

STAFF REPORT

Date: 2025-09-04

To: Electoral Area Services Committee

From: Sterling Chan, Deputy Director of Engineering

Subject: Athey Rd Bank Stabilization Contract Award

Reviewed by: Tareq Islam, Director of Engineering & Utilities

Beth Klein, Controller/Deputy CFO

Jennifer Kinneman, Chief Administrative Officer

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize its signatories to execute a contract with Jakes Construction Ltd for the amount of \$1,986,456.20 for the construction of the shoreline protection works at Athey Rd;

AND THAT the FVRD Board authorize its signatories to execute a sole-sourced purchasing contract with the Fraser Valley Watersheds Coalition for the amount of \$984,859.80 for the required riparian restoration work and long-term effectiveness monitoring;

AND FURTHER THAT the FVRD Board authorize its signatories to execute an agreement with Fisheries and Oceans Canada and to provide them with Letters of Credit of \$150,000 for a 10 year term and \$800,000 to be held until the completion of the riparian restoration works;

AND FINALLY THAT the FVRD Board authorize its signatories to execute an agreement with the Nicomen Island Improvement District for these works.

BACKGROUND

Nicomen Island is protected from flooding by the Fraser River by 35km of dikes and five pump stations owned and operated by the Nicomen Island Improvement District (NIID). The shorelines adjacent to Athey Rd, located on the eastern side of Nicomen Island have historically been susceptible to erosion from the Fraser River. While the dike is setback from the shoreline, the rate of foreshore erosion has accelerated in recent years with the Fraser River advancing 46m since 2015 with 27m being in 2021 alone.

Bathymetric survey conducted following freshet in 2023 revealed the presence of a 13m deep scour hole having formed since 2019. This confirmed that bank stabilization is required to protect the

previously installed shoreline works from further failure as a result of continued scour and outflanking and to prevent the compromise of the Nicomen Island Dike.

In the fall of 2023, Staff worked with WSP to develop a conceptual design for the stabilization of the shoreline in this area. Staff were then successful in securing \$5,000,000 in grant funding under the Investing in Agriculture Foundation (IAF) Fraser Valley Flood Protection Program to complete bank stabilization works in this area.

With this funding in place, WSP was further engaged to complete the detailed design and prepare the necessary regulatory applications for this work. The key tasks included topographic survey, geomorphological assessment, hydrotechnical assessment and finally detailed design. Additionally, environmental overview assessments and construction environmental management plans were required to support the necessary permitting requirements under the *Water Sustainability Act* and the *Fisheries Act*.

DISCUSSION

WSP's final design of the shoreline protection works was developed in conjunction with stakeholders Leq'a:mel First Nation (LFN) and NIID. The site is located within the heart of LFN's traditional territory and NIID will be the ultimate owner of the works. The design involves the installation of 100m of riprap along the Fraser River shoreline, the installation of a 337m buried self-launching riprap trench set back from the Fraser River bank and the installation of a large woody debris habitat structure along the shoreline. Any disturbance to the riparian area in and around the site is to be restored following the completion of the works.

As a condition for authorization under the *Fisheries Act*, Fisheries and Oceans Canada (DFO) has required additional habitat offsetting to counterbalance the impacts of this project. Staff worked with LFN to identify nearby opportunities to satisfy this requirement. Ultimately, a plan to restore riparian habitat on a tributary of Nicomen Slough, at a site owned by The Nature Trust of BC was selected. Once complete, DFO requires that the restoration work at the Nature Trust Site and at Athey Rd be monitored and maintained for 10 years to ensure their success.

The shoreline protection works (riprap and large woody debris structure) was recently put out to tender. Of the bids received, Jakes Construction Ltd had the lowest bid price coming in at \$1,986,456.20. Staff have reviewed the tender from Jakes Construction Ltd and confirmed that it meets all of the tender requirements.

Staff propose to sole-source the construction, maintenance and monitoring of the riparian restoration work both at Athey Rd and at the Nature Trust site to the Fraser Valley Watersheds Coalition (FVWC). The FVWC has prepared a work plan developed in conjunction with LFN that utilizes LFN Guardians for much of the planting, maintenance and site monitoring. The value of this work is \$984,859.80. In this instance, sole-sourced purchasing aligns with Section ii of the sole-source provisions in the FVRD's Procurement Policy:

Prior to the issuance of an authorization under the *Fisheries Act*, DFO requires letters of credit to secure the riparian restoration work. A \$800,000 letter of credit is required to secure the construction of the work, which will be released following its completion in early 2026. A second \$150,000 letter of credit is required to secure the maintenance and effective monitoring of the riparian restoration work over a 10 year maintenance period. This letter of credit will be released at the end of the 10 years.

Should the riparian planting's effectiveness fall below objectives, DFO may require replanting and or additional maintenance measures. The FVWC's work plan has a small contingency for replanting; however, should significant work be required the FVRD does not have a service area to cover the cost. Instead, NIID has agreed to take on the responsibility for these costs. An agreement between the FVRD and NIID is required to formalize this arrangement.

COST

This project is funded through a \$5,000,000 grant under the IAF Fraser Valley Flood Protection Program.

The FVRD does not have a specific service area for Nicomen Island Flood Protection and any additional costs associated with the administration of the letters of credit cannot be claimed under the grand funding; therefore must be paid from the Electoral Area Administrative budget.

CONCLUSION

Based on the analysis and considerations discussed, it is recommended that the FVRD enter into contracts with Jakes Construction Ltd for the shoreline protection works and the FVWC for the construction, maintenance and monitoring of the riparian restoration work both at Athey Rd and at the Nature Trust site. The shoreline protection works were tendered with Jakes Construction Ltd having the lowest bid price. The sole-source to FVWC is justified by its collaborative work plan with LFN.

Furthermore, it is recommended that the FVRD issue letters of credit to DFO securing the construction, maintenance, and effectiveness monitoring of the riparian restoration works required for authorization under the *Fisheries Act*.

Finally, it is recommended that the FVRD enter into an agreement with NIID to cover the cost of any replanting and or additional maintenance measures required by DFO.