

Missouri Department of Transportation
Kevin Keith, Director

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Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

November 9, 2011

Dear Research Partner:

The Missouri Highways and Transportation Commission requests proposals from qualified organizations—namely private consultants, universities and research organizations—to furnish professional services as described in the following request for proposal to be coordinated by the Research Unit of the Construction and Materials Division.

Please submit a proposal for project TRyy1226 entitled, “Evaluation of Pile Load Tests for Use in Missouri LRFD Guidelines.” Your submittal must include a work plan, the proposed project team and its background, and any related projects now active or recently completed by your firm. The project team must be led by a licensed professional engineer in the state of Missouri and the final report must be sealed, in accordance with the provisions of Chapter 327 RSMo.

The selection committee will use Qualification Based Selection. A “not to exceed” budget amount is included in the RFP to assist with the required scope, but budgets are not to be included with the proposal submissions, and will not be presented to the selection committee.

Please deliver all proposals to the Construction and Materials Contract Administrator indicated in the attachment by December 7, 2011. More information about project contracting in general can be found at: www.modot.mo.gov/services/OR/orRFP.htm.

Sincerely,



Bill Stone, P.E.
Research Administrator



This document contains information and requirements for only this RFP. A “Standard Requirements” document contains additional needs for all research proposals and contracting. Submitters should review both this document and the Standard Requirements document, available from the Construction and Materials Contract Administrator (identified at the end of this document) or:

www.modot.org/services/OR/orTemplates.htm

TRyy1226

“Evaluation of Pile Load Tests for Use in Missouri LRFD Guidelines”

Background:

In April 2011, MoDOT updated the Engineering Policy Guide (EPG) for design of bridge foundations based on a two year research program. MoDOT designs foundations using Load and Resistance Factor Design (LRFD) which is mandated by the new AASHTO bridge design specifications. The previous research project performed load testing on drilled shafts at two different sites in order to calibrate the LRFD design to Missouri geotechnical conditions. Performing load tests on driven piles was not part of the original scope so driven pile LRFD factors were based on existing dynamic pile verification tests not on static pile load tests. MoDOT believes a cost savings could be realized if static driven pile load tests are performed and a similar calibration process is completed. Currently, neighboring state DOTs are performing similar tests. Combining data from these tests with a static pile load test program from Missouri will enable the DOTs to leverage funding and optimize driven pile design.

Objectives:

The research project objective (Phase 1) is to develop a new static pile load test data set from Missouri locations, preferably at previously characterized sites. Test piles should be installed in accordance to the current special provisions for dynamic pile testing. A potential future phase 2 for the project will combine all available driven pile load test data and calibrate and revise MoDOT’s LRFD Design Guidelines. Phase 2 calibration is intended to produce new resistance factors that include the information of neighboring states and the pile load tests of Phase 1.

Project Requirements and Deliverables:

The primary task of this project is to perform pile load tests in the State of Missouri, both in the northern part of the state and the southern part of the state. Testing methods and data collected should be in accordance with ASTM D1143/D1143M, ATM D4945-08, and AASHTO T 298-99.

Quarterly Reports: Quarterly reports are due the last day of March, June, September, and December. This does not limit any informal meetings or communications that may be required during the project.

Interim Presentation: An Interim presentation shall be scheduled near the mid-point of the project to update MoDOT on the progress and the direction of the project. This is in addition to the necessary communication between the Principal Investigator(s) and MoDOT contacts throughout the project. The purpose of the interim presentation is to evaluate the progress and determine if any mid-project corrections are necessary.

Draft Research Findings: A draft of all research findings is due to the DOT 5 weeks prior to the final research findings.

Final Presentation: A final presentation is due at the time of the draft research findings.

Research Findings: Research findings and all data will be provided to MoDOT. A potential future phase 2 for the project will combine all available driven pile load test data from phase 1 and neighboring state DOTs, calibrate and revise MoDOT's LRFD Design Guidelines, and provide a final report.

Project Schedule:

The following is an estimate of the project timeline or information on key dates within the project, presuming the project starts January 16, 2012. Proposals need to include a work plan with a proposed timeline. While alternative timelines will be considered, an extension is unlikely. The project timeline will be finalized during the contracting phase.

By January 31, 2012: A kick-off meeting with MoDOT will be scheduled to discuss project requirements and deliverables.

March 30, 2012: 1st Quarterly Report Due

June 30, 2012: 2nd Quarterly Report Due

September 1 – September 30, 2012: Interim Presentation Due

September 30, 2012: 3rd Quarterly Report Due

December 31, 2012: 4th Quarterly Report Due

March 30, 2013: 5th Quarterly Report Due

July 1, 2013: Draft research findings due

July 1- July 15, 2013: Final Presentation

August 15, 2013: Final research findings and all data due.

October 31, 2013: Contract ends, final invoice is due to MoDOT.

(For report templates and a standard form see:
www.modot.org/services/OR/orTemplates.htm.)

Special Notes:

Project budget is not to exceed \$60,000. A budget is not to be included in the proposal, but will be required for the contract and must be within this limit.

Reporting templates and standard report forms are available from the Construction and Materials Contract Administrator or the web site:

www.modot.org/services/OR/orTemplates.htm

RFP Requirements:

- Proposals must be no more than 10 pages with a font size no less than 11 points. This length limit does not include forms or resumes attached to the proposal.
- The “Standard Requirements” document provides further details and links to the required forms. It is available from the Construction and Materials Contract Administrator or at: www.modot.org/services/OR/orTemplates.htm
- Proposals will be evaluated by an agency and stakeholder team with knowledge and backgrounds in relevant areas for this project. Selection of the successful proposer will be based on the proposer’s demonstrated knowledge in the required areas, the merit of the proposed methods and approach in achieving the desired goals, the experience and qualifications of the team, the plan for ensuring implementation of results, and the adequacy and availability of team members to complete the work in a timely manner.

RFP Schedule:

The following timeline must be met for a proposal to be accepted.

Date:	Action:
Nov. 9, 2011	MoDOT posts RFP to the website: www.modot.mo.gov/services/OR/orRFP.htm
Nov. 23, 2011	Written comments or questions must be submitted to Construction and Materials Contract Administrator.
Nov. 30, 2011	MoDOT will post written responses publicly on the website: www.modot.mo.gov/services/OR/orRFP.htm
Dec. 7, 2011	Written proposals must be submitted to Construction and Materials Contract Administrator.
Dec. 21, 2011	MoDOT will notify submitters about project selection, or if needed about interviews to finalize selection.

Contracting Requirements:

- The successful team will be required to complete additional documentation and enter into a contract such as a “Standard Research Agreement” or “Task Order.” Applicants should be aware of these additional needs so contracting can proceed in a timely manner.
- Standard contracts, forms, attachment templates and additional information are available from the Construction and Materials Contract Administrator or the web site:
www.modot.org/services/OR/orTemplates.htm

Contact Information:

Proposals must be either hand delivered by close of business; or faxed, emailed, or mailed by midnight (Central Standard Time) according to time stamp or postmark; on the due date indicated below. Please reference the project title since more than one RFP may be due at one time. Electronic proposals are encouraged. They may be faxed or emailed to the OR Contract Administrator:

Karmen.Stockman@modot.mo.gov

Fax: 573-522-8416

Proposal packages suitable for duplicating may be submitted by mail or hand delivery to:
 Construction and Materials Contract Administrator
 Missouri Department of Transportation
 1617 Missouri Blvd
 PO Box 270
 Jefferson City, MO 65109