

ENGINEERING AND RELATED SERVICES

October 2, 2009

STATE PROJECT NO. 700-92-0024

INTERIM IMPROVEMENTS FOR SAFETY AND EFFICIENCY

ROUTE I-49 SOUTH

JEFFERSON, LAFOURCHE AND ST. CHARLES PARISHES

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. Mike Aghayan, P.E.

All inquiries concerning this advertisement should be sent in writing to Edward.Wedge@LA.gov.

PROJECT DESCRIPTION

The work described herein is concerned with identifying interim improvements in the future I-49 South Corridor necessary to develop control of access along the existing US 90 roadway sufficient to meet Interstate Standards from the LA 1/LA 308 Interchange in Lafourche Parish eastbound to I-310 in St. Charles Parish. The construction will interchange with I-310 in St. Charles Parish and with other state highways at locations to be determined. The Line and Grade Study begins at the interchange of US 90 with the LA1/LA308 Interchange in Lafourche Parish, extends eastward to I-310 in St. Charles Parish, and then extends eastward to the Westbank Expressway in Jefferson Parish.

SCOPE OF SERVICES

The selected Consultant/Team will provide all services required to conduct the study which will include the analysis, evaluation and documentation of the proposed project concept and the selection of a preferred concept. As needed data collection and line and grade study for the selected concept will be developed to a sufficient level of detail to define the route location and major design features.

Items to be addressed in the study are:

1.0 PROJECT DESCRIPTION

The work described herein is concerned with identifying Interim Improvements in the Future I-49 South Corridor necessary to develop control of access along the existing US 90 roadway sufficient to meet Interstate Standards through such actions as the purchase of control-of-access, and through constructing frontage roads, grade separations, and interchanges at select locations. In developed areas, where it may not be practical to use the existing facility, new alignment will be investigated (possibly elevated on structure). The work shall include conceptual design and cost estimates for geometric, signalization, or other physical improvements proposed. Routing I-49 concurrent with I-310 to its juncture with I-10 shall be investigated.

The Consultant shall use the forecasted traffic data shown in the Environmental Impact Statement (EIS) I-49 South, Route US 90, the Record of Decision (ROD) I-49 South, US Route 90, and the Project Management Plan (PMP) I-49 South, US Route 90 for State Project Number 700-92-0011, Federal Aid Project Number HP-9201(501), and any other traffic data available at and supplied by DOTD. **The collection of additional traffic data is not included in nor required by this Scope of Work.**

The deliverable will consist of a Draft Report and a Final Report illustrating the improvements required, presenting the estimated construction costs, and ranking the improvements in priority order.

2.0 SCOPE OF PROJECT

The Consultant will provide all services required to conduct the study described above and will include analysis, evaluation and documentation of the proposed project concepts and the selection of a preferred concept. As-needed data collection and research for the selected concept will be developed to a sufficient level of detail to define the route location and major design features.

- (1) The horizontal and vertical geometrics on the various concepts will be developed in detail sufficient to determine project cost;
- (2) An estimate of the construction cost including roadway and bridges;
- (3) An estimate of the required right-of-way and associated cost, including utility relocation and access provisions;
- (4) An evaluation of the impacts of the proposed roadway on the existing roadway system and other projects in the vicinity; and
- (5) Identification of limits and costs of independent projects.

3.0 Project Initiation Meeting

The Consultant shall coordinate a project initiation meeting for this project to be held at the Louisiana Department of Transportation and Development (DOTD) Headquarters in Baton Rouge, LA. The meeting shall include representatives of the Consultant and Sub-Consultants, DOTD and FHWA. DOTD input shall be drawn from District 02, and other DOTD Project Team members. The Consultant will be responsible for the coordination of the meeting logistics. The purpose of this meeting will be to obtain the general history of the area relative to this project, and to obtain views from DOTD and FHWA. The Consultant shall be responsible for conducting the meeting, and preparing and distributing meeting minutes accordingly to all members present.

Product: Preparation of an initial project contact list, conducting the Initiation Meeting, preparation of a meeting summary report.

4.0 Project Research & Data

The Consultant shall perform general research that shall include obtaining information about the origin of the project, funding history, initial conceptual geometric layouts (performed to date), traffic volumes, and other important issues that currently exist, most importantly the Environmental Impact Statement (EIS) I-49 South, Route US 90, the Record of Decision (ROD) I-49 South, US Route 90, and the Project Management Plan (PMP) I-49 South, US Route 90 produced under State Project Number 700-92-0011, Federal Aid Project Number HP-9201(501). The Consultant will research and obtain copies of all pertinent as-built highway plans and aerial photography of the project area. Access to as-built plans will be provided by DOTD for the Consultant's staff to find. These services shall include communications with DOTD and FHWA to *gain an understanding of all work performed on the project to this point in time and the context sensitive issues involved with the project.*

The Consultant will also contact major utilities to identify current major assets and determine whether other projects are being planned in the vicinity that might impact location, design and construction of the project.

Product: Memorandum listing and summarizing all relevant background information identified in the foregoing effort. Aerial photo GIS project base map and additional map layers identifying relevant information.

5.0 Site Investigation

The Consultant shall conduct a project site visit. The site visit shall consist of gathering sufficient field information for developing an understanding of the physical, engineering, and environmental features of the site and will include site conditions recordation (i.e. pictures, etc.). The site visit shall be conducted early in the task. The Consultant will have

on hand for the site visit, land use maps, and as-built plans. This site visit will have representatives from the Consultant and Sub-Consultants.

Product: Background information (maps, logs, reports, etc.), site visit report, with photographs.

6.0 Traffic Study

The Consultant shall utilize the traffic study recently completed in the Environmental Impact Statement (EIS) I-49 South, Route US 90, the Record of Decision (ROD) I-49 South, US Route 90, and the Project Management Plan (PMP) I-49 South, US Route 90 for State Project Number 700-92-0011, Federal Aid Project Number HP-9201(501), and any other traffic data available at and supplied by DOTD. **The collection of additional traffic data is not included in this Scope of Work.**

6.1 Traffic Analyses

Traffic analyses will be performed for each of the proposed concepts.

6.2 Traffic Study Report

Upon completion of all tasks described above, a draft traffic report will be provided to document all findings and recommendations of the traffic study. Findings of the traffic study will be incorporated into the Draft and Final Report.

The Consultant will place a pdf copy of the draft traffic study on an internet site for review by the DOTD Project Team members. Upon review and approval, the Consultant will provide three (3) copies of the final traffic study signed and sealed by a licensed professional engineer. A pdf version of the final Traffic Study, including appendices and maps, will also be provided on a CD.

Product: Traffic study summarizing the results of the work described above.

7.0 Design Criteria

The Consultant shall develop design criteria which will include proposed roadway functional classification, design speed, lane widths, minimum horizontal curvature, maximum side slopes, horizontal and vertical clearances, and maximum roadway grade. The Consultant shall prepare a table of design criteria to be included in the report documenting the design criteria that will be used in all traffic engineering development. The design criteria will be based on DOTD's design standards supplemented with the American Association of State Highway and Transportation Officials (AASHTO) guidelines (AASHTO Policy for the Geometric Design of Highways and Streets, AASHTO LRFD Bridge Design Specifications) for design speed and functional classification and bridge design, the U.S. Army Corps of Engineer's permit criteria associated with flood control levee systems, and the U.S. Coast Guard's permit criteria

for improvements along navigable waterways. The Consultant shall submit the design criteria for review and approval prior to advancing with production of conceptual typical sections and project concepts. Context sensitive solution principles shall be utilized in determining recommended project corridor and features.

Product: Design Criteria Table.

8.0 Concept Development and Evaluation

The Consultant shall research, review, and develop the alternative concepts considered to be reasonable and technically feasible. The concepts shall show plan views of the corridor including the lane configuration for intersections as determined from capacity analyses.

The Consultant shall research all existing utilities that are within the potential limits of the project to aid in the development of project concepts in an effort to minimize utility relocation costs and impacts. Research shall include CI/ASCE 38-02 Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data Quality Level D records research for the identification of utilities that exist within the project corridor.

Product: A listing and evaluation of reasonable and technically feasible alternative concepts ranked in order of priority.

9.0 Typical Sections

The Consultant shall prepare typical road and bridge sections, meeting current design criteria as required by DOTD, for each of the proposed concepts, based upon design criteria and roadway functional classifications. The typical sections may vary by location along the proposed route due to traffic volumes, level of service, design criteria selected, access control, median and shoulder treatments, and intersection treatments. The Consultant will submit the typical sections to DOTD for review.

Product: Typical roadway and bridge sections for each of the alternatives.

10.0 Environmental Documentation

DOTD's Stage 0 Environmental Checklist will be utilized to document the results of the preliminary environmental review. The Consultant will assess any potential mitigation cost that could possibly be incurred in future stages of the development of the project for each project concept studied in the report. All field investigations to assess environmental issues or impacts shall be accomplished by conducting a windshield survey and researching internet websites.

Product: Stage 0 Environmental Checklist, supporting descriptions documenting issues in the human and natural environments, estimate of mitigation requirements and costs by alternative.

11.0 Opinion of Probable Cost

The Consultant shall develop a preliminary cost estimate for each proposed project concept. The project costs will include an estimate for right-of-way for all land and improvements situated within the proposed right-of-way (all concepts considered). Additionally, the right-of-way cost estimate should include the estimated cost for land and improvements not in the required area but possibly impacted by the proposed project. The right-of-way cost estimate should take into consideration damages, etc. that may accrue due to the proposed project (all alternates considered). Refer to the Real Estate Needs Checklist for Stage 0 Cost Estimates and the Stage 0 Cost Estimate Appraiser Checklist). The estimated relocation cost should consider potential commercial and/or residential relocation costs. The estimated relocation cost would include but not be limited to replacement housing payments, moving cost for businesses and/or residences, incidental expenses, etc. in compliance with the Uniform Act. Utility relocations costs, construction costs, environmental (i.e. document, mitigation, etc.) costs, and design engineering costs are also part of the preliminary cost estimate.

All utility relocation research shall include contacting both the local DOTD district and headquarters utility relocation sections for guidance in the estimation of these potential costs. While the district and headquarters utility relocation sections will provide such guidance, it shall be the Consultant's responsibility to estimate the cost of such relocations, etc. The Consultant shall utilize recent DOTD unit bid price averages for major construction items to be anticipated in future stages. The Consultant shall list the assumptions made for the pavement section used in estimating the construction cost. All minor construction items can be estimated by using contingency factors. The Consultant shall note on each construction estimate that all costs are based upon current year estimates for planning purposes.

The Consultant shall estimate anticipated right-of-way land and improvement acquisition costs by obtaining current real estate prices on a per acre, per square or whatever unit is appropriate for each type (i.e. commercial, residential, etc.) of property to be acquired. This will include both vacant and improved properties of the various property types, if applicable.

Approximate costs associated with engineering and surveying fees to produce future engineering plans and specifications shall be estimated for each project concept. All geotechnical investigations required for all roadway and bridge structures shall be estimated.

Product: Opinion of probable cost for each of the concepts.

12.0 Report Preparation and Coordination Meetings

This task provides for report preparation and coordination meetings. At this time it is assumed that there will be four coordination meetings between the Consultant and DOTD with representatives of both Headquarters and District 02 at which FHWA also may be

represented. If other agencies are found to be appropriate participants, it is assumed here that they will attend the same meetings. The four meetings will include:

- (1) A start-up meeting at which the Consultant will be instructed regarding which DOTD staff with whom to coordinate various project concerns, and there will be a general discussion of scope and schedule so that all issues, such as design criteria and communications with regional and local transportation agencies, are resolved prior to beginning work.
- (2) Two coordination meetings with DOTD during this study to give status and updates to be held at DOTD HQ in Baton Rouge.
- (3) A review meeting to occur after DOTD has reviewed the Draft Report to discuss unresolved issues and to receive comments to be incorporated in the Final Report.

These meetings do not include individual or small group discussions between the Consultant and DOTD personnel that may occur over the telephone.

There will be two submissions of the report:

- (1) Consultant will submit 5 hard copies and two electronic copies on CD's of a Draft Report for review by DOTD and FHWA. If additional copies are needed, these will be furnished electronically.
- (2) Following review and comments on the Draft Report to be discussed at the second coordination meeting, Consultant will submit 10 hard copies and two electronic copies:
 - (a) A CD with a pdf for the production of additional copies by DOTD as may be required, and;
 - (b) A CD with the live files in Word, Excel, CADD, and other programs as may be appropriate.

13.0 Draft Report

The Consultant shall prepare a Report that shall include the following items:

- Table of Contents
- Executive Summary
- Checklist for Stage 0: Preliminary Scope and Budget Worksheet
- Stage 0 Environmental Checklist
- List of Exhibits
- List of Tables
- Appendix A: Existing Site Pictures
- Appendix B: Traffic Study
- Appendix C: Environmental Database Research Results

The Consultant shall address all items identified in the standard DOTD “Checklist for Stage 0: Preliminary Scope and Budget Worksheet”. All sheets within the report document shall contain a “DRAFT” watermark for the purpose of identifying that this report is in a draft format for review. The Consultant shall submit a total of ten (10) copies of the report for review. Additional review copies of the draft will be furnished as needed on CD in PDF format, with an Executive Summary, Table of Contents, List of Figures and List of Tables. All copies shall be unbounded and held together by standard binder clips.

14.0 Final Draft Report

Upon review of the draft report by DOTD and other agencies, the Consultant shall address all items/questions identified during the review process, and resubmit a revised report identified as “Final Draft” in the same format as described in Section 10.1 of this Scope of Services. All sheets within this revised report shall contain a “FINAL DRAFT” watermark for the purpose of identifying that this report is in a final draft format for review. The Consultant shall submit a total of ten (10) copies of the revised report. Additional review copies of the final draft will be furnished as needed on CD in PDF format, with an Executive Summary, Table of Contents, List of Figures and List of Tables. All copies shall be unbounded and held together by standard binder clips.

15.0 Final Report

Upon review of the final draft report by DOTD and other agencies, the Consultant shall address all items/questions identified during the review process, and submit a final revised report, signed and sealed by a professional engineer licensed in the State of Louisiana, after receiving approval from the DOTD project manager to submit the final report. The final report shall be in the same format as described in Section 10.1 of this Scope of Services. The Consultant shall submit a total of three (3) bound copies of the report. Each final report shall be accompanied by a CD containing a PDF of the report.

ITEMS TO BE PROVIDED BY DOTD

DOTD will provide copies of or access to maps, surveys, plans, right-of-way information and/or any other pertinent information in its files that may assist the Consultant/Team in performing this work.

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 actual cost plus a negotiated fixed fee, with a maximum compensation 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>. 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 **360 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 also employ on a full-time basis, a minimum of four Professional Engineers, registered in the state of Louisiana, one with at least five years experience in road and bridge design with emphasis in interstate design and a 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. A principal or responsible member with a minimum of five years of experience in responsible charge of the preparation of National Environmental Policy Act (NEPA) documents for the Federal Highway Administration (FHWA), including Environmental Impact Statements.

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.

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 Planning (PL) performance rating will be used for this project.

Complexity level: **complex**

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.

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.

1. Edward R. Wedge – Ex officio
2. Mike Aghayan – Project Manager
3. Nick Kalivoda
4. Wayne Nguyen
5. Patrick Toney
6. Chris Morvant

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the notice of selection as shown on the DOTD website. 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 (SF 24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
- B. The Consultant, nor any other party on behalf of the Consultant, shall not contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

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

CONTRACT REQUIREMENTS

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

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

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

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

Any Consultant currently under contract with the DOTD and who 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 **five** 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. **700-92-0024**, and will be submitted **prior to 3:00 p.m. CST on Monday, October 19, 2009**, by hand delivery or mail, addressed to:

Department of Transportation and Development
Attn.: Mr. Edward R. Wedge, III
Contracts 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.