

TO: CITY MANAGER 2006 SEPTEMBER 21  
 FROM: CHIEF INFORMATION OFFICER File: IS-RTC  
 SUBJECT: CITY MAPPING SYSTEM UPGRADE  
 PURPOSE: To request \$ 200,000 in funding to upgrade the City's mapping system.

**RECOMMENDATION:**

1. **THAT** a \$ 200,000 Capital Expenditure Bylaw (inclusive of 6% GST) be brought down for the purchase of implementation services, equipment and licencing to upgrade the City's mapping system.

**REPORT**

In 2005, the Burnaby Geographic Information System was enhanced by upgrading to the latest software version, purchasing additional equipment resources and purchasing Oracle licensing. In order to keep the system up-to-date additional consulting expertise and equipment are needed to maintain the current software, provide additional functionality and increase equipment capacity.

The 2006 task list and cost breakdown is as follows:

<b>Tasks</b>	<b>Task Description</b>	<b>Costs</b>
1	Take satellite aerial photographs (multi-spectral data) to compare hard surface (roads, walkways & parking lots) to pervious land (grassed areas), which will be used in determining surface water runoff.	\$ 20,000
2	Purchase additional computer equipment (memory).	10,000
3	Consulting services to assist in reviewing the enhanced mapping features within the new release ArcGIS version 9.1.	30,000
4	Purchase new ArcIMS server software module and equipment, which is the new direction for ESRI GIS configurations.	75,000
5	Consulting engagement to do GIS action plan.	15,000
6	Export digital data from our mapping and database systems.	45,000
7	Contingency	5,000
	<b>TOTAL COSTS</b>	<b>\$ 200,000</b>

This phase of the GIS project will include the following benefits:

- Capture satellite imagery to distinguish between hard and soft surfaces
- Update the web mapping software to its current version;
- Enhance mapping features within the new mapping software;
- Allow multiple database environments to enable the City to maintain a test, development, integration and production environments;
- Provide for extraction of digital data from our mapping and database systems; and
- Provide for database growth, to accommodate additional data within the GIS.

## FINANCING

Sufficient Capital Reserves are available to finance the equipment, software and consulting resources estimated to cost \$200,000 (inclusive of GST). These items are included under the 2006 Information Services component of the 2006-2010 Provisional Capital Program.



Brian Sameshima  
CHIEF INFORMATION OFFICER

BS:RE:js

cc: Director Engineering  
Director Finance