
TO: CITY MANAGER **DATE:** 2015 Dec 08

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

SUBJECT: 2016 ENGINEERING CAPITAL INFRASTRUCTURE TRAFFIC
MANAGEMENT BYLAW FUNDING REQUEST

PURPOSE: To request funding approval for 2016 Traffic Management capital improvements.

RECOMMENDATIONS:

1. **THAT** Council approve the capital expenditure of \$2.995 Million for Traffic Management capital improvements, as outlined in this report.
2. **THAT** Council authorize staff to bring down a Capital Reserves bylaw in the amount of \$3.135 Million (inclusive of GST), to finance the capital programs as outlined in this report.

REPORT

The 2016 component of the 2015 – 2019 Financial Plan provides funding for various multi-year capital improvements. In order to proceed in a timely manner with the contracts for design and construction, funding approval is requested for the below listed projects. Sufficient Capital Reserves are available to complete these works.

1.1 2016 Bus Shelter Program (EMF.0054) \$350,000

- Funding for new or replacement bus shelters to improve amenities for transit users.
- New locations for advertising shelters are primarily based on transit usage at a bus stop.
- All old advertising bus shelters have been replaced and a review is underway to determine if we replace or refurbish existing old non-advertising shelters.

1.2 2016 Audible Signals (EMF.0048) \$50,000

- Funding for the installation of new or replacement audible signals to provide crossing guidance at signalized intersections for people with visual impairments.
- New locations are determined through public requests or identified by staff. Replacements are installed based on the age of the equipment or where they are malfunctioning.

To: City Manager
From: Director Engineering
Re: 2016 Engineering Capital Infrastructure Traffic Management Bylaw
Funding Request
2015 December 08..... Page 2

1.3 2016 Traffic Signal Cabinet Replacement (EMF.0049) \$240,000

- Funding for the installation of replacement traffic signal control equipment and cabinets to maintain reliable traffic signal operation at all times.
- Locations are determined based on the age the equipment and emerging problems tracked through regular maintenance.

1.4 2016 Traffic Control Devices (EMF.0050) \$230,000

- Funding for the installation of a new traffic signal or upgrades to a full traffic signal to improve the operation of an intersection.
- Locations are determined based on the operation of the intersection which includes an assessment of the traffic volumes, collision history, surrounding land uses, and comparison with other potential locations.

1.5 2016 Minor Traffic Management Projects (EMF.0051) \$100,000

- Funding for the potential installation of a wide variety of traffic control devices over the course of the year. The funding enables the City to be responsive to needs as they arise and to take advantage of cost efficiencies if completed in conjunction with existing projects underway. This includes the installation of special crosswalks or permanent traffic counters, adjustments to the roadway or existing traffic signals, or any other traffic control devices.
- In addition to staff initiatives, projects are often identified through public requests or a result of other work undertaken by city forces or third parties.

1.6 2016 Traffic Camera Replacement (EMF.0052) \$100,000

- Funding for the installation of replacement traffic signal cameras that are aging and less reliable. Traffic signal cameras are used to detect traffic and trigger the appropriate traffic signal function. They are advantageous over loop detectors because they are unaffected by any road work and one camera can detect multiple lanes. However, they are more expensive compared to loop detectors so are best suited for larger intersections with multiple lanes in each direction or in locations where there are ongoing disruptive road works.
- Replacements are identified by staff based primarily on the age of the equipment.

1.7 2016 Traffic Signal Communication (EMF.0053) \$50,000

- Funding for the installation of replacement traffic signal communication equipment to allow continuous monitoring of traffic signals at City Hall. Many existing radios are beyond their useful life and are no longer reliable.
- Locations are determined based on the age of the equipment.

To: City Manager
From: Director Engineering
Re: 2016 Engineering Capital Infrastructure Traffic Management Bylaw
Funding Request
2015 December 08..... Page 3

1.8 2016 Parking Meter Equipment (EMG.0007) \$175,000

- Funding for new or replacement parking meter equipment as required.
- In 2016, a portion of the funding will be used for installing some new parking meter equipment that accepts credit cards for increased customer convenience and better audit controls.
- The credit card enabled parking meters will focus on existing locations with single space meters. Multi-space parking meter equipment may also be considered at new locations.

1.9 2016 LED Streetlight Conversion (ELA.0022) \$1,700,000

- Funding for the installation of LED streetlight fixtures to replace the existing HPS fixtures in the southwest quadrant of the City. The new fixtures are more energy efficient and last much longer than existing fixtures. Although the capital cost of the LED fixtures are more expensive, the energy and maintenance savings is estimated to provide a payback in about 6 years assuming increasing electricity costs and BC Hydro rebates.
- This is the second phase of the project and the conversion of the majority of streetlights in the City will be completed in phase 4 (2018).

Recommendation:

It is recommended that Council approve the capital expenditure of \$2.995 Million for Traffic Management capital improvements, as outlined in this report and that Council authorize staff to bring down a Capital Reserves Bylaw in the amount of \$3.135 Million (inclusive of GST) to finance the capital programs as outlined in this report.



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

FV/cp

Copied to: City Manager
Director Finance
Director Parks, Recreation & Cultural Services
City Solicitor