



Long Point Region Conservation Authority

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Sediment Management Plans - Vittoria and Teeterville Dams

Request for Proposal

8/3/2017

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1. Introduction

Long Point Region Conservation Authority (LPRCA) intends to hire a qualified Engineering Consultant to develop Sediment Management Plans (SMP) for Vittoria Dam and Teeterville Dam. The intention of the SMP is to acquire the supporting information to make decisions about the dams through a future environmental assessment process. LPRCA will evaluate the submitted proposals for engineering services received, and select a successful consultant to undertake the project.

2. Submission Details

The proposal must be clearly marked **“Sediment Management Plans –Vittoria and Teeterville Dam – Proposal - 2017”**. The submission should be addressed to Cliff Evanitski - General Manager and will be received at the Long Point Region Conservation Authority Office located at 4 Elm Street, Tillsonburg, Ontario N4G 0C4, until 3:00 pm on **August 24th, 2017**. Submissions received after this time will be returned unopened.

All submitted proposals including costs are public information and subject to the Freedom of Information and Privacy Act. LPRCA reserves the right to cancel this request for engineering services for any reason without any liability. Awarding of the contract based on the RFP must go before the LPRCA Board of Directors for final approval.

3. Proposal Contents

The proposal must contain sufficient information to allow LPRCA staff the ability to adequately evaluate the consultant’s qualifications and project understanding. As a minimum, the following information should be provided:

- a) Details outlining the approach and methodology to meet the scope and deliverables.
- b) Breakdown of tasks with hours of staff time and cost.
- c) The consultant’s commitment to assign necessary resources to complete the study.
- d) Key personnel and team members with curriculum vitae who will supervise and perform the majority of the work.
- e) Three (3) examples and Three (3) references for similar projects relating to small and medium-sized dams in Canada.

- f) Lump sum fee for completing the project with itemized costs for the contingency items as described in the scope of work. Terms of payment shall be included in the proposal. LPRCA will not pay a down payment prior to work starting.

4. Scope of Services

4.1 Vittoria Dam

A Dam Safety Review (DSR) was conducted in 2014-15 by AECOM. The report describes the natural heritage/environmental features in the vicinity of and downstream of the dam. The DSR included a cursory sediment quantity estimate for Vittoria Dam. No sediment quality sampling was carried out. LPRCA requires a written report recommending how accumulated sediment can be managed at Vittoria Dam in the event the reservoir is drawn down. The SMP should include:

1. Sufficient quality testing to satisfy Ministry of Environment and Climate Change (MOECC) requirements for sediment quality testing. LPRCA will require sediment quality samples to be collected and analyzed in a certified lab. The Lab analysis should include:
 - Complete Metal Scan
 - Volatile organic compounds (VOC's)
 - Petroleum hydrocarbons
 - Polycyclic aromatic hydrocarbons (PAH)
 - Organo-chlorinated pesticides
 - Grain size and bulk density
2. A detailed estimate of accumulated sediment
3. A strategy for managing sediment should the reservoir be drawn down for any reason including decommissioning, repair or replacement.
4. A recommendation on a monitoring program and sediment release contingency plan.

4.2 Teeterville Dam

The Dam Safety Review and Condition Assessment (DSRCA) was conducted in 2016 by AECOM. The report describes the natural heritage/environmental features in the vicinity of and downstream of the dam. The DSRCA also includes a sediment quantity and quality analysis. The report concluded that the reservoir had accumulated 321,500 m³ of sediment and that it could be disposed of on-site or at any other suitable location.

1. The successful consultant will review the DSRCA's sediment management section and determine whether it contains sufficient detail to satisfy the MOECC's requirements for sediment quality testing. If it is determined that there is not sufficient detail, further testing should be conducted. LPRCA may

require sediment quality samples to be collected and analyzed in a certified lab. The Lab analysis should include:

- Complete Metal Scan
 - Volatile organic compounds (VOC's)
 - Petroleum hydrocarbons
 - Polycyclic aromatic hydrocarbons (PAH)
 - Organo-chlorinated pesticides
 - Grain size and bulk density
2. A review of the accumulated sediment quantity estimate, if necessary for the purposes of this project.
 3. A strategy for managing sediment should the reservoir be drawn down for any reason including decommissioning, repair or replacement.
 4. A recommendation on a monitoring program and sediment release contingency plan.

5. Deliverables

5.1 Review of DSR & DSRCA

Review the Vittoria Dam DSR and the Teeterville Dam DSRCA. Determine whether further sediment analysis is required for Teeterville Dam to satisfy MOECC requirements.

5.2 Sediment Sampling and Analysis

Based on the scope and the DSRCA review, the successful consultant should create a field program to complete the necessary sediment sampling and analysis.

5.3 Progress Reports

A progress report is to be provided for engineering work completed on a monthly basis for each dam. The progress should include description and cost of the work completed. One monthly report may be submitted but the progress and cost of work for each dam should be shown separately.

5.4 Report

The final report for each of the dams shall be submitted to LPRCA that includes the results and recommendations of the study. The final reports may be provided electronically, in the digital forms of Adobe Acrobat (pdf) and Microsoft Word. Each report should include the sediment analysis, recommendations on how to manage sediment if the reservoir is drawn down, and a sediment monitoring/contingency plan. LPRCA staff shall be given the opportunity to review and make comments prior to

finalizing each report. All information, reports, drawings and model input and output produced shall be the property of LPRCA.

For budgetary reasons, every effort shall be made to complete the study by December 31, 2017.

6. Description of Structures

Vittoria Dam as it stands today was built in 1964. It is located on Young Creek approximately 9 km West of Port Dover in Norfolk County. The structure is a composite gravity dam with earth berms and a concrete spillway with 2 bays. The water level in the reservoir is manually controlled by adding or removing stoplogs. A low volume, 2 lane road crosses overtop the dam structure. A Dam Safety Review (DSR) was completed in 2015 by AECOM that identified the need for major repairs/modifications to the structure.

Teeterville Dam was built in the early 1900's. It is located on Big Creek in the hamlet of Teeterville in Norfolk County. The structure is a composite gravity dam consisting of earth berms and a concrete spillway with 4 bays. The water level in the reservoir is manually controlled by adding or removing stop logs. A pedestrian bridge extends over the dam. A Dam Safety Review and Condition Assessment (DSRCA) was completed in 2016 by AECOM that identified the need for major repairs/modifications to the structure.

7. Insurance and Other Requirements

The successful consultant must provide proof of Work Place Insurance Board (WSIB) clearance certification and a minimum of two million dollars of liability and errors/omissions insurances. Any sub-consultant hired by the successful consultant must also provide, maintain and provide proof of WSIB clearance certificate, two million dollars of liability and two million dollars of errors and omissions insurance (minimum).

8. Enquiries and Clarification

All enquiries to clarify terms and conditions of the proposal shall be directed to:

Matthew Churly, EIT
Water Resource Analyst
T: 519-842-4242 ext. 264 Email: mchurly@lprca.on.ca

Questions will be received and answered until 3 pm (EST) on Monday, August 21, 2017. All questions received that may affect this RFP will be issued by addenda from the LPRCA.

9. Right to Reject or Modify

LPRCA reserves the right to reject any and/or all proposals submitted at its sole discretion. In the event that a prepared proposal does not precisely or entirely meet the requirements of the Request for Proposal, the LPRCA reserves the right to enter into negotiations with the selected consultant(s) to arrive at a mutually satisfactory arrangement with respect to any modifications to the proposal.

10. Selection Criteria

An assessment team will consider all proposals that have been submitted by **3 pm on August 24, 2017**. The assessment team may consult with LPRCA staff and Board Members, third party consultants and references as determined necessary in the evaluation. The Assessment team will review, evaluate, and compare all submissions to determine the strengths and qualifications which are most advantageous to LPRCA in accordance with the following criteria:

1. Compliance of the Proposal with RFP
2. Quality of the Proposal
3. Company and Project Manager Experience
4. Team Quality
5. Resources and capability/commitment to complete project within timelines
6. References
7. Cost

11. Appendices

Appendix A – Relevant Reports

Appendix A – Relevant Reports

The following web link redirects to a google drive folder. Within this folder are digital copies of relevant reports to this project. Detailed site photos can be found in these reports.

1. AECOM - Dam Safety Review and Condition Assessment – Teeterville Dam
2. AECOM - Dam Safety Review – Vittoria Dam
3. Riggs Engineering – Dam Inspection Report – 2014

<https://drive.google.com/open?id=0B4sUDKiAbe0ZWExWQmw1LTdlRjA>