



**Engineering Services
Information Package
for the Fernie Valley
Pathway**

August 10, 2021

Prepared by McElhanney

Contact

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**Your Challenge.
Our Passion.**



August 10, 2021

Attention: Mark Rowlands, PEng – Acting Director of Operations

Executive Summary

The City of Fernie, in partnership with the Fernie Trails Alliance (FTA), has been awarded \$1,619,000 from CVRIS for segment 1B of the Fernie Valley Pathway (FVP). This grant will fund the detailed design and construction of the Segment 1B of the FVP.

Segment 1B is a 1.69 km active transportation corridor that will extend from McLeod Avenue in West Fernie to Mount Fernie Provincial Park Road. It is one portion of the larger FVP, which is a 6.1 km paved, multi-use pathway from the City of Fernie to Fernie Alpine Resort. It is intended to be a safe and direct link to the residential neighbourhoods and businesses along the Highway 3 corridor, recreation areas, and Fernie Alpine Resort.

We have prepared this Information Package to provide the City with an understanding of the services we can offer. We have a long history working on this project and we are well versed in trails and pathway construction projects. We have assembled a team of experts that includes local project management talent and technical experts. This will allow us to provide both large firm expertise and local support.

Having already completed the preliminary design, the CVRIS grant application, and many other relevant pathway projects in the City, we have gained a understanding of the project and the City's processes and priorities. We understand the key issues that will need to be addressed to successfully deliver this project. Further to this there will be efficiencies to coupling this project with our ongoing Annex Dike Project.

In this information package we discuss the advantages to choosing McElhanney as the engineering services consultant for this project and

We are excited for the opportunity to work with the City once again. Should you have any questions or concerns regarding the contents of this proposal, please do not hesitate to contact the undersigned.

Sincerely,
McElhanney Ltd.



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Key Opportunities

ACCELERATED SCHEDULE

The CVRIS grant funding application that McElhanney prepared with the City provided the following schedule:

Milestone	Start Date	End or Milestone Date
Engineering RFP Award		April 15, 2021
Engineering Design	April 15, 2021	June 15, 2021
MoTI Approvals	June 15, 2021	August 1, 2021
Tendering	July 7, 2021	August 1, 2021
Contract Award		August 9, 2021
Construction	August 9, 2021	July 15, 2022

As shown above, the delayed funding announcement has caused the schedule to slip past the first five of these milestone dates. The project's schedule must now be accelerated to allow for construction in early 2022.

McElhanney has completed the preliminary design of this project and in doing so we gained a thorough understanding of this project. We understand the remaining issues that must be resolved to advance the preliminary design and we know how to address these issues. One example, is the inaccurate legal boundary base plan. It is critical that we define the highway corridor and the surrounding properties accurately and ensure the trail does not encroach on private property.

Leveraging our past design effort on this project allows us to clearly understand where to focus our efforts. This will enable us to be efficient in the design process and submit for approval from MoTI as quickly as possible in 2021.

BUDGET EFFICIENCIES

This is a grant-funded project with a strict budget limit and there is no known opportunity to obtain additional grant funds. Our understanding is also that there are no capital funds allotted for any budget overruns. Therefore, it is crucial to keep the total project cost (including engineering, construction, and internal fees) under the grant amount to avoid cost overruns being borne by the City.



An excellent option for managing spending would be to combine the construction contract of FVP with the Annex Dike Improvements project. This would reduce engineering fees related to contractor management and would also reduce contractor fees for mobilization, pedestrian/traffic management, and bidding.

Combining the FVP Segment 1B with the Annex Dike Improvements Project will also result in a construction contract valued at approximately \$6.0M. This size of project will attract contractors from beyond the local area and push all bidders to submit very competitive bids. The cost savings that could be achieved are difficult to predict, but we expect they would be substantial. ***This is an immense opportunity that cannot be overstated.***

As McElhanney is already under contract with the City to perform the engineering and construction management services for the Annex Dike Improvements project we could efficiently combine the two projects into one construction contract.

STREAMLINED PUBLIC ENGAGEMENT AND DETOURING

Both the Annex Dike Improvements project and the FVP project will be major City of Fernie construction projects scheduled for the summer of 2022. Both will involve major construction in and around critical pedestrian and cyclist corridors. Combining the two projects through engineering design and construction will allow for a streamlined process through design, staging, public engagement, and construction. Any detour planning and staging during construction will be able to consider the entire length of pathway that will be impacted during planned 2022 construction, not just the sections within each project's boundary.

Public engagement is already planned for the Annex Dike Improvements project, prior to the planned 2022 construction. Combining this dike project with the FVP project will also allow any public engagement meetings and online processes to be combined and streamlined. We expect a number of residents would be interested in both projects, so this would simplify residents' ability to provide feedback for both projects.

Again, as McElhanney is already under contract with the City to perform the engineering and construction management services for the Annex Dike Improvements project, it would be a practical choice to engage McElhanney as the engineering consultant for FVP in order to achieve the efficiencies that can be gained by combining the two projects into one construction contract.



Relevant Experience

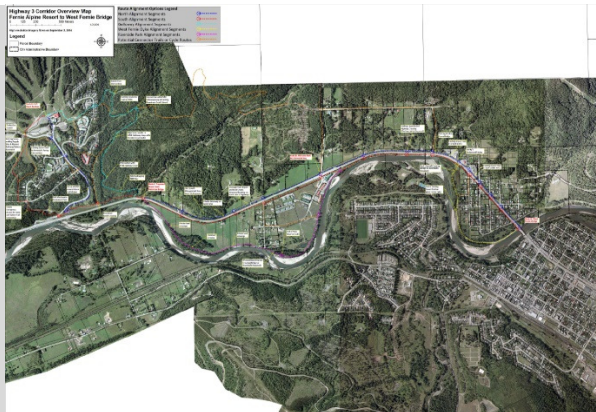
McElhanney has a strong history in providing excellent service to East Kootenay clients, including the City of Fernie. Our Fernie-based project management team will be supported by our trails design team from Canmore and our legal land surveyors, geotechnical and structural engineers in Cranbrook. We are proposing the same team that successfully delivered the preliminary design of the FVP and the Maiden Lake and Mountview Dike Improvement projects for the City of Fernie. This is also the team currently working on the Annex Dike Improvements project.

RELEVANT PROJECTS

Below we provide a summary of local and relevant projects to demonstrate our team's experience.

Fernie Valley Pathway Preliminary Design Report and CVRIS Grant Support, Fernie, BC

Year: 2020 | Client: City of Fernie via the Fernie Trails Alliance | Capital Value: \$90K



Relevance:

- Preliminary design of the project including Segment 1B
- CVRIS grant application preparation on behalf of the City
- Cost estimates to set the grant funding amount

Project Summary:

Working for the Fernie Trails Alliance, McElhanney developed a preliminary design, report and costs estimate of the overall FVP. Upon completion we then were engaged by the City to prepare a grant application to the COVID-19 CVRIS Grant which resulted in the successful award of the grant.

Mountview and Maiden Lake Dike Improvements, Fernie, BC

Year: 2019-2020 | Client: City of Fernie | Capital Value: \$2.5M



Relevance:

- City of Fernie dike and trails projects
- Grant funded projects
- MMCD Tender and Construction Contract
- Compressed design schedules
- Project and construction management

Project Summary:

McElhanney has successfully delivered two dike improvement projects for the city that also include multi-use trails. These projects included many relevant construction and design elements that will be similar to elements of the FVP Segment 1b including retaining wall structures, legal surveying, and road and trail improvements.

Annex Dike Improvements, Fernie, BC

2021-2022 | Client: City of Fernie | Capital Value: \$4.8M



Relevance:

- City of Fernie dike and trails project
- Grant funded project
- MMCD Tender and Construction Contract
- Adjacent to and can be combined with FVP.

Project Summary

McElhanney was retained by the City to provide engineering and construction management services to raise and improve the Annex Dike. The project's design includes substantial trail upgrades. We recently assisted the City in submitting a BC Active Transportation Grant to fund the paving and access improvements.



Rocky Mountain Legacy Trail Project, Banff National Park, AB

2015 | Client: Bow Corridor Regional Mobility Partnership |



Relevance:

- Multi-use pathway along a highway corridor
- Roadside and pedestrian crossing safety features
- Permitting and approvals
- Design and construction management

Project Summary:

The Legacy Trail extends from the Banff National Park East Gate to the Canmore Visitor Centre along the Trans Canada Highway #1 corridor. The trail's design included various highway crossings along pedestrian safety considering the vehicle traffic present on the roadway.

KEY TEAM MEMBERS

McElhanney provides a team of experienced professionals that will be led by our Project Manager, **Kevin Mohr**. Kevin is based locally in our Fernie office and is the current Project Manager of the Annex Dike Improvements project. Kevin will be supported by a combination of Fernie-based and Cranbrook-based local staff plus McElhanney's trails design experts from our Canmore office.



Kevin Mohr, PEng

Project Manager, Construction Contract Administrator

Primary Location: Fernie / **Year's Experience:** 13 years

Kevin will be the primary point of contact for communications with the City. As Project Manager, Kevin will be responsible for managing the successful delivery of the project, tracking costs and schedule, and maintaining communication with the City, the contractor(s), the consulting team, and regulators.

Kevin will also act as the contract administrator for the pathway. His experience in high-profile municipal projects, including the Annex Dike Improvements project and multiple other MMCD and MoTI projects, will allow him to carefully consider critical components and priorities to develop the best possible design.





Karen Prezelj, PEng

Senior Site Inspector, Reviewing Civil Engineer, Back-up PM

Primary Location: Fernie / **Year's Experience:** 8 years

Karen will be the full-time site inspector for both the Annex Dike Improvements project and the FVP project. She is an experienced site inspector and was the primary site inspector for both the Maiden Lake and Mountview Dike Improvements projects. She could be supported by a junior site inspector as needed to manage the larger combined contract of both Annex Dike and FVP.

Karen will also support the design process as the reviewer for all designs, as well as back-up support for Kevin's role as Project Manager.



Darin Langhorst, PEng

Design Lead, Engineer of Record

Primary Location: Canmore / **Year's Experience:** 17 years

Darin has prepared engineering plans and construction documents for major cycling and pedestrian trails, urban and rural bikeway trails and pathways, and many other civil engineering projects. Darin will lead the design of the project, leveraging his 17 years of experience on trails projects such as this one. He has ample experience on projects within highway corridors along with his experience leading the preliminary design of the FVP project.



Matt Hadley, B.Sc.

Trails Designer, Design Support

Primary Location: Canmore / **Year's Experience:** 17 years

Matt Hadley is an expert trail designer, specializing in mountain biking, hiking, and multi-use trails. He was instrumental in the preparation of the FVP preliminary design and his knowledge of the project and skillset are critical in advancing the detailed design efficiently.



Ryan Gibbard, PEng

Senior Geotechnical Engineer

Primary Location: Cranbrook / **Year's Experience:** 20 years

Ryan will serve as the senior geotechnical engineer on the project. He will be responsible for designing retaining walls, assessing the existing geotechnical data, performing geotechnical investigations, if required and providing geotechnical recommendations to the design team.

Supporting roles:

McElhanney will also pull support from our structural and bridge engineering, highway design, transportation safety, legal land survey, landscape architecture, and municipal engineering teams as required to complete the design. McElhanney also has a construction management division that can provide support during tendering, and construction should there be contractual related claims or issues.



Contact

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