ENGINEERING AND RELATED SERVICES SEPTEMBER 04, 2015

CONTRACT NO. 4400006906 STATE PROJECT NO. H.011251 F.A.P. NO. H011251 PAVEMENT CONDITION INDEX (PCI) STUDY FOR VARIOUS AIRPORTS 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 – Heidi Higginbotham

All inquiries concerning this advertisement should be sent in writing to <u>hadi.shirazi@la.gov</u> and heather.huval@la.gov.

PROJECT DESCRIPTION

The selected Consultant will provide a Pavement Condition Index (PCI) study for the 61 general aviation airports in Louisiana that are part of the Louisiana Airport System as identified in the Louisiana Airport System Plan. The work will be conducted according to the American Society for Testing and Materials (ASTM) manual D5340-12 and Federal Aviation Administration Advisory Circular 150/5380-6C standards. Individual airport reports will be provided to us upon completion.

SCOPE OF SERVICES

Airports are an essential component of the Louisiana Transportation System. Protecting and preserving the valuable infrastructure at these airports through progressive pavement maintenance management is very important, and that is the focus of this airport pavement management system project. The scope of this project entails the successful Consultant to visit each airport to ascertain existing pavement conditions in accordance with the Federal Aviation Administration (FAA) Advisory Circular 150/5380-6C – *Guidelines and Procedures for Maintenance of Airport Pavements* and ASTM D5340-12 – *Standard Test Method for Airport Pavement Condition Index Surveys*. The collected inventory and pavement condition index (PCI) data will be used to prepare maps, update pavement management data, develop multi-year maintenance and rehabilitation plans, and produce project reports and integrate the reports and data with DOTD's Aviation web interface.

The Consultant shall perform airport pavement inspections, to update DOTD's Airport Pavement Management System (APMS), and provide electronic reports in a searchable PDF format for individual airports and for the statewide airport system. These updates will be performed annually. There are 61 paved General Aviation airports that are maintained in the system.

The following is a summary of the major tasks required and associated with this project that will be required of the selected Consultant. A complete detailed Scope of Services will be negotiated with the Consultant and become part of the final contract with DOTD.

Task 1.0 Records Review

The objective is to conduct a review of the records to determine pavement structure and age. Information pertaining to the pavement history, as well as information concerning the physical layout of the pavement system, will be obtained. This work will concentrate on pavement maintenance, rehabilitation and new construction that has occurred at a project airport since it was last inspected in the previous PCI study.

Task 2.0 Pavement Network Definition Update

Airport mapping will be updated to identify the location of branches, sections, and sample units. Since recommendations for pavement maintenance and rehabilitation are made at the section level, it is important that the sections identified in the current data repository represent areas where pavement repair work would realistically be applied.

Task 3.0 Pavement Condition Survey

The pavements will be inspected using the pavement condition index (PCI) procedures as outlined in the American Society for Testing and Materials (ASTM) Standard D5340-12, *Standard Test Method for Airport Pavement Condition Index Surveys* and the FAA Advisory Circular 150/5380-6C, *Guidelines and Procedures for Maintenance of Airport Pavements*. Additionally, photographs of representative pavement conditions and typical distresses observed in each section will be collected during the inspection. Table 1 identifies the standard inspection sampling rate that will be used during the PCI inspection.

PCC Pavements		AC Pavements	
Ν	n	Ν	n
1-3	all	1-3	all
4	3	4	3
5-7	4	5-9	4
8 — 10	5	10 — 20	5
11—16	6	21 — 30	6
17 — 28	7	31 — 70	7
29 — 64	8	>70	10%, but ≤ 17
65 — 90	9		
> 90	10%, but ≤ 32		

Table 1. Inspection sampling rate.

N – Total number of samples in a section

n – Number of samples to inspect in a section

Task 4.0 Data Repository Update

The existing pavement data repository will be updated with the inventory and PCI data collected during earlier project tasks. The data entered will be verified through a process of basic data entry checks followed by "reality" checks. The "reality" checks consist of a review of items such as last construction dates versus pavement condition and the standard deviation of different sections.

Task 5.0 Aviation Toolset Customization

The APMS solution will be customized to more accurately reflect the conditions and policies under which the state of Louisiana operates. The customization will involve updating the pavement performance models, maintenance policies, prioritization guidelines, and unit cost information contained in the APMS.

Task 6.0 APMS Toolset Update

An updated MicroPaver (or equivalent) data repository and updated CAD maps of each airport will be provided. This includes the update of the existing MicroPaver (or equivalent) solution to the most current version.

Task 7.0 Data Analysis

Data analysis will include the evaluation of the distress data (composite index, cause of deterioration, and rate of deterioration), a statewide needs analysis, the identification of the level of repair required and the timing of these activities, and the development of a multi-year pavement repair program. The statewide needs assessment will include an analysis of the overall statistics on the condition of airport pavements. The condition of the pavement sections – current and projected – will then be used to identify pavement M&R (maintenance and repair) needs. Using the information obtained during the pavement condition analysis and the statewide needs assessment, a five year plan for

pavement projects will be prepared. This plan will present a list of pavement M&R projects.

Task 8.0 Statewide Summary Report

A Statewide Summary Report will be prepared that will contain the results of the analysis, including annual maintenance programs, multi-year pavement rehabilitation programs, and network level budget plans.

Task 9.0 Pavement Solution Report

An interactive report deliverable will be created that can be hosted on the state's website. The pavement inventory and condition data, color-coded PCI maps, photographs taken during the inspection, predicted condition data, and the M&R plan for each airport will be incorporated into this program for easy retrieval of project information.

Task 10.0 GIS Map Link

The GIS link will be established between the updated MicroPaver (or equivalent) data repository and the airport maps using MicroPaver (or equivalent) internal GIS viewer.

Task 11.0 PCI and MicroPaver (or equivalent) Training

Training in the conduct of a PCI inspection and the use of MicroPaver (or equivalent) will be conducted. PCI training will consist of a one day training program and will focus primarily on the conduct of an inspection and the identification and causes of pavement distresses. The MicroPaver (or equivalent) training course will consist of a two day tutorial using realistic scenarios leading the trainee through the steps involved in updating and utilizing the APMS data repository.

Task 12.0 PCN Determination

The FAA has mandated that pavement classification numbers (PCN) be determined for commercial service runway pavements within the next two to four years. Determination of the PCN values requires detailed pavement cross section, subgrade strength, and operation traffic information. All necessary information will be collected and the appropriate PCN value for each commercial airport runway included in this project will be determined in accordance with FAA Advisory Circular 150/5335-5C, *Standardized Method of Reporting Airport Pavement Strength* – PCN.

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.

CONTRACT TIME

The overall contract time is estimated to be **three years**. The Consultant will proceed with the services specified herein after the execution of this Contract and upon written Notice-To-Proceed from the DOTD.

COMPENSATION

Compensation to the Consultant for services rendered in connection with this Contract will be made on the basis of an actual cost plus a fixed fee, with a maximum limitation, based on negotiated man hours.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: <u>http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm</u> 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

- 5. DOTD Design Guidelines
- 6. DOTD Hydraulics Manual
- 10. National Environmental Policy Act (NEPA)
- 11. National Electric Safety Code (NESC)
- 12. National Electric Code (NFPA 70)
- 13. DOTD Environmental Impact Procedures (Vols. I-III)
- 15. DOTD Construction Contract Administration Manual
- 16. DOTD Materials Sampling Manual
- 18. Consultant Contract Services Manual
- 19. Geotechnical Engineering Services Document
- 21. DOTD Stage 1 Planning/Environmental Manual of Standard Practice
- 22. Code of Federal Regulations 29 CFR 1926 (OSHA)
- 23. Testing Procedures Manual
- 24. Engineering Directives and Standards Manual (EDSM)
- 25. American Society for Testing and Materials (ASTM) manual D5340-12
- 26. Federal Aviation Administration Advisory Circular 150/5380-6C
- 27. FAA Advisory Circular 150/5335-5C

Follow link below for the individual reference links:

http://webmail.dotd.louisiana.gov/ContWEB.nsf/b88769326453bef886256fe00047183a/1 8fc2860512aba5886257a62006133b8?OpenDocument

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 a responsible member of the Prime-Consultant must be a professional Civil Engineer registered in the State of Louisiana.

3. In addition to the above, at least one Principal or Responsible Member shall have had a minimum of five years of experience in airport pavement evaluation.

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; **

* The OT (Other) performance rating will be used for this project.

** Location will be based out of Marksville, Louisiana.

Consultants with no past performance rating in a rating category will be assigned the average rating of the firms submitting; with ratings capped at the statewide average rating for that category as of the date the advertisement was posted.

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 0-4. 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. Hadi Shirazi Ex officio
- 2. Heidi Higginbotham– Project Manager
- 3. Tina Wilson
- 4. Michael Burrows
- 5. Randall Withers
- 6. Dean Goodell

<u>Rules of Contact</u> (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 shall provide to the DOTD Audit Section an *independent* Certified Public Accountant (CPA) audited overhead rate developed in accordance with Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the selected Consultant/Team will allow the DOTD Audit Section to perform an overhead audit of its books, at the DOTD's sole discretion. The performance of such an audit by the DOTD Audit Section shall not relieve the Consultant/Team of its responsibilities under this paragraph.

Consultants are also required to submit labor rate information twice a year to the DOTD's Audit Section and/or as requested by DOTD. Newly selected firms must have audited salaries and overhead rates on file with the DOTD's Audit Section before starting any

additional stage/phase of their contracts. All Qualification Statements (24-102) submitted to DOTD by Consultants currently under contract may be considered non-responsive if the consultant is not in compliance with the above audit requirements.

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 (<u>www.dotd.louisiana.gov</u>), 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.

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</u> <u>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. 4400006906 and State Project No. H.011251, and will be submitted prior to 3:00 p.m. CST on Tuesday, September 22, 2015, by hand delivery or mail, addressed to: Department of Transportation and Development Attn.: Mr. Hadi Shirazi, P.E., PTOE Consultant Contracts Services Administrator 1201 Capitol Access Road, **Room 405-E** Baton Rouge, LA 70802-4438 or Telephone: (225) 379-1929

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.