

**ENGINEERING AND RELATED SERVICES  
OCTOBER 02, 2015**

**CONTRACT NO. 4400006784  
STATE PROJECT NO. H.011133  
F.A.P. NO. H011133  
LA 1: UP RR XING  
ROUTE LA 1  
WEST 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 DOTD Form 24-102 (24-102), “Professional Engineering and Related Services”, revised November 2011, from Consulting Firms (Consultant) to provide engineering and related services. **Consultants who are a Louisiana or foreign LLC or corporation should be appropriately registered with the Louisiana Secretary of State, as contemplated by Title 12 of the Louisiana Revised Statutes, and with LAPELS under it’s rules for FIRMS. If a Consultant fails to place itself in good standing in accordance with those provisions, it may be subject to consequences contemplated in Title 12 and/or the LAPELS rules. All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met and the Prime Consultants shall be registered with the Federal Government using SAM.gov at the time of submittal. One Prime-Consultant/Sub-Consultant(s) will be selected for this Contract.**

DOTD employees may not submit a proposal, nor be included as part of a Consultant’s team.

**Project Manager – Shawn Luke**

All inquiries concerning this advertisement should be sent in writing to [hadi.shirazi@la.gov](mailto:hadi.shirazi@la.gov) and heather.huval@la.gov.

**PROJECT DESCRIPTION**

The selected Consultant will provide engineering and related services to relocate the industrial spur track crossing LA 1 in West Baton Rouge Parish in a way that will maximize the benefit of the planned LA 1 at Dow Spur Overpass currently under design.

## SCOPE OF SERVICES

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

Stage 1: Planning/Environmental

Part II: Line and Grade Study

Part IV: Conceptual Design

Part V: Scope and Budget Development

Stage 3: Design

Part I: Surveying Services

(a) Topographic Survey

(c) Property Survey

(e) Right-of-Way (R/W) Maps

Part III: Preliminary Plans

Part IV: Final Plans

Stage 5: Construction

Part I: Construction Support

The Project scope consists of consolidating the Union Pacific (UP) rail spurs crossing LA 1 in West Baton Rouge Parish in a way that will utilize the overpass currently under design. The DOTD is in need of Consultant Services to provide preconstruction activities for the Project as well as general engineering support during construction. The Consultant shall agree to furnish the following services (for three alternatives and the No Build) to the Project Manager (PM):

### **Tasks:**

- Obtain the most recent aerial photography for use on the project. Project mapping will include layouts of the build alternatives and estimated rights-of-way and any constraints. Local landmarks and major features will be labeled to assist in interpreting the exhibits. LIDAR data will be obtained by the Consultant for use in developing vertical geometry for the build alternatives.
- Prepare track alignment alternatives that meet UP's current industrial track standards. This includes preparing construction cost estimates for each alternative for review and comparison.
  1. The Consultant will be responsible for establishing the design criteria and geometric layout necessary to ensure compliance with the current edition of the *AREMA Manual for Railway Engineering* and the design guidelines established by UP.
- Responsible for undertaking the line and grade study for three alignment alternatives and the No Build alternative which shall include, but not be limited by, the following:
  1. Development of typical roadway (if applicable) and track sections

2. Establishment of design criteria (including but not limited to)
  - A. Design class and design speeds
  - B. Minimum horizontal curvature
  - C. Horizontal and vertical clearances
  - D. Maximum track grade
3. Factors for consideration
  - A. UP and AREMA standards
  - B. Major existing and required drainage structure locations and patterns
  - C. Impacts to improvements in the area
  - D. Cost estimates for Right-of-Way, Utility relocations, road modifications and/or improvements, and construction
4. The alignment alternatives will be evaluated for impacts. The consultant will conduct field reconnaissance and public records searches, coordinate with utility companies and DOTD personnel in obtaining location information. Relocation cost estimates will be developed and presented in a summary memorandum.
  - A. Horizontal alignment
    - a. A preliminary horizontal alignment study shall be prepared for each alternative. The alignment should consider major utility conflicts, major drainage structures, existing roadway/track geometry, superelevation, minimum clearances, etc. The final refinement to the alignment shall be adjusted based on a constructability review. The final alignment should also consider:
      - i. Existing roadway and track conditions
      - ii. Location of utilities
      - iii. Environmentally sensitive areas
      - iv. Topographical features
      - v. Developed properties
      - vi. Urban constraints
      - vii. Railroad crossings
    - b. A plan view of the each horizontal alignment shall be prepared on aerial photography. The following geometric data shall be displayed on the plan:
      - i. Curve lengths (L)
      - ii. Tangent lengths (T)
      - iii. Curve radii (R)
      - iv. Superelevation rates and transition lengths
      - v. Estimated R/W limits, existing and required
      - vi. Baselines and stationing
      - vii. New edge of ballast
      - viii. Curb lines
      - ix. Existing and relocated utilities, as known
      - x. Major drainage features, if any

## B. Vertical Alignment

- a. A vertical alignment study shall be prepared for each alternative. The vertical alignment should consider above ground and below ground utilities, major existing and required drainage or structure locations and patterns, overpass/underpass clearances for the railroad track and roadway, etc.
  - b. A profile view of each vertical alignment shall be prepared and shall display the following geometric data
    - i. Vertical grades
    - ii. P.V.I. locations
    - iii. Length of Vertical curve (V.C.)
    - iv. Horizontal and vertical clearances of any overhead structure(s).
- Perform roadway (if necessary), track, and drainage design.
    1. Any roadway design must meet current DOTD and AASHTO guidelines.
  - The alignment alternatives will be evaluated for impacts on drainage and incorporate drainage features into the design plan that are commensurate with DOTD's roadway and bridge standards, and any applicable UP, Dow Chemical Company, and Shintech Louisiana policies. Major drainage features will be described and estimated pipe sizes, as appropriate, will be determined for cost estimation purposes.
  - Provide a topographic survey, property survey, and right of way maps (scope and compensation to be added by supplemental agreement).
  - Develop preliminary and final plans (scope and compensation to be added by supplemental agreement).
  - Prepare special provision write-ups (if required).
  - Provide public meeting support (if required).
  - Develop permit sketches (if required).
  - Provide general engineering support during construction.

### **Consultant Deliverables:**

The following information shall be included as part of the project submittal and shall be submitted in both hardcopy and electronic formats (word, pdf and dgn as applicable):

- Design Criteria
- Drawings for three line and grade alternatives showing horizontal and vertical geometry with topographic, right of way, utilities, and hydraulic features in a graphical format on an aerial background.
- Summary of all alternatives and location, and a discussion on the design ability and constructability of each alternative.
- Cost estimate for each alignment alternative
- Recommendation on the preferred alternative

## **ELECTRONIC DELIVERABLES**

The Consultant hereby agrees to produce electronic deliverables in conformance with the DOTD Software and Deliverable Standards for Electronic Plans document. The Consultant is also responsible for ensuring that Sub-Consultants submit their electronic deliverables in conformance with the same standards. The DOTD Software and Deliverable Standards for Electronic Plans document and DOTD CAD Standards Downloads are available via links on the DOTD web site.

The Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. The Consultant hereby agrees to install major updates to software versions and CAD Standard Resources in a timely manner. Major updates of CAD standards and software versions shall be applied per directive or approval of the DOTD Design Automation Manager. Such updates will not have a significant impact on the plan development time or project delivery date, nor will they 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 project-specific requirements.

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.

The Consultant shall upload (or check in) electronic deliverables directly into the DOTD ProjectWise repository at each plan delivery milestone. Consultants are responsible for performing certain operations at each milestone including, but not limited to, the following:

- Upload (or check in) CAD plan deliverables to the discipline “Plans” folder
- Apply and maintain indexing attributes to CAD plans (and other deliverables as needed)
- Publish PDF format plan submittals in ProjectWise using automated publishing tools
- Digitally sign PDF format plan submittals in ProjectWise according to DOTD standards and procedures (Final Plans, Revisions and Change Orders). Signatures shall be applied in signature blocks provided with electronic seals and Title Sheets.

Additionally, after reviewing deliverables for each submittal milestone, the Project Manager shall notify the Consultant regarding the availability of two automatically-generated informational reports in ProjectWise. These reports document the completion status and other information regarding indexing attributes and CAD standards. Consultants shall take these reports into account and make any necessary adjustments to plans before the next submittal milestone; or sooner, if directed by the Project Manager.

## 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 BY DOTD

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

1. Traffic Data (if required)
2. Pavement Design (if required)
3. Standard Plans
4. Design plans for the overpass.
5. Geotechnical investigation, analysis, and design
- 5-6. Environmental Determination (Anticipate Categorical Exclusions)

### CONTRACT TIME

The overall contract time is estimated to be **two years**. Contract time for alternatives development and analysis is **180 calendar days**.

### COMPENSATION

The total estimated compensation to the Consultant for all services rendered in connection with this Contract will be a non-negotiated lump sum of **\$466,131**.

The compensation to the Consultant for Stage 1, Parts II (Line and Grade), IV (Conceptual Design) & V (Scope and Budget) is a non-negotiated lump sum of **\$101,186**.

The compensation to the Consultant for Stage 3, Parts I, III and IV and Stage 5, Part I will be done by a non-negotiated lump sum Supplemental Agreement.

### ~~DIRECT EXPENSES~~

~~All direct expense items which are not paid for in the firm's overhead which are needed and will be consumed during the life of the contract must be identified by the consultant~~

~~during contract development. Standard equipment to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses. Failure to provide the above information will deem items as non-qualifying for direct expenses.~~

~~The consultant shall provide a minimum of three rate quotes for any specialty vehicle or equipment. Any and all items for which said quotes are not submitted shall be deemed as non-qualifying for payment as direct expenses.~~

## 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. Union Pacific Technical Specifications for Construction of Industrial Tracks
2. BNSF Railway- Union Pacific Railroad Guidelines for Railroad Grade Separation Projects
3. AREMA Manual for Railway Engineering
4. AASHTO A Policy on Geometric Design of Highways and Streets
5. Highway Safety Manual
6. Highway Capacity Manual
7. DOTD Location and Survey Manual
8. DOTD Roadway Design Procedures and Details Manual
9. DOTD Hydraulics Manual
10. DOTD Standard Specifications for Roads and Bridges
11. Manual of Uniform Traffic Control Devices
12. Construction Contract Administration Manual
13. Material Sampling Manual
14. ASTM Standards or DOTD Test Procedures
15. DOTD Bridge Design Manual
16. AASHTO LRFD Bridge Design Specifications
17. AASHTO LRFD Movable Bridge Design Specifications
18. DOTD Bridge Design Technical Memoranda
19. Consultant Contract Services Manual
20. Bridge Inspectors Reference Manual

Follow link below for the individual reference links:

<http://webmail.dotd.louisiana.gov/ContWEB.nsf/b88769326453bef886256fe00047183a/18fc2860512aba5886257a62006133b8?OpenDocument>

## 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 a Responsible Member of the Prime-Consultant must be a Professional Engineer registered in the State of Louisiana, with at least ten years of experience in responsible charge of transportation projects.
3. The Prime-Consultant must employ on a full-time basis, a minimum of one Professional Civil Engineer, registered in the State of Louisiana, with a minimum of fifteen years of experience in track design including alignments, hydraulics, and railroad structures.
4. The Prime-Consultant must also employ on a full time basis, a minimum of one Professional Civil Engineer registered in the State of Louisiana with at least five years of experience in roadway design.
5. 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) A minimum of one Registered Professional Land Surveyor, registered in the State of Louisiana, with at least five years in conducting topographic and property surveys, preparing right-of-way maps for DOTD, ~~and hydrographic surveys in rivers, lakes and bays, and a corresponding support staff~~ with at least five years of experience and training in topographic, ~~and~~ property ~~and hydrographic~~ surveys. The support staff must also have the necessary equipment to complete the above mentioned tasks.

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

## WORK ZONE TRAINING REQUIREMENTS (PRE-CONSTRUCTION SERVICES)

As part of DOTD's on-going commitment to work zone safety, required work zone training courses must now be taken every four years in order for personnel to remain eligible to work on DOTD projects. For consultants performing pre-construction services (i.e., design, survey, subsurface utility, geotechnical, traffic, bridge inspection, environmental services), appropriate personnel must take these courses. In general, the responsible charge of traffic control plans shall be required to have Traffic Control Supervisor training. For field services performed within the clear zone, at least one member of the field crew shall have Traffic Control Supervisor or Traffic Control Technician training. Consultant should identify all personnel listed in the staffing plan for the project that have completed the appropriate work zone training courses. Current



certifications of compliance for this training should be submitted with and made part of Consultant's DOTD Form 24-102. The consultant shall explain in Section 13 of DOTD Form 24-102 how they plan to meet the work zone requirements. However, all requirements shall be met prior to contract execution. It will be the prime consultant's responsibility to ensure their staff and sub-consultants have the appropriate work zone training.

The above requirements are the minimum to perform work on DOTD projects. It is desired that all staff have work zone training as shown below:

Engineers:	Traffic Control Technician Traffic Control Supervisor Flagger
Engineer Interns:	Traffic Control Technician Traffic Control Supervisor Flagger
Field Senior Technicians, Survey Party Chiefs, and SUE Worksite Traffic Supervisors:	Traffic Control Technician Traffic Control Supervisor Flagger
Field Personnel:	Traffic Control Technician Flagger

Approved courses are offered by ATSSA and AGC. Substitutes for these courses must be approved by the LA DOTD Work Zone Task Force. Specific training course requirements are:

Flagger: Successful completion every four years of a work zone flagger course approved by the Department. The "DOTD Maintenance Basic Flagging Procedures Workshop" is not an acceptable substitute for the ATSSA and AGC flagging courses.

Traffic Control Technician (TCT): Successful completion every four years of a work zone traffic control technician course approved the Department. After initial successful completion, it is not necessary to retake this course every four years if Traffic Control Supervisor training is completed every four years.

Traffic Control Supervisor (TCS): Successful completion of a work zone traffic control supervisor course approved by the Department. Following an initial completion, traffic control supervisors must either

complete a 1-day TCS refresher course or retake the original 2-day TCS course every four years.

ATSSA contact information: (877) 642-4637

### **EVALUATION CRITERIA**

The general criteria to be used by DOTD 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 **7**;
2. Consultant's personnel experience on similar projects, weighting factor of **9**;
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 **1**; \*
5. Consultant's current work load with DOTD, weighting factor of **1**;
6. Location where the work will be performed, weighting factor of **4**;

\* All respondents will receive a 4 in this category.

\*\*Firms with a ratio of 5 or greater on the Department's firm size graph will receive a compatibility rating of no less than 2.

#### **Complexity Level- normal**

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. Hadi Shirazi – Ex officio
2. Shawn Luke– Project Manager
3. Jared Ray
4. Stan Ard
5. Jason Lacombe

6. Dallas Ballmer

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 (24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
- B. Neither the Consultant, nor any other party on behalf of the Consultant, shall 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 failed to meet all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website ([www.dotd.louisiana.gov](http://www.dotd.louisiana.gov)), will not be considered for this project.

### **SUBMITTAL REQUIREMENTS**

One original (**stamped “original”**) and **five** copies of the DOTD Form 24-102 must be submitted to DOTD **along with an electronic copy (USB flash drive only) in a searchable Portable Document Format (pdf)**. **If you wish to have your flash drive returned, please include a postage paid, self-addressed envelope.** All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual.

Multiple firms that are listed on a single proposal (e.g., prime consultants as well as listed sub-consultants) will be considered a “Team.” Only one Consultant or Team will be selected for each contract to be awarded pursuant to a Request for Qualifications. A Team may submit more than one proposal reflecting different allocations of work or different combinations of prime and sub-consultants, but in no instance will a single Team be awarded more than one contract from a single Request for Qualifications.

Any Consultant/Team failing to submit any of the information required on the 24-102, or providing inaccurate information on the 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 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant’s 24-102 must be firmly bound to the Consultant’s 24-102. In Section 8, the Consultant’s 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.

Contract employees may be allowed for a period of time for a particular element or task on a project. Contract employees should be shown in **Section 9a. Project Staffing Plan** with resumes included in **Section 10**.

**Use of contract employees requires prior approval by the Consultant Contract Services Section for each element or task on a project. The approval request shall be made prior to the submittal of the 24-102 form.**

Name(s) of the Consultant/Team listed on the 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 DOTD Form 24-102 will be identified with **Contract No. 4400006784 and State Project No. H.011133**, and will be submitted **prior to 3:00 p.m. CST on Tuesday, October 20, 2015**, by hand delivery or mail, addressed to:

Department of Transportation and Development  
Attn.: Mr. Hadi Shirazi, P.E., PTOE  
Consultant Contracts Services Administrator  
1201 Capitol Access Road, **Room 405-E**  
Baton Rouge, LA 70802-4438 or  
Telephone: (225) 379-1929

### **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.