
TO: CITY MANAGER **DATE:** 2009 August 25

FROM: DIRECTOR ENGINEERING **FILE:** 35000 30 01
Reference: Burnaby Lake

**SUBJECT: BURNABY LAKE REJUVENATION PROJECT CONTRACT
INSPECTION AND ENVIRONMENTAL MONITORING SERVICES**

PURPOSE: To seek Council approval to award two service contracts in connection with the Burnaby Lake Rejuvenation Project

RECOMMENDATION:

1. **THAT** Council approve the contracts with Associated Engineering and Enkon Environmental in the amount of \$470,000 and \$1,090,000 plus GST, respectively for contract inspection and environmental management services in connection with the Burnaby Lake Rejuvenation Project as outlined in this report.

REPORT**1.0 INTRODUCTION**

In 2009, May, Council approved a report from the Environment Committee that outlined a strategy to advance the Burnaby Lake Rejuvenation Project to the implementation phase. The approved program is based on a reduced scope project to meet the budgetary limits of \$20M. The program includes dredging of 200,000m³ of sediments to fully restore the rowing course to an international rowing standard and to enhance four key environmental areas near the mouth of Still Creek, Deer Lake Brook, Ramsey Creek and Eagle Creek. Although the reduced program is significantly less than the original project target of 360,000m³, when complete, the project will provide a restored rowing course and much needed environmental benefits to several major streams. The cost of providing contract inspection and environmental monitoring during dredging is also included in the \$20M budget for the project.

Subsequent to Council approval of a project scope reduction, tenders for the dredging work were received in 2009 June. On 2009 June 22, Council awarded the dredging contract to the lowest bidder, Hazco Environmental Services, for a total of approximately \$14M. Presently, the Contractor is in the process of preparing the work site and arranging for the delivery of the required equipment for dredging to commence in late September.

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2.0 ENVIRONMENTAL AND CONTRACT REQUIREMENTS

When the Province issued the Project Approval Certificate in 2002 for the Burnaby Lake Project, it stipulated a comprehensive environmental management program as a condition of approval. The management program is intended to safeguard the lake and its surrounding environment from any adverse effects that may be created by the dredging work. The program requires City commitment to comply with regulatory requirements including fish and wildlife salvage during dredging, siltation control, water quality sampling and monitoring, sampling and disposal management of dredgeate and wildlife survey.

Although the environmental monitoring would require significant manhours and costs, staff recognize the importance of the environmental monitoring work required and have included the regulatory requirements as a part of the overall rejuvenation plan.

3.0 PROPOSED SERVICES

Following the award of the dredging contract to Hazco, staff have contacted Associated Engineering and Enkon Environmental to discuss their potential involvement in the dredging inspection and environmental monitoring work. Both firms were involved in the 2000 Burnaby Lake pilot project and the preparation of the design and tendering of the current contract, hence were invited to submit a fee proposal for the services required during the dredging phase (16 months). These services are outlined as follows:

- Inspection of dredging and waste water treatment work (6 days/week and 12 hours/day)
- Monitor dredging areas on-lake with respect to sediment control, fish and wildlife requirements
- Survey wildlife and vegetation pre and post dredging
- Salvage, trap and relocate fish and wildlife for each dredge cell (approximately 40 cells) prior to commencement of dredging
- Collect water and soil samples and undertake analyses in accordance with regulatory requirements (approximately 2,000 samples)
- Review contract progress payments and claims

Staff have received and discussed the proposals submitted by Enkon and Associated Engineering. Adjustments to the fee proposals were made to ensure the City receive the best possible rates while meeting the regulatory conditions of the project certificate. The estimated expenditures for the required contract inspection and environmental monitoring services are as follows:

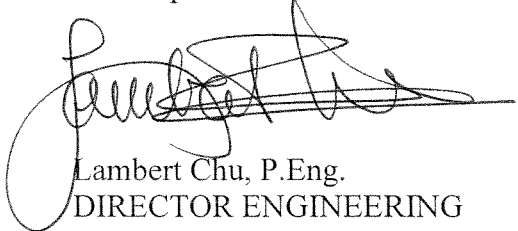
Associated Engineering	\$470,000
Enkon Environmental Services	\$1,090,000
	(plus GST)

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Staff have reviewed the proposed services in detail and concur with the level of effort and fee schedule as presented in the proposals. During the dredging phase, staff will closely monitor the quality of the dredgeate and discharge water with a view to reduce and optimize the sampling and testing process and costs. To facilitate the dredging work starting in September, it is recommended that Associated Engineering and Enkon Environmental be retained to carry out the inspection and monitoring work as outlined in this report. The required funds are available within the existing project budget of \$20M of which \$10M was provided by the Province with the remainder from the City's Gaming Fund. These expenditures are included in the Parks component of the 2009 Annual Financial Plan.

4.0 FUTURE CONTRACT EXTENSION CONSIDERATION

The current cost commitment for the project is approximately \$15.6M including GST and is within the approved budget of \$20M. A preliminary cost analysis of extending the current scope of contract to 360,000m³ concluded that it would increase the total project cost to approximately \$25M including in-lake dredging and monitoring. Subject to Council's concurrence, staff would undertake further discussion with the contractor to confirm the feasibility, schedule and cost implication of the extra dredging work and provide the information to Council at a future meeting.



Lambert Chu, P.Eng.
DIRECTOR ENGINEERING

LSC:br

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