

## **ENGINEERING AND RELATED SERVICES**

**May 2, 2008**

**STATE PROJECT NO. 700-26-0299**

**F.A.P. NO. BR-2607(515)**

**BAYOU BARATARIA BRIDGE @ JEAN LAFITTE**

**ROUTE LA 302**

**JEFFERSON PARISH**

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 Standard Form 24-102 (SF 24-102), "Professional Engineering and Related Services", revised January 2003, from Consulting Firms (Consultant) to provide engineering and related services. **All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met at the time of submittal.** One Prime-Consultant/Sub-Consultant(s) (Consultant/Team) will be selected for this Contract.

**Project Manager** – Mr. Chris Guidry, P.E., may be reached at (225) 379-1328.

### **PROJECT DESCRIPTION**

This project will consist of four phases which are to be performed as separate and distinguishable efforts. In the first phase, the Consultant will perform an Economic Benefit Study for the purpose of pursuing an alternative funding source (Truman Hobbs Funds) for the project. The second phase will be performed concurrent with the first and shall consist of the design and preparation of Preliminary Plans for the road and bridge (approach spans). The third phase will consist of the final design and preparation of plans for road and bridge (approach spans). The fourth phase will be for construction related services.

The Road and Bridge Design portion of this contract shall consist of Preliminary Road and Bridge Design and Final Road and Bridge Design.

### **SCOPE OF SERVICES**

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

Stage 0: Feasibility Studies

Part I: Feasibility Study

Stage 3: Design

Part III: Preliminary Plans

Part IV: Final Plans

Stage 5: Construction

Part I: Construction Support

## Part II: Shop Drawings

The services to be performed by the Consultant are described more specifically as follows:

### **Economic Benefit Study Development (Stage 0: Feasibility Studies, Part I: Feasibility Study)**

The Consultant will perform an Economic Benefit Study for use in pursuing an alternative funding source, Truman-Hobbs in particular, for the replacement of the existing low-level swing span bridge on LA 302 over Bayou Barataria at Jean Lafitte. The study will include the location, assembly, evaluation, and presentation of information with respect to marine and bridge traffic at the site, existing bridge closure and damage frequency, local demographics and economic concerns, cost estimates and economic evaluations. The results of the study will be assembled by the Consultant into a report to be submitted to the United States Coast Guard (USCG) and other state and federal government agencies to determine eligibility and apply for funding.

As the report will be used by the USCG to make the determination of qualification for Truman-Hobbs funds, the Consultant will reference *Title 33 – Navigation and Navigable Waters, Chapter 1- Coast Guard, Department of Transportation, Section 116 – Alteration of Unreasonably Obstructive Bridges* in the preparation of the document in order to assure that all issues are addressed. The tasks to be performed by the Consultant will include, but are not limited to, the following:

1. **Compilation of Complaints** – The Consultant will review all comments and/or complaints received previously as part of the Bayou Barataria Bridge Replacement EIS Project. Additionally, the Consultant will schedule and coordinate meetings with maritime interests and other concerned parties in the area for the purpose of soliciting input regarding obstructions to navigation due to the existing bridge. The comments and/or complaints will be assembled into report form to submit to the USCG.
2. **Preliminary Review of Complaints** – The Consultant will assist the USCG District Commander in reviewing complaint documents and informal discussions with parties who submit concerns to determine if a Preliminary Investigation is warranted. The Consultant shall also review the documented maritime accident history at the bridge site as part of this determination and prepare a summary of the findings.
3. **Preliminary Investigation** – If deemed warranted, the Consultant shall prepare a Preliminary Investigation Report which will summarize the information gathered previously including, but not limited to, existing bridge type and location, marine traffic volume, complaints received, accident documentation, and potential benefits to improvements to or replacement of the bridge. The Consultant will then meet with the USCG and all other involved agencies to determine if continued pursuit of Truman-Hobbs funding is warranted.

4. **Detailed Investigation** – The Consultant will be responsible for conducting a document for the Detailed Investigation and preparing the Report as required by the USCG in Title 33. The Report shall also include estimated cost information for the design and construction of the replacement structure which will be compared to the estimated navigational benefits to establish a benefit/cost ratio. The Report will be used to determine whether the existing bridge will be declared an “unreasonable obstruction to navigation.”
5. **Public Hearings** – The Consultant will schedule, coordinate and participate in any Public Hearings determined to be necessary by the USCG to allow input from any parties of interest in the vicinity of the existing bridge site. This will include preparing the notices, advertisements, exhibits and presentations as well as compiling all input received and preparing a Public Hearing Summary.
6. **Review and Evaluation** – The Consultant will prepare a Decision Analysis including a Benefit/Cost Analysis and Benefit/Cost ratio to be used in determining the “need” for a new bridge. The Analysis will also include details of the proposed new structure including horizontal and vertical clearances and detailed explanations as to the necessity of a replacement bridge.
7. **Order to Alter** – Should the USCG determine necessary, the Consultant will prepare the Order to Alter as specified in Title 33 on behalf of the USCG.

**Road and Bridge Design (Stage 3: Design, Part III: Preliminary Plans, Part IV: Final Plans)**

The Road and Bridge Design portion of this contract will consist of three phases, more specifically described as follows:

1. **Preliminary Road and Bridge Design** – The Consultant will be responsible for producing Preliminary Plans for the approach roadway and approach bridge spans for the replacement of the Bayou Barataria Bridge at Jean Lafitte. The bridge will be designed in accordance with the latest AASHTO LRFD Bridge Design Specifications and will consist of slab spans, pre-stressed girder spans and steel girder spans supported by concrete pile and column bents. The bridge will also include a steel girder bascule span to be designed by DOTD, therefore close coordination and cooperation during the design process is required.
2. **Final Road and Bridge Design** – The Consultant will be responsible for producing Final Plans for the approach roadway and approach bridge spans for the replacement of the Bayou Barataria Bridge at Jean Lafitte as described previously. The Consultant will be responsible for submitting an LRFR bridge load rating upon completion of construction of the bridge.

During the progress of each previously described phase of work, intermediate submissions will be made to the DOTD for review and comment at the 60% and 90% levels of completion. Comments received as a result of the

submissions will be discussed with the DOTD and incorporated into the final submittal of that respective phase as warranted.

All designs and drawings will comply with the requirements of the DOTD Bridge Design Manual, DOTD Roadway Design Procedures and Details Manual and the current edition of the DOTD Road and Bridge Specifications. Where it is necessary to depart from the Road and Bridge Specifications or augment them, Supplemental Special Provisions will be written.

All drawings will be developed using MicroStation, and they will comply with the DOTD CADD standards.

### **ITEMS TO BE PROVIDED BY DOTD**

The DOTD shall provide to the Consultant, copies of the following documents to be used as references in the development of the report:

- Final Environmental Impact Statement & Appendix (August 2002)
- Vessel Height Requirements for Maritime Traffic on Bayou Barataria Study (April 2001)
- Transcript of Public Hearing of April 4, 2002
- Transcript of Public Hearing of October 26, 2000
- Vessel Collision Risk Assessment – Kerner Ferry Bridge (December 1998)
- TOPO Survey Data
- Standard Plans
- Soil Borings

The Consultant will not limit his use of references to those listed above.

### **ADDITIONAL SERVICES**

The scope of services, compensation and contract time for future engineering services will be established by Supplemental Agreement(s) for the following:

- Stage 5: Construction Support
  - Part I: Construction Support
  - Part II: Shop Drawings

### **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 Roadway Design Procedures and Details
4. DOTD Hydraulics Manual
5. DOTD Standard Specifications for Roads and Bridges
6. Manual of Uniform Traffic Control Devices
7. DOTD Traffic Signal Design Manual
8. National Environmental Policy Act (NEPA)
9. National Electric Safety Code
10. National Electric Code (NFPA 70)
11. DOTD Environmental Impact Procedures (Vols. I-III)
12. Policy on Geometric Design of Highways and Streets
13. Construction Contract Administration Manual
14. Materials Sampling Manual
15. DOTD Bridge Design Manual
16. Consultant Contract Services Manual
17. Geotechnical Engineering Services Document
18. Bridge Inspectors Reference Manual
19. DOTD Stage 1 Manual of Standard Practice
20. AASHTO/LRFD Bridge Design Specifications
21. AASHTO Manual for Condition Evaluation of Bridges
22. Manual for Maintenance Inspection for Bridges
23. AASHTO Manual for Condition Evaluation and Load and Resistance Factor Rating (LAFR) of Highway Bridges

### **COMPENSATION**

Compensation to the Consultant for services rendered in connection with this Contract will be a negotiated lump sum.

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/travelguide.pdf>. Vehicle rental rates will require prior approval from the DOTD Project Manager.

The selected Consultant/Team will be required to submit a proposal within 45 calendar days following the notification of selection. All negotiations must be completed within 90 calendar days following the notification of selection.

### **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 **365 calendar days**. The delivery schedule for all project deliverables shall be established by the Project Manager.

## **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 Civil Engineer, registered in the State of Louisiana.
3. In addition to the above, the Prime Consultant must employ on a full-time basis a minimum of three Professional Civil Engineers, registered in the State of Louisiana, one with at least ten years of experience in Bridge Design, and one with at least five years experience in Road Design, with corresponding support staff.
4. The Prime-Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
  - a. At least one Professional Civil Engineer registered in the State of Louisiana with at least five years of Geotechnical experience including experience with pile supported structures in soft coastal soils of Louisiana and a corresponding support staff.
  - b. At least one Professional Engineer registered in the State of Louisiana with experience in obtaining data and information and the preparation of reports and applications for alternative source funding for transportation projects, with a corresponding support staff.

## **ELECTRONIC DELIVERABLES**

The Consultant hereby agrees to produce electronic deliverables in conformance with “DOTD Software and Deliverable Standards for Electronic Plans” as outlined at [http://www.dotd.louisiana.gov/highways/project\\_devel/design/electronic\\_standards\\_disclaimer.asp](http://www.dotd.louisiana.gov/highways/project_devel/design/electronic_standards_disclaimer.asp). The Consultant shall download and apply the latest CAD standards. The Consultant hereby agrees to install incremental updates to software and CAD standards as instructed by the Project Manager. Such updates will not have a significant impact on the development time or delivery date for project plans, or require the Consultant to purchase additional software. Prior to proceeding with plan development, the Consultant shall contact the Project Manager for any special instructions regarding updates to standards or project-specific requirements if this information has not already been provided.

In the event that any electronic standard conflicts with written documentation, including DOTD plan-development manuals, the electronic standard typically governs. The Consultant is responsible for contacting the Project Manager should questions arise.

Plan deliveries shall be made on CD or DVD media and labeled with media-compatible indelible ink on separate lines as follows:

- State Project Number
- “Final Plans Submittal”, “60% ACP Submittal” (or other milestone)
- “Electronic Deliverables”
- Consultant Firm Name

The CD/DVD shall be delivered with a signed cover letter that includes, among the formalities, a deliverable “hash” code that is documented in a report generated by the ControlCAD Indexer Submittal tool. The hash code is used to verify that the CD is authentic. At any stage of the plan development process, the Project Manager may require plan delivery by other methods including, but not limited to, upload to the DOTD ProjectWise repository.

The prime Consultant is responsible for ensuring that Sub-Consultants are prepared to produce electronic deliverables in conformance with DOTD electronic standards for plans.

### **QUALITY CONTROL/QUALITY ASSURANCE**

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program or adopt DOTD's program; in order to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. Consultant's 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. The Consultant's plans shall meet or exceed DOTD's Construction Plans Quality Control / Quality Assurance Manual and EDSM No. Volume I. 1.1.24 on Plan Quality. The Consultant shall transmit plans with a DOTD Quality Control/Quality Assurance Checklist, Documentation Manual for Project Delivery, and a certification that the plans meet the DOTD's quality standards.

### **EVALUATION CRITERIA**

The general criteria to be used by DOTD (when applicable) 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 Bridge Design (Complex) (BC) performance rating will be used for this project.

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, 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.

The following estimates of work categories will be used in the Consultant Evaluation Process. These percentages are based on the overall project:

Planning - 16%  
Roadway Design - 26%  
Bridge Design - 58%

DOTD's Consultant Evaluation Committee 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.

### **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 has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website ([www.dotd.louisiana.gov](http://www.dotd.louisiana.gov)), will not be considered for this project.

## SUBMITTAL REQUIREMENTS

One original (**stamped original**) and four copies of the SF 24-102 must be submitted to DOTD. 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 SF 24-102, or providing inaccurate information on the SF 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 SF 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's SF 24-102 must be firmly bound to the Consultant's SF 24-102. In Section 9, the Consultant's SF 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.

Name(s) of the Consultant/Team listed on the SF 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 SF 24-102 will be identified with State Project No. **700-26-0299**, and will be submitted **prior to 3:00 p.m. CST on Tuesday, May 27, 2008**, by hand delivery or mail, addressed to:

Department of Transportation and Development  
Attn.: Mr. Edward R. Wedge, P.E.  
Consultant Contract Services Administrator  
1201 Capitol Access Road, **Room 405-T**  
Baton Rouge, LA 70802-4438 or  
Post Office Box 94245  
Baton Rouge, Louisiana 70804-9245  
Telephone: (225) 379-1989

## 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.