



Report to: General Committee

Meeting Date: December 2, 201

---

**SUBJECT:** Status of Capital Projects as of October 31, 2019  
**PREPARED BY:** Sandra Skelcher – Senior Manager, Financial Planning & Reporting (Ext. 3880)  
Jemima Lee – Senior Financial Analyst (Ext. 2963)

---

**RECOMMENDATION:**

- 1) That the report dated December 2, 2019 titled “Status of Capital Projects as of October 31, 2019” be received; and,
- 2) That the amount of \$2,286,734 from the closure of capital projects be transferred to the sources of funding as listed on Exhibit A; and,
- 3) That the closure of projects as outlined on Exhibit B and C be approved; and
- 4) That the Non-Development Charge Capital Contingency Project be topped up from the Life Cycle Replacement and Capital Reserve Fund by \$971,256 to the approved amount of \$250,000; and,
- 5) That the Engineering Capital Contingency Project be topped up from the City-Wide Hard Development Charges Reserve by \$67,679 to the approved amount of \$100,000; and,
- 6) That the Design Capital Contingency Project be topped up from the Development Charges Reserve by \$99,952 to the approved amount of \$100,000; and,
- 7) That the Planning Capital Contingency Project be topped up from the Development Charges Reserve by \$8,987 to the approved amount of \$50,000; and,
- 8) That the Waterworks Capital Contingency Project be topped up from the Waterworks Stabilization/Capital Reserve by \$27,731 to the approved amount of \$100,000; and,
- 9) That the following new capital projects, initiated subsequent to the approval of the 2019 capital budget, be received:

19285 – Yonge Street Highway 7 Transit Planning Advisory – Budget of \$25,000 funded from Development Charges Reserve.

19289 – Supply and Install Oil/Water Separator – Fire Station 94 – Budget of \$20,000 funded from the Non-DC Capital Contingency.

19290 – Centennial Community Centre Fan Wheel – Budget of \$23,073 funded from the Non-DC Capital Contingency.

19292 – Berczy Park Washroom Renovation – Budget of \$20,148 funded from the Non-DC Capital Contingency.

---

19297 – Pan Am Daktronics – Budget of \$77,826 funded from the Non-DC Capital Contingency, and further,

- 10) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**EXECUTIVE SUMMARY:**

Below is a summary of funds to be returned to original sources from closed capital projects. Section A of this report highlights capital projects with surplus funds of more than 50% of the approved budget or in excess of \$100,000:

1) Life Cycle Replacement and Capital Reserve	\$1,322,219
2) Development Charges	\$543,856
3) Waterworks Stabilization/Capital Reserve	\$53,055
4) Other Reserves and Reserve Funds	<u>\$367,604</u>
Total	\$2,286,734

**PURPOSE:**

The purpose of this report is to provide an update on the status of capital projects as of October 31, 2019, and advise Council of the net transfer of funds to reserves.

**OPTIONS/ DISCUSSION:**

In an effort to promote timely closure of projects and the return of surplus funds, Staff conducted a status review of all open capital projects as of October 31, 2019. As a result, 109 projects are identified for closure, with a total budget remaining of \$2,286,734 to be returned to the original sources of funding.

A detailed listing of projects to be closed and the funding amounts to be transferred are included in the following exhibits:

Exhibit A – Summary of funding from closed capital projects to be returned to funding sources as of October 31, 2019

Exhibit B – Details of capital projects to be closed with funding to be returned to funding sources as of October 31, 2019

Exhibit C – Summary of capital projects to be closed that are fully expended as of October 31, 2019

---

**A. CAPITAL PROJECT CLOSURES**

Capital projects to be closed are listed in Exhibits B and C. The following four sections provide details of the capital projects listed in Exhibit B with surplus funds of more than 50% of the approved budget or in excess of \$100,000 that will be returned to the applicable funding sources.

**1) Life Cycle Replacement & Capital Reserve Fund**

The closure of capital projects identifies funds in the amount of \$1,322,219 to be returned to the Life Cycle Replacement & Capital Reserve Fund.

- a) **Engineering**  
Project 17042 – Intersection Improvements – Budget of \$450,495 with remaining funds of \$254,040 (56% of project budget). This project is 67.5% funded through the Development Charges Reserve and 32.5% funded through the Life Cycle Replacement & Capital Reserve Fund. Refer to project status under Development Charges Reserves.
- b) **Operations - Parks**  
Project 18227 – Floodlights, Poles & Cross Arms Replacement – Budget of \$65,800 with remaining funds of \$65,800 (100% of project budget). The project was not initiated due to change in scope requirements to be compliant with most current lighting standards. This project has been re-submitted as part of the 2020 Capital Budget with an updated scope.
- c) **Operations - Parks**  
Project 18233 – Planter Replacement – Budget of \$236,800 with remaining funds of \$236,800 (100% of project budget). The project was not initiated. The replacement planters planned on Regional right-of-way are still in negotiation for cost sharing with the Region to an appropriate level to only reflect planter replacement and not surrounding path surfacing. This project will be re-requested in 2021 pending formation of an agreement with the Region.
- d) **Operations - Parks**  
Project 19184 – Bleachers (Metal) Replacement – James Edward Park – Budget of \$11,000 with remaining funds of \$6,671 (61% of project budget). The footing replacement of the bleachers were not required based on condition assessment.
- e) **Recreation**  
Project 18130 – Camp Chimo Site Improvements – Budget of \$26,900 with remaining funds of \$19,352 (72% of project budget). The window installation originally planned was not done due to Toronto and Region Conservation Authority (TRCA) restrictions.

- 
- f) Recreation  
Project 18136 – Crosby Community Centre Exterior Masonry Repairs – Budget of \$61,400 with remaining funds of \$37,095 (60% of project budget). A change in scope of work resulted in block wall not being replaced, but resurfaced with concrete instead.
  - g) Recreation  
Project 18148 – Milliken Mills Community Centre Library Lighting Replacement – Budget of \$36,600 with remaining funds of \$22,913 (63% of project budget). The replacement of light dimmers originally budgeted for were not required based on condition assessment.
  - h) Recreation  
Project 18157 – Mount Joy Plate & Frame Heat Exchanger – Budget of \$11,200 with remaining funds of \$11,200 (100% of project budget). The heat exchanger replacement will be added to the scope of the condenser replacement project at Mount Joy under project 18154.
  - i) Recreation  
Project 18191 – Water Street Senior Centre - Painting – Budget of \$33,200 with remaining funds of \$21,650 (65% of project budget). The evening labour costs originally included in the budget were less than anticipated.
  - j) Sustainability Asset Management – Facility Assets  
Project 17186 – Other Facility Improvements – Budget of \$43,700 with remaining funds of \$22,002 (50% of project budget). The demolition costs anticipated for Elson Miles Barn were less than budget.
  - k) Sustainability Asset Management – Facility Assets  
Project 18093 – Fire Facility Improvements – Budget of \$376,633 with remaining funds of \$138,023 (37% of project budget). The budget dedicated to fire station signs (\$30k) was used as these components were completed under a separate dedicated Fire Station Signs project. The salary recovery budgeted (\$60k) was also not fully utilized as Department staff was used to complete some of the work. Lastly, the use of provisional items were lower than anticipated.
  - l) Sustainability Asset Management – Facility Assets  
Project 18098 – Parking Lot Light Replacement – Budget of \$91,800 with remaining funds of \$53,182 (58% of project budget). The replacement of some parking lot lights were deferred based and condition assessment.
  - m) Sustainability Asset Management – Facility Assets  
Project 18099 – Recycling Depot Improvements – Budget of \$76,500 with remaining funds of \$44,130 (58% of project budget). The siding work was deferred due to ongoing discussions on material.

---

**Return of Funds to the Life Cycle Replacement & Capital Reserve Fund**

In addition to the above list, contract awards greater than \$25,000 with surplus funds are returned to the original funding source(s).

Since the last Status of Capital Projects report tabled at General Committee in June 2019, \$881,415 has been returned to the Life Cycle Replacement & Capital Reserve Fund from contract awards.

**2) Development Charges (DC) Reserves**

The closure of capital projects identifies funds in the amount of \$543,856 to be returned to Development Charges (DC) Reserve Funds.

**a) Engineering**

Project 17042 – Intersection Improvements – Budget of \$450,495 with remaining funds of \$254,040 (56% of project budget). This project is 67.5% funded through the Development Charges Reserve and 32.5% funded through the Life Cycle Replacement & Capital Reserve Fund. The scope of project work was reduced due to the cancellation of the John/Henderson intersection.

**3) Waterworks Stabilization/Capital Reserve**

Funds in the amount of \$53,055 will be returned to the Waterworks Stabilization/Capital Reserve resulting from the closure of capital projects.

**a) ES – Water & Wastewater**

Project 19244 – CI Watermain Rehabilitation – Langstaff Area – Budget of \$35,600 with remaining funds of \$35,600 (100% of project budget). The initial field investigation for this project identified two pressure reducing valves owned by the Region requiring replacement. However, the Region assumed responsibility for the repair, and therefore, this project is no longer required.

**4) Other Reserves and Reserve Funds**

Funds in the amount of \$367,604 will be returned to other Reserves and Reserve Funds resulting from the closure of capital projects.

**a) Recreation & Library**

Project 10566 – East Markham Community Centre & Library – Budget of \$75,635,889 with remaining Non-DC Growth funds of \$259,513 (0.3% of project budget). The use of contingency and provisional items were lower than anticipated.

---

**B. CAPITAL CONTINGENCY PROJECTS**

In accordance with the Capital Budget Control Policy, the five (5) capital contingency projects are topped up to the maximum approved funding amount through the semi-annual Status of Capital Projects Report to Council.

**Non-DC Capital Contingency**

The Non-DC Capital Contingency Project was approved to a maximum of \$250,000. Currently, the account has a negative balance of (\$751,256). Thereby a top-up of \$971,256 is required from the Life Cycle Replacement & Capital Reserve Fund.

For this period, Staff undertook four emergency building and structural repairs. Of the \$971,256 drawn from the Non-DC Capital Contingency Project, \$325,612 (34%) was related to the following emergency projects:

- a) Sustainability Asset Management – Facility Assets  
Project 19086 – Salt Barn - \$262,391 – Funding was required for the construction of a new salt storage facility to store committed pre-scheduled October 2019 salt delivery. A condition assessment of one of the three existing salt facilities at the Operations yard resulted in a decision to construct a new facility due to extensive structural repairs required for the old structure.
- b) Recreation  
Project 19290 – Centennial Community Centre Cooling Fan Wheel – \$23,073 – The fan wheel of the rooftop cooling unit was damaged during a routine inspection and needed to be replaced immediately to maintain air quality and circulation in the facility
- c) Sustainability Asset Management – Facility Assets  
Project 19292 – Berczy Park Washroom Renovations – \$20,148 – The public washroom facilities required repair due to fire damage.
- d) Sustainability Asset Management – Facility Assets  
Project 19289 – Supply and Install Oil/Water Separator at Fire Station 94 – \$20,000 – The supply and installation of a damaged oil/water separator at the station was required to prevent sewer gas from entering the building.

Further, use of the contingency account was necessitated by the following non-emergency projects:

- a) Recreation  
Project 19297 - Pan Am Daktronic Controllers and Computer Replacement - \$77,826 – The controllers and computer system supporting the display board in the Pan Am Centre pool required replacement outside of warranty.

---

b) Recreation

Project 19131 – Milliken Mills Community Centre Pool Mechanical Replacement – \$61,114 – An external consultant recommended replacement of existing pool filters and corresponding components with a newer regenerative filter system, which cost more than budget, but has proven to achieve operational savings over the life of the asset.

c) Recreation

Project 19110 – Arena Ice Plant Monitoring System – \$59,398 – The existing monitoring system budgeted for replacement was discontinued, and the newer model installed as the replacement, required new controllers and a new operating platform.

d) Arts Centres

Project 18016 – Gallery HVAC Cooling Tower, Chiller and Exhaust Fan – \$44,239 – The project award was higher than budget due to additional costs associated with on-site assembly of equipment within a confined space.

e) Engineering

Project 18339 – Construction of Pan Am overflow parking lot – \$42,408 – A geotechnical engineer examining the site recommended repair and replacement of the soft and cracked asphalt, laid in November 2018 during poor weather conditions, to improve structure strength of the lot.

f) Recreation

Project 19154 – Rouge River Community Centre Mechanical Unit Replacement – \$40,963 – The removal and replacement of four out of five rooftop units instead of the one budgeted for, were warranted due to condition assessment.

g) Operations - Parks

Project 19201 – Replacement of Rougehaven Parkette and Roxbury Park Shade Structures – \$38,329 – The replacement cost was underestimated for the removal and disposal of existing wood structures and installation of new steel structures.

h) Operations - Parks

Project 19203 – Stairway Replacement – Ponomo Mills Park – \$36,997 – The complexity and difficulty in accessing stairway location for replacement were underestimated.

i) ITS

Project 18073 – Road Occupancy Permit Mapping - \$35,000 – Additional features were required for the Municipal Consent application.

j) Theatre

Project 19009 – Highway 7 Theatre Electronic Sign - \$33,563 – A consultation with IT Services recommended using a fibre-optic cable instead of a wireless connection as originally budgeted.

---

k) Operations - Fleet

Project 19207 – Corporate Fleet Replacement – Non-Fire - \$26,965 – The contract awarded was higher than budget based on market price for the 16 foot rotary mower.

The remaining draws totaling \$148,842 were each under \$20,000.

**Engineering DC Capital Contingency**

The Engineering DC Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$32,321 thereby requiring a top up of \$67,679 from the City-Wide Hard DC Reserve.

The use of the contingency account was necessitated by the following projects:

a) Engineering

Project 18045 – John Street MUP Design - \$32,741 – An additional field investigation was needed to complete the geotechnical report which required recommendations on slope stability, utility relocation, road reinstatement, retaining wall construction and additional bore hole samples. The initial budget for the report only accounted for a preliminary design report.

b) Engineering

Project 19041 – Markham Centre Trails Environmental Assessment for Areas 1, 2, and 4 - \$30,410 – The contract awarded for the project was higher than budget.

The remaining draw was under \$5,000.

**Design DC Capital Contingency**

The Design DC Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$48 thereby requiring a top up of \$99,952 from the Parks Development DC Reserve.

The use of the contingency account was necessitated by the following project:

a) Design

Project 12026 – Angus Glen West Village Parks Development Reimbursement - \$67,759 – Design changes and a delay in construction of parks caused an increased scope of work resulting in a higher cost.

b) Design

Project 16021 – Boxgrove Rizal Avenue Neighbourhood Park - Construction - \$29,931 – Sunken spots in the park were required to be regraded to eliminate standing/pond water, including construction of fencing to maintain closure throughout the winter months.

---

The remaining draw was under \$2,500.

**Planning DC Capital Contingency**

The Planning DC Capital Contingency Project was approved to a maximum of \$50,000. The project currently has a balance of \$41,013 thereby requiring a top up of \$8,987 from the Admin Capital Growth Studies DC Reserve.

The use of the contingency account was necessitated by the following project:

- a) Sustainability Asset Management – Facility Assets  
Project 19293 – 14<sup>th</sup> Avenue Parking, Gates, Lighting - \$8,987 – The contract awarded for the project was higher than budget.

**Waterworks Capital Contingency**

The Waterworks Capital Contingency Project was approved to a maximum of \$100,000. The project currently has a balance of \$72,269 therefore requiring a top up of \$27,731 from the Waterworks Stabilization/Capital Reserve.

The use of the contingency account was necessitated by the following project:

- b) ES – Waterworks  
Project 19248 – Sanitary Sewers Laterals Inspection - \$27,731 – The unit cost for flushing sanitary sewers was underestimated.

**C. STATUS OF OPEN CAPITAL PROJECTS**

After the closure of 109 projects, there are 546 open capital projects with a total budget of \$743.4M as of October 31, 2019. The term “open” refers to approved projects that have not started, or are at various stages of project completion, and includes 21 pre-approved 2020 capital projects with a total budget of \$24.3M.

In comparison, the November 2018 status update, reported 556 open projects with a total budget of \$710.4M.

Of the 546 open capital projects as at October 31, 2019, 78% of the projects were approved in 2017 to 2019. **(Refer to TABLE A).**

**TABLE A**

Project approval year	# of open projects	% of open projects	Unencumbered \$ in M	% of Unencumbered \$
2019	266	49%	\$95.2	58%
2018	101	18%	\$18.2	11%
2017	61	11%	\$16.7	10%
2016	41	8%	\$4.7	3%
2015 and prior	77	14%	\$28.3	17%
	546	100%	\$163.1	100%

The following summarizes the status of open capital projects:

**TABLE B**

(in millions)	Q3 2019		Q3 2018	
Encumbered/Committed	\$ 580.3	78%	\$ 604.0	85%
Unencumbered/Uncommitted	\$ 163.1	22%	\$ 106.4	15%
Total Open Capital	\$ 743.4		\$ 710.4	

**Encumbered/Committed**

The total 2019 encumbered amount of \$580.3M includes expenditures of \$488.4M (84%) and commitments of \$91.9M (16%). (Expenditures refer to payments issued for goods/services received and commitments refer to purchase orders on file with the Procurement Department).

**Unencumbered/Uncommitted**

Major projects, defined as multi-year, one-time projects account for \$97.4M (59% of \$163.1M) of the total unencumbered amount which includes the following projects:

- Rodick Road Reconstruction and Extension – Miller to 14<sup>th</sup> Avenue
- Storm sewer, sanitary sewer and watermain construction and replacement
- Whistling Cessation Program
- Official Plan and Secondary Plan engineering studies
- Hwy 404 mid-block crossing, North of Hwy 7
- West Thornhill flood control implementation
- Enterprise Asset Management and Digital Markham Strategic implementation
- Box Grove Community, Kirkham Drive, and Wismer Community park construction
- Sidewalk program, multi-use pathways and intersection improvements

---

**FINANCIAL CONSIDERATIONS**

The net amount of \$1,111,129 as summarized in the following table will be transferred to Reserves and Reserve Funds as a result of closing capital projects, return of surplus funds from open projects and top-up of capital contingency projects.

	<b>Funding Returns from Closed Projects (A)</b>	<b>Contingency Projects Top up from Reserves (B)</b>	<b>Net Change to Reserves (C)=(A)+(B)</b>
Life Cycle Replacement & Capital Reserve	\$1,322,219	(\$971,256)	\$350,963
Development Charge Reserves	\$543,856	(\$176,618)	\$367,238
Waterworks Stabilization / Capital Reserve	\$53,055	(\$27,731)	\$25,324
Other Reserves	367,604	-	\$367,604
<b>Net Change to Reserves &amp; Reserve Funds</b>	<b>\$2,286,734</b>	<b>(\$1,175,605)</b>	<b>\$1,111,129</b>

Since the last report on Status of Capital Projects tabled at General Committee in June 2019, \$881,415 has been returned to the Life Cycle Replacement & Capital Reserve Fund from contract awards.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

All business units managing capital projects have been consulted in the development of this report.

**RECOMMENDED BY:**

Joel Lustig  
Treasurer

Trinela Cane  
Commissioner, Corporate Services

**ATTACHMENTS:**

Exhibit A – Summary of funding from closed capital projects to be returned to original funding sources as of October 31, 2019

Exhibit B – Details of capital projects to be closed with funding to be returned to original funding sources as of October 31, 2019

Exhibit C – Summary of capital projects to be closed that are fully expended as of October 31, 2019