

Request for Proposals

Professional Engineering Services For Arrowsmith Dam Inundation Study



Closing:

Proposal must be received before **Friday, March 15, 2024** at 3:00 pm Local Time

Closing Location, By Email Only:

bsilenieks@parksville.ca

Contact Person:

Barbara Silenieks, Utilities Technician

bsilenieks@parksville.ca

250 248-5412

Proposals will not be opened publicly

Contents

1.0 INTRODUCTION2

2.0 SCOPE OF WORK.....3

3.0 SCHEDULE4

4.0 PROPOSAL FORMAT5

5.0 PROPOSAL EVALUATION CRITERIA7

6.0 EXTRA WORK8

7.0 PROPOSAL SUBMISSION8

7.1. General8

7.2. Inquiries8

7.3. Instructions, Terms, and Conditions.....9

8.0 PROPOSAL COMMITMENT 11

1.0 INTRODUCTION

The City wishes to retain the services of a professional consultant to conduct a Dam Inundation Study for the Arrowsmith Dam.

The Arrowsmith Dam, a very high failure consequence concrete gravity dam founded on bedrock, was designed, and constructed between 1997 and 1999, and it was commissioned in September 2000. The dam is 14m in height and 75m long with a maximum base width of 12m. The crest elevation is 830m. Arrowsmith Lake is located approximately 4km east of the peak of Mount Arrowsmith and, due to snow, sometimes it is not accessible between November and April. The lake occupies the base of a steep sided glacial cirque. The Dam is in a watershed mostly composed of privately managed forest lands.

The Dam was built to supplement the Englishman River flow during the drier months (July-October) to meet domestic water demands and enhance fish habitat. The Arrowsmith Dam consists of concrete dam, reservoir, foundation, concrete spillway, plunge pool, water conveyance structures, flow control equipment, piezometers, and buildings. The Qualified Professional is to review and assess the components associated with a Dam failure and consequent inundation.

Consequences of Dam failure may include loss of life, injury, property and environmental damage, and general disruption of the lives of the population in the inundated area. This release may also affect aquatic habitat, recreational property, Parksville's water intakes, and other essential infrastructure. With an updated inundation study, that will take climate change into consideration, the City will be able to update the Emergency Response Plan with a more robust inundation map.

The Dam has been the subject of previous investigation and studies including the 2012 Dam Safety Review, the 2014 Inundation Study, and Annual Formal Dam Inspections. Previous investigation and studies will be made available and can be requested at any time.

The BC Ministry of Environment and Climate Change Strategy has established that the consequence classification for the Arrowsmith Dam is "very high". The Inflow Design Flood (IDF) for a "very high" classification is 2/3 between the 1/1,000-year flood and the probable maximum flood (PMF) as per the Canadian Dam Association (CDA) Dam safety guidelines (pg. 63 of 2013 revised edition).

2.0 SCOPE OF WORK

The following works present the minimum work plan and submissions required. Additional items may be included by the proponent wherever they believe those items are required or would bring greater value to the City.

The project must be described completely and accurately. The main body of the proposal should clearly state the proposed work and indicate how the awardee will meet specific objectives and performance measures for the period of the proposed work.

The general scope of work to be addressed by the proponent should include, but not be limited to:

GENERAL SERVICES

- Conduct a project kickoff meeting to be held virtually, or at the City's Public Works office.
- Prepare and distribute meeting agenda and minutes for the kickoff meeting.
- Review the 2014 Inundation Study and identify gaps in the study to the current standards and relevant regulations.
- Review all required record drawings, historical data, and documents needed for proper completion of this project.
- Conduct site visit with Operators.

DELIVERABLES

- Breach outflow hydrograph of a flood-induced dam breach with climate change adjustments.
- Breach outflow hydrograph of a sunny-day failure.
- Mapping of flood wave route through the downstream valley and floodplains.
- Mapping of maximum flood depth and extent.
- Mapping of flood arrival time, and information on time to maximum flood depth.
- Flood hazard map.
- Maximum flow, velocity, and increase in water level above normal conditions.

- Define risk zones based on the flow depth and velocity.
- Resulting damage to downstream communities, environment, structures, and potential loss of life.
- Preparation and submission of a digital draft and a final report, and two bound copies. The report should include a summary of the findings.
- Provide data files. Format to be FGDB (preferred choice) or Shapefiles.

SUPPORT INFORMATION

To ensure all required information is covered in this study, refer to:

- CDA – Emergency Management Dam Safety Technical Bulletin 2021
- CDA – Dam Safety Guidelines (latest edition)

Support documents provided in **Appendix 2**:

- Arrowsmith Dam Breach Study 2014
- Study area map

3.0 SCHEDULE

The following dates, other than the Request for Proposal (RFP) closing date, are guidelines only and may be adjusted based on the schedule proposed by the successful proponent.

RFP Closing Date – 3:00pm deadline	Friday, March 15, 2024
Anticipated Award Date	Tuesday, March 26, 2024
Tentative Start Date	Monday, April 8, 2024
Tentative Completion Date	Friday, July 5, 2024

The City reserves the right to engage the Consultant chosen from this RFP for future work related to this project.

4.0 PROPOSAL FORMAT

This section describes the expectations for proposal formatting. Any proposal submitted should be in general alignment with these expectations to facilitate comparative evaluation.

COVER LETTER / INTRODUCTION

Provide a single-page cover letter that succinctly demonstrates the proponent's understanding of key project issues and associated risk(s), experience, and strategies to make the project successful. The letter must include the name, address, telephone number, email address, title, and signature of the proponent's contact person for this proposal.

PROJECT TEAM, CORPORATE COMMITMENT AND PAST PERFORMANCE

Establish that the proponent's organizational structure and proposed team, including subconsultants and specialists, has the necessary technical and managerial knowledge to successfully complete the requirements of this project. As well, confirm the proponent's corporate commitment to the adhering to the terms and conditions of this RFP.

- Provide a brief introduction of the proponent's company and any required subconsultants.
- Identify the primary contact for the project. Should this primary contact not have the signing authority required to execute an agreement with the City, identify the individual who will fulfill this role in addition to the primary contact.
- Summarize the past relevant experience and performance of the proposed team's key personnel on similar works to those described within this RFP.
- Provide an organization chart showing the names and responsibilities of key personnel.
- Provide resumes (maximum two pages in length) for key personnel.
- State the corporate commitment to maintaining the proposed staffing for the entirety of the project and acceptance that subsequent substitution of staff and/or subconsultants shall be submitted in writing for review and approval by the City. Acceptance of any requested substitution is at the sole discretion of the City. The City reserves the right to request that the successful proponent replace a staff person assigned to the contract should the City consider such a replacement to be in the best interests of the City.
- State the corporate commitment to completing this project within the scope, budget, and timelines outlined.
- State the corporate acceptance of the terms and conditions of this RFP and attached Professional Services Agreement. Any deviation or exceptions to the terms and conditions

included within this RFP must be fully described. Any proposal which contains terms or conditions that are contrary to, or inconsistent with, those included within this RFP may be rejected at the discretion of the City.

- Confirm that the proponent carries adequate insurance, meeting or exceeding the levels specified within the Professional Services Agreement, and that proof of the required insurances will be submitted upon request.
- Include a completed copy of section *8.0 Proposal Commitment* from this RFP.

PROJECT UNDERSTANDING, SAFETY PROGRAM, METHODOLOGY, TASK LIST, AND DELIVERABLES

Communicate in detail the proponent's understanding of the project, its requirements, and important issues. Describe both the project management and technical methodologies proposed to be used. Clearly indicate all services which are to be included, excluded, optional, or to be provided by others.

- Describe the proposed methodology and approach to manage the project, as well as identification of risks to the project and how those risks will be managed.
- Identify areas where innovative solutions supporting the purpose of the project are proposed and how they could be leveraged to drive project success.
- Provide a description of the communication requirements and expectations between the City and the successful proponent.
- Provide a safety plan outlining the approach the proponent will take to ensure the safety of staff, the City, and any contractor for the duration of the project.
- List all phases of work, breakdown each phase into tasks, and discuss what is to be undertaken for each discrete task. Identify deliverables for each phase of work. At a minimum, the phases of work and deliverables listed in Section 2.0 Scope of Work of this RFP must be present. Additional phases and deliverables proposed to support innovative solutions or project management strategies will be acceptable.
- Provide a Gantt chart style schedule of each task and deliverable required to successfully complete all phases of work. The schedule is to start at the Anticipated Award Date listed in section 3.0 Schedule of this RFP. The schedule should include fifteen (15) working days for review of all submissions to the City.

FEES

Provide a fee schedule matching the phasing and detailed tasks proposed.

- The fee schedule must identify:

- Hourly rates and number of hours budgeted for each team member to complete each task proposed;
 - Any expected travel time, expenses, and disbursements required to complete each task proposed; and,
 - A total cost for each proposed task, a subtotal for each proposed phase of work, and a total cost for completion of the project.
- State the proponent's commitment to maintain hourly rates for all staff and any required subconsultants for the duration of the project.
- Hourly rates listed in the fee schedule shall be used for any extra work that is negotiated during the course of the contract.

5.0 PROPOSAL EVALUATION CRITERIA

The City will evaluate each proposal submitted on the basis of how well the proponents respond to the requirements of the RFP. Each submission will be assessed using a matrix scoring system as set out below. **Any submission received which does not include required elements will be deemed non-compliant and ineligible for award.**

PROJECT TEAM, CORPORATE COMMITMENT AND PAST PERFORMANCE - 35%

- Relevant experience
- Years of experience
- Professional accreditation
- Quality management processes
- Recent similar projects successfully completed by the project team
- Proven ability to efficiently collect, organize, and analyze information on existing site conditions over a large area and produce actionable recommendations

PROJECT UNDERSTANDING, SAFETY PROGRAM, METHODOLOGY, TASK LIST, AND DELIVERABLES – 35%

- Ideas for innovation and methods to deliver maximum value to the City
- Demonstrated understanding of project risks, opportunities, and requirements
- Safety Program and Philosophy
- Clearly articulated, well-detailed plans for each project phase. Breaking down each phase of work into the tasks to be undertaken and deliverables to be issued

FEES – 30%

6.0 EXTRA WORK

The consultant must receive written approval prior to commencing any additional works which will affect the project cost or schedule. The consultant is to submit a Change Order indicating the impact these extra or additional works will have on the project for written approval from the City.

A Change Order must also be submitted in the event the consultant's fees will exceed the original proposal amount (i.e. change to original budget must be requested and must be approved in writing). In this situation, the consultant may be requested to provide scope change alternatives to meet the original budget.

An invoice encompassing additional works that has not been approved in writing will not be accepted by the City.

7.0 PROPOSAL SUBMISSION

7.1. General

Before submitting proposals, proponents must satisfy themselves about the nature and location of the work, local conditions, the professional services, equipment, technology, and facilities needed for the execution of the work, and all other factors that might have a bearing on their proposal. Proponents are fully responsible for obtaining all information required for the preparation of proposals and the execution of the work.

Proponents are solely responsible for their own expenses in preparing and submitting proposals, and for any meetings, negotiations, or discussions with the City or its representatives and consultants, relating to or arising from this RFP. Proponents agree that by participating in the RFP process, and/or submitting a proposal, they have no claim for compensation.

7.2. Inquiries

All inquiries regarding this request for proposal must be directed to:

Barbara Silenieks
Utilities Technician
bsilenieks@parksville.ca

All requests for information (RFI) related to this RFP are to be submitted in writing by email at least 6 calendar days prior to the Closing Date.

7.3. Instructions, Terms, and Conditions

The following terms and conditions will apply to this Request for Proposal. Submission of a proposal indicates acceptance of all the terms that follow and that are included in any addenda issued by the City (which will be posted on BC Bid and the City website).

- Proposals must be received by the **Closing Time & Date**.
- Proposals should be emailed to bsilenieks@parksville.ca.
- Proponents are cautioned to carefully read and follow the instructions, terms and conditions required by this Request for Proposal as any deviation, omission, as well as any inaccuracies or misstatements may be cause for rejection. However, the City reserves the right, at its sole discretion, to waive minor irregularities and defects in a proposal and proceed with that respondent.
- Proposals must be executed by an authorized signatory of the proponent utilizing the Proponent Commitment section of this Request for Proposal.
- All proposals and subsequent information or material received shall become the property of the City and will not be returned. The proposals will be held in confidence by the City subject to the provisions of the *Freedom of Information and Protection of Privacy Act*.
- Proposals may be withdrawn by written request only to bsilenieks@parksville.ca at any time prior to the scheduled closing time. Proposals remain valid and may not be withdrawn, for a period of sixty (60) days following the deadline date for submission of proposals.
- Prior to the deadline date for submission of proposals, proponents must not contact any other representative of the City regarding this Request for Proposal, other than the designate for this project. Unauthorized contact with any City representatives, including members of City Council, may be cause for the rejection of the proponent's proposal.
- The City is under no obligation to award a contract as a result of this Request for Proposal and reserves the right to terminate this Request for Proposal process for any reason, at any time. The City may then do nothing, re-tender, sole-source or complete the work with the City's own forces.
- No proponent shall have any claim for any compensation of any kind whatsoever, as a result of participating in this Request for Proposal process, and by submitting a proposal each proponent shall be deemed to have agreed that it has no claim.
- This Request for Proposal and the successful proponent's response may form part of any contract or professional services agreement entered into with the City of Parksville.
- Any information acquired about the City by a proponent during this process must not be disclosed unless authorized by the City, and this obligation will survive the termination of the Request for Proposal process.

- The proponent, including all consultants, subconsultants, corporation or individual members of a proponent, will promptly disclose to the City any potential conflict of interest and existing business relationships they may have with the City or evaluation committee. The City reserves the right to disqualify any proponent who in its opinion has a conflict of interest, whether such conflict exists now or is likely to arise in the future.
- Pricing will be firm for the contract period unless this Request for Proposal states otherwise. All prices quoted are to be in Canadian funds including fees, charges, contingencies and applicable taxes.
- Any dispute arising from this Request for Proposal, or subsequent agreement, will be resolved according to the laws of the *Province of British Columbia*.
- Using a subcontractor (who must be clearly identified in the proposal) is acceptable. This includes a joint submission by two proponents having no formal corporate links. However, in this case, one of these proponents must be prepared to take overall responsibility for successful interconnection of the two products and this must be defined in the proposal.

8.0 PROPOSAL COMMITMENT

This section must be completed by the proponent and included as an appendix with their submitted proposal:

Provided that this proposal is accepted within sixty (60) calendar days from the closing date, the undersigned agrees on behalf of the company named below, to supply the goods and services listed at the prices quoted, under the terms and conditions set forth in this RFP document, the proponent's proposal, any and all addendum, which shall together form the agreement. This proposal is valid and enforceable for a period of not less than sixty (60) days following the closing date. In accordance with the terms, conditions, instructions, and specifications the undersigned agrees to supply products and services at the prices quoted.

Company Name:

Company Address:

Postal Code:

Phone Number:

Email Contact:

Signature of Signing Officer:

Printed Name of Signing Officer:

Title of Signing Officer:

Date:
