

FINANCIAL MANAGEMENT COMMITTEE

HIS WORSHIP, THE MAYOR AND COUNCILLORS

SUBJECT: 2017 ENGINEERING CAPITAL INFRASTRUCTURE BYLAW FUNDING REQUEST - DESIGN

RECOMMENDATIONS:

- 1. THAT Council approve the capital expenditure of \$4.615 Million for infrastructure programs, as outlined in this report.
- 2. THAT Council authorize staff to bring down a Capital Reserves Bylaw in the amount of \$3,276,300 (inclusive of GST), and draw from the Sanitary Sewer Capital Fund amount of \$811,300 (inclusive of GST) and the Waterworks Utility Capital Fund the amount of \$743,200 (inclusive of GST) to finance the capital projects, as outlined in this report.

REPORT

The Financial Management Committee, at its meeting held on 2016 May 25, received and adopted the <u>attached</u> report seeking Council's approval and funding for the design portion of 2017 Engineering capital improvements (Watermain Renewals, 10th Avenue PRV, Sanitary Main Renewals, Douglas Sanitary Pump Station, Sanitary Services, Storm Main Renewals, Storm Main Extensions, Storm Water Management, MRN Road Rehabilitation, LRN Road Rehabilitation, Bridge Rehabilitation, Rumble – McKay to Royal Oak Upgrades, 2017 Streetlight and Sidewalk Improvements; Lougheed – Underhill to Austin Improvements, North Road – Clarke to Broadway Upgrades, Gamma – Cambridge to Albert Improvements, and Ridge – Inlet to Duthie Improvements).

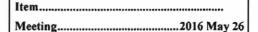
Respectfully submitted,

Councillor D. Johnston Chair

Councillor C. Jordan Vice Chair

Councillor P. McDonell Member

| Copied to: | City Manager |
|------------|----------------------|
| | Director Engineering |
| | Director Finance |
| | City Solicitor |



COMMITTEE REPORT

| то: | CHAIR AND MEMBERS FINANCIAL MANAGEMENT COMMITTEE | DATE: | 2016 May 17 | |
|----------|--|--------------|----------------|---|
| FROM: | DIRECTOR ENGINEERING | FILE: | 32000-05 | |
| SUBJECT: | 2017 ENGINEERING CAPITAL INFRASTRUCT REQUEST – DESIGN | URE BYLA | W FUNDING | |
| PUDDOSE. | To request approval and funding for the design po | ortion of 20 | 17 Engineering | ~ |

PURPOSE: To request approval and funding for the design portion of 2017 Engineering capital improvements

RECOMMENDATIONS:

- 1. **THAT** Council approve the capital expenditure of \$4.615 Million for infrastructure programs, as outlined in this report.
- 2. THAT Council authorize staff to bring down a Capital Reserves Bylaw in the amount of \$3,276,300 (inclusive of GST), and draw from the Sanitary Sewer Capital Fund the amount of \$811,300 (inclusive of GST) and the Waterworks Utility Capital Fund the amount of \$743,200 (inclusive of GST) to finance the capital projects as outlined in this report.

REPORT

The 2016 - 2020 Annual Financial Plan contains the following infrastructure projects. In order to initiate designs for the 2017 Capital Program, it is necessary to have funding approval in place. The current project locations for the 2017 Capital Program are shown on the attached map and table.

Water

1.1 Watermain Renewals (2017 Program)

The City has an annual watermain renewal program that consists of the replacement of aging watermain infrastructure, capacity upgrades for adequate flow for firefighting purposes and needs due to growth. The proposed 2017 program will replace approximately 15 km of watermains (about 2% of a total inventory of 720 km). It consists of contracted work and work by City forces, coordinated works with Metro Vancouver and Development Services, LAS programs, and related engineering services.



(EJA.0015)

\$600,000

 To:
 Chair and Members Financial Management Committee

 From:
 Director Engineering

 Re:
 2016 Engineering Capital Infrastructure Bylaw

 Funding Request 2017 Design Funding

 2016 May 17

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

1.2 10th Avenue PRV (EJB.0011) \$110,000

In order to proceed with designs for rehabilitation and upgrades to the 10th Avenue PRV (pressure reducing valve), funding approval is requested now. The design effort requires work in 2016 and 2017, and a portion of the 2016 component of design funding has already been approved by Council. This request involves the remaining 2016 design funding component, as well as the 2017 design funding component.

Sewer

2.1 Sanitary Main Renewals (2017 Program) (EKA.0015) \$550,000

The City has an annual sanitary sewer renewal program that consists of combined sewer separation, condition-based sewer main renewal, and capacity upgrades to accommodate growth and re-development. Separation of combined sewers into separate sanitary and storm sewer systems is an integral part of the City's commitment to eliminate existing combined sewer overflows into the environment and is a key component of the regional Integrated Liquid Waste and Resource Management (ILWRM) plan adopted in 2010. The sanitary sewer renewals consist of both contracted work and work by City forces, development coordinated works, and related engineering services.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

2.2 Douglas Sanitary Pump Station (EKB.0006) \$200,000

The existing and aging Douglas sanitary pump station will be replaced with a larger pump station in order to meet the needs of ongoing growth and development, and to mitigate flooding risk due to the close proximity to Still Creek. This request involves the 2017 design funding component. The capital plan for this project is split \$100,000 for 2017 and \$1,100,000 for 2018. \$100,000 from 2018 is being brought forward to 2016 in order to enable design work in 2016.

| 2.3 Sanitary Services | <i>(EKC.0008)</i> | \$25,000 |
|-----------------------|-------------------|---|
| 210 Sunnary Services | (2100000) | <i><i><i><i>v</i>=<i>v</i>,<i>vvv</i></i></i></i> |

Sanitary services are replaced or relined to reduce inflow and infiltration of rainwater and groundwater into the sanitary system, reducing overall treatment costs. This request involves the 2017 design funding component.

<u>Storm</u>

3.1 Storm Main Renewals (2017 Program) (ELA.0022) \$120,000

Through completion of Integrated Stormwater Management Plans (ISMP's), storm sewer CCTV inspections program, and input from Operations, the City has identified various storm sewer and culvert upgrades. These upgrades will address aging or undersized infrastructure. These projects are coordinated with the road rehabilitation projects in order to upgrade the crossing or adjacent roads that are currently in poor condition.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

3.2 Storm Main Extensions (2017 Program) (ELA.0025) \$120,000

The 2016-2020 Capital Plan includes provision for cost-sharing with private development for infrastructure improvements not directly related to the proposed development. The program takes advantage of the development process in providing a cost-effective solution for upgrading the City's infrastructure adjacent to their development site, when considered desirable by the City. Typical works include pavement and storm sewer rehabilitation in coordination with development projects.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

3.3 Storm Water Management (2017 Program) (ELD.0018) \$280,000

Through completion of Integrated Stormwater Management Plans, the City has identified various stormwater management projects in order to improve watershed health, address aging or undersized infrastructure, and reduce the likelihood of increased erosion on watercourses.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

<u>Roads</u>

4.1 MRN Road Rehabilitation (2017 Program) (EMA.0008) \$350,000

The Major Roads Network (MRN) Rehabilitation Program is part of the City's ongoing infrastructure renewal strategy to sustainably maintain the primary transportation corridors. Project locations are determined based on pavement condition information provided by the City's Pavement Management System and input from Operations. This is an annual program funded through TransLink. The City interim finances these expenditures as payment transfers from TransLink are made on a quarterly basis. The capital Reserves will be reimbursed upon receipt of TransLink funding.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

4.2 LRN Road Rehabilitation (2017 Program) (EMC.0011) \$800,000

The Local Road Network (MRN) 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.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

4.3 Bridge Rehabilitation (2017 Program) (EMJ.0009) \$100,000

The City is committed to ongoing maintenance and rehabilitation of our roadway structures within the Major Roads Network (MRN). A structures rehabilitation program is in place to address recommendations provided from the bridge inspections program and input from Operations.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and this request involves the 2016 and 2017 design funding components.

4.4

Rumble, McKay to Royal Oak Upgrades

The Rumble Improvement Project involving upgrades from McKay to Royal Oak, including curb/gutter sidewalk Urban Trail streetlighting and utilities. This 2017 component of Rumble

(ERA.0053)

\$300.000

curb/gutter, sidewalk, Urban Trail, streetlighting and utilities. This 2017 component of Rumble represents the final section of Rumble to be upgraded, completing a multi-year program of improvements.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

4.5 2017 Streetlight and Sidewalk Improvements (ERA.0056) \$150,000

This project addresses locations throughout the City that are missing sidewalks, trails, or street lights. The 2017 project location is Burnaby Mountain Parkway from Centennial Way to Gaglardi Way.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

4.6 Lougheed, Underhill – Austin Improvements (ERA.0058) \$450,000

The Lougheed Improvement Project involves rehabilitation and upgrades from Underhill – Austin. Lougheed from Austin to Bell will also include Town Centre Standard upgrades and utility rehabilitation.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and this request involves the 2016 and 2017 design funding components.

4.7 North Road, Clarke to Broadway Upgrades (ERA.0059) \$150,000

The North Road Upgrade Project involves intersection improvements at Clarke & North Road, as well as Town Centre Standard implementation including curb/gutter and sidewalk from Clarke to Broadway.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

4.8 Gamma, Cambridge to Albert Improvements (ERA.0060) \$160,000

The Gamma Improvement Project involves upgrades from Cambridge to Albert which includes road widening, curb/gutter, sidewalk, and curb bulges.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

4.9 Ridge, Inlet to Duthie Improvements (ERA.0061) \$150,000

The Ridge Improvement Project involves intersection improvements at Ridge & Inlet, as well as curb/gutter, sidewalk, and street lighting from Inlet to Duthie. A stormwater management feature is also being considered near Inlet Drive.

In order to proceed with designs for the 2017 Capital Program, funding approval is requested now. The design effort requires work in 2016 and 2017, and the 2016 component of design funding has already been approved by Council. This request involves the 2017 design funding component.

2.0 Recommendation

The total cost of the above programs is estimated at 4.615M. These programs are included in the 2016 – 2020 Annual Financial Plan and sufficient Capital Reserves and Funds are available to fund these works as outlined in this report.

It is recommended that Council authorize staff to bring down a Capital Reserves Bylaw in the amount of 3,276,300 (inclusive of GST), and draw from the Sanitary Sewer Capital Fund the amount of 811,200 (inclusive of GST) and the Waterworks Utility Capital Fund the amount of 743,200 (inclusive of GST) to finance the 2016 - 2020 Capital Programs as outlined in this report.

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

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Copied to: Director Finance