction.*

**Mission:** *To help build great communities by providing safe, sustainable underground infrastructure.*

Drainage Design and Construction, a section of the Drainage Services branch, provides underground infrastructure construction to the City of Edmonton. Also, the section leverages its reputation as a supplier of well designed, well managed, and well constructed tunneling projects to provide primary and sub-contractor services to local construction firms and private developers.

Drainage Design and Construction's competitive advantage comes from its 100 years of tunneling experience and its continuous incorporation of new trenchless technologies that improve project time and cost efficiency.

The section is divided into three teams: Client Services, Design Services, and Construction Services.



### **Client Services**

This team is the main point of contact with internal and external clients and works collaboratively with the Design Services and Construction Services teams to deliver quality projects on time and on budget. Client Services also provides surveying, inspection, and project support activities.

### **Design Services**

The Design Services team designs the city's underground infrastructure to meet the requirements of standards needed to ensure safety and longevity of infrastructure design. Design Services includes concept, preliminary and detailed design, cost estimation, drafting, review/update of engineering design standards and creation/maintenance of the approved materials and product list.

### **Construction Services**

The Construction Services team provides open cut, tunnel, and small diameter trenchless construction expertise. Open cut construction involves sensitive trenching work in developed urban areas where significant probability of conflict with other existing utilities exists. Tunneling utilizes a fleet of Tunnel Boring Machines and traditional hand tunneling methods to install infrastructure. Small diameter trenchless work involves using various emerging technologies including pilot tube micro tunneling, pipe bursting, and pipe ramming.

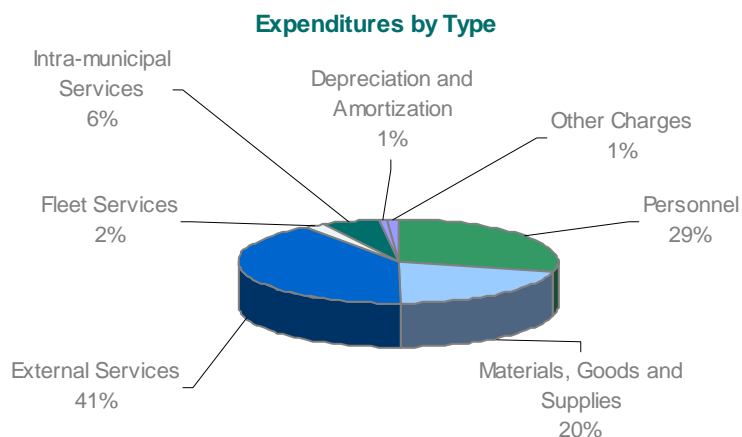
### **Highlights for 2014 include:**

- Continue transformation of the section to improve on processes, organizational structure, management capacity, and technology
- Increase construction capacity to meet the needs of the Drainage Services capital program
- Continued delivery of flood prevention program to address city wide system requirements

# Branch — Drainage Design and Construction

## Approved 2014 Budget – Branch Summary (\$000)

	2012 Actual	2013 Budget	2014 Budget	\$ Change '13-'14	% Change '13-'14
<b>Revenues</b>					
<b>Total Revenues</b>	<b>\$ 122,073</b>	<b>\$ 113,804</b>	<b>\$ 127,202</b>	<b>\$ 13,398</b>	<b>11.8</b>
<b>Expenditures</b>					
Personnel	30,532	38,139	36,794	(1,345)	(3.5)
Materials, Goods and Supplies	17,256	21,816	25,643	3,827	17.5
External Services	57,927	41,625	51,362	9,737	23.4
Fleet Services	2,346	2,482	2,436	(46)	(1.9)
Intra-municipal Services	7,098	5,601	7,355	1,754	31.3
Depreciation and Amortization	1,072	1,027	1,047	20	1.9
Other Charges	1,304	1,456	1,269	(187)	(12.8)
<b>Total Expenditures</b>	<b>117,535</b>	<b>112,146</b>	<b>125,906</b>	<b>13,760</b>	<b>12.3</b>
<b>Net Income Before Other</b>	<b>\$ 4,538</b>	<b>\$ 1,658</b>	<b>\$ 1,296</b>	<b>\$ (362)</b>	<b>(21.8)</b>
<b>Other</b>					
Provision for Capital Reserve	3,841	992	992	-	-
<b>Total Other</b>	<b>3,841</b>	<b>992</b>	<b>992</b>	<b>-</b>	<b>-</b>
<b>Net Income before Dividends</b>	<b>\$ 697</b>	<b>\$ 666</b>	<b>\$ 304</b>	<b>\$ (362)</b>	<b>(54.4)</b>
<b>Dividends</b>					
Dividend to the City of Edmonton	-	167	76	(91)	(54.5)
<b>Total Other</b>	<b>-</b>	<b>167</b>	<b>76</b>	<b>(91)</b>	<b>(54.5)</b>
<b>Net Income</b>	<b>\$ 697</b>	<b>\$ 499</b>	<b>\$ 228</b>	<b>\$ (271)</b>	<b>(54.3)</b>
<b>Full-time Equivalents</b>	<b>365.0</b>	<b>365.0</b>	<b>365.0</b>	<b>-</b>	<b>-</b>



# Branch — Drainage Design and Construction

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## Budget Changes for 2014 (\$000)

### Revenue & Transfers - Changes

#### Revenues \$13,398

The increase reflects overall higher project volume and is related to an increase in internal Other City Department work and in Drainage Services capital plan in 2014 relative to 2013. This will be offset by a decrease in external work. No profit is earned on internal Other City Department or Drainage capital work. Decrease in net position due to less external project volume.

### Expenditures & Transfers - Changes

#### Personnel (\$1,345)

The decrease is resulting from more accurate information with the implementation of the Capital and Operating Budgeting System (COBS)

#### Material, Goods and Supplies \$3,827

The increase reflects higher project volume.

#### External Services \$9,737

The increase reflects higher project volume.

#### Fleet Services (\$46)

The decrease in Fleet Services is attributed to Drainage Design & Construction now purchasing vehicles through the capital program instead of leasing through Fleet Services. As the vehicles leased through Fleet Services are replaced by purchased vehicles, Fleet Services charges will continue to decline.

#### Intra-municipal Services \$1,754

The increase is primarily attributed to adjustments in the shared service allocation to Drainage Design & Construction. In previous years Drainage Design & Construction has had a discounted allocation of shared service costs. In 2014 they will pay 100% of their share of shared service costs.

#### Depreciation and Amortization \$20

The increase reflects an adjustment in equipment usage based on an increase in project volume.

#### Other Charges (\$187)

The decrease is attributed to lower insurance premium costs relating to external project volume.

#### Provision for Capital Reserve \$0

Equipment reserve requirements will not change from 2013. The reserve is funded to meet Drainage Design & Construction equipment replacement needs.

#### Dividend to City of Edmonton (\$91)

The proposed 2014 budget includes a 25% dividend payment based upon budgeted 2014 net income before dividends. The actual dividend is calculated using actual net income.

### Full-time Equivalents - Changes

No additional FTE's requested in the 2014 budget. Labour requirements are a product of project volume which can fluctuate depending on the timing of project work and tenders that are awarded. As such, the use of temporary FTE's will be used to manage the workload as necessary.

# Branch — Drainage Design and Construction

## Approved 2014 Budget – Program Summary (\$000)

### Program Name - Drainage Design and Construction

[Link to 10-Year Strategic Goals](#)



### Results to be Achieved

The primary responsibility of Drainage Design and Construction is to design and construct sanitary and stormwater drainage infrastructure in support of the Drainage Services Utility. It also provides underground infrastructure design, construction, and project management services to other City of Edmonton departments and external clients.

### Cost Drivers

Cost depends on size of project, market conditions and capacity.

### Service Standards

Design and construction of new sanitary and stormwater drainage infrastructure. Rehabilitation and replacement of existing drainage infrastructure systems. Project management, design and construction services to internal and external clients.

Resources (\$000)	2012 Actual	2012 Budget	2013 Budget	2014 Budget
Revenue & Transfers	\$ 122,073	\$ 110,659	\$ 113,804	\$ 127,202
Expenditure & Transfers	121,376	109,370	113,305	126,974
Net Income	\$ 697	\$ 1,289	\$ 499	\$ 228
Management		4.0	4.0	5.0
Professional/Technical/Union Exempt		28.7	28.7	34.0
Union		332.3	332.3	326.0
Temporary		-	-	-
Full - Time Equivalents		365.0	365.0	365.0

### 2013 Services

- Expansion: construct new infrastructure to support drainage infrastructure system growth
  - Flood Prevention: implement projects to reduce flood risk
  - Neighbourhood Renewal: renew existing drainage infrastructure
  - Environmental Protection: install infrastructure to enhance environmental protection
- \*\*Infrastructure includes pipes, tunnels, storm water management facilities and pump stations

### Changes in Services for 2014

- Pursue more integrated services delivery model with Drainage Services
- Anticipate project requirements for Expanded Flood Prevention program

## Branch — Drainage Design and Construction

### Pro-forma Income Statement (\$000)

	2014	2015	2016	2017	2018
<b>Revenues</b>					
<b>Total Revenues</b>	<b>\$ 127,202</b>	<b>\$ 142,986</b>	<b>\$ 129,639</b>	<b>\$ 123,234</b>	<b>\$ 133,606</b>
<b>Expenditures</b>					
Personnel	36,794	37,645	38,525	39,435	40,378
Materials, Goods and Supplies	25,643	30,824	25,828	23,508	26,488
External Services	51,362	60,629	51,744	46,897	53,042
Fleet Services	2,436	2,328	2,228	2,134	2,046
Intra-municipal Services	7,355	7,417	7,478	7,539	7,600
Depreciation and Amortization	1,047	1,174	1,063	1,009	1,092
Other Charges	1,269	1,425	1,291	1,227	1,331
<b>Total Expenditures</b>	<b>125,906</b>	<b>141,442</b>	<b>128,157</b>	<b>121,749</b>	<b>131,977</b>
<b>Net Income Before Other</b>	<b>\$ 1,296</b>	<b>\$ 1,544</b>	<b>\$ 1,482</b>	<b>\$ 1,485</b>	<b>\$ 1,629</b>
<b>Other</b>					
Provision for Capital Reserve	992	1,047	936	882	965
<b>Total Other</b>	<b>992</b>	<b>1,047</b>	<b>936</b>	<b>882</b>	<b>965</b>
<b>Net Income before Dividends and Transfers</b>	<b>\$ 304</b>	<b>\$ 497</b>	<b>\$ 546</b>	<b>\$ 603</b>	<b>\$ 664</b>
<b>Dividends and Transfers</b>					
Dividend to the City of Edmonton	76	111	122	134	147
<b>Total Other</b>	<b>76</b>	<b>111</b>	<b>122</b>	<b>134</b>	<b>147</b>
<b>Net Income</b>	<b>\$ 228</b>	<b>\$ 386</b>	<b>\$ 424</b>	<b>\$ 469</b>	<b>\$ 517</b>