



**RESORT MUNICIPALITY OF WHISTLER**

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## STAFF REPORT TO COUNCIL

**PRESENTED:** March 19, 2024 **REPORT:** 24-031  
**FROM:** Capital Projects – Water **FILE:** 5330-14-1008  
**SUBJECT:** WATERMAIN UPGRADES PROJECT CONTRACT AWARD

### 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 for the Watermain Upgrades Project in the amount of \$1,199,690 (exclusive of GST) to Coastal Mountain Excavations Ltd. in accordance with their tender proposal dated February 13, 2024, and as recommended by ISL Engineering and Land Services attached as Appendix A of Administrative Report No. 24-031.

### PURPOSE OF REPORT

The purpose of this report is to inform Council of the status of the Watermain Upgrades Project (Project) and procurement process, and to request approval to proceed with the contract award for the construction work to implement the Project in the amount of \$1,199,690 (exclusive of GST).

Information Report  Administrative Report (Decision or Direction)

### DISCUSSION

#### **BACKGROUND**

The Project includes replacing old water pipes in two neighborhoods: Creekside and Emerald. These pipes are being replaced with new infrastructure to ensure continued delivery of clean, high-quality water. However, the Project's scope extends beyond simply addressing aging assets. The Project will upgrade water infrastructure in three specific locations: Lake Placid Road, Taylor Way, and Summer Lane. The existing water mains, installed in the 1980s, have reached the end of their useful life and require replacement to ensure continued reliable water service. Not only are they old, but their depth of burial (2.7 to 3 meters) makes maintenance difficult and expensive.

#### **Why is this needed?**

The Project goes beyond simply replacing old pipes. These are the specific reasons for the upgrades:

- **Creekside Neighborhood (Lake Placid Road):** There have been four unplanned water main breaks in the last 10 years. These breaks are disruptive and costly to fix. Upgrading the pipes will significantly reduce the risk of future breaks.

- **Creekside Neighborhood (Taylor Way):** Corrosive soil has damaged the valves and fittings, leading to potential water flow issues and leaks. Replacing these components will improve reliability.
- **Emerald Neighborhood (Summer Lane):** New PVC pipes will ensure residents on Summer Lane continue to receive safe, high-quality drinking water.

### Scope of work for 2024 Watermain Upgrades Project

- **Lake Placid Road:**
  - **Pipe Replacement:** The existing 150 mm diameter ductile iron pipes will be replaced with PVC pipes. The total length of pipe to be replaced is 211 meters. The new pipes will be installed at the standard depth of approximately 1.8 meters. This new depth will make future maintenance and repairs much easier and less disruptive.
  - **Additional Improvements:**
    - Two new fire hydrant assemblies will be installed to enhance fire protection capabilities in the area.
    - A new isolation valve will be installed to enable better control of water flow during maintenance or emergencies.
    - 10 residential services will be replaced with new connections.
    - New asphalt pavement will be installed in areas where the existing surface is disturbed during excavation activities.
- **Taylor Way:**
  - **Pipe Replacement:** While the existing pipes on Taylor Way are already PVC, as part of our proactive maintenance efforts and leveraging our current work in the neighborhood, we'll be replacing this section originally installed in the late 1980s. This 76-meter section, currently 200mm in diameter, will be replaced with new PVC pipes of the same size. Given the known corrosive factors present in the neighborhood, addressing this section now proactively eliminates the potential for future issues with aging infrastructure and ensures a reliable water supply for the entire neighborhood.
  - **Additional Improvements:**
    - Two new fire hydrant assemblies and four new isolation valves will be installed.
    - One new service to a strata complex, and three new irrigation services will be installed.
      - The corrosive soil in this area has caused the existing valves and fittings to deteriorate. Replacing these components will ensure reliable water flow and reduce the risk of future leaks.
    - New asphalt pavement will be laid in areas affected by excavation.
- **Summer Lane:**
  - **Pipe Replacement:** The existing 100mm diameter cast iron pipes will be replaced with 75 meters of new, larger 150mm diameter PVC pipes. Cast iron pipes can be susceptible to mineral buildup on the inside of the pipe over time, which in some cases can lead to discolored water. This proactive upgrade to PVC pipes, known for their resistance to corrosion and mineral buildup, will help prevent future discoloration and maintain a consistently clear water supply for residents.
  - **Additional Improvements:**
    - A blow-off assembly will be installed at the end of the pipeline to allow for pressure release when necessary.
    - Six residential services will be replaced with new services.
    - New asphalt pavement will be installed in areas disturbed by excavation activities.

**Analysis**

The Resort Municipality of Whistler (RMOW) received two qualified submissions for the Project. The Invitation to Tender was posted to the RMOW bid opportunities page and BC Bid between January 11, 2024 and February 13, 2024.

The Engineer's initial cost estimate for this project was \$792,950, based on similar historical projects. Following the tender closing and consultations with both bidders, a significant potential risk was identified related to the geotechnical investigation in the Taylor Way and Lake Placid Road areas. The geotechnical report revealed a wider-than-expected range of groundwater fluctuation, increasing the risk of trench collapse during construction. To mitigate this risk, both contractors included higher unit rates in their bids to cover the additional costs of implementing measures to prevent trench collapse and ensure worker safety.

We have carefully assessed the geotechnical risks and the contractors' proposed mitigation plans. We consider the increased pricing justified due to the necessary precautions to ensure worker safety during construction. Additionally, re-tendering is unlikely to yield significantly lower costs, as all contractors would face the same risk factors. Both bids complied with the project's requirements.

Based on the above considerations, we recommend awarding the contract to the lowest bidder, Coastal Mountain Excavations Ltd. for a total cost of \$1,199,690.00 (excluding GST).

Results from two bidders are listed in Table 1 – Tenderer’s Submissions:

| TENDERER   |                                   | TOTAL PRICE<br>(EXCLUDING GST) | VARIANCE TO<br>ENGINEER'S ESTIMATE<br>(%) |
|--|-----------------------------------|--------------------------------|---|
| 1  | Drake Excavating (2016) Ltd.      | \$ 1,849,500                   | 133                                       |
| 2  | Coastal Mountain Excavations Ltd. | \$ 1,199,960                   | 51  |
| <b>Engineer’s Estimate (ISL<br/>Engineering and Land Services)</b> |                                   | <b>\$ 792,950</b>              |   |

**POLICY CONSIDERATIONS**

**Relevant Council Authority/Previous Decisions**

*Council Policy F-29: Procurement Policy and Administrative Procedure D-1: Procurement* requires Council approval for any contracts over the value of \$500,000.

**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. The Water and Sewer Valve and Fitting Replacement Project directly aligns with key goals and objectives outlined in the RMOW's OCP.

**Goal 12.1: Safe Drinking Water and Reliable Water Supplies**

The Project directly supports Objective 12.1.1 and Policy 12.1.1.1 by proactively replacing aging infrastructure critical to maintaining a reliable and high-quality water supply system. By addressing potential corrosion issues before they lead to failures, this project will help to ensure sufficient water quantities and quality that meet or exceed Canadian Drinking Water Guidelines, fulfilling the requirements set by the Local Health Authority.

The Project demonstrates the RMOW's commitment to upholding the core principles of the OCP by ensuring the safety, reliability, and sustainability of Whistler's essential water infrastructure.

**BUDGET CONSIDERATIONS**

The current approved budget for the Project utilizes Agresso code E205-02 Creekside and Summer Lane Watermain Upgrades. A detailed breakdown of the low bid from Coastal Mountain Excavations Ltd. and its associated costs compared to the original budget can be found in Table 2. For reference, Table 2 also summarizes the total estimated project cost encompassing, tendering services, construction, and project management activities planned for the year. While the final tender price from Coastal Mountain Excavation Ltd. is higher than the Engineer's initial estimate, it is still within the approved project budget for 2024. Awarding the contract to Coastal Mountain Excavations Ltd. will not require any adjustments to the previously approved budget.

Table 2 – 2024 Estimated Total Project Cost and Total Project Budget

| BUDGET CODE NUMBER AND NAME                     | 2024 PROJECT COST – COASTAL MOUNTAIN EXCAVATIONS LTD. | ESTIMATED 2024 PROJECT MANAGEMENT (PM) COST | TOTAL 2024 ESTIMATED PROJECT COST (TENDER PLUS PM) | ESTIMATED PROJECT VARIANCE TO BUDGET (%) | TOTAL 2024 BUDGET |
|---|---|---|--|--|-------------------|
| E20502 Creekside and Emerald Watermain Upgrades | \$ 1,199,960  | \$ 64,846                                   | \$ 1,264,806                                       | -16                                      | \$ 1,500,000      |

## LÍLWAT NATION & SQUAMISH NATION CONSIDERATIONS

The RMOW is committed to working with the Líl'wat 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.

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## COMMUNITY ENGAGEMENT

Level of community engagement commitment for this project:

Inform     Consult     Involve     Collaborate     Empower

This report outlines the RMOW's plan to keep the community informed throughout the Project. We will utilize a multi-pronged approach to ensure residents are aware of project details and potential impacts:

- **Social Media:** Regular updates will be posted on the RMOW's social media channels, providing project information and timelines.
- **Project Signs:** On-site signage will be displayed at project locations, detailing the work being done and estimated durations.
- **Letters to Impacted Residents:** Residents directly affected by construction will receive personalized letters outlining the project scope and potential disruptions.

This approach adheres to the "**Inform**" level of public participation as defined by the International Association of Public Participation (IAP2).

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## REFERENCES

Appendix A – E205-02 Tender Award Recommendation

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## SUMMARY

Staff recommend awarding the Project to Coastal Mountain Excavations Ltd. for \$1,199,960 (excluding GST) due to their competitive bid and strong qualifications. The Project aligns with the RMOW's infrastructure plan, improving water system reliability and sustainability.

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## SIGN-OFFS

### Written by:

Chelsey Roberts,  
Manager of Infrastructure Projects

### Reviewed by:

James Hallisey,  
General Manager of Infrastructure Services

Virginia Cullen,  
Chief Administrative Officer