



Item.....	
Meeting.....	2019 Jan 22

COMMITTEE REPORT

TO: CHAIR AND MEMBERS FINANCIAL MANAGEMENT COMMITTEE
DATE: 2019 Jan 08

FROM: DIRECTOR ENGINEERING
FILE: 32000-05

SUBJECT: 2019 ENGINEERING CAPITAL INFRASTRUCTURE BYLAW FUNDING REQUEST

PURPOSE: To request the use of Water and Sanitary Reserves and to request a Capital Reserve Fund Bylaw to finance 2019 Engineering capital infrastructure design and early tender projects.

RECOMMENDATION:

1. **THAT** the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserves Fund Bylaw in the amount of \$4,383,200, the use of Sanitary Sewer Capital Fund the amount of \$2,440,300 and the use of Waterworks Utility Capital Fund the amount of \$4,156,300 to finance Engineering capital infrastructure improvement projects, as outlined in this report.

INTRODUCTION

The 2019 – 2023 Provisional Financial Plan will provide funding for various multi-year capital improvement projects. Upon approval of this funding request by Council, these expenditures will be included in the 2019 – 2023 Financial Plan (Engineering Section). In order to proceed with the award of contracts for design, contract administration and construction, funding approval is requested for the projects listed below. This report is to seek Council approval of fund allocation for 2019 Engineering projects in advance of council adoption of the 2019 financial plan. Sufficient Capital Reserves are available to fund the capital projects outlined in this report.

POLICY SECTION

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

Goal

- A Safe Community
 - Transportation safety –
Make City streets, pathways, trails and sidewalks safer

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- A Dynamic Community
 - City Facilities and infrastructure –
Build and maintain infrastructure that meets the needs of our growing community.
- A Thriving Organization
 - Reliable services, technology and information –
Protect the integrity and security of City information, services and assets.

1.0 Infrastructure

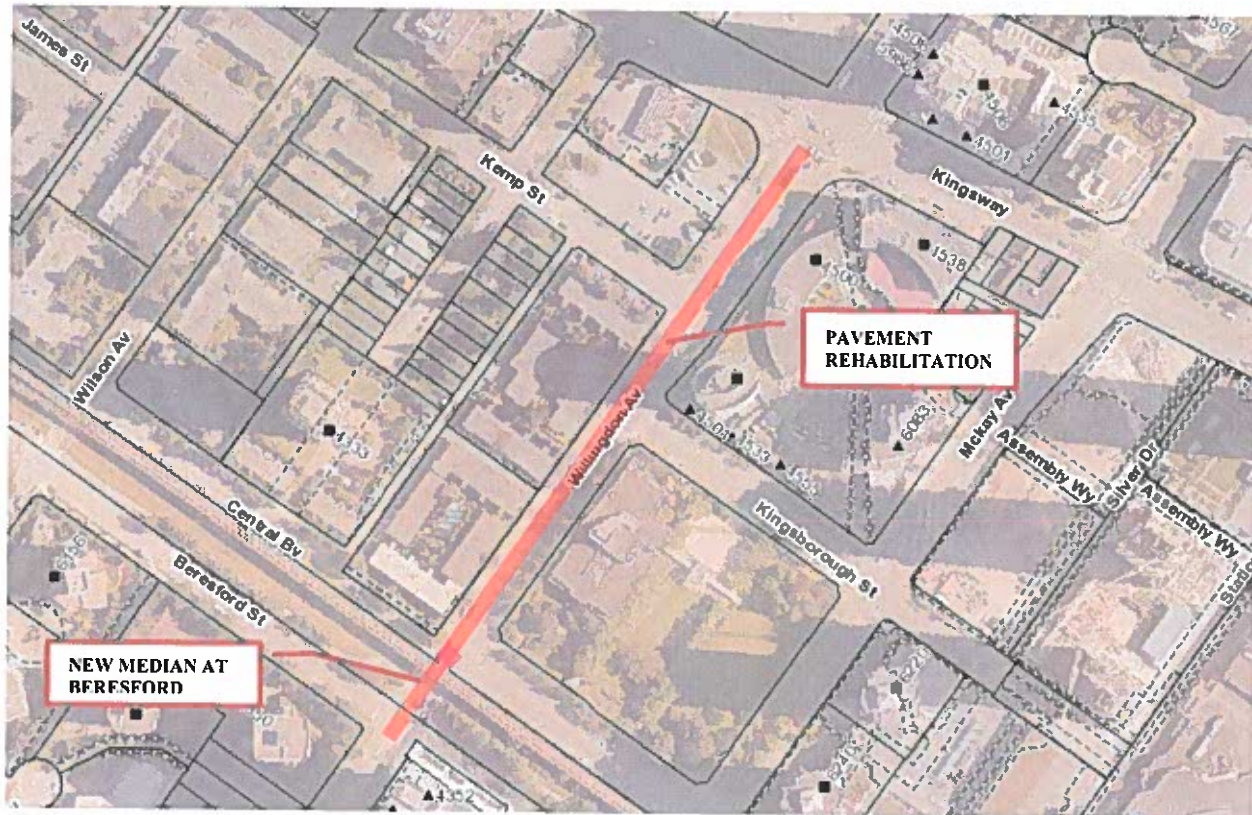
1.1 Royal Oak, Willingdon and Penzance Paving and Trails Estimated 3,387,000

Project Mask(s)	2019
AEC.3091 Communication Conduit	272,800
ELA.3091 Storm	20,000
EMC.3091 Local Roads	2,332,900
EJA.3091 Water	761,300
Total	3,387,000

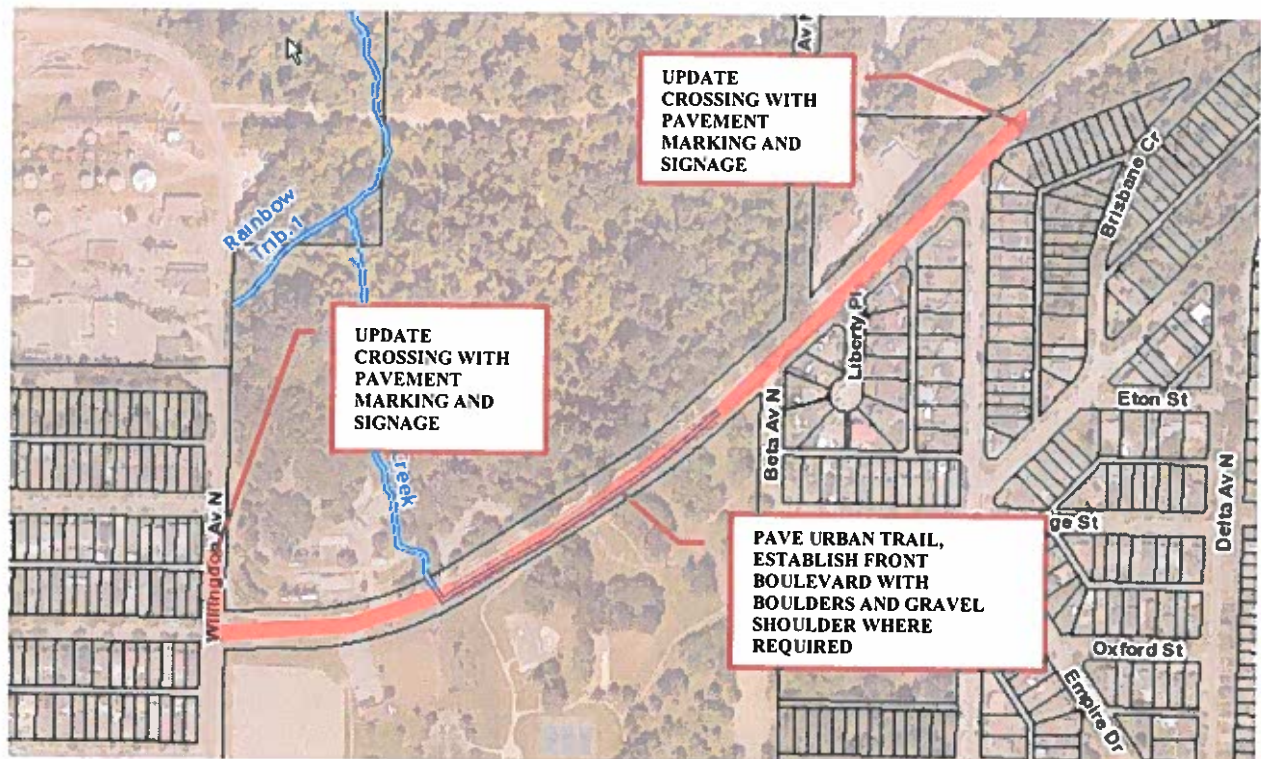
This is a roads package that involves pavement rehabilitation on collector streets, some coordinated watermain replacement, and paving of the Trans Canada Urban Trail. This project is fully designed and will be tendered in January for contract award in February.

Project	Name	Description
Project 1	Willingdon Av	Road Rehabilitation
Project 2	Trans Canada Trail	Paved Urban Trail
Project 3	Royal Oak A	Road Rehab, Watermain and Storm
Project 4	Royal Oak B	Road Rehab

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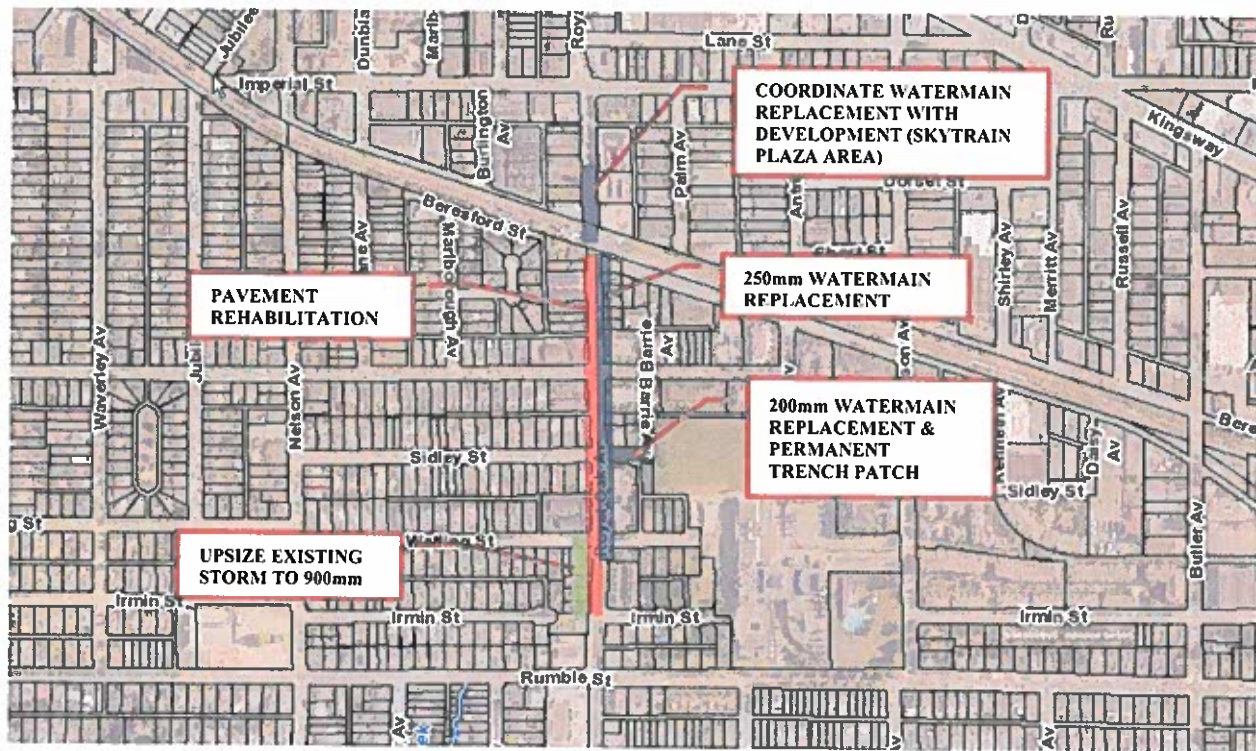


Project 1

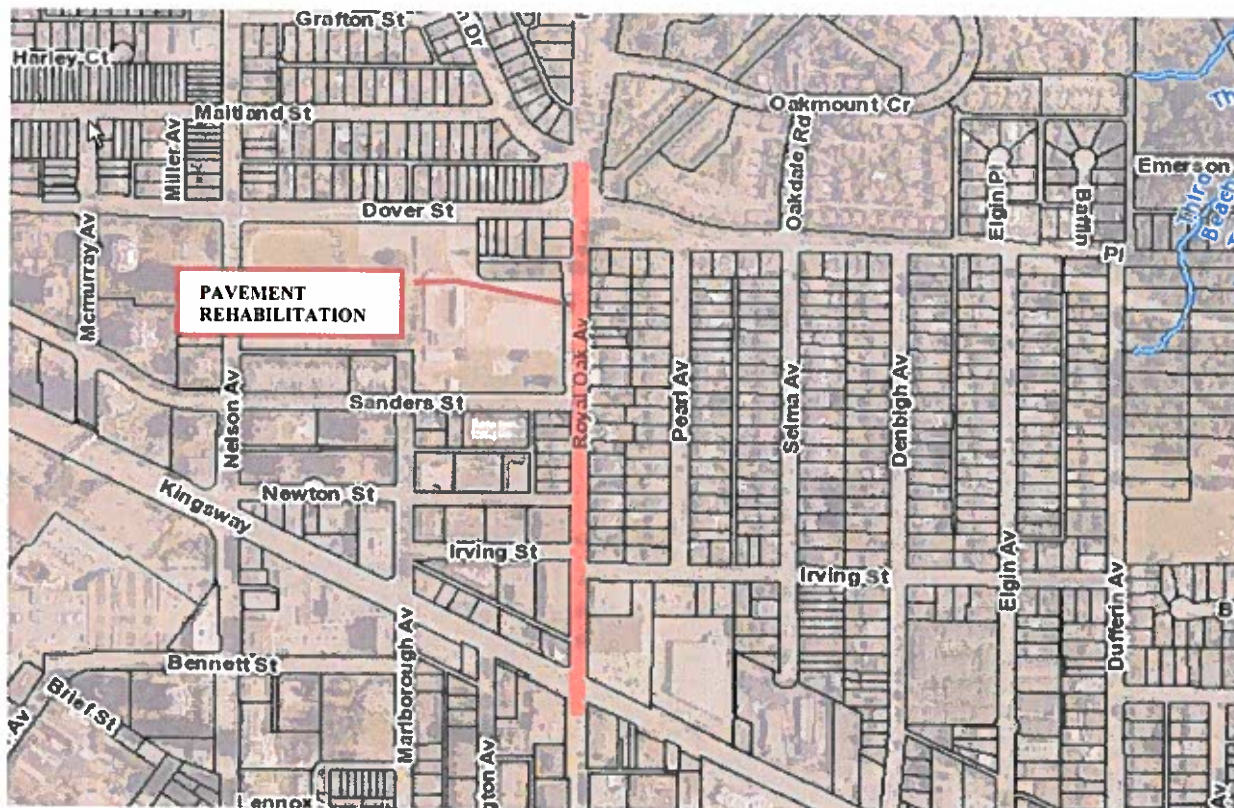


Project 2

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Project 3



Project 4

1.2 Storm Extensions 2019-2020 Package A ELA.3162 Estimated \$400,000

This project involves development coordinated works related to storm sewer extensions and associated road repair and upgrades (if applicable). Long term, costs are fully recovered by initiating and benefitting property owners.

Summer Storm Sewer Extensions Package (May Tender):

- May.01 to Oct.31 – Collect Applications and cut-off point
- Nov.01 to Apr.30 – RFP award/design completion
- May.01 – Tender close/award/construction

This funding will be for the design component of the Summer Storm Sewer Extensions Package. The design is anticipated to be completed in 2019.

1.3 Sperling Stairs EMC.3081 Estimated \$394,500

This project will replace the stairs along the Sperling Avenue right of way between Haszard Street and Deer Lake Drive. Landscaping, irrigation, bike channel, and drainage improvements will be incorporated in the design.

Funding of \$720,000 was raised in order to do design and award the Engineering Contracts for this project. Of that amount \$670,000 was for estimated construction amounts to be spent in 2019. Final design has firmed up the cost estimate to \$1,094,500, necessitating additional funding of \$394,500. Construction will be tendered in January and awarded in February. This project is anticipated to be completed in 2019.

1.4 Beaverbrook Pedestrian Overpass EMC.3143 Estimated 300,000

This project will replace Beaverbrook Pedestrian overpass that was damaged in a motor vehicle incident in 2017. Funding is required for design contracts to be awarded in December in order to be in compliance with the 2 year window for I.C.B.C claims. This project is anticipated to be completed in 2019. The City is working to ensure cost recovery from ICBC, and is still waiting to receive a proposed settlement amount.

1.5 Eastbrook Pump Station EJA.3165 Estimated \$550,000

This project consists of upgrades to the existing Eastbrook pump station to accommodate changes in the existing common forcemain (shared by Eastbrook, Beta, Delta and Douglas pump stations) resulting from increased system demands from growth and re-development in the Central Valley area.

Upgrades to the existing lift station are anticipated to include pump impellers, motors, check valves, variable frequency drives and a control kiosk so that the existing Eastbrook station can continue to meet anticipated total dynamic head conditions in the common forcemain. The funding being requested is for design contracts to be awarded in January for the new pump station. Design is anticipated to be completed in 2019. This project is anticipated to be constructed in 2020.

1.6 Burnaby Mountain Booster

Estimated \$300,000

This project consists of upgrades to the existing Burnaby Mountain Booster to accommodate increased demand from growth and development on Burnaby Mountain. Upgrades to the existing station are anticipated to include design and installation of a new pump, motor, associated piping, controls, communications and re-programming, to accommodate the anticipated demand.

Project Mask	2019
AEC.3167 Communication Conduit	75,000
EJA.3167 Water	225,000
TOTAL	300,000

The funding being requested is for design contracts to be awarded in January for the Burnaby Mountain Booster Station. Design is anticipated to be completed in 2019. This project is anticipated to be completed in 2020.

1.7 Sunset Pressure Release Valve

Estimated \$300,000

This project scope includes the design and construction (replace or upgrade) of the existing Sunset PRV, located at Sunset and Boundary Road, as part of the City's ongoing infrastructure renewal program.

The design consultant will develop options for the design and construction of a replacement for the existing Sunset Pressure Release Valve (PRV) suited to the existing site conditions and general requirements. The project will include replacement of the existing feeder main, services and road rehabilitation along Sunset St, adjacent to the new PRV. The funding being requested is for design contracts to be awarded in January for the Sunset PRV. Design is anticipated to be completed in 2019, with construction completed in 2020.

Project Mask	2019	2020	Total
EJA.3168	100,000	200,000	300,000

1.8 Douglas Sanitary Pump Station Replacement EKA.3017 Estimated \$2,000,000

Replacement of the existing Douglas Sanitary Pump Station facility is required to accommodate anticipated increases in peak sanitary flows resulting from growth and re-development within the local service area, and to reduce risk of flooding of Still Creek. The project is initiated so that construction can be coordinated with development activity at this location (2590 Douglas Road).

This project consists of the construction and commission of a new sanitary pump station while keeping the existing facility in service. Project site will be contained within a Statutory Right of Way (SROW), in favour of the City, at 2590 Douglas Road. The project also includes the installation of a (twin) 250mm forcemain across Douglas Road and the tie-in to an existing 400mm common forcemain at Still Creek Av & Royal Oak.

1.9 Beta Pump Station Upgrade EKA.3057 Estimated \$415,300

Upgrades to the existing Beta Pump Station facility are required to accommodate anticipated increases in peak sanitary flows resulting from growth and re-development within the (southern) Brentwood Town Centre area.

In 2017 & 2018 there was \$6,650,776 in funding raised for this project. Funding in 2019 required to cover off remaining change orders as a result of unknowns during the 2018 construction. These include: BC Hydro Design for pad mounted transformer and ducting; utility conflicts when installing force main; correction of a tilting overbuild manhole; and retaining structure to deal with higher than anticipation flood elevation.

1.10 North Burnaby Water Mains and Road Rehab Estimated \$2,208,000

Project Mask	2019
AEC.3147 Communication Conduit	208,000
EJA.3147 Water	2,000,000
TOTAL	2,208,000

This is a watermain replacement and roads rehabilitation package that involves replacement of existing watermain and services, complete with pavement rehabilitation on local/collector streets in various locations of north Burnaby. This project will be designed by an engineering consultant(s) and the water constructed via City Forces and the conduit through a tendered contract. Roads are scheduled to be tendered and constructed in 2020.

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1.11 Ledger Avenue Upgrades

Estimated \$725,000

Project Mask	2019
ELA.3159 Storm	30,000
EMC.3159 Roads	350,000
EKA.3159 Sewer	25,000
EJA.3159 Water	320,000
TOTAL	725,000

This project will complete the offsite works for the City's temporary Works Yard development at 4244 Norland Avenue and a social housing development at 3986 Norland Avenue.

These expenditures will be included in the 2019-2023 Financial Plan and sufficient Capital Reserve Funds 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 \$4,383,200, the use of Sanitary Sewer Capital Fund in the amount of \$2,440,300 and the use of Waterworks Utility Capital Fund in the amount of \$4,156,300 to finance Engineering capital infrastructure improvement projects, as outlined in this report.



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

FV/ac

Copied to: City Manager
Director Finance
City Solicitor
Deputy Director Engineering
Assistant Director Infrastructure & Development
Manager, Engineering Projects