

**CITY OF PORTSMOUTH
NEW HAMPSHIRE
Public Works Department**

**RFP No. 08-11
REQUEST FOR PROPOSALS**

**ENGINEERING SERVICES
Bellamy Reservoir Dam - Madbury
Breach Analysis and Emergency Action Plan Update
Portsmouth Public Works Department**

The City of Portsmouth, New Hampshire is seeking Proposals from interested engineering firms for breach analysis, inundation mapping, and updating an Emergency Action plan (EAP).

Sealed Request for Proposals, **plainly marked “RFP # 08-11 ENGINEERING SERVICES Bellamy Reservoir Dam – Madbury Breach Analysis and Emergency Action Plan Update on the outside of the mailing envelope as well as the sealed envelope,** shall be addressed to: Finance/Purchasing Department, Portsmouth City Hall, 1 Junkins Avenue, Portsmouth, NH, 03801. Proposals will be accepted until 2:30 p.m. on August 9, 2010.

This Request for Proposals may be obtained from the Finance/Purchasing Department on the third floor at the above address, by calling the Purchasing Clerk at 603-610-7227 or from our website <http://www.cityofportsmouth.com/finance/purchasing.htm>.

Addenda to this document, if any, including written answers to questions, will be posted on the City of Portsmouth website under the appropriate heading at least two days prior to the due date.

The City of Portsmouth reserves the right to reject any or all proposals, to waive technical or legal deficiencies, and to accept any proposal that it may deem to be in the best interest of the City.

**CITY OF PORTSMOUTH, NH
DEPARTMENT OF PUBLIC WORKS**

**RFP No. 08-11
REQUEST FOR PROPOSALS**

**ENGINEERING SERVICES
Bellamy Reservoir Dam - Madbury
Breach Analysis and Emergency Action Plan Update**

Sealed Proposals, plainly marked RFP #08-11, " Breach Analysis and Emergency Action Plan Update" on the outside of the mailing envelope, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, NH 03801 will be accepted until **2:30 p.m. August 9, 2010.** Six copies of the proposal will be submitted.

SUMMARY

The City is seeking Proposals from interested engineering firms for breach analysis, inundation mapping, and updating Emergency Action plan (EAP). The proposed breach analysis is required by the NH Department of Environmental Services (NHDES) due to changes in downstream development since the original analysis and map were completed in 1991.

In accordance with New Hampshire Code of Administrative Rules Env-Wr 502 & 503, the following tasks are required:

- Review existing EAP
- Meeting with the City of Portsmouth Public Works and NHDES to review requirements.
- Expand the scope of the previously approved Breach Analysis to include any newly developed area(s).
- Review and comment on NHDES Letter of Deficiency DSP#10-026 date February 17, 2010 regarding erosion control issues.
- Produce a new inundation map, based on the best available contour data, and created/submitted in GIS-based software.
- Prepare three copies of a draft report for submission to NHDES and City of Portsmouth. In addition to the breach analysis and inundation map, the report shall include a narrative outline of the emergency actions to be taken by city departments in the event of an impending or actual breach, per Dam Bureau guidance.
- Address review comments and submit six copies of the final report for NHDES and MWW approval.

SPECIFICATIONS

Analysis shall include a hydrology & hydraulics review of the structure to assure that an updated stormwater model is used for the analysis. Analysis is to be accomplished using either HydroCAD software or HEC-HMS. A final model is to be submitted to the NHDES Dam Bureau for approval prior to dam breach modeling efforts.

Breach configurations shall be per Env-Wr 502.06 and shall be submitted to the Dam Bureau for approval prior to breach modeling.

Analysis shall include the sunny day breach, 100-year, and 100-year with breach events; as well as a dam breach assuming water at the top of dam.

Inundation maps to be prepared, including all the above scenarios, in ArcGIS format.

Analysis to be done using HydroCAD version 8.0 or later or HEC-HMS version 3.3 and HEC-RAS version 4.0; or similar program.

Electronic Copies of all documents shall be provided to City of Portsmouth and NHDES Dam Bureau.

Flooding heights, widths, and durations shall be shown at points of interest. Analysis shall be done to satisfy NH Env-Wr 500.

Consultant is responsible for obtaining contour data, as appropriate.

Once the breach analysis and inundation maps are prepared, consultant is to finalize a revised EAP, per Dam Bureau guidance, and submit to the City of Portsmouth for distribution. The number of copies is dependent on the number necessary to meet the Env-Wr 505-507. The City of Portsmouth will be responsible for distribution and testing of the EAP.

DOCUMENTS

All documents will be turned over to the City in paper and electronic format upon completion of the work. Electronic format shall be as approved by City and be compatible with Microsoft office product suite and AutoCad 2009. All deliverable data products should be delivered in the New Hampshire State Plane Coordinate System, US Survey feet. The horizontal datum shall be the NAD1983 datum. Vertical Datum shall be NAVD1988. GIS data shall be delivered in ESRI GeoDatabase format on CD-ROM or DVD suitable for use with ArcGIS. All documentation, reports, field notes and other data generated as part of the service by the consultant and/or its sub consultants for this project shall be the property of the City of Portsmouth and will be turned over in a format acceptable to the City.

PROPOSAL REQUIREMENTS

Each statement shall include the following components:

1. Cover letter
2. Baseline requirements (see below)
3. Brief description of the firm
4. Project understanding
5. Typical project approach focusing on uniqueness of firm
6. Experience statement identifying work on similar projects. Experience statements shall identify the key design personnel involved in the project.
7. Project Team Chart (with resumes limited to 2 pages) identifying the team
 - a. Principal-in-Charge
 - b. Project Manager
 - c. Project Engineer(s)
 - d. Sub Consultants
8. Six (6) copies of the proposal will be submitted

BASELINE REQUIREMENTS

Each consultant shall provide a statement regarding each of the following:

- Consultant shall have registration and good standing with the Secretary of State, Corporate division, in order to perform work in the State of New Hampshire
- The Consultant shall be listed on the NHDES Roster of pre-qualified Consulting Engineers.

CITY ROLE

City staff will be responsible for administering the project and overseeing the consultant's work on this project. Representatives of the City's Public Works Department will review plans and other documents prepared by the consultant. The following information is available for the Consultant's review at the Public Works Department:

- January 1991 - Dam Breach Analysis completed by Rivers Engineering Corporation of Manchester, NH
- NHDES Letter of Deficiency DSP#10-026
- Aerial Mapping and topography
- GIS mapping information

PROPOSAL CONTENTS AND EVALUATION CRITERIA

The City of Portsmouth will review the proposals on the following criteria.

1. Similar experience (30%)
2. Experience of assigned personnel (20%)
3. Quality of proposal (15%)
4. Understanding of project (25%)
5. Client references (10%)

Upon review of all proposals, the City may select a firm or firms to interview. Upon completion of the review and any interviews, the City will attempt to negotiate a final Scope of Services and Fee with the highest ranked firm. If the City is unable to reach agreement with the highest ranked firm, the City reserves the right to negotiate with the next highest ranked firm until an agreement is reached.

RESERVATION OF RIGHTS

The City of Portsmouth reserves the right to reject any or all proposals, to waive technical or legal deficiencies, and to accept any proposal that it may deem to be in the best interest of the City.

The City reserves the right to make such inquires regarding the firm's qualifications and reputation as it deems necessary to evaluate the firm. The City reserves the right to negotiate directly with the firm selected for additional project work including construction administration services, and/or additional project engineering and design services.

CONTRACT DOCUMENT

Upon selection the successful Consultant will prepare Contract documents for City review. The Contract shall be in NHDES Format. Upon execution of the Contract the Consultant will be instructed to commence providing the work outlined in the contract.

ADDITIONAL INFORMATION

If you have any procedural questions please contact Lori MacGinnis, Purchasing Coordinator at: (603) 610-7227. For technical questions please contact Peter Rice, P.E. City Engineer, Water/Sewer Divisions (603) 766-1416.