



REPORT

To: Solid Waste Committee

Report Number: ENV-SWC-043

From: Gerritt Lacey, Solid Waste Manager

Date: May 6, 2021

Subject: RFQ 14-2021 North Peace Regional Landfill Concrete Crushing

RECOMMENDATION:

That the Solid Waste Committee recommend that the Regional Board award RFQ 14-2021 “North Peace Regional Landfill Concrete Crushing” to Brocor Construction Ltd. for a cost not to exceed \$110,000 (excluding taxes); and further, that the Chair and Chief Administrative Officer be authorized to sign the contract on behalf of the Peace River Regional District.

BACKGROUND/RATIONALE:

All three of the Peace River Regional District (PRRD) landfills accept concrete waste. This concrete is considered a diverted/recycled material, which means that it is not buried in the landfill. Instead, the concrete rubble is processed by crushing it into a gravel material, which can be reused, in turn, at the landfill in place of gravel for roads and laydown pads¹.

The current concrete pile at the North Peace Regional Landfill (NPRLF) has been collected since 2016. The concrete pile is estimated to be approximately 3,000 m³.

Concrete is the only material at PRRD landfills where the processing is the responsibility of the PRRD. For other materials such as wood waste and metals, the landfill contractor is responsible for managing those products.

Staff issued a Request for Quotation (RFQ) to secure best pricing and two bids were received. The proponents were evaluated on experience, qualifications, and budget. The scoring matrix for the proposals is provided below:

	Brocor Construction	DFA Contracting
Mandatory Requirements		
Submission Form (Appendix B)	✓	✓
Pricing (Appendix C)	✓	✓
Scoring Matrix Results		
Total Score	82.25	69.75
Clean Up and Sorting Costs	\$ 46,480.00	\$ 70,740.00
Crushing Costs (\$/m ³)	\$ 27.19	\$ 44.82

¹ Onsite waste concrete was crushed and reused to surface a new perimeter road at Bessborough Landfill in 2019.

Both submissions met the mandatory requirements of the RFQ. Based on the scoring matrix above, Brocor Construction Ltd. is the preferred proponent.

Brocor's process for crushing the material requires three steps:

1. Clean Up The concrete rubble is sorted from any non concrete materials.
2. Sorting/Processing All the concrete is reduced to a size less then 12 inches in diameter.
3. Crushing The reduced material is fed into a hammer mill and further reduced into a 1 inch minus material.

ALTERNATIVE OPTIONS:

1. That the Solid Waste Committee provide further direction.

STRATEGIC PLAN RELEVANCE:

- Not Applicable to Strategic Plan.

FINANCIAL CONSIDERATION(S):

\$110,000 was included in the 2021 Financial Plan for this project.

With the estimated sorting cost of \$46,480, this leaves \$63,520 budgeted for crushing costs. This will allow for the crushing of up to 2,336m³ of finished product. The crushing cost applies only to the amount of finished product produced.

The current size of the pile is approximately 3,000m³ which is larger then what is allowed for in the budget. However, the raw unprocessed pile contains a large amount of voids and empty space. The whole pile is expected to be less than the 2,336m³ once processed and crushed.

The total unit cost for creating a gravel material through crushing concrete waste is \$47.08/m³.

COMMUNICATIONS CONSIDERATION(S):

None at this time.

OTHER CONSIDERATION(S):

In 2019, the installation and placement of crushed concrete material cost \$33.56/m³ (excluding crushing) for the Bessborough capital program.

Comparatively, the cost to supply and install crushed gravel for this same scope of work was \$84.25/m³.

Using this year's unit cost for crushing, a total cost for placing/crushing this material would be approximately \$77.64/m³, resulting in approximately \$6.61/m³ in savings.