
TO: CHAIR AND MEMBERS FINANCIAL MANAGEMENT COMMITTEE **DATE:** 2018 March 06

FROM: DIRECTOR ENGINEERING **FILE:** 32000-05

SUBJECT: 2018 MARCH ENGINEERING CAPITAL INFRASTRUCTURE BYLAW FUNDING REQUEST - INFRASTRUCTURE

PURPOSE: To request funding to finance 2018 and 2019 Engineering capital infrastructure projects.

RECOMMENDATION:

1. **THAT** the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$4,074,300, the use of Sanitary Sewer Reserves in the amount of \$895,000 and Water Reserves in the amount of \$457,600 to finance the Engineering capital infrastructure projects as outlined in this report.

REPORT**INTRODUCTION**

In order to proceed with the award of contracts for design, administration and construction, funding approval is requested for the projects listed below.

1.0 INFRASTRUCTURE**POLICY SECTION**

The following infrastructure projects are aligned with the City of Burnaby's Corporate Strategic Plan, typically by supporting the following goals and sub-goals of the Plan.

- A Connected Community – these projects provide a geographic connection to ensure that people can move easily through Burnaby, using any form of transportation.
- A Dynamic Community – Build and maintain infrastructure that meets the needs of our growing community.
- A Thriving Organization – Protect the integrity and security of City Services and Assets.

The following projects also support a component of A Safe Community – Make City streets, pathways, trails and sidewalks safer:

- Beaverbrook Pedestrian Overpass
- Sperling Stairs
- Minor Bridge Rehabilitation Program

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1.1 Developer Coordinated Works

estimated \$2,200,000

This project involves development coordinated works related to drainage, sewers, water and roads. Through development services review, the Engineering Department may identify offsite improvements adjacent to development that are more effective and/or cost efficient to be delivered by or together with development projects. Anticipated expenditures are as follows:

Project Mask	2018
ELA.3074 Storm	1,250,000
EMC.3074 Road	650,000
EJA.3074 Water	150,000
EKA.3074 Sewer	150,000
Total	\$2,200,000

1.2 Phase 1 of 3 Water & Pump Station Controls Upgrade

estimated \$305,000

The upgrading or replacement of existing water and sewer pump station Remote Terminal Units and Programmable Logic Controllers is part of the City's ongoing infrastructure renewal program. Planned expenditures are as follows:

Project Mask	2018
EJA.3010 Water	80,000
EKA.3010 Sewer	225,000
Total	\$305,000

1.3 Water Meter Reading Project

EJA.3028

estimated \$136,000

The upgrading of existing water meters to include automated metering reading technology is part of the City's ongoing infrastructure renewal program. New meter reading technology improves meter reading accuracy and billing, and is anticipated to lead to significant cost savings compared to manual reading and data collection methods. Planned expenditures are anticipated to be in 2018.

1.4 Road & Sidewalk Rehabilitation

estimated \$994,800

This is a 2019 construction package to rehabilitate roads and sidewalks throughout the City. This project is part of the City's ongoing infrastructure renewal strategy to sustainably maintain roads, sidewalks, multi-use paths and street lighting. This funding will be used to award a contract for design and contract administration, with planned expenditures as follows:

Project Mask	2018	2019	Total
EMC.3151 Road	469,900	469,900	\$939,800
EMA.3151 Road MRN	27,500	27,500	\$55,000
Total	\$497,400	\$497,400	\$994,800

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1.5 Trenchless Rehabilitation

estimated \$480,000

Rehabilitation or replacement of sanitary and storm sewer mains using Trenchless Technology (including Relining/Bursting, etc.). Planned expenditures are as follows:

Project Mask	2018
EKA.3083 Sewer	240,000
ELA.3083 Storm	240,000
Total	\$480,000

1.6 Pump Stations, Reservoirs, PRVs & SCADA

estimated \$90,000

This project involves pump station, reservoir, Pressure Reducing Valves (PRV), and Supervisory Control and Data Acquisition System (SCADA) rehabilitation and replacement design. The funding is to award design contract to determine scope. Planned expenditures are as follows:

Project Mask	2018
EJA.3150 Water	60,000
EKA.3150 Sewer	30,000
Total	\$90,000

1.7 Goring Pump Station Replacement

estimated \$250,000

Replacement of the existing Goring Pump Station facility is required as the existing facility has reached the end of its useful life. The new facility will be sized to accommodate anticipated increase in peak sanitary flows resulting from growth and re-development within the local service area. Planned expenditures are as follows:

Project Mask	2018	2019	Total
EKA.3087 Sewer	75,000	175,000	\$250,000

1.8 Sperling Stairs

estimated \$720,000

This project will replace the stairs along the Sperling Avenue right of way between Haszard Street and Deer Lake Drive, as recommended by the City Hall Occupational Health & Safety Committee. Landscaping, irrigation, bike channel, and drainage improvements have been incorporated into the design. Planned expenditures are as follows:

Project Mask	2018	2019	Total
EMC.3081	50,000	670,000	\$720,000

1.9 Right of Way Acquisitions

EMC.3029

estimated \$50,000

This is budget allocation for right of way acquisition as required by road related projects. Planned expenditures are anticipated to be in 2018.

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1.10 Edmonds Street – South of Kingsway ERA.0038 estimated \$44,500

Funding is required to complete this capital roads project including the completion of street light installation, complete project closeout and delivery of as-built drawings. Planned expenditures are anticipated to be in 2018.

1.11 Gilmore North EJA.0013 estimated \$31,600

Engineering has engaged in the Master Municipal Construction Documents Association's contract dispute resolution process for this project to settle claims due to unforeseen conditions during construction. Planned expenditures are anticipated to be in 2018.

1.12 Minor Bridge Rehabilitation Program estimated \$50,000

The City is committed to ongoing maintenance and rehabilitation of our roadway structures, which include road bridges and pedestrian bridges. A structures rehabilitation program is in place to address recommendations provided from the bridge inspections program and input from Operations.

The 2019 program involves minor rehabilitation works on the four road bridges and one pedestrian bridge: Willingdon Overpass (over the BNSF Railway), Gagliardi Way Overpass (Eastlake Drive), Gagliardi Way Overpass (Government Street), Royal Oak Avenue Bridge (Deer Lake Park) and Griffiths Drive Pedestrian Overpass (Griffiths Drive). The scope of work generally includes small scale rehabilitation of concrete surfaces, bearings, railings, and expansion joints.

This funding will be used to award a contract for design and contract administration. Planned expenditures are as follows:

Project Mask	2018	2019	Total
EMC.3082	25,000	25,000	\$50,000

1.13 Meadow Drainage Pump Station estimated \$75,000

Preliminary investigation (Feasibility Review) and identification of options are required to define the extent of pump station and forebay area upgrades required to bring the station operation up to peak performance.

To complete an assessment of the existing station, include recommendations to address replacement or repair of station components as identified in the 2016 Condition Assessment report provided by KWL Associates Ltd.

This Feasibility Review report will be used as the basis of a **future** design and construction assignment. Planned expenditure of these funds is anticipated to be as follows:

Project Mask	2018	2019	Total
ELA.3079	25,000	50,000	\$75,000

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These expenditures are included in the 2018 – 2022 Provisional Financial Plan and sufficient Reserves are available to finance the capital projects outlined in this report.

RECOMMENDATION

It is recommended that the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$4,074,300, the use of Sanitary Sewer Reserves in the amount of \$895,000, and the use of Water Works Reserves in the amount of \$457,600 to finance the Engineering capital infrastructure as outlined in this report.



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DIRECTOR ENGINEERING

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