# **REQUEST FOR PROPOSALS**

# **GEOTECHNICAL INVESTIGATION OF THE LORDS LAKE EAST DAM TO**

# ASSESS STABILITY UNDER SEISMIC LOADING CONDITIONS

NOTICE IS HEREBY GIVEN that the city of Port Townsend will accept proposals from firms specializing in dam engineering.

Proposals must be received no later than 2 p.m. on Wednesday May 11, 2022. <u>Late responses will</u> not be accepted. Mailgrams, telex or facsimile proposals will not be accepted. The proposals should be sent or delivered to:

Ian Jablonski City of Port Townsend 250 Madison St Suite 2R Port Townsend, WA 98368

Or emailed to:

ijablonski@cityofpt.us

Additional information regarding the project scope and contents of the Request for Proposals may be obtained from the project manager.

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# I. INTRODUCTION

# A. PROJECT DESCRIPTION

The Washington State Dam Safety Office (DSO) has conducted periodic inspections of the Lords Lake Reservoir dams. The 2020 inspection report rated the East Dam in poor condition due to the dam not meeting the minimum stability requirements under seismic loading. The DSO is requiring the city of Port Townsend to retain the services of an engineering consultant to develop alternatives to improve the stability of the East Dam under seismic loading conditions to ensure the dam meets the minimum stability requirements as per the dam safety guidelines; and, to reduce earthquake-induced embankment deformations to minimize the risks of an uncontrolled release of the reservoir contents. Piezometer alarm levels must also be established that would represent anomalous but not necessarily hazardous conditions. The project will include permit scoping to prepare an environmental and permitting analysis plan for permit acquisition if slope stabilization is required.

# **B. PROJECT STUDY AREA**

Lords Lake is located about 4.5 miles northwest of Quilcene, Jefferson County, Washington on an unnamed tributary of Howe Creek, which in turn is a tributary of the Little Quilcene River. Access is via state Hwy 101 and Lords Lake Loop Rd. The facility is owned by the city of Port Townsend and operated by the Port Townsend Paper Corporation. The reservoir is a 1480 acre-feet enlargement of a natural lake created by two earth-fill dams. Lords Lake is used as a secondary source of water supply for the city of Port Townsend. The lake is filled by a gravity diversion pipeline from the Little Quilcene River. East Dam NID # WA00357 and North Dam NID # WA00243.

### C. DESIRED QUALIFICATIONS

The ideal consulting team would possess the following skills:

- Strong technical expertise in dam safety, seismic assessment, geotechnical analysis, structural and hydraulic design;
- Strong knowledge of federal, state, and local laws and policies pertaining to water projects and environmental protection;
- Multiple successes in the completion of similar projects;
- A proven history in completing work that is accepted as technically sound by multiple interest groups including state and federal agencies and outside interest groups;
- The ability to develop and adhere to strict QA/QC standards.

### **D.** SCHEDULE AND FUNDING

The project has been selected for the FY2021 High Hazard Potential Dams (HHPD) Grant Program. A total budget of \$134,000 has been approved for the assessment. The project is expected to start after HHPD grant funds are released with the proposed schedule is as follows:

Task	Description	Target Dates
1	Project Management, Coordination, and Meetings	7/2022 – 9/2023
2	Collection and Review of Existing Data	7/2022 – 10/2022
3	Geotechnical Investigation	11/2022 - 4/2023
4	Slope Stabilization Alternative Analysis (if required)	4/2023 - 6/2023

5	Slope Stabilization Preliminary Design Analysis Report (if required)	7/2023 – 9/2023
6	Environmental Permit Scoping	9/2022 - 3/2023

# II. SCOPE OF WORK

#### A. TASK 1: REVIEW OF BACKGROUND INFORMATION

Review existing background information for the site including previous geotechnical investigations, monitoring data, and dam condition assessments.

### B. TASK 2: GEOTECHNICAL INVESTIGATION AND ANALYSIS

Complete a geotechnical investigation of the East Dam to confirm the elevation and extent of the loose fill noted in the assessment Draft Report Lords Lake East Dam, Golder May 31, 2019 (Golder). The city anticipates the scope of work will include seismic cone penetration tests and a seismic refraction survey with multichannel analysis of surface waves. Consultants are requested to provide a proposed scope of work as part of the approach to the project.

If results of the geotechnical investigation show an extensive layer of liquifiable soil with similar material properties as identified as Golder, additional analysis may not be warranted, and slope stabilization alternatives will be reviewed. Conversely if the results of the geotechnical investigation indicate that the liquifiable soils are limited in extent additional analyses may be completed.

Deliverables will include a geotechnical report and analysis report.

### C. TASK 3: SLOPE STABILIZATION ALTERNATIVE ANALYSIS (IF REQUIRED)

Perform an alternative analysis to determine the seismic slope stabilization improvements required for the embankment if it is determined the seismic induced displacements exceed the safety recommendations. Each alternative will be evaluated with respect to its impact on the environment.

Feasibility level designs with a high-level cost estimate will be prepared for the two (2) preferred alternatives.

A geotechnical assessment and design analysis report will be prepared summarizing the findings from Task 2 and 3.

# D. TASK 4: SLOPE STABILIZATION PRELIMINARY DESIGN ANALYSIS REPORT (IF REQUIRED)

Advanced the design of the preferred alternative to preliminary design and prepare a preliminary design analysis report. The preliminary design analysis report will include the design parameters, proposed construction methods, preliminary drawings, and cost estimate.

### E. TASK 5: ENVIRONMENTAL PERMIT SCOPING

Permit scoping will prepare an environmental and permitting analysis plan that will be used for permit acquisition efforts going forward. The plan will identify the regulatory programs, permits, agency contacts, submittal requirements, and timeline for permit applications. This plan will identify the critical regulatory path and interrelationships with other permits for the development of thorough and complete submittal packages, in turn providing for timely receipt of permits and approvals.

# III. PROJECT REVIEW

The project will be reviewed by FEMA and the DSO for compliance with the FEMA High HHPD Grant program criteria.

All consultant, subconsultant and vendor contracts associated with the proposed scope of work will include provisions that require commitment to all applicable federal labor laws.

# **IV.** PROPOSAL CONTENTS AND SELECTION PROCESS

Respondents to this RFP are requested to submit a statement of qualifications and project approach (SOQPA), which includes the prime consultant and all sub-consultants qualifications. All proposals shall be limited to 25 pages, not including the cover letter or resumes.

The respondent should include the following information organized in the order shown below. Proposals will be scored based on the evaluation criteria listed in section **IV** of this RFP. The maximum evaluation points for each item are shown in parentheses. The total possible number of points for the SOQPA is 100. The proposals shall, at minimum, include:

#### A. PRIME CONSULTANT AND SUB-CONSULTANTS QUALIFICATIONS (Maximum of 40 points)

Experience, qualifications and multi-disciplinary range of team (prime and subconsultants) in providing services for each of the types of work listed in section **II**, detailed as follows:

- List the prime's project manager;
- List the firm(s) that would take the lead and what their experience and qualifications are for this type of work.

Please attach resumes of the key team members (prime and sub-consultants) to be assigned to each of the types of work. (No more than two (2) pages per resume, no limit to number of resumes.)

<u>Please Note: It is mandatory that you identify the actual persons who will be performing the</u> work. The city reserves the right to disqualify the consultant awarded this project if that consultant assigns staff to the contract who are not listed in the proposal without the prior consent of the city.

# B. PROJECT APPROACH

#### (Maximum of 40 points)

Discuss and clearly explain the methodology that the team proposes to use to satisfactorily achieve the required results for this contract.

- Discuss in general terms, the team's approach to developing the tasks and work products necessary to carry out the work described in the Scope of Work in section II.
- Discuss how the team will incorporate interdisciplinary assistance as needed and steps the team will take to manage the project and ensure timeliness of completion.

# C. RELATED EXPERIENCE

#### (Maximum of 10 points)

Provide a list of projects of similar magnitude and complexity that the prime consultant has performed in the last five years. Do not list more than five projects. Include a brief description – not more than one page per project. The descriptions should specify the services provided, contract amount, client name and phone number, and any other pertinent information.

### D. PROJECT MANAGEMENT

#### (Maximum of 10 points)

Project management will be ranked on the manager's experience and proposed approach to managing the project, as well as the overall organization and work distribution among the project team.

- Include an organizational chart that lists the specific individuals assigned to each sub-task included in your proposed scope of work.
- Explain procedures and protocols used for project management and communication, including communication between the engineer, city, and government agencies.
- Include schedule with deadlines for each sub-task listed in the proposed scope of work.
- Describe project billing and tracking for deliverables or milestones.
- Provide team's schedule and availability for this project and potential issues with other commitments.

# E. REFERENCES

Please furnish the name, address, and phone number of at least three references. Please include the clients' project manager's name and telephone number. These references will not be scored but may be used to verify the accuracy of information provided by the respondents and may lead to adjustment of the initial scoring of respondents on the proposal criteria. The city reserves the right to contact references other than those provided.

### F. RIGHT OF REFUSAL

Any proposal that does not reasonably comply with the instructions may be rejected as an incomplete proposal and may be declared unresponsive. The city of Port Townsend reserves the right to reject any and all proposals, and to waive any informality in proposals received. The city reserves the right to consider all information, submitted or otherwise, to determine responsibility of the proposer. The city will award to the most responsive and responsible proposer that best meets the needs of the city, and whose proposal is in the best financial interest of the city, all costs considered. The city reserves the right to withhold award based on the requirements of the city and HHPD Grant. All proposals must be honored and valid until award action is complete.

# V. INTERVIEW

The top 3 firms may be invited to participate in an online interview. Interview questions and evaluation criteria will be sent to short-listed firms prior to the interview. The interview will be an informal working session where the consultants/teams will be asked questions to clarify and/or expand on their qualifications and project approach. Only the consultant's proposed project team members, including the project manager and key sub-consultants, will be invited to the interview.

# VI. REQUEST FOR PROPOSAL SCHEDULE

Apr 20, 2022:	RFP is advertised
May 11, 2022	RFPs are due
May 23, 2022:	Short-listed firms are notified
Jun 1, 2022:	Interviews
Jun 13, 2022:	Selection
Jun 20-Jul 22, 2022:	Contract Negotiations
Aug 1, 2022:	Contract Signed/Project Kick-off

# VII. LIST OF ATTACHMENTS

The following documents may be downloaded from the city of Port Townsend's website <u>https://cityofpt.us/rfps</u>.

Attachment A – Vicinity Map of Lords Lake Attachment B – Lords Lake Design Drawings Attachment C – Draft Report Lords Lake East Dam, Golder May 31, 2019 Attachment D – 2020 Periodic Inspection Report Lords Lake North Dam and East Dam Jefferson County, Washington, Washington State Department of Ecology Attachment E – Report of the Engineering Control of Compacted Fill Two Earth Dams Lords Lake Development Jefferson County, Washington, November 12, 1957 Attachment F – Report of Foundation Investigation Two Proposed Earth-Fill Dams Lords Lake Jefferson County, Washington, 1956