

# **A REQUEST FOR PROPOSAL FOR PROFESSIONAL SERVICES CONTRACT**

Department of Highways  
Professional Services Procurement Bulletin 2017-04  
Mason | US 68 | 09-1095.00

This document constitutes a Request for Proposals for Professional Service Contract from qualified individuals and organizations to furnish those services as described herein for the Commonwealth of Kentucky, Department of Highways (hereinafter referred to as “Department”).

## **I. PROJECT DESCRIPTION**

County – Mason

Route – US 68

Item No – 09-1095.00

Project Description – Repair bridge on US 68 over Lawrence Creek 0.13 mi SW of KY 3056 (081B00067N)(16CCR)

## **II. PROJECT INFORMATION**

Project Managers – Blake Jones, P.E. and Joe Callahan, P.E.

User Division – Highway Design

Approximate Fee – \$350,000 Bridge Analysis (Cost Plus a Fixed Fee)

Project Funding – Federal Bridge Replacement – On System (BRO Funds)

Bridge length – Approximately 766 feet

## **III. PURPOSE AND NEED**

This route is a vital route for motorists travelling between and through northeast Kentucky and south-central Ohio. It serves as the primary truck route as it leads to the only Ohio River crossing between Portsmouth and Cincinnati (each being over 40 miles away) capable of legally carrying Class AAA roadway loads. The Lawrence Creek bridge is on the southern approach to the Harsha Bridge and is located approximately 1.3 miles south of the Ohio River. US 68 at this location is classified as “Urban Principal Arterial” and has an AADT of 4,549 (2013).

The bridge is a very tall (~150 feet) five-span continuous prestressed I-beam bridge. The end bents and landward piers are founded on steel piling, while the two interior piers have spread footings. The structure is approximately 766 feet in length (out-to-out) and just over 63 feet in width (out-to-out). The typical deck section consists of three 12-foot driving lanes and two 12-foot shoulders (60 feet curb-to-curb).

The structure has experienced differential movement issues since being open to traffic in the late 1990s. The most noticeable evidences of this dynamic are deformed and shifted neoprene beam bearing pads and cracking in the end bent backwall due to pressure from the beams being pushed against it. Additionally, there are indications of differential lateral movement at the bridge

approaches: measureable barrier wall shifting, visible beam sweeping, and beam diaphragm spalling. There has also been significant settlement of the fill as can be seen by the limits of the concrete coating placed on the abutment seats and it's relative position to the fill surface today (greater than a foot).

Although these issues have persisted some time and the rate of movement has decreased, it appears that stresses are becoming more apparent due to the end bent backwall cracks and possible sweeping of the beams.

#### **IV. DBE REQUIREMENT**

Consultants should include a DBE participation plan with their Response to Announcement. An additional page will be allowed with the Project Approach (page 7) in the Response to Announcement to convey this plan. A maximum of 4 points will be considered in the Evaluation Factors for the DBE Participation Plan.

#### **V. SCOPE OF WORK**

The selected Consultant will provide engineering services for the evaluation of the bridge and a recommended course of action (if any) for remediation. Activities include but may not be limited to the following:

- Evaluation of existing conditions, determination of the source/extent of the undesirable force(s) acting upon the structure, and providing recommendations for a course of corrective action.
  - Review historical bridge inspection reports (to be provided by Department upon request)
  - Perform survey of structure (LiDAR, GPR, etc.)
  - Complete geotechnical evaluation
  - Perform structural investigation
  - Develop and submit report:
    - Identify the source(s) causing the substructure issues
    - Provide a recommended course(s) of action for correction
    - Provide a general cost estimate for each recommendation

Detailed repair design and plan development may be added later as a Contract Modification, which is anticipated to include the following activities:

- Development of detailed plans for corrective action
  - Develop and submit plan set and detailed cost estimates for any recommended repairs, countermeasures and/or monitoring methods
  - Complete environmental documentation and clearance (at the discretion of the Department)
  - Develop standard bid package including MOT plans

#### **VI. SPECIAL INSTRUCTIONS**

The Department may retain any of the advertised services to be performed by in-house state forces.

Instructions for Response to Announcement can be found at:

<http://transportation.ky.gov/Professional-Services/Pages/Respond-to-an-Announcement.aspx>

## **VII. AVAILABLE STUDIES**

No study has been undertaken to identify the cause of the movement. The most recent bridge inspection report is attached for specific notes and photographs of the existing condition of the bridge. Additionally, bridge design plans are attached.

[Item No. 9-1095 | US 68 Bridge Repair | Bridge Plans](#)

[Item No. 9-1095 | US 68 Bridge Repair | Bridge Inspection Report](#)

## **VIII. METHOD OF DESIGN**

The selected Consultant shall utilize the most recent CADD Standards for Highway Plans Policy in any development of repair plans. Prequalification in the area of Roadway Design for “Rural Roadway Design” and “Surveying” is required to be identified in the Consultant’s Response to Announcement.

## **IX. ENVIRONMENTAL**

The Department will provide any necessary Environmental Services. However, the Department retains the option of adding all or any Environmental Services elements to this contract by modification. Prequalification in several areas are required to be identified in the Consultant’s Response to Announcement.

## **X. PHOTOGRAMMETRIC SERVICES**

The selected Consultant will provide any necessary Photogrammetric Services.

## **XI. STRUCTURE DESIGN**

The selected Consultant shall provide technical expertise on structure repair recommendations, structure/approach/fill stabilizations and cost estimates. Prequalification in the area of Structure Design for “Spans Under 500 feet” is required to be identified in the Consultant’s Response to Announcement.

## **XII. GEOTECHNICAL SERVICES**

The selected Consultant will provide any necessary Geotechnical Services. Prequalification in the area of Geotechnical Services for “Engineering Services”, “Laboratory Testing Services”, and “Drilling Services” are is required to be identified in the Consultant’s Response to Announcement.

## **XIII. TRAFFIC**

The selected Consultant will provide any Traffic Engineering Services. Prequalification in the area of Traffic Engineering for “Traffic Engineering Services” is required to be identified in the Consultant’s Response to Announcement.

#### **XIV. RIGHT-OF-WAY SERVICES**

The selected Consultant shall provide any estimated right-of-way costs and land area for all remediation alternates. Consultant prequalification will not be required for right-of-way services pertaining to this phase of the project.

#### **XV. UTILITY SERVICES**

The selected Consultant shall provide any Utility Services and provide relocation estimates for all remediation alternates. Consultant prequalification will not be required for utility services pertaining to this phase of the project.

#### **XVI. PREQUALIFICATION REQUIREMENTS**

To respond to this project, the consultant project team must be prequalified in the following areas by the response due date of this advertisement.

##### **ROADWAY DESIGN**

- Rural Roadway Design
- Surveying

##### **STRUCTURE DESIGN**

- Spans under 500 feet

##### **GEOTECHNICAL SERVICES**

- Engineering Services
- Laboratory Testing Services
- Drilling Services

##### **HIGHWAY OPERATIONS/BRIDGE MAINTENANCE SERVICES**

- In-depth Structure Inspection

##### **TRAFFIC ENGINEERING**

- Traffic Engineering Services

##### **ENVIRONMENTAL AND UST SERVICES**

- Hazmat Preliminary Site Assessment (Phase 1)
- Hazmat Site Recon/Sampling (Phase 2)
- UST Preliminary Site Assessment

##### **ENVIRONMENTAL AQUATIC AND TERRESTRIAL ECOSYSTEM ANALYSIS**

- Fisheries
- Macroinvertebrates
- Water Quality
- Botany
- Zoology
- Wetlands

## ENVIRONMENTAL ARCHAEOLOGY AND OTHER SERVICES

- Prehistoric
- Historic
- Highway Noise
- Air Quality Analysis
- Socioeconomic Analysis
- Cultural-Historic Analysis
- EIS Writing and Coordination
- Stream Mitigation

### **XVII. PROCUREMENT SCHEDULE**

Dates other than Response Date are tentative and provided for information only.

- Bulletin Posted – October 11, 2016
- Response Date – November 2, 2016 by 4:30 PM ET (Frankfort Time)
- First Selection – November 8, 2016
- Final Selection – November 23, 2016
- Pre-Design Conference – November 30, 2016
- Fee Proposal – December 9, 2016
- Contract Negotiations – December 21, 2016
- Notice to Proceed – January 19, 2017

### **XVIII. PROJECT SCHEDULE**

- Draft Report – August 4, 2017
- Final Report – September 15, 2017

### **XIX. EVALUATION FACTORS**

Consultants will be evaluated by the selection committee based on the following, weighted factors:

1. **Staff Experience – (20 Points)** Relative experience of consultant personnel assigned to project team with highway project for KYTC and/or federal, local or other state governmental agencies.
2. **Performance of Past Projects – (15 Points)** Past record of performance on projects similar in type and complexity.
3. **Project Approach – (15 Points)** Project approach and proposed procedures to accomplish the services for the project.
4. **Project Schedule Compliance – (10 Points)** Capacity to comply with project schedule.
5. **DBE Participation Plan – (4 Points)**
6. **Consultant's offices where work is to be performed – (2 Points)**

**XX. SELECTION COMMITTEE MEMBERS**

1. Blake Jones, P.E., User Division
2. Joe Callahan, P.E., User Division
3. Brent Sweger, P.E., Secretary's Pool
4. Nikki Boden, P.E., Secretary's Pool
5. Wesley Sydnor, Governor's Pool

**XXI. PROJECT MAP**

