

City of Mississauga

Corporate Report



Date: November 15, 2021 To: Chair and Members of General Committee	Originator's files:
From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works	Meeting date: December 1, 2021

Subject

Amendment to Existing Consultant Contract – Procurement No. PRC001263 (Aquafor Beech Limited) to include additional Construction Supervision and Administration Services for the Applewood Creek Erosion Control Project through Lakeview Golf Course (Ward 1)

Recommendation

That the Purchasing Agent be authorized to increase the existing contract (Procurement No. PRC001263) with Aquafor Beech Ltd. by an estimated additional amount of \$157,309, funded from PN 18-135, to an estimated revised total contract value of \$461,391 (excluding taxes) to allow for the extension of specialized construction supervision and administration services over the full duration of construction for the Applewood Creek Erosion Control - Lakeview Golf Course project.

Executive Summary

- The Applewood Creek Erosion Control - Lakeview Golf Course project was awarded to Aquafor Beech Ltd. (ABL) in 2019 to undertake an Environmental Assessment (EA) study, detailed design, and provide construction supervision services for the recommended creek works.
- Detailed design of the erosion control works has been completed and includes a re-alignment and widening of Applewood Creek through the Lakeview Golf Course which requires modifications to several greens, fairways, cart paths, bridges and the irrigation system.
- Staff recommends that the existing contract with ABL be amended to undertake additional specialty construction supervision and administration services throughout the duration of construction of the project, scheduled for fall of 2021 through summer of 2022.
- In accordance with the Purchasing By-Law 374-06, Section 18(2)(d)(i), the requested funding increase to undertake additional specialty construction supervision and administration services is greater than \$100,000 and 20 percent of the original contract value, therefore Council approval is required in order to authorize the Purchasing Agent to proceed with this increase.

Background

Applewood Creek flows through the City-owned Lakeview Golf Course between the Dixie Outlet Mall and the CN Railway in the southeast corner of the City (refer to Appendix 1). Currently, the creek is channelized and its banks are lined with stone-filled gabion baskets that were installed 30 to 40 years ago over the entire 1.3 km (0.8 mile) length through the golf course.

The gabion baskets are approaching the end of their life-span, with many sections beginning to fall into the creek, posing a significant risk to the safety of golf course users and the environment. The City identified this reach of Applewood Creek as a high priority site in need of rehabilitation.

In 2019, the Applewood Creek Erosion Control - Lakeview Golf Course project was awarded to Aquafor Beech Limited (ABL) to undertake an Environmental Assessment (EA) study and detailed design for the creek restoration works. The assignment also included an allowance for up to four months of construction supervision and administration services during the construction of the creek works.

Comments

Following the recommendations of the EA study, detailed design of the erosion control works was undertaken in 2020-2021 and construction is now underway. The planned work includes removal of the failing gabion basket banks and restoration of the creek using a wider natural channel configuration which follows a more gentle winding alignment through the golf course. Benefits of this project include:

- Repair of existing erosion damages;
- Increased flood conveyance capacity;
- Water quality improvements;
- Long-term fish and wildlife habitat improvements; and
- Improved golf course aesthetics and playability.

The recommended widening and re-alignment of the creek also requires some minor modifications to the Lakeview Golf Course itself, including:

- Minor reconfiguration of fairways, tees and greens on several holes immediately adjacent to the creek;
- Re-alignment of the cart path adjacent to the creek;
- Replacement of five bridge crossings over the creek; and
- Alterations to the golf course irrigation system, including removal of an existing pond.

The above golf course modifications were included in the overall project design based on consultation with Community Services' recreation and golf course staff.

Given that the Lakeview Golf Course is a designated heritage property, a report was presented to the City's Heritage Advisory Committee at its meeting of May 11, 2021. This report concluded that the proposed changes to the golf course would not alter the original course design and would either maintain or improve the heritage characteristics of the course. The Heritage Advisory Committee reviewed the report and approved the request to alter the property at 1190 Dixie Road. Heritage Property Permit HPA 21-11 was issued in May 17, 2021.

During the procurement of consulting services and based on staff experience with similar erosion control projects, it was anticipated that construction of the creek works would take place over roughly four months between November and March while the golf course was closed. However, due to the extent of additional works required, including alterations to the golf course itself to accommodate the wider re-aligned creek, the construction duration and the types of specialty inspection services required will be more extensive than originally planned.

The majority of the creek-related construction work is still expected to take place over the winter. However, the alterations to the golf course will take place in the subsequent growing season once the ground thaws (around April to mid-July). As a result, construction is now expected to extend over a period of approximately nine months from late November 2021 to mid-July, 2022.

Given the above, it is recommended that the existing contract with ABL be amended to increase it for an additional five months of construction supervision and administration services, including additional services from the consultant team's golf course landscape architect and irrigation specialists. In doing so, the City will benefit from the ABL team's above-noted specialized knowledge of the site-specific environmental constraints, City and agency requirements, design nuances, and continuity of knowledge on this project. Based on ABL's fees estimate, an increase to the existing contract in the estimated amount of \$157,309 is required (refer to Appendix B).

The contract increase recommendation will require Council approval in accordance with Purchasing By-law 374-06, (Section 18(2)(d)(i) for contract increases exceeding \$100,000 and 20 percent of the original contract value.

Strategic Plan

The implementation of this project falls within the *Connected* Strategic Pillar under its strategic goal to *Build and Maintain Infrastructure*, and within the *Green* Strategic Pillar under its strategic goal to *Lead and Encourage Environmentally Responsible Approaches*.

Financial Impact

Table 1 below outlines the status of the existing and proposed revised contract amounts with ABL. PN 18-135 Applewood Creek Erosion Control - Lakeview Golf Course has sufficient funds available to accommodate the recommended increase.

Table 1	
Contract Items	Applewood Creek Erosion Control - Lakeview Golf Course (PRC 001263)
Original Contract Value	\$209,955
Approved Change Orders – Heritage Impact Assessment, Archaeologic Investigation, Soils Testing, Hydrant Testing, Reptile Rescue, Golf Course Design Consultation	\$94,127
<i>Proposed Fees for Additional Specialized Construction Supervision & Administration Services</i>	<i>\$157,309</i>
Total New Contract Value (excluding taxes)	\$461,391

Conclusion

An estimated increase of \$157,309 (excluding taxes) to the existing contract with ABL for construction supervision and administration services over the full duration of construction for the Applewood Creek Erosion Control - Lakeview Golf Course project represents good value as ABL and its golf course design sub-consultant team have worked closely with Community Services' recreation and golf course staff on the design changes that will be implemented to Lakeview Golf Course as part of the erosion control works on Applewood Creek. There is sufficient funding under PN 18-135 Applewood Creek Erosion Control - Lakeview Golf Course to accommodate the recommended increase.

Attachments

Appendix 1: Location Map for Applewood Creek Erosion Control Project through Lakeview Golf Course

Appendix 2: Aquafor Beech Limited Change Order Request for Construction Administration and Inspection



Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

Prepared by: Greg Frew, P.Eng, Stormwater Drainage Engineer