

**FINANCIAL MANAGEMENT COMMITTEE**

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: 2018 ENGINEERING CAPITAL INFRASTRUCTURE BYLAW FUNDING  
REQUEST**

**RECOMMENDATION:**

1. THAT Council authorize the City Solicitor to bring forward a Capital Reserves Bylaw in the amount of \$17,492,861.31 (inclusive of GST of \$780,931.31) and draw from the Sanitary Sewer Capital Fund the amount of \$4,869,953.64 (inclusive of GST of \$217,408.64) and the Waterworks Utility Capital Fund the amount of \$6,510,270.06 (inclusive of GST of \$290,637.06) to finance Engineering capital infrastructure improvement projects, as outlined in this report.

**REPORT**

The Financial Management Committee, at its meeting held on 2017 November 22, received and adopted the attached report seeking Council approval and funding for 2018 Engineering capital infrastructure design and early tender projects.

Respectfully submitted,

Councillor D. Johnston  
Chair

Councillor C. Jordan  
Vice Chair

Copied to:	City Manager Director Engineering Director Finance Asst. Dir. Eng. – Infrastructure & Development Asst. Dir. Eng. – Projects Asst. Dir. Eng. – Transportation Services Asst. Dir. Eng. – Facilities Maintenance Manager – Public Works Operations City Solicitor
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To: Chair and Members Financial Management Committee  
 From: Director Engineering  
 Re: 2018 Engineering Capital Infrastructure Bylaw  
 Funding Request  
 2017 November 15..... Page 2

This sewer separation project is part of the City’s ongoing infrastructure renewal program involving separation of combined sewer as required under the Liquid Waste Management Plan (ILWRMP). Work will take place in the following areas:

- Area 1 – Lanes north of Trinity and Yale St, from Ingleton Ave to Gilmore Av
- Area 2 – Lanes north of Oxford and Cambridge St, from Esmond to Gilmore Av
- Area 3 – Lanes north of Union, Georgia and Francis St, from MacDonald to Carleton Av
- Area 4 – 17<sup>th</sup> Ave, from Canada Way to 6<sup>th</sup> St

**1.3 Fraser Foreshore Dyke Reach 8 \$3,372,462**

ELA.3056 Reach 8 Dyke Improvement	\$ 3,122,462
EMC.3056 Streetlight and Sidewalk Program	250,000

This project is intended to improve flood protection at the Reach 8 dike section and public access along the unpaved sections of previously constructed Fraser River foreshore dikes.

**1.4 Generator Replacement Program \$700,000**

EJA.3076 Genset Replacements	\$ 290,000
EKA.3076 Genset Replacements	410,000

Investigate, design and replace existing gensets at various water and sanitary pump stations, as part of the City’s ongoing infrastructure renewal program.

**1.5 Pressure Reducing Valve (PRV) Station Upgrades EJA.3080 \$1,054,200**

Investigate, design and construct (replace or upgrade) the existing Ashgrove and Forest Grove PRV’s, as part of the City’s ongoing infrastructure renewal program.

**1.6 Rumble Street Upgrades – McKay to Royal Oak – Phase 3 of 3 \$6,554,013**

AEC.3004 Conduit	\$ 97,375
EJA0.3004 Watermain Renewal	1,282,250
EKA.3004 Sanitary Main	76,375
ELA.3004 Storm Sewers	683,466
EMC.3004 Local Road Network (LRN)	4,414,547

Transportation Services (Engineering) and Transportation Planning (Planning) have identified road improvements on Rumble Street to provide street beautification, improve the flow of vehicle traffic, and improve bicycle and pedestrian accessibility and safety.

This project is the continuation of street upgrade east of McKay Avenue on Rumble Street. Watermain replacement and storm sewer upgrades are also completed as part of an integrated project.

To: *Chair and Members Financial Management Committee*  
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 2017 November 15..... Page 3

**1.7 South and Central Burnaby Road Rehabilitation EJA.3002 \$37,183**

The Local Road Network (LRN) Rehabilitation Program is part of the City’s ongoing infrastructure renewal strategy to sustainably maintain local streets. Project locations are determined based on pavement condition information provided by the City’s Pavement Management System and input from Operations.

**1.8 Emergency Works \$500,000**

EJA.3075 Watermain Renewal	\$150,000
EKA.3075 Sanitary Main	150,000
ELA.3075 Storm Sewers	100,000
EMC.3075 Local Road Network (LRN)	100,000

Provide funding for unplanned emergency work.

**1.9 Service, Meter, and Street Light Replacement \$2,090,000**

EJA.3085 Watermain Renewal	\$940,000
EKA.3085 Sanitary Main	825,000
ELA.3085 Storm Sewers	225,000
EMC.3085 Local Road Network	100,000

Funding to replace water/sanitary/storm services, water meters, Pressure Reducing Valve (PRV) flow meters, and street lights as necessary due to leaks, blockages, failures, age, condition, etc.

Some funding also included for sanitary service relining/replacements due to inflow and infiltration performance.

**1.10 Traffic Signal at Parker and Gilmore EMF.0071 \$300,000**

A traffic signal at Parker and Gilmore is proposed to replace the existing 4-way stop controls. The warrant for a traffic signal is met and a report recommending the signal will be brought forward to the Public Safety Committee for approval and installation in 2018.

**1.11 2 Bucket Trucks (Electrical) ENZ.0052 \$350,000**

To further expand the electrical compliment for the work being carried out we are looking to add 2 more technicians. These vehicles are for the increased staff component of this department taking on additional work load of the traffic fibre network and the cities rapid growth in many additional controlled intersections.

**1.12 Mini Split Bodies ENZ.0056 \$290,000**

Mini Split Body Refuse Truck needed to fit the new Sanitation delivery model and 4 day work week.

**1.13 Service Truck with Knuckle Boom ENZ.0052 \$215,000**

This would be used for Pumps and Controls station maintenance on a daily basis. This vehicle will save hired equipment costs for emergency contractor crane services, give a readily available truck for on call pump and valve service. The truck would be a 4x4 and be equipped with a plow that we can use for multiple stations including Kingsgate and Burnaby Mountain booster that is the main supply stations for all of Simon Fraser University (SFU).

**1.14 6 Recycle Trucks (6007 – 6012) ENZ.0055 \$2,100,000**

Recycle Trucks to replace old units that are due for replacement and maintenance costs are very high.

These vehicles are being funded specifically from bylaw as the existing reserves are inadequate to fund the replacement due to different make of the recycle truck as well as declining Canadian dollar.

**1.15 2 Rear Load Refuse Trucks (3012, 3013) ENZ.0053 \$660,000**

Rear Load Refuse Trucks to replace old units that are due for replacement and maintenance costs are very high.

These vehicles are being funded specifically from bylaw as the existing reserves are inadequate to fund the replacement due to different make of the refuse truck as well as declining Canadian dollar.

**1.16 Facilities Management**

Early funding approval is requested for the areas of facility re-roofing and mechanical system replacements that have reached the end of their service life. The projects chosen are based on site reviews and inspections along with direct reporting from our preventative maintenance programs. This approval will allow for the advancement of the designs to facilitate early tendering of the re-roofing program to take advantage of early pricing and the summer construction window, and to allow for the long lead time delivery requirements of the mechanical equipment.

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 2017 November 15..... Page 5

CAPITAL PROJECT NAME	Project ID	Early Funding Request
<b>Mechanical:</b>		
Burnaby Art Gallery-Hot Water-Boiler-Replacement	ENX.0087	60,000
Mather House-Hot Water Boiler-Replacement	ENX.0087	60,000
Bill Copeland Sports Complex-Ice Plant Chiller-Replacement	ENX.0088	190,000
Bonsor Rec Cmplx-Heating Ventilation & Air Conditioning-Chiller- Replacement	ENX.0088	200,000
Edmonds Community Centre - Natatorium- Hot Water- Ventilation System Retrofit	ENX.0088	250,000
Eileen Dailly Pool-Heating Ventilation & Air Conditioning-Chiller & Cooling Tower-Replacement	ENX.0088	300,000
Eileen Dailly Pool-Air Handling Unit-2 -Refit	ENX.0088	50,000
Kensington Pk-Outdoor Pool-Tank Rehabilitation	ENX.0088	40,000
McPherson Pk-Outdoor Pool-Tank Rehabilitation	ENX.0088	75,000
Robert Burnaby Pk-Outdoor Pool-Tank Rehabilitation	ENX.0088	80,000
Burnaby Lake Arena-Ice Plant Chiller-Replacement	ENX.0088	170,000

The mechanical equipment replacements include: air handling and air conditioning units, control systems, heating ventilation air conditioning units, make up air equipment and roof top units.

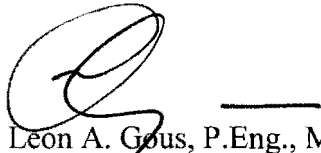
CAPITAL PROJECT NAME	Project ID	Early Funding Request
<b>Roofing:</b>		
Burnaby Lake Sports Complex West-Reroofing-Area A	ENX.0088	30,000
Bonsor Pool-Reroofing-Area H	ENX.0088	50,000
Eileen Dailly Pool-Snow Guard-Installation	ENX.0088	50,000
Kensington Arena-Reroofing Areas E,F,J	ENX.0088	75,000
Kensington Pk-Cliff Ave Fieldhouse-Reroofing	ENX.0088	100,000
Burnaby Lake Sports Complex East-Rugby Club House-Reroofing Area C	ENX.0088	20,000
Capital Hill Club House- Reroofing	ENX.0088	70,000
Riverway Golf Course-Proshop-Reroofing	ENX.0088	10,000
Fire Hall # 3-Reroofing Areas A,B,C, D	ENX.0090	300,000

The roof replacements are typically flat gravel roofs that have exceeded their service life and will be replaced with more conventional 2 ply Styrene Butadiene Styrene (SBS) roofing.

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2017 November 15..... Page 6

**RECOMMENDATION**

It is recommended that The Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserves bylaw in the amount of \$17,492,861.31 (inclusive of GST of \$780,931.31) and draw from the Sanitary Sewer Capital Fund the amount of \$4,869,953.64 (inclusive of GST of \$217,408.64) and the Waterworks Utility Capital Fund the amount of \$6,510,270.06 (inclusive of GST of \$290,637.06) to finance Engineering capital infrastructure improvement projects, as outlined in this report.



Leon A. Gous, P.Eng., MBA  
DIRECTOR ENGINEERING

FV/ac

Copied to: City Manager  
Director Finance  
Asst. Director Engineering – Infrastructure & Development  
Asst. Director Engineering – Projects  
Asst. Director Engineering – Transportation Services  
Asst. Director Engineering – Facilities Maintenance  
Manager – Public Works Operations