

**The Miami Conservancy District  
Request for Qualifications  
Engineering Services for Regional Flood Protection System  
SOQ for Dam Concrete Wall Drain  
April 26, 2018**

**Request for Qualifications**

The Miami Conservancy District (MCD) is requesting Statements of Qualifications (SOQ) from civil engineering consulting firms for analysis and design of drains behind concrete walls at one or more MCD dams. The design shall include engineering analysis to develop a design report of the results. In addition, the firm shall develop construction plans and specifications using MCD standards for construction.

**About MCD**

MCD protects communities in southwest Ohio from flooding, preserves the quality and quantity of water, and promotes the enjoyment of our waterways.

MCD is a regional agency chartered under Section 6101 of the Ohio Revised Code that provides a high degree of flood protection to 11 municipalities in the Great Miami River Watershed. The design flood is known as the Official Plan Flood (OPF). This level of flood protection is accomplished by the action of five dry dams, storage areas known as retarding basins, channel improvements, and over 55 miles of levees.

The integrated system of dams and levees was built and are maintained with local funding. The dams are all non-federal structures and the levees and channels are almost all non-federal structures.

The dams are regulated by the Ohio Department of Natural Resources (ODNR) under Section 1521 of the Ohio Revised Code and Section 1501 of the Ohio Administrative Code. All five dams are Class I structures that are required by ODNR Dam Safety to handle 100-percent of the probable maximum flood (PMF).

Additional information about MCD may be found at [www.mcdwater.org](http://www.mcdwater.org).

**Purpose**

MCD maintains its dams and levees to ensure the high level of flood protection for which the system was designed. Recent studies and inspections have shown drainage concerns behind the large concrete walls at the dam outlet works. The proposed drain systems will be engineered to eliminate water from storing against and leaking into the backside of the concrete walls. MCD's concrete walls retain the primary dam embankment, principal spillway, and/or emergency spillways.

For example, Lockington Dam concrete walls are up to 78 feet high and 525.5 feet long (Appendixes A and B). The drainage concern was identified for the majority of the lengths of the walls at the upper sections of the original construction joints (Appendixes C and D). Water concerns are estimated to extend 10 to 25 feet below the top of the wall. Drains will be segmented into 4 systems, 2 downstream and 2 upstream. The upstream drain systems will experience temporary retarding basin storage during high water events. Upstream drains will need to handle turbid water storage while maintaining wall drainage as the storage pool rises

and falls. The selected consultant will design a drain system for the concrete walls at one or more MCD dams.

### **Services**

The following are types of consulting services that may be required:

- Site visit(s) with MCD to observe and evaluate the project
- Surveying for developing engineering plans
- Engineering design report including analysis and computations
  - Drain/filter gradation
  - Drain and filter geometry design
  - Slope stability of drain system and covering
  - Concrete wall seepage coating or barrier
  - Other
- Construction plans
- Construction bid documents using MCD templates
- Sealed by a professional engineer registered in the State of Ohio

The scope of services does not include:

- Structural analysis of the concrete walls

MCD will select engineering consultants for defined services based on qualifications as outlined Ohio's Qualifications Based Selection Law, ORC 153.65–153.73. Each service agreement will include a Scope of Services defining the deliverable products, project schedule, and meeting requirements. MCD may schedule and interview with one or more consulting firms as part of the selection process. MCD intends to enter into negotiations with the preferred firm(s) regarding scope of work and fees. If an agreement on scope and fees cannot be reached, MCD will initiate negotiations with the next preferred firm(s).

### **General Qualifications**

All firms submitting their qualifications must provide the information below:

1. Firm name, mailing address, telephone number, web address (if applicable), name, title, and email address of contact person.
2. A brief (no more than one page per type of service) statement of interest and qualifications for each of the types of services that your firm is qualified to provide.
3. Discussion of firm's specific abilities and expertise to provide the required professional services.
4. Discussion of firm's qualifications related to project management skills and methodology to monitor project budgets.
5. Discussion of firm's capacity and personnel resources to perform the types of services described in a timely manner.
6. A list of key personnel anticipated to be project team members, including detailed resumes and experience on similar projects.
7. Examples of recent related projects completed by the firm including discussion of unique knowledge, expertise or experience offered by the firm for those projects.
8. At least (5) references from other agencies or corporations, (3) of which should be local, regional or state government agencies, for which the firm has established a contract for a similar type of project. Reference information must include:
  - a. Project name

- b. Name of owner
  - c. Name and contact information of owner contact person
  - d. Description of the firm's involvement and services provided
  - e. Firm's key personnel assigned to the referenced project
9. A description of the proposed methods and procedures to complete the scope of work and an estimate of time to complete.

### **Additional Considerations**

The firm is encouraged to provide additional information that could assist MCD in determining which firm is best qualified for a specific service. This additional information would include but not be limited to:

- Discussion of the firm's familiarity with Ohio Department of Natural Resources Dam Safety regulations and requirements.
- Discussion of the firm's familiarity with provisions of the Ohio Revised Code and Ohio Administrative Code as they apply to dam permitting.

### **Limitations**

Firms that have a potential conflict of interest due to other contractual obligations may be precluded from performing work in the same area.

### **Schedule**

The final project deliverables must be complete by August 17, 2018.

### **Submittals**

The Statement of Qualifications (SOQ) including all attachments and appendices should not exceed 25 pages. An electronic copy of the SOQ is due to The Miami Conservancy District, Manager of Technical Services at the contact information below no later than **May 18, 2018**. Acknowledgement of receipt will be provided and no late SOQs will be accepted.

Questions regarding this RFQ should be made by email to Barry Puskas.

(Note: Please use "SOQ for Dam Concrete Wall Drain" in the email subject.)

Barry Puskas, PE, GISP  
Manager of Technical Services  
The Miami Conservancy District  
38 E. Monument Avenue  
Dayton, OH 45402-1265  
937-223-1278, ext. 3243  
[bpuskas@mcdwater.org](mailto:bpuskas@mcdwater.org)

## **Appendix A**

**MCD Drawing No. 4563  
Lockington Dam  
Spillway and Outlet Works  
PLAN and LONGITUDINAL SECTION**

## **Appendix B**

**MCD Drawing No. 2639  
Lockington Dam  
Spillway and Outlet Works  
CROSS SECTIONS**

## **Appendix C**

**MCD Drawing No. 2885  
Lockington Dam  
Spillway and Outlet Works  
DIAGRAM OF CONTRACTION JOINTS AND QUANTITIES**

## **Appendix D**

**MCD Drawing No. 2886**

**Lockington Dam**

**Spillway and Outlet Works**

**DETAILS OF BACK OF WALLS CROSS SECTIONS AT JOINTS**