

ENGINEERING AND RELATED SERVICES

July 4, 2008

STATE PROJECT NO. 700-99-0461 (DBE Goal)

F.A.P. NO. BR-9908(508)

BRIDGE SCOUR ANALYSIS

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 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. Joshua Harrouch may be reached at (225) 379-1313.

PROJECT DESCRIPTION

The Consultant will provide all engineering services required to perform scour analyses and to review the structural stability of selected bridges statewide. For all structures determined to be scour critical, an FHWA Plan of Action (POA) will be prepared and where required, a scour countermeasure design will be completed and plans prepared for construction. The work has been categorized into the following 4 phases that are briefly described as follows:

Phase I: Screening of scour susceptible bridges.

In Phase I, the hydrologic characteristics of each bridge site, including drainage area, discharge and pile penetration are determined and used to categorize structures as scour susceptible. Those structures found to be scour susceptible, will be prioritized based on an agreed upon method and used to develop the Phase II activities.

Phase II: Scour analysis of selected bridges

Phase II involves calculating the anticipated scour for the scour susceptible bridges selected in Phase I. The analyses will be made in accordance with the FHWA publication FHWA-NHI-01-001, March 2001, Hydraulic Engineering Circular (HEC) 18, Evaluating Scour at Bridges, and will include a water surface profile analysis. WSPRO software is the FHWA developed computer model widely accepted to develop water surface profile computations. The information obtained from the software will be used to develop a predicted scour elevation for that bridge location and assist in determining if the structure requires further investigation to determine it's susceptibility to scour. Those structures

determined to be scour critical after phase II, will proceed to Phase III where a structural and geotechnical analysis will be completed.

Phase III: Stability analysis of scour critical bridges.

In Phase III, the structures will be evaluated at the predicted scour elevation from the Phase II reports. Using existing or obtained geotechnical data along with structural data obtained from As-built plans, the structural stability will be compared to the predicted scour elevation. If the structure is unstable at that elevation, structural analysis software will be used to determine the stream bottom elevation at which the structure becomes stable. That elevation will be identified as the critical scour elevation. A scour critical structure will be identified based on criteria comparing the current mud-line or stream bottom elevation to the identified critical scour elevation. Those structures determined to be scour critical will proceed to Phase IV where scour countermeasures will be implemented.

Phase IV: Design and Implementation of Scour Countermeasures.

In Phase IV, Scour countermeasures are implemented. For those structures with recommended countermeasures that go beyond an increased monitoring schedule, Scour designs and plans are developed.

SCOPE OF SERVICES

The scope of services for this contract includes Phases I, II, III, and IV services for scour critical structures throughout the state. Phase I and Phase II services were completed for 830 structures currently rated “scour critical” (NBIS Item 113 rating of 2, 3, or 7). Of this group, 648 Bridges are currently rated “3” or below and require Phase III services. Phase IV services may also be required for a percentage of these structures if it is determined necessary after Phase III. The scope of services will include Phase I, II, III, and IV services for additional structures that may be added to this group. These structures will include those with previously undetermined foundations and/or newer structures with construction issues that have led to a scour critical condition.

The primary objective of this contract will be to complete Phase III services for the 648 structures previously mentioned. For structures requiring a complete scour study, the order of work for determining bridge vulnerability to scour will be performed in the following manner: Phase I will consist of Data Collection and Qualitative Analysis at each site, Phase II will consist of Hydrologic and Hydraulic Assessments, Phase III will include Geotechnical and Structural Stability Assessments, and Phase IV will consist of the FHWA required Plan of Action (POA). Should the POA, include the construction of scour countermeasures and the recommendation is approved by the DOTD, the consultant will be responsible for a scour remediation design and development of plans and specifications for the specific site.

This document will describe the phase process for bridge scour evaluations, with each phase being the completion of a logical step in the site evaluation. The findings of each step will provide guidance to the requirements and the direction of evaluation for the next phase. The selected consultant will be required to provide documentation and an executive summary report for each completed phase for approval before proceeding. This report will include plans of action for the next phase. The DOTD is aware that a conclusion could be reached at any phase in the process eliminating the need to proceed further.

Stream stability and scour evaluation for bridges shall be developed using a multi-disciplinary approach involving the hydraulics engineer, geotechnical engineer, and structural engineer. Each phase will involve the expertise of the appropriate technical specialist. It is the responsibility of the selected consultant to ensure he has appropriate expertise and a coordinated approach is used in each phase.

The following is a summary of the information that is to be developed and the methods and procedures to be followed in performing scour evaluations for existing waterway bridges in Louisiana. This scope document is not all-inclusive and the Consultant will be expected to use good judgment and ensure that the evaluation is complete and appropriate for each site. The FHWA Technical Advisory 5140.23 is referenced for policy guidelines in scour evaluations.

PHASE 1: Data Collection and Qualitative Analysis

The site and data analysis for this phase is qualitative and of the simplest form. It involves preliminary conclusions and findings based on the application of simple geomorphic concepts and the engineers' evaluation of data and site conditions.

In some cases, sufficient information and conditions are such that a scour assessment and bridge stability recommendation can be made at this level. FHWA HEC-20 is the model for the following required steps in Phase I:

1. Step 1: Perform an office data search and collection of information pertinent to the structure. When available, this data shall include:
 - Construction and As-built plans to be provided by DOTD
 - Bridge inspection reports to be provided by DOTD
 - Hydraulic & hydrologic data to be provided by DOTD
 - Foundation reports, test boring data, site geology, subsurface information to be provided by DOTD
 - Other agency such as the Corps of Engineers (COE), Federal Emergency Management Agency (FEMA), Soil Conservation Service (SCS), United States Geological Survey (USGS), etc.
 - Mapping – Quad Maps to be provided by DOTD
 - Aerial photography
 - Gage data.

2. Step 2: Conduct a field investigation (not a formal survey) to supplement existing data found during the office investigation. In some cases, office data will not be available due to the age or type of structure. In these instances, the field investigation will serve as the primary source of information for the structure. The following information will be collected during the field investigation:

- Observe and record channel and floodplain characteristics at as well as up and downstream of the crossing.
- Measure mudline elevation at each bent.
- Describe the observed geological conditions at the site including their influence on stream stability.
- Record any indications of scour in the area of the bridge.
- Describe bed and bank materials.
- Plot hydrographic survey as required.
- Investigate and note any up and downstream activities that would influence short or long term channel stability.
- Note any major changes or anticipated changes in the watershed over the life of the structure.
- Obtain information on flood history (including local resident interviews where practical).
- Debris conditions and potential.
- Observe other general geomorphic features of the stream reach.
- Note any levees, dikes, or other stream controls.
- Note stream confluences.
- Record site and special stream factors with photographs.

3. Step 3: Prepare and submit a qualitative summary report of this phase to the DOTD bridge scour program manager. The report shall include:

- Drawings and photos of the site.
- Summary of important site data.
- Definition of the stream geomorphic characteristics according to most recent edition of FHWA HEC-20.
- Definition of overall stream stability (lateral, vertical, potential responses)
- Conclusions and recommendations.
- General outline of proposed direction and study procedures for next phase.

These steps will be completed to develop a Phase 1 NBIS item 113 rating that will be used to determine if further analysis for scour will be required. The following is the expected rating criteria used to develop the NBIS item 113 code:

Note: (8): Bridge foundations determined to be stable for the assessed condition & (6): Scour calculations/evaluation required

Rating Criteria:

- A. Drainage area less than 10 sq. miles*
 - (8) penetration > 20 feet, but not less than 50% of the total pile length*
 - (6) penetration < 20 feet or less than 50% of the total pile length*
- B. Drainage area greater than 10 sq. miles but less than 25 sq. miles*
 - (8) penetration > 25 feet, but not less than 50% of the total pile length*
 - (6) penetration < 25 feet or less than 50% of the total pile length*
- C. Drainage area between 25 and 100 sq. miles*
 - (8) penetration > 25 feet, but not less than 50% of the total pile length.*
 - (6) penetration >25 feet or less than 50% of the total pile length.*
- D. Drainage Area Greater Than 100 Sq. miles will be rated a (6) in all cases.*

For the development of the line items associated with Phase I services, the following Activities associated with these steps will be completed under the following task items:

- Obtain As-Built plans to obtain channel cross sections.
- Obtain parish maps and USGS maps and quad maps not supplied by DOTD.
- Organize bridge data by stream system by devising system to track data and set up a project plan.
- Determine the drainage area.
- Determine the 100 year discharge for bridge.
- Obtain stream gage data as necessary.
- Perform Phase 1 bridge vulnerability to scour screening.
- Compile and catalogue hydrology information for bridge site.
- Prepare preliminary report for DOTD review and format approval.
- Prepare summary report for each bridge.
- Perform an In-House review.
- Address DOTD comments.
- Submit final summary report for each bridge.
- Prepare a prioritized list of scour susceptible bridges based on Annual Average Daily Traffic (AADT).

PHASE II: Hydrologic & Hydraulic Assessment for Scour Analysis

This Phase involves the basic analysis and development of quantitative information for bridge scour assessment. It is probable that the Phase I study will identify and eliminate some of the required steps in Phase II as well as expand on some of the Phase II requirement.

1. Step 1: Evaluate flood history of the site and develop runoff relations.
 - Significant, historical rainfall and hurricane events affecting the site of interest will be documented, as well as any documented scour from these events.

- A hydrologic analysis will be made to determine runoff conditions at the site. (note: related hydrologic analysis completed in Phase I should be used for this step in phase 2).
2. Step 2: A hydraulic analysis will be made to determine basic hydraulic conditions at the site, such as velocity and flow distribution. The hydraulic analysis will include a water surface profile analysis using WSPRO – an FHWA computer model for water surface profile computations. The HECRAS version of WSPRO will be allowed for this purpose as it has been shown to be more user-friendly. However, if cross sections are needed that require additional survey data to run the program, the DOTD will provide it upon approval by the Project Manager. A tabular summary of the hydraulic analysis, predicted scour, summary of findings, and recommendations will be required. The DOTD will provide an example of this worksheet for use in the development of this worksheet. In some cases, hydraulic information may be available from previous studies or existing design calculations. An effort should be made to incorporate this data whenever possible.
 3. Step 3: A grain size analysis will be made of the bed and bank material; and in most cases, assumptions will be made to develop general particle size gradation curves. Information on depths of material and erodibility characteristics should be described. The DOTD will not require a sieve analysis for each bridge or any other extensive tests. However, comparison type tests to get a reasonable D_{50} should be made. Existing borings will have information that can be used for this purpose. The DOTD may request an in-depth grain size analysis for structures where it is deemed appropriate. In such cases, the selected consultant will be allowed to employ the services of a geotechnical sub-consultant
 4. Step 4: Calculate scour depths for the foundation components at the bridge crossing at a minimum for the conditions described below.
 - Design Frequency for Scour Estimates: Scour estimates shall be developed for the following conditions.
 - Worst-case scour condition up through the 100 year frequency flood event. (Design Scour Flood Event).
 - Worst-case scour condition up through the 500 year frequency flood event. (Check Scour Flood Event).
 - Scour Components - Scour estimates for the above events shall consist of the total scour resulting from the following:
 - Natural channel aggradations and degradation anticipated during the life of the structure based on the remaining life of the bridge assuming a 75 year life span.
 - a) Channel migration anticipated during the life of the structure
 - b) Contraction scour
 - c) Local scour, including pier scour and abutment scour
 5. Step 5: Prepare and submit a summary report of this phase to the DOTD bridge scour program coordinator. The report shall include the following:

- Plot of bridge foundation elements and computed scour depths, where deep foundation tips are unknown, denote same on plot, and also that related scour depths are based on foundation tip elevations assumed below depth of scour.
- Proposal and detailing of additional information required for analytical assessment of structure scour stability. (geology and unknown foundation determination).
- Conclusions and recommendations.
- General outline of proposed direction and study procedures for next phase.

For the development of the line items associated with Phase II services, the following Activities associated with these steps will be completed under the following task items:

- Collect bridge inspection reports to obtain channel cross-sections and evidence of scour.
- Collect quad maps not obtained in Phase I.
- Collect soil maps from soil conservation service.
- Calculate discharge for sites not done in Phase I.
- Perform site inspection, including photography, cross section, soil sampling, and complete field data sheet. (DOTD will provide example report)
- Review field and office data.
- Collect aerial photos when necessary to review channel migrations noted in field inspections.
- Perform scour analysis using WSPRO software.
- Perform scour analysis using HEC-18.
- Prepare drawings to accompany calculations.
- Prepare draft report.
- Perform internal review of reports.
- Address comments and submit final reports to DOTD.
- Prepare prioritized list of bridges for Phase III study.

PHASE III – Stability Analysis of Scour-Critical Bridges

Based on previously obtained scour depth information and pile penetration data, DOTD will select bridges to be analyzed in accordance with rational methodology, as directed by the DOTD Bridge Design Section. If pile penetration data is not available or unusable, the consultant will be responsible for obtaining Geotechnical information required for analysis and for geotechnical input to be used with software. In order to minimize the cost of additional geotechnical services, the selected consultant will submit a formal request to obtain these services to the DOTD Project Manager.

The Consultant will evaluate the structural stability of the assigned structures based on the identified critical structural elements. The structures will be evaluated under critical scour events utilizing the FB-MultiPier v4.12 or later. Special analysis software may be required for special structures. Structures will be evaluated for Group I loads. For

structures susceptible to debris build-up, the Group I loads will be applied without debris loads. Once the critical scour elevation is determined, debris loads will be applied. The debris effects will be noted in executive summary. Allowable Stress Design analysis will be used for the analysis of the structural elements. To evaluate both axial and lateral pile behavior, service loads should be used.

The structures will be evaluated at the predicted scour elevation from Phase II reports. If the structure is unstable, the ground line elevation will be raised until a stable condition is reached and the stream bottom elevation at which the structure becomes stable will be identified as the critical scour elevation. If the structure is stable, the ground line elevation will be lowered until an unstable condition is reached and the last stream bottom elevation at which the structure was stable will be identified as the critical scour elevation.

For structures susceptible to debris build-up, the debris loads will be computed in accordance with the NCHRP Report 445, Debris Forces on Highway Bridges. Our main thrust here is to identify those structures that are debris critical and flag these so the Districts are put on notice that these structures are unstable at predicted scour elevations and debris should not be allowed to build up on these structures. Even if structures are not critical for debris, we should report the condition if it exists at the site.

During the iterations of the FB-MultiPier runs, the Consultant will model the structure, review the resulting output and compare the results to the limiting criteria. If the limiting criteria are met, the structure is stable at that scour / debris condition. If any of the limiting criteria are not satisfied, then the FB-MultiPier inputs and information should be reviewed by a Geotechnical Consultant to determine if the soil conditions are actually failing or if there is any additional capacity. Only when the soil conditions are found to be failing by the Geotechnical Consultant will the structure be considered unstable.

Limiting Criteria

- 1) **Axial Service Pile Load:** $1.3(\text{applied axial service load to pile}) \leq \text{the ultimate soil resistance.}$

- 2) **Axial Pile Movement:** vertical pile displacements should be no greater than $\frac{1}{2}$ inch for piles with diameters/widths up to 18 inches; for piles with diameters/widths between 18 and 36 inches vertical displacements should be less than $\frac{3}{4}$ inch

- 3) **Lateral Pile Movement:** lateral pile deflections should be less than $\frac{1}{2}$ inch at the "Scour Mudline" and less than 6 " at the centerline of the cap.

For each structure studied in Phase III, a Plan of Action (POA) Form will be filled out by the Consultant. The selected Consultant will also be responsible for populating DOTD

Microsoft Access Database fields for P.O.A. document. A copy of the Microsoft Access File will be provided to the selected Consultant.

Report:

The Consultant will prepare and submit a report for each structure evaluated in this phase of the work. The Report format will be established and approved prior to the preparation of the first reports. The final draft of the report shall contain a discussion of the key points considered during the evaluation. As a minimum, the report shall contain the following:

- Color pictures of the site will be included. These pictures were gathered during previous phases.
- A General Bridge Plan and a sketch of the entire bridge with each foundation element shown. A sketch of typical substructure sections with the current bottom of channel and the critical scour channel bottom shown. A table will be provided with multiple columns. At each substructure element location, show bent/pier number, station, number, size and type of piles, critical scour elevations and depth, along with several additional columns for recording future field measurements for monitoring scour.
- Evaluations of the structural stability of the structure. A description of what was considered, the failure mechanism, critical scour elevation, and critical structural elements. A discussion of debris load on structure and whether or not the structure is debris critical.
- Soil boring sheets, cone data and static pile bearing capacity analysis sheets correlated to plan elevations and depths measured from top of bridge rail. Pile driving and test pile data from original construction should be included. FB-Pier input variables provided by the Geotechnical Consultant.
- Recommendation for corrective action as necessary.
- Three CD's will be provided for each structure with the as-built plans, new geotechnical information and plan sheets, FB-Pier computations, along with two hard copies of the report. An index should be included. Files will be divided into folders in order to facilitate review of the CD. All files except the index shall be in pdf. Format. The index will be a comma delimited text file.

For the development of the line items associated with Phase III services, the following Activities in this phase will be completed under the following task items:

- Collect any additional plans needed.
- Analyze potential scour depth and foundations materials resistance to scour.
- Analyze capacity of each foundation unit for Group 1 loads with and without debris loads for structural stability.
- Establish recommendations for P.O.A..
- Prepare Draft report (DOTD will provide Format and specific items to be included).
- Perform Internal Review.
- Address comments and submit final report to DOTD.
- Prepare P.O.A document in accordance with DOTD requirements.

- Prepare Prioritized list of Structures requiring scour countermeasures.

PHASE IV – Design of Countermeasures

The Consultant will provide scour countermeasure designs and plans for scour-critical bridges selected from Phase III, as directed by the Project Coordinator. The design of these countermeasures will be in accordance with FHWA Publication No. FHWA NHI 01-003, March 2001, HEC No. 23, Bridge Scour and Stream Stability Countermeasures, Experience Selection and Design Guidance, Second Edition.

The Consultant will provide the scour remediation design and will be expected to develop final plans and specifications for this design. This will include obtaining As-built plans and incorporating them into the detail sheets associated with the scour remediation plan.

For the development of the line items associated with Phase IV services, the following Activities in this Phase will be completed under the following task items:

- Scour Remediation Design.
- Develop DOTD Title Sheet with Vicinity Map showing location of bridge structure.
- General Notes Sheet and Summary of Quantities Sheet.
- Scour Repair Plan Sheet.
- Original As-Built general plan with superimposed scour remediation design.

ITEMS TO BE PROVIDED BY DOTD

The DOTD will provide the following:

- As-built plans where available
- Existing Phase I and II Reports
- Existing Geotechnical information
- Quad Maps

ADDITIONAL SERVICES

A percentage of the structures to be studied may require additional Geotechnical Services. Geotechnical data may not have been included in the development of the original plans for some structures or existing geotechnical data is either unusable or may not provide the necessary information to complete Phase III services. For these instances, this contract will allow the selected consultant to seek geotechnical services from an DOTD Approved sub-consultant. These services will be included as part of the initial contract and a supplemental agreement for these services will not be required.

In order to minimize the cost associated with additional geotechnical services, a formal request will be submitted to the project coordinator prior to obtaining these services.

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. FHWA Publication No. FHWA NHI 01-001, May 2001 Hydraulic Engineering Circular No. 18 "Evaluating Scour at Bridges", Fourth Edition
21. FHWA Publication No. FHWA-SA-98-080, June 1998 "User's Manual for WSPRO – A Computer Model for Water Surface Profile Computations"
22. FHWA Publication, No. FHWA NHI 01-002 March 2001 Hydraulic Engineering Circular NO. 20 "Stream Stability at Highway Structures", Third Edition
23. FHWA Publication, No. FHWA NHI 01-003, March 2001 Hydraulic Engineering Circular No. 23 "Bridge Scour and Stream Stability Countermeasures, Experience, Selection and Design Guidance", Second Edition
24. Louisiana Standard Specifications for Roads and Bridges

COMPENSATION

Compensation for the required services rendered in connection with this Contract will be based on 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/travelguide.pdf>.
require prior approval from the DOTD Project Manager.

Vehicle rental rates will

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 **seven years**. 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 six Professional Engineers, registered in the State of Louisiana, four with a minimum of five years experience in Bridge Structural Design, and two with a minimum of five years experience in Hydraulic Engineering, with corresponding support staffs.
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 a minimum of five years experience in Bridge Structural Design, and one with a minimum of five years experience in Hydraulic Engineering,
 - b. A minimum of two Professional Engineers, registered in the State of Louisiana, one with at least five years experience in responsible charge of geotechnical services, and one with at least five years of experience in producing FB Pier input from boring and ECPT data, and a corresponding support staff.

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;*

* Location will be based from Marksville, Louisiana

** 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.

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.

DBE – The selected Consultant/Team will have a DBE/WBE goal of 10% of the contract fee. DBE participation will be limited to the firms listed on the LA DOTD approved certification list.

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), 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. **700-99-0461**, and will be submitted **prior to 3:00 p.m. CST on Monday, July 28, 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.