ENGINEERING AND RELATED SERVICES JANUARY 08, 2016

CONTRACT NO. 4400006631 STATE PROJECT NO. H.005384 F.A.P. NO. H005384 TESTING OF UNKNOWN FOUNDATIONS STATEWIDE

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on DOTD Form 24-102 (24-102), "Professional Engineering and Related Services", revised November 2011, from Consulting Firms (Consultant) to provide engineering and related services. Consultants who are a Louisiana or foreign LLC or corporation should be appropriately registered with the Louisiana Secretary of State, as contemplated by Title 12 of the Louisiana Revised Statutes, and with LAPELS under it's rules for FIRMS. If a Consultant fails to place itself in good standing in accordance with those provisions, it may be subject to consequences contemplated in Title 12 and/or the LAPELS rules. All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met and the Prime Consultants shall be registered with the Federal Government using SAM.gov at the time of submittal. One Prime-Consultant/Sub-Consultant(s) will be selected for this Contract.

DOTD employees may not submit a proposal, nor be included as part of a Consultant's team.

Project Manager – Mr. David Nash

All inquiries concerning this advertisement should be sent in writing to masood.rasoulian@la.gov and heather.huval@la.gov.

PROJECT DESCRIPTION

The selected Consultant will perform pile length testing and scour susceptibility evaluation for a population of 1900 steel, timber and concrete bridges statewide that remain with unknown foundations. These bridges typically will be older structures with low ADT counts.

SCOPE OF SERVICES

The services to be rendered for this Project shall consist of the following:

Stage 1: Perform field data collection on bridges with unknown foundations using Non Destructive Testing

Part 1:

Consists of performing Field data collection using the dispersive wave testing methodology and or dispersive side sonic wave testing or other proven Non Destructive Testing methods. Pile selection will be the responsibility of the Consultant, however DOTD will reserve the right to designate particular piles on any bridge the engineer deems necessary. A minimum of three test piles per bridge is required [one nearest the deepest point of the channel profile and one nearest the shallowest point of the channel profile]. A maximum number of test piles for each bridge will be determined by dividing the number of bents by two, unless authorized by the engineer in writing.

Part 2:

Consists of sketching the bent and pile layout giving geographic references and nomenclature of test piles. This sketch (or a computer generated model) is to be included in the report. Numbering of bents shall begin at the abutment at the beginning of the bridge in the direction of control. Numbering of piles shall be from left to right when facing the bent in the direction of control. The route's direction of control is generally accepted as South to North or West to East. A control section manual containing beginning and ending points can be provided by DOTD.

Part 3:

Consists of measuring the length of pile exposure to determine the deepest point along the profile of the bridge (either up-stream or down-stream). This measurement will be used to calculate the minimum pile penetration. Also, any channel or abutment revetment (stone or concrete) found must be documented and reported along with the length test results. Any site location that has both concrete revetment and channel should not be tested, but brought to the Project Engineer's attention.

Stage 2: Screening of Scour Susceptible Bridges (Phase 1 Scour)

Part 1: Consists of obtaining any additional plans or information missing from the information supplied by the DOTD and organizing the bridges by river or stream.

Part 2: Will consist of determining the drainage areas for the bridges, computing the 100 year frequency discharge for bridge sites with drainage areas greater than 25 square miles and performing a scour analysis using the factors established by DOTD.

The DOTD required factors are identified in the <u>Phase I Scour Assessment Worksheet</u> and shall be included in the reports. An example can be found in Appendix A to this Scope of Services.

The Consultant will determine the hydrologic characteristics of each bridge site, including drainage area, discharge and pile penetration. The hydrologic information (drainage area and discharge) computed for each site will be gathered and catalogued for future reference by DOTD and other users requiring such information. The Consultant will provide all quadrangle maps required under this Phase and they will become part of the records for each site.

From information gathered from the reports, a list of scour susceptible bridges will be prioritized based on the Annual Average Daily Traffic (AADT) of the highway crossing the stream. This list will be used to determine the order in which the bridges will be analyzed in the next Stage. The AADT information can be found in the current issue of the DOTD Highway Needs Summary for each district.

- Part 3: Consists of general project management including meetings with DOTD to discuss progress, resolve any problems, and to file and organize the data. The use of DOTD microfilm files, microfilm reader/printers, construction plans, and Bridge Maintenance files should be scheduled as to not interfere with normal DOTD operations.
- Part 4: Consists of producing all testing reports in Portable Document Format (PDF) recorded on a CD with files named using the LADOTD bridge Recall Number, and organized by District number on a monthly basis not to exceed 36 months after the Notice To Proceed (NTP) as issued by the DOTD. A copy of the raw data for each pile tested, arranged in a format acceptable to the engineer, and organized by pile name, recall number, and District number will be submitted by the end of 36 months after the Notice To Proceed (NTP) was issued by the DOTD.

Stage 3: Scour Analysis of Selected Bridges (Phase 2 Scour)

Part 1:

Part 1 involves evaluation of the anticipated scour for the bridges identified as scour susceptible (SI&A Item 113 = 6) selected in Stage 2. The Consultant will analyze the selected bridges in accordance with Federal Highway Administration (FHWA) Publication No. FHWA-NHI-01-001, May 2001, Hydraulic Engineering Circular (HEC) No. 18, Evaluating Scour at Bridges, Fourth Edition with applicable Errata, and will provide Water Surface Profile Analysis (WSPRO) as established in FHWA Publication No.FHWA-SA-98-080, June 1998, Hydraulic Computer Program HY-7, User's Manual for WSPRO.

The WSPRO analysis requires a cross section of the flood plain. This cross section may be determined from the stream cross section available from the Bridge Inspection files and the quadrangle maps for the site. Actual field survey data may be required if this information is not available or if the complexity of the site warrants a more detailed analysis.

The DOTD Phase II SCOUR ANALYSIS OF SCOUR SUSCEPTIBLE BRIDGES worksheet shall be included in the report.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program; in order to provide a mechanism by which all contracted services can be subject to a systematic and consistent review. Consultants must ensure quality and adhere to established design policies, procedures, standards, and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant.

SERVICES TO BE PROVIDED BY DOTD

- Access to Bridge Maintenance bridge files, folders, and bridge inspection reports.
- Access to DOTD's archived microfilm and/or CD records to obtain as-built bridge drawings for each task order. The Consultant shall perform the work necessary to obtain drawings.

CONTRACT TIME

The Consultant shall proceed with the services specified herein after the execution of this Contract and upon written Notice-To-Proceed from the DOTD. The overall contract time to complete this project is estimated to be **four years**. The delivery schedule for all project deliverables shall be established by the Project Manager.

During the completion of Stage I, the consultant with submit a monthly progress report to the project engineer. During Stage II, the Consultant will submit two draft copies of the final report, with results, conclusions and recommendations, twelve months after the test date of the bridges for Stage 1 work. Contract time for Stage III shall be twelve months after the satisfactory completion of Stage II. Total contract time for all stages shall not exceed 1461 calendar days after the NTP from DOTD has been issued.

COMPENSATION

Compensation for the required services rendered in connection with this Contract will be negotiated work-hours using DOTD established billable rates for the actual time spent on the project, with a maximum limitation.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm Vehicle rental rates will require prior approval from the DOTD Project Manager.

Within 15 calendar days of notification of selection, a kick-off meeting will be held with the selected Consultant/Team and appropriate DOTD personnel. The selected Consultant/Team will be required to submit a proposal within 30 calendar days following the notification of selection. All negotiations must be completed within 60 calendar days following the notification of selection.

DIRECT EXPENSES

All direct expense items which are not paid for in the firm's overhead which are needed and will be consumed during the life of the contract must be identified by the consultant during contract development. Standard equipment to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses. Failure to provide the above information will deem items as non-qualifying for direct expenses.

The Consultant shall provide a minimum of three rate quotes for any specialty vehicle or equipment. Any and all items for which said quotes are not submitted shall be deemed as non-qualifying for payment as direct expenses.

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

- 1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
- 2. DOTD Location and Survey Manual
- 3. DOTD Addendum "A" to the Location and Survey Manual
- 4. DOTD Roadway Design Procedures and Details
- 5. DOTD Design Guidelines
- 6. DOTD Hydraulics Manual
- 7. DOTD Standard Specifications for Roads and Bridges
- 8. Manual of Uniform Traffic Control Devices
- 9. DOTD Traffic Signal Design Manual
- 10. National Environmental Policy Act (NEPA)
- 11. National Electric Safety Code (NESC)
- 12. National Electrical Code (NFPA 70)
- 13. A Policy on Geometric Design of Highways and Streets (AASHTO)
- 14. DOTD Construction Contract Administration Manual
- 15. DOTD Materials Sampling Manual
- 16. DOTD Bridge Design Manual
- 17. Consultant Contract Services Manual
- 18. Geotechnical Engineering Services Document
- 19. Bridge Inspectors Reference Manual/90
- 20. DOTD Stage 1 Planning/Environmental Manual of Standard Practice
- 21. Code of Federal Regulations 29 CFR 1926 (OSHA)
- 22. Complete Streets,
 http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safet
 http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safet
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Follow link below for the individual reference links:

 $\frac{http://webmail.dotd.louisiana.gov/ContWEB.nsf/b88769326453bef886256fe00047183a/1862860512aba5886257a62006133b8?OpenDocument}{2}$

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met by the Prime-Consultant at the time of submittal:

- 1. At least one Principal of the Prime-Consultant must be a Professional Engineer registered in the State of Louisiana.
- 2. At least one Principal or other Responsible Member of the Prime-Consultant must be a Professional Engineer, registered in the State of Louisiana, with five years of experience in responsible charge of non-destructive evaluation.

- 3. In addition to the above, the Prime-Consultant must employ on a full-time basis a minimum of three Professional Engineers, registered in the State of Louisiana, one with a minimum of five years of experience in Bridge Structural Design, and two with a minimum of five years of experience in Hydraulic Engineering.
- 4. The Prime-Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
 - a. A minimum of two Professional Engineers, registered in the State of Louisiana, one with at least five years of experience in responsible charge of geotechnical services, and one with at least five years of experience in hydraulic engineering.—producing FB Pier input from boring and Electronic Cone Penetrometer Test (ECPT) data.

Training Certifications/Certifications of Compliance must be submitted with and made part of the Consultants DOTD Form 24-102 for all Personnel Requirements listed herein

WORK ZONE TRAINING REQUIREMENTS (PRE-CONSTRUCTION SERVICES)

As part of DOTD's on-going commitment to work zone safety, required work zone training courses must now be taken every four years in order for personnel to remain eligible to work on DOTD projects. For consultants performing pre-construction services (i.e., design, survey, subsurface utility, geotechnical, traffic, bridge inspection, environmental services), appropriate personnel must take these courses. In general, the responsible charge of traffic control plans shall be required to have Traffic Control Supervisor training. For field services performed within the clear zone, at least one member of the field crew shall have Traffic Control Supervisor or Traffic Control Technician training. Consultant should identify all personnel listed in the staffing plan for the project that have completed the appropriate work zone training courses. Current certifications of compliance for this training should be submitted with and made part of Consultant's DOTD Form 24-102. The consultant shall explain in Section 13 of DOTD Form 24-102 how they plan to meet the work zone requirements. requirements shall be met prior to contract execution. It will be the prime consultant's responsibility to ensure their staff and sub-consultants have the appropriate work zone training.

The above requirements are the minimum to perform work on DOTD projects. It is desired that all staff have work zone training as shown below:

Engineers: Traffic Control Technician

Traffic Control Supervisor

Flagger

Engineer Interns: Traffic Control Technician

Traffic Control Supervisor Flagger

Field Senior Technicians, Survey Party Chiefs, and

SUE Worksite Traffic Supervisors: Traffic Control Technician

Traffic Control Supervisor

Flagger

Field Personnel: Traffic Control Technician

Flagger

Approved courses are offered by ATSSA and AGC. Substitutes for these courses must be approved by the LA DOTD Work Zone Task Force. Specific training course requirements are:

Flagger: Successful completion every four years of a work zone flagger

course approved by the Department. The "DOTD Maintenance Basic Flagging Procedures Workshop" is not an acceptable

substitute for the ATSSA and AGC flagging courses.

Traffic Control Technician (TCT): Successful completion every four years of a work zone traffic control technician course approved the Department. After initial successful completion, it is not necessary to retake this course every four years if Traffic Control Supervisor

training is completed every four years.

Traffic Control Supervisor (TCS): Successful completion of a work zone traffic control supervisor course approved by the Department. Following an initial completion, traffic control supervisors must either complete a 1-day TCS refresher course or retake the original 2-day

TCS course every four years.

ATSSA contact information: (877) 642-4637

EVALUATION CRITERIA

The general criteria to be used by DOTD in evaluating responses for the selection of a Consultant to perform these services are:

- 1. Consultant's firm experience on similar projects, weighting factor of 3;
- 2. Consultant's personnel experience on similar projects, weighting factor of 4;
- 3. Consultant's firm size as related to the estimated project cost, weighting factor of 3;
- 4. Consultant's past performance on similar DOTD projects, weighting factor of 6; **
- 5. Consultant's current work load with DOTD, weighting factor of 5;
- 6. Location where the work will be performed, weighting factor of 4; *
- * Location will be based out of Marksville, Louisiana
- ** The performance bridge design (BZ) rating will be used for this project.

8a. List the elements of work as defined in the advertisement, and an estimated percentage and detailed description of the work elements(s) to be performed by the prime consultant and each sub-consultant.								
Element of Work	% of Overall Project	Sub- Task % of Element of Work	Firm A	Firm B	Firm C	Firm D	Firm E	Firm F
NON DESTRUCTIVE	100%							
Data Collection		40%						
Analysis		60%						
Percent of Contract	100%							

Complexity Level- normal

Consultants will be evaluated as indicated in Items 1-6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 1-5. The rating will then be multiplied by the corresponding weighting factor. The firm's rating in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.

- 1. Masood Rasoulian Ex officio
- 2. David Nash-Project Manager
- 3. Steven Sibley
- 4. David Miller
- 5. Haylye Brown
- 6. Stephanie Cavalier

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution of the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator:
- B. Neither the Consultant, nor any other party on behalf of the Consultant, shall contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;

E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. The Prime-Consultant may require the Sub-Consultant(s) to carry professional liability insurance. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant/Team will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant/Team will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant/Team will maintain an approved Project Cost System, and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant/Team will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who failed to meet all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (stamped "original") and five copies of the DOTD Form 24-102 must be submitted to DOTD along with an electronic copy (USB flash drive only) in a searchable Portable Document Format (pdf). If you wish to have your flash drive returned, please include a postage paid, self-addressed envelope. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual.

Multiple firms that are listed on a single proposal (e.g., prime consultants as well as listed sub-consultants) will be considered a "Team." Only one Consultant or Team will be selected for each contract to be awarded pursuant to a Request for Qualifications. A Team may submit more than one proposal reflecting different allocations of work or different combinations of prime and sub-consultants, but in no instance will a single Team be awarded more than one contract from a single Request for Qualifications.

Any Consultant/Team failing to submit any of the information required on the 24-102, or providing inaccurate information on the 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's 24-102 must be firmly bound to the Consultant's 24-102. In Section 8, the Consultant's 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Contract employees may be allowed for a period of time for a particular element or task on a project. Contract employees should be shown in **Section 9a. Project Staffing Plan** with resumes included in **Section 10**.

<u>Use of contract employees requires prior approval by the Consultant Contract Services</u>

<u>Section for each element or task on a project. The approval request shall be made prior to the submittal of the 24-102 form.</u>

Name(s) of the Consultant/Team listed on the 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The DOTD Form 24-102 will be identified with Contract No. 4400006631 and State Project No. H.005384, and will be submitted prior to 3:00 p.m. CST on , Thursday, February 11, 2016 Thursday, January 28, 2016, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Mr. Masood Rasoulian, P.E. Consultant Contracts Services Administrator 1201 Capitol Access Road, **Room 405-E** Baton Rouge, LA 70802-4438 or Telephone: (225) 379-1433

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted, and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD, and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.