



To: General Purposes Committee

Date: March 3, 2011

From: John Irving, P.Eng. MPA
Director, Engineering

File: 10-6340-01/2011-Vol
01

Re: Lansdowne Forcemain Emergency Replacement

Staff Recommendation

1. That funding of \$480,000 from the Sanitary Utility Reserve be included in the 5 Year Financial Plan (2011-2015) to complete the Lansdowne Forcemain Emergency Replacement Project (2011).

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ROUTED TO:	CONCURRENCE		CONCURRENCE OF GENERAL MANAGER
Budgets	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Sewerage and Drainage	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
REVIEWED BY TAG	YES	NO	REVIEWED BY CAO
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

Staff Report

Origin

In late February 2011 the Lansdowne Forcemain experienced a series of breaks and blockages that required a City response on an emergency basis to maintain service and to prevent public exposure to the inherent health and safety risks. While a temporary system is presently in place and is providing uninterrupted service, it is necessary to complete a permanent replacement of the broken/blocked sections of forcemain.

The purpose of this report is to seek Council support for replacement of the Lansdowne Forcemain under the 2011 Capital Program with funding from the Sanitary Utility Reserve.

Analysis

The City owns and operates approximately 170 sanitary pump stations. These stations collect wastewater from City residents/businesses through a network of gravity pipes and pump it through a series of forcemains to the Metro Vancouver system. The wastewater collected is treated at the Lulu Island Wastewater Treatment Plant before it is ultimately discharged to the Fraser River.

The Lansdowne Forcemain provides sanitary service to a significant area of the City roughly bounded by Garden City Road, Alderbridge Way, Westminster Highway and Hollybridge Way. Five of the City's pump stations connect to the Lansdowne Forcemain, which conveys wastewater from this area to the Metro Vancouver Gilbert Trunk Main at Hollybridge Way.

The City has a proactive program of sanitary infrastructure upgrades funded through the Sanitary Utility. With the exception of the section of forcemain between Gilbert Road and Cedarbridge Way, almost the entirety of the Lansdowne Forcemain has been replaced through past projects under the City's annual capital program.

At the end of February 2011, the section of the Lansdowne Forcemain between Gilbert Road and Cedarbridge Way experienced a significant blockage (grease) and several breaks to the point where it was no longer functional. Staff responded to the situation immediately and were able to install a temporary system with no loss to the continuity of sanitary service. This temporary system presently remains in operation.

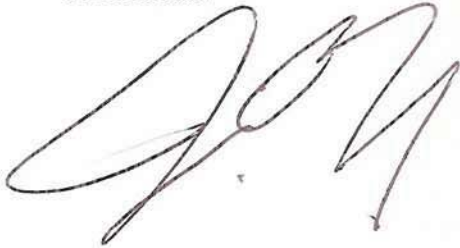
It is necessary to replace the Lansdowne Forcemain between Gilbert Road and Cedarbridge Way and the crossing of Cedarbridge Way as a permanent solution. The estimated cost to complete this work is \$480,000.

Financial Impact

The total capital cost is \$480,000 and funding of \$480,000 is available from the Sanitary Utility Reserve.

Conclusion

At the end of February 2011, the Lansdowne Forcemain experienced a series of blockages/breaks to the point where it was no longer operational. Staff were able to install a temporary system that is currently providing continuity of sanitary service. It is necessary to implement a permanent solution through replacement of the blocked/broken sections of the Lansdowne Forcemain.



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