

# **Request for Qualifications for Engineering Services**

## **Fort Bend County Levee Improvement District No. 19 System Review**

Background: Fort Bend County Levee District No. 19 (the District) is adjacent to the Brazos River southwest of Houston, Texas. During Hurricane Harvey, the District experienced a coincidental event consisting of a high river event and a persistent heavy rainfall resulting in significant structural flooding within the District.

Description of the Work: The District will hire an engineering firm to perform an independent review of all aspects of the design, construction, and operation of the District's facilities. The facilities include, levees, internal drainage channels, detention ponds, and pump stations. The objective of this project is to provide the District with an independent report on the design, construction, and operation of the facilities relative to all applicable standards and best practices within the industry.

It is the desire of the District to accomplish this work as quickly as is practical while being thorough and complete.

It is imperative that the firms responding and ultimately selected for this project be completely independent from all firms and individuals involved in the creation, design, construction, and operation of the District.

The Engineer shall prepare and submit three reports of their findings, one for each phase of their study.

### **PHASE 1 – Design and Construction**

1. Executive Summary
2. Report on District Facilities Design Compliance with All Applicable Standards
  - a. Review Federal, State, County, and / or City standards or requirements regarding the design and or operations of levee systems.
  - b. Review design assumptions including river levels, rain events, inflow from sources outside of the District, storage reservoirs, and pump facilities.
3. Review of Construction of District Facilities Compliance to Construction Documents
  - a. Review all plans and specifications used in the construction of the levees, internal drainage systems, storage facilities, and pump stations.
  - b. Review all "Record Drawings."
  - c. Perform site visit to inspect the facilities.
  - d. Review of any applicable survey information as required.

### **PHASE 2 – Operations and Response**

1. Executive Summary

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2. Review of Operating Procedures
  - a. Review of Operations Manual
  - b. Review of Emergency Action Plan
  
3. Review of Performance During Hurricane Harvey
  - a. Review of operations relative to the Emergency Action Plan
  - b. Coordination with other agencies
  - c. Review of District Facilities and their functionality during the event
  
4. Determine the cause of structural flooding

### **PHASE 3 – Recommendations**

1. Executive Summary
  
2. Recommendations for changes to system design & construction WITHIN current acceptable standards / requirements
  - a. List of potential changes
  - b. Probable cost estimate of changes categorized by:
    - i. Levee System
    - ii. Drainage System
    - iii. Pump Station
  
3. Recommendations for changes to system design & construction ABOVE current standards / requirements
  - a. List of potential changes
  - b. Probable cost estimate of changes categorized by:
    - i. Levee System
    - ii. Drainage System
    - iii. Pump Station
  
4. Recommendations for changes to system that would prevent structural flooding by an event similar to Hurricane Harvey
  - a. List of potential changes
  - b. Probable cost estimate of changes categorized by:
    - i. Levee System
    - ii. Drainage System
    - iii. Pump Station
  
5. Recommendation for changes to operation manuals and practices

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- a. Changes to Operation and Maintenance Manuals and related practices, and cost estimate of such changes
- b. Changes to Emergency Action Plan, and cost estimate of same

Statements of Qualifications received will be reviewed by a selection committee and scored independently. Responding firms should attempt to limit their statements to no more than 10 pages excluding attachments and resumes. The three firms with the highest scores will be selected for interviews. The scoring criteria are:

Firms will be scored based upon (maximum score 150 pts):

- 1) Firms Background and Responsiveness to the Request for Qualifications (25 pts)
  - a. Understanding of the project, the District's objectives
  - b. Firms background and experience in the industry
  - c. SOQ's clarity, brevity, and completeness
  - d. Statement acknowledging no previous or current relationship (exclusive of this RFQ) with the following firms or persons:
    - i. FBC-LID 19
    - ii. Johnson Development
    - iii. Costello Engineering, Inc.
    - iv. Stephen Costello, P.E.
    - v. Levee Management Systems
    - vi. Fort Bend County
    - vii. The City of Missouri City
    - viii. The City of Sugar Land
    - ix. The Muller Law Group, LLP
    - x. Mike Stone Associates, Inc.
- 2) Firm's plan to perform the work and deliver the completed project in a timely and efficient manner, please include a proposed draft schedule (20 pts)
- 3) Availability of key team members and commitment to this project (15 pts)
- 4) Principal in Charge's Experience (10 pts)
- 5) Demonstrated experience of the project manager (25 pts)
  - a. Leadership in managing project teams
  - b. Experience in assisting levee districts flood fighting
  - c. Experience in the design of levee systems
  - d. Experience in the design of storm water pump stations

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- e. Familiarity with USACE requirements concerning levees and PL-84
  - f. Experience in management or leadership role of a levee system
  - g. Experience in after action or forensic analysis studies of levee systems
- 6) Demonstrated experience of the team members (20 pts)
- a. Experience in design of levee systems
  - b. Experience in design of storm water pump stations
  - c. Experience assisting levee district planning for and during flood fights
  - d. Experience in after action or forensic analysis studies of levee systems
- 7) Firms ability to demonstrate recent experience performing similar type reviews (15 pts)
- 8) Recommendation and references (20 pts)

If your firm would be interested in submitting a Statement of Qualification for the RFQ, please submit five (5) hard copies and two (2) electronic copies by 5:00pm, November 07, 2017. Qualification Statements should be sent to:

Attention: FBC-LID 19  
c/o Nancy Carter, Esq.  
The Muller Law Group  
16555 Southwest Freeway, Suite 200  
Sugar Land, Texas 77479

Statements received after the deadline will not be accepted. Each firm is responsible for insuring responses to this RFQ are delivered by the date, time, and to the location specified.

All proposals will be reviewed and scored. No more than three (3) firms will be selected for interviews based upon the scoring of the Statements of Qualifications received.

All interviews will be conducted the first week of December. Contract negotiations with the selected firm will commence immediately upon selection and expected to be complete by December 15, 2017.

Following the successful contract negotiations and contract execution, the District will provide de-briefings to the firms not selected if asked to do so. Debriefings will not be scheduled until after the successful firm and the District have entered into a binding contract.

Any questions related to this RFQ should be directed to Mike Stone, at [MikeStone@MikeStoneAssociates.com](mailto:MikeStone@MikeStoneAssociates.com) no later than November 01, 2017. Firms interested in receiving answers to all respondent's questions should initiate their request by email no later than November 01, 2017. Responses to questions will be sent to all firms that provided an email requesting the responses by November 03, 2017.