

STAFF REPORT TO COUNCIL

PRESENTED: January 23, 2024
FROM: Solid Waste
SUBJECT: TRANSFER STATION VEHICLE SCALE PLAZA REPLACEMENT TENDER AWARD

REPORT: 24-006
FILE: 5330-04-1014

RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Infrastructure Services be endorsed.

RECOMMENDATION(S)

That Council award the contract to construct the Transfer Station Vehicle Scale Plaza project to Coastal Mountain Excavations in the amount of \$1,013,237.00 (exclusive of GST).

PURPOSE OF REPORT

The purpose of this report is to inform Council of the process and outcomes of the transfer station vehicle scale plaza project construction tender process, and to request Council approval to proceed with constructing the scale system in 2024.

☐ Information Report ☒ Administrative Report (Decision or Direction)

DISCUSSION

Background

The Resort Municipality of Whistler (RMOW) Transfer Station was constructed to support the RMOW solid waste management program once the municipal landfill began closing in 2005.

The RMOW Transfer Station currently has one bi-directional 24 metre (80 ft) weigh scale that is utilized by all the waste hauling vehicles entering and exiting the Transfer Station (see Figure 1).

In 2022, challenges with the maintenance and operation of the existing scale were reviewed with consulting engineers Morrison Hershfield (MH). The existing scale has reached the end of its useful service life, which given the localized weather conditions the scale operates in, matches the industry standard life expectancy of 20 to 25 years. Although the current scale system (purchased second hand in 2008) continues to operate, heavy corrosion on both the scale bridge deck support structures and the electrical connections between the load cells and the scale house computer terminal indicate that it is time to replace the scale system (see Figure 2). Utilizing MH's knowledge, staff proceeded to work on replacing the RMOW vehicle scale plaza beginning in late 2022. A design for two new scales (adding a second scale to improve user experience and provide operational redundancy) and a new location and layout for

the scales and new scale building was developed to allow for construction to occur while keeping the transfer station operational.

An invitation to tender was issued for construction of the weigh scale plaza (including installation of the two new scales and the scale building) and demolition of the old scale system.



Figure 1. Existing Transfer Station Weigh Scale Plaza



Figure 2. Existing scale Bridge Corrosion

The project will be funded from Solid Waste Annual Reconstruction project E088 which is used for solid waste facility renewal projects to ensure that the service life of these facilities (depots, transfer station and compost facility) is maximized.

Analysis

In order to construct a new vehicle scale plaza while keeping the existing scale system operational, the new scale system will be constructed north of the current scale location.

Keeping the existing scale system online during construction allows the important day-to-day operation to continue, processing transactions of waste in and out of the transfer station.

Adding a second scale improves the transfer station user experience by shortening wait times to access the scale (one to three minutes per transaction) and improves the flow of traffic for vehicles that need to be weighed several times (due to different types of waste). A transfer station best practice is to have a vehicle in and out of the facility in 15 minutes or less (most of the time) and this second scale is anticipated to allow the Whistler Transfer Station to meet that goal. Operational redundancy will also be an added benefit of this project, which will allow transfer station staff to continue processing transactions of waste even when one scale goes offline (for repair or maintenance).

Figure 3 illustrates the new scale location compared to the existing scale and defines the construction zone area. As the project moves from construction to demolition the work zone area will be adjusted to continually separate the transfer station operation, from the scale system construction (green outline) or demolition area (purple outline). Green For Life (GFL) is the Prime Contractor for the transfer station operation and is responsible for facility safety on an on-going basis. Scale construction safety within the work zone will be managed by the construction contractor as per the safety plan which will be collaboratively developed between the construction contractor, GFL and the RMOW before onsite construction begins.

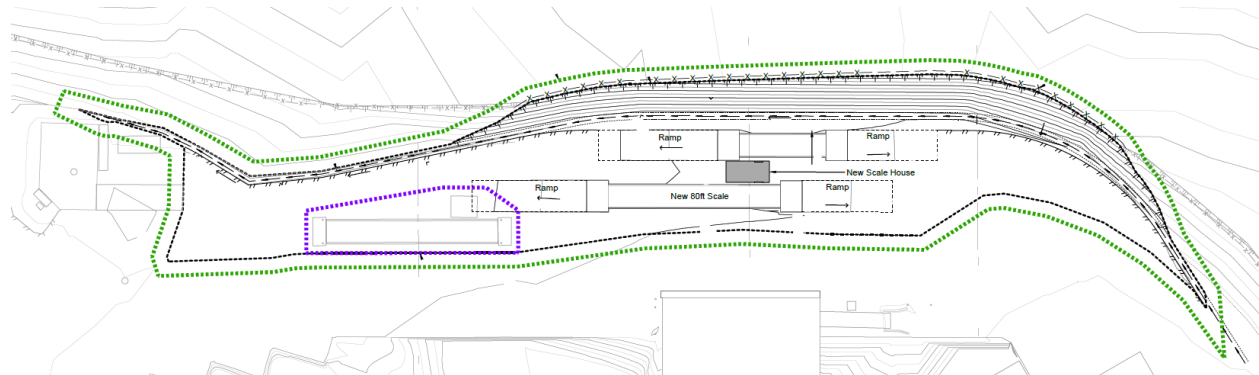


Figure 3. Scale Plaza construction work zone. The highlighted purple zone is the existing scale that will be demolished once the new scale plaza is online.

Figure 4 shows the U-turn route that vehicles with multiple types of waste will use so that each type of waste can be measured and paid for appropriately. The yellow lines identify vehicle travel paths to and from the vehicle scales, with the hatched route showing the U-turn route.

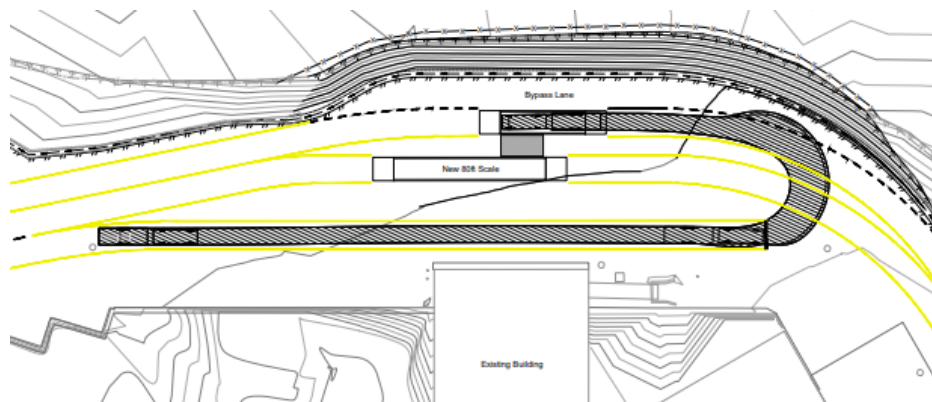


Figure 4. U-Turn Route for Multiple Tips

Procurement

To minimise the impacts to the project schedule and to have the flexibility of working with suppliers directly, staff procured the scale system itself (scale bridges, electronics) and scale building in advance of issuing the construction tender.

These pre-purchased elements were not included in the current construction tender as these items have already been purchased and will be supplied to the successful bidder for integration into the project.

Scale System

Qualified vendors were asked to provide a response to a request for proposals (RFP) for supply of a new weigh scale system in December 2022 which included one twelve metre scale and one twenty-four metre scale. Three proposals were submitted varying in price between \$162,346 - \$289,010. Western Scale of Coquitlam, BC was awarded the contract to supply the two scales.

Scale Building

To keep the existing scale operational for the duration of construction, the existing scale building could not be moved over to the new scale and reused without being taken offline for a period of time. Since the existing scale building is already 15 years old and showing signs of age (see Figure 4), staff decided to purchase a new scale building and reuse the old scale building as an operational warming hut for the transfer station yard attendant staff.



Figure 4. Existing Scale Building

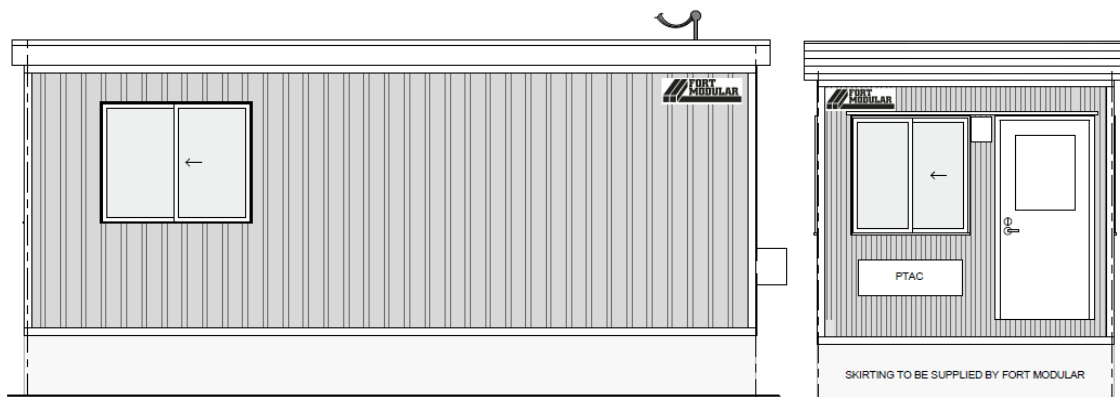


Figure 5. Side and front views of the New Scale Building

Three quotes for a new Scale Building were obtained in early 2023, and staff negotiated the purchase of a building with Fort Modular based out of Aldergrove, BC for a cost of \$78,734.70.

This price includes engineering, transportation to the transfer station site and installation of the scale house at its new location.

Construction Tender

The scope of work for the tender that is being considered in this report includes:

- Excavation and preparation of the scale area for the new scale foundations
- Supply and installation of scale foundations, approach ramps and electrical conduits and connections for the scales and traffic control systems
- Repair asphalt and paint traffic control markings; and
- Demolish the old scale system and remediate the old scale area.

Construction Tender Results

An invitation to tender was originally published on April 27, 2023, to ask contractors to submit bids to perform the earthworks, construct the weigh scale plaza (including installation of the two new scales and the scale building) and to demolish the old scale system. Three tenders were received in May 2023 and MH undertook a review of the submissions. While all tender submissions were found to be in general conformance with the mandatory submission requirements, all tenders were priced significantly higher than the engineer’s estimate.

Due to the higher than expected prices, and the fact that it was getting later in the construction season, increasing the risk the project would not be completed before potential weather delays, it was decided to not award the tender in favour of a minor re-design (intended to reduce cost) and reposting the construction Tender later in 2023 to align the project with the 2024 construction season.

On November 14, 2023, a new tender call was posted online that included the revised design and four compliant bids were received, one more than the prior tender call. Although lower costs associated with some aspects of the new design were seen in the bids, overall prices increased from the previous tender. The price of the four bids are within a reasonably narrow range indicating the proponents understood the scope of work, and that this is a fair price for this work in the current market conditions. In recent years, labour shortages and higher material and equipment costs have resulted in a sharp increase in project costs which seems to be reflected in this tender result. The lowest price bid was received from a local contractor, Coastal Mountain Excavations (CME), and their proposed substantial performance date for the work is July 24, 2024.

November 2023 Preferred Bid Tender result:

Engineers Estimate	\$616,910	CME Bid	\$1,013,237	Difference from engineers estimate	35%
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POLICY CONSIDERATIONS

Relevant Council Authority/Previous Decisions

One of the actions within the 2021 adopted [Zero Waste Action Plan](#) was to ensure adequate space (at the transfer station) for collecting and storing construction (and deconstruction)

materials that are still usable. Moving the current scale system location will allow for more operational area to be made available for this type of use.

[Climate Action Big Moves Strategy](#) – reducing the wait times at the transfer station weigh scale reduces the greenhouse gas emissions released by vehicles waiting to cross the scale. Vehicles will be able to move across scales concurrently instead of the current situation of waiting for one vehicle to pass before another vehicle can proceed onto the scale.

2023-2026 Strategic Plan

The 2023-2026 Strategic Plan outlines the high-level direction of the RMOW to help shape community progress during this term of Council. The Strategic Plan contains four priority areas with various associated initiatives that support them. This section identifies how this report links to the Strategic Plan.

Strategic Priorities

- ☐ Housing
Expedite the delivery of and longer-term planning for employee housing
- ☐ Climate Action
Mobilize municipal resources toward the implementation of the Big Moves Climate Action Plan
- ☐ Community Engagement
Strive to connect locals to each other and to the RMOW
- ☐ Smart Tourism
Preserve and protect Whistler's unique culture, natural assets and infrastructure
- ☒ Not Applicable
Aligns with core municipal work that falls outside the strategic priorities but improves, maintains, updates and/or protects existing and essential community infrastructure or programs

Community Vision and Official Community Plan

The Official Community Plan (OCP) is the RMOW's most important guiding document that sets the community vision and long-term community direction. This section identifies how this report applies to the OCP.

12.3.1.9 Policy: It is essential to operate a solid waste transfer station and drop-off facility that meets the waste disposal needs of the residential, industrial, commercial and institutional (ICI) sectors (including recycling, compost and landfill waste) at the transfer station location identified in Schedule D. Replacing the vehicle scale system enhances the function of the transfer station, better serving the community that needs the facility.

BUDGET CONSIDERATIONS

A 2024 budget of \$1,420,000 is allocated to cover the cost to procure and construct a completely new scale system, which includes installation of RMOW supplied equipment, site

preparation, and construction and demolition of the existing system, all while maintaining the day-to-day operation of the transfer station.

Of the approximately \$3.5Mm dollars generated each year at the transfer station as tipping fees, a portion of those revenues are directed to the Solid Waste Reserve which funds capital improvements such as the scale replacement. Utilizing the solid waste reserve to fund these projects means that solid waste capital improvements are paid for by the waste generators themselves and not the paid by the general community. The Solid Waste reserve amount at the end of 2023 was approximately \$3.3Mm.

Project Budget E088 Solid Waste Annual Reconstruction (subproject E08802):

Budget Code Number and Name	2022 Actual	2023 Actual	2024 Budget	Total Project Budget
E08802 Scale Project	\$10,671	\$216,145	\$1,420,000	\$1,646,816

LÍŁWAT NATION & SQUAMISH NATION CONSIDERATIONS

The RMOW is committed to working with the Lílwat People, known in their language as *L'il'wat7úl* and the Squamish People, known in their language as the *Skwxwú7mesh Úxwumixw* to: create an enduring relationship; establish collaborative processes for Crown land planning; achieve mutual objectives; and enable participation in Whistler's resort economy.

There are no specific considerations to include in this report.

COMMUNITY ENGAGEMENT

Level of community engagement commitment for this project:

☒ Inform ☐ Consult ☐ Involve ☐ Collaborate ☐ Empower

Notice of this construction will be posted at the transfer station, online on [whistler.ca](https://whistler.ca/construction-tracker) construction tracker webpage and through social media channels.

SUMMARY

The RMOW Transfer Station currently has one bi-directional 24 metre weigh scale that is utilized by all the vehicles entering and exiting the Transfer Station. The existing scale has reached the end of its service life and is significantly corroded.

An invitation to tender was posted in November 2023 with staff receiving four compliant bids in response to that tender call.

Based on a review of the four submitted bids, staff recommend awarding the contract for the transfer station scale plaza replacement to Coastal Mountain Excavations for the amount of \$1,013,237.00 (exclusive of GST).

SIGN-OFFS

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