

**ENGINEERING AND RELATED SERVICES  
JANUARY 08, 2016**

**CONTRACT NO. 4400008112  
STATE PROJECT NO. H.011137.5  
F.A.P. NO. H011137  
I-12 (LA 21 TO US 190)  
ROUTE I-12  
ST. TAMMANY 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 – Nicholas Olivier, P.E.**

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

**PROJECT DESCRIPTION**

The selected Consultant shall provide engineering and related services to widen and rehabilitate I-12 to the median side from a four lane freeway to a six lane freeway section in both the East and West bound directions, including auxiliary lanes connecting Pinnacle Parkway across the Tchefuncte River to US 190. The project begins just west of LA 21 and ends just west of US 190 for approximately 3.50 miles. The LA 21 Interchange is included within this project. The US 190 Interchange is not included within this project.

## SCOPE OF SERVICES

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

Stage 3: Design

Part III: Preliminary Plans

Part IV: Final Plans

### **Road Design**

The selected Consultant shall provide all engineering required for preliminary and final 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"=50' plan/profile sheets with subsurface drainage and/or open ditch drainage as required)
  - Reference Points and Bench Mark Elevation sheets
  - Design Drainage Map sheets
  - Summary of Drainage Structures sheets
  - Geometric Layout and Detail sheets
  - Suggested Sequence of Construction and Construction Signing sheets
  - Cross Section sheets
  - Engineers Construction Cost Estimate
1. Pavement designs and standard plans (as needed) will be provided by the DOTD.
  2. The Consultant will be required to provide shallow boring information in accordance with standard DOTD procedure.
  3. Environmental approval was not obtained and environmental initiation has been requested. This project is classified as a Categorical Exclusions (CE). Public involvement will be scheduled by the DOTD environmental staff. The Consultant is expected to attend and prepare exhibits, handouts, etc. for a Public Meeting. If subsequent Public Involvement is required, the Consultant will be compensated by Extra Work Letter or Supplemental Agreement.
  4. Traffic data/assignments, traffic studies and traffic signalization plans, if required, will be either furnished by the DOTD or the Consultant, at the option of DOTD. If performed by the Consultant, such work shall be established by Extra Work Letter or Supplemental Agreement.
  5. Permanent Signing Plans will be completed by the DOTD.
  6. The Consultant will be required to complete a Level 4 (TMP) Transportation Management Plan, and depending on construction cost (if >\$100M), a Financial Plan.
  7. Electronic files will be in MicroStation and InRoads formats.
  8. Intelligent Transportation Systems (ITS) and geotechnical design will be furnished by the DOTD.

9. The Consultant will be expected to coordinate with the DOTD, or other parties working on the DOTD's behalf, as required, to produce the Preliminary and Final Plan set.
10. The Consultant will be expected to participate in periodic meetings, as required (e.g., Kick-Off, Intermediate Preliminary Progress Meeting, Plan-In-Hand, Public Meeting, Local Agency Meeting, Final Plan Review).
11. The Consultant will be expected to review and make recommendations regarding Value Engineering Findings and Report(s).

#### Consultant Submittals

- 30%, 60%, 90%, 100% Preliminary Plans
- 60%, 95%, 98%, 100% Final Plans
- QA/QC Checklist: Preliminary and Final

#### **Bridge Design**

The selected Consultant shall provide all engineering required for preliminary and final bridge plans for the project, including but not limited to:

- General notes and index
- Bridge General Plan and elevation
- Construction Phasing Details
- Summary of bridge quantities
- Foundation plan and pile layout
- Pile Loads and details
- Pile Data Table
- Approach slab details
- Guard rail details
- Bent details
- Fender Details
- Girder Details
- Span and deck details
- Joint Details
- Bearing Details
- Bridge Barrier Railing Details
- Bridge Drainage Details
- Revetment Details
- Bridge typical section
- Concrete Median Barrier

The finished cross section on the I-12 bridges over LA 21 shall include 3-12' travel lanes, 12' inside shoulder, and 12' outside shoulder with the exception of the Tchefuncte River bridges which will include an additional 12' auxiliary lane on each bridge. The bridge sites in this segment are:

- I-12 Over LA 21 (Two overpass structures on I-12, Structure Nos. 62524540406601 and 62524540406602)

- I-12 Over Tchefuncte River (Two stream crossing structures on I-12, Structure Nos. 62524540407971 and 62524540407972)

Structure No.	Crossing	Length ft.	Rdwy Width	Super Structure TYPE	Sub Structure Type
4540406601	I-12 Over LA 21	255'-7"	39'-3"	2 ~ 51' Type II & III PS Girders & 2 ~ 71' Type III PS Girders	Column Bents with timber piles
4540406602					
4540407961	Tchefuncte River	~1409'	51'-3 to 39'-3"	20 ~ 65' Type III PS Girders & 1 ~ 111' composite steel girder span	Pile Bents, 54" cylinder and 24" square concrete piles
4540407972			39'-3"		

A bridge evaluation report for these structures has been completed in accordance with LADOTD Bridge Design and Evaluation Manual (BDEM) Part 1, Chapter 6, Sections 6.1 and 6.2 providing a recommendation to widen the structures and identifying all existing deficiencies. The scope of work consists of:

- All work required to prepare preliminary and final bridge plans for the widening option and addressing all deficiencies in accordance with the bridge evaluation report and the BDEM (including Part 1, Chapter 6, Section 6.3 “Guidelines for Bridge Widening Design”) and all documents referenced therein.
- The bridge plans shall include design and typical sections of the 54” concrete median barrier for the entire length of the project. The Consultant shall coordinate with DOTD Electrical to ensure that future lighting integration is appropriately incorporated into the median barrier.
- The DOTD Electrical Section will provide all new lighting design. The Consultant shall coordinate with DOTD Electrical regarding any structural modifications needed to incorporate any lighting systems. All existing lighting systems shall be removed.
- The existing deck shall be evaluated for its structural condition and its friction rating. If the deck is coming apart, it should be determined if a demolition and latex overlay is appropriate or a complete deck replacement is needed. If friction is the only issue, then a thin bonded epoxy overlay may be the answer. Overlay is required for decks with friction number less than 30 for tread tires or 20 for blank tires. The friction number will be provided by DOTD.
- The hydraulic analysis for the bridges over stream crossing will be provided by DOTD.
- No future widening on LA 21 is planned.
- Approach slabs shall be completely replaced and the new approach slab standards shall be incorporated.
- The existing fender system on the Tchefuncte River Bridge shall be removed and a new fender system design shall be incorporated into the bridge plans.

The following tasks shall be performed under this contract:

Task 1: Review I-12 Bridge Evaluation Report LA 21 to US 190 and any other information pertaining to the structures and conduct a site visit.

Task 2: Prepare design criteria and submit it to DOTD for approval prior to proceeding with the design.

Task 3: Prepare bridge related preliminary design and visual aids required for the public meeting and provide coordination with local agencies when necessary. Prepare any required permit sketches for environmental approval.

Task 4: Prepare preliminary and final bridge plans for all the structures noted above.

Task 5: Prepare LRFR as-designed bridge rating for new widening structures and any rehabilitated existing structures, in accordance with the latest edition of the AASHTO Manual for Bridge Evaluation, LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and Bridge Design Technical Memoranda. The bridge rating report shall also be prepared in accordance with the aforementioned publications for each structure. A bridge rating report was completed for each existing structure as part of the Bridge Evaluation Report, these rating reports and all rating files will be provided to the consultant for modification and revision.

Task 6: Prepare special provisions and non-standard (NS) pay items.

Task 7: Prepare construction cost estimates.

Task 8: Provide Final Calculation Book in accordance with the BDEM QC-QA Policy.

Task 9: Consultant is required to attend a minimum of 6 meetings, including but not limited to, kickoff meeting, stakeholder's meeting, public meeting, Preliminary and Final (95% ACP) Plan-In-Hand, and progress meetings. Construction Support will be by supplemental agreement.

#### Consultant Submittals

- Design Criteria
- 30%, 60%, 90%, 100% Preliminary Plans
- 60%, 95%, 98%, 100% Final Plans
- Special Provisions and NS Pay Items
- Construction Cost Estimates (with each plan submittal)
- Final Calculation Document w/ Appendices
- As-Designed Bridge Rating, Rating Reports, and BrR files
- QA/QC Checklist: Preliminary and Final

## Geotechnical Services

The selected Consultant will perform geotechnical exploration services for the above captioned project, consisting of nineteen deep soil borings at 110 foot depth each, twenty shallow roadway borings at 8 foot depth each, sampling, and laboratory testing along the project alignment in St. Tammany Parish. The project alignment includes bridge crossings at I-12 over LA 21 and I-12 over Tchefuncta River. The exact number of soil borings may change as survey data and preliminary engineering are finalized. The following table indicates the number of borings estimated for each structure.

<b>Structure</b>	<b>Type of Crossing</b>	<b>Number of Borings</b>
I-12 Over LA 21	Overpass	4
I-12 Over Tchefuncta River	Land/River	15

The shallow borings will be made in the median spaced at approximately 1000-ft intervals. Also, two deep borings must be taken in the Tchefuncta River which may require barge rental. To help minimize barge rental costs, precautions must be taken such as: (high-water levels in the river, adverse weather conditions, etc.).

The soils investigations, sampling and testing services to be provided shall include, but are not limited to:

### Geotechnical Exploration and Investigations

The geotechnical investigations, sampling, and testing services to be provided shall include, but are not limited to:

- Field Reconnaissance (including rights of entry, utility locations, access, etc.);
- Mobilization/demobilization;
- Deep and Shallow Soil borings;
- CPT soundings (ASTM D5778);
- Water table elevations with duration of reading;
- GPS Latitude and Longitude of borings to within 10 ft (3 m) accuracy;
- Sealing boreholes in accordance to LA Water Well and DEQ Regulations;
- Standard Penetration Tests and Split-Barrel Sampling of Soils (AASHTO T 206);
- Unconfined Compressive Strength of Cohesive Soils (AASHTO T 208);
- Specific Gravity of Soils (AASHTO T 100);
- Laboratory Determination of Moisture Content of Soils (AASHTO T 265);
- Triaxial Compression Tests, Unconsolidated, Undrained (AASHTO T 296);
- Triaxial Compression Tests, Consolidated Drained 3-point (AASHTO T 297);
- Atterberg Limits (DOTD TR 428);
- Consolidation Tests with Rebound (AASHTO T 216);
- Organic Content (DOTD TR 413);
- Classification of Soils;
- Deep borings (ASTM D 2487 (USCS method));

- Shallow borings (ASTM D 3282(AASHTO method));
- Drafting of boring logs;
- Drafting of subgrade soil surveys; and
- Traffic Control.

### Drilling and Sampling

The deep soil borings shall be made by the wet rotary drilling method. In each deep boring, undisturbed samples of cohesive or semi-cohesive material shall be obtained from each distinct soil stratum that is penetrated or 5 ft (1.5 m) interval, whichever is less, using a 3 in. (76 mm) diameter Shelby tube sampling barrel as per AASHTO D 207. When cohesionless soils are encountered at any depth, a split spoon sampler shall be used in conjunction with Standard Penetration Tests (SPT) at 3 foot (1 m) intervals. In the case of massive dense sands being encountered, the Project Manager may be contacted in order to relax the sampling interval, on a case-by-case basis. If requested by DOTD, continuous sampling of a boring will be obtained at 3 foot (1 m) intervals to a pre-determined depth. Boring samples shall be retained for a minimum period of ninety days.

Boring logs which show evidence of SPT's in cohesive soils or tube samples in cohesionless soils will not be accepted.

Shallow soil borings for subgrade soil surveys can be made utilizing either hollow-stem or continuous-flight augers. Any other method shall be approved by the DOTD Pavement & Geotechnical Services Administrator prior to it being implemented.

Transport of samples from the field to the laboratory shall conform to ASTM D4220, Group C. Samples may not be extruded at the worksite. Sample tubes shall be transported vertically in the same orientation as they were sampled, with care taken to avoid excessive temperature variation, vibration, or any other sample disturbance. They shall be extruded in the laboratory in accordance by means of a continuous pressure hydraulic ram. Extrusion by any other method, such as water pressure, is prohibited. Samples shall be extruded directly onto a sample trough, and shall not be caught with the hands.

### Laboratory Testing

Soil mechanics laboratory testing shall be performed on at least seventy-five percent of all samples obtained from the borings. UU Triaxial compression and Atterberg limit testing shall be performed on at least seventy-five percent of the extruded cohesive samples. If designated as required for the boring, consolidation tests shall be performed according to AASHTO T 216, and results shall be reported as graphs of "Void Ratio vs. Log of Pressure" and "Coefficient of Consolidation vs. Log of Pressure." Both plots may be shown on the same graph, if adequately labeled. Any sample from a clay layer that shows signs of being over consolidated must be subjected to a load/rebound/re-load cycle during the consolidation testing, as per AASHTO T 216. Any sample selected for consolidation testing shall also have the specific gravity determined according to

AASHTO T 100, and the Atterberg Limits determined according to DOTD TR 428, and with supporting results reported. Laboratory classification of soils from deep borings shall be in accordance with ASTM D 2487. All other sampling and testing shall be performed in accordance with current AASHTO test procedures, unless otherwise noted.

#### Cone Penetrometer Testing (CPT)

The CPT rigs shall be capable of providing up to 20 tons reaction. Pore pressure measurements, when requested by the Project Manager, shall be obtained using U2 location, unless otherwise specified. Dissipation tests shall be performed until at least 50 percent of the excess pore water pressure has been dissipated. All CPT probes and equipment utilized shall have been calibrated within the previous year or within a period specified by the project manager. The cost of performing the calibration shall be the consultant's responsibility. The final CPT sounding results shall conform to the input format of LTRC's CPT-Pile software.

#### Other Considerations

The natural ground in elevation at the location of each borehole shall be determined to within 6 in. (0.15 m). These elevations may be determined utilizing elevations of existing structures for landmarks that may be shown on the plans supplied. If DOTD has established a temporary benchmark (TBM) at the site, it shall be used in lieu of elevations shown on the plans.

Unless otherwise stated, it will be the responsibility of the Consultant to obtain consent from the respective landowners in order to enter onto private property. The process for contacting landowners and documentation for Consultant Entry will be discussed at the Consultant Kickoff meeting with DOTD personnel. In the case that consent is not granted, the Consultant shall contact the project manager to execute a Forced Entry, as per Louisiana Revised Statute 48:217. Forced entry access will be granted via written notice from the project manager.

#### Deliverables

Unless specified by the Project Manager, it will be the responsibility of the Consultant to obtain 3 or 4 mil polyester double matte film for use in reporting the geotechnical exploration results. The DOTD Pavement & Geotechnical Services Section will provide one sheet to the Consultant for use as an example of each format. The lettering used on the profiles shall be of such size and clarity that the legibility of data can be maintained when reduced to fifty (50) percent of its original size. Soil profiles shall be grouped on the plan sheets according to the Construction Project Number(s). In addition to the paper submittal, electronic logs that can be imported into the gINT software for the electronic storage of the soil boring and CPT logs shall be submitted. All project deliverables shall become the property of DOTD upon successful completion of the above captioned project.



All reported test results, including each profile sheet, shall be sealed and manually signed and dated by the Professional Engineer in responsible charge of testing. The DOTD Pavement and Geotechnical Services Section will review the completed boring logs for completeness and accuracy prior to their final submittal.

### **Independent Contractor Estimate (ICE) and Critical Path Modeling (CPM) – (CP)**

The purpose of this task is to produce a contractor style construction cost estimate and a CPM schedule for the I-12 Widening and Rehabilitation project.

#### Required tasks include:

1. Project Management tasks include participation in a project kick-off meeting, Plan-in-Hand meeting, Final Plan Review meeting and 2 miscellaneous project progress meetings.
2. The selected consultant shall prepare a contractor style cost estimate for the project. The estimate shall provide an analysis of labor, materials, equipment, subcontractor and indirect costs, bond rates, and operating margins.  
Required submittals: (including data files and documentation used to develop the ICE, such as material quotes, sketches, spreadsheets, etc.)
  - Preliminary ICE (100% Preliminary Plans)
  - Final ICE (95% Final Plans)
3. The selected consultant shall prepare a Critical Path Method (CPM) schedule using Primavera P6 software. Scheduling format shall adhere to guidelines and standards set for the State of Louisiana. The CPM schedule shall be directly linked to the contractor style cost estimate.  
Required submittals: (including P6 data files)
  - Preliminary CPM schedule (100% Preliminary Plans)
  - Final CPM schedule (95% Final Plans)
4. The selected consultant shall prepare a Phasing Plan that corresponds to assumptions made within the estimate and schedule.
5. The selected consultant shall perform constructability plan reviews at 90% Preliminary, 100% Preliminary, and 95% Final Plan stages.
6. The selected consultant shall review and provide comments on Value Engineering recommendations.

The ICE should prepare quantity take-offs separate from the design engineer's quantity tabulations. The estimate should be completed as if the selected consultant were to bid on the project. The selected consultant will be excluded from providing competing bids on the final construction package at letting.

#### Consultant Submittals

- ICE and CPM package: Preliminary and Final
  - a. Project Phasing Plan
  - b. CPM Schedule
  - c. Contractor Style Construction Estimate
  - d. Materials estimates

- Constructability Reviews: 90% and 100% Preliminary, and 95% Final
- Review of Value Engineering Recommendations

#### Miscellaneous

1. A Plan-in-Hand Review Meeting and a Final Plan Review Meeting shall be held for this project. The Selected Consultant is required to plan for, attend, and conduct this meeting with the assistance of the DOTD Project Manager. The Select Consultant shall provide support to the DOTD staff regarding technical questions, and shall provide the DOTD Project Manager with Meeting Minutes no later than 3 business days following the meetings.
2. The Selected Consultant shall be required to provide the DOTD Project Manager with Meeting Minutes for all meetings conducted with DOTD and/or Agency Stakeholders no later than 3 business days.
3. The Selected Consultant shall comply with Chapter 4 of the Consultant Contract Services Manual regarding coordination procedures.
4. The Selected Consultant shall complete a Consultant Contract Tracking Table to be submitted with each invoice. The Tracking Table will be provided in electronic format by the DOTD Project Manager.
5. The Selected Consultant shall keep a log of all Agency provided comments and shall provide DOTD with a disposition of comments response following each plan submittal.
6. The Selected Consultant shall provide the DOTD with a Final Calculations Report (electronic format is acceptable) of all design and engineering related calculations pertinent to the project including a copy of all comments and disposition of comments. The report should be indexed and tabbed for ease of navigation. Information contained in the report should be neatly arranged and legible.
7. The Prime-Consultant will ensure that a Preliminary and Final QA/QC Checklist is completed at the completion of Preliminary and Final Plans.
8. The Prime-Consultant will ensure that a Constructability/Biddability Review Form is completed at 90% Preliminary and 95% Final Plans.
9. The Prime-Consultant will be responsible for coordination with DOTD Staff regarding ITS, Interstate Guide Signs, and Lighting plans. The Prime Consultant will ensure that these mentioned plan sheets are included on the project's Title Sheet.

### **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, and a certification that the plans meet the DOTD's quality standards.

## QUALITY CONTROL/QUALITY ASSURANCE

The Prime Consultant shall submit a bridge design QC/QA plan document specifically developed for this project as part of the DOTD Form 24-102. The QC/QA plan document must comply with the minimum requirements in the LADOTD Bridge Design Section Policy for QC/QA as stated in Part I, Chapter 3 of the LADOTD Bridge Design & Evaluation Manual (BDEM). The grading instructions, the rating matrix, and the grading sheet for the QC/QA plan document are included in Appendix G of the BDEM Part I, Chapter 3 – Policy for QC/QA. The QC/QA plan document shall be prepared to address all evaluation criteria included in the rating matrix. The QC/QA plan document must be implemented for all bridge design activities in both design phase and construction support phase of the project. The Prime Consultant is fully responsible for QC/QA of their work as well as the work of all sub-consultants. All project submittals must include a QC/QA certification that the submittals meet the requirements of the QC/QA plan document.

## 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.

- a. Access to standard plans
- b. Access to as-builts
- c. Topographic Survey design
- d. Sub-surface Utility Engineering design
- e. I-12 Bridge Evaluation Report LA 21 to US 190
- f. Most recent DOTD inspection and rating reports, BR rating files, and as-built information
- g. Friction number for the existing bridge decks (will be collected by LTRC)
- h. Hydraulic Analysis

## 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 **18 months**, which includes review time. The delivery schedule for all project deliverables shall be established by the Project Manager.

## **COMPENSATION**

The total compensation to the Consultant for all services rendered in connection with this Contract shall be a non-negotiated lump sum compensation of **\$1,531,240**, which is subdivided as follows:

Road Design	\$617,242
Bridge Design	\$467,554
Geotechnical Services	\$352,439
ICE & CPM Services	\$ 94,005

## **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, unless approved by the Consultant Contract Services Administrator.

## **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 on Uniform Traffic Control Devices (Millennium Edition)
6. DOTD Traffic Signal Design Manual
7. National Environmental Policy Act (NEPA)
8. National Electric 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)
21. Subsurface Investigations Manual, Publication No. FHWA HI-97-021, Nov. 1997;
22. Manual On Subsurface Investigations, Published by AASHTO, 1988;
23. AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing, PART I – SPECIFICATIONS and PART II – TESTS, current edition;
24. ASTM Procedures and Regulations, current edition;
25. Earth Retaining Structures, Participants Manual, FHWA-NHI-99-025, 1999;
26. Earth Retaining Systems, Geotechnical Engineering Circular No. 2, Publication No. FHWA-SA-96-038, February 1996;
27. Design of MSE Walls and Reinforced Slopes, FHWA NHI-10-024 Vol. I and NHI-10-025 Vol. II, 2009;
28. Geotechnical Instrumentation Manual, Publication No. FHWA HI-98-034, October 1998;
29. Drilled Shafts: Construction Procedures and LRFD Design Methods, Publication No. FHWA-NHI-10-016, May 2010;
30. Soils and Foundations Workshop Manual, Publication No. FHWA NHI-00-045, August 2000;
31. Geosynthetic Design and Construction Guidelines Manual, Publication No. FHWA HI-95-038, April 1998;
32. Ground Improvement Technical Summaries, DP 116, Publication No. FHWA-SA-98-086;
33. Design and Construction of Driven Pile Foundations Reference Manual, Volumes 1 & 2, Publications No. FHWA-NHI-05-042 and FHWA-NHI-05-043, 2006;
34. Soil Nail Walls, Geotechnical Engineering Circular No. 7, Publication No. FHWA-IF-03-017, March 2003;
35. Soil Nailing Field Inspectors Manual, (DP 103), Publication No. FHWA-SA-93-068, April 1994.

## 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 a minimum of five years of experience in Road Design or Bridge Design.
3. The Prime Consultant must also employ on a full-time basis, or through the use of a sub-consultant(s):
  - a. A Professional Engineer, registered in the State of Louisiana, with a minimum of five years of experience in the preparation of roadway plans and a corresponding support staff.
  - b. A Professional Engineer, registered in the State of Louisiana, with a minimum of ten years of experience in bridge design and bridge rehabilitation, reinforced concrete and pre-stressed concrete bridges, steel plate girders, bridge bearings, fender and pier protection systems and a corresponding support staff.
  - ~~b.c.~~ One Professional Civil Engineer, registered in the State of Louisiana, with five years of Geotechnical experience and a corresponding support staff.
  - ~~e.d.~~ A minimum of one laboratory manager with a minimum of five years of experience in geotechnical laboratory testing.
  - ~~d.e.~~ A minimum of one field crew driller/supervisor with a minimum of ten years of experience; with at least five years of experience demonstrated within the State of Louisiana with a corresponding support staff.
  - ~~e.f.~~ An individual with a minimum of three years of experience with contractor style estimating, with knowledge of local labor, equipment, and materials market. In addition, the estimator must have experience with bridge construction, both rehabilitation and widening of pre-stressed concrete and steel plate girder structures.
  - ~~f.g.~~ An individual with a minimum of three years of experience in ~~with~~ producing CPM schedules in Primavera P6 software.

**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. The 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 3;
2. Consultant's personnel experience on similar projects, weighting factor of 4;
3. Consultant's firm size as related to the estimated project cost, weighting factor of 3;
4. Consultant's past performance on similar DOTD projects, weighting factor of 6; \*\*
5. Consultant's current work load with DOTD, weighting factor of 5;
6. Location where the work will be performed, weighting factor of 4; \*

\* Location will be based from Covington, Louisiana.

\*\* The Road Design (RX), Bridge Design (BX), Geotechnical Services (GE) 23%, Critical Path Method (CP) performance ratings will be used for this project.



## 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. Masood Rasoulilian– Ex officio
2. Nicholas Olivier – Project Manager
3. Dallas Ballmer
4. Stephanie Cavalier
5. Derek Paille
6. Jennifer Branton

## 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 shall provide to the DOTD Audit Section an *independent* Certified Public Accountant (CPA) audited overhead rate developed in accordance with Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the selected Consultant/Team will allow the DOTD Audit Section to perform an overhead audit of its books, at the DOTD’s sole discretion. The performance of such an audit by the DOTD Audit Section shall not relieve the Consultant/Team of its responsibilities under this paragraph.

Consultants are also required to submit labor rate information twice a year to the DOTD’s Audit Section and/or as requested by DOTD. Newly selected firms must have audited salaries and overhead rates on file with the DOTD’s Audit Section before starting any additional stage/phase of their contracts. All Qualification Statements (24-102) submitted to DOTD by Consultants currently under contract may be considered non-responsive if the consultant is not in compliance with the above audit requirements.

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.

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. 4400008112** and **State Project No. H.011137**, and will be submitted **prior to 3:00 p.m. CST on Thursday, January 28, 2016**, by hand delivery or mail, addressed to:

Department of Transportation and Development  
Attn.: Mr. Masood Rasoulia, P.E.  
Consultant Contracts Services Administrator  
1201 Capitol Access Road, **Room 405-E**  
Baton Rouge, LA 70802-4438 or  
Telephone: (225) 379-1433

## **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.

