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Item No. 10.1.1
Halifax Regional Council
September 28, 2010

TO: Mayor Kelly and Members of Halifax Regional Council

Original Signed by

A handwritten signature in black ink, appearing to be "Mike Labrecque".

SUBMITTED BY: _____
Mike Labrecque, Acting Chief Administrative Officer

DATE: September 22, 2010

SUBJECT: Borrow Pit A2 Access Road, Otter Lake

ORIGIN

MIRROR Nova Scotia Limited, operator of HRM Otter Lake mixed waste processing and disposal facility.

RECOMMENDATION

It is recommended that Halifax Regional Council approve:

1. A budget increase of \$820,940 to capital project number CWU01066 - Cell 6 Construction;
2. A \$600,000 withdrawal from the Waste Resources Capital Reserve (Q123) and a \$220,940 withdrawal from the Capital Cost Contribution Reserve (Q137) in order to fund the above budget increase; and
3. The construction of the Borrow Pit A2 Access Road for a guaranteed maximum price of \$820,940 (inclusive of net HST).

BACKGROUND

The July 1997 contract between HRM and MIRROR Nova Scotia Limited, as approved by Regional Council, provides the basic elements for the operation of the waste processing and disposal facilities at Otter Lake. This contract includes and provides for MIRROR Nova Scotia Limited utilizing Dexter and Dillon Consulting (as Mirror's design engineers) to:

- design and construct each new cell (and cell closure); and
- provide for the maintenance, repair or replacement of stationary and mobile equipment at the facilities.

Annually, staff identifies (in consultation with MIRROR Nova Scotia) and incorporates all known projects for the coming year into the HRM business plan and budget process. Project No. CWU01066, Construction of Cell 6, is contained in the 2011/2012 Project Budget.

Section 16 of the 1997 contract agreement with MIRROR Nova Scotia Ltd., provides for the construction of capital improvements at the facility. Section 15 of the 1997 contract agreement with MIRROR Nova Scotia Ltd., provides for the construction (and closure) of each cell. MIRROR Nova Scotia (with their subcontractors, Dexter and Dillon) submits a design and construction cost proposal for review. A cost substantiation review of the design and construction of Cell 6 (as has been done for the previous five cells) will be completed by HRM Solid Waste Resources staff and CBCL Ltd., owner's engineer for HRM. The initial costing estimate for Cell 6 is \$16,600,000 (including net HST).

DISCUSSION

The current construction schedule anticipates Cell 6 construction in the 2011 construction season for use in early 2012 when Cell 5 reaches capacity. Failure to construct Cell 6 in 2011 will likely result in Cell 5 reaching capacity in 2012 without a new cell to continue normal waste disposal operations. The alternative would require transportation of HRM waste to an alternate site until the new cell was available for use. Existing contracts for contingency transfer of HRM waste for short durations to Chester and Queens is assessed to not meet extended requirements of taking HRM waste. This option would also incur significant costs to HRM.

In order to construct Cell 6 commencing in the spring of 2011, access to a new clay deposit was identified as a priority. HRM staff anticipating this issue, requested Mirror conduct clay deposit surveys in the areas surrounding the Otter Lake facility with the intent of identifying a new borrow pit to support future clay requirements. On June 30, 2010, MIRROR Nova Scotia formally notified HRM Solid Waste Resources that the clay reserves at the current borrow pit at the Otter Lake site were insufficient to complete any construction activities beyond the closure of Cell 4B in Fiscal 2010/11.

A drumlin, identified as A2, has the closest proximity to the site and was estimated with air photos, stereoscopic techniques, and test excavation pits to exceed the future site requirements of Otter Lake cells 6 through 9 construction and closure projects. Drumlin A2 is approximately 1.5 km from the facility and can currently only be accessed by a single lane logging road which is only accessible by off road vehicles and ATVs. Development of this borrow pit at drumlin A2 will require significant improvements to the existing road to facilitate heavy equipment and haulage of the clay for construction and closure projects of cells 6 through 9.

Staff requested Mirror develop a three option project proposal to complete the access road. The three possible options: a one lane road, a two lane road, and a two lane road completed over two phases were assessed. The one lane road was determined to not meet operational requirements of actively excavating the drumlin site and transporting the clay to the landfill site. The two phased road resulted in a higher cost which was deemed unsupportable. The recommended option was the one phase two lane road. In addition, given the natural wetness of the area, especially during spring thaw, following the recent dry summer, the construction of the borrow pit road during the fall 2010 was assessed as the most cost effective time period.

MIRROR Nova Scotia and Solid Waste Resources recommend the development in 2010 of the two lane access road as the most efficient for the construction of Cell 6 (and benefitting the future construction of cells 7-9), with respect to the transport of clay to the site, and overall operations. The road needs to be developed in 2010. If the road is not completed this fall and ready to use in the spring of 2011, Cell 6 construction may not be completed in the 2011 construction season which would interrupt the fill plan for the RDF (landfill) in early winter 2012. The initial assessment of clay deposit is in the order of a 25 year supply. This clay borrow pit access road will be used in all future construction projects requiring clay at the site and therefore the road cost and benefits are shared across multiple cell construction and closure projects.

The submitted budget is an upset (maximum) price from MIRROR Nova Scotia to cover all aspects of the road construction including any environmental or contingency requirements. This access road to the borrow pit will be constructed pursuant to the provisions of Section 16 of the contract agreement. Use of clay from on site (i.e., HRM owned land and material) eliminates the need to purchase and transport clay from offsite at additional cost for cell construction and cell closure. In terms of a cost comparison if the road is not built, to purchase and transport clay from an as yet unidentified source, within an hour's distance from Halifax, the cost is estimated to be approximately \$18.00 per cubic metre based on past other project data. Using a conservative figure of 80,000 cubic metres of clay needed to construct and close a cell (including clay use in liners, berms, etc.), the avoided cost of purchasing and transporting clay is at least \$1,440,000 per landfill cell.

BUDGET IMPLICATIONS

This portion of the Project was not budgeted for in 2010/11. Funding for Cell 6 construction is currently budgeted for 2011/12, estimated at \$16,600,000. The construction of this two lane access road is expected to increase the total project cost estimate to \$17,420,940.

The construction of roads is not listed as an approved use of funding as per the business case for the Waste Resources Capital Reserve (Q123). Due to funding pressures and the purpose of the road, we are asking that Council make an exception to this business case constraint.

The total quote is \$820,940 consisting of: Dexter Constructions quote to construct the road (\$656,000) + 8% engineering (\$52,480) + margin to MIRROR (\$78,720) + net HST (\$33,740).

Budget Summary: Project No CWU01066, Cell 6 Construction (Access Road)

Opening Balance	\$ 0
Add: Funding from CCC (Q137)	\$220,940
Add: Funding SW Reserve (Q123)	\$600,000
Less: Requirement for the Project	-\$820,940
Balance:	\$ 0

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

COMMUNITY ENGAGEMENT

N/A

ALTERNATIVES

Council could choose not to approve the withdrawal from the Waste Resources Capital Reserve (Q123) and other Reserves for the access road required for Project No. CWU01066. The result would be the requirement for HRM to purchase clay for construction purposes at the above noted cost which is currently not in the project cost. This option is not recommended.

Council could also choose to tender the construction of the two lane access road. However, given the amount of remaining construction time in this season, it is assessed that a tendering process would result in the road work not commencing until the 2011 construction season. In addition, due to the wetness of the route and terrain, it is also assessed that construction would be delayed further into the 2011 season while winter wetness dried up to allow for construction to commence. It is also assessed that a spring start would increase the cost of the road. A delay in construction and completion of the borrow pit road would delay access to the clay deposit to support on time construction of cell 6. Any negative affect on cell construction time lines results in an increase in overall cost of building Cell 6 based on time constraints and time line compression. There is also the factor of potential extra costs of diverting waste to alternate sites while awaiting access to the new cell. The delayed construction of the two lane road would put the construction season for Cell 6 in jeopardy, and run the risk of it not being operational before the closure of Cell 5. This option is not recommended.

ATTACHMENTS

N/A

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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