ENGINEERING AND RELATED SERVICES
September 5, 2008

STATE PROJECT NO. 700-24-0031
F.A.P. NO. BR-1707(509)
MISSISSIPPI RIVER BRIDGE CLEANING AND PAINTING
ROUTE US 190
EAST BATON ROUGE 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. Francisco Gudiel may be reached at (225) 379-1197.

PROJECT DESCRIPTION

The selected Consultant/Team will provide all engineering and related services required to perform the bridge rehabilitation design analysis and prepare plans and drawings for the rehabilitation, including cleaning and painting of the US 190 Bridge (Steel Truss) over the Mississippi River in Baton Rouge.

SCOPE OF SERVICES

The services to be rendered for this Project shall consist of the following Stage(s) and Part(s):

Stage 3: Design
- Part III: Preliminary Plans
- Part IV: Final Plans

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

REFERENCE INFORMATION TO BE USED

The rehabilitation design will be based on the bridge inspection report which was submitted to the DOTD on August 31, 2005. Dimensions of the existing bridge and member sizes of the structure will be taken from the As-Built bridge drawings which will be supplied to the Consultant by the DOTD. This information will be supplemented by shop drawings of the existing structure.

REHABILITATION DESIGN AND PLAN DEVELOPMENT

Using the bridge inspection report dated August 31, 2005 and the drawings of the existing structure provided by the DOTD, design services will be performed to rehabilitate certain structural members and elements of the bridge. The elements of the bridge that will be rehabilitated are those recommended in the bridge inspection report and approved by the DOTD. The design and the drawings will comply with the requirements of the DOTD Bridge Design Manual and the current edition of the DOTD Road and Bridge Specifications. Where it is absolutely necessary to depart from the Road and Bridge Specifications or augment them, Supplemental Special Provisions will be written.

The drawings will be developed using MicroStation, and they will comply with the DOTD CADD standards. The drawings will be developed in a manner such that they are grouped into the three sections described below with separate quantities and notes in order that they may be possibly separated to be advertised for construction.

During the progress of the work, intermediate submissions will be made to the DOTD for review and comments 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 Plans as warranted.

Among the bridge tasks that will be performed are the following:

ASSUMPTIONS

1. The design will be based on the 17th Edition of AASHTO.
2. The design and drawings will use Imperial units.
3. No roadway design is required.
4. Computer models of the superstructure will be developed and analyzed. Where structural members of the bridge have failed, the analysis will be used to design retrofits. Where structural members have not failed but have deteriorated, the new elements will be designed to “replace in kind”.

I. GROUP 1 - REPAIR ITEMS WITH BRIEF DESCRIPTION OF TASKS

PIER 1

Repair large spall and undermined bearing at Pier 1

a) Schematics for jacking and blocking of G2 to remove bearing
b) Design and replacement details for new bearing
c) Details for new anchor bolts
d) Details for new sole plate bolts
e) Details for concrete seat repair
f) Sequencing notes including temporary live load limitations

PIER 1 and PIER 6

Repair cracked and spalled bearing seat at construction joint where bridge was widened

a) Details for the removal deteriorated concrete
b) Plans for the repair and patching (dowels/repair mesh)

PIER 2

Repair railing post

a) Details to replace deteriorated railing post

RAILROAD APPROACH BENTS

Replace cracked gusset plates – 5 locations

b) Schematics for temporary bracing
c) Evaluation of design loads and fatigue to ensure proper plate size
d) Details for removal and replacement of cracked plates
e) Sequencing notes including temporary live load limitations

ANCHOR BOLTS – PIERS 1 and 6, EAST AND WEST HIGHWAY, EAST RR ABUTMENT

Replace broken anchor bolts

a) Schematics for jacking and blocking to replace deteriorated bearings
b) Details to remove concrete around anchor bolts and replacement of bolts
c) Details for replacement of missing sole plate bolts
d) Sequencing notes including temporary live load limitations

FRACTURED LOWER LATERAL BRACE

Replace top and bottom gusset plate at L0 to L1 midpoint connection

a) Schematics for temporary support for bracing
b) Details for replacement of top and bottom gusset plates and installation of bolts
c) Sequencing notes including temporary live load limitations

UPPER CHORD – SPLICE PLATE REPLACEMENT

Repair/replacement of upper chord splices at U8'N, U18'S, U18N, U18S, U24'N

a) Analysis of connections
b) Schematics for temporary bracing/supports
c) Details for replacement of deteriorated connection plates
d) Sequencing notes including temporary live load limitations

UPPER FALSE CHORDS

Replace missing sliding plates – U20N & U32N

a) Analysis to determine replacement of all or only missing plates
b) Details for replacements of plates required

MAIN TRUSS VERTICALS

Replace deteriorated interior stiffeners

a) Quantity and location area matrix for repairs
b) Schematics for limiting live load during repair
c) Details for removal existing stiffeners with heavy section loss including rivets and replacement in kind using HS bolts (Note: Coordinate with vertical hole repair)

Add plates where holes in vertical members exist

a) Quantity and location area matrix for repairs
b) Schematics for limiting live load during repair
c) Details to add reinforcing plates with HS Bolts where holes exist (Note: Coordinate with stiffener repair)

MAIN TRUSS DIAGONALS

Repair deteriorated diagonals at portals

a) Quantity and location area matrix for repairs
b) Schematics for limiting live load during repair
c) Details to add reinforcing plates with HS Bolts around portals

MAIN TRUSS VERTICAL & DIAGONAL – LACING BARS

Replace deteriorated lacing bars

a) Quantity and location area matrix for repairs
b) Schematics for limiting live load during repair
c) Details to replace lacing bars in kind using HS Bolts

APPROACH & MAIN TRUSS – TOP LATERAL BRACING

Replace deteriorated top lateral RR bracing

a) Quantity and location area matrix for repairs
b) Analysis to ensure proper size for fatigue
c) May require temporary removal of railroad ties to gain access
d) Will require temporary closure of railroad – sequence during off peak hours
e) Sequencing notes including temporary live load limitations

PROVIDE GUARD RAIL TO EXPOSED PIERS

Add guard rail to Piers 60 through 81

a) Details to provide new guard rail to protect Piers 60 through 81.

II. GROUP 2 - REPAIR ITEMS WITH BRIEF DESCRIPTION OF TASKS

THREE FOOT RETAINING WALL

Repair damaged/deteriorated retaining wall

a) Develop details for temporary sheet piling behind wall
b) Details for removal and replacement of deteriorated portions of wall
c) Develop traffic control plans

ANCHOR BOLTS – RR APPROACH BENTS

Repair/replace anchor bolts and base of bents

a) Develop details for anchor bolt repair
b) Develop table identifying locations and quantity of bolts to replace
c) Retrofit or replace base plates as required

RR APPROACH BENT – IMPACT DAMAGE AT BENT 103-104

Replace angle broken and damaged by vehicle impact

a) Schematics for temporary shoring
b) Details to replace in kind

RR APPROACH BENTS

Repair heavy section loss at angle ends at gusset plate connections

a) Quantity and location area matrix for repairs
b) Details to remove deteriorated angles and replace with bolted angles
c) Analysis for bolted connections

Repair lacing bars with heavy loss

a) Quantity and location area matrix for repairs
b) Details to remove rivets and removal of deteriorated lacing bars
c) Details for replacement of bar with bolted connection

PIER 1 BEARING PIN

Replace railroad bearing pins at G1 and G2

a) Details for jacking and blocking (Will require railroad traffic limitations)
b) Details for realignment of bearings and replacement of pins
c) Sequencing notes

APPROACH & MAIN TRUSS – CROSS FRAME CONNECTION ANGLES

Replace deteriorated railroad cross frame connection angles

a) Quantity & location area matrix for repairs
b) Analysis for member capacity

c) Details for replacement of connection angles using HS bolts
d) Sequencing notes including limitations of RR live load

APPROACH & MAIN TRUSS – CROSS FRAME CHORD MEMBERS

Replace deteriorated railroad cross frame chord members

a) Quantity and location area matrix for repairs
b) Analysis for member capacity
c) Details for replacement of chord members using HS bolts
d) Sequencing notes including limitations of RR live load

MAIN TRUSS – RAILROAD STIRRUP BEARINGS

Replace deteriorated railroad cross frame chord members

a) Quantity and location area matrix for repairs
b) Details for repair and/or replacement of floorbeam and bearing stiffeners
c) Details for replacement deteriorated bearing bolts
d) Sequencing notes including limitations of RR live load

RAILROAD APPROACHES – CORRODED BEARINGS

Repair bearings for approach railroad girders

a) Quantity and location area matrix for repairs
b) Details for jacking and blocking
c) Details for placing corroded anchor bolts and bearing plates
d) Sequencing notes including limitations of RR live load

RAILROAD THRU-GIRDER FLOORBEAM HOLES

Repair of holes in floorbeams of RR bridge thru-girders

a) Additional inspection required including removal of railroad ties to determine extent of deterioration
b) Details for repairing holes in floorbeams by attaching reinforcing plates to webs and flanges
c) Sequencing notes temporary closure to railroad traffic

RAILROAD THRU-GIRDER BLAST PLATE HANGERS

Repair or removal of corroded blast plate hangers

a) Determination of requirements for blast plate
b) Details for removal of blast plate if allowed, or
c) Details for replacement of blast plate hangers if required

SMALL RUST HOLES THRU STEEL MEMBERS

Repair of small holes thru steel members such as truss floorbeams

a) Quantity and location area matrix for repairs
b) Schematics for sandblasting and drilling of hole locations
c) Analysis of net sections at holes locations for structural adequacy
d) Details for structural retrofitting at locations of insufficient capacity

INTERIOR OF TRUSS CHORDS

Debris and corroded rivets on chord members

a) Sequencing and notes for cleaning, sandblasting and inspection of interior of truss chords
b) Details for replacement of all deteriorated rivets in truss chord interiors with HS bolts

RR APPROACH BENTS – PACK RUST

Removal of pack rust at gusset plates and back-to-back angles

a) Development of procedure for removal of pack rust by sand blasting

LOWER CHORD LATERAL BRACING – PACK RUST

Removal of pack rust at lower chord lateral bracing connections

a) Development of procedure for removal of pack rust by sand blasting
b) Details for removal and replacement of deteriorated rivets with HS bolts

BROKEN LIGHT SUPPORT

Repair broken light support at Panel 30', South Truss

a) Details for repair of broken light support

BENTS 81 and 82 – MISALIGNED BEARING

Widening of bearing seat for modified bearings

a) Details for jacking and blocking
b) Details for widening the bearing seat under girder on fixed side.
c) Sequencing notes including live load limitations

III. GROUP 3 - CLEANING AND PAINTING OF STRUCTURE

CLEANING OF STRUCTURE

Schematics, Notes, and Specifications will be developed for the cleaning of the entire structure. The Consultant shall take into consideration the presence of red lead paint during the development of the aforementioned and therefore all cleaning methods shall be fully contained. Plans should include notification of the presence of red lead paint and the requirements to adhere to all regulations pertaining to such. Cleaning shall include

vacuuming and pressure washing of all structural elements to remove all debris and loose rust.

PAINTING OF STRUCTURE

Schematics, Details, Notes, and Specifications will be developed for the painting of the entire structure in compliance with all DOTD regulations.

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

ITEMS TO BE PROVIDED BY DOTD

1. As-Built Drawings
2. Bridge Inspection Report (2005)
3. Shop Drawings of the Existing Structure

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. Code of Federal Regulations 29 CFR 1926 (OSHA)

COMPENSATION

Compensation to the Consultant for services rendered in connection with this Contract will be a non-negotiated lump sum in the amount of **$496,892**, subdivided as follows:

Preliminary Bridge Plans	$151,021
Final Bridge Plans	$345,871

Compensation for Stage 5, Parts I and II will be established by a fully executed Supplemental Agreement to this Contract.

CONTRACT TIME

The overall contract time is estimated to be **1460 calendar days**. The Consultant will proceed with the services specified herein after the execution of this Contract and upon written Notice-To-Proceed from the DOTD, and will not exceed **270 calendar days**, including review time. The delivery schedule for all project deliverables will 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 a Responsible Member of the Prime Consultant must be a Professional Civil Engineer registered in the State of Louisiana.
3. The Prime Consultant must also employ on a full time basis a minimum of three Professional Civil Engineers, registered in the State of Louisiana, including one with at least five years experience in the repair and/or rehabilitation of steel truss bridges, and a corresponding support staff with experience in performing structural analysis and evaluations including bridge rating.
4. In addition to the above requirements, the Prime Consultant must also employ on a full-time basis or through the use of a Sub-Consultant:
    a. One Professional Civil Engineer, registered in the State of Louisiana, with at least three years experience in structural painting and a corresponding support staff. Experience must include at least one bridge lead paint removal project along with National Association of Corrosion Engineers (NACE) Certification.
    b. One Professional Civil Engineer, registered in the State of Louisiana, with three years experience in Construction Zone Traffic Control and the MUTCD.

All field inspectors must have completed the Work Zone Traffic Control Technician and Flagger course. All field senior technicians and engineers must have completed the Traffic Control Supervisor course.

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

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. 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.

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), 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. **700-24-0031,** and will be submitted **prior to 3:00 p.m. CST** on **Monday, October 20, 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.