

REQUEST FOR DECISION (RFD)

Date: October 12, 2021
To: Her Worship Mayor Qualizza and Members of Council
From: Mark Rowlands, Acting Director of Operations
Subject: Consolidating Dike and Active Transportation Engineering and Design

RECOMMENDATION

THAT COUNCIL APPROVE an amendment to the current Engineering Services contract for Annex Dike Improvements between McElhanney and the City to allow for the delivery of engineering and project management consulting services for two additional projects including the Fernie Valley Pathway Segment 1B & the Annex Park Improvements project.

THAT COUNCIL APPROVE creating an Advisory Committee to guide the creative elements of the active transportation network improvements.

AND THAT COUNCIL PROVIDE City staff guidance on selecting Committee members with the appropriate skills to achieve the city design of choice.

PURPOSE

The purpose of this report is two-fold:

1. **Engineering Services:** Gain approval to amend McElhanney's existing Annex Dike Improvements engineering services contract to include the Fernie Valley Pathway (FVP) Segment 1B project and the Annex Park Improvements projects. The goal is to complete the construction of all projects in the summer & fall of 2022.
2. **Advisory Committee:** Gain approval and guidance to set up an advisory committee to help advise the City and McElhanney on the innovative features that will be present throughout the combined project's pathway. These features include informative and way-finding signage and experiential wellness stations from the Leo T. Nimsick Bridge to Mount Fernie Park Road. The advisory committee's recommendations need to finalize early in 2022 to incorporate them into the project ahead of procurement and construction.

BACKGROUND

Reviewed by:			
	Director of Corporate Administration Services 	Director of Finance 	Other:

THE PROJECTS

The City has successfully obtained three individual grants for these projects. Because these projects are interconnected and overlapping, they allow the City to combine them into a single project achieving improved integration and cost savings.

Annex Dike Improvements project (Figure 1):

Background

The Annex Dike Project is the City's third significant flood mitigation and protection initiative valued at \$4.975 million, funded by the BC Adaptation Resilience a Disaster Mitigation Program. McElhanney is currently the engineering consultant on this project under contract to the City.

The Annex Dike currently offers flood protection for over 900 residential, 113 commercial & 6 industrial properties, where over 2,000 citizens reside in the Annex neighbourhood.

Description

The Annex Dike Improvements project involves raising and improving the inadequate dike to the provincially mandated standard and improving existing erosion protection.

FVP Project (Figure 2):

Background

McElhanney, through the FVP, had previously prepared the preliminary (80%) design of the FVP project, which was a pathway connecting the West Fernie Bridge to the Fernie Alpine Resort. Splitting the project into segments was based on jurisdictional boundaries. Segment 1 was within the City limits.

Segment 1A of the FVP is currently being completed and fully funded by BC MoTI. Segment 1B of the Fernie Valley Pathway is a 1.69 km active transportation corridor that extends from McLeod Ave in West Fernie to Mount Fernie Provincial Park Road. The City received a \$1,619,000 grant to fund this project from the Investing in Canada Infrastructure Program (ICIP) – COVID-19 Resilience Infrastructure Stream (CVRIS) through the Government of Canada and the Province of British Columbia.

Public safety and response to climate change through active transportation measures are the primary drivers for developing the FVP. Many people commute and recreate using non-motorized transportation modes along the corridor, currently unprotected on the shoulder of Highway 3.

Description

The FVP 1B will provide a safe, vehicle-separated paved pathway along with Highway #3 from McLeod Ave to Mount Fernie Park Road.

Annex Park Improvements

Background

The City recognized the importance of Annex Park as a vital feature of the City. The City applied for additional funding to improve the Park's pathway system and features that benefit the community. The City successfully applied to the Active Transportation Infrastructure Grant, receiving \$500,000 in funding and committing \$263,850 from the Capital Reserve. McElhanney has completed the 90% design of the pathway improvements oration of this project. Part two of

this RTC seeks approval from the Council to form the advisory committee that will guide the development of the creative components of this project.

Description

The project comprises a paved pathway along the Annex Dike from the West Fernie Bridge to the Leo T. Nimsick bridge and paving the riverside pathway along the Attack Dike. The project also provides improvements to the Park's access ramps to allow for increased accessibility and inclusiveness. Further, strategically located wellness or experience stations are envisioned along the pathways to provide users with a unique and informative experience.

The Opportunities

In combining these projects into one project, the City sees the following opportunities:

Budget Efficiencies (Figure 3)

As noted previously, these projects are linked or overlapping. For example, the Annex Dike and Attack Dike form the foundation of the Annex Park's pathways. Completing the improvements to the Annex Dike must occur ahead of the Annex Park's pathway improvements and wellness stations. The Fernie Valley Pathway and the Annex Park Pathways are linked together by the West Fernie Bridge. The combined value of the projects is \$7.178 million.

Large projects offer opportunities for increased efficiencies with their economy of scale. All three projects will require coordinating materials, equipment, and skilled workers. The proposed strategy allows for the following opportunities:

Increased Competition: The total budget is also high enough to attract firms beyond the local area, increasing competition and forcing contractors to submit more competitive bids.

Simplified Management: One construction management consultant and the City Staff team can also manage the combined project more efficiently. This approach reduces consulting and staff costs, as noted in Figure 3.

All these opportunities, when combined, are expected to net considerable savings.

Consistency

When completed, the projects would form an Active Transportation corridor that stretches for 4.2km. Consistency concerning design standards, signage, way-finding and experiential features is vital throughout this corridor and delivers on multiple master plan priorities.

Public consultation is another crucial component of these projects. A consistent project team will allow for a streamlined approach to engaging with the public and Council and incorporating the public's input into the designs.

During construction, pedestrian detours will need to be in place to allow for work to proceed. Viewing these projects and their impacts holistically will allow for more opportunities to limit the resident impact.

Capabilities of the Consultant

One common feature in all these projects that is essential to meeting our goals and financial commitments is that the engineering services have all been contributed by McElhanney, as follows:

1. ***Annex Dike Improvements project*** – McElhanney supported the City Staff in preparing the grant application and is the contracted engineer on behalf of the City to design &

project manage the construction of the improved Annex Dike starting in the spring of 2022.

2. **Fernie Valley Pathway Project** – McElhanney completed the design and prepared the grant application in conjunction with the Fernie Trails Alliance following a competitive selection process.
3. **Annex Park Improvements** – McElhanney completed the grant application for these enhancements on behalf of the City. McElhanney also completed the 90% design of the pathway improvements.

The past work completed by McElhanney on the Fernie Valley Pathway and Annex Park Improvements projects are essential to note because another consultant would have to undertake substantial rework to advance the projects to their current stage. The additional work would burden the budget and extend the needed schedule, making the 2022 construction deadline a challenge to meet.

Staff recommend tendering the project as one construction contract to benefit from the opportunities we previously identified fully. To do this, it must be under the project management of one consulting firm. Since McElhanney has an existing contract for the Annex Dike Improvements and has completed the above-noted work on these projects, they are the logical firm to undertake this task.

Staff have reviewed the capability of McElhanney to provide the variety of services needed on this combined project. They have a proven track record on similar work, including the Maiden Lake Dike (and pathway) Improvements for the City and numerous pathway and trails projects completed by their trails design team. The Rock Mountain Legacy Trail from Banff to Canmore and the Fernie Trails Master Plan are noteworthy projects. McElhanney also offers all the in-house design support required, including Landscape Architecture support, legal surveying, transportation, civil, trails, and structural engineering.

Schedule (Figure 4)

The Workplan Schedule includes the following basic steps with further detail in Figure:

- Environmental Regulatory Permits - Summer 2021
- Public Consultation – Fall 2021
- Site Preparation - Spring 2022
- Construction - Spring - Fall 2022
- Completion and Reporting - Fall 2022

Advisory Committee

Committee Approach

Staff also recommend the establishment of an advisory committee, reporting to the consultant to support the development and design of non-engineered aspects of the project. Staff and the consultant would develop a TOR and call for applicants to be appointed by Council for a time-durated advisory committee reporting to the consultant to review material and provide recommendations as they implement this project. The selected members on this committee should represent key stakeholder groups in the community. Staff are suggesting they be recruited by the consultant to from the following:

- Yaqıt ʔa·knuq̓i 'it (Tobacco Plains) (1)
- Ktunaxa Nation (1-2)
- Families and Educators through School District 5 (1)
- Families and Educators through École Sophie-Moreau -Conseil Scolaire Francophone (1)
- Families and Educators through Fernie Academy (1)
- Fernie Trails Alliance (or member clubs) (1)
- Fernie District Historical Society (1)
- Elk River Alliance (1)
- Tourism Fernie (1)
- Seniors Centre Association (1)

The committee would also include a trails design engineer or landscape architect from McElhanney and possibly others based on expertise in physical and mental wellness. The Director of Operations would represent the City on the committee, and staff are seeking suggestions from Council as to other community representation that may benefit the project to inform recruitment.

The context of the committee's role and how each member fits into it with their unique skills will be essential. The committee's formulation process would include identifying participants and inviting them to the committee meetings (e.g., biweekly). The City would send out a package to each appointee to help them understand their role and responsibility within the project. The terms of the reference package would then be updated with the committee representation and published onto the Fernie website.

Recommendations from the committee will be assessed by the consultant and the Director of Operations, and presented to Council both for information and for decision where required

INTERNAL CIRCULATION

The CAO, Director of Corporate Administration, and Director of Finance have reviewed this report. Further work will involve internal collaboration across the following departments:

- Financial (procurement requirements),
- Planning (OCP, community design, Master Plans),
- Engineering (maintenance, quality construction & design)
- Parks, Recreation and Facilities (Community wellness & connectivity, and maintenance).

LEGAL/STATUTORY AUTHORITY

N/A

LEGAL/STATUTORY PROCEDURAL REQUIREMENTS

N/A

COMPLIANCE WITH CORPORATE STRATEGIES & POLICIES

Council approval is required for purchases above \$100,000. One design work is done the procurement and construction process will follow the City's standard policy.

FINANCIAL/BUDGETARY CONSIDERATIONS

The following table itemizes the budget for implementing these projects based on previous council commitments and the grant funding agencies. The \$263,850 is to be funded from the Capital Reserve as previously approved by Council. The 2021 budgeted ending balance of this reserve is \$1,365,512.

<i>Project</i>	Grant	City Commitment
<i>Annex Dike Improvement Project</i>	4,795,000	0
<i>Fernie Valley Pathway Project</i>	1,619,000	0
<i>Annex Park Improvements</i>	500,000	263,850
	\$6,914,000	\$263,850

PERSONNEL IMPLICATIONS

Asset Management will require some comment on pathway maintenance, dike maintenance, and station maintenance translating to budgets, equipment & personnel.

The Asset Management Working group previously discussed during budgeting has been re-established and will play a role in informing ongoing budgets for maintenance and renewal.

EXTERNAL AGENCY/PUBLIC COMMENTS

Ongoing approvals and consultation as previously identified in the Annex Dike Improvements project. Public consultation as described in Section 2 of this RTC via the Advisory Committee.

Approvals from the BC Ministry of Transportation, Fortis Gas, and the Ministry of Forests, Lands, Natural Resource Operations and Rural Development for the Fernie Valley Pathway project are required.

The Annex Dike Improvements regulatory approvals would cover the Annex Park Improvements project's regulatory approvals.

COMMUNICATION CONSIDERATIONS

Established external communications regarding the annex dike project are currently underway, with a landing page on fernie.ca and a project page on letstalk.fernie.ca.

Should Council approve, both resolutions staff would then complete tendering documents and publish as required.

Once complete, the Committee TOR and recruitment strategy will be brought forward for Council approval, then external communications regarding the combined project will be initiated.

OPTIONS

Council has the option to move forward in three ways as follows:

1. Combine all three projects into one with the advantages noted in this report.
2. Combine the Annex Dike project with the Annex Park Improvements.
3. Tender all projects separately.

Options 2 & 3 would require the development of proposals for the engineering services challenging the schedule goal of completion in 2022 and diminishing the noted economy of scale and consistency advantages despite the advantage to enable smaller companies to compete for this work.

CONCLUSION

In conclusion, the City has committed to moving forward on these three projects, which were priced out separately and can realize financial advantages of the economy of scale in tendering these projects as one and the related reduced engineering services needed to design, and project manages them together. This single project approach can best achieve the challenging construction target deadline in the fall of 2022.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "H. Hanley", is written over a horizontal line.

Attachments:

1. Figure 1 – Annex Dike Improvements Project
2. Figure 2 – Fernie Valley Pathway Project
3. Figure 3 – Project Engineering Budgets and Notable Efficiencies
4. Figure 4 – Project Schedule
5. McElhanney Statement of Qualifications



Figure 1 – Annex Dike Improvements Project

Reviewed by:			
	Director of Corporate Administration Services 	Director of Finance 	Other:

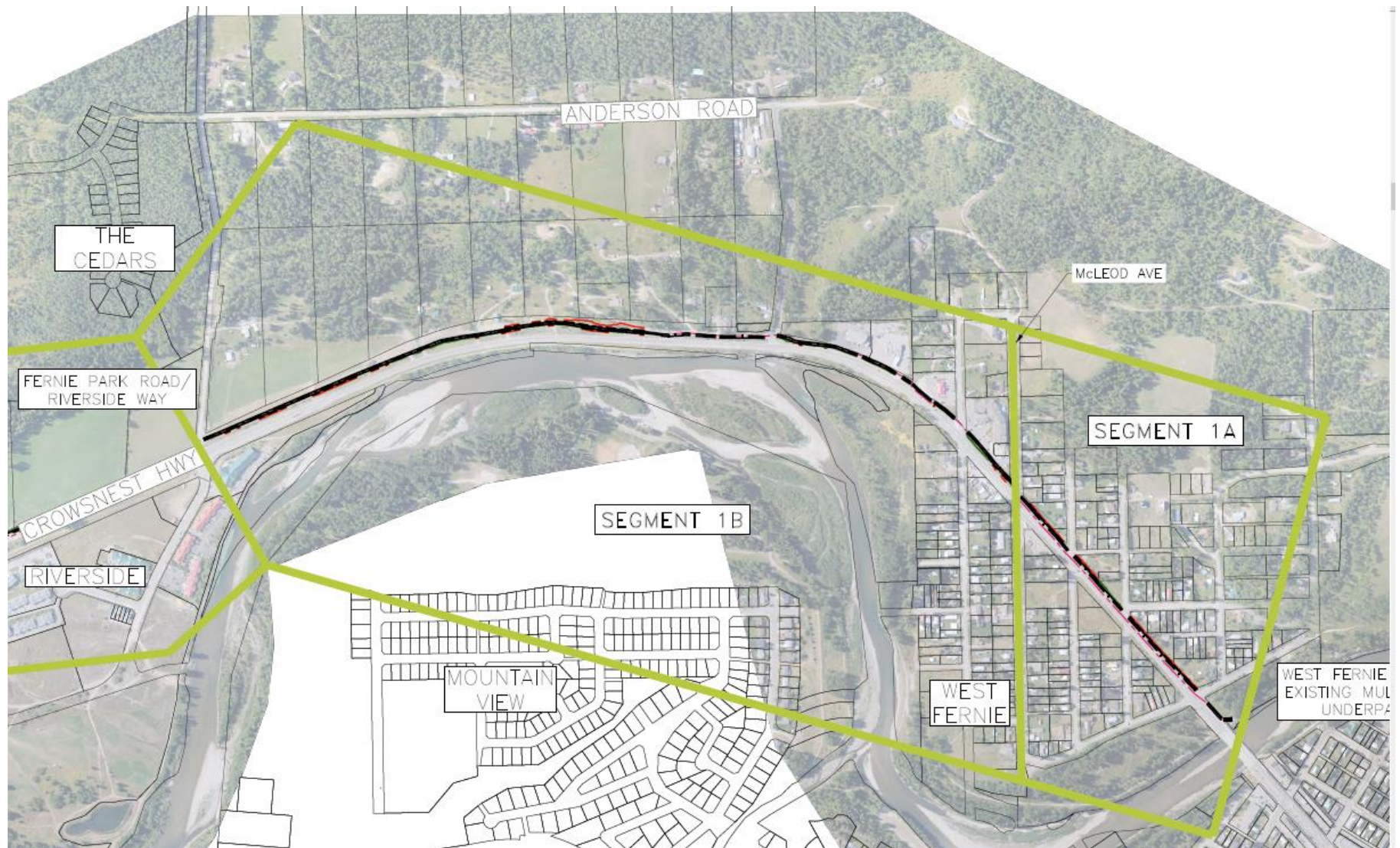


Figure 2 - Fernie Valley Pathway Project

Project Engineering Budgets and Notable Efficiencies

Annex Dike Improvements, Fernie Valley Pathway (Seg 1B) and Annex Park Pathway Improvements



Project Phase	Annex Dike Improvements	Fernie Valley Pathway	Annex Park Pathway Improvements	Notable Efficiencies
Project Management	\$ 6,810	\$ 4,352	\$ 1,514	Combining projects reduces project management and administrative burden
Design	\$ 89,599	\$ 57,263	\$ 19,913	Major efficiencies - see below
Regulatory Approvals	\$ 24,366	\$ 15,572	\$ 5,415	Annex Park Pathway Improvements and Fernie Valley Pathway will require MOTI approval which can be combined into one application
Public Consultation	\$ 9,589	\$ 6,128	\$ 2,131	The project's borders are overlapping and interconnected. Completing the public consultation in unison is logical.
Tendering and Construction Mgmt.	\$ 138,392	\$ 88,446	\$ 30,758	Combining the construction contracts into one contract will reduce the construction management and administrative burden. It will also attract larger contracting firms, which pushes pricing down through increased competition and allowing for increased efficiencies during construction.
Project Close-out Documents	\$ 6,194	\$ 3,959	\$ 1,377	The record drawings required to comply with the regulatory agencies can also be used as record drawings for the City.
Engineering Total	\$ 274,950	\$ 175,720	\$ 61,108	<i>Fernie Valley Pathway and Annex Park Pathway Improvement totals are preliminary, based off the grant application budgets. Finalized budgets will be negotiated prior to contract execution.</i>

Design Efficiencies

- During the design of the Annex Dike Improvements we developed designs of the Annex Park's pathway improvements into the design drawings. These drawings are currently at 90% and are progressing towards 100%. The majority of the remaining design effort will for the rest/activity stations as part of the recent grant.
- McElhanney, through the Fernie Trails Alliance completed the preliminary design (approximately 80%) of the Fernie Valley Pathway from the West Fernie Bridge to the Ski Hill. This work included the design of the Segment 1B of the Fernie Valley Pathway. Because of this previous work, we have already advanced the design to the 80% stage and we are well positioned to complete the work.
- The three project's borders are overlapping and interconnected. Because of this it would be very cumbersome to design the projects in isolation of each other, and it is only logical to design all three in unison to ensure a consistent approach is taken to all three.

Figure 3 – Engineering Budgets and Notable Efficiencies

Annex Dike Improvements, Fernie Valley Pathway (Seq 1B) and Annex Park Pathway Improvements

