

**TO:** CITY MANAGER **DATE:** 2009 June 17  
**FROM:** DIRECTOR ENGINEERING **FILE:** 32000 05  
**SUBJECT:** INTERNAL ORDERS  
**PURPOSE:** To obtain approval of capital Internal Order accounts.

**RECOMMENDATION:**

1. **THAT** the Internal Orders, as more specifically referred to in this report, be approved.

**REPORT**

**60-30129 Combined Sewer Separation [2009 Program]**

**Charge:** 2009 Capital Budget \$1.522 M  
 Sanitary Sewer Utilities

**Additional Information:** Appearing elsewhere on this agenda is a recommendation of the award of Contract 2009 - 17: Combined Sewer Separation – Lane south of Georgia. The contract involves an ongoing program to fulfil the City’s commitment under the regional Liquid Waste Management Plan, to eliminate combined sewer overflows by means of sewer separation. Total cost, including engineering services and ancillary work by City forces, is estimated at \$1.522 Million (inclusive of 5% GST). Sufficient General Revenue funds are available, and these expenditures are included in the Sewer Utility component of the 2009 Annual Financial Plan.

**60-30115 Sewer System Evaluation**

**Charge:** 2009 Capital Program \$175,000  
 Sanitary Extensions

**Additional Information:** The City has an ongoing program to reduce infiltration and inflow (I & I) in the sanitary sewer system. Reduction of I & I lessens the load on sewerage treatment plants and is a critical element in the Regional Liquid Waste Management Plan (LWMP). The annual flow monitoring program in selected areas is generally completed over the Fall/Winter periods. The information is used to evaluate inflow & infiltration characteristics of the sewer system and to develop future rehabilitation programs. The City is mandated under the LWMP to report infiltration and inflow data. Total cost is estimated at \$175,000. Sufficient General

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Revenue funds are available and these expenditures are included in the Sanitary Sewer Utility component of the 2009 Annual Financial Plan.

**60-30127** Development Related Pump Station Upgrades

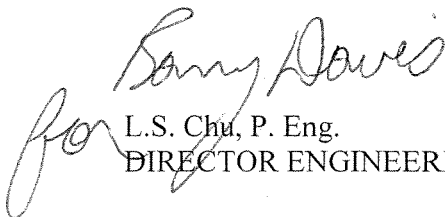
**Charge:** 2009 Capital Budget  
Sanitary Sewer Utility \$850,000

**Additional Information:** The 2009 Capital Program includes provision for development related upgrades to both the Gilmore and Delta sanitary pump stations. Infrastructure improvements that include replacement pump units, forcemains and miscellaneous upgrades to other ancillary equipment, provide the necessary capacity to accommodate increasing growth and future development in the Brentwood Town Centre area. The proposed project consists of upgrades to the Delta pump station that has experienced significant ground settlement over the years and engineering consulting services related to the Gilmore pump station upgrade program. Total cost of this phase is estimated at \$850,000. Sufficient General Revenue funds are available and these expenditures are included in the Sanitary Sewer Utility component of the 2009 Annual Financial Plan.

**60-32132** Storm Sewer Computer Modeling and Flow Monitoring

**Charge:** 2009 Capital Program \$50,000  
Storm Extensions

**Additional Information:** Storm sewer computer modeling is an important tool in effectively managing the drainage system in an urban catchment area, where storm sewers need to be adequately sized to minimize potential for flooding private property, as well as protecting the environment. The model, once calibrated with actual flow monitoring data, will be used to study the impact of future developments on the drainage system. Flow monitoring provides a significant value-added component to computer modeling as stream levels and velocity data can be used to strengthen and validate the model, in turn making it a more effective tool for use in developing strategies to minimize erosion and protect fisheries habitat. Total cost is estimated at \$50,000. Sufficient General Revenue funds are available and these expenditures are included in the Storm Sewer component of the 2009 Annual Financial Plan.

  
for L.S. Chu, P. Eng.  
DIRECTOR ENGINEERING  
AAS/br

Copied to: Director Finance