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CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date:May 1, 2007Author:Lynn Belanger & Gruja
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Meeting Date:May 15, 2007

FROM: General Manager, Engineering Services

SUBJECT: Award of Contract for Invitation to Tender PS07042 Vancouver Landfill Electrical and Communications Upgrade

RECOMMENDATION

- A. THAT, the Vancouver Landfill Electrical and Communications Upgrading Project (the "Project") scope be revised from the original scope approved by Council in June 2005 (RTS No. 05067, Vancouver Landfill Capital Projects) at a revised total Project budget of \$1,461,899; with the additional budget of \$481,899 to be funded by an increase in the Ioan from the Solid Waste Capital Reserve;
- B. THAT, subject to the conditions set out in Recommendations C, D and E, the General Manager of Engineering Services Department be authorized to enter into a contract with Houle Electric Limited ("Houle") for the construction work on the Vancouver Landfill Electrical and Communications Upgrading Project at an estimated cost of \$1,080,289 (including all applicable taxes and fees) with funding to be provided by the budget established pursuant to Recommendation A;
- C. THAT the Director of Legal Services be authorized to execute and deliver on behalf of the City all legal documents required to implement Recommendation B;
- D. THAT all such legal documents be on terms and conditions satisfactory to the General Manager of Engineering Services Department, Manager of Materials Management and the Director of Legal Services; and
- E. THAT no legal rights or obligations will be created or arise by Council's adoption of Recommendations B, C and D above unless and until such legal documents are executed and delivered by the Director of Legal Services.

COUNCIL POLICY

Funding for all capital expenditures must be approved by Council and Council approves the award of contracts that exceed \$300,000. In addition, Council awards contracts based on best value to the City.

PURPOSE

This report seeks authorization on the revised Project scope and revised total budget of \$1,461,899 million and to award the contract for the construction of the Vancouver Landfill Electrical and Communications Upgrading Project to Houle at an estimated cost of \$1,080,289 including all applicable taxes and fees.

BACKGROUND

The City of Vancouver owns and operates the Vancouver Landfill (the "Landfill") located in Delta at 5400 72nd Street. On June 16, 2005, Vancouver City Council approved a number of capital projects for the Landfill, one of which was the relocation of a high voltage distribution line and upgrades to emergency power and communications at the Landfill. At that time, the estimated approved budget was \$980,000.

The existing high voltage power supply line was originally installed in the early 1990s, prior to the development of a comprehensive filling plan for the Landfill. This power line is currently located in an area that is slated to be refilled with garbage; therefore, it must be moved to the southern edge of the Landfill.

On May 2, 2006, Council awarded the design and construction supervision work for this Project to Stantec Consulting Ltd. ("Stantec") at a cost of \$131,610. Following completion of the design by Stantec, the City issued an invitation to tender for the construction work on this Project (the "Invitation to Tender").

DISCUSSION

The Invitation to Tender was posted on March 9, 2007 and an Information Meeting for potential tenderers was held on March 14, 2007 at the Landfill. All tenders received by the City (before the deadline for such tender submissions) were opened on April 10, 2007 and referred to the General Manager of Engineering Services for evaluation.

Tenders were received from three bidders: Houle, Status Electrical Corporation and Mott Electric Ltd. Prices listed in Table 1 below include all applicable taxes and fees, and are based on lump sum amounts and unit rates (as applicable) for:

- mobilization and demobilization;
- the preparation and construction of a new overhead power and communications pole line, complete with all hardware, transformers, disconnect switches, fuses, complete grounding, communication cables junction boxes and fittings; and
- completing all new power and communication service connections to replace existing power and communication service connections.

This work also includes the provision of a new standby generator and transfer switch, a new pad-mounted transformer and switchgear, new roadway lighting, demolition and salvage of the existing overhead pole line, and other related works as described in the Tender Documents.

Table 1: Tender Prices	
Tenderer	Tender Price (including all applicable taxes and fees)
Houle Electric Limited	\$1,080,289.00
Status Electrical Corporation	\$1,104,401.28
Mott Electric Ltd.	\$1,106,640.00

An evaluation team composed of Engineering Services staff (the "Evaluation Team") evaluated the three tenders. As Houle's tender submission met the requirements of the Invitation to Tender and is the lowest amount bid, the Evaluation Team recommended that Houle be awarded the contract for the construction work on this Project as this tender is considered best value for the City.

FINANCIAL IMPLICATIONS

Funding for the construction work on this Project, originally estimated at \$980,000 (2004 Dollars), was approved by Council on June 16, 2005 as a loan from the Solid Waste Capital Reserve with a ten-year repayment term, which is to be repaid by users of the Landfill through tipping fees applicable to Greater Vancouver Regional District, Delta and Vancouver users. Included in the Project costs were upgrades to the leachate pump station controls at an estimated cost of \$200,000. To simplify this Project, upgrades to the pump station controls, including design and construction, were deferred for completion at a later time and will be awarded in a separate tender.

In May 2006, Stantec was awarded the design and construction supervision services at a cost of \$131,610. Houle's tender includes a cost of \$1,080,289. Costs to upgrade the leachate pump station controls have been revised to \$250,000. Therefore the total Project cost for design and construction is \$1,461,899. The additional cost of \$481,899 will be funded by an increase in the loan from the Solid Waste Capital Reserve with the same repayment term for this loan. This will result in an additional cost to homeowners of \$0.06 per year for 10 years. Based on tendered amounts, the revised budget estimate is calculated as shown in Table 2.

Project Component	Cost		
Design	\$131,610		
Construction	\$1,080,289		
Leachate Controls Upgrades	\$250,000		
Total Revised Budget	\$1,461,899		
Original Budget	\$980,000		
Increase in Budget	\$481,899		

Table 2: Costs of Pro	ject Components
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The reasons for the increased budget are due to the escalation of construction prices over the last three years and a scope change in the work following completion of a detailed site development plan for the Landfill.

The escalation in prices is due to the large increase in construction projects evident throughout the City. The three tender prices were within \$20,000 on a Project valued at over \$1,000,000 and this narrow spread in the prices indicates the Project was competitively bid. The escalation in construction costs is estimated at approximately 25% of the original budget of \$980,000, and is calculated to be \$245,000.

The revised Project scope included the following changes to the original project:

- The size of the overhead line was increased to accommodate future operations, and the system was adjusted to allow for a line to convey power produced on site back to the BC Hydro grid. Associated equipment was upsized and bird guards were added to all of the poles.
- A new power connection was identified at the Landfill gas flare and utilization facility, and the diesel emergency power generator was upsized to allow for expansion planned with the upgrades to the Landfill gas collection and flaring system resulting from the Phase 1 closure project. The larger generator requires ancillary equipment.
- New equipment was added to the composting facility to accommodate mixing facilities for biosolids to be used in the Phase 1 closure. There is a small offset resulting from a reduction in equipment at the administration building.
- The communications network was redesigned to accommodate future installation of a central monitoring system for all site facilities, i.e. SCADA.

The revised Project scope, including the additional equipment, increased capacities, and upgrades to the communications network, is estimated at \$236,899. The increase in budget is \$481,899 as shown below in Table 3.

Table 3.	Increase	in	Budget	by	Component
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Budget Component	Estimated Cost		
Escalation in construction costs	\$245,000		
Revised Scope	\$236,899		
Increase in budget	\$481,899		

IMPLEMENTATION PLAN

Construction at the Landfill for the Project will begin in May 2007, and is anticipated to be completed by November 30, 2007.

CONCLUSION

Following a public tender process and evaluation of the three tenders received, the General Manager of Engineering Services recommends increasing the Project scope and budget, and awarding the contract for the construction work on the Project to Houle at an estimated cost of \$1,080,289 (including all applicable taxes and fees) with funding provided by a loan from the Solid Waste Capital Reserve.

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