ENGINEERING AND RELATED SERVICES DECEMBER 2, 2011

STATE PROJECT NO. H.002868.5 F.A.P. NO. H.002868 I-49 SOUTH: AMBASSADOR CAFFERY AND US 90 INTERCHANGE ROUTE US 90 LAFAYETTE PARISH

DBE GOAL = 10%

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) will be selected for this Contract.

Project Manager – Mr. Nick Rabalais, P.E.

All inquiries concerning this advertisement should be sent in writing to Alan.Dale@LA.gov.

PROJECT DESCRIPTION

The project is located on US 90 at the current intersection of Corne Road and US 90 approximately 11.4 miles south of Lafayette along US 90 in Lafayette Parish. The total project length is approximately 1.0 mile with the limits beginning at approximately Station 710+00 of the existing US 90 to approximately Station 765+00 (per layout of Initial Build as shown in the EIS document).

The project entails construction of a new fully access controlled grade-separated interchange at the intersection of Ambassador Caffery Parkway (La 3073) and US 90 (future I-49 South) in Lafayette Parish. The design will be in conformance with the Initial Build Phase of the approved 2005 Environmental Impact Statement (EIS) which includes a US 90 six-lane structure over Ambassador Caffery and U-turns located beneath the structure.

The EIS-proposed one-way frontage roads and corresponding slip ramps as well as the US 90 flyover ramps associated with the full build-out phase of the environmental document <u>will not</u> be constructed under this project. However, plans will be developed based on the full build-out *only* for the purposes of determining the required control-of-access and right-of-way necessary for the construction of the future full build-out. It is anticipated that segments of two-way frontage roads will need to be constructed under this project in order to provide interim access to adjacent landowners. These frontage roads will tie directly into the alignment of the future frontage roads constructed under the ultimate Build Out phase. Additionally, temporary ramp connections to

US 90 will be included in the subject project, to be removed at a later time to accommodate the future slip ramps.

The design makes use of a Texas style 'X'-ramp (slip ramps) design which is described as follows:

Diamond interchange concepts force all interstate egress / access movements and turning movements at connecting roads to occur within the intersection of the frontage road and the connecting road. There are potential capacity constraints associated with weaving distances in this concept and the concept tends to concentrate development at the connecting road intersection with the frontage roads.

The X-ramp pattern ramps can be beneficial at interchanges in urban areas where development is likely to occur. When designed properly, this configuration provides access to development along frontage roads with minimal impacts to the intersecting arterials. With this configuration, the entrance ramps onto the interstate occur prior to the intersecting arterials and exit ramps occurs after the intersection arterials. This configuration can improve traffic flow for the connecting arterials around the interchanges. Within this concept, the logical location for development serving interstate traffic is on the frontage road away from the frontage road intersection with the connecting road.

When future frontage roads are constructed, the 6 lane bridge will need to be widened to 8 lanes. The design needs to accommodate the future widening of the structure to the outside for the addition of an auxiliary lane in each direction required by the "X" pattern ramp configuration. It is anticipated that segments of two-way frontage roads (see EIS) will need to be constructed under this project in order to provide interim access to adjacent landowners. These frontage roads will tie directly into the alignment of the future frontage roads constructed under the Full Build-Out phase. Additionally, temporary ramp connections to US 90 will be included in the subject project, to be removed at a later time to accommodate the future slip ramps.

The project includes, but is not limited to:

- Constructing a 6-lane bridge on US 90 over Ambassador Caffery Parkway.
- Widening US 90 (future I -49) to 6 lanes initially
- Signalized at-grade intersections with U-turns beneath bridge structure at service roads and Ambassador Caffery Parkway.
- Constructing entrance and exit ramps from US 90 to Ambassador Caffrery utilizing the Texas slip ramp design. Frontage Roads will be constructed at a future time.
- Establishing right-of-way limits that incorporate the Final Build-out.

SCOPE OF SERVICES

The services to be rendered for this Project shall consist of the following Stages and Parts: Stage 3: Design

Part I: Surveying Services

(a) Topographic Survey

(b) Title Research Reports

(c) Property Survey
(d) Title Updates
(e) Right-of-Way (R/W) Maps
(f) Title Take-Off

Part III: Preliminary Plans

SUE Services

This project will be designed as traditional Design-Bid-Build (DBB) project utilizing our normal engineering contract requirements for design, etc.

I. Survey Services

This project is located in Lafayette Parish, near the southern town limits of Broussard, Louisiana, and begins approximately 800 feet north of Young Street at the intersection of US Highway 90 at Station 690+00, and proceeds in a northerly direction, along US Highway 90 for approximately 9000 feet to Station 780+00 which is approximately 800 feet south of the B.N.S.F. Railroad crossing at US Highway 90.

A topographic survey is necessary with a DTM to extend to existing US 90 right of way (right and left of project centerline) being required along the length of the project. And a 100' wide DTM (50' right and 50' left of centerline) being required on side streets for a distance of 250' and a 150' wide DTM (75' right and 75' left of centerline) being required on major intersections for a distance of 500' and a 100' wide DTM (50' right and 50'left) being required on crossing streams or sufficient field survey data for the preparation of a Drainage Map.

Additional DTM is required south of Sugarfield Road from approximate Station 718+00 to approximate Station 723+00 with a DTM extending approximately 600 feet east. Additional DTM is required east of US Highway 90 from approximate Station 720+00 to approximate Station 750+00 with a DTM extending approximately 800 feet at the furthermost point (Zoo of Acadiana entrance gate). Additional DTM is required from the intersection of U.S. Highway 90 with Ambassador Caffery Parkway to Hardware Road with a DTM width that varies in width from approximately 1000 feet at U.S. Highway 90 to approximately 200 feet at Hardware Road and Ambassador Caffery Parkway which is approximately 0.5 miles in length.

As part of the topographic survey, a **Drainage Map** is required as well as a **Centerline Closure Sketch**.

The consultant will perform Stage 3 Part 1 (A). The remaining items, Stage 3 Part 1 (B) thru (F) will be completed under separate supplemental agreements and are not part of this scope of services listed above.

Part 1 (A)	Topographic Survey
Part 1 (B)	Title Research Reports
Part 1 (C)	Property Survey
Part 1 (D)	Title Updates
Part 1 (E)	Right Of Way Map
Part 1 (F)	Title Take-Offs

II. Preliminary Road Design Plans

The Consultant shall provide preliminary roadway plans for the project including, but not limited to:

- Title sheet
- Typical Section and Detail sheets
- Summary of Estimated Quantities sheets
- Plan/profile sheets (1"=20' plan/profile sheets with subsurface drainage and 1"=20' plan/profile sheets with open ditch drainage)
- Reference Points and Bench Mark Elevation sheets
- Existing and Design Drainage Map sheets
- Summary of Drainage Structures sheets
- Geometric Details sheets
- Suggested Sequence of Construction and Construction Signing sheets
- Cross Section sheets

Additional Comments:

- 1. Subgrade soil borings, retaining wall details, pavement designs, and standard plans (as needed) will be provided by the Department.
- 2. Environmental approval was previously obtained and no effort is anticipated herein. Consultant's assistance with permit application drawings, if required, will be established by a fully executed Supplemental Agreement or Extra Work Letter.
- 3. Traffic data/assignments and/or traffic studies, if required, will be either furnished by the Department or the Consultant, at the option of DOTD. If performed by the Consultant, such work shall be established by a fully executed Supplemental Agreement or Extra Work Letter.
- 4. Electronic files will be in MicroStation and InRoads formats.

III. <u>Preliminary Bridge Design Plans</u>

The Consultant shall be responsible for all engineering services required for the completion of preliminary bridge plans and cost estimates for the project, all under a schedule for completion which shall be in conformity with the contract time to be determined by the Project Manager. The plans shall be produced to include construction phased sequencing to coincide with the approach roadways as well as the remainder of the interchange. Preliminary plans shall be for the entire final build out of the structure as shown in the selected alignment depicted in the Environmental Impact Statement; however, the configuration of the structure shall be such to allow the structure to be built in two separate phases with minimal impact.

During the progress of the preliminary design phase of work, intermediate submissions will be made to the DOTD for review and comment at the 30%, 60% and 90% levels of completion. Comments received as a result of the submissions will be discussed with the DOTD and incorporated into the final submittal of that respective phase as warranted.

All design and drawings will comply with the requirements of the latest AASHTO LRFD Bridge Design Specifications, the DOTD LRFD Bridge Design Manual (including Technical Memoranda and the current edition of the DOTD Standard Specifications. Where it is absolutely necessary to depart from the Standard Specifications or augment them, Special Provisions and/or Item Number requests shall be provided to DOTD.

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

IV. Subsurface Utility Engineering (SUE) SERVICES:

A branch of engineering practice that involves managing certain risks associated with utility mapping at appropriate quality levels, utility coordination, utility relocation design and coordination, utility condition assessment, communication of utility data to concerned parties, utility relocation cost estimates, implementation of utility accommodation policies, and utility design.

The scope for this project includes Subsurface Utility Engineering (SUE) services for obtaining Utility Quality Level C services throughout the project limits

The required services also includes Utility Coordination to confirm that the Road and Bridge Design and the Utility Relocation efforts (if required) are conducted in accordance to the Department's standards, policies, procedures, and design criteria. The Utility Coordinator shall be responsible for assisting the Engineer of Record in identifying all existing utilities and coordinating any new installations, scheduling utility meetings, keeping and distribution of minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues, distributing all plans, conflict matrixes, and changes to affected utility owners and making sure this information is properly coordinated. The Utility Coordinator will review all proposed utility work to identify any potential conflicts during design, and will assist and recommend design alternatives to minimize utility impacts. As required, any utility relocation design is also included in this scope.

<u>Utility Quality Level C:</u> Indicates information obtained by flagging underground utilities and plotting visible above-ground utility features for the Survey Team to include and reference into the DTM. This is accomplished by using professional judgment in correlating such information with the previously obtained Quality Level D information.

<u>Utility Quality Level D:</u> Indicates utility information derived from existing records and oral recollections.

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.

ITEMS TO BE PROVIDED AND SERVICES TO BE PERFORMED BY DOTD

In addition to any services previously indicated to be performed by the DOTD, the following services and data shall also be provided, if available.

- Environmental Impact Statement (EIS) prepared in 2005
- Pavement Design
- Traffic Data
- Supplemental conceptual layouts and plans

- Access to Standard Plans
- Access to the As-Built Plans the consultant will be responsible for obtaining

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 3: Design
 - Part 1 (B) Title Research Reports
 - Part 1 (C) Property Survey
 - Part 1 (D) Title Updates
 - Part 1 (E) Right Of Way Map
 - Part 1 (F) Title Take-Offs
 - Part IV: Final Roadway and Bridge Plans (Initial Build)
- Stage 5: Construction Engineering Services
 - Part I: Construction Support
 - Part II: Shop Drawings
- Geotechnical Services
- Traffic Management Plan

All additional sub-consultants required to perform these services are subject to approval as per RS 48:290.D prior to execution of the supplemental agreement.

CONTRACT TIME

The Consultant shall proceed with the services specified herein after the execution of this Contract and upon written Notice-to-Proceed (NTP) from the DOTD and shall be completed within **360 calendar days**, which includes review time. The delivery schedule for all project deliverables shall be negotiated and approved by the Project Manager.

COMPENSATION

Compensation to the Consultant for services rendered in connection with this Contract will be a negotiated cost plus 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.htm Vehicle rental rates will require prior approval from the DOTD Project Manager.

Within 15 calendar days of notification of selection, a kick-off meeting will be held with the selected Consultant/Team and appropriate DOTD personnel. The selected Consultant/Team will be required to submit a proposal within 30 calendar days following the notification of selection.

All negotiations must be completed within 45 calendar days following the notification of selection.

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 LRFD Bridge Design Specifications
- 2. AASHTO/ASTM Standards and/or DOTD Test Procedures
- 3. DOTD Standard Specifications for Roads and Bridges
- 4. DOTD Roadway Design Procedures and Details
- 5. Manual of Uniform Traffic Control Devices (Millennium Edition)
- 6. DOTD Traffic Signal Design Manual
- 7. National Environmental Policy Act (NEPA)
- 8. National Electric Safety Code
- 9. DOTD Environmental Impact Procedures (Vols I-III)
- 10. Policy on Geometric Design of Highways and Streets
- 11. Construction Contract Administration Manual
- 12. Materials Sampling Manual
- 13. DOTD Bridge Design Manual
- 14. Consultant Contract Services Manual
- 15. Geotechnical Engineering Services Document
- 16. AASHTO Manual for Condition Evaluation of Bridges
- 17. Manual for Maintenance Inspection for Bridges
- 18. Bridge Inspectors Reference Manual
- 19. AASHTO Manual for Condition Evaluation and Load and Resistance Factor Rating (LRFR) of Highway Bridges.
- 20. DOTD LRFD Bridge Design Manual (Including Technical Memoranda)

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 shall 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 with at least five years experience in Transportation Design Management.
- 3. The Prime Consultant must also employ on a full time basis a minimum of three (3) Registered Professional Civil Engineers in the State of Louisiana along with a corresponding support staff. At least one of the previously described should have at least

ten (10) years of experience in Bridge Design, and one should have at least five (5) years of experience in Road Design

- 4. In addition to the above requirements, the Prime Consultant must also employ on a fulltime basis or through the use of a Sub-Consultant,
 - a. A minimum of one Registered Professional Civil Engineer in the State of Louisiana with five (5) years of Geotechnical experience including experience with pile supported structures in soft coastal soils of Louisiana and a corresponding support staff.
 - b. A minimum of one Professional Land Surveyor registered in the State of Louisiana, with at least five (5) years in conducting topographic and property surveys, and preparing right-of-way maps for DOTD, and a corresponding support staff. A Sub-Consultant will be allowed for title work and must be listed on the current LADOTD Real Estate Section's approved Title Work Panel list.
 - c. A minimum of one Professional Civil Engineer registered in the State of Louisiana with a minimum of five years experience in traffic analysis and certified as a Professional Traffic Operations Engineer.
 - d. A minimum of one Professional Civil Engineer registered in the State of Louisiana, with at least 5 years experience managing Subsurface Utility Engineering (SUE) services in support of roadway design on transportation projects and corresponding support staff.

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

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;

* All respondents will receive a 4 in this category.

** The Road Design Interchange (RI) performance rating will be used for this project.

*** All respondents will receive no less than a 2 in this category.

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 the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.

- 1. Alan Dale Ex officio
- 2. Nick Rabalais Project Manager
- 3. David Smith
- 4. Chris Guidry
- 5. Chris Nickel
- 6. Dennis Hebert

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 contract execution of the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (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.

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

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 (<u>www.dotd.louisiana.gov</u>), 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. H.002868.5**, and will be submitted **prior to 3:00 p.m. CST** on **Monday, December 19, 2011**, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Mr. Alan Dale, P.E. Contracts Administrator 1201 Capitol Access Road, **Room 405-T** Baton Rouge, LA 70802-4438 or Telephone: (225) 379-1401

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.