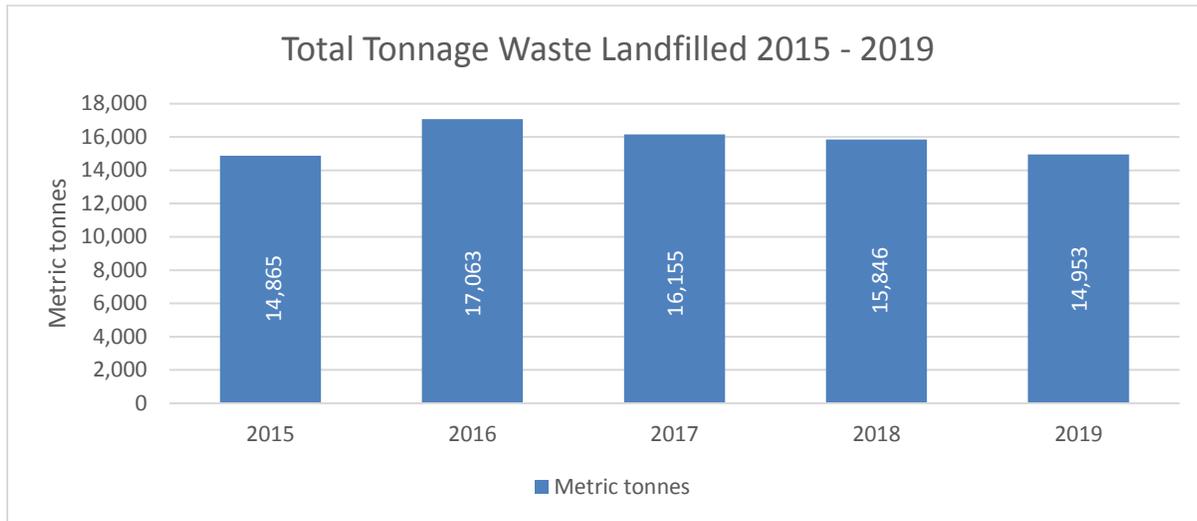


Figure 1. Total tonnage of waste disposed between 2015 and 2019



In accordance with the RMOW's purchasing and procurement requirements, a public Request for Proposals (RFP) or Tender must be issued for any contracts expected to exceed \$100,000 in value. An RFP was selected to allow flexibility and innovation from the waste management industry, consider GHG impacts, and potentially save costs for this long term disposal contract.

Staff developed the RFP document to invite qualified Proponents to submit proposals to the RMOW to receive Municipal Solid Waste (MSW) collected from the RMOW transfer station. If the RMOW is satisfied with the performance of the Contractor over the first five (5) years of the contract, an offer to extend the agreement for an additional five years could be negotiated.

The following steps were taken:

1. Develop the RFP document.
2. Issue the RFP publicly.
3. Evaluate submitted proposals based on the specific criteria and choose the "preferred Proponent".
4. Present the proposal evaluation to Council for approval.
5. With Council approval, issue a notice of award to the preferred proponent.

Using an RFP, rather than a simple price based tender allows proponents to find creative ways to provide the required services, and allows the RMOW to evaluate the proposals on more than just the cost. As set out in the RFP document, the following considerations form part of the evaluation process:

1. Does the proponent understand the needs of the RMOW?
2. Are they qualified and experienced to receive waste from the RMOW?
3. Does the proponent have the capacity and is available to receive waste from the RMOW?
4. Are the proponents committed to sustainability, and are they innovative?
5. Can they do the work in a cost effective manner compared to other proponents?

Once the proposals were evaluated, the "preferred Proponent" was chosen based on the following criteria specified in the RFP.

In the landfill waste disposal RFP it was stated that "all completed Proposals received by the

established deadline will be evaluated against the following evaluation criteria”:

Mandatory Criteria

Required (Mandatory) Criteria	Check
1. The proposal must be received by the specified closing date and time	
2. Proposal must be in English.	
3. Proposals must follow the specified proposal format.	
4. The proposal includes a completed Form of Proposal and Payment Schedule (Appendix “A”)	

Evaluation Criteria

The evaluation team evaluated all the submitted proposals according to the evaluation matrix criteria outlined below.

Criteria	Evaluation Considerations	% Evaluation
Project Understanding and Proposed Approach	<ul style="list-style-type: none"> Is the overall approach tailored to services required by the RMOW as described in the RFP? Does the submitted Proposal acknowledge all required services accurately? Is the Proposal easy to read and concise? 	10
Qualifications and Experience, including Safety	<ul style="list-style-type: none"> Proven performance and relevant experience of the proponent. Proposed team’s experience in providing similar services. Management capability, capacity, skills and qualifications of the proponent. Has the Proponent provided the information requested in Section 4? 	15
Company Capacity and Availability	<ul style="list-style-type: none"> Demonstrated capacity to accept waste quantities identified in Section 4 over the contract term. Proven history of waste disposal in a manner meeting all regulatory requirements. Robust contingency plan to ensure minimal service interruptions. Has the Proponent provided the information requested in Section 4? 	10
Commitment to Sustainability and Innovative Approaches	<ul style="list-style-type: none"> Proponent’s initiatives that would support the RMOW’s sustainability goals described under Section 3. Innovative approaches proposed by Proponent’s may include alternative waste processing technologies that increase overall waste diversion. Other innovative approaches may be related to waste hauling or disposal. 	25

Cost	<ul style="list-style-type: none"> • Transportation and hauling costs between the Designated Collection Point and the disposal facility – per container. • Processing and/or disposal costs – per tonne. • Benefit to RMOW’s projected transportation and hauling costs between the Whistler waste transfer station and the Designated Collection point – per container, per kilometre. 	40
TOTAL		100

Scoring Table

The Evaluation Team used the scoring table below as a guide for determining criterion score.

Scoring Table		
Points Awarded (% of available)	Quality	Criteria
100%	Exceptional	Exceptional; far exceeds requirements with no added risk.
80%	Very Good	Exceeds expectations; risk deemed acceptable or no added risk.
60%	Acceptable	Meets expectations and all minimum requirements.
40%	Below	Does not meet expectations or minimum requirements.
20%	Well Below Requirements	Fails to meet minimum requirements; proposes a solution or provides explanations that is not acceptable or relevant.
0%	Unacceptable	Proposed solution deemed unacceptable in every aspect.

Scoring

Prompts	Weighting
Costs will be evaluated using the following equation. $\frac{\text{Lowest Priced Proposal}}{\text{This Proposal's Price}} \times \text{Points Available}$	95%
The Payment Schedule sheet is clear and complete	5%

The RFP was posted online July 9, 2020 and remained open until August 6, 2020. In addition to posting the document on BC Bid and on the RMOW Bids and Opportunities webpage, the document was sent to two Landfill disposal service providers to solicit responses from them.

Proponents were encouraged to submit proposals that would keep the RMOW moving towards its sustainability goals outlined in the recently adopted Official Community Plan (OCP) and in the Community Energy and Climate Action Plan (CECAP).

During the period when the RFP was open, municipal staff issued two (2) addendum to clarify RFP information which was posted online for all interested parties to access.

In response to the posting, the RMOW received three (3) proposals from organizations interested in doing business with the RMOW. One submission was from Belkorp Environmental Services Inc. (Belkorp) who maintains a closed landfill and operates a new landfill in the Cache Creek area of British Columbia. Proposals were also received from Republic Services, who operates the Roosevelt Landfill located in Washington State, and Waste Management who operates the Columbia Ridge landfill located in Oregon State.

Evaluation

All three submissions complied with mandatory terms in the RFP qualifying them to proceed to being evaluated by the evaluation team using the established criteria.

To assist in the evaluation process, staff hired Morrison Hershfield (MH), an independent Consultant invited to participate with staff in the evaluation process, all using the same criteria. The evaluation team proceeded to evaluate and score each of the three proposals. As outlined in Section 6 of the RFP, the proponent with the highest score based on the evaluation would be considered the preferred proponent and the RMOW, with council approval, would then proceed to negotiate and execute a disposal agreement with them.

After the initial scoring process, the proposals from Belcorp and Republic Services had very similar scores. As allowed for in the RFP, staff invited teams from both these Proponents to an interview to provide further clarification of their proposals. Additional information from the interviews was used to develop the final score and choose the Preferred Proponent.

Qualifications and Experience including Safety

All three proponents had the qualifications, experience and capacity to provide a disposal service to the community of Whistler for the duration of the proposed five (5) year contract.

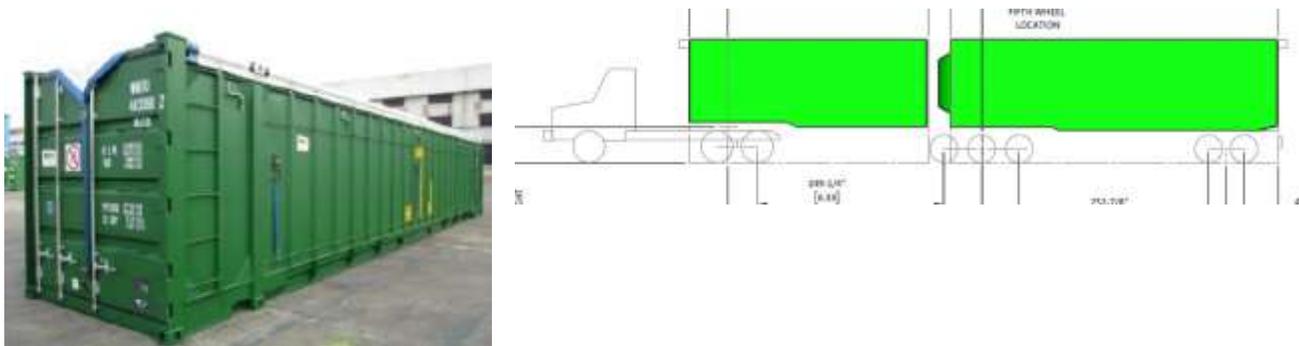
All proponents have acceptable staffing resources to operate their facilities as proposed. Staff for Republic Services and Waste Management have been with their organizations for years with the newest member being with the organizations for at least four years. Belcorp's team have not been with the organization for very long. During the interview process Belcorp explained that although they are new to their organization they believe they have qualified people and they clarified that there will be senior level oversight from more experienced Belcorp staff. The President of Belcorp is relocating to Kamloops to oversee the facility's operation with much of his work plan being allocated to the Campbell Hill landfill operation. To support the Campbell Hill operation Belcorp was planning to rehire some operational staff from the local community of Cache Creek that had worked previously at the now closed landfill.

All three proponents submitted evidence of operational safety programs and acknowledged the importance of ongoing continued Safety within their places of work.

Capacity and Availability

The approach to disposal was different between Republic Services and Waste Management compared to Belcorp. The first two groups rely on receiving waste at a Canadian intermodal facility or Designated Collection Point (DCP), located in Surrey and Burnaby respectively. At their DCP, full containers are transferred from truck to rail where the containers are transported down to their respective landfills for disposal. Belcorp was different as it is able to accept MSW at their DCP using a B-train configured transport truck and trailer systems rather than the intermodal system. The B-train configuration would allow for more waste to be loaded on each truck leaving Whistler, compared to the intermodal system. To provide redundancy, in an emergency situation Belcorp has proposed that they would use smaller 53' walking-floor trailers to move municipal waste to their landfill site. A performance threshold will be negotiated to determine how many times Belcorp could substitute a B-train with a walking-floor trailer.

Figure 2. Intermodal Container and B-train trailer examples.



Intermodal vs B-train

Container type	Tonnage maximum capacity
Intermodal	35*
B -Train	40**

(*heaviest load shipped under the current contract.)

(**a modified B-train system under the Belkorp program has the potential to carry a maximum of 43 tonnes)

Commitment to Sustainability and Innovation

Commitment to Sustainability was important to all three proponents and it was important for them to share with the evaluation team the GHG reduction work their companies have undertaken. All three proponents operate landfill gas recovery collection systems. Their systems collect greenhouse gases generated by the decomposing waste in their landfills. Systems collect and process gas to remove impurities, and either reuse the refined gas to generate electricity or for use to operate equipment such as compressed natural gas vehicles.

Belkorp operates a gas collection system at their now closed Cache Creek landfill next door to the Campbell Hill landfill. Campbell Hill itself is in its first year of operation and does not have its own gas collection system yet. Belkorp is planning to construct a gas collection system at Campbell Hill as early as 2021, once more material is received at the landfill. To remain in compliance with the Landfill Gas Management Regulation the Province will have Belkorp begin constructing their gas collection system once 10,000 tonnes of waste has been received at the landfill. Belkorp plans to connect the new collection system to their existing Cache Creek gas-to-energy plant. Until that time Belkorp will manage greenhouse gas emissions at Campbell Hill by covering the waste with a bio-based aggregate cover.

Using B-train trucks can reduce the total number of trips from Whistler to the landfill each year. Although using a B-train truck releases more emissions per trip to transport waste compared to rail from the DCP to the landfill, with an established back-haul program from the landfill back to the DCP the total GHG emissions associated with the RMOW's waste can be reduced and kept in line with that of rail. Belkorp had operated a woodchip back haul from Cache Creek to the Lower Mainland for twenty years prior to the closure of the Cache Creek landfill and they have indicated that they are again committing to this program. Belkorp shared that their short-term plan is to construct a reload facility adjacent to their Campbell Hill landfill. Woodchips originating from central BC will be reloaded into B-train trucks and trailers bound for Lower Mainland processors.

MH Greenhouse Gas Emissions review

The fuel economy for a B-train truck is on average 0.576 L/km according to the [Fuel Efficiency Benchmarking in Canada's Trucking Industry posted by National Resources Canada](#). MH has conservatively assumed 0.6L/km in our initial estimate. For this analysis, we have assumed the 43 tonne truck consumes 10 per cent more fuel than the 33 tonne truck, based on:

- The [GHG Protocol](#) standard emission factors, expressed as kg CO₂e per ton-mile, are the same for an articulated heavy goods vehicle with 3.5-33 tonnes capacity and that with >33 tonne capacity.
- Fuel Efficiency Benchmarking in Canada's Trucking Industry, linked above, suggest the fuel consumption can vary as much as 0.05L/km between summer and winter.

The estimated GHG emissions for the Belcorp 33 tonnes per truck option and the updated 43 tonnes per truck option are presented below.

33 tonne truck (with backhaul) – original estimate

461,733 kg CO₂e/year

- 33 tonnes per trip
- 480 trips per year
- Fuel consumption: 0.6 L/km

43 tonne truck (with backhaul)

396,802 kg CO₂e/year

- 43 tonnes per trip
- 375 trips per year
- Fuel consumption: 0.66 L/km

The GHG emissions are estimated to be reduced by 65 tonnes per year, should the trips be reduced from 480 to 375 per year. The GHG emissions for the Belcorp option **without** backhaul remains higher than those calculated for the Republic Services rail option. To reach the same emission levels as those estimated for the Republic Services rail option, the fuel consumption for the 43 tonne Belcorp option would have to be increased by 30 per cent (from 0.6L/km to 0.78L/km).

Cost

To evaluate the total cost of this contract, the RFP had requested that the proponents submit a cost to transport and dispose of a target weight of 16,100 metric tonnes of waste per year from their DCP location. This target weight was used because it is similar to the amount of waste the RMOW had landfilled in recent years and therefore would reflect a realistic scenario the proponents could benchmark to. In 2020 Whistler continues to be affected by Covid 19. This impact has reduced the amount of waste generated in the community compared to prior years. Due to this pandemic, staff felt that it was better to provide a target weight that reflected waste landfilled during a more typical period. Actual annual tonnages and number of loads transported was provided for the years 2017-2019.

Upon review, Republic Services had proposed to receive, transport and dispose of waste similarly to what presently occurs under an existing contract with the RMOW. Republic Services, Waste Management and Belcorp all proposed to receive Whistlers' waste at their respective DCP. Waste would be transported to the DCP locations by the RMOW under a separate transfer station operating contract, however both Belcorp and Waste Management had acknowledged that they could haul waste from Whistler directly. Belcorp could increase its efficiency and potentially reduce costs further by bypassing their own DCP, transporting the waste directly from Whistler to their landfill for disposal.

Early in the evaluation it was determined by staff that the Waste Management option to haul from Whistler was cost prohibitive compared to what the municipality already pays under a separate contract

to have a similar service provided. Republic Services did not provide an optional cost to haul directly from Whistler.

Flexibility was proposed by Belkorp to allow the RMOW to increase the weights in the B-train trucks up to a maximum of 43 tonnes per load by the third year of the contract to further reduce the number of loads required to move waste from Whistler to their landfill. In the proposal Republic Services and Waste Management had submitted costs that proposed a load of 25 tonnes.

Under the existing contract with Republic Services the RMOW began to increase the loads in an attempt to reduce the number of loads per year it was transporting and paying for. In response to this Republic Services levied additional costs to the municipality for delivering loads that were in excess of 28 tons which is approximately 25.5 metric tonnes in weight. The premium added \$62 USD per ton for all loads over 28 short tons up to 30 tons then an additional \$100 USD per ton for all loads over 30 tons. The reason stated for this change was to cover additional costs due to wear and tear on Republic Services offload equipment at their landfill. For this reason, the municipality is sensitive to transport heavier loads to Republic Services beyond what they had proposed without inviting added future costs.

To effectively load B-train trucks the compactor owned by the current RMOW transfer station operating contractor would need to be modified. Until that occurs top loading of the containers is possible and there is a risk that maximum weights will not be realized until the modification is complete.

Interview

The evaluation team determined that proponent scores for Republic Services and Belkorp were close enough that interviews should be held with both these companies as per Section 7.4 of the RFP document. Waste Management has a similar transportation system as Republic Services and their proposal costs were significantly higher compared to the other proponents. Due to this reason the evaluation team evaluated their proposal but did not invite Waste Management to a subsequent interview. The additional step of holding interviews was taken to ensure the proponents had the opportunity to clarify their proposals. After the interviews concluded, the final evaluation scores were calculated, and are shown below. Belkorp scored the highest out of the three submissions and it was determined to be the preferred Proponent. Although RMOW staff and MH scored the proposals differently, both groups came to the same consensus on who was the preferred proponent. The flexibility that Belkorp provides with the use of B-train trucks does allow the option for the RMOW to ship more waste per trip compared to disposal by rail, which can reduce transportation costs to the municipality.

Proponent Ranking

Proponent	RMOW (out of 100)	MH (out of 100)	Ranking
Belkorp Environmental Services	78.4	73.4	1
Republic Services	77.1	72.1	2
Waste Management	71.2	66.4	3

POLICY CONSIDERATIONS

Official Community Plan

Community Vision-Environment-GHG Emissions

When reviewing waste management options, staff consider reducing the amount of GHG emissions not only through waste reduction and material reuse, but by trying to reduce the impacts that transporting waste has on the environment over the long-term. Working with Belkorp over the term of the contract can reduce the number of trips required to move waste to their landfill for disposal. When Belkorp completes their reload facility and institutes a back-haul program the amount of GHG

emissions generated by the RMOW disposal program to dispose of its waste will be similar to disposing of waste through the use of a rail system.

Chapter 6 Economic Viability

Current Reality - The municipality is committed to being fiscally responsible and at the same time must continue to invest in infrastructure, amenities and services, which are integral to the authentic Whistler mountain resort experience. Reducing the number of loads transported via a B-train truck system reduces annual waste transportation costs.

Chapter 8 Health, Safety and Community Wellbeing

8.6 Goal – Create and embed effective governance mechanisms and partnerships to create trust, responsibility and accountability. Staff followed the procurement policy to ensure a balanced approach was used to establishing a new waste disposal contract.

8.6.1.2 Policy - Ensure planning and decision making is aligned with the community’s articulated Community Vision and OCP goals. Due to the annual cost of disposing of municipal waste, staff followed the municipal procurement policy to solicit proposals through a transparent public process.

Chapter 10 Climate Action and Energy

10.5.1.3 Policy Ensure that strategic directions related to climate change risk management and climate change adaptation objectives are routinely considered in decision-making processes and well-integrated with the CECAP. Staff understand the importance of reducing greenhouse gas emissions when managing municipal programs. Reducing the number of trips per year to transport waste for disposal, in a landfill that collects landfill gases for reuse, falls in line with the OCP and CECAP mandates.

11.5.1.4 Policy Explore strategies to enable more efficient movement of goods to, from and within Whistler. Staff see the importance of increasing the weight per load of waste being transported to the landfill for disposal. Doing so will reduce the number of shipments required to dispose of waste each year.

Other Relevant Plans

SLRD Solid Waste Resource Management Plan – Monitoring greenhouse gas emissions.

Activities related to solid waste management have the potential to create significant quantities of greenhouse gas emissions. These activities may represent an important proportion of the SLRD’s contribution to climate change. Reducing the number of trips to dispose of waste in a landfill can reduce greenhouse gases.

BUDGET CONSIDERATIONS

Prior Three Year Actual Disposal Costs with Republic Services

Year	Total Tonnage	Program Cost	Cost Per Tonne
2017	16,342	\$1,377,816.01	\$84.31
2018	16,385	\$1,629,158.22	\$99.43
2019	15,756	\$1,613,857.84	\$102.43

Moving forward with Belcorp, the RMOW is expecting to increase the weights for each load leaving the municipal transfer station to reduce the overall number of loads transported each year from the prior three year average of 638 loads to an estimated 480 loads in the first year of the contract. The costs

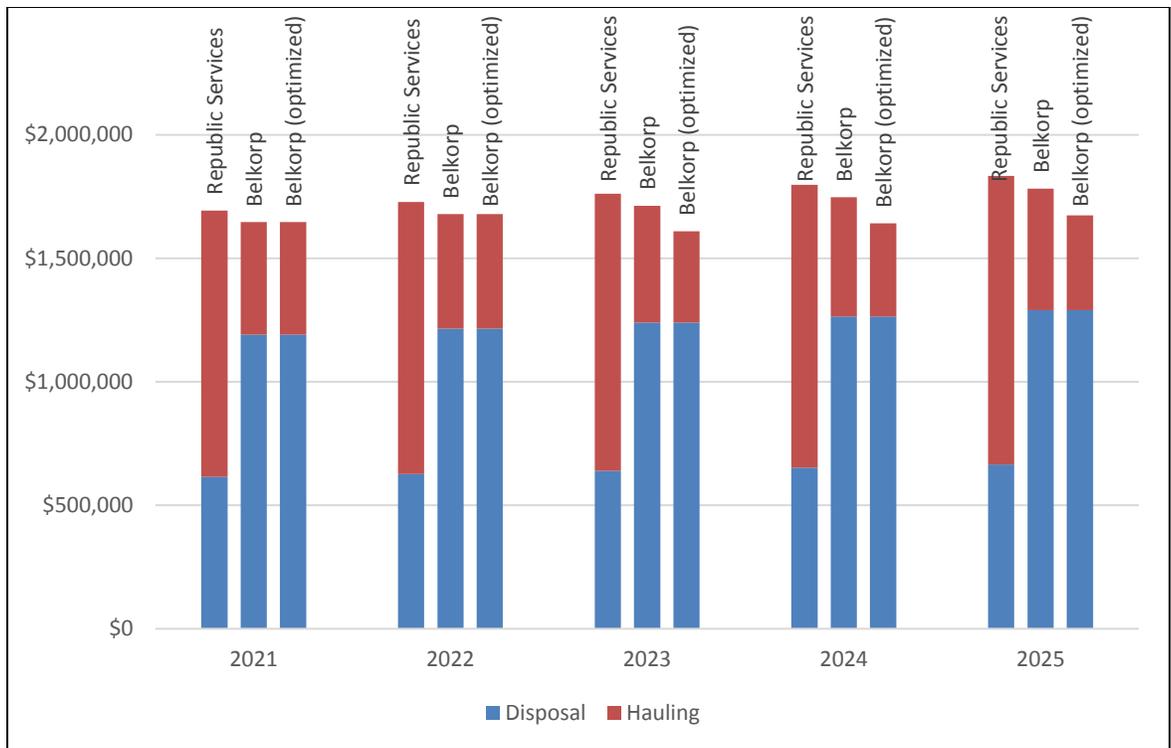
below represent a sum of transportation and disposal cost estimates for each proponent. The modified B-train option presented by Belkorp would not be available until at least the third year of the contract.

Estimated proposed cost based on target tonnage provided by staff in the RFP.

Proponents	Target Tonnage	Tonnage per load.	Proposed program cost	Cost per Tonne
Republic Services	16,100	25	\$1,693,874.50	\$105.21
Belkorp Environmental	16,100	33	\$1,646,440.00	\$102.30
Belkorp (Modified B-train option)	16,100	43	\$1,609,394.76	\$99.96*
Waste Management	16,100	25	\$2,332,796.55	\$144.89

Note: option available in third year of contract.

Figure 3. 2021-2025 Estimated Landfilled Waste Disposal Costs



Note: Assumes a 2 per cent CPI increase each year.

SUMMARY

Since the RMOW closed the municipal landfill in 2005, the community has transported and disposed of its waste at the Republic Services landfill located in Washington State. The existing contract to dispose of Whistler’s landfill waste expires November 1, 2020.

To comply with municipal procurement policies staff engaged in an RFP process to identify an organization that has the capacity to receive Whistler’s waste in a sustainable manner. The RFP process outlined criteria that Proponents followed to comply with the RFP evaluation.

Three proposals were submitted in response to the RFP and all three submissions complied with mandatory terms in the RFP.

Staff worked with an independent consultant to evaluate the proposals against an established criteria that was included in the RFP document posted online from July 9 to August 6, 2020.

The evaluation team determined that Belcorp had the best proposal and should move forward as the preferred proponent. Belcorp's proposal to use a transportation system that can move significantly more waste per trip allows the RMOW to reduce the number of trips required each year to deliver waste to the landfill. This is a key feature of Belcorp's proposal that allows them to offer lower costs and competitive GHG emissions.

Staff recommend that Council authorize the Mayor and Municipal Clerk to award the Landfill Waste Disposal contract to Belcorp Environmental Services Inc. for receiving and disposing of the RMOW's landfill waste for the next 5 years.

Respectfully submitted,

Andrew Tucker
MANAGER OF TRANSPORTATION AND WASTE MANAGEMENT

for

James Hallisey
GENERAL MANAGER OF INFRASTRUCTURE SERVICES